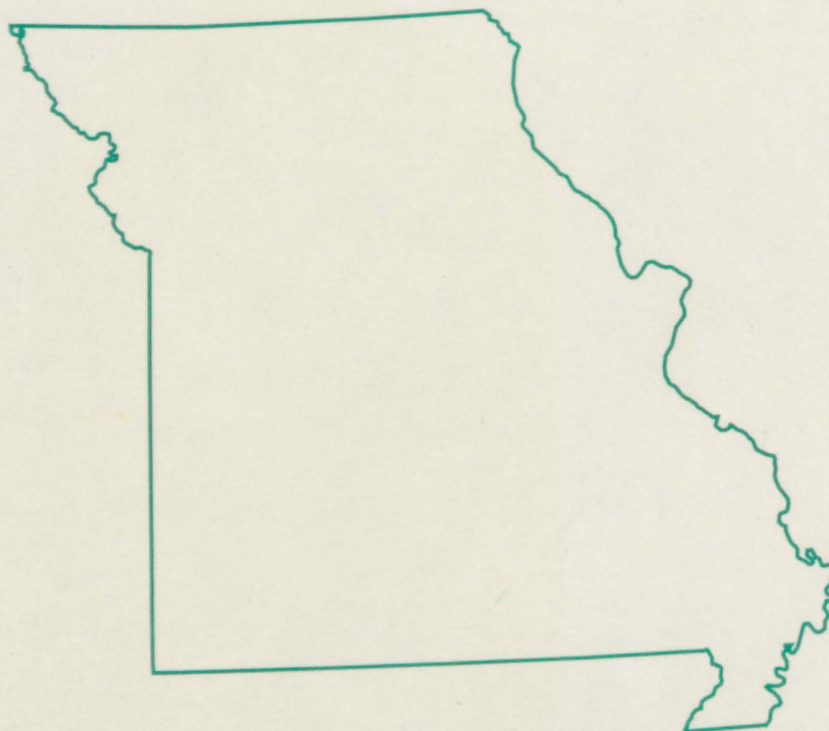
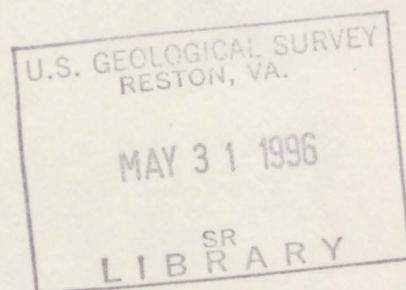


R
(200)
Ga 3
Missouri
1995



Water Resources Data Missouri Water Year 1995



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MO-95 -1
Prepared in cooperation with the State of Missouri
and other agencies

CALENDAR FOR WATER YEAR 1995

1994

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

1995

[illegible]

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

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



Water Resources Data Missouri Water Year 1995

by H.S. Hauck, L.G. Huber, and C.D. Nagel



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MO-95 -1
Prepared in cooperation with the State of Missouri
and other agencies

U.S. DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY

Gordon P. Eaton, Director

For information on the water program in Missouri write to:

District Chief, Water Resources Division

U.S. Geological Survey

1400 Independence Road - Mail Stop 100

Rolla, Missouri 65401

PREFACE

This hydrologic-data report for Missouri is one of a series of annual reports that document hydrologic data collected 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 surface water, surface-water quality, and ground-water levels provide the hydrologic information needed by local, State, 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 personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information is accurate, complete, and adheres to U.S. Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

Gary L. Alexander	Thomas E. Harris	L. A. Shannon
Terry W. Alexander	Michael J. Kleeschulte	Rick J. Southard
Kelly R. Brady	Kathy M. Love	Rodney E. Southard
F. Joe Chavedo	Larry J. Lumpkin	E. Scott Southern
Yemen D. Collier	John W. Melton	Sherry A. Ternes
Jerri V. Davis	Michael C. Moody	Robert E. Whitaker
Willie E. Easterling	H. Leon Reed	Gary L. Wilson
Hugh O. Edwards	Joseph M. Richards	Emitt C. Witt
Suzanne R. Femmer	Gregg K. Schalk	Lori D. Wood
H. Craig French		

Sherry A. Ternes and Lori D. Wood assembled the text of the report and Gary L. Wilson modified the illustrations in the report.

This report was prepared in cooperation with the State of Missouri and with other agencies under the general supervision of Loyd A. Waite, Hydrologic Surveillance Section Chief and James H. Barks, District Chief, Missouri.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
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 April 1996		3. REPORT TYPE AND DATES COVERED Annual--Oct. 1, 1994 to Sept. 30, 1995
4. TITLE AND SUBTITLE Water Resources Data--Missouri, Water Year 1995			5. FUNDING NUMBERS	
6. AUTHOR(S) H.S. Hauck, C.D. Nagel, and L.G. Huber				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Missouri District 1400 Independence Road, Mail Stop 100 Rolla, Missouri 65401			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-MO-95-1	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Missouri District 1400 Independence Road, Mail Stop 100 Rolla, Missouri 65401			10. SPONSORING / MONITORING AGENCY REPORT NUMBER USGS-WDR-MO-95-1	
11. SUPPLEMENTARY NOTES Prepared in cooperation with Federal, State, and local 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) The U.S. Geological Survey, Water Resources Division, in cooperation with local, State, and Federal agencies and organizations, obtains a large quantity of data pertaining to the water resources of Missouri each water year (October 1 to September 30). These data, accumulated during the water years, constitute a valuable data base for developing an improved understanding of the water resources of Missouri. Water-resources data for the 1995 water year for Missouri consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and ground-water levels. This volume contains discharge records for 106 gaging stations; stage at 12 lakes and reservoirs; water quality at 53 sampling stations (including 2 lakes and reservoirs); and water-level records for 8 ground-water monitoring wells.				
14. SUBJECT TERMS *Missouri, *Hydrologic data, *Surface water, *Quality water, Gaging stations, Stream-flow, Flow rates, Lakes, Reservoirs, Chemical analysis, Sediment, Water temperature, Water analysis, Water levels, Data collection			15. NUMBER OF PAGES 320	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT	

CONTENTS

	Page
Preface.....	iii
List of surface-water stations, in downstream order, for which records are published in this volume	vii
List of ground-water wells, by county, for which records are published in this volume.....	xi
List of discontinued surface-water discharge or stage-only stations	xii
List of discontinued surface-water-quality stations	xv
Introduction.....	1
Cooperation.....	1
Water use--1990.....	2
Missouri water-use fact sheet.....	2
Physiography.....	3
Summary of hydrologic conditions.....	3
Surface water--streamflow.....	3
Water quality--streamflow	6
Ground-water levels.....	6
Special networks and programs	7
Explanation of the records	7
Station identification numbers	7
Downstream order and station number.....	7
Numbering system for wells and miscellaneous sites.....	8
Records of stage and water discharge.....	8
Data collection and computation	8
Data presentation	9
Station manuscript	9
Data table of daily mean values	10
Statistics of monthly mean data	10
Summary statistics	11
Identifying estimated daily discharge	12
Accuracy of data and computed results	12
Other data available	12
Records of surface-water quality	12
Classification of records	12
Arrangement of records	13
On-site measurements and sample collection	13
Water temperature.....	13
Sediment	13
Laboratory measurements	13
Quality assurance of water-quality data.....	14
Data presentation	14
Remark codes.....	14
Dissolved trace-element concentrations	15
Records of ground-water levels	15
Data collection and computation	15
Data presentation	15
Access to WATSTORE data.....	16
Definition of terms.....	16
Publications on Techniques of Water-Resources Investigations	20
Surface-water station records.....	25
Discharge at partial-record stations	283
Analyses of samples collected at water-quality partial-record stations	284
Ground-water monitoring wells.....	305
Index	317

ILLUSTRATIONS

	Page
Figure 1. Pie chart showing major water-use categories and percentage of surface water used in Missouri during 1990	2
2. Pie chart showing major water-use categories and percentage of ground water used in Missouri during 1990	2
3. Map showing major drainage basins, physiographic areas, and areas of greater-than-average discharge during 1995	4
4. Graphs showing comparison of 1995 water-year mean discharge to long-term mean discharge	5
5. Diagram showing system for numbering miscellaneous sites (latitude and longitude)	8
6. Map showing location of surface-water stations	23
7. Map showing location of surface-water-quality stations	24
8. Map showing location of ground-water monitoring wells	304

TABLES

	Page
Table 1. Comparisons of peak discharge for the 1995 water year with those for period of record for selected stations	3
2. Comparisons of 1995 7-day low flows to 7-day, 2-year low flows and minimum flows for the period of record at selected stations	6

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

[Letter after station name designates type of data: (d) discharge, (c) chemical, (m) microbiological,
(t) water temperature, (s) sediment, and (e) elevation and/or contents]

	Station Number	Page
<u>UPPER MISSISSIPPI RIVER BASIN</u>		
Mississippi River:		
FOX RIVER BASIN		
Fox River at Wayland (d)	05495000	25
WYACONDA RIVER BASIN		
Wyaconda River above Canton (d)	05496000	26
FABIUS RIVER BASIN		
North Fabius River at Monticello (d)	05497000	27
Middle Fabius River near Monticello (d)	05498000	28
South Fabius River near Taylor (d,c,m,)	05500000	29
NORTH RIVER BASIN		
North River at Palmyra (d)	05501000	33
BEAR CREEK BASIN		
Bear Creek at Hannibal (d)	05502000	34
SALT RIVER BASIN		
North Fork Salt River at Hagers Grove (d)	05502300	35
North Fork Salt River near Shelbina (d)	05502500	36
Crooked Creek near Paris (d)	05503800	37
South Fork Salt River above Santa Fe (d)	05504800	38
Long Branch near Santa Fe (d)	05506100	39
Middle Fork Salt River at Paris (d,s)	05506500	40
Elk Fork Salt River near Madison (d)	05506800	44
Lick Creek at Perry (d)	05507600	45
Mark Twain Lake near Center (e)	05507700	46
Salt River near Center (d)	05507800	48
Salt River near New London (d,s)	05508000	49
Spencer Creek below Plum Creek near Frankford (d)	05508805	51
CUIVRE RIVER BASIN		
Cuivre River near Troy (d,c,m)	05514500	52
Mississippi River at Grafton, IL (d)	05587450	55
Mississippi River below Grafton, IL (d,s)	05587455	56
MISSOURI RIVER BASIN		
Missouri River:		
Missouri River at Rulo, NE (d)	06813500	59
NODAWAY RIVER BASIN		
Nodaway River near Graham (d,c,m)	06817700	60
Missouri River at St. Joseph (d,c,m)	06818000	64
PLATTE RIVER BASIN		
Platte River near Agency (d)	06820500	67
Smithville Reservoir near Smithville (e)	06821140	68
Little Platte River at Smithville (d)	06821150	69
Platte River at Sharps Station (d,c,m)	06821190	70
Missouri River at Kansas City (d)	06893000	73
BLUE RIVER BASIN		
Blue River near Kansas City (d)	06893500	74

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

	Station Number	Page
<u>MISSOURI RIVER BASIN--Continued</u>		
LITTLE BLUE RIVER BASIN		
Longview Reservoir at Kansas City (e).....	06893791	75
Little Blue River below Longview Dam at Kansas City (d).....	06893793	76
Blue Springs Reservoir near Blue Springs (e).....	06893885	77
East Fork Little Blue River near Blue Springs (d).....	06893890	78
Little Blue River near Lake City (d).....	06894000	79
Missouri River at Waverly (d).....	06895500	80
GRAND RIVER BASIN		
Grand River near Gallatin (d).....	06897500	81
Thompson River at Trenton (d).....	06899500	82
Grand River near Sumner (d,c,m).....	06902000	83
CHARITON RIVER BASIN		
Chariton River at Livonia (d).....	06904050	88
Chariton River at Novinger (d).....	06904500	89
Chariton River near Prairie Hill (d,c,m).....	06905500	90
LITTLE CHARITON RIVER BASIN		
Long Branch Reservoir near Macon (e).....	06906190	93
East Fork Little Chariton River near Macon (d).....	06906200	94
East Fork Little Chariton River near Huntsville (d).....	06906300	95
LAMINE RIVER BASIN		
Lamine River near Otterville (d).....	06906800	96
Blackwater River at Blue Lick (d).....	06908000	97
Missouri River at Boonville (d).....	06909000	98
OSAGE RIVER BASIN		
Osage River:		
East Fork Drywood Creek at Prairie State Park (c,m).....	06917630	99
Osage River above Schell City (d,c,m,s).....	06918070	101
Sac River near Dadeville (d).....	06918440	106
Turnback Creek above Greenfield (d).....	06918460	108
Little Sac River at Walnut Grove (c,m).....	06918600	109
Little Sac River near Morrisville (d).....	06918740	110
Stockton Lake near Stockton (e).....	06918990	111
Sac River at Highway J below Stockton (d).....	06919020	112
Cedar Creek near Pleasant View (d).....	06919500	113
Sac River near Caplinger Mills (d).....	06919900	114
Brush Creek near Collins (d).....	06919950	115
Pomme De Terre River near Polk (d,c,m).....	06921070	116
Lindley Creek near Polk (d).....	06921200	119
Pomme De Terre Lake near Hermitage (e).....	06921325	120
Pomme De Terre River near Hermitage (d).....	06921350	121
South Grand River near Clinton (d,s).....	06921760	122
Harry S. Truman Reservoir at Warsaw (e).....	06922440	126
Osage River below Harry S. Truman Dam at Warsaw (d).....	06922450	127
Big Buffalo Creek at Big Buffalo Wildlife Area (c,m).....	06922850	128
Niangua River:		
Dousinbury Creek On Highway JJ near Wall Street (d,c,m).....	06923150	129
Niangua River near Windyville (d,c,m).....	06923250	134

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

	Station Number	Page
<u>MISSOURI RIVER BASIN--Continued</u>		
OSAGE RIVER BASIN--Continued		
Spring Branch:		
Bennett Spring at Bennett Springs (d)	06923500	139
Niangua River below Bennett Springs (c,m)	06923700	140
Ha Ha Tonka Spring at Ha Ha Tonka State Park (c,m)	06924500	141
Coakley Hollow Spring Branch at Lake of the Ozarks Spring (c,m)	06925445	143
Lake of the Ozarks near Bagnell (e)	06925500	145
Osage River near Bagnell (d)	06926000	146
Osage River near St. Thomas (d)	06926500	147
Osage River below St. Thomas (c,m)	06926510	148
GASCONADE RIVER BASIN		
Gasconade River:		
Roubidoux Spring at Waynesville (c,m)	06928440	150
Paddy Creek above Slabtown Spring (d,c,m)	06929315	151
Big Piney River near Big Piney (d)	06930000	156
Shanghai Spring near Waynesville (c,m)	06930400	157
Big Piney River at Devil's Elbow (c,m)	06930450	160
Gasconade River above Jerome (c,m)	06930800	161
Little Piney Creek at Newburg (d)	06932000	163
Gasconade River at Jerome (d)	06933500	164
Gasconade River near Rich Fountain (d)	06934000	165
Missouri River at Hermann (d,c,m,t)	06934500	166
<u>LOWER MISSISSIPPI RIVER BASIN</u>		
Mississippi River at St. Louis (d,s)	07010000	170
MERAMEC RIVER BASIN		
Meramec River:		
Maramec Spring near St. James (c,m)	07010500	174
Meramec River near Steelville (d)	07013000	175
Huzzah Creek near Steelville (c,m)	07014000	176
Courtois Creek at Berryman (c,m)	07014200	177
Meramec River near Sullivan (d,c,m)	07014500	178
Bourbeuse River near High Gate (d)	07015720	181
Bourbeuse River above Union (c,m)	07016400	182
Bourbeuse River at Union (d)	07016500	184
Big River at Irondale (d)	07017200	185
Coonville Creek at St. Francois State Park (c,m)	07017605	186
Big River near Richwoods (d,c,m)	07018100	187
Big River at Byrnesville (d)	07018500	189
Meramec River near Eureka (d)	07019000	190
Meramec River at Paulina Hills (c,m)	07019280	191
HEADWATER DIVERSION CHANNEL BASIN		
Pickle Creek at Hawn State Park (c,m)	07020200	193
Mississippi River at Chester, IL (d,s)	07020500	194
Mississippi River at Thebes, IL (d,c,m,s)	07022000	198
ST. FRANCIS RIVER BASIN		
St. Francis River near Roselle (d)	07034000	205
Little St. Francis River at Fredericktown (d)	07035000	206
St. Francis River near Mill Creek (d)	07035800	207
St. Francis River near Saco (d,s)	07036100	208

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

	Station Number	Page
<u>LOWER MISSISSIPPI RIVER BASIN--Continued</u>		
ST. FRANCIS RIVER BASIN--Continued		
Big Creek at Des Arc (d)	07037000	212
Big Creek at Sam A. Baker State Park (c,m)	07037300	215
St. Francis River near Patterson (d)	07037500	214
Wappapello Lake at Wappapello (e)	07039000	215
St. Francis River at Wappapello (d)	07039500	217
Right Chute of Little River:		
Little River Ditches near Rives (c,m)	07046250	218
WHITE RIVER BASIN		
White River:		
Roaring River:		
Roaring River Spring near Cassville (c,m)	07050150	220
James River near Springfield (d)	07050700	221
Wilson Creek near Brookline (c,m)	07052152	222
James River near Boaz (c,m)	07052250	223
James River at Galena (d)	07052500	226
Table Rock Lake near Branson (e)	07053400	227
White River below Table Rock Dam near Branson (c,t)	07053450	228
White River near Branson (d)	07053500	230
Lake Taneycomo at College of the Ozarks (c,t)	07053600	231
Bull Creek near Walnut Shade (d)	07053810	233
Beaver Creek at Bradleyville (d)	07054080	234
Double Spring near Dora (c,m)	07057475	235
North Fork River near Tecumseh (d)	07057500	236
Bryant Creek below Evans (c,m)	07057750	237
Bryant Creek near Tecumseh (d)	07058000	239
Black River:		
Black River near Annapolis (d)	07061500	240
Black River below Annapolis (c,m)	07061600	241
Clearwater Lake near Piedmont (e)	07062000	245
Black River at Poplar Bluff (d)	07063000	246
Current River:		
Jacks Fork at Alley Spring (d,c,m)	07065495	247
Jacks Fork at Eminence (d)	07066000	252
Jacks Fork above Two River (c,m)	07066110	253
Current River at Van Buren (d,c,m)	07067000	254
Big Spring near Van Buren (d,c,m)	07067500	259
Current River at Doniphan (d,c,m)	07068000	262
Spring River:		
Mammoth Spring at Mammoth Spring, AR (c,m)	07069200	265
Eleven Point River:		
Greer Spring at Greer (d,c)	07071000	266
Eleven Point River near Bardley (d,c)	07071500	269
<u>ARKANSAS RIVER BASIN</u>		
Arkansas River:		
Neosho River:		
Spring River near Waco (d)	07186000	271
Center Creek below Carl Junction (d)	07186475	272
Center Creek near Smithfield (c,m)	07186480	273

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

Station Number Page

ARKANSAS RIVER BASIN--Continued

Arkansas River--Continued

Neosho River--Continued

Shoal Creek above Joplin (d).....	07187000	277
Elk River near Tiff City (d,c,m).....	07189000	278

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GREENE COUNTY

Springfield:

Belcrest Street	371250093140101	305
Bissett School	371321093201401	306
Cherokee School	370702093173001	307
Fulbright.....	371605093184401	309
Kansas Street.....	370826093184701	311
Main Street.....	371240093174501	313
Southwest Power Plant	370912093231101	314
York Street	371233093212901	316

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Missouri have been discontinued. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. Discontinued project stations with less than three years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

[Letters after station name designate type of data collected: (d) discharge and (e) elevation (stage only)]

Station name	Type of record	Station number	Drainage area (mi ²)	Period of record
Middle Fabius River near Baring	(d)	05497500	185	1930-61
North River at Bethel	(d)	05500500	58.0	1930-73
Oak Dale Branch near Emden	(d)	05503000	2.64	1955-75
North Fork Salt River near Hunnewell	(d)	05503500	626	1931-40, 1979-88
Youngs Creek near Mexico	(d)	05506000	57.4	1930-82
Middle Fork Salt River at Duncan's Bridge	(d)	05506190	200	1980-82
Elk Fork Salt River near Paris	(d)	05507000	262	1930-54, 1980-82
Salt River near Monroe City	(d)	05507500	2,230	1939-81
Calumet Creek near Clarksville	(d)	05509700	15.7	1965-72
Tarkio River at Fairfax	(d)	06813000	508	1922-90
Mill Creek at Oregon	(d)	06816000	4.90	1950-76
Nodaway River near Burlington Junction	(d)	06817500	1,240	1922-83
Platte River at Ravenwood	(d)	06818900	486	1921-23, 1924-25, 1928-32, 1958-71
One Hundred Two River at Maryville	(d)	06819500	515	1932-90
White Cloud Creek near Maryville	(d)	06820000	6.06	1948-70
Jenkins Branch at Gower	(d)	06821000	2.72	1950-76
Line Creek at Riverside	(d)	06821280	19.2	1975-81
Brush Creek at Main Street in Kansas City	(d)	06893560	14.8	1970-79
Rock Creek at Independence	(d)	06893600	5.20	1967-74
Shoal Creek at Claycomo	(d)	06893670	29.8	1975-81
East Fork Fishing River at Excelsior Spring	(d)	06894500	20.0	1950-72
Sni-A-Bar Creek near Tarsney	(d)	06894680	29.1	1970-79
Crooked River near Richmond	(d)	06895000	159	1948-70
Wakenda Creek at Carrollton	(d)	06896000	248	1948-70
Thompson Branch near Albany	(d)	06896500	5.58	1955-72
East Fork Big Creek near Bethany	(d)	06897000	95.0	1934-72
Thompson River at Mount Moriah	(d)	06898100	891	1960-77
Weldon River near Mercer	(d)	06898500	246	1939-59
Weldon River at Mill Grove	(d)	06899000	494	1929-72
Shoal Creek near Braymer	(d)	06899700	391	1957-77
Medicine Creek near Galt	(d)	06900000	225	1921-75 1977-90
Locust Creek near Linneus	(d)	06901500	550	1928-72
West Yellow Creek near Brookfield	(d)	06902200	135	1959-77
Hamilton Branch near New Boston	(d)	06902500	2.51	1955-72
Mussell Fork near Mussellfork	(d)	06906000	267	1948-51 1962-90
Thomas Hill Lake near Thomas Hill	(e)	06906350	147	1966-74
Middle Fork Chariton River below Salisbury	(d)	06906470	201	1964-70
Burge Branch near Arrow Rock	(d)	06906600	0.33	1959-73
Flat Creek near Sedalia	(d)	06906700	148	1958-67
Lamine River at Clifton City	(d)	06907000	598	1922-71
South Fork Blackwater near Elm	(d)	06907500	16.6	1954-79
Blackwater River at Valley City	(d)	06907700	547	1958-73
Shiloh Branch near Marshall	(d)	06908500	2.87	1952-65
Moniteau Creek near Fayette	(d)	06909500	81	1948-69
Petite Saline Creek near Boonville	(d)	06910000	182	1948-67

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Type of record	Station number	Drainage area (mi ²)	Period of record
Hinkson Creek at Columbia	(d)	06910230	44.8	1964-76
Cedar Creek near Columbia	(d)	06910410	70.2	1986-91 1966-82 1987-91
Moreau River near Jefferson City	(d)	06910500	561	1947-74
Chesapeake Spring at Chesapeake	(d)	06918444	--	1926, 1932, 1936, 1954, 1963-68
Oak Grove Branch near Brighton	(d)	06918700	1.30	1956-75
Little Sac River at Aldrich	(d)	06918800	304	1967-68
Pomme De Terre River near Bolivar	(d)	06921000	225	1950-69
Pomme De Terre River at Hermitage	(d)	06921500	655	1921-65
South Grand River at Archie	(d)	06921590	356	1969-86
South Grand River at Urich	(d)	06921600	670	1960-69
Big Creek at Blairstown	(d)	06921720	414	1960-74
Brushy Creek near Blairstown	(d)	06921740	1.15	1960-75
South Grand River near Brownington	(d)	06922000	1,660	1921-71
Big Buffalo Creek near Stover	(d)	06922800	24.2	1965-77
Starks Creek at Preston	(d)	06925200	4.18	1956-76
Van Cleve Branch near Meta	(d)	06926200	0.75	1956-72
Niangua River near Decaturville	(d)	06924000	627	1929-69
Maries River at Westphalia	(d)	06927000	257	1947-70
Big Hollow near Fulton	(d)	06927200	4.05	1957-72
Osage Fork Gasconade River at Drynob	(d)	06927800	404	1962-81
Gasconade River near Hazlegreen	(d)	06928000	1,250	1928-71
Laquey Branch near Hazlegreen	(d)	06928200	1.58	1958-72
Gasconade River near Waynesville	(d)	06928500	1,680	1914-71
Beeler Branch near Cabool	(d)	06928700	7.78	1967-76
Little Beaver Creek near Rolla	(d)	06931500	6.45	1947-75
Loutre River at Mineola	(d)	06935500	202	1947-67
Coldwater Creek near St. Louis	(d)	06936500	43.6	1959-65,
Meramec River at Cook Station	(d)	07010350	199	1965-81
Meramec Spring near St. James	(d)	07010500	--	1903-06, 1921-29, 1965-86
Green Acre Branch near Rolla	(d)	07011500	0.62	1947-75
Bourbeuse River near St. James	(d)	07015000	21.3	1947-81
Lanes Fork near Rolla	(d)	07015500	0.225	1952-71
Bourbeuse River near Spring Bluff	(d)	07016000	608	1943-81
Dry Branch near Bonne Terre	(d)	07017500	3.35	1955-75
Sandy Creek near Pevely	(d)	07019690	32.5	1966-68, 1969-72
Plattin Creek at Plattin	(d)	07019790	65.8	1965-72
Saline Creek near Minnith	(d)	07020270	82.6	1968-81
Castor River at Zalma	(d)	07021000	423	1920-91
Brewers Creek near Ironton	(d)	07033800	2.19	1964-66
Barnes Creek near Fredericktown	(d)	07035500	3.35	1955-75
Clark Creek near Piedmont	(d)	07037700	4.39	1956-76
Little River Ditch 81 near Kennett	(d)	07041000	111	1926-79
Little River Ditch 1 near Kennett	(d)	07042000	235	1926-79
Little River Ditch 251 near Lilbourn	(d)	07042500	235	1945-91
Castor River at Aquilla	(d)	07043000	175	1945-81
Little River Ditch 1 near Morehouse	(d)	07043500	450	1945-91
Little River Ditch 251 near Kennett	(d)	07044000	883	1926-79
Little River Ditch 66 near Kennett	(d)	07045000	--	1926-79
Little River Ditch 66-A near Kennett	(d)	07045500	--	1927-65
Little River Ditch 259 near Kennett	(d)	07046000	89.0	1926-79

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE-ONLY STATIONS--Continued

Station name	Type of record	Station number	Drainage area (mi ²)	Period of record
Roaring River Spring near Cassville	(d)	07050150	--	1965-68
James River near Stafford	(d)	07050580	165	1973-86
Wilsons Creek near Springfield	(d)	07052100	31.4	1972-82
Wilsons Creek below Springfield	(d)	07052150	47.2	1967-72
Wilsons Creek near Battlefield	(d)	07052160	55.0	1968-70, 1972-82
James River near Boaz	(d)	07052250	462	1972-80
Hodgson Mill Spring at Sycamore	(d)	07057800	--	1965-68
East Fork L. Black River near Lesterville	(d)	07061300	94.5	
Black River near Leeper	(d)	07062500	987	1921-94
Fudge Hollow near Licking	(d)	07064300	1.72	1956-76
Montauk Springs at Montauk	(d)	07064400	--	1964-68
Big Creek near Yukon	(d)	07064500	8.36	1949-75
				1960-90
Round Spring at Round Spring	(d)	07065000	--	1928-39, 1965-79
Alley Spring at Alley	(d)	07065500	--	1928-39, 1965-79
Current River near Eminence	(d)	07066500	1,272	1921-75
Middle Fork Little Black River at Grandin	(d)	07068250	6.85	1980-84
North Prong Little Black River near Grandin	(d)	07068300	39.4	1980-84
Little Black River near Grandin	(d)	07068380	79.5	1980-84
Little Black River below Fairdealing	(d)	07068510	194	1980-86
Logan Creek at Oxly	(d)	07068540	37.5	1980-84
Little Black River at Success, AR	(d)	07068600	386	1980-86
Fourche River near Poynor	(d)	07068863	87.2	1976-83
Eleven Point River near Thomasville	(d)	07070500	361	1950-76
Stahl Creek near Miller	(d)	07185500	3.86	1950-76
Spring River at La Russell	(d)	07185700	306	1947-81
Spring River at Carthage	(d)	07185765	425	1966-80
Center Creek near Cartersville	(d)	07186400	232	1962-91
Turkey Creek near Joplin	(d)	07186600	41.8	1963-72

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following surface-water-quality stations in Missouri have been discontinued or converted to partial-record stations. Water-quality data (daily or periodic samples with collection frequency not less than quarterly) were collected and published for the period of record shown for each station. Discontinued project stations with less than three years of record are not included. Information regarding these stations may be obtained from the District Chief at the address given on the back of the title page of this report.

[Type of record: (B) biological, (C) chemical, (M) microbiological, (S) sediment, (T) temperature]

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
Des Moines River at St. Francisville	05490600	14,300	C,M,S	1967-92
Fox River at Wayland	05495000	400	C	1967-72
Mississippi River at Canton	05495150	--	C,T	1969-75
Middle Fabius River near Monticello	05498000	393	S	1980-86
North River at Palmyra	05501000	373	C	1972-75
Mississippi River at Hannibal	05501600	--	C,M	1982-89
North Fork Salt River near Shelby	05502500	481	S	1988-94
North Fork Salt River near Hunnewell	05503500	626	S	1980-88
Salt River near New London	05508000	2,480	C,M,T	1967-75, 1977-90
Mississippi River below Grafton, IL	05587455	171,300	C	1989-94
Mississippi River at Alton, IL	05587500	171,500	S	1980-85, 1986-89
Mississippi River below Alton, IL	05587550	171,500	C,M	1975-89
Nodaway River near Oregon	06817800	--	C,M	1968-75, 1977-89
Platte River at Platte City	06821200	--	C	1967-75
Missouri River at Sibley	06894100	--	C,T	1972-75
Thompson River near Chillicothe	06899620	--	C,M	1968-75, 1983-87
East Fork Little Chariton River near Macon	06906200	112	C	1971-74
East Fork Chariton River near Huntsville	06906300	220	C,M	1963-69, 1973-75, 1979-91
East Fork Chariton River near Clifton Hill	06906320	--	C	1963-73
Middle Fork Little Chariton River below Salisbury	06906470	201	C,M	1983-86
Burge Branch near Arrow Rock	06906600	0.33	S	1961-64
Lamine River near Blackwater	06908800	2,610	B,C,M,T	1979-86
Missouri River at Boonville	06909000	505,700	T	1953-59, 1960-64
Hinkson Creek at Columbia	06910230	70.2	T	1987-91
Cedar Creek near Columbia	06910410	44.8	C,M	1987-91
Cedar Creek near Ashland	06910414	--	C,M	1983-89
Marais Des Cygnes River near Worland	06916650	3,230	C,M	1962-63, 1972-75, 1977-81
Osage River above Schell City	06918070	5,410	C	1979-92
Sac River near Dadeville	06918440	257	C,M,T	1974-78, 1980-82, 1983-87
Stockton Lake near Stockton	06918990	1,160	T	1974-77
Pomme De Terre River near Hermitage	06921350	615	T	1974-77
Pomme De Terre River at Hermitage	06921500	615	T	1970-78
South Grand River at Ulrich	06921600	670	C,M	1983-87
West Fork Tebo Creek near Lewis	06922190	--	C,M	1983-91
Tributary to Middle Fork Tebo Creek near Leeton	06922075	--	C	1989-92
Tebo Creek at Leesville	06922200	--	B,C,M,T	1978-83
Osage River at Warsaw	06922500	11,500	T	1969-78
Big Buffalo Creek near Stover	06922800	24.2	T	1965-77
Bennett Spring at Bennett Springs	06923500	--	C,M	1991-93
Gasconade River near Hooker	06928600	--	C,M	1977-86

DISCONTINUED SURFACE-WATER-QUALITY STATIONS--Continued

Station name	Station number	Drainage area (mi ²)	Type of record	Period of record
Missouri River near St. Louis	06935840	--	C,T	1969-74
Mississippi River at East St. Louis, IL	07001000	--	C	1969-73
Crooked Creek near Dillard	07013050	--	C	1982-88
Mississippi River at Cape Girardeau	07020850	--	C,T	1969-74
Crooked Creek near Dillard	07013050	--	C	1982-88
Meramec River near Eureka	07019000	3,788	C, M	1978-94
Mississippi River at Cape Girardeau	07020850	--	C,T	1969-74
Headwater Diversion Channel near Allenville	07021800	--	C	1969-75
St. Francis River near Saco	07036100	664	C,M	1983-87, 1988-89
Big Creek at Chloride	07036940	--	C	1969-75, 1983-90
St. Francis River at St. Francis, AR	07040100	--	C	1969-75
Little River Ditches near Kennett	07046001	--	C,M	1969-70, 1972-73, 1977-89, 1992-93
Roaring River at Roaring River State Park	07050152	--	C,M	1991-93
James River near Nixa	07050750	273	T	1966-75, 1977-80
James River near Wilsons Creek	07051600	--	C,M	1967-82, 1983-87
Wilsons Creek near Springfield	07052100	31.4	C,T	1972-82
Wilsons Creek below Springfield	07052150	47.2	C,T	1967-70, 1970-72
Wilsons Creek near Battlefield	07052160	55.0	C,T	1972-82
James River west of Nixa	07052200	440	C	1962-63, 1965-67
Finley Creek at Riverdale	07052340	--	C	1967-75
Lake Taneycomo at Branson	07053700	--	C,M	1977-91
North Fork River near Tecumseh	07057500	561	C,M	1969-72, 1978-79, 1983-87
Black River at Poplar Bluff	07063000	1,245	C,M	1983-87
Black River below Poplar Bluff	07063050	--	C	1969-75
Main Ditch near Neelyville	07063300	--	C	1969-75
Middle Fork Little Black River at Grandin	07068250	6.85	T	1980-84
North Prong Little Black River near Grandin	07068300	39.4	C,M	1980-84
Little Black River near Grandin	07068380	79.5	C,M,S,T	1980-84
Little Black River below Fairdealing	07068510	194	C,M,S,T	1980-86
Logan Creek at Oxly	07068540	37.5	C,M,S,T	1980-84
Little Black River near Naylor	07068550	--	C	1969-75
Little Black River at Success, AR	07068600	386	C,M,S,T	1980-86
Fourche River near Poynor	07068863	87.2	T	1976-83
Fourche River near Middlebrook, AR	07068867	--	C	1969-75
Spring River near Thayer	07069170	--	C	1969-75
Eleven Point River below Bardley	07071900	--	C	1969-75
Spring River near Waco	07186000	1,164	C	1965-75, 1977-78, 1980-81
Center Creek near Cartersville	07186400	232	C,M	1980-89
Turkey Creek near Joplin	07186600	41.8	C,M	1963-77
Shoal Creek above Joplin	07187000	427	C,M	1968-68, 1979-82
Shoal Creek near Galena, KS	07187560	--	C	1968-75
Lost Creek at Seneca	07188500	42	C	1967-75
Little Sugar Creek at Caverna	07188820	--	C	1967-75
Buffalo Creek at Tiff City	07189100	--	C	1967-75

WATER RESOURCES DATA - MISSOURI 1995

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with local, State, and Federal agencies and organizations, obtains a large quantity of data pertaining to the water resources of Missouri each water year (October 1 to September 30). These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of Missouri. To make these data readily available to interested parties outside the U.S. Geological Survey, the data are published annually in this report series, entitled "WATER RESOURCES DATA - MISSOURI." This volume contains records for water discharge at 106 gaging stations; stage at 12 lakes and reservoirs; water quality at 53 sampling stations (including 2 lakes); and water-level records for 8 ground-water monitoring wells.

Records of discharge and 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 entitled, "Surface Water Supply of the United States." These Water-Supply Papers were in an annual series through September 30, 1960, and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperature, and suspended sediment were published from 1941 to 1970 in an annual series of Water-Supply Papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of Water-Supply Papers entitled, "Ground-Water Levels in the United States." Water-Supply Papers are in the libraries of the principal cities in the United States or may be purchased from the U.S. Geological Survey, Information Services, Federal Center, Box 25286, Denver, CO 80225.

For water years 1961 through 1974, streamflow data were released by the U.S. Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 similarly were released either in separate reports or in conjunction with streamflow records.

Beginning with water year 1975, water data for streamflow, water quality, and ground water are published in Survey reports on a State-boundary basis. These reports 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 volume is identified as "U.S. Geological Survey Water-Data Report MO-95-1." For archiving and general distribution, the reports for water years 1971-74 also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports are also available on Compact Disc -Read Only Memory (CD-ROM).

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on back of the title page or by telephone (573) 308-3665. A limited number of CD-ROM discs will be available for sale by the Information Services, U.S. Geological Survey, Federal Center, Box 25286, Denver, CO 80225.

COOPERATION

The U.S. Geological Survey and organizations of the State of Missouri have had cooperative agreements for the systematic collection of streamflow records since 1921, and for water-quality records since 1964. Organizations that assisted in collecting data through cooperative agreements are:

MISSOURI DEPARTMENT OF CONSERVATION, Jerry J. Presley, Director.

MISSOURI DEPARTMENT OF HEALTH, Dr. Coleen H. Kivlahan, MD, Director.

MISSOURI DEPARTMENT OF NATURAL RESOURCES, David A. Shorr, Director.

DIVISION OF GEOLOGY AND LAND SURVEY, Dr. James H. Williams, Director.

DIVISION OF ENVIRONMENTAL QUALITY, John A. Young, Director.

LAND RECLAMATION COMMISSION, Charles A. Stieffermann, Director.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION, Joe Mickes, Chief Engineer.

CITY UTILITIES OF SPRINGFIELD, R. David Plank, Manager, Engineering Services.

The following Federal and State agencies and organizations assisted in collection of records published in this report by providing funds or services:

U.S. Army Corps of Engineers.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration,
National Weather Service.

National Park Service, Midwest Region.

Union Electric Company of Missouri.

Sho-Me Power Electric Cooperative.

Missouri Park Board.

WATER USE--1990

Listed below are general water-use facts for the state of Missouri. The major water uses and percentage of surface and ground water for 1990 are shown in figures 1 and 2.

MISSOURI WATER-USE FACT SHEET

1. Total offstream water use was 6,930 million gallons per day (Mgal/d).
2. Ground-water use was 730 Mgal/d, about 10 percent of total offstream use. The largest ground-water use was for irrigation in southeastern Missouri.
3. Offstream surface-water use was 6,200 Mgal/d, about 90 percent of total offstream use. The largest use was in the St. Louis and Kansas City metropolitan areas.
4. Consumptive use of freshwater was 529 Mgal/d, which was about 8 percent of total use. Irrigation consumptive use was about 50 percent of total consumptive use.
5. The largest use of water in Missouri was for onstream hydroelectric power generation, about 13,900 Mgal/d.
6. Total population was 5.12 million, an increase of 1.8 percent from 1985.
7. Per capita water use for all offstream uses was 1,350 gallons per day.
8. Public water supplied was 677 Mgal/d: 27 percent ground water and 73 percent surface water.
9. Domestic water use was 410 Mgal/d: 15 percent self-supplied and 85 percent public-supplied.
10. Commercial water use was 81.2 Mgal/d: 27 percent self-supplied and 73 percent public-supplied.
11. Industrial water use was 218 Mgal/d: 39 percent self-supplied and 61 percent public-supplied.
12. Mining water use was 25.3 Mgal/d, mostly from dewatering of active and inactive lead mines.
13. The largest offstream use of water was 4,580 Mgal/d (mostly surface water) to produce 57,100 gigawatt hours of electricity. This was 66 percent of the total offstream water use.
14. Non-irrigation agricultural water use was 54.8 Mgal/d for fish culture and livestock use.
15. The largest use of ground water was 335 Mgal/d for irrigation. Total irrigation water use was 371 Mgal/d.
16. About 2,455 municipal and other sewage-treatment facilities released 998 Mgal/d of effluent.

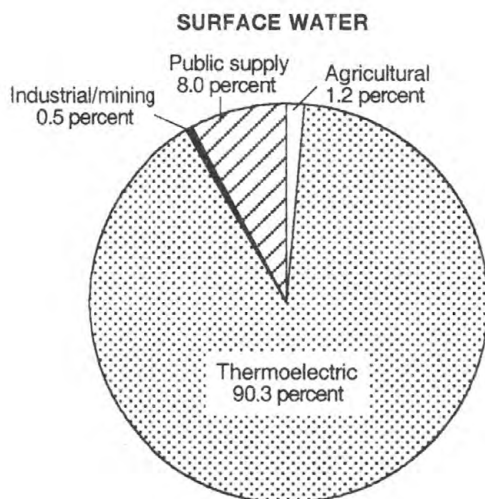


Figure 1. Major water-use categories and percentage of surface water used in Missouri during 1990.

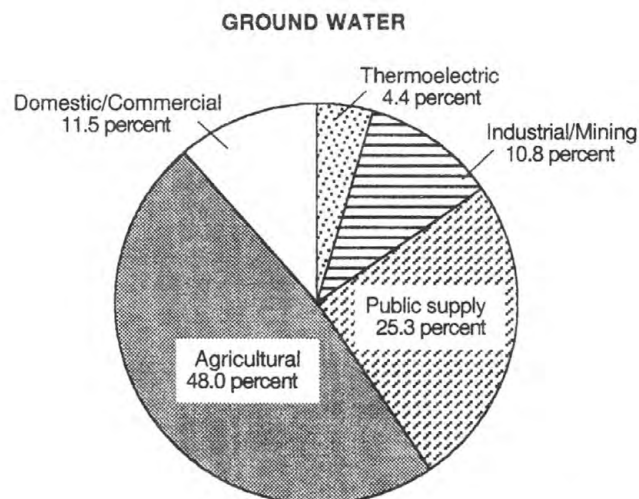


Figure 2. Major water-use categories and percentage of ground water used in Missouri during 1990.

PHYSIOGRAPHY

Missouri has three distinct physiographic areas--the Central Lowland in the north and west, the Mississippi Alluvial Plain in the southeast, and between them the Ozark Plateaus (fig. 3).

The Central Lowland includes most of the area north of the Missouri River and a large area south of the river in the western part of the State. Elevations range from about 450 to 1,000 feet above sea level. The area has numerous wide, flat valleys incised by rivers.

The Ozark Plateaus in the southern part of the State is wooded, rugged, and has deep, narrow valleys with sharp ridges separating the valleys. Elevations range from about 1,000 to 1,600 feet above sea level.

The Mississippi Alluvial Plain (Bootheel) is a relatively flat area of about 3,000 square miles in the extreme southeast part of the State. Elevations range from about 200 to 300 feet above sea level. The area is well drained and contains excellent farmland.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water--Streamflow

Streamflow varies seasonably in Missouri and generally reflects precipitation patterns unless a stream is regulated. Above average rainfall during the spring over most of Missouri caused flooding of many rivers and streams during May and June. The gage height at Mississippi River at Thebes exceeded the 1993 peak gage height because of backwater, but the peak discharge was less than the 1993 peak discharge. Monthly mean discharge during water year 1995 and long-term monthly discharges at representative stations are shown in figure 4.

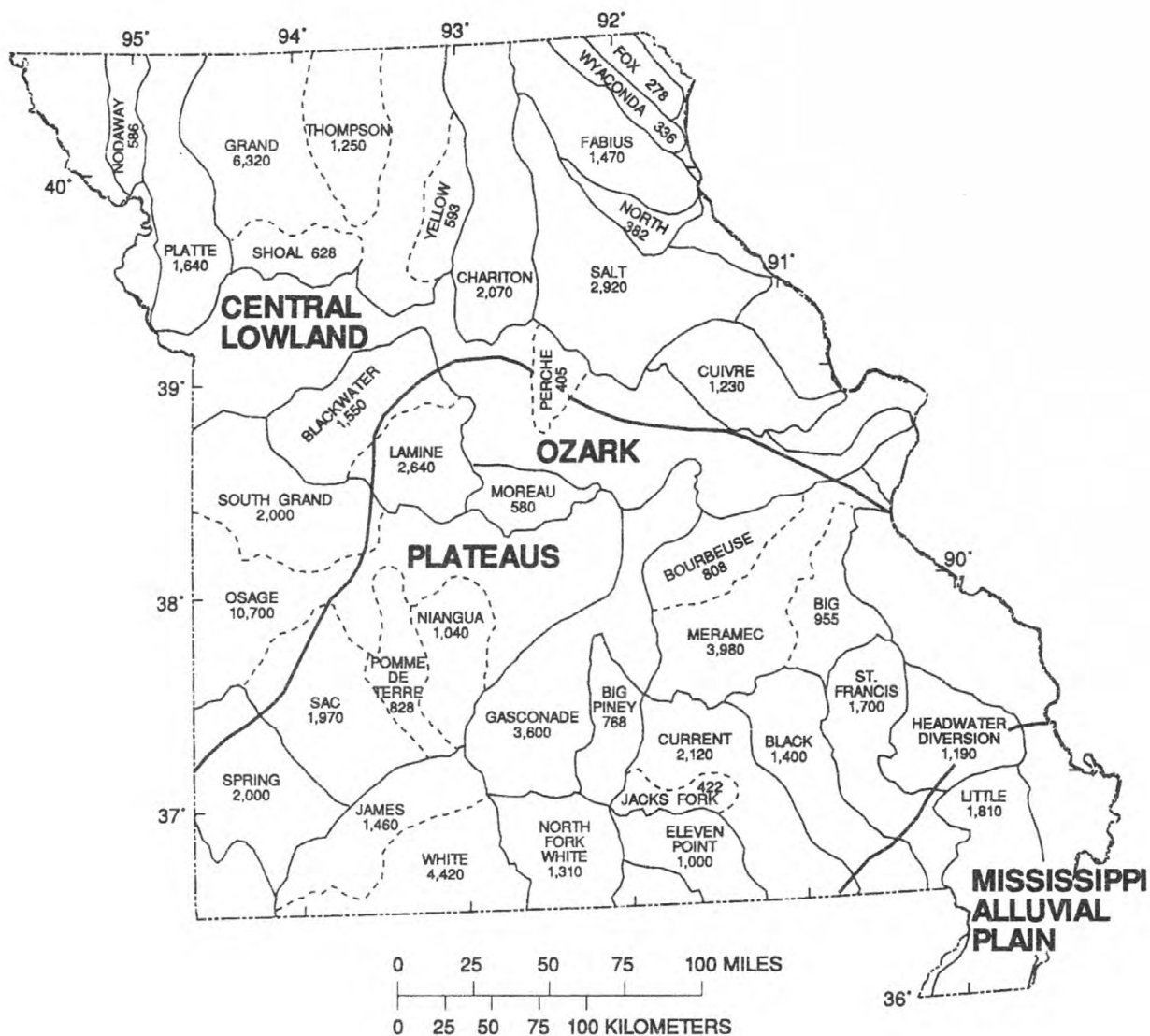
During the spring flooding, the USGS provided continuous streamflow and related information to the U.S. Army Corps of Engineers, National Weather Service and many State and local agencies to provide basic information on the floodwaters. The information was used by the U.S. Army Corps of Engineers to operate water diversions, dams, locks, and levees. The National Weather Service used the information in forecasting floods and issuing flood warnings.

Mean discharges during water year 1995 and long-term mean discharges at representative stations are shown in figure 4. Mean discharges during water year 1995 were greater than long-term means throughout southern Missouri and less than long-term means in northern Missouri.

Peak discharges for water year 1995 are compared to the peak discharges for the period of record at 15 selected gaging stations in table 1. The 7-day average low flow for water year 1995 is compared to the 7-day, 2-year low flow and minimum flow for selected stations in table 2. The 7-day, 2-year low flow is the 7-day average minimum flow with a recurrence interval of 2 years.

Table 1.--Comparisons of peak discharge for the 1995 water year with those for period of record for selected stations

Station identification		Peak discharge during 1995 water year		Peak discharge for period of record	
		Cubic feet per second	Date	Cubic feet per second	Date
05495000	Fox River at Wayland	11,300	July 6	26,400	Apr. 22, 1973
05587450	Mississippi River at Grafton, Ill.	419,000	May 28	598,000	Aug. 1, 1993
06893000	Missouri River at Kansas City	220,000	May 19	573,000	July 14, 1951
06894000	Little Blue River near Lake City	8,590	May 17	42,300	Aug. 13, 1982
06897500	Grand River near Gallatin	37,700	May 13	89,800	July 7, 1993
06905500	Chariton River near Prairie Hill	31,600	May 24	31,900	Apr. 23, 1973
06933500	Gasconade River at Jerome	34,100	May 3	136,000	Dec. 5, 1982
06934500	Missouri River at Hermann	579,000	May 19	750,000	July 31, 1993
07010000	Mississippi River at St. Louis	800,000	May 22	1,080,000	Aug. 1, 1993
07019000	Meramec River near Eureka	69,700	May 20	145,000	Dec. 6, 1982
07022000	Mississippi River at Thebes, Ill.	875,000	May 23	975,000	Aug. 7, 1993
07037500	St. Francis River near Patterson	36,000	May 18	155,000	Dec. 3, 1982
07057500	North Fork River near Tecumseh	7,010	May 1	133,000	Nov. 19, 1985
07068000	Current River at Doniphan	19,200	May 3	122,000	Dec. 3, 1982
07018600	Spring River near Waco	31,800	June 10	151,000	Sept. 26, 1993



EXPLANATION

- PHYSIOGRAPHIC AREA BOUNDARY
- PRIMARY DRAINAGE-BASIN DIVIDE
- SECONDARY DRAINAGE-BASIN DIVIDE

BIG 955 NAME OF RIVER AND APPROXIMATE DRAINAGE AREA IN MISSOURI, IN SQUARE MILES

NOTE: 1995 ANNUAL MEAN DISCHARGE GREATER THAN LONG-TERM MEAN DISCHARGE STATEWIDE

Figure 3. Major drainage basins, physiographic areas, and area of greater than mean long-term discharge during 1995.

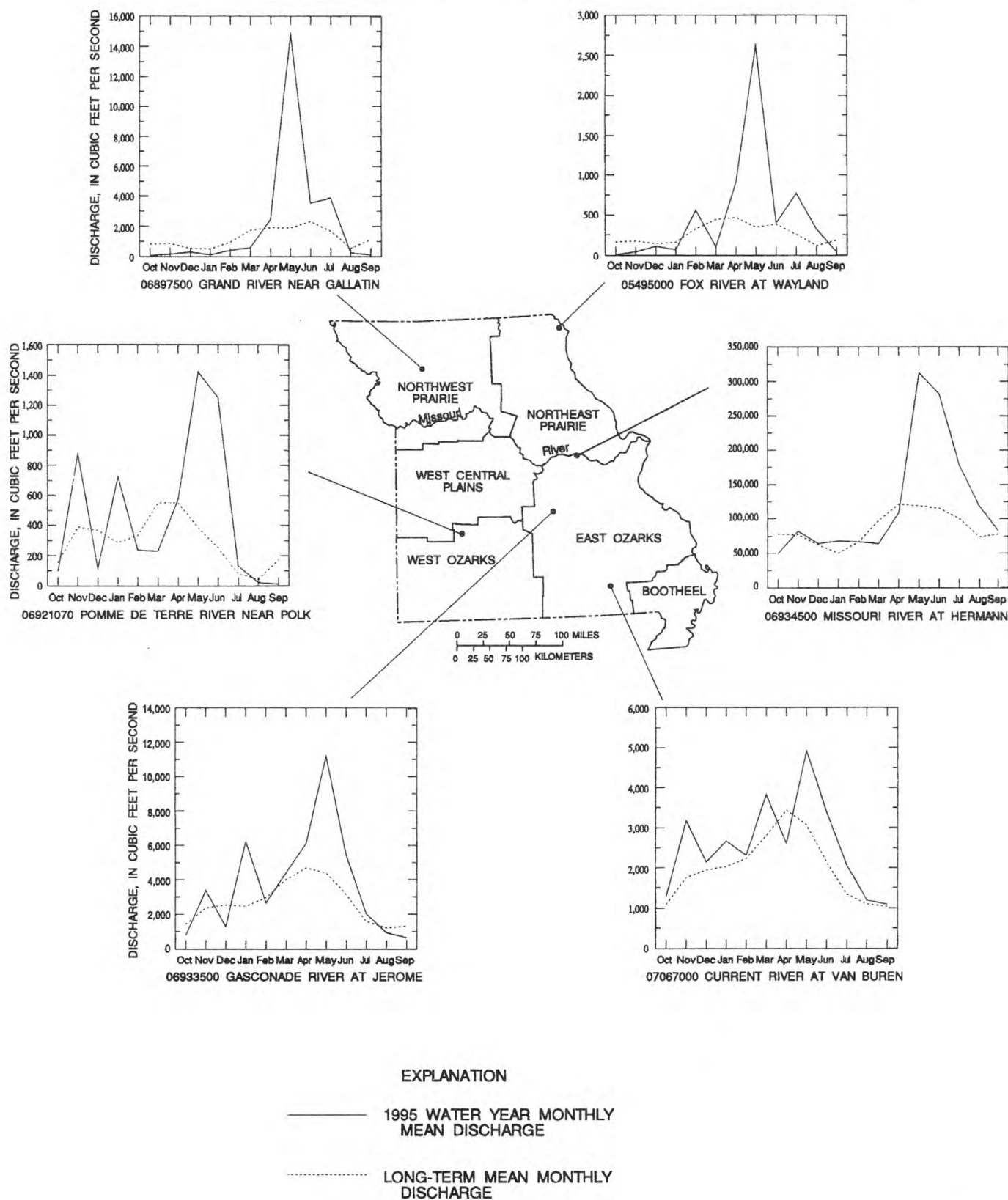


Figure 4. Comparison of 1995 water-year mean discharge to long-term mean discharge.

Table 2.--Comparisons of 1995 7-day low flows to 7-day, 2-year low flows and minimum flows for the period of record at selected stations

[Flows in cubic feet per second]

Station identification and period of record (water years) used	Average 7-day low flows		Minimum flows for period of record used	
	1995	2-year ¹	Discharge	Years of occurrence
05549500 Fox River at Wayland (1922-91)	4.43	1.3	0	Several years
06820500 Platte River near Agency (1933-91)	43	17	0	Several years
06921070 Pomme de Terre River near Polk (1969-91)	7.9	3.0	0.3	1980
07016500 Bourbeuse River at Union (1921-91)	46	32	11	1956
07067000 Current River at Van Buren (1912-91)	959	700	473	1956
07187000 Shoal Creek above Joplin (1942-91)	129	92	12	1954

¹ Skelton, John, 1976, Missouri stream and springflow characteristics--Low-flow frequency and flow duration: Rolla, Missouri Division of Geology and Land Survey Water Resources Report 32, 76 p.

Water Quality--Streamflow

Samples for determining the chemical quality of streamflow were collected at 53 stations in Missouri. Data collected at these stations, in addition to streamflow data, include some or all of the following properties or constituents: water temperature, specific conductance, dissolved oxygen, pH, carbonate, bicarbonate, alkalinity, inorganic constituents, nutrients, trace elements, indicator bacteria, sediment, and pesticides.

Missouri streams generally are not contaminated by industrial wastes. Localized contamination may occur near urban areas, industrialized centers, agricultural-chemical-use areas, and waste-dump sites. The range of dissolved-solids concentrations in selected streams during water year 1995 is given in the following table.

Station identification	Dissolved-solids concentration (milligrams per liter)	
	Minimum	Maximum
Cuivre River near Troy	124	244
Missouri River at St. Joseph	458	540
Platte River at Sharps Station	146	227
Grand River near Sumner	96	336
Osage River below St. Thomas	142	216
Gasconade River above Jerome	142	185
Missouri River at Hermann	228	448
Meramec River at Paulina Hills	<1	222

Daily suspended-sediment samples and data on the particle size of suspended sediment were collected at 10 stations in Missouri. At three Missouri River stations, point suspended-sediment samples and particle-size data were collected periodically. The following table lists one selected station in the Central Lowland and the Mississippi River at Thebes, Ill. and their minimum and maximum daily mean suspended-sediment concentrations during water year 1995:

Station identification	Daily mean suspended-sediment concentration (milligrams per liter)	
	Minimum	Maximum
Middle Fork Salt River at Paris	7	4,320
Mississippi River at Thebes, Ill.	76	966

Ground-Water Levels

Ground-water levels for eight ground-water monitoring wells are listed in this report. Water levels generally followed precipitation patterns, although fluctuations may reflect changes in the rate of pumping and the location of principal pumping centers.

SPECIAL NETWORKS AND PROGRAMS

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 national or regional water-quality planning and management. The 142 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.

NASQAN was redesigned in 1995 and will be known as NASQAN II beginning in 1996. NASQAN II will focus on four of the largest river basins in the Nation--the Mississippi, the Columbia, the Colorado, and the Rio Grande. The objective of NASQAN II is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The Ambient Water-Quality Network (AWQN) is a statewide data-collection network designed by both the U.S. Geological Survey and the Missouri Department of Natural Resources to meet many of the information needs of State agencies and other groups involved in Statewide water-quality planning and management. There are currently 22 member stations within this network. Each station has been assigned a U.S. Geological Survey downstream station number under which all data are stored in WATSTORE (the U.S. Geological Survey national water-quality data base). The objectives of AWQN are (1) to obtain information on the quality and quantity of water moving within the State; (2) provide for a historical data base of water-quality information that can be used by State planning and management agencies to make informed decisions about cultural impacts on the State's surface waters; and (3) provide for consistent methodology in data collection, laboratory analysis, and data reporting.

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

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.

EXPLANATION OF THE RECORDS

The surface- and ground-water records published in this report are for the 1995 water year that began October 1, 1994, and ended September 30, 1995. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for the surface water, and ground-water-level data. 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.

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 system used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water sites will 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 Missouri, for surface-water stations where only miscellaneous measurements are made.

Downstream Order and Station Number

Since October 1, 1950, the order of listing hydrologic-station records in U.S. Geological Survey reports is in a downstream direction along the mainstream. 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 on which a station is situated is indicated by an indentation in a list of stations in the front of the report. Each

indention represents one rank. The downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. 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 8-digit number for each station such as 06909000, which appears just to the left of the station name, includes the 2-digit part number "06" plus the 6-digit downstream-order number "909000".

Numbering System for Wells and Miscellaneous Sites

The 8-digit downstream-order station numbers are not assigned to miscellaneous sites where only random water-quality samples or discharge measurements are taken. The miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the miscellaneous sites and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the sites within a 1-second grid (fig. 5).

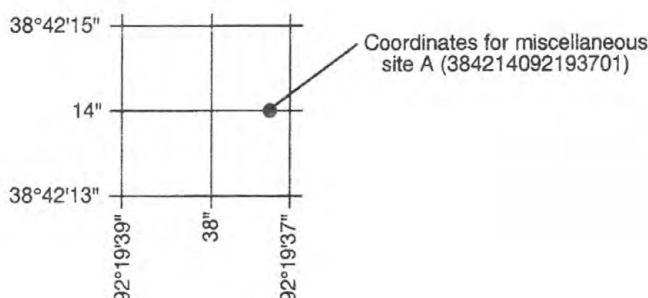


Figure 5. System for numbering miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharge may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or any period of time. They may be obtained using a continuous stage-recording device, but need not be. Locations of surface-water stations are shown in figure 6.

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. Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report.

Data Collection and Computation

The data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from electronic retrieval of data via satellite from a data-collection platform at the gaging station, direct readings on a nonrecording gage, or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the U.S. Geological Survey. These methods are described in standard textbooks, U.S. Geological Survey Water-Supply Paper 2175, and the U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI's) Book 3, Chapter A1 through A19 and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge-relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements; computation of flow over dams or weirs), step-backwater techniques, velocity-area

studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. 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 computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some gaging stations, acoustic velocity meter (AVM) systems are used to compute discharge. The AVM system measures the stream's velocity at one or more paths in the cross section. Coefficients are developed to relate this path velocity to the mean velocity in the cross section. Because the AVM sensors are fixed in position, the adjustment coefficients generally vary with stage. Cross-sectional area curves are developed to relate stage, recorded as noted above, to cross-section area. Discharge is computed by multiplying path velocity by the appropriate stage related coefficient and area.

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.

At some stream-gaging stations, the stage-discharge relation is affected by ice in the winter and it becomes impossible to compute the discharge in the usual manner. Discharge for period of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

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

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

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 on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

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 consist 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 includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

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 the 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 reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

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

PERIOD OF RECORD.--This 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 sea level (see "DEFINITION OF TERMS" section), 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 also is 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 presentation 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"). The figure 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 includes large noncontributing areas. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir 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 PERIOD OF RECORD, 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, "FOR PERIOD OF RECORD," will consist of all of the stations 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 that follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year.

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

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

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

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

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

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

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 the runoff for a given time period were uniformly distributed on it.

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

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

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

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first 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 generally are 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 value 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 Data and Computed Results

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

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair", within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharge of less than 1 cubic foot per second; to tenths between 1.0 and 10 cubic feet per second; to whole numbers between 10 and 1,000 cubic feet per second; and to three significant figures above 1,000 cubic feet per second. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

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

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the District Office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the District Office.

The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintains an index of all discharge measurement sites in the State as well as an index of records of discharge collected by other agencies but not published by the U.S. Geological Survey. Information on records available at specific sites can be obtained upon request.

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 require 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 one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a 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 surface-water-quality stations are shown in figure 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 or 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 records are published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-records 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 ensuring that the data obtained represents the in situ quality of water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To ensure 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 onsite measurements and for collecting, treating, and shipping samples are detailed in the TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in the "PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS" section of this report. These methods are consistent with the ASTM standards and generally follow ISO standards.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogenous. 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. 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.

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 bi-hourly readings beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the District Office.

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 daily, the water temperatures are taken at about the same time each day. Large streams have a small daily 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, maximum, minimum, and mean temperatures for each day are published.

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 loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations measured immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

The daily suspended-sediment concentrations for the Mississippi River at St. Louis are derived from turbidity readings from the Chain of Rocks Water-Treatment Plant and the Chouteau Island Water-Treatment Plant. Approximately once a week, two depth-integrated verticals are taken to adjust the relation between suspended sediment and turbidity.

Laboratory Measurements

Samples for indicator bacteria and specific conductance are analyzed locally. All other samples are analyzed in the U.S. Geological Survey laboratories in Arvada, CO, Ocala, FL, and Rolla, MO. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI Book 5, Chapter C1. Methods used by the U.S. Geological Survey laboratories are given in TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Quality Assurance of Water-Quality Data

Quality assurance is a system of activities whose purpose is to produce a product with the assurance that it meets defined standards of quality with a stated level of confidence. A quality assurance program became an integral part of the ambient water-quality monitoring network in fiscal year 1993. The program involved collecting additional samples to measure sampling repeatability, container cleanliness, and equipment cleanliness during regular site visits when environmental samples were being collected. The results of these additional samples are used by the District Water-Quality Specialist to define problem areas and eliminate further contamination of samples and/or improper sampling procedures. A data base of quality-assurance data has been created and contains all quality-assurance data collected within the District. These data can be retrieved by written request through the District Water-Quality Specialist.

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, and biological data obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither "LOCATION" nor the "DRAINAGE AREA" statements are repeated. The following information, when 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 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 recorder, sediment pumping samples, 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 U.S. 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 transaction 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 ensure the most recent updates.

Remark Codes

The following remark codes may appear with the water-quality data in this report.

PRINTED OUTPUTREMARK

>	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 acceptable range (non-ideal colony count).
E	Laboratory estimated value.
M	Results compromised due to contaminated bacteria media.
V	Estimated discharge value due to icy conditions.

Dissolved Trace-Element Concentrations

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

Records of Ground-Water Levels

Only water-level data from a national network of observation wells are given in this report. These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Missouri are shown in figure 8.

Data Collection and Computation

Measurements of water levels are made 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 in numerical order according to map number (fig. 8). 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 is the well map number and name shown at the beginning of each record.

Water-level records are obtained from direct measurements with a steel tape or M-scope, 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. The method and frequency of measurement are given in the station 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 in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water levels 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 during the water year. The description of the well is presented first through the use of descriptive headings preceding the tabular data. The following comments clarify information presented under the various headings of the well description.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the landline location; and a geographic point of reference.

FORMATIONS OPEN TO THE WELL.--This entry designates by name (if a name exists) and geologic age the formation(s) to which the well is open.

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 the type of recorder (digital or graphic) and the date of recorder installation.

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, for example), 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) sea level; it is reported with a precision depending on the method of determination.

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

PERIOD OF PROCESSED 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 present" 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 U.S. Geological Survey, may be noted.

A table of daily mean 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. Monthly mean, maximum, and minimum daily water levels are reported for wells equipped with a recording device. Missing records are indicated by dashes in place of the water level.

ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal 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 U.S. 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 over 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.

*Daily Values Files - Contains over 220 million daily values of streamflow, 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 Data - 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 over 900,000 wells, springs, and other sources of ground water. The data include site location, geohydrologic characteristics, well-construction history, and onsite 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 USGS National Center
Reston, Virginia 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. 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.)

DEFINITION OF TERMS

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

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

Escherichia coli (E. Coli) bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. E. Coli is strictly an inhabitant of the gastrointestinal tract of warm-blooded animals, and its presence in water is direct evidence of fecal contamination from warm-blooded animals and the possible presence of pathogens. In the laboratory they are defined as all the organisms that produce yellow or yellow-brown colonies and remain so when placed on a filter pad saturated with urea substrate broth after resuscitation at $35.0^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ for 2 hours and incubation for 24 hours at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on m-TEC medium (nutrient medium for E. Coli growth). Their concentrations are expressed as number of colonies per 100 milliliters (cols./100 ML) of sample.

Fecal coliform bacteria are bacteria that also are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water and are characterized as gram-negative, rod-shaped bacteria that ferment lactose with gas formation. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-FC medium (nutrient medium for fecal coliform bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliter (cols./ 100 ML) of sample.

Fecal streptococci bacteria are bacteria that also are present in the intestines or feces 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 that produce red or pink colonies within 48 hours at $35.0^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ on KF medium (nutrient medium for fecal streptococci bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliter (cols. / 100 ML) of sample.

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

Cubic foot per second-day (Cfs-day) is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,445 cubic meters.

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

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.

Cubic foot per second (ft^3/s , 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 approximately 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 (CFSM) 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.

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

Dissolved refers to the amount of substance present in true chemical solution. In practice, however, the term includes all forms of substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analysis are performed on filtered samples.

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

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

Gage height (GH) 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 attributable to the presence of alkaline earth (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

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

Micrograms per gram ($\mu\text{g/g}$) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter ($\mu\text{g/L}$, $\mu\text{g/L}$) is a unit for expressing the concentration of chemical constituents in solution. Micrograms per liter represent the mass of solute per unit volume (liter) of water.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent 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 sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) 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 "mean sea level."

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 suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawn 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 recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)			Method of analysis
Clay	0.00024	-	0.004	Sedimentation
Silt	0.004	-	0.062	Sedimentation
Sand	0.062	-	2.0	Sedimentation 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 material 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.

Recurrence interval as applied to floods, is the average number of years within which a given flood peak will be equaled or exceeded once. For example, a 100-year flood discharge will be exceeded on the average of once in 100 years. In terms of probability, there is a 1 percent chance that such a flood will occur in any year.

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

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

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in stream 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.

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).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Suspended-sediment load is quantity of suspended sediment passing a section in a specified period.

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

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

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks 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 ($\mu\text{S}/\text{CM}$) 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.

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

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

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

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 water 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 in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

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 would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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, 1980, is called "1980 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.

WRD is used as an abbreviation for "Water-Resources Data" in the "REVISED RECORDS" paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references 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.
- 3-A9. *Measurement of time of travel in streams by dye tracing*, by F. A. Kilpatrick and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1989. 27 pages.
- 3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A12. *Fluorometric procedures for dye tracing*, Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.
- 3-A18. *Determination of stream reaeration coefficients by use of tracers*, by F. A. Kilpatrick, R. E. Rathbun, Nobuhiro Yotsukura, G. W. Parker, and L. L. DeLong: USGS--TWRI Book 3, Chapter A18. 1989. 52 pages.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.

- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS--TWRI Book 3, Chapter A21. 1995. 56 pages.
- 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 programmed 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.
- 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.

- 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.

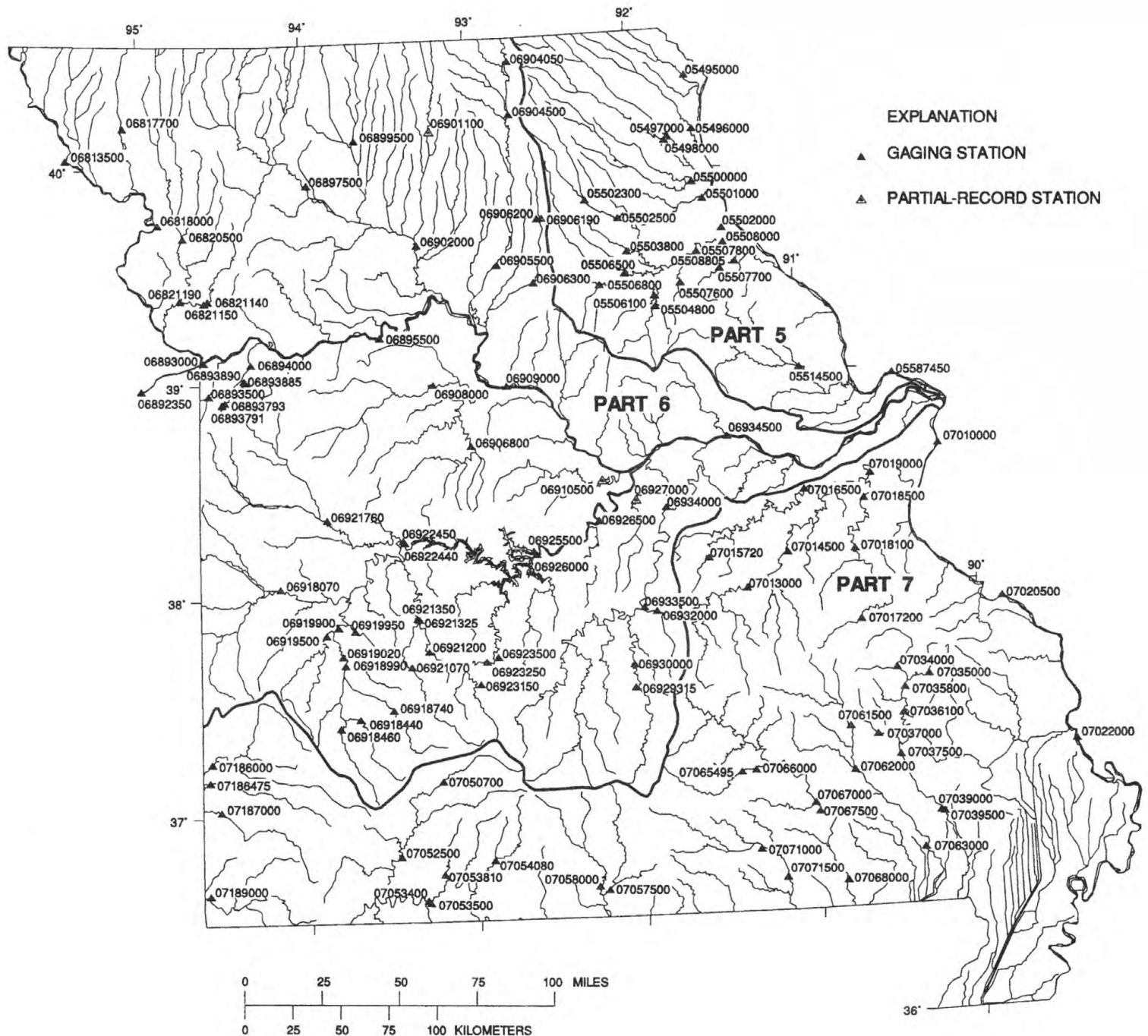


Figure 6. Location of surface-water stations.

05495000 FOX RIVER AT WAYLAND, MO

LOCATION.--Lat 40°23'33", long 91°35'50", in NW 1/4 sec.31, T.65 N., R.6 W., Clark County, Hydrologic Unit 07110001, on left bank 30 ft downstream from bridge on U.S. Highway 136, 0.8 mi west of Wayland, 5.0 mi downstream from Brush Creek and at mile 15.2.

DRAINAGE AREA.--400 mi², approximately.

PERIOD OF RECORD.--February 1922 to current year.

REVISED RECORDS.--WSP 785: 1934. Revised daily mean discharges for the period Aug. 9, 1977 to Sept. 30, 1977 and the annual maximum peak for the 1977 water year published in WDR-MO-79-1: 1978.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 501.52 ft above sea level. Prior to Oct. 1, 1929, nonrecording gage at bridge 2.8 mi upstream at different datum; Oct. 1, 1929 to June 11, 1936, nonrecording gage at bridge 90 ft upstream; June 1936 to Aug. 1988 upstream 300 ft. at present datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	16	56	25	341	155	76	228	421	64	23	15
2	4.6	16	34	25	902	101	69	175	404	40	75	14
3	3.9	20	28	14	2660	109	65	143	608	32	814	13
4	3.6	21	23	14	1970	77	58	145	639	2390	397	11
5	3.2	19	20	13	1470	90	49	166	383	8690	106	11
6	18	31	51	12	1000	105	43	167	1150	8150	53	12
7	17	22	908	12	804	122	43	211	1000	1690	110	173
8	11	39	847	12	541	85	453	4700	917	691	348	333
9	9.6	32	334	12	646	77	704	6140	2210	387	174	120
10	7.7	22	153	12	511	77	2150	4910	1320	267	3620	57
11	6.2	17	172	11	376	76	5820	1290	661	192	1090	31
12	5.3	24	117	9.8	289	87	4950	665	394	145	366	23
13	4.6	25	63	11	260	107	1950	2070	274	113	187	22
14	4.0	24	47	136	195	119	743	6250	194	94	111	18
15	4.0	19	36	104	174	111	449	3820	146	74	93	15
16	4.2	15	31	53	145	98	320	1310	117	59	892	13
17	4.7	16	40	40	139	86	264	6030	94	50	549	13
18	4.8	18	42	74	146	74	1850	3660	78	43	335	12
19	4.7	15	74	79	196	65	1710	2020	64	37	177	13
20	4.8	15	58	121	334	63	722	1030	54	33	108	14
21	5.2	38	57	76	622	63	384	590	48	30	74	15
22	4.9	151	56	44	588	60	264	382	43	30	55	16
23	5.5	147	53	38	233	54	200	696	39	34	45	15
24	6.4	73	45	35	173	49	163	6740	35	34	38	14
25	6.3	41	39	28	157	42	139	9910	57	53	31	14
26	6.2	28	32	23	151	44	133	7400	41	99	27	12
27	6.7	48	22	24	295	264	1120	2130	108	134	25	10
28	6.8	101	21	92	355	417	1400	4620	120	74	24	9.3
29	6.4	156	24	340	---	184	563	2300	198	42	21	16
30	6.3	103	24	363	---	118	321	944	136	29	18	88
31	9.9	---	20	302	---	91	---	598	---	22	17	---
MEAN	6.51	43.7	114	69.5	560	105	906	2627	398	768	323	38.1
MAX	18	156	908	363	2660	417	5820	9910	2210	8690	3620	333
MIN	3.2	15	20	9.8	139	42	43	143	35	22	17	9.3
IN.	.02	.12	.33	.20	1.46	.30	2.53	7.57	1.11	2.22	.93	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

	MEAN	167	176	144	160	320	444	466	348	384	256	120	184
MAX	1313	1375	1330	1133	1433	2264	2750	2627	2223	3387	1509	1999	
(WY)	1987	1929	1983	1969	1982	1979	1973	1995	1947	1993	1970	1970	
MIN	.000	.007	.019	.19	.42	8.56	2.35	1.39	.060	.21	.019	.17	
(WY)	1957	1957	1957	1957	1957	1956	1956	1956	1956	1936	1936	1937	

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1922 - 1995

	ANNUAL MEAN	179	498	264
HIGHEST ANNUAL MEAN				927
LOWEST ANNUAL MEAN				17.6
HIGHEST DAILY MEAN	5460	May 7	9910	May 25
LOWEST DAILY MEAN	3.0	Sep 21	3.2	Oct 5
ANNUAL SEVEN-DAY MINIMUM	3.5	Sep 15	4.4	Oct 13
INSTANTANEOUS PEAK FLOW	---		11300	Jul 6
INSTANTANEOUS PEAK STAGE	---		18.00	Jul 6
INSTANTANEOUS LOW FLOW	---		3.0	Oct 5, 6
ANNUAL RUNOFF (INCHES)	6.06		16.90	8.97
10 PERCENT EXCEEDS	326		1100	544
50 PERCENT EXCEEDS	39		74	38
90 PERCENT EXCEEDS	5.2		12	2.1

05496000 WYACONDA RIVER ABOVE CANTON, MO

LOCATION.--Lat 40°08'32", long 91°33'55", in SW 1/4 SW 1/4 NE 1/4 sec.28, T.62 N., R.6 W., Lewis County, Hydrologic Unit 07110001, on left bank on downstream side of bridge on State Highway 16, 1.9 mi upstream from Sugar Creek, 2.5 mi west of Canton and at mile 16.7.

DRAINAGE AREA.--393 mi².

PERIOD OF RECORD.--October 1932 to September 1972, October 1979 to current year.

REVISED RECORDS.--WDR MO-92-1: (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 517.41 ft above sea level. Prior to May 1, 1939, nonrecording gage 500 ft downstream at datum 2.00 ft lower; Sept. 25, 1975, to Sept. 17, 1979, nonrecording gage at present site and at datum 2.00 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	19	45	16	479	234	81	215	284	94	195	20
2	2.5	14	34	18	1890	148	74	172	231	60	452	18
3	2.3	12	24	17	2460	118	63	141	572	46	1090	18
4	2.1	11	23	14	1680	97	60	153	521	613	957	17
5	2.3	24	21	12	729	115	57	199	211	3650	211	16
6	2.3	63	172	11	279	146	51	179	1090	7790	96	16
7	2.5	33	1980	11	256	196	42	185	1170	8760	103	20
8	7.9	21	1150	9.5	374	156	52	3860	520	3250	210	23
9	5.6	15	340	9.0	350	202	330	4950	2340	618	90	19
10	3.1	13	198	8.4	248	115	2090	6950	1090	300	1270	15
11	3.0	9.7	98	8.4	182	109	3710	3030	470	198	545	14
12	3.4	8.7	95	12	189	108	4990	635	258	139	167	14
13	3.7	7.9	99	26	172	106	3720	659	173	94	104	16
14	3.2	11	66	739	117	116	909	3150	126	68	68	16
15	2.8	9.0	49	611	81	115	404	4710	99	57	128	14
16	2.8	9.3	54	321	83	102	288	2120	83	50	2690	12
17	3.2	7.6	59	189	77	89	272	4450	65	44	3570	11
18	3.5	5.8	63	137	93	79	1940	5930	55	38	971	10
19	3.6	7.4	76	202	185	76	2410	4980	48	34	307	10
20	6.6	24	59	183	212	73	883	1430	45	33	154	12
21	3.4	117	57	167	224	72	379	478	47	32	98	14
22	4.5	83	47	126	209	65	254	245	42	30	68	14
23	5.4	72	42	92	205	65	191	217	38	38	54	13
24	5.4	39	36	77	185	56	153	4830	31	39	50	11
25	5.4	27	31	67	180	51	130	7700	31	45	41	11
26	5.1	22	27	61	241	51	148	8590	118	223	39	9.9
27	4.8	46	23	65	624	158	1080	5060	127	234	32	9.3
28	7.5	165	22	229	530	304	1370	4330	834	80	28	8.8
29	7.5	164	23	579	---	180	531	4840	288	48	26	10
30	7.4	73	21	596	---	129	294	1580	250	36	23	22
31	17	---	20	432	---	111	---	486	---	61	21	---
MEAN	4.60	37.8	163	163	448	121	899	2789	375	865	447	14.5
MAX	17	165	1980	739	2460	304	4990	8590	2340	8760	3570	23
MIN	2.1	5.8	20	8.4	77	51	42	141	31	30	21	8.8
IN.	.01	.11	.48	.48	1.19	.35	2.55	8.18	1.07	2.54	1.31	.04

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
MEAN	136	166	162	155	337	413	424	400	359	297	138	171
MAX	1677	1463	1399	946	1389	1346	1809	2789	2594	2792	2242	2510
(WY)	1987	1986	1983	1946	1985	1985	1983	1995	1947	1993	1970	1986
MIN	.000	.000	.47	.10	2.05	7.53	3.38	1.69	.66	.016	.000	.017
(WY)	1954	1954	1954	1954	1989	1957	1956	1934	1956	1934	1934	1953

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	204	530	263
HIGHEST ANNUAL MEAN			861
LOWEST ANNUAL MEAN			14.2
HIGHEST DAILY MEAN	5060	May 8	16500
LOWEST DAILY MEAN	2.1	Oct 4	.00
ANNUAL SEVEN-DAY MINIMUM	2.4	Oct 1	.00
INSTANTANEOUS PEAK FLOW	---	Jul 7	17700
INSTANTANEOUS PEAK STAGE	---	Jul 7	31.33
INSTANTANEOUS LOW FLOW	---	Oct 4	1.00
ANNUAL RUNOFF (INCHES)	7.05	18.31	9.08
10 PERCENT EXCEEDS	356	1310	545
50 PERCENT EXCEEDS	36	81	31
90 PERCENT EXCEEDS	3.6	8.6	2.0

05497000 NORTH FABIUS RIVER AT MONTICELLO, MO

LOCATION.--Lat 40°06'30", long 91°42'51", in SW 1/4 SE 1/4 sec.6, T.61 N., R.7 W., Lewis County, Hydrologic Unit 07110002, on right bank upstream from bridge on State Highway 16, 1.0 mi south of Monticello and 19.0 mi upstream from Middle Fabius River.

DRAINAGE AREA.--452 mi².

PERIOD OF RECORD.--February 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 925: 1937-39(M). WSP 1308: 1922(M), 1924-26(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 540.73 ft above sea level. Prior to Nov. 22, 1930, nonrecording gage at site 400 ft downstream at datum 0.03 ft lower; Nov. 22, 1930, to Nov. 28, 1967, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	26	44	18	545	279	109	261	533	152	113	24
2	7.2	21	35	14	1820	168	103	215	540	107	310	22
3	6.8	19	31	16	2340	130	100	186	578	84	941	22
4	6.2	19	28	14	1820	124	88	198	582	2320	718	21
5	6.3	37	26	12	792	143	72	228	368	8740	306	19
6	8.6	53	135	12	679	176	64	216	1210	10300	194	19
7	15	32	2040	12	667	203	61	212	897	3030	513	36
8	13	26	1090	12	515	135	59	5060	1120	986	199	40
9	11	24	349	12	574	99	222	9400	2870	630	150	38
10	9.0	19	216	12	564	136	1120	3840	1130	458	307	25
11	8.2	17	107	12	376	129	5240	1200	609	355	522	20
12	7.3	17	126	13	250	131	4000	751	367	285	239	21
13	7.0	19	139	28	246	145	1470	2140	263	235	154	22
14	6.9	20	102	403	200	147	714	7180	205	196	115	19
15	7.0	18	69	213	175	142	463	2360	168	165	148	17
16	7.4	17	66	136	159	126	347	1210	144	140	2200	16
17	8.2	17	83	119	156	111	348	5490	121	115	1440	16
18	7.7	16	86	104	168	97	2150	5230	101	93	506	14
19	8.7	14	80	134	207	88	2320	2970	87	73	269	17
20	8.3	37	80	165	293	96	793	1090	78	60	179	20
21	7.7	143	78	172	365	87	429	632	81	53	133	19
22	7.7	136	60	139	236	82	307	441	82	52	103	18
23	6.9	85	50	109	186	72	237	716	80	67	82	18
24	7.5	42	43	91	169	61	199	7960	74	60	66	17
25	7.1	31	36	79	144	50	173	11100	81	59	53	16
26	7.2	25	29	70	136	58	185	4930	101	122	46	15
27	7.7	78	23	86	696	297	1600	2140	285	138	41	14
28	7.9	239	22	338	554	341	1510	6350	521	90	35	14
29	8.0	137	20	590	---	197	553	2970	496	75	32	26
30	8.5	73	19	540	---	147	337	999	240	72	28	77
31	21	---	16	455	---	122	---	643	---	85	26	---
MEAN	8.55	48.6	172	133	537	139	846	2849	467	948	328	22.7
MAX	21	239	2040	590	2340	341	5240	11100	2870	10300	2200	77
MIN	6.2	14	16	12	136	50	59	186	74	52	26	14
IN.	.02	.12	.44	.34	1.24	.36	2.09	7.27	1.15	2.42	.84	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

	185	198	178	192	345	462	521	417	412	315	137	192
MEAN	185	198	178	192	345	462	521	417	412	315	137	192
MAX	1496	1347	1521	1679	1346	2336	3171	2849	3148	3320	2149	1966
(WY)	1987	1929	1983	1974	1937	1979	1973	1995	1947	1993	1970	1970
MIN	.013	1.06	.73	.14	2.42	7.91	7.15	1.71	.070	.000	.000	.51
(WY)	1957	1957	1957	1940	1989	1956	1956	1934	1934	1934	1934	1953

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1922 - 1995
ANNUAL MEAN	216	544	296
HIGHEST ANNUAL MEAN			923
LOWEST ANNUAL MEAN			18.0
HIGHEST DAILY MEAN	5740	May 7	17900
LOWEST DAILY MEAN	5.4	Sep 21	.00
ANNUAL SEVEN-DAY MINIMUM	6.5	Sep 15	.00
INSTANTANEOUS PEAK FLOW	---		20700
INSTANTANEOUS PEAK STAGE	---		33.03
INSTANTANEOUS LOW FLOW	---		.00
ANNUAL RUNOFF (INCHES)	6.50		8.90
10 PERCENT EXCEEDS	448		572
50 PERCENT EXCEEDS	55		46
90 PERCENT EXCEEDS	8.2		4.0

05498000 MIDDLE FABIUS RIVER NEAR MONTICELLO, MO

LOCATION.--Lat 40°05'37", long 91°44'08", in SE 1/4 sec.12, T.61 N., R.8 W., Lewis County, Hydrologic Unit 07110002, on left bank on downstream end of bridge pier on State Highway 16, 2.5 mi southwest of Monticello, 8.0 mi downstream from Radish Branch and 17 mi upstream from mouth.

DRAINAGE AREA.--393 mi².

PERIOD OF RECORD.--July 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 540.46 ft above sea level. Prior to Oct. 4, 1967, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good except for periods of ice effect, Jan. 5-11, which are fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1945, reached a stage of 23.3 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	35	41	23	465	310	88	224	405	121	25	18
2	5.5	17	29	29	1050	160	81	178	415	71	122	16
3	5.0	9.9	23	18	1900	109	76	150	550	51	1790	15
4	5.1	7.8	22	17	1780	97	71	167	479	83	770	15
5	4.5	54	21	16	916	118	59	190	305	3370	258	13
6	3.8	130	267	16	445	149	50	210	516	8640	115	13
7	3.9	23	2130	16	292	175	46	254	980	11400	1040	122
8	12	15	1440	16	186	139	45	3330	704	4070	172	85
9	9.7	14	427	16	212	94	254	4220	2570	588	77	33
10	8.2	14	216	16	182	96	583	5130	1620	473	96	22
11	7.7	13	131	16	146	102	2720	4810	549	232	404	21
12	7.7	12	78	18	118	98	3470	703	329	157	206	20
13	8.2	11	77	22	84	107	1580	464	220	117	87	21
14	8.5	14	61	522	60	116	566	1880	163	92	51	16
15	9.0	15	39	238	49	118	346	3400	130	75	118	13
16	9.2	11	41	124	53	106	248	4590	108	61	2460	10
17	10	8.9	55	87	49	92	239	5440	90	51	2260	9.4
18	10	8.2	51	98	47	81	1930	4710	74	43	581	8.7
19	9.7	7.7	54	56	62	75	1920	4260	62	38	247	11
20	9.2	75	49	77	84	94	659	1310	53	35	133	12
21	9.1	340	43	75	109	78	351	618	45	32	88	17
22	9.0	122	38	60	128	68	244	389	38	33	63	19
23	9.3	76	34	38	123	60	183	339	33	36	50	15
24	10	47	31	33	104	49	148	5080	29	36	41	14
25	9.5	31	29	26	83	43	127	6500	27	30	35	13
26	9.5	23	28	23	83	49	171	6580	34	32	31	12
27	9.5	189	26	31	633	138	1020	5850	142	29	28	11
28	9.3	281	24	396	560	333	1630	5180	364	26	27	10
29	9.6	203	23	599	---	189	543	3800	342	30	25	84
30	9.5	80	22	489	---	125	313	1060	219	27	23	189
31	23	---	22	330	---	99	---	511	---	24	21	---
MEAN	8.73	62.9	180	114	357	118	659	2630	386	971	369	29.3
MAX	23	340	2130	599	1900	333	3470	6580	2570	11400	2460	189
MIN	3.8	7.7	21	16	47	43	45	150	27	24	21	8.7
IN.	.03	.18	.53	.34	.95	.35	1.87	7.72	1.10	2.85	1.08	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1995, BY WATER YEAR (WY)

MEAN	163	179	170	201	316	463	489	419	307	337	126	166
MAX	1368	1481	1418	1179	1359	1521	2719	2630	2582	3038	1758	1815
(WY)	1987	1986	1983	1969	1969	1979	1973	1995	1947	1993	1970	1970
MIN	.000	.000	.11	.31	1.23	6.32	3.83	1.48	1.04	.78	.56	.087
(WY)	1954	1954	1957	1957	1957	1957	1956	1989	1956	1988	1988	1953

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1946 - 1995
ANNUAL MEAN	174	494	278
HIGHEST ANNUAL MEAN			837
LOWEST ANNUAL MEAN			18.7
HIGHEST DAILY MEAN	3160		15100
LOWEST DAILY MEAN	2.1	Aug 25, Sep 21	.00
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 21	.00
INSTANTANEOUS PEAK FLOW	---	12900	17700
INSTANTANEOUS PEAK STAGE	---	24.28	27.14
INSTANTANEOUS LOW FLOW	---	3.5	.00
ANNUAL RUNOFF (INCHES)	6.00	17.06	9.60
10 PERCENT EXCEEDS	392	1160	587
50 PERCENT EXCEEDS	35	77	40
90 PERCENT EXCEEDS	5.8	10	2.6

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO

LOCATION.--Lat 39°53'49", long 91°34'49", in SW 1/4 NW 1/4 sec.21, T.59 N., R.6 W., Marion County, Hydrologic Unit 07110003, on right bank at downstream side of county highway bridge, 4.5 mi southwest of Taylor, 5.0 mi downstream from Grassy Creek and 5.3 mi upstream from confluence with North Fabius River.

DRAINAGE AREA.--620 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year. Prior to December 1934 monthly discharge only, published in WSP 1308.

REVISED RECORDS.--WSP 825: 1936.

GAGE.--Water-stage recorder. Datum of gage is 482.91 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 14, 1936, nonrecording gage at bridge 4.0 mi downstream at datum 21.94 ft lower; May 14, 1936, to Dec. 2, 1940, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1928 reached a stage of 18.49 ft, from floodmarks, at present site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	58	141	39	935	455	103	370	625	159	913	45
2	3.7	64	75	42	2380	279	89	297	1480	107	1360	47
3	3.6	46	56	43	3700	182	84	250	1740	82	3600	48
4	3.5	40	46	52	3600	143	79	239	864	73	3920	49
5	3.2	48	45	48	2020	150	73	295	506	637	1440	47
6	3.0	288	44	25	797	186	69	342	430	3490	693	44
7	2.7	237	1080	26	517	280	68	310	450	4940	1430	60
8	3.2	123	3490	33	337	310	67	5470	781	6480	1550	125
9	4.3	75	1210	23	300	221	1050	6360	1740	2810	455	102
10	4.2	53	499	21	295	201	1710	5550	2070	2410	378	68
11	3.8	38	299	20	216	173	7390	4210	878	798	339	49
12	3.3	31	190	23	224	161	6000	1630	415	350	497	40
13	3.0	24	137	40	191	149	4050	648	273	248	256	36
14	2.8	22	119	2550	148	145	1190	566	199	194	151	34
15	2.9	19	90	1390	104	145	636	1390	159	160	112	35
16	3.0	21	90	571	111	140	446	1270	131	138	1760	35
17	3.7	20	162	395	99	126	351	7920	111	121	3300	35
18	3.7	19	177	321	104	112	2740	11100	95	95	1430	34
19	3.5	17	142	238	160	101	3580	11800	86	71	490	37
20	3.4	35	111	198	215	93	1620	8700	76	63	287	42
21	3.3	631	105	199	259	95	643	2100	70	53	180	39
22	3.0	844	87	240	241	84	427	930	61	44	122	38
23	2.6	359	77	169	235	78	330	573	53	42	90	32
24	2.4	187	68	155	209	78	274	7880	52	42	73	30
25	2.4	86	63	122	177	75	234	9470	43	38	61	31
26	2.7	64	56	106	160	72	219	9240	43	117	53	29
27	2.9	70	52	77	184	75	1440	8040	80	92	49	27
28	3.0	403	49	361	408	134	2270	7250	615	61	48	26
29	3.1	530	46	1770	---	223	995	6200	428	41	45	25
30	3.2	255	43	1330	---	177	515	4910	291	32	42	56
31	22	---	41	820	---	127	---	1100	---	27	43	---
MEAN	3.84	157	287	369	654	160	1291	4078	495	775	812	44.8
MAX	22	844	3490	2550	3700	455	7390	11800	2070	6480	3920	125
MIN	2.4	17	41	20	99	72	67	239	43	27	42	25
IN.	.01	.28	.53	.69	1.10	.30	2.32	7.58	.89	1.44	1.51	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

	MEAN	265	296	266	292	503	706	752	689	483	406	180	210
MAX	2690	3103	2137	2000	2340	2659	3989	4078	3891	3647	2335	2841	
(WY)	1987	1986	1983	1965	1982	1973	1973	1995	1947	1993	1970	1970	
MIN	.000	.000	1.52	2.12	4.78	15.0	13.4	7.56	5.68	.71	.000	.39	
(WY)	1957	1957	1957	1954	1989	1956	1989	1989	1977	1988	1936	1953	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1935 - 1995
ANNUAL MEAN	295	764	413
HIGHEST ANNUAL MEAN			1147
LOWEST ANNUAL MEAN			27.4
HIGHEST DAILY MEAN	6450	Feb 20	11800
LOWEST DAILY MEAN	2.4	Oct 24, 25	2.4
ANNUAL SEVEN-DAY MINIMUM	2.7	Oct 22	2.7
INSTANTANEOUS PEAK FLOW	---	12200	May 19
INSTANTANEOUS PEAK STAGE	---	14.06	May 19
INSTANTANEOUS LOW FLOW	---	2.4	Oct 23-25
ANNUAL RUNOFF (INCHES)	6.47	16.74	9.04
10 PERCENT EXCEEDS	507	2040	995
50 PERCENT EXCEEDS	75	131	62
90 PERCENT EXCEEDS	3.7	21	4.1

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1972 to August 1973, October 1979 to October 1989, November 1992 to current year.

REMARKS.--Reestablished ambient water-quality monitoring network station since November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCHI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO ₃ (00410)
OCT 11...	1530	4	15.5	404	8.10	8.8	86	--	67	K2	146
NOV 01...	1600	56	10.0	422	8.10	10.8	96	<10	K6700	8900	157
DEC 06...	1130	44	5.5	300	7.70	10.9	84	--	101	220	92
JAN 03...	1530	35	1.0	526	7.20	14.0	95	11	40	K77	128
FEB 23...	1000	3750	3.5	390	7.60	13.2	99	--	68	166	109
MAR 21...	1000	88	11.0	466	8.30	12.1	108	--	66	384	139
APR 26...	1115	219	13.0	381	8.10	9.9	93	--	K162000	K290	125
MAY 10...	1030	5880	17.5	146	7.26	7.2	76	--	K5600	3640	53
JUN 13...	1430	262	21.5	269	7.49	8.8	98	10	M	117	98
JUL 06...	1300	3560	22.0	113	7.28	7.0	78	--	K10000	3500	63
JUL 17...	1145	121	28.5	278	8.05	9.5	123	--	168	56	106
AUG 01...	1030	1290	23.5	149	7.31	6.1	72	--	9800	K35200	48
SEP 12...	1235	39	19.5	334	8.11	8.8	97	--	260	92	120

DATE	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO-GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD-NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 11...	178	0	<0.020	<0.010	0.020	0.80	0.070	0.030	--	--	--
NOV 01...	191	0	0.290	0.010	0.110	0.70	0.100	0.050	190	56	12
DEC 06...	110	0	0.680	0.030	0.110	0.86	0.220	0.190	--	--	--
JAN 03...	152	0	0.850	0.010	0.060	0.62	0.030	0.020	220	63	14
FEB 23...	134	0	0.790	0.020	0.170	0.70	0.110	0.070	--	--	--
MAR 21...	172	0	<0.020	<0.010	0.040	0.63	0.090	0.010	--	--	--
APR 26...	154	0	0.580	0.010	0.040	0.71	0.090	0.060	--	--	--
MAY 10...	64	0	0.420	0.050	0.120	1.5	0.240	0.210	--	--	--
JUN 13...	117	0	0.560	0.020	0.040	0.86	0.160	0.090	120	36	6.5
JUL 06...	80	0	0.890	0.050	0.180	2.3	0.340	0.150	--	--	--
JUL 17...	131	0	<0.020	0.010	0.070	0.92	0.060	0.040	--	--	--
AUG 01...	56	0	0.850	0.040	0.060	2.8	0.830	0.180	--	--	--
SEP 12...	148	0	0.430	0.020	0.040	0.78	0.050	0.040	--	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS F) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)
NOV 01...	12	5.1	46	11	0.20	254	68	320	<20	<1	<1.0
JAN 03...	15	5.1	77	22	0.20	--	8	120	<20	1	1.0
JUN 13...	6.6	3.8	22	8.8	0.20	172	60	960	100	<1	<1.0

DATE	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)
NOV 01...	1	15	2	<1	140	<0.10	6	<4	<0.02	<0.008	0.02
JAN 03...	5	9	2	<1	290	0.20	10	7	--	--	--
MAR 21...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
APR 26...	--	--	--	--	--	--	--	--	<0.02	E0.003	<0.008
MAY 10...	--	--	--	--	--	--	--	--	<0.02	<0.008	0.03
JUN 13...	3	120	5	<1	1	0.20	8	4	<0.007	<0.002	0.02
AUG 01...	--	--	--	--	--	--	--	--	<0.007	<0.002	0.01

DATE	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	FONOFOS WATER, DISS, REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P,P' DDE DISSOLV (µG/L) (34653)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)
NOV 01...	<0.008	E0.05	0.05	<0.008	<0.007	<0.01	0.01	<0.01	<0.008	0.27	<0.01
MAR 21...	<0.008	E0.03	0.02	<0.008	<0.007	<0.01	0.02	<0.01	<0.008	0.14	<0.01
APR 26...	<0.008	E0.06	0.05	<0.008	<0.007	<0.01	0.48	<0.01	<0.008	0.68	<0.01
MAY 10...	0.010	E0.05	0.02	<0.008	<0.007	<0.01	0.63	<0.01	<0.008	1.20	<0.01
JUN 13...	E0.006	E0.19	1.1	<0.003	<0.002	<0.006	3.10	<0.004	<0.001	2.60	0.41
AUG 01...	<0.02	E0.13	0.59	<0.003	<0.002	<0.006	0.20	<0.004	<0.001	0.76	0.04

E--Laboratory estimated value.

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	FONOFOS WATER DISS REC (µG/L) (04095)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
NOV 01...	<0.008	<0.005	<0.01	<0.02	<0.008	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
MAR 21...	<0.008	<0.005	<0.01	<0.02	<0.008	0.01	<0.009	E0.001	<0.01	<0.01	<0.03
APR 26...	<0.008	<0.09	<0.01	<0.02	<0.008	0.02	0.03	<0.006	<0.01	<0.01	<0.03
MAY 10...	<0.008	<0.005	<0.01	<0.02	<0.008	0.03	0.06	<0.006	<0.01	<0.01	<0.03
JUN 13...	<0.003	<0.004	<0.005	<0.004	<0.002	0.05	0.19	<0.003	<0.004	<0.002	<0.007
AUG 01...	<0.003	<0.004	<0.005	<0.004	<0.002	0.03	0.02	<0.003	<0.004	<0.002	<0.007
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
NOV 01...	<0.04	<0.03	<0.005	<0.009	E0.009	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
MAR 21...	<0.04	<0.03	<0.005	<0.009	0.03	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
APR 26...	<0.04	<0.03	<0.005	<0.009	0.03	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
MAY 10...	<0.04	<0.03	<0.005	<0.009	E0.006	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
JUN 13...	<0.002	<0.006	<0.002	<0.004	0.02	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
AUG 01...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
NOV 01...	<0.06	<0.008	<0.02	<0.05	<0.008	E0.001	<0.02	<0.01	<0.006	<0.04	<0.02
MAR 21...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
APR 26...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAY 10...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.06	<0.04	<0.02
JUN 13...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005
AUG 01...	<0.02	<0.001	<0.004	E0.01	<0.002	<0.002	0.07	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

05501000 NORTH RIVER AT PALMYRA, MO

LOCATION.--Lat 39°49'06", long 91°31'13", in SE 1/4 SW 1/4 sec.13, T.58 N., R.6 W., Marion County, Hydrologic Unit 07110004, on right bank 100 ft upstream from City Waterworks Dam, 1,000 ft upstream from upstream bridge on dual U.S. Highways 24 and 61, 0.5 mi north of Palmyra and 7.0 mi upstream from mouth.

DRAINAGE AREA.--373 mi².

PERIOD OF RECORD.--December 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 464.81 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1945, nonrecording gage at bridge 1,000 ft downstream; Oct. 1, 1945, to June 22, 1951, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: May 14-30. Records good except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage prior to 1934, about 28.0 ft, from floodmarks, date unknown, at site 1,000 ft downstream, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	88	64	31	454	161	51	138	228	49	39	15
2	2.0	86	49	26	1380	121	49	123	659	38	1120	14
3	1.8	69	37	28	2760	94	49	112	475	33	2040	14
4	1.9	62	30	21	2170	81	45	141	230	31	1830	13
5	2.1	66	25	19	947	86	43	214	167	34	465	12
6	2.8	118	57	21	632	125	41	151	165	53	1730	13
7	3.6	94	1730	21	258	215	40	179	152	157	680	39
8	12	64	708	18	149	295	42	8760	1410	82	185	34
9	21	48	307	20	149	166	1210	2400	638	99	115	25
10	3.6	40	139	21	131	137	1170	956	312	203	198	18
11	3.1	32	101	23	100	122	8730	324	198	90	141	13
12	5.8	27	81	26	81	113	2680	218	146	46	76	12
13	8.1	20	68	32	96	101	785	190	113	34	59	13
14	7.8	18	61	2900	74	96	319	169	94	29	48	12
15	8.6	17	53	1400	74	87	209	313	81	25	44	11
16	9.9	15	56	429	58	79	166	375	71	22	316	13
17	14	14	134	245	67	74	146	6930	62	22	1200	14
18	19	15	114	184	80	70	4340	9100	55	28	309	12
19	18	15	86	127	144	66	1120	3640	50	22	125	14
20	19	48	78	88	193	65	451	947	45	23	76	25
21	21	364	69	123	231	60	229	373	41	32	56	23
22	20	253	63	128	181	56	168	259	39	35	44	22
23	20	135	55	113	160	54	141	230	37	29	37	19
24	22	81	49	72	143	53	126	9590	36	28	32	17
25	25	58	46	65	114	53	111	6500	34	141	28	16
26	25	42	42	54	100	52	109	1840	41	33	29	17
27	23	58	39	56	178	54	1010	1490	42	25	40	16
28	12	107	37	467	260	60	559	3250	82	19	36	14
29	18	136	34	3330	---	59	240	1350	98	16	22	16
30	25	96	34	1580	---	58	164	409	71	14	17	26
31	56	---	32	724	---	52	---	285	---	11	16	---
MEAN	14.2	76.2	144	400	406	95.6	818	1966	196	48.5	360	17.4
MAX	56	364	1730	3330	2760	295	8730	9590	1410	203	2040	39
MIN	1.8	14	25	18	58	52	40	112	34	11	16	11
IN.	.04	.23	.45	1.24	1.13	.30	2.45	6.08	.59	.15	1.11	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1995, BY WATER YEAR (WY)

	MEAN	158	180	179	183	312	450	481	466	319	257	112	133
MAX	1742	2639	1832	991	1720	2783	2691	2249	2296	2100	1357	1351	
(WY)	1987	1986	1983	1969	1982	1973	1973	1935	1947	1993	1970	1970	
MIN	.000	.000	.23	.66	.92	6.54	31.7	15.5	4.77	.52	.000	.17	
(WY)	1957	1957	1957	1954	1954	1956	1936	1989	1936	1936	1936	1940	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1935 - 1995
ANNUAL MEAN	215	379	266
HIGHEST ANNUAL MEAN			748
LOWEST ANNUAL MEAN			22.1
HIGHEST DAILY MEAN	8350	Apr 12	9590
LOWEST DAILY MEAN	1.8	Oct 3	1.8
ANNUAL SEVEN-DAY MINIMUM	3.3	Oct 1	3.3
INSTANTANEOUS PEAK FLOW	---		14600
INSTANTANEOUS PEAK STAGE	---		25.32
INSTANTANEOUS LOW FLOW	---		1.6
ANNUAL RUNOFF (INCHES)	7.82		13.81
10 PERCENT EXCEEDS	306		748
50 PERCENT EXCEEDS	56		64
90 PERCENT EXCEEDS	5.7		15

05502000 BEAR CREEK AT HANNIBAL, MO

LOCATION.--Lat 39°40'43", long 91°24'41", in SE 1/4 NW 1/4 sec.1, T.56 N., R.5 W., Ralls County, Hydrologic Unit 07110004, at bridge on Industrial Drive, on right downstream bank and 4.65 mi upstream from mouth.

DRAINAGE AREA.--31.0 mi².

PERIOD OF RECORD.--October 1938 to September 1942, October 1947 to current year in reports of U.S. Geological Survey. Monthly discharge only for some periods, published in WSP 1308. October 1936 to November 1938 (gage heights and discharge measurements only) in reports of Missouri Geological Survey.

REVISED RECORDS.--WSP 1115: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 508.91 ft above sea level. Prior to Mar. 26, 1948, nonrecording gage; Mar. 26, 1948, to Sept. 30, 1953, water-stage recorder, at datum 2.00 ft higher; Oct. 1, 1953, to Oct. 30, 1961, at present datum; Oct. 31, 1961, to Sept. 5, 1972, water-stage recorder 400 ft downstream at present datum; Sept. 6, 1972, to July 2, 1986, water-stage recorder 525 ft upstream at present datum.

REMARKS.--Estimated daily discharges: July 19 to Aug. 2. Records fair except for estimated daily discharges and discharges above 500 ft³/s, which are poor. High flow regulated by Bear Creek flood control reservoir, 1.0 mi upstream, since Aug. 7, 1961. Several observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,500 ft³/s, Aug. 3, 1957; gage height, 14.05 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	9.9	4.4	7.1	19	17	7.2	11	210	11	3.9	3.6
2	.48	3.6	3.3	6.3	12	14	7.1	9.9	197	8.4	100	3.4
3	.62	2.3	3.3	3.4	96	13	6.7	8.6	273	7.5	250	4.8
4	.92	2.2	3.1	1.8	56	13	6.3	16	144	8.9	55	3.9
5	.66	5.2	3.0	2.1	52	27	6.0	13	137	9.3	30	2.9
6	.74	21	12	2.3	32	22	6.2	10	57	8.3	52	2.8
7	1.2	5.2	49	2.3	4.1	46	6.2	22	15	6.1	15	15
8	7.2	3.1	60	1.2	227	43	6.5	60	63	8.7	8.0	7.1
9	2.0	3.2	23	.79	316	39	29	140	82	8.6	10	4.1
10	1.3	4.3	8.0	.77	54	19	31	116	33	6.8	20	3.3
11	.98	3.6	5.8	21	16	17	62	111	14	4.3	9.0	3.3
12	.91	2.8	2.9	7.2	18	14	110	81	13	5.2	7.6	3.1
13	.95	2.4	1.1	25	12	12	183	33	10	4.4	5.9	2.8
14	1.1	2.8	1.1	66	12	11	107	14	7.5	3.7	4.8	4.3
15	1.5	3.8	1.1	41	13	10	14	8.7	7.1	2.8	4.4	5.1
16	1.8	4.1	22	39	13	10	11	10	8.6	2.4	31	3.8
17	1.9	4.8	13	39	14	9.5	12	65	8.0	3.3	80	3.1
18	2.1	5.8	8.1	37	28	9.5	72	66	6.3	2.3	30	2.3
19	2.9	5.6	3.8	36	57	9.5	121	160	5.7	2.4	12	3.6
20	2.9	18	2.6	35	64	9.3	90	263	8.5	2.3	7.6	4.1
21	2.8	43	2.9	34	61	8.7	51	46	6.7	3.2	5.6	3.7
22	3.7	35	2.8	34	60	8.3	13	177	6.3	3.5	4.4	4.9
23	2.4	6.3	3.6	32	60	7.8	11	98	5.2	2.9	4.0	2.7
24	.75	4.6	35	21	58	7.8	10	219	7.5	2.8	3.8	2.4
25	.80	3.8	12	15	68	7.4	9.2	330	6.5	7.0	4.0	2.4
26	1.0	3.3	9.5	6.0	31	7.7	10	407	5.6	3.3	6.0	2.2
27	1.3	7.3	5.3	10	61	7.5	50	256	31	2.5	5.0	2.1
28	2.0	7.5	1.9	47	41	6.9	15	301	60	1.9	4.5	1.8
29	2.5	4.1	1.9	50	---	6.9	12	362	17	1.6	3.9	1.9
30	3.1	2.9	1.7	25	---	6.5	11	512	11	1.4	4.0	5.4
31	7.7	---	19	35	---	6.5	---	382	---	1.1	3.4	---
MEAN	1.96	7.72	10.5	22.0	55.5	14.4	36.2	139	48.5	4.77	25.3	3.86
MAX	7.7	43	60	66	316	46	183	512	273	11	250	15
MIN	.48	2.2	1.1	.77	4.1	6.5	6.0	8.6	5.2	1.1	3.4	1.8
IN.	.07	.28	.39	.82	1.87	.54	1.30	5.17	1.75	.18	.94	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995^a, BY WATER YEAR (WY)

MEAN	15.6	21.1	20.8	15.7	28.5	38.6	39.5	38.7	21.4	19.9	16.7	16.4
MAX	116	225	155	84.0	124	125	193	146	76.5	193	141	190
(WY)	1970	1986	1983	1969	1985	1973	1973	1991	1982	1981	1993	1970
MIN	.016	.15	.11	.27	.85	2.86	3.11	2.72	.58	.026	.15	.006
(WY)	1964	1964	1964	1977	1964	1981	1977	1988	1963	1977	1962	1988

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1962 - 1995^a

ANNUAL MEAN	19.9	30.7	24.4
HIGHEST ANNUAL MEAN			57.9
LOWEST ANNUAL MEAN			5.33
HIGHEST DAILY MEAN	398	Mar 8	1470
LOWEST DAILY MEAN	.34	Sep 16	.00
ANNUAL SEVEN-DAY MINIMUM	.36	Sep 14	.00
INSTANTANEOUS PEAK FLOW	---		3120
INSTANTANEOUS PEAK STAGE	---		9.24
INSTANTANEOUS LOW FLOW	---		.00
ANNUAL RUNOFF (INCHES)	8.71	13.44	10.68
10 PERCENT EXCEEDS	38	66	52
50 PERCENT EXCEEDS	5.4	7.7	4.8
90 PERCENT EXCEEDS	.62	2.0	.52

^aPost-regulation period.

05502300 NORTH FORK SALT RIVER AT HAGERS GROVE, MO

LOCATION.--Lat 39°49'40", long 92°14'10", in NE 1/4 SW 1/4 sec.15, T.58 N., R.12 W., Shelby County, Hydrologic Unit 07110005, at bridge on State Highway 151, 200 ft downstream from old channel carrying Bear Creek, 0.25 mi west of Hagers Grove, 2.5 mi upstream from Ten Mile Creek and at mile 143.8.

DRAINAGE AREA.--365 mi².

PERIOD OF RECORD.--September 1974 to current year. Prior to October 1983 published as "Salt River at Hagers Grove, Mo.". September 1939 to August 1974, gage height and miscellaneous measurements published by U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder, wire-weight gage and crest-stage gage. Datum of gage is 702.30 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 1-13 and Aug. 19 to Sept. 8. Records fair except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1947 reached a stage of 19.7 ft and discharge of 26,900 ft³/s, according to information furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	12	35	7.5	624	100	46	164	192	88	387	13
2	3.8	28	24	7.0	1170	54	45	120	386	61	2400	12
3	3.6	20	19	5.5	2110	46	41	82	332	52	1680	13
4	3.7	12	16	5.0	1820	42	39	151	186	3360	766	13
5	3.7	16	14	4.8	518	52	35	328	134	10000	263	12
6	3.4	26	13	4.6	223	69	33	199	413	11300	145	12
7	3.6	29	3000	4.4	160	112	30	149	290	2940	197	16
8	4.7	24	1070	4.0	92	83	32	7290	1420	1490	115	60
9	3.9	13	231	5.5	111	74	856	7800	1990	1800	70	49
10	3.5	9.8	193	6.0	92	73	941	2430	547	359	454	25
11	3.4	8.5	93	7.5	88	69	4440	751	273	185	511	12
12	3.9	7.6	83	10	67	65	2910	391	161	122	134	13
13	3.9	7.6	61	20	46	72	755	676	120	97	52	14
14	3.4	8.6	45	200	38	63	299	2770	90	73	21	11
15	3.0	8.4	36	258	40	71	185	596	70	59	94	10
16	3.8	8.0	38	145	42	62	131	1340	59	47	990	12
17	4.3	10	91	90	37	49	110	10700	50	46	1170	8.9
18	4.3	9.0	83	71	44	44	2500	8120	45	39	321	8.4
19	4.1	8.3	49	35	65	43	1200	4610	40	30	140	11
20	4.0	40	47	30	69	41	383	946	35	33	96	10
21	4.1	623	35	60	86	41	247	336	30	25	58	8.1
22	4.4	223	31	49	75	38	155	186	27	45	43	9.7
23	4.3	63	29	37	72	35	151	333	26	1190	35	9.8
24	4.1	28	25	32	60	31	152	8630	28	848	27	8.0
25	3.7	28	21	26	45	27	94	8110	81	230	25	8.8
26	4.4	16	17	22	51	35	102	2490	540	191	23	7.4
27	4.6	58	13	40	119	139	2040	2860	511	82	22	6.2
28	4.5	532	11	803	170	136	870	6730	1090	65	19	5.8
29	4.6	132	9.9	835	---	78	291	1750	450	43	19	7.6
30	4.8	48	9.2	465	---	59	199	335	149	27	17	67
31	9.7	---	8.3	287	---	50	---	193	---	24	16	---
MEAN	4.16	68.6	176	115	290	63.0	644	2631	325	1127	333	15.8
MAX	9.7	623	3000	835	2110	139	4440	10700	1990	11300	2400	67
MIN	3.0	7.6	8.3	4.0	37	27	30	82	26	24	16	5.8
IN.	.01	.21	.56	.36	.83	.20	1.97	8.31	1.00	3.56	1.05	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1995, BY WATER YEAR (WY)

	MEAN	177	322	234	103	317	444	445	536	262	435	102	130
MAX	1201	1426	1319	457	1599	1177	2036	2631	1074	3033	441	937	
(WY)	1987	1986	1983	1993	1982	1979	1983	1995	1984	1993	1982	1993	
MIN	2.02	4.40	2.20	1.13	5.18	22.5	8.20	10.4	3.55	4.01	3.90	3.41	
(WY)	1989	1976	1977	1977	1989	1989	1989	1980	1988	1988	1984	1988	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1974 - 1995

ANNUAL MEAN	133	487	293	
HIGHEST ANNUAL MEAN			767	1993
LOWEST ANNUAL MEAN			35.4	1989
HIGHEST DAILY MEAN	3860	Apr 28	11300	Jul 6 1983
LOWEST DAILY MEAN	3.0	Oct 15	3.0	Oct 15 1988
ANNUAL SEVEN-DAY MINIMUM	3.6	Oct 10	3.6	Oct 10 1991
INSTANTANEOUS PEAK FLOW	---		15200	Jul 6 1983
INSTANTANEOUS PEAK STAGE	---		18.51	Jul 6 1983
INSTANTANEOUS LOW FLOW	---		2.0	Oct 13 1991
ANNUAL RUNOFF (INCHES)	4.96		18.11	10.89
10 PERCENT EXCEEDS	156		1080	545
50 PERCENT EXCEEDS	20		50	32
90 PERCENT EXCEEDS	5.0		5.5	3.8

05502500 NORTH FORK SALT RIVER NEAR SHELBYNA, MO

LOCATION.--Lat 39°44'29", long 92°02'26", in SW 1/4 NE 1/4 sec.17, T.57 N., R.10 W., Shelby County, Hydrologic Unit 07110005, on right bank near downstream end of bridge on State Highway 15, 3.0 mi north of Shelbyna, 15.0 mi upstream from Black Creek and at mile 122.3.

DRAINAGE AREA.--481 mi².

PERIOD OF RECORD.--April 1930 to February 1934, March 1934 to September 1972. March 1988 to current year. Prior to March 1988 published as "Salt River near Shelbyna, Mo.". Fragmentary record prior to October 1933. Monthly discharge only for period October 1933 to February 1934 published in WSP 1308.

GAGE.--Water-stage recorder and crest-stage gage with concrete control since Mar. 25, 1988. Datum of gage is 664.58 ft above sea level. Prior to Mar. 1, 1934, nonrecording gage at site 100 ft downstream at present datum; Mar. 1, 1934, to Nov. 2, 1962, water-stage recorder at site 175 ft downstream at present datum; Nov. 3, 1962, to Sept. 30, 1972, water-stage recorder at site 100 ft upstream at present datum; Oct. 1, 1972, to Sept. 30, 1979, gage-height records collected by St. Louis U.S. Army Corps of Engineers at site 100 ft downstream; Oct. 1, 1979, to Sept. 1981, gage-height data collected by U.S. Geological Survey at site 100 ft downstream.

REMARKS.--Estimated daily discharges: Jan. 3-9. Records good except for estimated daily discharges and those below 50 ft³/s, which are poor. Several observations of water temperature and specific conductance were made during the year. Water is pumped from river at the gage by City of Shelbyna. U. S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1928 reached a stage of 23.54 ft, from floodmarks, discharge, 18,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	26	34	15	736	174	57	206	370	127	330	18
2	4.3	22	22	9.7	1380	93	54	159	493	82	1620	16
3	4.2	47	17	8.0	2010	69	52	128	406	60	4620	15
4	4.6	20	13	7.5	2990	64	44	196	248	1070	2000	16
5	3.0	10	11	6.3	1070	74	39	466	163	4940	639	13
6	7.5	18	20	6.0	519	100	39	364	319	7630	431	13
7	6.0	58	2160	5.8	250	169	39	345	388	9180	439	18
8	12	60	1800	5.2	99	143	46	4880	921	3450	266	66
9	24	34	391	7.0	142	96	896	7310	3080	2950	157	55
10	19	16	228	7.8	120	102	1520	7420	996	677	130	27
11	12	12	122	8.5	76	88	4620	2540	408	285	742	20
12	8.7	12	69	12	61	84	5380	685	210	152	221	17
13	5.7	15	59	23	63	86	2260	438	134	101	102	18
14	6.7	23	47	542	44	89	633	3100	99	74	67	15
15	6.1	25	42	479	44	86	376	1410	80	57	49	13
16	4.5	23	39	274	36	79	246	567	66	48	597	13
17	3.7	20	70	170	39	70	228	5730	57	44	1510	14
18	3.3	28	98	95	47	62	2560	11300	49	41	476	12
19	5.3	20	56	45	67	57	2780	10000	43	33	171	14
20	7.1	42	54	38	90	56	686	5820	38	32	95	16
21	8.1	549	46	65	105	59	355	1230	34	31	63	14
22	11	329	39	65	101	53	224	618	31	27	46	13
23	16	93	35	53	97	47	158	548	27	794	37	17
24	14	40	33	47	86	41	127	5240	28	1280	31	16
25	15	22	31	45	73	37	108	8760	30	364	27	12
26	12	13	27	39	100	42	106	8680	342	271	25	14
27	9.2	23	25	35	175	111	1850	4500	750	137	23	14
28	10	612	21	1020	257	212	1670	5840	1040	86	21	14
29	11	199	19	1480	---	115	494	6490	853	61	20	17
30	14	68	18	781	---	80	291	1690	254	42	19	28
31	25	---	18	456	---	65	---	585	---	35	18	---
MEAN	9.81	82.6	183	189	388	87.2	931	3460	399	1102	484	18.9
MAX	25	612	2160	1480	2990	212	5380	11300	3080	9180	4620	66
MIN	3.0	10	11	5.2	36	37	39	128	27	27	18	12
IN.	.02	.19	.44	.45	.84	.21	2.16	8.29	.92	2.64	1.16	.04

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	134	170	153	203	347	453	509	462	432	350	128	175
MEAN	134	170	153	203	347	453	509	462	432	350	128	175
MAX	809	1327	835	1319	1395	1417	1944	3460	4171	4119	1214	1831
(WY)	1958	1993	1972	1965	1949	1948	1944	1995	1947	1993	1970	1970
MIN	.000	.000	.000	.013	1.80	6.41	7.24	14.7	2.93	.000	.000	.000
(WY)	1953	1954	1954	1954	1934	1956	1989	1941	1988	1934	1936	1953

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	196	616	295
HIGHEST ANNUAL MEAN			1037
LOWEST ANNUAL MEAN			36.2
HIGHEST DAILY MEAN	5190	Feb 21	18600
LOWEST DAILY MEAN	3.0	Oct 5	.00
ANNUAL SEVEN-DAY MINIMUM	5.0	Oct 13	.00
INSTANTANEOUS PEAK FLOW	---		23000
INSTANTANEOUS PEAK STAGE	---		27.40
INSTANTANEOUS LOW FLOW	---		.00
ANNUAL RUNOFF (INCHES)	5.53	17.38	8.35
10 PERCENT EXCEEDS	268	1560	698
50 PERCENT EXCEEDS	32	63	31
90 PERCENT EXCEEDS	6.7	12	1.6

05503800 CROOKED CREEK NEAR PARIS, MO

LOCATION.--Lat 39°35'06", long 91°59'36", near NW corner S 1/4 sec.2, T.55 N., R.10 W., Monroe County, Hydrologic Unit 07110005, on right bank downstream from county road bridge, 7.0 mi north of Paris, 1.4 mi north of State Route 15 and at mile 8.9.

DRAINAGE AREA.--80.0 mi².

PERIOD OF RECORD.--October 1979 to current year. March 1966 to October 1979 published by U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 650.00 ft above sea level. Prior to Nov. 8, 1967, wire-weight gage and Nov. 9, 1967, to Sept. 1979, recording gage at datum 50 ft lower.

REMARKS.--Estimated daily discharges: Dec. 11-13. Records good except for estimated daily discharges, which are fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 1973 reached a stage of 15.53 ft and discharge of 12,100 ft³/s, according to information furnished by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.2	2.6	1.0	122	21	3.9	17	19	6.3	6.4	.23
2	.00	1.5	1.8	1.0	354	11	3.7	17	38	3.5	136	.21
3	.00	.62	1.5	.93	516	8.2	3.5	14	16	2.1	461	.20
4	.00	.46	1.3	.91	273	7.1	3.4	55	12	1.8	401	.18
5	.00	1.4	1.1	.85	58	8.3	3.3	112	9.9	1.5	170	.12
6	.00	8.6	4.6	.86	37	13	3.2	45	9.1	6.7	49	.09
7	.00	3.1	345	.89	20	32	3.1	158	9.3	8.7	132	.18
8	.00	1.6	121	.89	12	36	4.8	3000	142	4.3	42	.16
9	.00	.97	16	.90	10	17	177	1610	187	2.6	11	.13
10	.00	.82	5.6	.93	9.6	13	240	138	32	1.5	9.3	.12
11	.00	.77	3.5	.94	9.0	9.8	1650	87	15	1.0	4.0	.11
12	.00	.63	2.5	1.1	7.9	9.4	956	67	9.6	1.4	2.3	.10
13	.00	.72	1.9	5.0	7.2	8.9	91	64	6.6	.98	1.5	.10
14	.00	1.0	1.6	556	6.6	7.9	47	55	5.2	.64	1.1	.09
15	.00	.96	1.5	267	6.6	7.0	30	46	4.0	.28	1.0	.08
16	.00	.81	3.6	39	6.7	6.1	21	156	2.8	.28	1.5	.06
17	.00	.70	10	13	6.4	5.5	23	1680	2.1	.33	1.3	.06
18	.00	.61	4.7	7.0	7.0	5.1	648	2810	1.7	.41	12	.06
19	.00	.57	3.9	5.4	9.5	5.0	372	1440	1.5	.24	6.0	.08
20	.00	23	2.9	4.8	15	4.9	50	152	1.4	.35	2.3	.10
21	.00	127	2.2	4.2	19	4.7	30	83	1.3	.43	1.2	.10
22	.00	39	1.8	3.5	17	4.4	20	60	1.2	.42	.73	.11
23	.00	5.9	1.5	3.1	12	4.1	15	76	1.0	4.5	.54	.10
24	.00	3.2	1.4	2.8	10	3.8	13	3650	.81	7.7	.37	.08
25	.00	2.0	1.2	2.6	8.8	3.4	11	2940	.77	57	.28	.08
26	.00	1.6	1.2	2.3	14	3.5	12	206	1.4	11	.24	.07
27	.00	3.0	1.1	3.0	62	3.8	172	558	53	4.5	.23	.07
28	.00	4.1	1.1	378	48	5.3	79	1120	27	1.5	.14	.06
29	.00	7.3	1.1	616	---	7.3	29	240	20	.65	.13	.09
30	.00	4.2	1.1	228	---	5.1	20	45	10	.34	.19	.21
31	.02	---	1.0	76	---	4.2	---	26	---	.28	.21	---
MEAN	.001	8.31	17.8	71.9	60.2	9.22	158	669	21.4	4.30	46.9	.11
MAX	.02	127	345	616	516	36	1650	3650	187	57	461	.23
MIN	.00	.46	1.0	.85	6.4	3.4	3.1	14	.77	.24	.13	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1995, BY WATER YEAR (WY)

	MEAN	30.7	74.3	67.4	26.4	73.9	83.3	87.4	132	60.7	86.6	29.0	49.3
	MAX	320	550	247	86.4	359	214	319	669	230	554	223	510
	(WY)	1987	1986	1983	1982	1985	1993	1983	1995	1990	1993	1993	1993
	MIN	.000	.000	.000	.000	.000	.066	.16	1.53	.031	.000	.000	.000
	(WY)	1980	1981	1989	1989	1989	1989	1989	1988	1988	1988	1988	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1980 - 1995
ANNUAL MEAN	49.3	89.6	66.7
HIGHEST ANNUAL MEAN			179
LOWEST ANNUAL MEAN			7.38
HIGHEST DAILY MEAN	2410	3650	4620
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW	---	4490	8100
INSTANTANEOUS PEAK STAGE	---	10.83	12.68
INSTANTANEOUS LOW FLOW	---	.00	.00
ANNUAL RUNOFF (INCHES)	8.37	15.20	11.32
10 PERCENT EXCEEDS	37	137	95
50 PERCENT EXCEEDS	3.9	3.7	4.0
90 PERCENT EXCEEDS	.00	.07	.00

05504800 SOUTH FORK SALT RIVER ABOVE SANTA FE, MO

LOCATION.--Lat 39°19'34", Long 91°50'02", in SE 1/4 SE 1/4 sec.31, T.53 N., R.8 W., Audrain County, Hydrologic Unit 07110006, on left bank near downstream side of bridge on county road, 4.0 mi southwest of Santa Fe, 1.0 mi upstream from Littleby Creek and at mile 104.2 above mouth of Salt River.

DRAINAGE AREA.--233 mi².

PERIOD OF RECORD.--February 1940 to current year. Published as "near Santa Fe" October 1969 to September 1975 and as "at Santa Fe" February 1940 to September 1968 and October 1975 to September 1986.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 644.87 ft above sea level. Prior to Feb. 5, 1940, nonrecording gage; Feb. 5, 1940, to Sept. 30, 1968, and Oct. 1975 to Sept. 1986, water-stage recorder, 8.0 mi downstream at datum 613.05; Oct. 1, 1968, to Sept. 30, 1975, water-stage recorder, 1.0 mi downstream at datum 5.78 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	19	31	5.1	526	235	7.1	453	288	69	7.4	5.7
2	1.5	18	20	4.7	1200	120	6.9	988	653	41	40	6.9
3	1.4	6.0	14	4.4	2920	77	7.1	261	196	29	62	5.9
4	1.2	4.4	12	3.8	3060	57	8.0	479	101	29	68	4.8
5	1.1	30	9.6	3.6	572	66	8.1	707	72	46	179	3.5
6	1.1	142	10	3.5	230	105	7.4	224	57	43	411	4.3
7	1.2	96	170	3.6	162	159	7.0	1110	45	39	321	6.5
8	4.7	37	116	3.7	102	242	7.1	3350	348	35	217	15
9	27	15	95	3.8	79	139	7.3	1900	955	35	78	9.2
10	6.2	55	55	3.8	59	94	12	322	221	20	126	6.1
11	3.3	32	31	4.0	54	89	880	171	147	15	64	5.0
12	2.3	16	19	4.9	49	74	838	118	102	11	32	4.4
13	2.0	11	12	119	34	58	257	102	62	9.3	21	3.9
14	1.7	7.4	8.9	2550	25	45	117	89	44	8.1	12	3.4
15	1.4	5.9	7.7	1510	23	36	74	52	34	7.3	8.3	4.2
16	1.7	5.1	13	260	25	29	52	166	27	7.2	19	4.1
17	2.4	4.8	30	137	24	25	1230	3280	21	6.7	119	3.5
18	2.4	4.4	25	89	29	21	3940	8180	18	6.1	113	3.2
19	3.9	3.7	18	82	53	17	2110	7500	14	5.8	45	4.2
20	3.4	164	16	73	104	15	518	593	11	6.3	21	4.1
21	2.1	1260	14	58	126	13	487	268	9.4	6.4	12	6.2
22	2.0	443	11	48	110	11	163	164	8.1	6.8	7.9	5.3
23	2.0	117	8.3	40	76	11	103	143	7.7	7.9	5.8	4.4
24	2.5	51	7.4	34	62	10	103	4540	12	9.8	5.2	3.7
25	5.4	27	6.8	29	46	9.1	89	3830	225	14	5.1	3.6
26	4.3	16	6.3	24	43	8.5	76	602	244	12	4.7	3.2
27	3.4	44	5.9	57	1140	7.8	489	588	822	10	5.2	2.9
28	3.5	345	5.6	1500	838	7.5	285	632	995	8.4	7.0	2.8
29	3.1	152	5.5	2260	---	7.3	121	282	339	8.2	6.2	2.6
30	2.6	61	5.3	945	---	7.1	350	145	146	7.6	4.3	2.9
31	3.3	---	5.2	454	---	7.2	---	104	---	6.5	3.5	---
MEAN	3.41	106	25.6	333	420	58.1	412	1334	207	18.3	65.5	4.85
MAX	27	1260	170	2550	3060	242	3940	8180	995	69	411	15
MIN	1.1	3.7	5.2	3.5	23	7.1	6.9	52	7.7	5.8	3.5	2.6
IN.	.02	.51	.13	1.65	1.88	.29	1.97	6.60	.99	.09	.32	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

MEAN	129	137	140	136	210	312	337	306	242	207	53.2	141
MAX	1646	1378	1447	792	1031	1715	1734	2238	1307	2415	544	1830
(WY)	1942	1986	1983	1974	1985	1973	1944	1943	1942	1969	1982	1993
MIN	.006	.36	.58	1.18	1.91	2.74	4.43	5.92	3.28	1.31	.46	.22
(WY)	1954	1954	1964	1963	1954	1954	1963	1980	1988	1944	1964	1960

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1940 - 1995
ANNUAL MEAN	166	248	196
HIGHEST ANNUAL MEAN			509
LOWEST ANNUAL MEAN			10.7
HIGHEST DAILY MEAN	15900	8180	24000
LOWEST DAILY MEAN	.06	1.1	.00
ANNUAL SEVEN-DAY MINIMUM	.09	1.3	.00
INSTANTANEOUS PEAK FLOW	---	11800	31800
INSTANTANEOUS PEAK STAGE	---	22.46	28.66
INSTANTANEOUS LOW FLOW	---	.73	.00
ANNUAL RUNOFF (INCHES)	9.69	14.47	11.40
10 PERCENT EXCEEDS	170	521	320
50 PERCENT EXCEEDS	10	24	16
90 PERCENT EXCEEDS	1.2	3.6	1.4

05506100 LONG BRANCH NEAR SANTA FE, MO

LOCATION.--Lat 39°21'21", long 91°50'03", in SE 1/4 SE 1/4 sec. 19, T.53 N., R.8 W., Monroe County, Hydrologic Unit 07110006, on left bank on west side of concrete ford on Monroe County Road 26.

DRAINAGE AREA.--180 mi².

PERIOD OF RECORD.--December 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft. above sea level.

REMARKS.--Estimated daily discharges: May 19 to June 30. Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9250 ft³/s, May 18, gage height 15.01 ft; minimum discharge 0.33 ft³/s, Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	4.1	604	138	8.4	130	118	114	3.0	1.7
2	---	---	---	3.5	1210	79	8.0	242	157	51	60	1.7
3	---	---	---	3.0	1260	53	8.0	164	100	12	217	1.7
4	---	---	---	2.3	1250	43	7.8	411	50	3.8	791	2.5
5	---	---	---	2.3	822	49	7.2	524	30	38	1070	2.0
6	---	---	---	2.5	369	61	7.1	212	20	236	749	1.4
7	---	---	---	2.5	125	161	6.9	580	9.2	157	536	1.7
8	---	---	---	2.4	226	231	7.7	2890	268	90	278	1.1
9	---	---	---	2.4	51	126	9.3	1460	735	44	115	.94
10	---	---	---	2.4	42	90	21	692	176	21	68	.78
11	---	---	17	2.7	38	68	801	122	129	13	49	.55
12	---	---	15	3.3	34	57	553	87	74	9.2	36	.49
13	---	---	11	264	25	50	194	71	35	7.2	26	.47
14	---	---	9.8	1330	20	42	100	58	24	5.7	20	.46
15	---	---	7.9	1090	19	36	68	46	21	4.7	17	.45
16	---	---	18	636	19	29	51	51	17	4.6	36	.44
17	---	---	79	136	16	23	63	2910	14	34	505	.43
18	---	---	74	107	24	19	2250	7250	12	6.1	149	.43
19	---	---	59	147	45	17	966	3260	11	3.1	95	1.0
20	---	---	37	145	67	15	359	1500	8.9	2.2	58	.85
21	---	---	22	84	88	17	111	646	7.9	1.9	41	.75
22	---	---	13	53	81	11	78	368	7.0	1.9	30	.66
23	---	---	11	42	72	9.9	59	161	9.9	4.8	19	.54
24	---	---	8.7	35	59	9.5	50	3670	8.2	24	6.5	.50
25	---	---	8.5	35	43	8.8	43	3450	27	11	6.2	.48
26	---	---	6.5	39	44	8.8	42	650	1020	13	4.0	.46
27	---	---	6.0	77	362	10	249	615	686	13	3.7	.41
28	---	---	5.7	1120	329	9.8	210	487	1280	8.6	3.9	.33
29	---	---	5.1	1220	---	9.0	114	99	634	6.6	3.3	.35
30	---	---	4.7	938	---	8.7	80	62	240	4.6	1.8	.47
31	---	---	4.3	609	---	8.5	---	50	---	3.3	1.7	---
MEAN	---	---	---	263	262	48.3	218	1062	198	30.6	161	.87
MAX	---	---	---	1330	1260	231	2250	7250	1280	236	1070	2.5
MIN	---	---	---	2.3	16	8.5	6.9	46	7.0	1.9	1.7	.33

SALT RIVER BASIN

05506500 MIDDLE FORK SALT RIVER AT PARIS, MO

LOCATION.--Lat 39°29'01", long 92°00'49", in NE 1/4 NE 1/4 NW 1/4 sec.10, T.54 N., R.10 W., Monroe County, Hydrologic Unit 07110006, on left bank downstream side of bridge on State Highway 24 at Paris, about 1.0 mile upstream from Wabash Railroad Bridge, 14.0 mi upstream from Elk Fork Salt River and at mile 106 above mouth of Salt River.

DRAINAGE AREA. -- 356 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 630.00 ft above sea level. Prior to Jan. 22, 1940, nonrecording gage at present site; Jan. 1940 to Sept. 1958, a water-stage recorder, 1.4 mi downstream; Sept. 1958 to July 1968, 1.5 mi downstream; July 1968 to Apr. 1973, 1.5 mi downstream at datum 8.29 ft lower.

REMARKS.--Estimated daily discharges: Jan. 28 and May 26 to June 4. Water-discharge records good except for estimated daily discharges, which is poor. City of Paris water intakes are in the same pool as gage. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	24	72	14	605	206	54	184	250	159	56	12
2	3.9	33	37	12	1400	144	50	277	170	103	302	11
3	1.4	67	23	11	1850	95	49	207	110	67	1930	11
4	.56	41	17	9.2	1900	68	45	394	80	52	3240	11
5	.58	37	14	8.0	1120	74	39	860	52	48	3050	12
6	.60	49	27	9.3	378	108	37	451	67	526	1080	14
7	1.6	97	1040	7.2	214	211	35	417	101	625	396	19
8	6.2	71	1360	6.6	128	299	48	3890	1430	272	270	16
9	2.5	45	652	6.2	120	198	149	4740	1740	115	134	14
10	1.4	26	205	6.2	103	144	652	3430	1130	68	771	14
11	.22	24	117	6.3	67	127	3010	1760	534	57	1150	22
12	.19	17	84	7.5	49	110	3390	301	186	52	437	18
13	.45	13	51	34	50	99	2350	224	127	35	164	16
14	.35	9.6	38	1550	36	92	795	185	96	26	93	14
15	.25	7.6	29	1570	30	82	263	155	78	22	95	13
16	.20	7.7	37	540	24	73	189	340	64	18	161	14
17	.82	7.4	117	308	25	65	184	3580	54	15	144	12
18	.55	7.1	123	203	27	58	1810	5220	47	13	308	9.7
19	.98	6.5	99	111	35	54	2080	9160	39	12	157	13
20	.18	66	80	95	45	52	1310	6170	34	15	81	12
21	.32	1200	57	104	58	51	312	1930	30	12	47	9.4
22	.22	641	46	99	67	49	201	346	26	13	29	8.5
23	.14	256	39	79	73	49	154	329	25	16	23	8.0
24	.23	106	30	57	68	49	130	5450	26	148	19	7.4
25	.17	53	26	44	56	44	111	8380	37	337	16	7.7
26	.16	29	23	34	54	43	103	572	153	128	14	8.5
27	.15	36	21	43	134	44	493	2190	897	62	13	9.1
28	.15	51	19	300	248	98	862	2000	1910	93	13	8.7
29	.18	165	17	2000	---	98	508	330	1070	51	11	8.8
30	.84	168	15	1780	---	86	218	226	246	26	11	12
31	12	---	15	749	---	65	---	516	---	18	11	---
MEAN	1.39	112	146	316	320	97.9	654	2071	360	103	459	12.2
MAX	12	1200	1360	2000	1900	299	3390	9160	1910	625	3240	22
MIN	.14	6.5	14	6.2	24	43	35	155	25	12	11	7.4
IN.	.00	.35	.47	1.02	.94	.32	2.05	6.71	1.13	.33	1.49	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

MEAN	167	184	174	170	274	433	477	392	310	275	107	145
MAX	1815	2083	1255	829	1634	1837	3164	2071	1747	2100	1195	1495
(WY)	1987	1986	1983	1946	1985	1973	1973	1995	1947	1981	1958	1993
MIN	.000	.000	.37	1.08	2.61	3.26	13.3	12.6	2.31	.37	1.13	.18
(WY)	1957	1954	1954	1954	1989	1956	1989	1941	1988	1954	1953	1953

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1940 - 1995

ANNUAL MEAN	210		390		259	
HIGHEST ANNUAL MEAN					743	1973
LOWEST ANNUAL MEAN					53.1	1956
HIGHEST DAILY MEAN	6100	Apr 12	9160	May 19	24800	Apr 22 1973
LOWEST DAILY MEAN	.14	Oct 23	.14	Oct 23	.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	.17	Oct 23	.17	Oct 23	.00	Many Years
INSTANTANEOUS PEAK FLOW	---		9840	May 19	45000	Apr 21 1973
INSTANTANEOUS PEAK STAGE	---		16.93	May 19	33.50 ^a	Apr 21 1973
INSTANTANEOUS LOW FLOW	---		.14	Oct 23	.00	Many Years
ANNUAL RUNOFF (INCHES)	8.00		14.86		9.87	
10 PERCENT EXCEEDS	262		1120		588	
50 PERCENT EXCEEDS	24		56		31	
90 PERCENT EXCEEDS	2.0		7.2		1.9	

^aFormer datum.

05506500 MIDDLE FORK SALT RIVER AT PARIS, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT: August 1980 to current year.

REMARKS.--Sediment records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,320 mg/L, Feb. 3, 1995; minimum daily mean, 2 mg/L, Oct. 23, 1989 and Aug. 1, 1991.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 40,200 tons, Mar. 5, 1985; minimum daily, 0.00 tons, many years.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,320 mg/L, Feb. 3; minimum daily mean, 7 mg/L, Oct. 2.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 21,600 tons, Feb. 3; minimum daily, 0.00 ton, Oct. 28 and 29.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	5.5	8	.11	24	14	.88	72	138	27
2	3.9	7	.07	33	10	.85	37	132	13
3	1.4	8	.03	67	9	1.6	23	167	10
4	.56	11	.02	41	8	.93	17	179	8.2
5	.58	16	.03	37	8	.83	14	178	6.7
6	.60	24	.04	49	11	1.4	27	185	18
7	1.6	22	.10	97	29	7.6	1040	638	1990
8	6.2	18	.31	71	47	8.9	1360	525	1930
9	2.5	15	.10	45	45	5.4	652	321	580
10	1.4	14	.06	26	46	3.2	205	190	106
11	.22	15	.01	24	47	3.0	117	136	43
12	.19	14	.01	17	45	2.1	84	106	24
13	.45	12	.01	13	36	1.2	51	95	13
14	.35	16	.02	9.6	27	.70	38	86	8.8
15	.25	18	.01	7.6	27	.55	29	78	6.1
16	.20	17	.01	7.7	34	.72	37	92	9.6
17	.82	17	.04	7.4	36	.73	117	122	39
18	.55	16	.02	7.1	32	.61	123	106	35
19	.98	16	.04	6.5	27	.47	99	91	24
20	.18	16	.01	66	102	47	80	84	18
21	.32	15	.01	1200	847	2750	57	78	12
22	.22	15	.01	641	341	633	46	76	9.5
23	.14	16	.01	256	207	144	39	77	8.0
24	.23	17	.01	106	143	41	30	84	6.7
25	.17	22	.01	53	98	14	26	92	6.4
26	.16	19	.01	29	68	5.3	23	72	4.5
27	.15	12	.01	36	75	8.1	21	69	3.8
28	.15	9	.00	51	95	13	19	62	3.1
29	.18	10	.00	165	167	85	17	54	2.4
30	.84	10	.02	168	209	94	15	60	2.5
31	12	11	.38	---	---	---	15	51	2.0

05506500 MIDDLE FORK SALT RIVER AT PARIS, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	14	47	1.7	605	672	1240	206	172	96
2	12	45	1.4	1400	2930	11400	144	124	48
3	11	43	1.3	1850	4320	21600	95	90	23
4	9.2	42	1.0	1900	3080	16000	68	66	12
5	8.0	40	.87	1120	846	2820	74	75	15
6	9.3	38	.96	378	175	195	108	107	32
7	7.2	37	.71	214	99	57	211	207	125
8	6.6	35	.63	128	83	29	299	285	232
9	6.2	34	.57	120	70	23	198	175	95
10	6.2	33	.54	103	62	17	144	140	54
11	6.3	31	.53	67	55	9.8	127	129	44
12	7.5	35	.73	49	49	6.3	110	118	35
13	34	153	27	50	43	5.8	99	109	29
14	1550	1010	4540	36	38	3.7	92	100	25
15	1570	627	2800	30	34	2.7	82	92	20
16	540	213	326	24	31	2.1	73	84	17
17	308	131	109	25	35	2.4	65	77	14
18	203	116	63	27	42	3.1	58	71	11
19	111	109	32	35	49	4.6	54	65	9.5
20	95	102	26	45	58	7.1	52	60	8.3
21	104	96	27	58	68	11	51	55	7.6
22	99	89	24	67	77	14	49	54	7.1
23	79	77	16	73	68	13	49	53	7.1
24	57	66	10	68	58	11	49	53	7.0
25	44	56	6.6	56	49	7.3	44	52	6.1
26	34	48	4.4	54	44	6.5	43	51	5.9
27	43	46	5.7	134	146	62	44	50	5.9
28	300	215	174	248	227	152	98	85	24
29	2000	1550	8370	---	---	---	98	83	22
30	1780	1650	7930	---	---	---	86	71	16
31	749	757	1530	---	---	---	65	64	11
APRIL			MAY			JUNE			
1	54	59	8.6	184	100	50	250	97	65
2	50	50	6.8	277	89	67	170	74	34
3	49	44	5.9	207	77	43	110	85	25
4	45	52	6.2	394	83	105	80	107	23
5	39	45	4.8	860	252	591	52	130	18
6	37	47	4.7	451	133	166	67	99	18
7	35	48	4.6	417	113	205	101	85	24
8	48	55	7.2	3890	921	9930	1430	755	3990
9	149	171	82	4740	523	6770	1740	704	3380
10	652	778	1840	3430	350	3240	1130	463	1410
11	3010	2070	16700	1760	251	1250	534	242	373
12	3390	1170	10700	301	130	107	186	110	56
13	2350	578	3810	224	87	53	127	81	28
14	795	272	611	185	65	32	96	74	19
15	263	178	127	155	78	32	78	67	14
16	189	109	55	340	103	192	64	41	7.0
17	184	99	73	3580	767	7680	54	41	6.0
18	1810	1560	8210	5220	563	7920	47	54	6.7
19	2080	887	4990	9160	494	12300	39	47	4.9
20	1310	432	1620	6170	260	4470	34	44	4.0
21	312	205	176	1930	201	1020	30	49	4.0
22	201	142	77	346	131	124	26	45	3.2
23	154	110	46	329	89	79	25	40	2.7
24	130	87	30	5450	424	6230	26	35	2.4
25	111	78	23	8380	348	7880	37	35	3.8
26	103	82	24	572	223	345	153	84	42
27	493	331	474	2190	363	2150	897	571	2010
28	862	590	1380	2000	334	1800	1910	862	4420
29	508	367	526	330	282	251	1070	320	1070
30	218	188	112	226	242	148	246	167	111
31	---	---	---	516	151	210	---	---	---

05506500 MIDDLE FORK SALT RIVER AT PARIS, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	159	116	50	56	138	20	12	52	1.6
2	103	117	32	302	205	195	11	51	1.5
3	67	119	21	1930	768	4340	11	48	1.4
4	52	69	9.7	3240	954	8310	11	72	2.2
5	48	61	8.3	3050	471	3970	12	57	1.9
6	526	272	434	1080	143	494	14	48	1.9
7	625	655	1100	396	106	124	19	58	3.0
8	272	389	296	270	131	95	16	78	3.3
9	115	188	59	134	91	33	14	73	2.7
10	68	162	30	771	454	1500	14	52	1.9
11	57	141	21	1150	584	1840	22	49	3.0
12	52	65	9.3	437	263	326	18	52	2.5
13	35	56	5.2	164	115	52	16	50	2.2
14	26	61	4.3	93	83	21	14	47	1.8
15	22	68	4.1	95	120	43	13	57	2.1
16	18	55	2.6	161	203	90	14	61	2.2
17	15	47	1.9	144	153	62	12	57	1.9
18	13	46	1.6	308	149	126	9.7	58	1.5
19	12	45	1.5	157	151	62	13	70	2.5
20	15	42	1.7	81	130	28	12	70	2.3
21	12	38	1.2	47	86	11	9.4	77	2.0
22	13	37	1.4	29	72	5.6	8.5	83	1.9
23	16	31	1.4	23	66	4.1	8.0	71	1.5
24	148	72	45	19	56	2.9	7.4	63	1.3
25	337	344	315	16	54	2.4	7.7	67	1.4
26	128	255	90	14	36	1.4	8.5	50	1.1
27	62	131	22	13	38	1.4	9.1	56	1.4
28	93	128	32	13	32	1.1	8.7	51	1.2
29	51	97	13	11	34	1.0	8.8	40	.96
30	26	89	6.3	11	48	1.4	12	36	.86
31	18	86	4.2	11	65	1.9	---	---	---

05506800 ELK FORK SALT RIVER NEAR MADISON, MO

LOCATION.--Lat 39°26'05", long 92°10'04", in SE 1/4 NE 1/4 SW 1/4 sec.29, T.54 N., R.11 W., Monroe County, Hydrologic Unit 07110006, on downstream side of highway, 25 ft to the left of bridge on State Highway AA, 500 ft downstream from Allen Creek, 3.5 mi southeast of Madison and at mile 29.8.

DRAINAGE AREA.--200 mi².

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

REVISED RECORDS.--WDR MO 1973: 1970(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 690.16 ft above sea level (Missouri State Highways and Transportation Commission bench mark).

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 9, 1967, reached a stage of 31.25 ft, from floodmark, discharge, 31,200 ft³/s, by contracted-opening method. Flood in 1871 reached nearly the same stage, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	64	15	8.5	585	93	15	130	61	56	4.5	1.7
2	.54	41	11	7.9	1050	53	16	334	53	30	49	1.6
3	.53	16	9.8	7.4	2110	36	16	160	71	21	395	1.2
4	.52	10	9.2	5.8	1560	31	15	519	54	18	608	1.5
5	.54	18	8.5	3.5	259	41	14	620	39	76	1040	1.4
6	.60	87	12	6.2	148	82	14	198	67	145	239	1.6
7	.63	57	896	6.5	105	214	13	354	44	89	740	2.1
8	.94	26	268	6.8	72	208	17	6370	1080	32	115	1.9
9	.86	18	89	6.9	48	102	49	3790	1570	20	39	3.2
10	1.7	13	45	6.9	44	75	111	239	194	14	414	2.2
11	1.9	11	28	7.3	40	62	1710	140	107	10	166	1.8
12	1.2	8.7	20	9.1	21	55	766	102	62	9.0	34	1.9
13	.92	7.9	16	76	23	47	202	101	39	7.7	15	2.1
14	.74	7.6	14	2520	21	39	114	88	28	6.7	9.8	2.0
15	.69	6.8	13	1230	22	32	80	55	22	5.6	8.3	1.8
16	.66	6.0	35	203	23	28	59	58	18	4.6	64	1.8
17	.65	6.4	143	122	21	25	79	2120	15	4.4	93	1.6
18	.64	6.0	93	93	23	24	2470	6480	13	3.9	34	1.3
19	.60	5.6	45	71	29	23	670	4100	11	3.3	13	1.2
20	.68	316	28	60	36	22	165	302	10	4.1	8.0	1.3
21	.77	1290	22	52	45	20	112	152	8.7	6.5	5.9	1.9
22	.94	197	18	39	44	19	75	101	7.7	8.0	4.6	2.2
23	.92	57	15	30	41	18	56	115	6.7	6.1	4.3	1.3
24	.84	28	13	26	34	17	51	8870	140	4.7	4.3	1.1
25	.79	18	12	22	30	16	45	8470	145	6.1	4.3	1.1
26	.75	13	11	15	31	17	46	535	296	5.7	3.8	.97
27	.79	35	10	32	145	18	652	1620	300	4.4	3.0	.96
28	.98	45	10	1490	201	20	241	1540	798	4.3	2.9	1.0
29	1.0	38	9.9	1840	---	19	113	296	500	3.6	2.6	1.2
30	.92	22	9.5	598	---	16	83	127	196	3.2	2.3	1.7
31	3.3	---	8.5	285	---	15	---	79	---	3.1	1.7	---
MEAN	.91	82.5	62.5	287	243	48.0	269	1554	199	19.9	133	1.62
MAX	3.3	1290	896	2520	2110	214	2470	8870	1570	145	1040	3.2
MIN	.52	5.6	8.5	3.5	21	15	13	55	6.7	3.1	1.7	.96
IN.	.01	.46	.36	1.65	1.27	.28	1.50	8.96	1.11	.11	.77	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1995, BY WATER YEAR (WY)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	109	148	155	117	180	271	341	265	175	157	48.1	127															
MAX	1077	1248	750	533	935	1154	1651	1554	1005	1409	256	1381															
(WY)	1967	1966	1983	1974	1985	1973	1973	1995	1969	1981	1985	1993															
MIN	.25	1.24	.94	.95	2.07	3.02	10.8	10.0	1.61	1.06	.82	.63															
(WY)	1981	1981	1989	1977	1989	1981	1989	1992	1988	1988	1980	1988															

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1969 - 1995

	1994	1995	1969-1995
ANNUAL MEAN	156	243	174
HIGHEST ANNUAL MEAN			380
LOWEST ANNUAL MEAN			23.6
HIGHEST DAILY MEAN	10800	8870	24100
LOWEST DAILY MEAN	.47	.52	.00
ANNUAL SEVEN-DAY MINIMUM	.54	.56	.00
INSTANTANEOUS PEAK FLOW	---	13900	42300
INSTANTANEOUS PEAK STAGE	---	24.90	33.40
INSTANTANEOUS LOW FLOW	---	.52	.00
ANNUAL RUNOFF (INCHES)	10.58	16.48	11.83
10 PERCENT EXCEEDS	151	403	286
50 PERCENT EXCEEDS	12	22	15
90 PERCENT EXCEEDS	.66	1.3	1.1

05507600 LICK CREEK AT PERRY, MO

LOCATION.--Lat 39°25'53", long 91°40'34", near center of NW 1/4 SW 1/4 sec.27, T.54 N., R.7 W., Ralls County, Hydrologic Unit 07110007, on right bank and downstream side of State Highway 154 bridge, 0.1 mi west of Perry and at mile 11.9.

DRAINAGE AREA.--104 mi².

PERIOD OF RECORD.--October 1979 to current year. Prior to October 1979 gages were maintained and operated by U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.00 ft above sea level. Prior to November 1967 nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Jan. 6-17 and May 24 to June 10. Records good except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 12, 1969, reached a stage of 26.24 ft as determined by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.13	8.2	2.0	235	51	2.6	54	102	10	22	.05
2	.00	.20	5.1	1.8	734	26	3.1	160	155	4.7	428	.04
3	.00	.16	4.0	1.5	1970	18	3.1	54	125	3.0	119	.04
4	.00	.28	3.0	1.0	873	15	3.2	143	50	3.2	239	.03
5	.00	1.1	2.4	.90	177	20	2.6	191	36	5.0	192	.03
6	.00	96	3.5	.85	79	27	2.6	60	25	3.3	161	.03
7	.01	32	177	.88	38	82	2.6	392	10	4.4	606	.05
8	.05	12	61	.92	32	93	2.9	1670	34	28	69	.04
9	.09	5.4	30	1.0	17	39	3.5	223	7.1	17	20	.04
10	.08	2.8	22	1.0	16	30	6.1	70	5.3	11	65	.04
11	.05	1.6	13	1.2	16	29	251	43	5.1	4.7	26	.03
12	.04	1.2	9.8	1.5	14	25	125	27	4.0	2.6	10	.04
13	.04	1.1	6.6	60	10	19	40	21	3.1	1.8	4.1	.04
14	.03	1.4	4.7	1300	9.2	15	19	16	2.4	1.2	2.1	.05
15	.03	1.3	4.1	700	9.4	12	11	12	2.1	.94	1.4	.04
16	.03	1.1	12	130	10	10	8.6	15	1.7	.75	1.1	.06
17	.03	.79	39	70	9.9	8.6	36	1460	1.4	.70	9.8	.06
18	.03	.57	23	39	32	7.6	1140	4230	1.2	.56	11	.04
19	.03	.44	14	31	110	6.7	156	487	1.0	.40	4.3	.11
20	.02	118	10	24	152	6.0	77	90	.97	.53	1.8	.16
21	.02	547	7.5	17	124	5.1	70	37	.85	.60	1.1	.14
22	.02	75	5.3	13	58	4.6	31	21	.67	.56	.65	.11
23	.02	25	4.4	12	50	4.3	20	15	.61	.72	.41	.10
24	.02	13	4.0	10	35	4.0	18	2750	17	1.4	.26	.08
25	.02	8.9	3.6	9.2	22	3.7	15	595	98	6.1	.18	.09
26	.02	5.4	3.2	7.7	22	3.4	14	492	37	18	.12	.11
27	.02	105	2.9	15	477	3.4	81	630	8.3	5.3	.10	.11
28	.02	134	2.6	592	155	3.2	47	465	48	2.9	.08	.07
29	.02	30	2.4	525	---	3.0	24	197	58	1.6	.06	.07
30	.02	14	2.1	277	---	2.8	26	30	20	1.1	.04	.19
31	.08	---	2.0	143	---	2.6	---	25	---	.90	.04	---
MEAN	.027	41.2	15.9	129	196	18.7	74.7	473	28.7	4.61	64.4	.070
MAX	.09	547	177	1300	1970	93	1140	4230	155	28	606	.19
MIN	.00	.13	2.0	.85	9.2	2.6	2.6	12	.61	.40	.04	.03
IN.	.00	.44	.18	1.43	1.96	.21	.80	5.25	.31	.05	.71	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1995, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	14.0	104	95.6	44.7	93.0	86.3	114	116	48.3	90.3	27.9	59.1				
MAX	95.9	652	442	151	389	340	541	473	221	482	143	748				
(WY)	1987	1986	1983	1982	1985	1984	1994	1995	1982	1981	1982	1993				
MIN	.000	.048	.047	.003	1.67	.41	2.49	1.27	.035	.031	.000	.011				
(WY)	1989	1981	1980	1980	1981	1981	1981	1988	1988	1994	1994	1983				

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1980 - 1995

ANNUAL MEAN	64.7	86.9	74.3
HIGHEST ANNUAL MEAN			188
LOWEST ANNUAL MEAN			15.1
HIGHEST DAILY MEAN	7760	4230	7880
LOWEST DAILY MEAN	.00	.00	.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
INSTANTANEOUS PEAK FLOW	---	5960	10900
INSTANTANEOUS PEAK STAGE	---	17.71	21.96
INSTANTANEOUS LOW FLOW	---	.00	.00
ANNUAL RUNOFF (INCHES)	8.45	11.34	9.70
10 PERCENT EXCEEDS	56	155	90
50 PERCENT EXCEEDS	2.9	5.4	3.8
90 PERCENT EXCEEDS	.00	.04	.02

05507700 MARK TWAIN LAKE NEAR CENTER, MO

LOCATION.--Lat 39°31'29", long 91°38'37", sec.26, T.55 N., R.7 W., Ralls County, Hydrologic Unit 07110007, inside dam structure at mile 63.0 on Salt River.

DRAINAGE AREA.--2,318 mi².

PERIOD OF RECORD.--1984 to present. 1984 to September 30, 1991, available in files at U.S. Army Corps of Engineers, St. Louis District.

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

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,360,000 ac-ft, May 28-30, 1995, elevation, 636.22 ft., May 29; minimum, 386,000 ac-ft, Oct. 10, 1984, elevation, 596.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,360,000 ac-ft, May 28-30, elevation, 636.22 ft., May 29; minimum, 435,000 ac-ft, Jan. 13, elevation, 599.74 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601.91	601.33	603.36	601.01	607.92	606.95	602.58	610.56	635.06	617.23	603.47	602.61
2	601.87	601.32	603.35	600.97	608.51	606.89	602.58	610.66	634.52	616.55	603.83	602.62
3	601.84	601.29	603.38	600.95	609.85	606.83	602.53	610.66	633.98	619.79	604.52	602.60
4	601.83	601.33	603.38	600.73	611.96	606.58	602.49	610.66	633.31	615.10	605.54	602.59
5	601.63	601.35	603.41	600.24	612.81	606.55	602.41	610.63	632.63	614.85	606.78	602.59
6	601.63	601.51	603.04	600.20	612.92	606.56	602.44	611.13	631.91	614.57	607.47	602.42
7	601.63	601.55	603.20	600.19	612.30	606.63	602.37	611.10	631.20	614.53	607.94	602.47
8	601.74	601.61	603.42	600.10	611.61	606.69	602.39	612.91	630.62	614.71	607.88	602.45
9	601.77	601.65	603.78	600.10	611.03	606.73	602.47	615.93	630.54	614.71	607.58	602.43
10	601.75	601.71	603.53	599.93	610.31	606.74	602.62	617.66	630.23	614.37	607.52	602.42
11	601.74	601.71	603.43	599.87	609.94	606.74	603.85	618.60	629.60	613.78	607.49	602.42
12	601.70	601.73	603.27	599.76	609.52	606.79	606.07	618.85	628.85	613.17	607.46	601.98
13	601.70	601.74	602.83	599.74	609.07	606.86	607.41	618.73	628.09	612.51	607.03	601.63
14	601.70	601.75	602.53	600.96	608.55	606.81	607.77	618.63	627.30	611.83	606.87	601.61
15	601.61	601.71	602.50	603.06	608.20	606.66	607.94	618.65	626.57	611.14	606.67	601.59
16	601.60	601.73	602.29	603.83	607.97	606.60	607.94	618.65	625.87	610.42	606.48	601.60
17	601.64	601.71	602.25	604.11	607.59	606.41	608.01	619.73	625.18	609.79	606.22	601.60
18	601.65	601.67	601.98	604.16	607.37	606.37	608.71	623.29	624.47	609.19	606.10	601.50
19	601.54	601.63	601.82	604.27	607.23	606.32	610.37	627.55	624.04	608.57	605.93	601.43
20	601.45	601.68	601.60	604.35	607.10	606.34	611.11	629.92	623.62	608.02	605.77	601.43
21	601.43	602.35	601.22	604.35	606.90	605.95	611.35	630.46	623.10	607.48	605.61	601.41
22	601.44	603.01	601.25	604.34	606.71	605.58	611.32	630.00	622.43	606.83	605.26	601.43
23	601.46	603.30	601.18	604.27	606.51	605.23	611.25	629.51	621.70	606.83	604.98	601.39
24	601.42	603.37	600.99	603.95	606.49	604.71	611.17	630.56	620.98	606.92	604.79	601.39
25	601.38	603.40	601.02	603.80	606.47	604.35	610.95	633.53	620.24	606.86	604.42	601.39
26	601.32	603.37	601.03	603.82	606.52	604.09	610.59	635.06	619.65	606.36	603.97	601.32
27	601.31	603.42	601.05	603.74	606.67	604.02	610.48	635.57	619.07	605.82	603.63	601.33
28	601.22	603.57	601.03	604.06	606.93	603.47	610.59	636.13	618.69	605.21	603.32	601.30
29	601.21	603.58	600.95	605.62	---	603.07	610.67	636.22	618.45	604.59	603.16	601.29
30	601.20	603.43	600.96	606.94	---	602.73	610.62	636.11	617.93	604.21	602.87	601.30
31	601.24	---	600.96	607.57	---	602.64	---	635.69	---	603.62	602.75	---
MAX	601.91	603.58	603.78	607.57	612.92	606.95	611.35	636.22	635.06	619.79	607.94	602.62
MIN	601.20	601.29	600.95	599.74	606.47	602.64	602.37	610.56	617.93	603.62	602.75	601.29

05507700 MARK TWAIN LAKE NEAR CENTER, MO--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471000	461000	496000	455000	581000	561000	483000	632000	1310000	782000	498000	483000
2	470000	461000	496000	455000	592000	560000	483000	637000	1300000	766000	508000	483000
3	470000	461000	497000	455000	618000	558000	482000	636000	1280000	747000	517000	483000
4	470000	461000	497000	451000	661000	554000	481000	637000	1250000	734000	540000	483000
5	466000	462000	497000	445000	683000	555000	480000	643000	1230000	728000	562000	483000
6	466000	464000	491000	443000	686000	553000	480000	647000	1200000	722000	573000	480000
7	466000	465000	493000	443000	673000	556000	479000	643000	1180000	722000	580000	481000
8	468000	466000	497000	441000	658000	558000	480000	695000	1170000	728000	577000	480000
9	469000	467000	504000	441000	645000	558000	480000	763000	1160000	724000	574000	480000
10	468000	468000	499000	438000	629000	558000	484000	798000	1150000	715000	573000	480000
11	468000	468000	497000	437000	622000	558000	511000	821000	1130000	701000	573000	480000
12	468000	468000	495000	436000	613000	560000	552000	825000	1100000	687000	569000	472000
13	468000	468000	487000	435000	605000	560000	572000	821000	1080000	672000	562000	466000
14	468000	468000	482000	451000	594000	559000	578000	818000	1090000	659000	559000	466000
15	466000	468000	481000	489000	587000	556000	580000	821000	1070000	643000	554000	466000
16	466000	468000	478000	504000	582000	555000	582000	819000	1020000	627000	549000	466000
17	466000	468000	477000	509000	575000	551000	580000	859000	994000	615000	547000	466000
18	467000	467000	472000	511000	570000	551000	604000	968000	974000	603000	546000	466000
19	465000	466000	470000	512000	567000	550000	635000	1090000	962000	591000	543000	463000
20	463000	467000	466000	514000	565000	548000	646000	1150000	951000	581000	540000	463000
21	463000	479000	460000	514000	561000	540000	651000	1160000	935000	569000	534000	463000
22	463000	490000	460000	514000	558000	533000	649000	1140000	916000	560000	530000	463000
23	464000	495000	459000	513000	554000	527000	648000	1130000	896000	560000	525000	462000
24	463000	496000	456000	508000	554000	517000	646000	1190000	878000	558000	522000	462000
25	462000	497000	456000	505000	553000	510000	641000	1280000	858000	558000	515000	462000
26	461000	496000	456000	504000	553000	508000	632000	1320000	840000	548000	507000	461000
27	461000	497000	457000	504000	557000	506000	632000	1340000	828000	536000	501000	461000
28	460000	500000	456000	506000	561000	494000	635000	1360000	820000	524000	496000	461000
29	459000	500000	455000	534000	---	489000	634000	1360000	824000	518000	493000	462000
30	459000	497000	455000	561000	---	485000	635000	1360000	800000	506000	488000	462000
31	460000	---	455000	574000	---	484000	---	1340000	---	498000	485000	---
MAX	471000	500000	504000	574000	686000	561000	651000	1360000	1310000	782000	580000	483000
MIN	459000	461000	455000	435000	553000	484000	479000	632000	102000	498000	485000	461000

05507800 SALT RIVER NEAR CENTER, MO

LOCATION.--Lat 39°34'26", long 91°34'15", near SE corner, sec.4, T.55 N., R.6 W., Ralls County, Hydrologic Unit 07110007, on left bank at left downstream end of bridge on Highway A, 0.5 mi downstream from Clarence Cannon Dam, 5.0 mi northwest of Center and at mile 53.1.

DRAINAGE AREA.--2,350 mi², approximately.

PERIOD OF RECORD.--October 1979 to current year. Prior to October 1979, gage heights only by U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 500.00 ft above sea level. Prior to Oct. 1979 nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: July 29 to Aug. 2. Records good except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station. Flow regulated by Clarence Cannon Dam, 0.5 mi upstream.

EXTREME FOR PERIOD OF RECORD.--Maximum gage height, 33.00 ft, Apr. 22, 1973.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	98	409	108	1340	1720	379	2180	12500	8430	1100	288
2	75	124	71	107	1760	1380	571	1280	12500	8630	850	57
3	84	110	65	843	3880	2590	583	2330	12400	9000	1140	51
4	1320	69	62	3570	4040	1360	295	1770	12400	6140	1150	47
5	436	80	1830	1330	3780	88	500	2120	12400	5740	410	561
6	54	74	2650	277	5890	949	40	1400	12400	7520	67	452
7	48	68	3510	477	8380	1260	366	3100	12100	7150	3540	223
8	55	64	2910	73	8090	985	83	2590	12200	7330	3770	51
9	49	65	4520	1290	7060	947	72	1290	12600	6920	2240	44
10	47	62	880	528	6130	973	415	2410	12600	7120	2090	39
11	46	60	1800	681	3990	186	83	2680	12600	7780	2560	2250
12	56	57	2190	427	4190	71	1060	2870	12600	7340	3000	3060
13	129	57	4940	78	5220	500	3800	2730	11900	7260	3750	940
14	421	56	640	583	4870	1750	1090	2510	11000	6970	1840	94
15	61	67	1810	73	2950	1360	1380	1260	10500	7470	2520	61
16	58	63	1540	70	3530	1380	275	2710	10100	7140	3230	55
17	54	62	2690	235	2230	1320	3170	1440	9940	6960	3860	53
18	65	197	1580	927	1770	628	4150	992	8150	5860	2900	50
19	91	126	2210	327	2390	198	1800	1410	5870	5880	2270	1160
20	39	123	4270	738	2680	2750	2500	6140	5440	5460	1790	256
21	58	122	109	529	2900	3440	1370	8680	8600	5890	2670	63
22	93	113	79	390	2480	3940	1490	10000	9440	2150	2590	57
23	92	84	2350	2760	813	4170	1810	10100	9480	151	1940	53
24	96	56	80	1710	1070	4430	1920	12100	9520	2290	2830	47
25	1420	56	77	646	136	2540	3930	12400	9650	4040	3900	45
26	72	67	75	379	109	559	4420	12200	9670	6130	2960	74
27	371	62	72	362	1550	3840	3810	12400	9730	6240	2850	71
28	303	148	126	79	1650	4530	3740	12300	9730	5850	1810	66
29	101	1280	488	317	---	3810	3010	12800	9650	3900	2370	62
30	94	1520	112	1190	---	1110	1480	12500	9140	4100	1590	58
31	98	---	109	710	---	492	---	12500	---	3400	920	---
MEAN	195	173	1428	704	3388	1782	1653	5587	10560	6008	2274	346
MAX	1420	1520	4940	3570	8380	4530	4420	12800	12600	9000	3900	3060
MIN	39	56	62	70	109	71	40	992	5440	151	67	39
IN.	.10	.08	.70	.35	1.50	.87	.79	2.74	5.02	2.95	1.12	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1995, BY WATER YEAR (WY)

	MEAN	1217	1616	2292	1184	1713	2699	2457	2528	2821	2464	1355	1221
MAX	9085	6038	10360	3703	8098	10530	10310	6741	10560	10810	7895	7902	
(WY)	1994	1987	1983	1986	1982	1985	1983	1981	1995	1981	1993	1993	
MIN	4.62	14.8	31.4	30.5	81.6	87.0	126	67.5	126	75.2	13.9	25.3	
(WY)	1980	1981	1980	1980	1989	1989	1989	1989	1988	1983	1980	1983	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1980 - 1995
ANNUAL MEAN	1548	2833	1965
HIGHEST ANNUAL MEAN			3462
LOWEST ANNUAL MEAN			283
HIGHEST DAILY MEAN	9280	May 6	65600
LOWEST DAILY MEAN	39	Oct 20	.44
ANNUAL SEVEN-DAY MINIMUM	51	Oct 6	.65
INSTANTANEOUS PEAK FLOW	---	13800	72800
INSTANTANEOUS PEAK STAGE	---	15.93	32.62
INSTANTANEOUS LOW FLOW	---	7.2	.44
ANNUAL RUNOFF (INCHES)	8.95	16.37	11.36
10 PERCENT EXCEEDS	4960	9060	5770
50 PERCENT EXCEEDS	491	1380	437
90 PERCENT EXCEEDS	62	62	40

05508000 SALT RIVER NEAR NEW LONDON, MO

LOCATION.--Lat 39°36'44", long 91°24'30", in NE 1/4 NW 1/4 sec.36, T.56 N., R.5 W., Ralls County, Hydrologic Unit 07110007, on left bank near downstream end of bridge on north bound side of dual U.S. Highway 61, 9.9 miles downstream from Clarence Cannon Dam, 2.0 mi north of New London, 8.0 mi upstream from Spencer Creek and at mile 35.5.

DRAINAGE AREA.--2,480 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 477.03 ft above sea level. Prior to Apr. 7, 1931, nonrecording gage 400 ft upstream at datum 0.03 ft higher; Apr. 7, 1931 to Jan. 17, 1935, nonrecording gage at site 180 ft upstream at datum 0.04 ft lower, Jan. 1935 to Apr. 1985 water-stage recorder 400 ft upstream same datum.

REMARKS.--Estimated daily discharges: Jan 1-9. Water-discharge records good except for estimated daily discharges which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station. Flow mostly regulated by Clarence Cannon Dam, 9.9 mi upstream, since Sept. 1979. Five percent of the drainage area, 130 mi², is natural drainage not regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107,000 ft³/s, Apr. 22, 1973; gage height, 31.8 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 14, 1858, reached a stage of 27.6 ft, present site and datum, based on comparison of June 1928 flood crest at stone marker 1.0 mi downstream of gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	133	1220	150	1000	1990	457	2590	13100	8750	1160	861
2	80	122	165	148	2330	1740	697	1010	13300	8260	934	154
3	81	145	106	1000	3930	2120	552	2710	13200	9150	1440	94
4	193	112	95	3700	4500	2090	724	1260	13000	7520	2130	83
5	1470	110	1200	1400	4160	726	504	2480	13000	5030	1540	76
6	112	165	2330	300	4500	799	200	1470	12900	7500	278	865
7	76	98	3040	520	7590	1220	322	3500	12600	7250	1620	404
8	92	81	3640	150	7670	1090	221	3850	13300	7300	4060	155
9	76	79	3740	1500	6380	1280	162	1200	13200	7040	3040	80
10	64	78	1620	671	6120	1200	413	3050	13200	7020	2120	70
11	60	74	2210	603	3800	874	1020	1970	13200	7700	2840	407
12	58	70	1230	872	4020	183	568	2660	13200	7480	2890	3120
13	88	67	4580	276	5080	156	3240	3310	12600	6970	4580	2550
14	183	68	1860	2040	4960	1290	2660	2730	11400	7120	1790	416
15	369	64	388	477	3410	1810	1040	1550	10800	7420	2930	96
16	80	70	2880	227	3040	1180	678	2940	10400	7380	2900	76
17	73	69	1370	182	1800	2210	1840	4230	10100	6710	3440	68
18	69	74	2030	885	2250	325	4980	5140	9180	6020	3480	62
19	86	232	2350	603	2060	861	2630	1390	6090	5920	2950	847
20	105	257	3810	564	2500	1720	2950	5470	5730	5580	1710	624
21	61	593	1410	967	3870	3200	1200	8420	7760	5950	2670	118
22	72	216	150	714	2560	3490	1760	9880	9700	4180	2710	73
23	105	163	1890	1920	1610	3640	1780	10200	9610	538	2270	66
24	106	111	494	2120	1130	4570	2000	15100	9560	1160	1950	59
25	1120	85	136	1590	706	2730	3070	13100	9740	3040	3580	53
26	341	82	124	485	248	1440	4380	12700	9750	6240	3240	54
27	87	104	117	503	1070	1910	3710	13400	9820	6000	3080	77
28	580	109	113	908	1950	4720	3790	13900	9860	5910	2540	76
29	138	219	419	911	---	3300	3560	13200	9800	4330	1620	74
30	114	1820	310	887	---	2220	1310	13100	9320	4650	2760	72
31	127	---	158	1650	---	951	---	13100	---	4000	1180	---
MEAN	205	189	1458	933	3366	1840	1747	6149	10950	6101	2433	394
MAX	1470	1820	4580	3700	7670	4720	4980	15100	13300	9150	4580	3120
MIN	58	64	95	148	248	156	162	1010	5730	538	278	53
IN.	.10	.09	.68	.43	1.41	.86	.79	2.86	4.93	2.84	1.13	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1995, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	1247	1772	2441	1271	1824	2867	2626	2656	2920	2597	1434	1286				
MAX	9165	6406	11100	4001	8787	10810	10660	6651	10950	11900	7961	8300				
(WY)	1994	1986	1983	1985	1982	1985	1983	1981	1995	1981	1993	1993				
MIN	16.9	18.4	48.6	37.1	84.9	90.2	150	93.4	128	88.4	42.8	28.5				
(WY)	1980	1981	1980	1981	1989	1989	1989	1989	1988	1983	1983	1983				

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1980 - 1995
ANNUAL MEAN	1646	2973	2080
HIGHEST ANNUAL MEAN			3577
LOWEST ANNUAL MEAN			307
HIGHEST DAILY MEAN	9280	Apr 22	62100
LOWEST DAILY MEAN	58	Oct 12	9.5
ANNUAL SEVEN-DAY MINIMUM	65	Sep 18	9.6
INSTANTANEOUS PEAK FLOW	---		74200
INSTANTANEOUS PEAK STAGE	---		31.09
INSTANTANEOUS LOW FLOW	---		9.5
ANNUAL RUNOFF (INCHES)	9.01		11.39
10 PERCENT EXCEEDS	5020		6010
50 PERCENT EXCEEDS	542		520
90 PERCENT EXCEEDS	77		50

05508000 SALT RIVER NEAR NEW LONDON, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1967 to July 1975, July 1977 to current year.

REMARKS.--Discontinued as National stream-quality accounting network station Sept. 1986. Discontinued as daily sediment station Sept. 1989. Oct. 1989 to Sept. 1990, partial water-quality data site. Oct. 1989 to present, partial sediment data site.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1979 to September 1981.

WATER TEMPERATURE: March 1979 to September 1981.

SUSPENDED-SEDIMENT: July 1980 to September 1989.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 733 microsiemens, Jan. 12, 1981; minimum daily, 86 microsiemens, Dec. 3, 1979.

WATER TEMPERATURE: Maximum daily, 36.0° C, July 18, 19, 21, and Aug. 23, 24, 1980; minimum daily, 0.0° C, Mar. 1, 1980.

DATE	TIME	WATER TEMPER- ATURE	DIS- CHARGE INST. CUBIC FEET PER SECOND	SEDI- MENT SUS- PENDED, (MG/L)	INST. SEDI- MENT LOAD (TONS)
Oct. 25	1203	12.0	112	9.9	3.0
Dec. 1	1500	9.0	541	17	25
Mar. 24	0900	7.0	1600	52	225
Apr. 21	1405	9.0	744	38	76
May 11	1500	14.0	365	108	1060
May 19	1145	14.0	880	100	238
June 19	1700	20.0	6040	76	1240
Sept 1	1045	23.0	726	42	82

05508805 SPENCER CREEK BELOW PLUM CREEK NEAR FRANKFORD, MO

LOCATION.--Lat 39°31'13", long 91°20'32", in NW 1/4 NW 1/4 NW 1/4 sec.27, T.55 N., R.4 W., Ralls County, Hydrologic Unit 07110007, on left bank 25 ft downstream from bridge on dual U.S. Highway 61, 0.75 mi downstream from Plum Creek, 2.5 mi northwest of Frankford and at mile 4.5.

DRAINAGE AREA.--206 mi².

PERIOD OF RECORD.--October 1, 1979 to current year. March 27, 1930 to September 1978, fragmentary record.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 485.00 ft above sea level. Mar. 24, 1930, to Sept. 30, 1936, nonrecording gage at site 0.75 mi upstream at datum 3.63 ft higher; Oct. 7, 1961, to July 15, 1974, fragmentary record, at present site, datum unknown; July 26, 1974, to Apr. 15, 1975, from nonrecording gage present site and datum.

REMARKS.--Estimated daily discharges: Nov. 12-20, Jan. 1-17, and Feb. 16-20. Records fair except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	2.5	3.3	.95	177	102	22	61	201	18	12	5.2
2	.60	2.4	2.2	.90	716	74	23	75	269	13	1390	3.8
3	.46	2.3	1.7	.85	1630	66	23	68	439	11	363	4.9
4	.38	3.1	1.3	.80	832	61	22	72	227	12	1130	4.4
5	.30	53	1.0	.75	244	77	20	128	164	20	646	4.7
6	.25	204	3.7	.72	146	80	18	81	132	18	372	4.2
7	.23	88	187	.70	104	171	17	85	120	11	737	6.5
8	1.4	58	49	.80	74	154	17	2040	1020	12	260	5.8
9	1.6	38	20	9.5	72	98	17	490	355	12	129	5.9
10	1.1	41	14	10	70	87	18	149	184	10	1910	4.5
11	.86	38	8.4	11	61	83	177	116	131	9.1	601	3.2
12	.65	30	4.7	12	50	80	179	85	108	7.7	177	3.1
13	.54	20	3.0	100	47	68	80	76	87	6.3	107	2.7
14	.44	9.4	2.5	2020	42	61	62	67	72	5.1	77	1.4
15	.40	7.0	2.0	624	42	54	49	57	59	3.7	58	1.3
16	.32	5.0	11	163	41	49	41	164	48	3.4	85	1.6
17	.32	3.5	47	79	40	44	52	2830	40	3.6	386	1.7
18	.33	3.1	16	64	38	41	842	7060	30	2.1	223	1.0
19	.40	2.7	8.4	58	42	38	185	1550	25	2.4	93	.95
20	.34	21	5.4	47	52	37	128	490	24	2.8	56	1.6
21	.34	313	4.6	37	86	32	111	281	18	3.5	38	1.6
22	.39	50	4.2	30	119	32	73	175	16	3.3	28	1.3
23	.38	13	3.5	27	105	30	64	124	13	232	21	.93
24	.43	5.7	3.1	22	83	28	59	7260	19	495	17	.70
25	.43	3.3	2.5	20	70	27	50	1910	95	800	15	.92
26	.46	2.0	2.1	17	69	26	47	617	26	655	14	.30
27	.51	42	1.8	34	428	25	113	1250	100	201	13	.19
28	.60	68	1.6	478	175	25	84	931	46	79	12	.18
29	.70	16	1.4	412	---	24	66	413	126	34	11	.55
30	.72	5.9	1.2	227	---	23	65	273	43	18	8.4	.70
31	1.5	---	1.1	123	---	22	---	218	---	13	6.8	---
MEAN	.59	38.4	13.5	149	202	58.7	90.8	942	141	87.6	290	2.53
MAX	1.6	313	187	2020	1630	171	842	7260	1020	800	1910	6.5
MIN	.23	2.0	1.0	.70	38	22	17	57	13	2.1	6.8	.18
IN.	.00	.21	.08	.84	1.02	.33	.49	5.27	.77	.49	1.62	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1995, BY WATER YEAR (WY)

	45.5	207	204	91.7	206	266	269	287	96.0	179	72.3	111
MEAN	45.5	207	204	91.7	206	266	269	287	96.0	179	72.3	111
MAX	376	1310	985	274	766	738	919	942	451	1788	290	1402
(WY)	1987	1986	1983	1982	1985	1978	1994	1995	1982	1981	1995	1993
MIN	.22	.48	1.67	2.58	3.40	9.23	26.6	15.1	2.23	.84	.96	.32
(WY)	1989	1990	1990	1980	1980	1981	1986	1988	1988	1988	1994	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1976 - 1995
ANNUAL MEAN	115	169	169
HIGHEST ANNUAL MEAN			355
LOWEST ANNUAL MEAN			36.5
HIGHEST DAILY MEAN	12100	7260	15600
LOWEST DAILY MEAN	.23	.18	.08
ANNUAL SEVEN-DAY MINIMUM	.35	.35	.10
INSTANTANEOUS PEAK FLOW	---	11300	20300
INSTANTANEOUS PEAK STAGE	---	15.12	18.54
INSTANTANEOUS LOW FLOW	---	.18	.00
ANNUAL RUNOFF (INCHES)	7.60	11.13	11.13
10 PERCENT EXCEEDS	125	330	241
50 PERCENT EXCEEDS	25	28	27
90 PERCENT EXCEEDS	.83	.83	1.1

05514500 CUIVRE RIVER NEAR TROY, MO

LOCATION.--Lat 39°00'59", long 90°59'00", in SE 1/4 sec.14, T.49 N., R.1 W., Lincoln County, Hydrologic Unit 07110008, on downstream side of right end of downstream bridge on dual U.S. Highway 61, 1.2 mi downstream from confluence of North and West Forks Cuivre River and 2.0 mi north of Troy.

DRAINAGE AREA.--903 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1922 to July 1972, May 1979 to current year.

REVISED RECORDS.--WSP 855: 1933(m), 1935(m), 1937(m). WSP 895: 1939. WSP 1005: 1942(m). WSP 1308: 1922-25(m).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 450.27 ft above sea level. Prior to Oct. 1, 1930, nonrecording gage at site 3 mi downstream at datum 4.31 ft lower; Oct. 1, 1930, to July 1939, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. National Weather Service gage-height telemark and U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1895 was 5 to 6 ft lower at Frenchmens Bluff, 3.0 mi downstream, than the October 1941 flood, which is the highest flood since 1888.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	17	168	80	2320	1000	137	2570	593	175	217	32
2	4.6	18	125	73	5740	491	133	4440	1150	127	2080	29
3	4.5	21	105	67	14300	329	129	1550	1530	105	1500	29
4	4.4	42	90	61	12200	262	152	1690	805	98	3270	30
5	3.8	55	82	58	3460	269	140	3310	523	287	2880	28
6	3.5	2100	77	54	1300	356	132	1410	389	318	1440	27
7	3.3	828	76	53	900	4430	123	803	309	167	10300	28
8	7.1	290	124	52	566	3050	119	4330	274	118	1510	25
9	12	160	177	48	505	1170	111	4900	315	99	648	25
10	14	688	343	47	425	850	105	1640	328	87	4000	23
11	33	379	285	48	359	756	115	885	257	79	2560	22
12	22	167	185	51	275	618	955	615	217	77	473	21
13	16	93	139	4550	270	486	968	1140	190	75	242	22
14	18	63	115	24200	232	393	471	868	168	67	163	21
15	13	48	98	7490	215	328	282	513	151	61	136	20
16	8.5	37	107	1960	206	286	223	1990	139	57	108	19
17	6.8	31	301	951	198	256	7200	29700	127	956	886	19
18	7.3	24	400	726	189	233	6820	59600	116	357	501	18
19	7.5	21	249	765	210	215	4190	26100	110	150	175	20
20	6.2	849	180	640	260	210	3590	4600	104	108	113	23
21	6.1	8090	247	506	429	196	2170	1560	98	88	87	23
22	5.7	2190	492	398	471	181	998	1080	92	108	74	21
23	4.9	698	349	369	356	170	657	822	88	200	63	20
24	5.6	353	234	266	290	157	668	5900	85	881	56	19
25	5.2	223	176	247	255	148	611	9660	80	450	50	17
26	5.3	169	146	212	224	141	455	3700	80	204	45	17
27	5.1	159	124	706	771	262	1290	2670	86	130	42	16
28	5.1	303	111	12600	2130	267	1340	5990	974	114	41	15
29	4.7	262	99	9500	---	189	738	1980	671	91	37	14
30	4.0	239	90	3000	---	162	1930	1010	312	75	35	14
31	8.2	---	84	1640	---	146	---	694	---	66	34	---
MEAN	8.38	621	180	2304	1752	581	1232	6056	345	193	1089	21.9
MAX	33	8090	492	24200	14300	4430	7200	59600	1530	956	10300	32
MIN	3.3	17	76	47	189	141	105	513	80	57	34	14
IN.	.01	.77	.23	2.94	2.02	.74	1.52	7.73	.43	.25	1.39	.03

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	422	531	538	522	822	994	1237	1047	685	566	298	488
MAX	6704	4503	5924	2465	4250	3596	6126	6311	4735	4366	1994	9098	
(WY)	1942	1986	1983	1949	1962	1922	1994	1929	1970	1981	1923	1993	
MIN	.10	1.30	1.11	1.63	1.80	2.51	25.8	17.1	11.0	.44	.23	.24	
(WY)	1965	1954	1964	1954	1954	1954	1954	1934	1936	1934	1936	1964	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	776	1201	678
HIGHEST ANNUAL MEAN			2186
LOWEST ANNUAL MEAN			27.3
HIGHEST DAILY MEAN	72000	Apr 12	59600
LOWEST DAILY MEAN	2.4	Aug 29	3.3
ANNUAL SEVEN-DAY MINIMUM	2.7	Aug 23	4.1
INSTANTANEOUS PEAK FLOW	---		67900
INSTANTANEOUS PEAK STAGE	---		30.05
INSTANTANEOUS LOW FLOW	---		2.8
ANNUAL RUNOFF (INCHES)	11.66		18.06
10 PERCENT EXCEEDS	957		2420
50 PERCENT EXCEEDS	99		189
90 PERCENT EXCEEDS	5.7		18
			5.6

05514500 CUIVRE RIVER NEAR TROY, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

REMARKS.--National stream-quality accounting network station since October 1986

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCOCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL AS CaCO ₃ (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV												
02...	0845	128	421	7.59	10.5	6.0	11.2	99	K132	104	200	62
JAN												
03...	1200	194	435	7.50	0.5	6.4	15.0	99	K10	26	180	59
MAR												
21...	1300	348	380	8.10	13.0	6.5	12.1	112	K22	54	170	53
MAY												
10...	1400	1790	250	7.54	17.0	96	8.9	92	K1900	1520	110	34
JUL												
17...	1430	800	291	7.30	25.5	480	5.0	62	1600	K29800	65	21
SEP												
12...	0915	93	419	7.68	21.0	14	8.4	95	46	124	180	57

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV											
02...	9.9	9.2	3.7	168	0	205	17	23	0.10	7.8	244
JAN											
03...	8.9	11.0	4.0	145	0	177	31	16	0.10	6.8	242
MAR											
21...	8.4	9.6	3.2	137	0	167	27	12	0.20	5.3	214
MAY											
10...	5.1	5.2	4.8	88	0	107	13	7.5	0.20	10	166
JUL											
17...	3.1	4.7	8.0	50	0	62	10	8.1	0.20	6.4	124
SEP											
12...	8.4	7.4	4.2	180	0	220	16	11	0.20	8.6	236

K--Results based on colony count outside the acceptable range (non-ideal colony count).

05514500 CUIVRE RIVER NEAR TROY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
NOV 02...	235	0.33	84	0.010	0.12	0.010	0.46	0.040	0.020	<0.010	<10
JAN 03...	229	0.33	127	<0.010	1.10	0.050	0.37	0.060	0.020	0.020	<10
MAR 21...	203	0.29	201	0.010	0.34	0.030	0.64	0.060	<0.020	0.010	<10
MAY 10...	141	0.23	802	0.050	1.80	0.090	0.75	0.280	0.120	0.110	80
JUL 17...	103	0.17	268	0.070	2.30	0.120	1.8	0.330	0.190	0.130	190
SEP 12...	222	0.32	59	0.010	0.02	0.020	0.41	0.060	0.020	0.010	10

DATE	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LITHIUM DIS- SOLVED (MG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (MG/L AS MO) (01060)	NICKEL, DIS- SOLVED (MG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (MG/L AS SE) (01145)	SILVER, DIS- SOLVED (MG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (MG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (MG/L AS V) (01085)
NOV 02...	120	<3	11	<4	410	<10	2	<1	<1.0	120	<6
JAN 03...	81	<3	11	<4	230	<10	2	<1	<1.0	110	<6
MAR 21...	87	<3	24	<4	160	<10	1	<1	<1.0	100	<6
MAY 10...	70	<3	77	<4	22	<10	2	<1	<1.0	77	<6
JUL 17...	61	4	200	<4	8	10	2	<1	<1.0	48	<6
SEP 12...	120	4	25	<4	520	10	3	<2	<1.0	120	<6

05587450 MISSISSIPPI RIVER AT GRAFTON, IL

LOCATION.--Lat 38°58'05", long 90°25'42", in NE 1/4 sec.15, T.6 N., R.12 W., Jersey County, Hydrologic Unit 07110009, on left bank 0.2 mi downstream from the mouth of Illinois River, 15.3 mi above Lock and Dam 26, 23.0 mi above mouth of Missouri River and at mile 218.6 upstream of the mouth of Ohio River.

DRAINAGE AREA.--171,300 mi², approximately.

PERIOD OF RECORD.--

DISCHARGE: Intermittently from 1880 to 1928, computed daily 1928 to 1932 by National Weather Service and/or U.S. Army Corps of Engineers. Discharge previously published as "Mississippi River at Alton, Illinois" 1927 to September 1986.

GAGE HEIGHT: August 1879 through September 1892, 1929 to September 1986, October 1986 to current year. Stages also available from reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 403.79 ft above sea level. Auxiliary water-stage recorder 15.3 mi downstream.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 2, Mar. 28 to Apr. 6, June 22 to July 25, and Sept. 21-30. Records fair. Natural flow of river affected by many navigation dams in upper Mississippi River basin. Flood water from Missouri River overtops or breaches the levees at extremely high stages. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1844 reached an elevation of 435.89 ft, present datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106000	89000	120000	79200	109000	96900	157000	241000	390000	134000	92200	85900
2	108000	92800	118000	82100	111000	95700	161000	239000	374000	131000	100000	82500
3	109000	98500	119000	66400	126000	90900	166000	241000	361000	125000	103000	80900
4	109000	94800	120000	70800	145000	81200	168000	247000	350000	138000	109000	86200
5	94000	101000	123000	57100	141000	79600	169000	250000	337000	137000	116000	87600
6	87700	98500	130000	57300	118000	73300	181000	249000	326000	144000	97200	85600
7	80100	102000	126000	48400	94500	68700	181000	246000	318000	161000	117000	89900
8	81800	106000	114000	62200	98800	70400	175000	246000	311000	174000	104000	101000
9	85300	109000	117000	64400	103000	70100	168000	242000	306000	177000	93400	101000
10	81400	112000	121000	38700	93600	70400	192000	242000	298000	164000	97500	129000
11	74700	119000	126000	70900	92500	80300	205000	250000	290000	142000	114000	107000
12	74900	122000	116000	68600	80000	75800	214000	259000	276000	131000	113000	87400
13	82000	109000	109000	66500	79500	74900	227000	262000	259000	119000	95400	81000
14	80100	118000	116000	81000	83100	85100	238000	259000	244000	108000	90900	74000
15	75900	125000	82700	96200	71700	95300	243000	260000	230000	111000	80400	70500
16	77800	117000	78400	131000	64100	111000	240000	273000	220000	110000	83400	69900
17	75800	116000	81100	130000	67200	128000	237000	295000	213000	107000	113000	60500
18	71900	115000	90000	130000	70100	137000	237000	329000	208000	105000	132000	58000
19	77000	119000	98900	129000	65900	126000	241000	359000	202000	101000	101000	56000
20	69200	113000	79500	114000	62800	135000	248000	378000	195000	102000	89900	54000
21	70700	110000	97300	87400	70500	133000	251000	377000	195000	100000	97100	52000
22	72700	121000	102000	99700	76000	131000	251000	370000	170000	98000	106000	50000
23	73500	124000	94900	105000	73600	145000	246000	359000	155000	98000	110000	48000
24	77100	124000	100000	105000	77100	156000	240000	348000	149000	101000	111000	47500
25	78800	125000	101000	105000	79400	161000	234000	357000	141000	98000	112000	45000
26	79600	120000	108000	108000	78100	155000	231000	384000	135000	101000	111000	43200
27	78900	117000	107000	112000	82300	153000	231000	407000	137000	99600	108000	53000
28	83300	127000	106000	119000	89000	151000	231000	417000	141000	96200	110000	58000
29	81800	121000	98700	127000	---	138000	236000	417000	143000	87900	110000	60800
30	87200	121000	92300	121000	---	135000	244000	411000	138000	88400	99700	50000
31	89700	---	88700	110000	---	149000	---	404000	---	91800	88900	---
MEAN	83060	112900	105900	91710	89390	111400	214800	310300	240400	118700	103400	71850
MAX	109000	127000	130000	131000	145000	161000	251000	417000	390000	177000	132000	129000
MIN	69200	89000	78400	38700	62800	68700	157000	239000	135000	87900	80400	43200
IN.	.56	.74	.71	.62	.54	.75	1.40	2.09	1.57	.80	.70	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	105300	100400	103900	86120	88880	141900	180700	181900	147000
MAX	334900	171300	169900	161000	113600	210400	342100	333300	244200
(WY)	1987	1987	1993	1993	1993	1993	1993	1993	1993
MIN	28050	33270	31810	34800	40940	72220	82570	69140	36310
(WY)	1989	1990	1990	1990	1989	1989	1990	1988	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1987 - 1995
ANNUAL MEAN	115400	138000	125100
HIGHEST ANNUAL MEAN			250700
LOWEST ANNUAL MEAN			53860
HIGHEST DAILY MEAN	243000	Apr 13	596000
LOWEST DAILY MEAN	45900	Feb 17	20100
ANNUAL SEVEN-DAY MINIMUM	51800	Feb 13	23600
INSTANTANEOUS PEAK FLOW	---		598000
INSTANTANEOUS PEAK ELEVATION	---		441.96
INSTANTANEOUS LOW FLOW	---		20100
ANNUAL RUNOFF (INCHES)	9.15		9.92
10 PERCENT EXCEEDS	188000		243000
50 PERCENT EXCEEDS	105000		98300
90 PERCENT EXCEEDS	72900		39100

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL

WATER-QUALITY RECORDS

LOCATION.--Lat. 38°57'04", long. 90°22'16", in sec.24, T.6 N., R.11 W., Jersey County, Hydrologic Unit 07110009, 11.3 mi above Lock and Dam 26, 19.0 mi above mouth of Missouri River, at mile 214.6 upstream from the mouth of the Ohio River.

DRAINAGE AREA.--171,300 mi², approximately.

PERIOD OF RECORD.--March 1989 to current year. National stream-quality accounting network station 1989 to 1994.

REMARKS.--Established ambient water-quality monitoring network station November 1992. Sediment records fair.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT: October 1989 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,910 mg/L, May 23, 1990; minimum daily mean, 1 mg/L, Sept. 10, 1991.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 1,090,000 tons, May 23, 1990; minimum daily, 186 tons, Sept. 10, 1991.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 444 mg/L, Jan. 16; minimum daily mean, 32 mg/L, Sept. 30.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 278,000 tons, Apr. 14; minimum daily, 4,270 tons, Sept. 30.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	106000	142	40700	89000	136	32700	120000	69	22600
2	108000	145	42300	92800	141	35300	118000	108	34400
3	109000	164	48200	98500	137	36400	119000	125	40200
4	109000	153	45000	94800	106	27200	120000	116	37600
5	94000	128	32500	101000	100	27100	123000	115	38100
6	87700	106	25200	98500	123	32700	130000	90	31700
7	80100	94	20400	102000	124	34300	126000	90	30500
8	81800	103	22800	106000	119	33900	114000	116	35900
9	85300	91	21000	109000	114	33400	117000	111	35000
10	81400	81	17700	112000	114	34400	121000	97	31600
11	74700	84	16900	119000	141	45400	126000	85	29000
12	74900	84	17000	122000	150	49300	116000	78	24300
13	82000	80	17800	109000	115	34000	109000	112	33000
14	80100	84	18100	118000	100	32000	116000	118	36900
15	75900	96	19600	125000	125	42300	82700	114	30100
16	77800	102	21400	117000	113	35600	78400	140	29500
17	75800	102	20900	116000	114	35900	81100	122	26800
18	71900	130	25200	115000	162	50100	90000	106	25900
19	77000	100	20800	119000	140	44700	98900	127	33900
20	69200	105	19700	113000	89	27300	79500	122	26100
21	70700	103	19700	110000	98	29600	97300	120	31800
22	72700	108	21300	121000	105	34200	102000	121	33300
23	73500	117	23300	124000	75	24900	94900	124	31800
24	77100	128	26600	124000	59	19600	100000	92	24700
25	78800	137	29100	125000	48	16100	101000	86	23500
26	79600	118	25300	120000	41	13300	108000	83	24200
27	78900	121	25700	117000	39	12500	107000	78	22700
28	83300	124	27900	127000	38	13100	106000	72	20600
29	81800	137	30200	121000	40	13100	98700	67	17800
30	87200	152	35900	121000	57	18800	92300	65	16300
31	89700	134	32500	---	---	---	88700	53	12700

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	79200	41	8810	109000	65	19100	96900	137	35900
2	82100	45	10000	111000	72	21500	95700	154	39800
3	66400	50	8870	126000	112	38500	90900	140	34400
4	70800	41	7760	145000	121	47700	81200	162	35500
5	57100	42	6610	141000	135	51300	79600	179	38400
6	57300	54	8220	118000	136	43100	73300	173	34200
7	48400	52	6890	94500	162	41300	68700	240	43800
8	62200	48	8000	98800	136	36400	70400	264	50300
9	64400	43	7530	103000	140	38900	70100	271	51200
10	38700	47	4870	93600	138	34900	70400	277	51700
11	70900	52	10000	92500	147	36600	80300	283	61300
12	68600	50	9270	80000	162	34800	75800	290	59300
13	66500	52	9140	79500	154	33200	74900	301	60800
14	81000	186	40700	83100	137	30800	85100	288	66400
15	96200	385	100000	71700	156	30000	95300	197	50500
16	131000	444	157000	64100	175	30300	111000	216	65100
17	130000	396	137000	67200	162	29400	128000	206	71500
18	130000	212	73500	70100	143	27100	137000	223	82600
19	129000	207	71900	65900	129	22800	126000	249	84300
20	114000	209	63800	62800	142	24000	135000	238	87000
21	87400	236	55500	70500	172	32800	133000	236	84700
22	99700	184	49500	76000	164	33700	131000	192	67900
23	105000	181	51100	73600	190	37700	145000	184	72000
24	105000	180	51100	77100	165	34400	156000	148	62500
25	105000	218	62000	79400	166	35600	161000	152	66000
26	108000	205	59900	78100	161	33900	155000	158	66000
27	112000	159	48300	82300	146	32600	153000	163	67600
28	119000	167	54000	89000	130	31300	151000	169	69100
29	127000	130	44400	---	---	---	138000	177	66000
30	121000	123	40000	---	---	---	135000	200	73100
31	110000	73	21800	---	---	---	149000	192	77300
APRIL			MAY			JUNE			
1	157000	177	74900	241000	270	176000	390000	109	114000
2	161000	166	72100	239000	208	134000	374000	135	136000
3	166000	177	79300	241000	239	156000	361000	119	116000
4	168000	151	68500	247000	235	157000	350000	104	98700
5	169000	148	67400	250000	214	144000	337000	98	89500
6	181000	138	67600	249000	193	130000	326000	106	92900
7	181000	135	66000	246000	158	105000	318000	126	108000
8	175000	147	69500	246000	150	99800	311000	161	135000
9	168000	161	73300	242000	167	109000	306000	186	154000
10	192000	122	63300	242000	186	122000	298000	156	125000
11	205000	142	79000	250000	203	137000	290000	195	152000
12	214000	237	137000	259000	215	151000	276000	197	146000
13	227000	417	256000	262000	242	171000	259000	183	128000
14	238000	432	278000	259000	283	198000	244000	153	100000
15	243000	362	237000	260000	312	219000	230000	145	90400
16	240000	340	220000	273000	250	184000	220000	137	81200
17	237000	313	200000	295000	188	150000	213000	140	80300
18	237000	247	158000	329000	181	161000	208000	153	85800
19	241000	238	155000	359000	183	178000	202000	165	89800
20	248000	299	201000	378000	148	151000	195000	182	95700
21	251000	289	196000	377000	116	118000	195000	187	99100
22	251000	261	177000	370000	89	88500	170000	141	64700
23	246000	246	164000	359000	107	103000	155000	125	52200
24	240000	253	164000	348000	111	104000	149000	128	51600
25	234000	263	166000	357000	176	171000	141000	132	50400
26	231000	249	155000	384000	206	214000	135000	142	51700
27	231000	215	134000	407000	177	195000	137000	171	63200
28	231000	230	144000	417000	146	164000	141000	184	69900
29	236000	262	167000	417000	149	168000	143000	189	73200
30	244000	254	167000	411000	151	168000	138000	195	72900
31	---	---	---	404000	135	147000	---	---	---

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	134000	199	72100	92200	119	29700	85900	96	22200
2	131000	199	70300	100000	98	26700	82500	89	19800
3	125000	206	69700	103000	167	45900	80900	83	18200
4	138000	186	69100	109000	169	49700	86200	83	19400
5	137000	161	59700	116000	158	49400	87600	88	20700
6	144000	218	84800	97200	156	40900	85600	97	22300
7	161000	390	170000	117000	189	59700	89900	99	24000
8	174000	343	161000	104000	192	54000	101000	104	28500
9	177000	328	157000	93400	123	31200	101000	101	27700
10	164000	279	124000	97500	125	32900	129000	93	32400
11	142000	170	65300	114000	134	41300	107000	100	28800
12	131000	140	49600	113000	130	39500	87400	88	20800
13	119000	115	36900	95400	109	28100	81000	77	17000
14	108000	103	30000	90900	104	25500	74000	69	13800
15	111000	98	29500	80400	115	24800	70500	68	12900
16	110000	105	31100	83400	97	21900	69900	59	11200
17	107000	116	33700	113000	102	31800	60500	58	9430
18	105000	96	27200	132000	134	47400	58000	61	17000
19	101000	93	25500	101000	147	39700	56000	61	10300
20	102000	92	25400	89900	153	37200	54000	69	11400
21	100000	94	25300	97100	139	36600	52000	77	10800
22	98000	96	25400	106000	113	32400	50000	48	6480
23	98000	98	26100	110000	110	33400	48000	54	7050
24	101000	101	27500	111000	120	36100	47500	60	7680
25	98000	104	27400	112000	132	40300	45000	66	7970
26	101000	106	28900	111000	142	42700	43200	72	8390
27	99600	109	29300	108000	133	38800	53000	76	10800
28	96200	112	28900	110000	148	43800	58000	52	8100
29	87900	110	26100	110000	128	38000	60800	43	6990
30	88400	100	23800	99700	121	32500	50000	32	4270
31	91800	102	25300	88900	105	25200	---	---	---

06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW 1/4 NW 1/4 sec.17, T.1 N., R.18 E., Richardson County, Hydrologic Unit 10240005, on right bank at downstream side of bridge on U.S. Highway 159 at Rulo, 3.2 mi upstream from Big Nemaha River, and at mile 498.0.

DRAINAGE AREA.--414,900 mi², approximately. The 3,959 mi² in Great Divide Basin are not included.

PERIOD OF RECORD.--October 1949 to current year in reports of U.S. Geological Survey. Gage-height record collected at site 80 ft upstream January 1886 to December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City office of U.S. Army Corps of Engineers.

GAGE.--Water-stage encoder. Datum of gage is 837.23 ft above sea level. Oct. 1949 to Sept. 12, 1950, nonrecording gage at site 80 ft upstream and Sept. 13, 1950 to Apr. 19, 1983, recording gage on downstream end of middle pier, all at same datum.

REMARKS.--Estimated daily discharge: June 8. Records good except for estimated daily discharge, which is poor. Flow regulated by upstream main-stem reservoirs. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water quality data. U.S. Army Corps of Engineers satellite data collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 ft³/s, Apr. 22, 1952; gage height, 25.60 ft; minimum daily discharge, 4,420 ft³/s, Jan. 13, 1957; minimum gage height, -0.19 ft, Dec. 25, 1990, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1881 reached a stage of 22.9 ft, from floodmark, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40400	40500	32900	31000	28700	35000	54600	66400	114000	72300	57500	63600
2	40500	40600	32300	29800	29100	33700	53400	63200	112000	70600	55900	64300
3	43100	40500	31600	27600	31000	30800	51100	60300	111000	69600	56500	65300
4	41500	40500	31600	26100	34800	30900	49600	64100	112000	70900	56600	65500
5	41300	40300	31300	25500	36800	31100	48400	69600	114000	76800	58000	65000
6	41300	40000	31100	24200	34200	32000	48500	68100	112000	70900	59300	65100
7	41500	39900	30500	22300	32600	31600	48100	70500	108000	68700	60200	65100
8	41600	39800	27600	22500	31900	29000	49700	106000	106000	68100	61600	65300
9	41300	39500	25000	22900	30900	26500	49100	102000	99000	66900	62900	65000
10	40800	39600	25300	23500	29500	26000	50000	99800	89200	65700	65600	65200
11	40400	40000	26100	24200	29100	28400	54400	95200	84900	65400	68500	64500
12	39900	39800	26400	24900	30100	33300	57100	90900	83500	64300	67700	64500
13	40000	39800	25800	25300	28900	45500	57400	118000	82400	63500	66000	64700
14	39700	39800	25300	28500	25500	47200	55300	108000	81200	62100	64900	64500
15	39800	39900	25900	30600	24200	45900	53700	85700	80300	60100	66100	63800
16	40400	39700	27900	29400	27400	44500	53100	82000	80300	59600	67200	62800
17	41500	39600	28100	29500	27600	43600	53300	90400	79100	59000	68200	62200
18	43200	40300	28400	31200	27500	43600	54400	94900	78000	57700	68900	62000
19	43300	40400	30300	30900	29000	42400	55300	88200	76500	55700	68300	64200
20	42900	40900	30100	30500	32000	41300	61800	82300	75500	57500	67200	66000
21	42400	41100	29700	29300	35700	41900	71500	78100	75300	56900	66100	67000
22	42800	42000	30100	28800	40200	43000	75300	75000	74100	57600	65300	69700
23	42600	42700	31100	28300	42200	44800	72400	84500	73400	58600	65300	68300
24	42100	42000	31100	26900	39300	45700	72800	88300	74600	59600	66800	67400
25	41800	41600	30800	26700	38000	46700	76100	80400	75900	60800	72300	66600
26	41800	41100	31200	27600	36800	49000	77900	77100	76700	61600	71900	66100
27	41700	39700	31500	28900	35800	52700	82800	89900	75900	60100	64900	66300
28	41500	38000	32200	29800	35400	55700	81300	110000	75300	60700	61500	66500
29	40600	37300	32900	29300	---	60100	74700	101000	75600	60100	61400	66800
30	40600	35800	32500	29900	---	59200	70100	106000	73700	58500	63000	67200
31	40500	---	32400	29100	---	56500	---	108000	---	57300	63400	---
MEAN	41380	40090	29650	27580	32290	41210	60440	87220	87650	63140	64160	65350
MAX	43300	42700	32900	31200	42200	60100	82800	118000	114000	76800	72300	69700
MIN	39700	35800	25000	22300	24200	26000	48100	60300	73400	55700	55900	62000
IN.	.11	.11	.08	.08	.08	.11	.16	.24	.23	.17	.18	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995^a, BY WATER YEAR (WY)

MEAN	43900	39930	26600	22420	28170	41740	51690	51300	55290	50800	44630	45330
MAX	77770	69430	55240	42280	52560	79590	102900	94370	130600	164800	67800	69780
(WY)	1987	1976	1987	1973	1983	1979	1984	1984	1984	1993	1975	1975
MIN	25580	17000	11330	12430	14530	19380	31960	34040	34830	33860	32790	34140
(WY)	1962	1962	1964	1964	1964	1964	1990	1958	1958	1963	1991	1991

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1958 - 1995 ^a
ANNUAL MEAN	44440	53410	41850
HIGHEST ANNUAL MEAN			65930
LOWEST ANNUAL MEAN			29670
HIGHEST DAILY MEAN	90400	Mar 7	118000
LOWEST DAILY MEAN	24200	Jan 11	22300
ANNUAL SEVEN-DAY MINIMUM	25700	Dec 9	23500
INSTANTANEOUS PEAK FLOW	---		127000
INSTANTANEOUS PEAK STAGE	---		22.41
INSTANTANEOUS LOW FLOW	---		22100
ANNUAL RUNOFF (INCHES)	1.44		1.73
10 PERCENT EXCEEDS	61200		80700
50 PERCENT EXCEEDS	42700		49700
90 PERCENT EXCEEDS	30100		28800
			19500

^aPost-regulation period.

06817700 NODAWAY RIVER NEAR GRAHAM, MO

LOCATION.--Lat 40°12'08", long 95°04'07", NE 1/4 NE 1/4 NE 1/4 sec.9, T.62 N., R.37 W., Holt County, Hydrologic Unit 10240010, at right downstream end of bridge on Highway A, 0.15 mi east of Maitland and 1.5 mi west of Graham.

DRAINAGE AREA.--1,380 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 852.09 ft above sea level.

REMARKS.--Estimated daily discharges: Apr. 28 to May 5 and July 6-10, 12-28. Water-discharge records poor. U.S. Army Corps of Engineers satellite telemeter at station.

REVISIONS.--The maximum discharge for calendar and water year 1993 has been revised to 78,300 ft³/s, July 23, 1993; gage height, 26.16 ft. Revised daily discharges, in cubic feet per second, for September 1993, are given below. These figures supersede those published in the report for 1993.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	122	137	150	220	224	722	3080	2540	1710	420	96
2	105	119	134	140	225	209	661	2700	2670	1260	744	100
3	394	116	131	125	225	200	608	2470	2290	1070	803	102
4	309	118	128	115	220	180	566	2680	2060	3290	561	104
5	175	122	110	113	240	210	514	3350	1910	9340	474	106
6	185	122	110	104	240	200	467	2980	1860	5150	583	96
7	200	118	137	100	250	170	454	3190	1980	2960	517	90
8	185	120	134	98	280	200	439	9470	2750	2060	388	94
9	163	127	110	106	270	224	414	8500	2770	1800	339	96
10	163	120	113	110	270	268	1460	7750	2190	1560	320	96
11	143	115	120	119	275	377	2610	5020	1660	1200	298	92
12	128	117	115	137	280	590	3730	3940	1420	1090	265	94
13	119	126	113	165	300	831	3210	9360	1240	1040	234	96
14	115	132	108	170	320	726	2030	5630	1120	888	230	96
15	112	132	102	170	375	744	1580	3260	1040	793	288	94
16	120	126	106	175	367	766	1260	2680	970	840	334	84
17	140	118	108	170	364	608	1090	4320	886	762	376	78
18	164	116	106	170	354	542	1400	4880	782	780	293	78
19	348	118	131	180	380	503	1450	4120	700	757	234	133
20	520	164	164	180	364	486	1940	3240	643	821	203	157
21	303	224	173	170	390	492	1840	2420	608	730	182	123
22	230	218	167	160	424	520	1900	2280	573	888	170	102
23	188	188	179	150	432	510	1520	9390	545	1120	164	92
24	173	185	206	160	404	489	1200	5450	520	1780	155	84
25	143	170	197	180	374	464	1100	3110	782	1070	155	80
26	132	152	173	200	342	1100	1320	2440	897	1120	146	82
27	119	149	170	220	332	2700	10000	5150	2100	775	134	80
28	108	161	167	195	314	2130	5800	8000	2010	650	125	72
29	110	164	167	190	---	1260	4360	5500	2270	519	113	98
30	116	144	164	200	---	990	3410	3580	2980	460	104	149
31	128	---	160	210	---	826	---	2850	---	411	98	---
MEAN	182	141	140	156	315	637	1968	4606	1559	1571	305	98.1
MAX	520	224	206	220	432	2700	10000	9470	2980	9340	803	157
MIN	97	115	102	98	220	170	414	2280	520	411	98	72
IN.	.15	.11	.12	.13	.24	.53	1.59	3.85	1.26	1.31	.25	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	MEAN	527	524	631	424	744	1015	1558	1856	1654	1922	659	922
MAX	2313	1735	2026	1199	1839	2205	3614	4606	4936	12460	2758	3364	
(WY)	1987	1993	1993	1983	1983	1993	1984	1995	1984	1993	1987	1993	
MIN	47.2	77.1	69.7	67.4	82.2	315	58.8	48.6	68.5	75.1	46.2	50.1	
(WY)	1989	1989	1989	1989	1989	1989	1989	1989	1988	1988	1988	1988	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1983 - 1995

	ANNUAL MEAN	546	979	1018	
HIGHEST ANNUAL MEAN				2870	1993
LOWEST ANNUAL MEAN				320	1985
HIGHEST DAILY MEAN	7430	Jun 24	10000	52000	Jul 23 1993
LOWEST DAILY MEAN	93	Sep 22	72	28	Jun 9 1989
ANNUAL SEVEN-DAY MINIMUM	108	Dec 12	84	33	May 24 1989
INSTANTANEOUS PEAK FLOW	---		13800	90700	Sep 22 1993
INSTANTANEOUS PEAK STAGE	---		15.23	26.89	Sep 22 1993
INSTANTANEOUS LOW FLOW	---		72 ^a	23	Sep 9 1985
ANNUAL RUNOFF (INCHES)	5.37		9.63	10.02	
10 PERCENT EXCEEDS	1130		2760	2410	
50 PERCENT EXCEEDS	300		270	440	
90 PERCENT EXCEEDS	119		106	76	

^aMay have been less during period of doubtful record.

06817700 NODAWAY RIVER NEAR GRAHAM, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1989 to October 1989, November 1992 to current year.

REMARKS.--This site replaced the Nodaway River near Oregon, Missouri (06817800).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT											
25...	1040	146	10.5	420	8.40	9.4	84	--	355	159	171
NOV											
29...	1200	161	1.5	465	8.60	14.7	105	<10	50	63	168
DEC											
13...	1130	116	0.5	532	8.70	13.9	95	--	80	251	205
JAN											
04...	1230	V115	0.5	521	8.60	15.4	103	<10	76	76	237
FEB											
07...	1030	V250	0.5	310	7.80	14.0	95	--	820	K4620	134
MAR											
27...	1030	2170	6.5	314	7.90	11.9	102	--	13000	K140000	123
APR											
19...	1130	1450	9.5	347	7.80	10.2	89	--	8000	18000	133
MAY											
23...	1120	10400	15.5	230	7.85	8.0	80	--	18300	80000	93
JUN											
13...	1230	1240	22.0	400	8.20	8.5	97	<10	K330	K830	150
JUL											
11...	1345	1200	28.5	376	8.20	8.2	106	--	M	K600	133
AUG											
01...	1245	416	23.5	355	9.10	11.4	134	15	K360	K1500	146
SEP											
06...	1315	96	25.0	375	8.60	8.6	104	--	430	230	147

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
OCT											
25...	192	3	2.20	0.020	0.070	0.84	0.170	0.140	--	--	--
NOV											
29...	180	12	1.40	0.010	<0.090	0.47	0.080	0.080	200	57	15
DEC											
13...	228	7	1.80	0.020	0.200	0.79	0.110	0.060	--	--	--
JAN											
04...	285	1	3.00	0.030	0.480	1.2	0.190	0.160	260	73	20
FEB											
07...	165	0	2.10	0.040	0.660	2.3	0.390	0.230	--	--	--
MAR											
27...	157	0	4.00	0.070	0.200	4.0	4.00	0.160	--	--	--
APR											
19...	163	0	4.40	0.030	0.060	2.3	0.450	0.150	--	--	--
MAY											
23...	113	0	2.10	0.070	0.070	8.6	0.810	0.240	--	--	--
JUN											
13...	183	0	4.80	0.020	0.040	1.0	0.320	0.160	180	49	14
JUL											
11...	163	0	5.60	0.020	0.020	3.0	0.300	0.230	--	--	--
AUG											
01...	177	0	1.80	0.040	0.100	2.2	0.450	0.140	170	46	14
SEP											
06...	179	1	0.02	0.010	0.010	1.8	0.090	0.070	--	--	--

V--Estimated discharge value due to icy conditions.

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

06817700 NODAWAY RIVER NEAR GRAHAM, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)
NOV 29...	10	2.7	34	11	0.20	258	14	220	<20	<1	<1.0
JAN 04...	14	3.6	41	14	0.30	338	12	220	<20	<1	<1.0
JUN 13...	9.5	2.2	24	8.4	0.30	246	150	2700	20	<1	<1.0
AUG 01...	9.2	2.6	25	9.2	0.30	230	92	2000	20	1	1.0

DATE	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)	PROP- CHLOR, WATER, DISS, REC (MG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (MG/L) (04028)	SI- MAZINE, WATER, DISS, REC (MG/L) (04035)
NOV 29...	2	6	2	<1	73	<0.10	4	5	<0.02	<0.008	<0.008
JAN 04...	2	<3	2	4	230	<0.10	7	8	--	--	--
MAR 27...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
APR 19...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
MAY 23...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
JUN 13...	2	3	5	<1	11	0.10	20	16	<0.007	<0.002	0.01
AUG 01...	2	8	5	1	1	0.10	10	7	<0.007	<0.002	E0.004

DATE	PRO- METON, WATER, DISS, REC (MG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (MG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (MG/L) (04041)	FONOFOS WATER, DISS, REC (MG/L) (04095)	ALPHA BHC DIS- SOLVED (MG/L) (34253)	P,P' DDE DISSOLV (MG/L) (34653)	METO- LACHLOR WATER, DISSOLV (MG/L) (39415)	LINDANE DIS- SOLVED (MG/L) (39341)	DI- ELDRIN DIS- SOLVED (MG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (MG/L) (39632)	METRI- BUZIN SENCOR WATER, DISSOLV (MG/L) (82630)
NOV 29...	<0.008	E0.02	0.06	<0.008	<0.007	<0.01	0.19	<0.01	<0.008	0.19	<0.01
MAR 27...	<0.008	E0.03	0.07	<0.008	<0.007	<0.01	0.11	<0.01	<0.008	0.18	<0.01
APR 19...	<0.008	E0.06	0.41	<0.008	<0.007	<0.01	0.13	<0.01	<0.008	1.3	<0.01
MAY 23...	<0.008	E0.05	0.52	<0.008	<0.007	<0.01	0.18	<0.01	<0.008	0.76	<0.01
JUN 13...	<0.02	E0.08	0.88	<0.003	<0.002	<0.006	0.25	<0.004	<0.001	0.85	0.02
AUG 01...	<0.02	E0.05	0.15	<0.003	<0.002	<0.006	0.06	<0.004	<0.001	0.33	<0.004

DATE	FONOFOS WATER, DISS, REC (MG/L) (04095)	CHLOR- PYRIFOS DIS- SOLVED (MG/L) (38933)	MALA- THION, DIS- SOLVED (MG/L) (39532)	PARA- THION, DIS- SOLVED (MG/L) (39542)	DI- AZINON, DIS- SOLVED (MG/L) (39572)	ALA- CHLOR, WATER, DISS, REC, (MG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC, (MG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (MG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (MG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (MG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (MG/L) (82665)
NOV 29...	<0.008	<0.005	<0.01	<0.02	<0.008	E0.009	<0.008	<0.006	<0.01	<0.01	<0.03
MAR 27...	<0.008	<0.005	<0.01	<0.02	<0.008	0.20	E0.008	<0.006	<0.01	<0.01	<0.03
APR 19...	<0.008	<0.06	<0.01	<0.02	<0.008	E0.008	0.10	<0.006	<0.01	--	<0.03
MAY 23...	<0.008	<0.005	<0.01	<0.02	<0.008	E0.009	0.09	<0.006	<0.01	<0.01	<0.03
JUN 13...	<0.003	<0.004	<0.005	<0.004	<0.002	0.05	0.08	<0.003	<0.004	<0.002	<0.007
AUG 01...	<0.003	<0.004	<0.005	<0.004	E0.004	<0.002	0.005	<0.003	<0.004	<0.002	<0.007

E--Laboratory estimated value.

06817700 NODAWAY RIVER NEAR GRAHAM, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
NOV 29...	<0.04	<0.03	E0.003	<0.009	<0.02	<0.007	<0.01	<0.010	<0.01	<0.01	<0.009
MAR 27...	<0.04	<0.03	0.01	<0.009	<0.02	<0.007	<0.01	<0.010	<0.01	<0.01	<0.009
APR 19...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	--	<0.01	<0.01	<0.009
MAY 23...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	<0.010	<0.01	<0.01	<0.009
JUN 13...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
AUG 01...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
NOV 29...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAR 27...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
APR 19...	<0.06	<0.008	<0.02	<0.05	<0.008	E0.001	<0.02	<0.01	<0.006	<0.04	<0.02
MAY 23...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 13...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005
AUG 01...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06818000 MISSOURI RIVER AT ST. JOSEPH, MO

LOCATION.--Lat 39°45'12", long 94°51'28", in NW 1/4 SW 1/4 sec.17, T.57 N., R.35 W., Buchanan County, Hydrologic Unit 10240011, on left bank at left abutment of St. Joseph and Grand Island Railroad Bridge in St. Joseph and at mile 448.2.

DRAINAGE AREA.--420,300 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to current year. Gage-height records collected in vicinity 1873-99 are contained in reports of Missouri River Commission; since 1900 in reports of National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 788.19 ft above sea level. Prior to Oct. 21, 1931, nonrecording gage and from Oct. 21, 1931, to Dec. 31, 1933, water-stage recorder at same site at datum 5.50 ft higher.

REMARKS.--Estimated daily discharges: Mar. 16-22 and 26. Water-discharge records good. Some regulation from many upstream reservoirs. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, 397,000 ft³/s, Apr. 22, 1952; gage height, 32.07 ft; July 26, 1993; minimum, 2,300 ft³/s, Jan. 9, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 29, 1881, reached a stage of 27.2 ft, present datum, discharge, about 370,000 ft³/s, computed by U.S. Army Corps of Engineers. Flood of June 1844 reached a stage of 24.5 ft, discharge, about 350,000 ft³/s, computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42100	41100	35500	32200	29900	34500	54200	77500	119000	77300	60200	65200
2	42200	41400	33900	31200	29700	33700	53700	74600	121000	75600	59100	64700
3	50600	41700	33100	29900	31100	31500	52400	70500	117000	74900	58900	65700
4	46400	41900	32900	27900	34900	29800	50500	72000	117000	80400	57700	65800
5	43200	41900	33100	26600	38800	30100	50100	82500	121000	112000	57200	65200
6	43200	41700	33300	26200	37500	30700	49700	80000	120000	92100	58100	64300
7	43600	41200	33900	24400	34700	31200	49100	80700	116000	82400	58300	64300
8	44300	41400	32200	23600	33300	30200	50000	124000	121000	78800	58000	64400
9	43700	41100	28600	23800	32500	28200	50900	131000	127000	76200	58400	64900
10	43200	41200	27400	24700	31500	27600	50500	121000	110000	73700	60300	64700
11	42700	40900	27800	25500	30800	28100	57000	113000	101000	72100	64300	64500
12	42100	41200	28800	26600	30900	30300	60600	103000	97900	71200	65500	65100
13	41900	40900	29000	27300	31800	39500	61300	140000	95000	69600	64100	64600
14	41400	41200	28100	28600	28800	51100	58200	149000	91500	68700	62700	64500
15	41000	41400	28300	31700	26100	49300	56000	108000	88900	66700	65900	63800
16	41400	40800	29600	31900	26800	44700	55400	97500	88200	65900	69100	62900
17	42600	40700	31200	31200	29400	44000	55900	110000	87400	65200	67800	62800
18	45400	40900	30300	31900	28800	44100	58500	120000	85600	64300	68400	62700
19	45500	41100	31200	33400	28800	43900	59200	109000	83600	62400	68600	69500
20	45400	41700	32100	32500	29900	42200	62300	97800	82100	65200	67800	70400
21	45000	41800	31300	31500	32800	42100	74600	89400	81200	61700	66800	68300
22	44600	41900	31200	30300	36400	43200	82000	82600	79700	60100	66100	71100
23	44800	42800	31700	29800	40200	45100	78800	91300	77900	60200	65800	70400
24	44500	42500	32600	28700	40800	46000	76600	109000	77900	61000	66800	69000
25	43900	41700	31800	27500	37900	45800	79500	89100	78400	61000	72100	67500
26	43500	41400	32000	27800	35800	48000	82800	81300	78500	62700	76700	66500
27	43200	41500	31900	28900	34800	52400	97100	91100	77600	61700	69000	66100
28	43300	39100	32400	30300	34700	54800	101000	126000	77900	61200	63600	65900
29	42200	38100	33300	30400	---	56400	89100	108000	78900	62100	62600	66200
30	41500	38400	33500	30400	---	57700	82100	108000	79000	60600	63900	67700
31	41500	---	33000	30700	---	55600	---	111000	---	59500	65600	---
MEAN	43550	41150	31450	28950	32840	41030	64640	101500	95910	69890	64170	65960
MAX	50600	42800	35500	33400	40800	57700	101000	149000	127000	112000	76700	71100
MIN	41000	38100	27400	23600	26100	27600	49100	70500	77600	59500	57200	62700
IN.	.12	.11	.09	.08	.08	.11	.17	.28	.25	.19	.18	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995^a, BY WATER YEAR (WY)

	MEAN	46550	42340	28870	24240	30810	45690	55420	56410	59780	55760	47360	48620
MAX	87650	70980	61820	45740	60570	96800	113600	104800	144700	195400	73290	70680	
(WY)	1987	1976	1987	1973	1983	1979	1984	1984	1984	1993	1993	1975	
MIN	30290	18510	11560	12210	15790	19490	32920	36390	35620	34230	33520	34260	
(WY)	1962	1991	1964	1959	1964	1964	1990	1958	1958	1963	1991	1963	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1958 - 1995 ^a
ANNUAL MEAN	46460	56840	45190
HIGHEST ANNUAL MEAN			72080
LOWEST ANNUAL MEAN			30960
HIGHEST DAILY MEAN	102000	Jun 24	328000
LOWEST DAILY MEAN	25500	Jan 11	4000
ANNUAL SEVEN-DAY MINIMUM	28300	Dec 9	5030
INSTANTANEOUS PEAK FLOW	---		335000
INSTANTANEOUS PEAK STAGE	---		32.07
INSTANTANEOUS LOW FLOW	---		4000
ANNUAL RUNOFF (INCHES)	1.50		1.46
10 PERCENT EXCEEDS	63700		68600
50 PERCENT EXCEEDS	44500		41200
90 PERCENT EXCEEDS	31400		20800

^aPost-regulation period.

06818000 MISSOURI RIVER AT ST. JOSEPH, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to July 1992, November 1992 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1984 to December 1984, July 1985 through September 1985, April 1986 to September 1986.

DISSOLVED OXYGEN: May 1984 to November 1984, July 1985 through September 1985, April 1986 to September 1986.

INSTRUMENTATION.--Water-quality monitor, May 1984 to December 1984, July 1985 to September 1985, April 1986 to September 1986.

REMARKS.--Discontinued as national stream-quality accounting network station, September 1986. Ambient water-quality monitoring network station since November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC- CI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT 25...	0730	44100	711	8.30	13.5	8.50	82	469	107	--	--
NOV 29...	0815	36700	735	8.50	4.5	11.80	980	1100	187	250	64
DEC 13...	0830	28800	832	8.50	0.5	13.30	91	K1200	480	--	--
JAN 04...	0800	28100	690	8.80	0.5	15.40	105	280	247	270	70
FEB 07...	0800	35100	615	8.10	0.5	13.50	93	2000	K6220	--	--
MAR 28...	0830	54700	660	8.10	9.0	9.40	81	5830	23000	--	--
APR 19...	0745	59300	710	7.90	10.0	10.40	93	1270	8300	--	--
MAY 23...	0800	81900	723	8.17	18.0	9.10	97	K500	K750	--	--
JUN 13...	0845	95300	760	8.20	19.5	7.20	78	K2500	K930	310	78
JUL 11...	0800	72100	810	8.40	25.5	7.80	96	M	660	--	--
AUG 01...	0800	60300	765	8.30	27.5	6.30	80	K97	K50	270	68
SEP 06...	0850	64400	830	8.30	25.5	6.90	85	K130	K160	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
OCT 25...	--	--	--	164	164	5	190	--	--	--
NOV 29...	22	56	5.3	171	168	6	193	160	19	0.50
DEC 13...	--	--	--	216	212	2	254	--	--	--
JAN 04...	23	57	5.7	210	206	16	219	160	20	0.40
FEB 07...	--	--	--	177	182	0	223	--	--	--
MAR 28...	--	--	--	178	184	0	225	--	--	--
APR 19...	--	--	--	207	206	0	251	--	--	--
MAY 23...	--	--	--	199	199	0	243	--	--	--
JUN 13...	28	37	8.5	207	208	0	254	170	18	0.40
JUL 11...	--	--	--	193	194	4	229	--	--	--
AUG 01...	25	67	7.7	180	182	5	212	210	18	0.40
SEP 06...	--	--	--	162	162	1	199	--	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

MISSOURI RIVER MAIN STEM

06818000 MISSOURI RIVER AT ST. JOSEPH, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)
OCT 25...	--	--	--	--	0.060	0.77	0.150	--	--	--
NOV 29...	458	428	0.62	45400	<0.060	0.50	0.060	<20	9	5
DEC 13...	--	--	--	--	0.180	0.61	0.130	--	--	--
JAN 04...	484	460	0.66	36700	0.130	0.61	0.120	<20	7	11
FEB 07...	--	--	--	--	0.280	2.0	0.510	--	--	--
MAR 28...	--	--	--	--	0.020	1.9	0.170	--	--	--
APR 19...	--	--	--	--	0.080	1.7	0.250	--	--	--
MAY 23...	--	--	--	--	0.090	1.7	0.080	--	--	--
MAY 23...	--	--	--	--	0.050	1.7	0.120	--	--	--
JUN 13...	504	465	0.69	130000	0.040	1.3	0.280	20	7	1
JUL 11...	--	--	--	--	0.030	1.7	0.180	--	--	--
AUG 01...	540	505	0.73	87900	0.040	1.6	0.250	20	3	1
SEP 06...	--	--	--	--	0.050	1.2	0.100	--	--	--

06820500 PLATTE RIVER NEAR AGENCY, MO

LOCATION.--Lat 39°41'20", long 94°42'15", in NE 1/4 NW 1/4 sec.10, T.56 N., R.34 W., Buchanan County, Hydrologic Unit 10240012, on left bank 10 ft downstream from bridge of U.S. Highway 169, 1.5 mi downstream from Third Fork, 3.5 mi northeast of Agency and at mile 66.8.

DRAINAGE AREA.--1,760 mi², approximately.

PERIOD OF RECORD.--May 1924 to August 1930 (published as "at Agency"), May 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 807.38 ft above sea level. May 22, 1924, to Aug. 9, 1930, nonrecording gage at site 4 mi downstream at different datum; May 13, 1932 to Nov. 14, 1965, nonrecording gage at same site and datum; Nov. 15, 1965, to Oct. 25, 1989, water-stage recorder at site 150 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 11-14, Jan. 1-4, 12-27, Jan. 30 to Feb. 1, Feb. 8-16, and Mar. 2, 3, 7-9. Records good except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	44	130	170	230	161	487	2310	3040	1910	306	132
2	45	45	140	120	239	120	433	2500	2760	1310	290	202
3	1160	46	121	100	218	105	390	1530	2310	1040	664	118
4	721	61	128	90	258	115	344	2100	1890	3370	589	95
5	415	73	112	80	1230	131	306	2790	2070	14600	395	87
6	245	64	200	80	811	133	278	2030	3170	16100	329	85
7	193	60	1140	80	443	130	265	2090	3560	13700	300	87
8	142	58	602	80	420	120	256	16000	7640	5490	277	81
9	126	56	374	90	350	130	312	19100	8570	2040	246	80
10	111	52	306	90	300	150	417	17500	4080	1560	223	78
11	82	51	250	100	280	271	3590	13900	2170	1280	200	73
12	66	54	220	120	220	322	5370	6670	1600	1070	182	112
13	56	60	190	130	200	522	3900	14400	1300	925	180	119
14	54	77	175	150	180	562	1870	21700	1120	805	171	99
15	49	71	154	160	190	564	1240	17500	985	705	406	77
16	47	70	147	170	200	631	1030	9960	873	932	1100	68
17	46	75	145	175	214	511	891	11400	788	2160	666	63
18	57	75	145	250	193	413	1510	15000	722	1060	346	58
19	57	69	169	265	172	348	3130	13500	669	714	232	86
20	57	218	173	250	180	340	2480	7200	608	3130	189	125
21	59	587	178	240	184	342	2200	3230	560	1200	163	205
22	61	388	189	225	195	295	2680	2400	524	671	144	137
23	54	311	299	220	205	296	1540	5900	497	1340	135	115
24	61	232	392	240	209	264	1100	18500	770	2230	124	96
25	53	187	343	250	198	238	910	18800	630	1280	115	83
26	50	147	285	240	190	556	960	13000	6240	1870	108	76
27	44	205	222	260	193	3090	4210	10500	5530	707	102	67
28	40	212	224	271	181	2260	9450	15800	5770	538	96	59
29	35	147	212	239	---	1070	3550	13500	5400	446	93	71
30	39	138	193	250	---	714	2000	6810	3310	384	93	226
31	51	---	182	240	---	569	---	3060	---	338	198	---
MEAN	140	131	250	175	289	499	1903	10020	2639	2739	279	102
MAX	1160	587	1140	271	1230	3090	9450	21700	8570	16100	1100	226
MIN	35	44	112	80	172	105	256	1530	497	338	93	58
IN.	.09	.08	.16	.11	.17	.33	1.21	6.57	1.67	1.79	.18	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995, BY WATER YEAR (WY)

	MEAN	536	380	387	809	1369	1455	1590	1957	1222	454	936
MAX	8584	4620	3248	3714	4912	6345	6835	10020	13640	21280	2935	7853
(WY)	1974	1962	1983	1974	1973	1979	1973	1995	1947	1993	1987	1926
MIN	.016	6.14	5.59	2.72	14.0	12.7	9.89	26.9	41.7	10.2	2.62	6.76
(WY)	1957	1956	1939	1940	1940	1938	1956	1956	1988	1936	1934	1955

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1925 - 1995

ANNUAL MEAN	475	1612	980
HIGHEST ANNUAL MEAN			4108
LOWEST ANNUAL MEAN			67.4
HIGHEST DAILY MEAN	5550	Mar 5	57500
LOWEST DAILY MEAN	27	Sep 21	.00
ANNUAL SEVEN-DAY MINIMUM	34	Sep 18	.00
INSTANTANEOUS PEAK FLOW	---		22600
INSTANTANEOUS PEAK STAGE	---		28.15
INSTANTANEOUS LOW FLOW	---		28
ANNUAL RUNOFF (INCHES)	3.66		12.44
10 PERCENT EXCEEDS	1020		3710
50 PERCENT EXCEEDS	299		250
90 PERCENT EXCEEDS	54		65

06821140 SMITHVILLE RESERVOIR NEAR SMITHVILLE, MO

LOCATION.--Lat 39°23'50", long 94°33'25", SW 1/4 sec.13, T.53 N., R.33 W., Clay County, Hydrologic Unit 10240012, in control tower at outlet works on the Little Platte River, 1.0 mi northeast of Smithville and 5.0 mi north of Kansas City.

DRAINAGE AREA.--213 mi².

PERIOD OF RECORD.--July 1981 to current year. Records collected at same site since 1976 and are available from U.S. Army Corps of Engineers.

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

REMARKS.--Lake is formed by a rolled earthfill type dam. Storage began on July 13, 1976. An uncontrolled limited service type spillway, 50 ft wide, is located at the right abutment. Capacity of surcharge pool 182,209 ac-ft (elevation 876.2 ft to 891.1 ft); of flood control pool 101,800 ac-ft (elevation 864.2 to 876.2 ft); and of multipurpose pool 144,600 ac-ft (elevation 799.0 ft to 864.2 ft). Lake is used for flood control, water supply, water-quality control, recreation, and fish and wildlife enhancement.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 225,000 ac-ft, July 28, 1993, maximum elevation 874.31 ft; minimum, 2,360 ac-ft, Jan. 13, 1980, elevation, 819.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 193,000 ac-ft, June 1, elevation, 870.74 ft; minimum, 126,000 ac-ft, Jan. 10, elevation, 861.95.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863.53	863.22	862.17	862.02	862.10	862.15	862.26	862.65	870.74	865.37	864.78	864.13
2	863.54	863.20	862.18	862.01	862.15	862.14	862.26	862.73	870.74	865.31	864.68	864.08
3	863.53	863.21	862.20	862.00	862.19	862.12	862.28	862.82	870.67	865.25	864.64	864.10
4	863.51	863.22	862.20	861.98	862.16	862.12	862.28	862.82	870.47	865.40	864.78	864.09
5	863.49	863.23	862.20	861.96	862.15	862.14	862.24	863.06	870.50	865.60	864.73	864.08
6	863.47	863.22	862.19	861.96	862.15	862.16	862.23	863.11	870.39	865.63	864.70	864.08
7	863.47	863.22	862.45	861.97	862.15	862.19	862.25	863.13	870.11	865.66	864.68	864.05
8	863.46	863.21	862.54	861.97	862.15	862.16	862.25	864.05	870.01	865.66	864.66	864.00
9	863.44	863.24	862.53	861.97	862.12	862.15	862.29	864.50	870.19	865.66	864.63	863.96
10	863.43	863.20	862.53	861.95	862.12	862.16	862.30	864.65	870.29	865.66	864.53	863.94
11	863.41	863.18	862.53	861.96	862.13	862.18	862.23	864.72	870.32	865.65	864.58	863.92
12	863.40	863.17	862.52	861.98	862.11	862.22	862.23	864.79	870.30	865.59	864.54	863.96
13	863.38	863.16	862.52	862.00	862.10	862.26	862.24	864.91	870.12	865.50	864.50	863.96
14	863.38	863.21	862.47	862.01	862.10	862.26	862.28	865.00	869.78	865.40	864.46	863.95
15	863.37	863.19	862.38	862.00	862.11	862.27	862.30	865.60	869.45	865.30	864.42	863.94
16	863.37	863.19	862.31	862.00	862.10	862.28	862.30	865.64	869.09	865.20	864.63	863.92
17	863.36	863.18	862.21	862.01	862.10	862.29	862.40	866.13	868.72	865.11	864.77	863.91
18	863.35	863.15	862.13	862.01	862.11	862.29	862.44	866.76	868.35	864.98	864.80	863.87
19	863.35	863.17	862.03	862.01	862.13	862.29	862.54	867.21	868.00	864.87	864.76	863.83
20	863.34	863.26	862.02	861.99	862.13	862.30	862.56	867.30	867.62	865.61	864.68	863.84
21	863.33	863.40	862.02	861.98	862.15	862.30	862.56	867.33	867.22	865.67	864.60	863.83
22	863.31	863.43	862.02	861.97	862.15	862.30	862.56	867.36	866.87	865.71	864.52	863.80
23	863.28	863.30	862.02	861.96	862.15	862.28	862.55	867.41	866.48	865.72	864.45	863.79
24	863.29	863.14	862.02	861.98	862.15	862.29	862.55	868.97	866.07	865.62	864.38	863.77
25	863.25	862.99	862.02	861.96	862.12	862.28	862.55	869.71	865.69	865.49	864.29	863.76
26	863.24	862.81	862.01	861.96	862.14	862.31	862.57	869.92	865.33	865.45	864.24	863.76
27	863.22	862.63	862.03	861.97	862.21	862.38	862.57	869.64	865.28	865.33	864.21	863.75
28	863.20	862.40	862.03	862.12	862.19	862.28	862.57	870.52	865.32	865.20	864.17	863.74
29	863.19	862.30	862.03	862.12	---	862.28	862.57	870.62	865.37	865.06	864.15	863.73
30	863.20	862.21	862.03	862.11	---	862.27	862.57	870.66	865.38	864.90	864.13	863.73
31	863.23	---	862.03	862.10	---	862.26	---	870.72	---	864.75	864.11	---
MAX	863.54	863.43	862.54	862.12	862.21	862.38	862.57	870.72	870.74	865.72	864.80	864.13
MIN	863.19	862.21	862.01	861.95	862.10	862.12	862.23	862.65	865.28	864.75	864.11	863.73
(-)	135000	128000	127000	127000	128000	128000	130000	193000	150000	146000	141000	138000
(=)	-2000	-7000	-1000	0	+1000	0	+2000	+63000	-43000	-4000	-5000	-3000

CAL YR 1994...-3000

WTR YR 1995...+1000

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

06821150 LITTLE PLATTE RIVER AT SMITHVILLE, MO

LOCATION.--Lat 39°23'17", long 94°34'44", in NW 1/4 SW 1/4 sec.23, T.53 N., R.33 W., Clay County, Hydrologic Unit 10240012, on left bank behind city equipment shelter on old bridge abutment, 500 ft upstream from town bridge in Smithville, 1,500 ft upstream from bridge on U.S. Highway 169, 0.5 mi downstream from Wilkerson Creek, 2.4 mi downstream from Smithville Lake and at mile 11.1.

DRAINAGE AREA.--234 mi².

PERIOD OF RECORD.--June 1965 to current year. Occasional measurements 1942, 1943, 1946, 1962-65.

REVISED RECORDS.--WDR MO 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 778.18 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to March 23, 1966, nonrecording gage at site 1,500 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 1, 5, Feb. 8, 12, Mar. 5-7, Apr. 5-7, June 26, 27, and July 5-14. Records good except for estimated daily discharges, which are fair, and May 17 and 18, which are poor due to severe backwater condition. Construction of dam for Smithville Lake (station 06821140) began in June 1974 and partial regulation began Aug. 6, 1977. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,600 ft³/s, July 20, 1965; gage height, 44.8 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	10	4.3	11	16	14	12	31	67	84	302	10
2	8.2	9.2	5.4	12	15	13	13	22	389	172	351	10
3	8.3	9.1	9.0	12	14	13	13	18	961	191	600	10
4	8.5	9.4	9.1	12	13	13	12	56	780	230	368	10
5	8.6	10	9.1	12	13	13	12	27	760	95	210	9.8
6	8.9	11	80	12	13	13	12	20	1100	30	78	9.8
7	9.2	9.8	133	12	13	12	12	101	1290	15	75	9.8
8	9.7	9.6	16	12	12	14	12	712	713	12	72	9.6
9	9.6	9.3	13	12	12	14	13	76	157	10	71	9.6
10	9.5	9.3	12	12	12	16	13	51	57	10	70	9.6
11	9.6	9.3	10	12	12	16	15	41	106	12	69	9.8
12	9.6	9.3	10	13	12	15	14	32	485	150	69	12
13	9.6	10	119	13	11	14	12	25	1140	310	69	10
14	9.8	10	310	13	11	13	12	18	1330	300	68	9.8
15	10	10	311	12	11	13	12	42	1330	300	83	9.6
16	10	9.9	312	12	11	12	13	127	1310	293	313	9.6
17	10	9.8	310	13	10	12	15	689	1300	286	28	9.6
18	10	9.6	310	12	11	12	17	419	1290	286	98	9.6
19	10	9.5	163	12	12	12	14	131	1290	293	187	10
20	10	170	13	12	12	13	14	67	1280	906	187	10
21	10	37	12	12	12	12	14	45	1280	30	184	11
22	10	147	12	12	11	12	12	34	1270	113	179	10
23	19	635	12	12	11	12	11	448	1260	344	176	10
24	5.5	626	12	12	11	12	11	1710	1280	469	175	9.8
25	4.7	614	12	12	11	13	11	143	1290	466	153	9.8
26	4.5	611	12	12	13	18	12	110	656	466	105	9.9
27	4.4	612	12	16	54	14	14	655	11	463	104	9.9
28	4.2	452	12	276	18	12	13	138	56	463	51	9.8
29	8.1	297	12	47	---	12	13	69	16	463	10	11
30	8.8	145	12	19	---	12	14	51	8.6	462	9.8	11
31	10	---	12	17	---	12	---	41	---	392	10	---
MEAN	8.92	151	73.9	22.3	13.8	13.2	12.9	198	809	262	146	10.0
MAX	19	635	312	276	54	18	17	1710	1330	906	600	12
MIN	4.2	9.1	4.3	11	10	12	11	18	8.6	10	9.8	9.6
IN.	.04	.72	.36	.11	.06	.06	.06	.98	3.86	1.29	.72	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995^a, BY WATER YEAR (WY)

	195	166	97.0	93.3	74.7	152	224	296	242	220	210	176
MEAN	195	166	97.0	93.3	74.7	152	224	296	242	220	210	176
MAX	960	755	466	563	257	585	640	850	809	583	1206	1006
(WY)	1986	1978	1993	1993	1985	1985	1978	1993	1995	1984	1993	1977
MIN	1.01	2.06	.052	.074	10.2	4.73	9.85	11.4	13.3	10.6	7.65	7.79
(WY)	1977	1977	1977	1977	1977	1981	1981	1988	1988	1980	1980	1980

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1977 - 1995 ^a
ANNUAL MEAN	117	143	179
HIGHEST ANNUAL MEAN			476
LOWEST ANNUAL MEAN			35.4
HIGHEST DAILY MEAN	2850	1710	7810
LOWEST DAILY MEAN	4.2	4.2	.05
ANNUAL SEVEN-DAY MINIMUM	5.7	5.7	.05
INSTANTANEOUS PEAK FLOW	---	3720	21000
INSTANTANEOUS PEAK STAGE	---	27.40	36.44
INSTANTANEOUS LOW FLOW	---	3.6	.00
ANNUAL RUNOFF (INCHES)	6.76	8.32	10.42
10 PERCENT EXCEEDS	299	463	560
50 PERCENT EXCEEDS	16	13	22
90 PERCENT EXCEEDS	8.6	9.6	8.4

^aPost-regulation period.

PLATTE RIVER BASIN

06821190 PLATTE RIVER AT SHARPS STATION, MO

LOCATION.--Lat 39°24'03", long 94°43'36", in NW 1/4 SE 1/4 SW 1/4 sec.16, T.53 N., R.34 W., Platte County, Hydrologic Unit 10240012, on downstream side of center pier at Sharps Bridge, 0.2 mi upstream from Jowler Creek, 3.3 mi downstream from Little Platte River, 3.6 mi south of Camden Point and at mile 25.1.

DRAINAGE AREA.--2,380 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 754.23 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharges: Jan. 4-6, 21-23, Feb. 2, 3, 10-14, Mar. 6-8, Apr. 30, May 22, 23, June 1, 11, and Aug. 17 to Sept. 30. Water-discharge records poor. Some regulation from Smithville Lake (station 06821140), 17.0 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	64	202	240	290	305	764	2580	8410	3900	1230	330
2	66	66	157	178	300	269	662	3150	4900	2590	1110	270
3	56	65	149	145	310	232	579	2940	4600	2020	1410	300
4	952	66	156	140	323	205	526	2240	4250	3330	2080	267
5	674	69	139	135	351	204	496	3150	3920	7870	1520	218
6	402	88	161	130	1170	200	446	3300	4660	10900	968	197
7	225	107	846	125	950	195	422	2540	5380	12700	813	181
8	148	91	1500	120	566	190	406	7190	7230	14800	744	178
9	115	76	890	113	408	189	405	11000	9840	14200	694	173
10	100	78	557	120	390	228	465	13000	10000	5460	641	172
11	88	76	384	120	325	277	889	17400	5520	2470	583	167
12	79	72	287	127	300	395	3660	18700	3070	2250	544	170
13	71	70	262	155	250	495	5000	16700	3140	1980	507	174
14	66	75	508	183	260	635	3620	14900	3280	1780	483	196
15	67	81	563	208	262	715	2080	18500	3010	1620	495	187
16	68	83	572	230	269	716	1450	21000	2850	1500	1180	166
17	68	82	540	249	257	771	1410	20300	2730	1970	2020	154
18	66	72	538	273	249	690	1390	18100	2650	2860	1220	146
19	61	82	526	317	252	584	2320	16600	2590	1970	721	120
20	59	229	304	299	265	485	3300	16400	2540	3970	559	150
21	59	528	240	280	274	471	2660	15200	2500	4410	482	200
22	58	648	243	270	288	465	2610	8500	2480	2150	446	275
23	57	878	244	280	277	420	2690	4500	2460	1730	420	242
24	59	964	313	292	301	415	1800	12400	2520	2930	401	202
25	48	890	436	307	326	382	1310	15900	3010	3390	386	170
26	47	842	430	314	312	396	1080	20600	3260	3370	326	157
27	47	828	356	309	391	823	1220	20900	7160	3290	276	157
28	45	815	288	596	363	2950	5460	18400	6340	1970	265	100
29	44	599	283	469	---	2310	7530	16600	6870	1630	216	90
30	47	487	274	346	---	1320	3830	16400	5840	1470	174	115
31	53	---	255	280	---	957	---	15000	---	1360	160	---
MEAN	131	306	407	237	367	609	2016	12710	4567	4124	744	187
MAX	952	964	1500	596	1170	2950	7530	21000	10000	14800	2080	330
MIN	44	64	139	113	249	189	405	2240	2460	1360	160	90
IN.	.06	.14	.20	.11	.16	.30	.95	6.16	2.14	2.00	.36	.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1995, BY WATER YEAR (WY)

	MEAN	1310	928	1250	665	1285	2244	2630	3591	2811	3447	1178	1621
MAX	6847	3759	5005	2153	3980	8745	6946	12710	10790	21600	3535	7206	
(WY)	1986	1993	1993	1983	1982	1979	1993	1995	1984	1993	1987	1993	
MIN	25.1	61.9	46.1	50.1	37.6	110	93.0	157	75.2	52.5	47.7	56.7	
(WY)	1989	1989	1989	1989	1989	1989	1989	1989	1988	1988	1988	1991	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR			FOR 1995 WATER YEAR			WATER YEARS 1979 - 1995		
ANNUAL MEAN	858			2220			1925		
HIGHEST ANNUAL MEAN							5697		
LOWEST ANNUAL MEAN							464		
HIGHEST DAILY MEAN	6300	Jul 3		21000	May 16		37300	Jul 26	1993
LOWEST DAILY MEAN	44	Oct 29		44	Oct 29		12	Aug 7-8, 13-14	1989
ANNUAL SEVEN-DAY MINIMUM	47	Oct 25		47	Oct 25		14	Aug 7	1989
INSTANTANEOUS PEAK FLOW	---			21400	May 16		37800	Jul 26	1993
INSTANTANEOUS PEAK STAGE	---			32.25	May 16		36.43	Jul 26	1993
INSTANTANEOUS LOW FLOW	---			Unknown ^a	Unknown ^a		12	Aug 7-8, 13-14	1989
ANNUAL RUNOFF (INCHES)	4.90			12.67			10.99		
10 PERCENT EXCEEDS	2010			6040			4650		
50 PERCENT EXCEEDS	584			446			667		
90 PERCENT EXCEEDS	71			82			70		

^aProbably occurred during period of estimated record.

06821190 PLATTE RIVER AT SHARPS STATION, MO--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1979 to September 1981.

WATER TEMPERATURE: April 1979 to September 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCHI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
		MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET (MG/L AS CaCO ₃) (00410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)
NOV 29...	1500	585	334	7.80	2.0	110	11.7	84	1070	2400	140	42
MAR 29...	0930	2430	281	8.01	8.0	700	12.6	106	4670	15000	120	35
MAY 31...	1145	15200	240	7.70	18.0	170	6.6	70	1000	2100	100	31
JUN 15...	1000	3030	335	7.80	20.0	97	7.8	86	520	380	150	47
NOV 29...	7.9	9.2	5.2	125	128	0	156	20	11.0	0.30	4.5	189
MAR 29...	7.5	9.7	4.0	110	108	0	132	23	11.0	0.40	9.2	227
MAY 31...	6.0	5.0	3.6	86	85	0	103	9	4.9	0.20	11.0	146
JUN 15...	8.3	8.2	4.0	141	142	0	174	19	8.3	0.20	7.8	199
NOV 29...	179	0.26	299	0.010	0.47	0.010	1.0	0.100	0.040	0.030	--	--
MAR 29...	178	0.31	1490	0.030	2.80	0.020	8.9	0.230	0.040	0.010	4040	99
MAY 31...	129	0.20	5990	0.030	1.50	0.070	1.3	0.430	0.130	0.090	668	98
JUN 15...	197	0.27	1630	0.010	1.70	0.020	1.2	0.230	0.070	0.050	682	93
NOV 29...	60	97	<3	43	8	31	10	2	<1	<1.0	180	<6
MAR 29...	80	120	<3	58	11	5	<10	4	<1	<1.0	150	<6
MAY 31...	<10	100	<3	9	<4	5	<10	3	<2	<1.0	130	<6
JUN 15...	<10	130	<3	29	7	96	20	1	<1	<1.0	200	<6

06821190 PLATTE RIVER AT SHARPS STATION, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SI-MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO-METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	METO- LACHLOR WATER, DISSOLV (µG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	METRI- BUZIN, SENCOR WATER, DISSOLV (µG/L) (82630)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	FONOFOS WATER, DISS, REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)
MAY 31...	0.01	E0.009	E0.03	0.47	0.97	2.6	0.11	0.009	<0.007	<0.002	<0.003	<0.002
JUN 15...	<0.005	<0.02	E0.20	1.6	0.63	2.7	0.06	0.02	<0.007	<0.002	<0.003	<0.002

DATE	P,P' DDE DISSOLV (µG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
MAY 31...	<0.006	<0.004	<0.004	<0.001	<0.005	<0.004	<0.002	<0.003	<0.004	<0.002	<0.007
JUN 15...	<0.006	<0.004	<0.004	<0.001	<0.005	<0.004	<0.002	<0.003	<0.004	<0.002	<0.007

DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
MAY 31...	<0.002	<0.006	0.007	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
JUN 15...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
MAY 31...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005
JUN 15...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06893000 MISSOURI RIVER AT KANSAS CITY, MO

LOCATION.--Lat 39°06'43", long 94°35'16", in sec.32, T.50 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on downstream side of right pier of Chicago, Burlington and Quincy Railroad Bridge at Kansas City, 1.4 mi downstream from Kansas River and at mile 366.1.

DRAINAGE AREA.--485,200 mi², approximately.

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only, published in WSP 1310. Gage-height records collected at same site 1873-99 are contained in reports of Missouri River Commission; those since 1900 are contained in reports of National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft above sea level. Prior to May 4, 1931, nonrecording gage; May 4, 1931, to Aug. 23, 1934, water-stage recorder, at present site and datum; Aug. 24, 1934, to May 15, 1947, water-stage recorder at site 200 ft upstream at same datum; May 16, 1947, to Feb. 28, 1948, nonrecording gage at present site and datum. Feb. 29, 1948, to Oct. 1, 1989, at datum 10.00 ft higher.

REMARKS.--Estimated daily discharges: Sept. 21 and 22. Records good. Some regulation from many upstream reservoirs. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 573,000 ft³/s, July 14, 1951.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 16, 1844, reached a stage of 38.0 ft; discharge, about 625,000 ft³/s, computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42400	42900	38900	34500	33300	37100	59300	85400	177000	109000	68200	69300
2	42100	42300	36300	33600	32600	37100	57100	83500	180000	102000	69500	69200
3	43700	42000	35700	32400	33000	36000	55700	82200	174000	95800	71600	69800
4	50200	42600	35100	30700	35100	33400	54400	81100	168000	97400	71600	70500
5	46900	42900	34900	28600	39300	32500	53400	87500	169000	118000	68500	70600
6	44200	42900	35800	27600	43300	32700	52900	93700	169000	130000	67400	69300
7	44300	42000	38700	27100	42100	33300	53000	91200	162000	110000	67200	68300
8	44800	41500	39100	25900	38500	33000	52600	113000	167000	105000	66200	67600
9	45000	41700	37500	25400	36500	31100	54100	145000	188000	104000	65900	67300
10	44300	41700	33200	25700	35300	28200	55000	140000	184000	98600	67900	67200
11	43700	41200	31200	26600	34100	28000	56900	137000	168000	92100	69500	66600
12	43200	41500	31300	27700	32800	29200	62600	133000	153000	89100	71500	66800
13	42800	41600	31800	28700	33100	33400	67400	136000	150000	86500	71200	67300
14	42600	41700	32100	29600	33200	48100	67000	177000	151000	83600	69900	67500
15	42200	41900	31700	31200	30400	67800	63000	169000	150000	79900	74300	67400
16	42200	42100	31800	33800	28200	64600	61900	150000	144000	77900	81600	66200
17	42800	41500	32800	34200	28900	57000	64100	182000	141000	77400	89300	65300
18	43800	41400	33800	33500	31100	53100	64800	211000	140000	77000	88600	65000
19	45800	41700	33200	34100	30600	50700	68400	211000	137000	74700	86800	66300
20	45600	45500	33800	35100	30400	48800	73000	171000	136000	83900	84200	71800
21	45500	47900	34500	34700	31600	45900	74800	148000	135000	84200	82900	74700
22	45200	44800	34100	34000	34400	45800	80800	140000	133000	79600	80700	74500
23	45200	44700	34100	33200	38300	47100	83400	132000	129000	78000	78000	74500
24	45300	45300	34600	32500	42100	48900	79700	181000	126000	77500	75300	73800
25	44800	44800	34700	31400	41800	49600	78800	202000	128000	77300	75300	72600
26	44300	43800	33900	30400	39400	50400	80600	162000	123000	75500	78500	71000
27	44000	43600	33900	31100	38300	53300	84600	157000	122000	76100	77600	69800
28	43800	43000	33800	33600	37300	60900	96600	190000	123000	73800	70800	69000
29	43800	41100	34400	34800	---	62400	95700	193000	121000	72700	67400	68600
30	42400	39800	34900	34000	---	62200	88600	168000	116000	71100	66700	68600
31	43000	---	35100	33300	---	61300	---	167000	---	68800	67600	---
MEAN	44190	42710	34410	31260	35180	45250	68010	145800	148800	87950	73930	69210
MAX	50200	47900	39100	35100	43300	67800	96600	211000	188000	130000	89300	74700
MIN	42100	39800	31200	25400	28200	28000	52600	81100	116000	68800	65900	65000
IN.	.11	.10	.08	.07	.08	.11	.16	.35	.34	.21	.18	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995^a, BY WATER YEAR (WY)

	MEAN	55430	49540	34620	28210	37420	56510	69460	71150	76010	70090	56030	58100
MAX	135200	93340	75370	60980	77690	133700	148900	145800	173800	288300	144300	115600	
(WY)	1974	1974	1987	1973	1973	1979	1984	1995	1984	1993	1993	1993	
MIN	34650	20560	12970	13800	16610	20190	36370	37230	40410	39230	33850	34510	
(WY)	1992	1991	1964	1963	1964	1964	1990	1989	1989	1991	1991	1991	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1958 - 1995 ^a
ANNUAL MEAN	52220	69020	55260
HIGHEST ANNUAL MEAN			102100
LOWEST ANNUAL MEAN			35600
HIGHEST DAILY MEAN	100000	Mar 8	529000
LOWEST DAILY MEAN	31200	Dec 11	4730
ANNUAL SEVEN-DAY MINIMUM	31800	Dec 11	26600
INSTANTANEOUS PEAK FLOW	---	220000	541000
INSTANTANEOUS PEAK STAGE	---	33.77	48.87
INSTANTANEOUS LOW FLOW	---	25300	7480
ANNUAL RUNOFF (INCHES)	1.46	1.93	1.55
10 PERCENT EXCEEDS	73600	140000	92000
50 PERCENT EXCEEDS	47000	55700	47400
90 PERCENT EXCEEDS	35900	32700	23800

^aPost-regulation period.

06893500 BLUE RIVER NEAR KANSAS CITY, MO

LOCATION.--Lat 38°57'26", long 94°33'31", in SE 1/4 NE 1/4 sec.28, T.48 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on downstream side of right pier of bridge on Bannister Road, 0.4 mi downstream from Indian Creek, in Kansas City and at mile 23.2.

DRAINAGE AREA.--188 mi².

PERIOD OF RECORD.--May 1939 to current year.

REVISED RECORDS.--WSP 926: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 753.73 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to July 1, 1939, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: May 26-28, July 6-9, and Aug. 12-15. Records fair, except for estimated daily discharges, which are poor. Low flow regulated by commercial plants above station. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of November 17, 1928, reached a stage of about 39 ft, from information by City of Kansas City.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	210	54	63	127	48	31	824	275	82	222	22
2	18	105	49	65	135	45	31	356	230	74	422	24
3	25	70	44	58	211	43	30	562	201	63	1540	29
4	21	120	41	46	136	54	30	509	232	242	646	18
5	40	368	36	45	112	110	33	309	452	160	278	17
6	54	333	443	43	105	78	26	237	262	135	208	18
7	23	141	826	50	96	141	24	449	167	115	179	16
8	137	93	348	48	90	77	26	4980	3240	111	161	15
9	44	75	264	49	85	63	29	506	3140	77	112	14
10	27	62	204	47	80	58	85	336	698	39	98	16
11	20	54	153	54	73	55	173	268	364	38	91	15
12	19	44	117	68	67	52	72	233	265	44	86	14
13	17	73	105	74	65	50	48	376	219	48	69	16
14	17	90	97	66	61	48	40	238	190	47	61	16
15	39	53	91	58	66	50	37	171	171	43	107	15
16	44	46	184	54	61	46	325	2950	153	41	244	12
17	31	40	134	58	54	46	408	15300	122	36	91	16
18	43	37	99	53	51	42	370	8180	107	31	65	17
19	80	35	85	51	54	44	188	1060	87	36	46	251
20	28	2660	78	51	54	89	127	414	78	1180	40	74
21	20	726	82	47	51	51	101	327	63	200	38	53
22	19	230	97	44	50	45	79	267	63	135	34	57
23	18	163	81	42	48	43	118	321	58	113	27	31
24	18	129	75	38	47	41	96	1310	258	103	19	27
25	18	107	68	37	43	68	66	466	213	94	19	27
26	19	87	66	36	85	96	75	429	390	67	16	21
27	19	159	67	148	142	51	135	1260	154	66	14	20
28	18	123	63	481	55	42	63	762	312	59	21	19
29	17	77	60	237	---	38	339	350	178	63	16	46
30	20	63	58	172	---	35	180	284	120	52	16	97
31	696	---	59	141	---	31	---	260	---	43	15	---
MEAN	52.5	219	136	81.4	82.3	57.4	113	1429	415	117	161	34.4
MAX	696	2660	826	481	211	141	408	15300	3240	1180	1540	251
MIN	17	35	36	36	43	31	24	171	58	31	14	12
IN.	.32	1.30	.84	.50	.46	.35	.67	8.76	2.47	.72	.99	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

	MEAN	128	99.7	93.3	95.1	120	190	272	256	273	171	82.1	167
MAX	790	771	726	445	740	1407	1279	1457	1285	1616	431	1395	
(WY)	1987	1962	1993	1941	1985	1973	1944	1990	1967	1951	1982	1986	
MIN	.000	.000	.000	.000	2.66	4.36	6.41	17.8	7.44	1.72	.94	.047	
(WY)	1940	1940	1940	1940	1940	1957	1954	1956	1953	1946	1947	1939	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1939 - 1995

ANNUAL MEAN	187	243	163	
HIGHEST ANNUAL MEAN			437	1993
LOWEST ANNUAL MEAN			12.8	1956
HIGHEST DAILY MEAN	9310	Apr 28	15300	May 17
LOWEST DAILY MEAN	13	Aug 18	12	Sep 16
ANNUAL SEVEN-DAY MINIMUM	16	Aug 12	15	Sep 10
INSTANTANEOUS PEAK FLOW	---		18800	May 17
INSTANTANEOUS PEAK STAGE	---		33.81	May 17
INSTANTANEOUS LOW FLOW	---		9.6	Aug 29
ANNUAL RUNOFF (INCHES)	13.48		17.58	
10 PERCENT EXCEEDS	326		359	
50 PERCENT EXCEEDS	66		66	
90 PERCENT EXCEEDS	20		20	

06893791 LONGVIEW RESERVOIR AT KANSAS CITY, MO

LOCATION.--Lat 38°55'29", long 94°27'35", SE 1/4 NE 1/4 NW 1/4 sec.4, T.48 N., R.32 W., Jackson County, Hydrologic Unit 10300101, in the U.S. Army Corps of Engineers Administration Building at the right end of dam on Little Blue River at Kansas City and 3.1 mi upstream from Cedar Creek.

DRAINAGE AREA.--50.3 mi².

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by a rolled earthfill type dam. Closure began June 16, 1983. Storage began on Sept. 16, 1985. An uncontrolled limited service type spillway 200 ft wide is located at the left abutment. Capacity of surcharge pool 35,370 ac-ft (909.0 ft to 922.9 ft); of flood control pool 24,800 ac-ft (elevation 891.0 ft to 909.0 ft); and of multipurpose pool 22,100 ac-ft (elevation 816.0 ft to 891.0 ft). Lake is used for flood control, water-quality control, recreation, and fish and wildlife enhancement.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 37,100 ac-ft, May 16, 1990, elevation, 903.36 ft; minimum, 2,680 ac-ft, Oct. 1, 1985, elevation, 849.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 30,700 ac-ft, May 18, elevation, 898.79 ft; minimum, 21,100 ac-ft, Oct. 30, elevation, 889.81 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	889.90	890.67	891.40	891.16	891.48	891.11	891.07	891.47	891.89	891.52	891.34	890.75
2	889.88	890.68	891.35	891.16	891.44	891.10	891.06	891.79	891.77	891.44	891.35	890.72
3	889.97	890.69	891.33	891.16	891.46	891.10	891.03	891.79	891.67	891.39	892.75	890.71
4	889.96	890.71	891.30	891.12	891.47	891.08	891.01	892.11	891.59	891.40	893.42	890.69
5	889.95	890.68	891.27	891.12	891.42	891.11	891.00	892.09	891.58	891.53	892.67	890.67
6	889.95	891.15	891.27	891.09	891.40	891.12	890.97	891.91	891.61	891.53	892.29	890.65
7	889.95	891.16	891.88	891.08	891.36	891.18	890.97	891.80	891.53	891.44	892.01	890.62
8	889.96	891.16	891.86	891.08	891.32	891.19	890.95	894.43	891.89	891.43	891.80	890.58
9	889.98	891.15	891.74	891.07	891.28	891.19	890.94	893.82	892.85	891.34	891.65	890.55
10	889.96	891.14	891.63	891.07	891.27	891.16	890.91	893.86	893.05	891.29	891.57	890.52
11	889.94	891.13	891.57	891.07	891.24	891.15	891.05	892.40	892.59	891.25	891.43	890.50
12	889.92	891.12	891.50	891.08	891.23	891.15	891.13	892.17	892.22	891.21	891.36	890.48
13	889.90	891.09	891.45	891.11	891.21	891.16	891.11	892.25	892.02	891.17	891.31	890.46
14	889.88	891.12	891.42	891.11	891.18	891.15	891.10	892.14	891.82	891.14	891.25	890.43
15	889.85	891.11	891.35	891.11	891.18	891.15	891.07	891.90	891.69	891.10	891.25	890.41
16	889.87	891.11	891.36	891.11	891.18	891.14	891.07	891.93	891.60	891.07	891.18	890.38
17	889.87	891.10	891.40	891.11	891.18	891.14	891.32	896.78	891.50	891.05	891.21	890.35
18	889.97	891.06	891.40	891.11	891.16	891.14	891.60	898.79	891.43	891.02	891.18	890.33
19	890.03	891.04	891.35	891.11	891.15	891.12	891.51	898.57	891.37	890.99	891.14	890.35
20	890.03	891.27	891.30	891.12	891.15	891.13	891.46	898.41	891.31	891.39	891.11	890.37
21	890.03	892.36	891.31	891.11	891.14	891.12	891.43	895.40	891.26	891.49	891.07	890.35
22	890.01	892.11	891.31	891.10	891.14	891.11	891.37	893.90	891.23	891.49	891.05	890.33
23	889.99	891.87	891.28	891.10	891.13	891.10	891.33	893.14	891.19	891.41	891.02	890.31
24	889.95	891.74	891.26	891.10	891.12	891.09	891.34	892.83	891.15	891.35	890.99	890.29
25	889.94	891.63	891.24	891.08	891.11	891.08	891.32	892.61	891.16	891.29	890.95	890.26
26	889.91	891.54	891.23	891.07	891.10	891.12	891.27	892.25	891.72	891.25	890.93	890.24
27	889.88	891.50	891.21	891.07	891.12	891.15	891.30	892.23	891.78	891.21	890.90	890.23
28	889.85	891.65	891.19	891.54	891.11	891.14	891.29	893.02	891.71	891.15	890.88	890.21
29	889.84	891.53	891.17	891.60	---	891.09	891.28	892.60	891.73	891.12	890.85	890.30
30	889.81	891.45	891.17	891.59	---	891.09	891.37	892.25	891.68	891.08	890.82	890.38
31	890.30	---	891.17	891.53	---	891.09	---	892.01	---	891.05	890.78	---
MAX	890.30	892.36	891.88	891.60	891.48	891.19	891.60	898.79	893.05	891.53	893.42	890.75
MIN	889.81	890.67	891.17	891.07	891.10	891.08	890.91	891.47	891.15	890.99	890.78	890.21
(-)	21500	22600	22300	22600	22200	22200	22500	23100	22800	22200	21900	21600
(=)	+400	+1100	-300	+300	-400	0	+300	+600	-300	-600	-300	-300

CAL YR 1994...+200

WTR YR 1995...+500

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

06893793 LITTLE BLUE RIVER BELOW LONGVIEW DAM AT KANSAS CITY, MO

LOCATION.--Lat 38°55'26", long 94°28'05", in NE 1/4 SW 1/4 NW 1/4 sec.4, T.47 N., R.32 W., Jackson County, Hydrologic Unit 10300101, on right bank 300 ft downstream from Longview Dam.

DRAINAGE AREA.--50.3 mi².

PERIOD OF RECORD.--August 1966 to current year.

REVISED RECORDS.--WDR MO-77-1: 1975-76. WDR MO-86-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 793.55 ft above sea level. Aug. 1, 1966, to Oct. 24, 1974, at site 0.7 mi upstream at datum 24.90 ft higher; Oct. 25, 1974, to Sept. 30, 1985, at site 0.5 mi downstream at present datum; Oct. 1, 1985, to July 24, 1990, at present site at datum 5.05 ft higher.

REMARKS.--No estimated daily discharges. Records good except during periods of backwater, Oct. 1 to Nov. 21 and Aug. 27 to Sept. 20, which are fair. Construction of dam began Oct. 1982 and storage began Sept. 1985. Several observations of water temperature and specific conductance were made during the year. Complete regulation by Longview Reservoir (station 06893791), 300 ft upstream.

EXTREMES FOR PERIOD FOR RECORD.--Maximum discharge, 18,700 ft³/s, July 13, 1982; gage height, 21.24 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	7.5	19	6.2	54	10	11	71	117	41	40	4.7
2	5.2	7.3	15	6.6	48	9.4	11	85	91	32	106	4.7
3	5.9	7.7	11	6.9	53	9.2	11	109	70	26	444	4.7
4	5.6	7.7	9.3	6.6	50	9.2	10	153	57	30	464	4.8
5	5.3	8.9	7.5	7.3	43	11	5.5	131	63	49	305	4.5
6	6.5	11	19	6.9	38	11	.87	101	59	41	218	4.5
7	7.9	11	94	7.3	33	16	5.8	108	48	34	152	4.5
8	8.2	10	75	7.2	28	15	7.5	753	198	29	108	4.5
9	8.2	10	59	7.0	26	15	7.6	499	431	23	77	4.5
10	8.1	11	45	7.2	23	18	7.9	303	365	19	56	4.8
11	8.3	11	34	7.5	20	22	11	214	263	16	42	5.1
12	8.3	11	27	9.2	18	23	12	157	182	14	32	5.4
13	8.3	12	22	9.8	16	20	11	182	125	11	25	5.7
14	8.5	11	18	11	15	19	12	138	88	8.9	19	5.5
15	8.9	10	15	10	14	19	9.4	101	63	7.4	16	5.5
16	8.2	11	18	12	13	18	14	249	47	5.6	17	5.5
17	8.1	13	20	12	13	18	28	1010	36	4.5	18	5.5
18	10	8.7	17	9.7	13	18	48	993	29	4.1	14	5.3
19	9.1	9.0	15	11	13	18	42	974	22	4.3	11	5.4
20	8.4	60	13	11	12	18	35	967	17	40	7.7	4.9
21	8.3	168	12	12	12	18	30	948	13	48	5.9	4.0
22	8.5	127	11	11	12	17	26	639	11	45	4.9	4.0
23	8.6	87	10	10	11	16	24	389	8.5	35	4.4	4.0
24	8.5	60	9.0	9.6	11	16	25	348	7.0	27	4.2	4.0
25	8.4	43	7.9	9.2	12	18	23	282	11	22	4.0	4.0
26	8.1	32	7.2	9.3	10	24	20	221	77	17	4.0	4.0
27	7.9	42	6.8	13	11	21	21	390	79	15	4.1	4.3
28	7.6	42	6.1	58	11	12	18	380	79	12	4.4	4.4
29	7.5	31	5.5	80	---	.18	24	274	74	9.7	4.5	5.1
30	7.3	24	5.2	73	---	.13	28	199	54	11	4.6	4.9
31	9.5	---	5.2	63	---	5.4	---	144	---	8.9	4.7	---
MEAN	7.82	30.2	20.6	16.8	22.6	15.0	18.0	371	92.8	22.3	71.7	4.76
MAX	10	168	94	80	54	24	48	1010	431	49	464	5.7
MIN	5.2	7.3	5.2	6.2	10	.13	.87	71	7.0	4.1	4.0	4.0
IN.	.18	.67	.47	.38	.47	.34	.40	8.51	2.06	.51	1.64	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995^a, BY WATER YEAR (WY)

	MEAN	49.3	33.3	27.4	16.1	20.6	42.2	63.3	126	30.1	40.8	15.3	50.1
MAX	283	99.5	144	74.3	44.0	149	194	378	92.8	312	71.7	225	
(WY)	1987	1993	1993	1993	1987	1987	1994	1990	1995	1993	1995	1986	
MIN	5.62	6.09	6.12	5.63	5.56	5.64	4.98	5.56	4.85	5.16	3.75	4.76	
(WY)	1991	1991	1991	1991	1986	1986	1986	1986	1986	1986	1986	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1986 - 1995^a

ANNUAL MEAN	42.5	58.3	43.0
HIGHEST ANNUAL MEAN			104
LOWEST ANNUAL MEAN			13.9
HIGHEST DAILY MEAN	880	1010	1160
LOWEST DAILY MEAN	.00 Sep 12, 13	.13 Mar 30	.00 At Times
ANNUAL SEVEN-DAY MINIMUM	2.7 Sep 12	4.0 Sep 21	2.3 Sep 15 1990
INSTANTANEOUS PEAK FLOW	---	1110 May 17	2870 May 15 1990
INSTANTANEOUS PEAK STAGE	---	13.09 May 17	12.96 Jul 6 1993
INSTANTANEOUS LOW FLOW	---	.00 Apr 6	.00 At Times
ANNUAL RUNOFF (INCHES)	11.48	15.75	11.62
10 PERCENT EXCEEDS	96	129	83
50 PERCENT EXCEEDS	10	13	9.0
90 PERCENT EXCEEDS	5.5	5.0	5.5

^aPost-regulation period.

06893885 BLUE SPRINGS RESERVOIR NEAR BLUE SPRINGS, MO

LOCATION.--Lat 39°01'03", long 94°20'06", sec.33, T.49 N., R.31 W., Jackson County, Hydrologic Unit 10300101, in maintenance building at right end of dam on East Fork Little Blue River, 2.2 mi west of Blue Springs and 2.5 mi upstream from mouth.

DRAINAGE AREA.--32.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by a rolled earthfill type dam. An uncontrolled limited service type spillway 300 ft wide is located on left abutment. Capacity of surcharge pool, 3,310 ac-ft (elevation 820.3 to 823.6 ft); of flood control pool, 1,590 ac-ft (elevation 802.0 to 820.3 ft); and of multi-purpose pool, 10,640 ac-ft (elevation 760.0 to 802.0 ft).

COOPERATION.--Records provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 22,800 ac-ft, May 17, 1990, elevation, 816.37 ft; minimum contents, 142 ac-ft, Oct. 22, 29, 30, and Nov. 1-11, 1988, elevation, 773.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,900 ac-ft, May 19, elevation, 808.58 ft; minimum contents, 10,500 ac-ft, Sept. 24, elevation, 801.67 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	802.19	802.49	802.74	802.28	802.55	802.28	802.28	802.85	803.36	802.82	802.34	802.08
2	802.19	802.50	802.72	802.26	802.57	802.25	802.28	802.94	803.24	802.79	802.34	802.06
3	802.18	802.52	802.69	802.25	802.61	802.25	802.29	802.98	803.13	802.76	802.46	802.04
4	802.19	802.57	802.65	802.23	802.59	802.26	802.26	803.13	803.05	802.81	802.62	802.03
5	802.19	802.55	802.63	802.21	802.58	802.26	802.24	803.22	803.09	802.96	802.65	802.03
6	802.19	802.69	802.58	802.22	802.58	802.26	802.24	803.23	803.25	802.93	802.67	802.02
7	802.21	802.71	802.76	802.22	802.56	802.40	802.25	803.20	803.24	802.88	802.65	802.00
8	802.20	802.73	802.74	802.21	802.53	802.40	802.26	804.05	803.35	802.84	802.63	801.95
9	802.21	802.73	802.71	802.21	802.52	802.40	802.26	804.86	804.49	802.79	802.59	801.93
10	802.18	802.69	802.66	802.21	802.51	802.40	802.22	804.86	804.75	802.74	802.53	801.92
11	802.17	802.66	802.61	802.21	802.48	802.40	802.25	804.03	804.37	802.70	802.49	801.91
12	802.16	802.63	802.57	802.21	802.45	802.40	802.26	803.72	803.96	802.67	802.47	801.90
13	802.14	802.61	802.55	802.22	802.43	802.40	802.27	803.50	803.64	802.64	802.44	801.89
14	802.13	802.63	802.51	802.21	802.42	802.40	802.30	803.38	803.40	802.60	802.40	801.89
15	802.14	802.59	802.49	802.21	802.42	802.39	802.32	803.24	803.24	802.56	802.37	801.87
16	802.17	802.55	802.50	802.21	802.41	802.40	802.33	803.25	803.11	802.53	802.37	801.86
17	802.20	802.53	802.49	802.25	802.39	802.39	802.39	805.34	803.01	802.48	802.36	801.84
18	802.23	802.49	802.46	802.22	802.39	802.38	802.45	807.52	802.93	802.44	802.35	801.82
19	802.28	802.45	802.46	802.21	802.38	802.36	802.48	808.58	802.85	802.42	802.33	801.81
20	802.29	802.58	802.43	802.22	802.37	802.36	802.50	808.09	802.79	802.54	802.30	801.84
21	802.30	802.86	802.42	802.21	802.37	802.37	802.52	807.13	802.74	802.70	802.28	801.81
22	802.31	802.88	802.42	802.20	802.34	802.37	802.52	806.10	802.69	802.52	802.26	801.79
23	802.33	802.93	802.42	802.19	802.35	802.35	802.52	805.03	802.65	802.50	802.24	801.77
24	802.33	802.95	802.38	802.19	802.33	802.34	802.53	804.47	802.65	802.48	802.21	801.67
25	802.32	802.92	802.36	802.19	802.31	802.32	802.54	804.16	802.60	802.45	802.19	801.75
26	802.30	802.88	802.34	802.19	802.33	802.35	802.52	803.84	802.82	802.42	802.17	801.74
27	802.29	802.89	802.32	802.21	802.33	802.33	802.55	803.60	802.87	802.40	802.16	801.74
28	802.28	802.86	802.33	802.39	802.29	802.30	802.54	804.15	802.87	802.38	802.15	801.72
29	802.28	802.81	802.33	802.45	---	802.30	802.54	804.02	802.90	802.37	802.13	801.73
30	802.26	802.78	802.32	802.49	---	802.28	802.78	803.75	802.88	802.34	802.12	801.78
31	802.33	---	802.30	802.53	---	802.27	---	803.51	---	802.32	802.10	---
MAX	802.33	802.95	802.76	802.53	802.61	802.40	802.78	808.58	804.75	802.96	802.67	802.08
MIN	802.13	802.45	802.30	802.19	802.29	802.25	802.22	802.85	802.60	802.32	802.10	801.67
(-)	11000	11300	11000	11100	11000	10900	11300	11900	11400	11000	10800	10600
(=)	+100	+300	-300	+100	-100	-100	+400	+600	-500	-400	-200	-200

CAL YR 1994...+100

WTR YR 1995...-300

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

LITTLE BLUE RIVER BASIN

06893890 EAST FORK LITTLE BLUE RIVER NEAR BLUE SPRINGS, MO

LOCATION.--Lat 39°01'32", long 94°20'37", in NE 1/4 NE 1/4 NW 1/4 sec.33, T.49 N., R.31 W., Jackson County, Hydrologic Unit 10300101, on left downstream side of bridge on east bound lane of U.S. Highway 40, 2.6 mi west of Blue Springs and 1.5 mi upstream from mouth.

DRAINAGE AREA.--34.4 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 753.09 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Estimated daily discharges: Sept. 14-19 and 21-25. Records good. Several observations of water temperature and specific conductance were made during the year. Flow impounded or detained in Jackson County Lake at times and by Blue Springs Reservoir subsequent to July 1986.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,000 ft³/s, Aug. 13, 1982; gage height, 22.14 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	25	46	11	28	8.8	4.3	54	109	51	13	.32
2	5.2	26	43	10	29	8.0	5.0	56	100	46	17	.40
3	6.2	28	40	9.3	31	7.8	5.2	66	89	42	27	.56
4	6.2	32	36	8.8	31	7.6	3.8	82	87	62	28	.52
5	6.0	39	33	8.5	31	8.5	3.5	85	94	72	28	.48
6	6.6	42	42	8.5	29	8.8	3.0	81	100	63	28	.36
7	6.0	43	54	8.5	28	9.3	3.0	84	94	57	29	.36
8	7.3	44	48	8.3	26	9.3	3.1	282	204	52	29	.28
9	6.6	46	44	8.2	25	9.0	2.7	349	339	46	27	.36
10	5.6	43	39	7.8	23	9.0	3.2	269	328	41	24	.40
11	4.6	41	35	7.9	21	9.0	5.8	203	250	37	23	.44
12	4.1	38	31	8.0	20	9.3	6.2	159	187	32	21	.52
13	3.8	37	28	8.0	19	9.0	6.2	134	141	28	16	.60
14	3.8	36	26	7.4	18	9.0	6.6	114	113	25	15	.24
15	4.6	32	23	7.3	17	8.8	6.6	102	94	22	14	.03
16	5.8	29	24	7.3	16	8.5	7.8	123	79	20	14	.03
17	7.6	27	23	7.3	15	8.5	11	518	67	18	13	.03
18	9.0	24	21	6.6	14	8.3	16	514	58	16	12	.03
19	10	22	20	6.6	14	8.0	17	483	50	15	11	.11
20	11	54	19	7.1	13	7.6	18	480	44	25	10	.05
21	12	62	18	6.6	13	7.6	18	472	39	23	8.3	.04
22	14	64	18	6.5	13	7.3	18	463	34	21	6.8	.04
23	14	68	17	5.9	11	6.7	19	349	29	19	5.3	.03
24	14	67	16	5.8	10	6.4	19	289	28	18	3.9	.03
25	13	64	15	5.8	9.9	6.4	18	216	32	17	2.7	.03
26	13	59	15	5.6	9.6	8.1	18	167	58	16	1.5	.03
27	12	61	14	9.0	10	6.8	20	190	56	15	1.3	.03
28	11	61	13	21	9.3	6.0	20	223	59	14	.92	.03
29	9.9	55	12	21	---	5.4	33	190	59	14	.68	.14
30	9.6	50	12	24	---	4.8	40	153	56	13	.56	.10
31	24	---	11	26	---	4.4	---	124	---	12	.44	---
MEAN	8.77	44.0	27.0	9.68	19.1	7.81	12.0	228	103	30.7	13.9	.22
MAX	24	68	54	26	31	9.3	40	518	339	72	29	.60
MIN	3.8	22	11	5.6	9.3	4.4	2.7	54	28	12	.44	.03
IN.	.29	1.43	.90	.32	.58	.26	.39	7.65	3.33	1.03	.47	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995^a, BY WATER YEAR (WY)

	MEAN	37.8	21.0	23.6	12.6	14.9	28.9	45.1	81.9	32.2	27.1	6.67	23.4
MAX	276	65.9	102	54.4	41.6	88.5	113	273	103	141	24.5	136	
(WY)	1987	1993	1993	1993	1993	1987	1994	1990	1995	1993	1990	1986	
MIN	.007	.14	.077	.056	.037	.37	.46	.20	.17	.049	.000	.22	
(WY)	1989	1989	1989	1989	1989	1989	1989	1989	1989	1989	1988	1995	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1986 - 1995 ^a
ANNUAL MEAN	34.2	42.2	29.7
HIGHEST ANNUAL MEAN			64.6
LOWEST ANNUAL MEAN			.31
HIGHEST DAILY MEAN	462	518	583
LOWEST DAILY MEAN	.25	.03	.00
ANNUAL SEVEN-DAY MINIMUM	1.1	.03	.00
INSTANTANEOUS PEAK FLOW	---	644	755
INSTANTANEOUS PEAK STAGE	---	11.70	13.67
INSTANTANEOUS LOW FLOW	---	.02	.00
ANNUAL RUNOFF (INCHES)	13.51	16.66	11.73
10 PERCENT EXCEEDS	67	94	69
50 PERCENT EXCEEDS	19	16	9.7
90 PERCENT EXCEEDS	3.1	2.2	.05

^aPost-regulation period.

79

REMARKS.--Estimated daily discharges: Dec. 6-8, Jan. 4-7, Apr. 17, Apr. 30 to May 1, and May 9-11. Records poor. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	173	155	25	190	48	18	1000	450	164	87	12
2	11	58	137	23	157	38	21	448	359	130	414	10
3	21	44	122	23	270	36	29	585	263	106	1640	14
4	22	49	111	24	190	35	29	830	296	548	1190	10
5	15	252	101	24	165	32	29	480	528	614	634	8.8
6	13	313	240	25	145	31	29	325	318	225	425	8.5
7	13	146	440	25	139	31	22	456	242	158	310	13
8	37	126	350	25	114	31	17	4010	2270	125	234	10
9	31	122	281	25	110	31	18	2300	2410	98	177	8.7
10	19	112	221	26	101	32	20	1050	1500	72	132	7.9
11	14	106	174	27	91	32	139	800	929	59	101	8.3
12	11	97	144	31	81	35	98	555	636	48	80	9.2
13	11	101	122	32	78	43	57	551	438	38	65	10
14	10	127	107	25	75	46	49	426	331	31	52	8.3
15	12	100	98	20	72	46	45	330	258	25	47	7.7
16	18	87	146	18	68	43	128	1110	200	21	67	7.6
17	18	81	138	19	65	40	390	6900	156	24	72	7.9
18	101	74	107	18	60	38	281	5480	120	16	46	7.6
19	192	71	94	18	56	36	186	2740	91	12	35	79
20	44	1590	68	22	53	47	175	2140	68	656	28	36
21	28	804	64	20	50	37	131	1990	52	168	24	18
22	22	440	65	17	47	35	105	1680	53	112	21	21
23	20	352	57	16	45	32	107	1290	42	280	17	11
24	21	301	49	16	42	29	102	2540	97	76	14	10
25	20	254	45	14	39	39	81	1080	320	59	12	9.2
26	20	216	39	13	41	137	73	726	1240	44	12	8.7
27	19	296	36	31	107	61	138	2410	371	32	10	10
28	16	263	33	922	60	39	73	1390	339	25	10	8.8
29	16	207	30	317	---	32	788	877	289	20	11	202
30	15	177	27	254	---	25	2300	610	213	17	11	118
31	445	---	25	212	---	20	---	453	---	17	9.1	---
MEAN	40.9	238	123	74.4	96.8	39.9	189	1534	496	130	193	23.4
MAX	445	1590	440	922	270	137	2300	6900	2410	656	1640	202
MIN	10	4.44	25	13	39	20	17	325	42	12	9.1	7.6
IN.	.26	1.44	.77	.47	.55	.25	1.15	9.62	3.01	.81	1.21	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1995, BY WATER YEAR (WY)

MEAN	134	105	88.1	90.4	121	196	245	271	256	142	95.3	156
MAX	983	854	495	357	576	1153	1069	1534	1216	1103	1455	1018
(WY)	1987	1962	1993	1993	1985	1973	1983	1995	1967	1993	1982	1961
MIN	.13	.49	1.36	1.36	3.09	4.15	11.3	27.9	10.3	.26	.016	.20
(WY)	1954	1957	1956	1957	1957	1956	1954	1988	1953	1954	1953	1953

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1948 - 1995
--------------------	------------------------	---------------------	-------------------------

ANNUAL MEAN	212		267		159	
HIGHEST ANNUAL MEAN					440	1993
LOWEST ANNUAL MEAN					11.5	1956
HIGHEST DAILY MEAN	5400	Apr 28	6900	May 17	27700	Aug 13 1982
LOWEST DAILY MEAN	6.5	Sep 16	7.6	Sep 16, 18	.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	7.4	Sep 15	8.3	Sep 12	.00	Several Years
INSTANTANEOUS PEAK FLOW	---		8590	May 17	42300	Aug 13 1982
INSTANTANEOUS PEAK STAGE	---		19.90	May 17	27.94	Sep 14 1961
INSTANTANEOUS LOW FLOW	---		7.1	Sep 15	.00	Several Years
ANNUAL RUNOFF (INCHES)	15.68		19.67		11.73	
10 PERCENT EXCEEDS	469		612		307	
50 PERCENT EXCEEDS	69		64		47	
90 PERCENT EXCEEDS	15		13		7.4	

06895500 MISSOURI RIVER AT WAVERLY, MO

LOCATION.--Lat 39°12'54", long 93°30'54", sec.14, T.51 N., R.23 W., Lafayette County, Hydrologic Unit 10300101 on downstream side of pier of bridge on State Highway 24 and U.S. Highway 65 at Waverly and at mile 293.5.

DRAINAGE AREA.--487,200 mi², approximately.

PERIOD OF RECORD.--October 1928 to current year. Gage-height records collected at same site 1878-79, 1883-99 are contained in reports of Missouri River Commission; since 1915 in reports of National Weather Service. Daily discharge not computed Apr. 1, 1977 to Mar. 31, 1978.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.00 ft above sea level. Prior to Jan. 1, 1934, at datum 5.00 ft lower; Mar. 30, 1929, to Apr. 4, 1934, nonrecording gage; Apr. 5, 1934 to June 13, 1943, water-stage recorder; June 14, 1943, to Sept. 15, 1944, nonrecording gage; Sept. 16, 1944, to May 28, 1969, water-stage recorder all at present site and datum; May 29, 1969, to Jan. 8, 1984, water-stage recorder at site 450 ft downstream, present datum; Jan. 9, 1984, to May 24, 1984, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good except for May 18 to June 19, which are poor. Some regulation from many upstream reservoirs. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43400	46000	42500	37300	35600	40500	66400	94600	199000	127000	71400	71600
2	42900	44500	41000	36600	35300	40200	64500	93500	196000	119000	71700	72200
3	42700	43400	38500	35500	34900	39900	62500	89300	197000	110000	78000	71700
4	45800	43300	37800	34000	35500	38700	60500	89700	196000	106000	84400	71700
5	52100	44700	37500	32100	37400	36200	58500	90400	193000	115000	77500	71900
6	47900	46400	37500	30300	42400	35200	57300	98900	194000	133000	71500	71500
7	45100	45700	44600	29100	46100	35900	56800	99600	193000	134000	70000	70400
8	45500	43800	47700	28600	44000	36300	56400	118000	188000	121000	69400	69600
9	45900	43300	43500	27400	40700	36000	55800	157000	195000	117000	68500	69100
10	45800	43400	40300	26600	38900	33600	57400	164000	211000	113000	68900	69100
11	45000	43200	35600	26700	38000	30600	58500	156000	215000	105000	70900	69000
12	44300	42800	33800	27400	36400	30000	62200	153000	201000	98800	73000	69100
13	43800	43000	33900	28500	35600	30800	68200	148000	185000	95000	74600	69600
14	43100	43100	34300	29700	35900	34700	72200	163000	174000	91500	73700	69500
15	42900	43200	34500	30600	36200	56400	68800	194000	170000	87600	73300	69500
16	42700	43300	34300	32400	32600	71800	64500	186000	165000	84000	81700	68900
17	42300	43000	34500	35200	30400	63100	66300	198000	160000	81800	90900	67900
18	42900	42300	35500	35900	31100	57000	68000	221000	156000	81000	93100	67200
19	44900	42200	36300	35300	33400	54600	68600	202000	152000	80000	92000	67300
20	47000	44900	35800	35700	33400	54300	73300	209000	149000	87100	89100	70600
21	46800	57500	36500	36800	33000	52700	75900	185000	147000	101000	86400	75600
22	46700	53300	37400	36400	34400	51100	80300	174000	146000	96400	84600	77900
23	46400	49000	36900	35400	37400	51200	87400	164000	144000	89300	82200	76600
24	46400	48900	36600	34400	42000	52200	86400	165000	141000	85600	79500	76400
25	46400	49200	36900	33800	46200	54200	83300	193000	139000	82800	77300	74700
26	46100	48100	37100	32500	45200	55700	83700	239000	142000	81900	79100	73100
27	45600	48000	36100	31600	43000	56000	86200	238000	139000	80800	82500	72000
28	45200	47900	35900	36000	41800	60400	95100	233000	137000	78800	78700	70900
29	45000	46400	35600	41200	---	67900	106000	249000	136000	75800	72700	70300
30	44900	43800	36200	38100	---	67800	103000	244000	134000	74600	70200	70000
31	44400	---	37100	36100	---	67800	---	211000	---	72100	70100	---
MEAN	45160	45590	37470	33140	37740	48150	71800	168400	169800	96960	77640	71160
MAX	52100	57500	47700	41200	46200	71800	106000	249000	215000	134000	93100	77900
MIN	42300	42200	33800	26600	30400	30000	55800	89300	134000	72100	68500	67200
IN.	.11	.10	.09	.08	.08	.11	.16	.40	.39	.23	.18	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995^a, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1958	55980	141900	1974	35340	1992
1959	49680	96020	1974	21620	1992
1960	35820	74470	1987	13010	1964
1961	29270	65720	1973	14770	1963
1962	38600	79780	1973	16830	1964
1963	56030	133500	1979	19250	1964
1964	72160	145500	1984	37920	1989
1965	73810	168400	1995	39350	1989
1966	78770	176600	1984	41340	1988
1967	72850	306500	1993	39120	1991
1968	56530	155700	1993	34420	1991
1969	57570	121700	1993	35380	1991

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1958 - 1995^a

	1994	1995	1958-1995
ANNUAL MEAN	54920	75400	56530
HIGHEST ANNUAL MEAN			109900
LOWEST ANNUAL MEAN			35950
HIGHEST DAILY MEAN	118000	249000	611000
LOWEST DAILY MEAN	33800	26600	5000
ANNUAL SEVEN-DAY MINIMUM	34400	27800	5540
INSTANTANEOUS PEAK FLOW	---	267000	633000
INSTANTANEOUS PEAK STAGE	---	28.82	31.15
INSTANTANEOUS LOW FLOW	---	26400	5000
ANNUAL RUNOFF (INCHES)	1.53	2.10	1.58
10 PERCENT EXCEEDS	78200	158000	95000
50 PERCENT EXCEEDS	49400	58500	48100
90 PERCENT EXCEEDS	38300	35100	24300

^aPost-regulation period.

06897500 GRAND RIVER NEAR GALLATIN, MO

LOCATION.--Lat 39°55'37", long 93°56'33", in SW 1/4 NW 1/4 sec.16, T.59 N., R.27 W., Daviess County, Hydrologic Unit 10280101, on left bank 100 ft upstream from bridge on State Highway 6, 50 ft downstream from Chicago, Rock Island and Pacific Railroad Company Bridge, 1.0 mi northeast of Gallatin, 6.0 mi upstream from Honey Creek and at mile 90.0.

DRAINAGE AREA.--2,250 mi², approximately.

PERIOD OF RECORD.--June 1921 to current year.

REVISED RECORDS.--WSP 786: 1933-34, WSP 1280: 1922, WDR MO-81-1: 1981, WDR MO-92-1: 1992(M).

GAGE.--Water-stage recorder. Datum of gage published in error from 1982 to 1992. The correct datum of gage is 707.56 ft above sea level. This figure supersedes figures published in reports from 1982 to 1992. Prior to Jan. 31, 1922, nonrecording gage at site 100 ft upstream at datum 5.00 ft lower; Jan. 31, 1922, to Nov. 15, 1936, nonrecording gage, at site about 1,100 ft upstream at datum 4.83 ft lower; Nov. 16, 1936, to Nov. 14, 1937, nonrecording gage; Nov. 15, 1937, to Sept. 21, 1961, water-stage recorder on center pier of highway bridge at datum 5.00 ft lower; Sept. 22-27, 1961, nonrecording gage at railroad bridge, 100 ft upstream at datum 5.00 ft lower; Sept. 28, 1961, to Mar. 4, 1964, water-stage recorder on downstream side of left bank pier of highway bridge and wire-weight gage for stages below 7.2 ft at datum 5.00 ft lower; Mar. 5, 1964, to Mar. 5, 1982, at present site at datum 5.00 ft. higher.

REMARKS.--Estimated daily discharges: Dec. 12-19, Jan. 17-23, 28-30, Feb. 9-11, 13-16, and Feb. 27 to Mar. 6. Records fair except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 45 ft, July 8, 1909, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	42	207	110	349	263	596	1740	3370	1590	273	78
2	31	44	155	61	310	207	539	2680	4600	1060	253	135
3	52	42	132	67	305	174	491	1710	4250	793	277	167
4	149	46	114	40	440	169	445	2000	2850	7320	274	114
5	170	76	103	40	1160	164	414	3940	2520	31800	254	94
6	125	124	154	40	1350	142	372	2130	4240	32100	236	76
7	94	84	1250	34	806	173	347	1550	9660	11500	347	75
8	73	63	1250	31	442	128	318	23300	8820	4610	257	241
9	62	49	648	31	430	124	355	34300	10500	3530	215	200
10	56	42	472	32	500	172	470	33000	5990	2190	184	125
11	50	43	300	35	420	327	9150	13600	3230	1610	169	94
12	44	38	185	42	310	553	13200	5990	2350	1260	161	84
13	42	39	175	57	250	980	5210	23300	1850	1040	162	84
14	39	42	160	71	240	885	2530	37200	1520	884	166	96
15	39	43	150	83	250	693	1640	24500	1280	763	159	92
16	40	47	140	90	250	604	1220	7910	1100	1540	613	76
17	39	55	130	97	251	515	991	29400	950	3180	1250	64
18	41	51	120	77	257	482	1980	22400	828	1990	664	57
19	43	48	130	92	293	407	5020	17600	727	1010	316	61
20	41	87	161	92	287	360	3480	7610	645	733	210	64
21	39	547	237	114	293	397	2060	4500	582	612	163	180
22	38	569	244	134	304	544	2350	3420	530	525	135	179
23	37	464	299	140	341	432	1520	10400	485	1360	122	133
24	37	382	485	154	361	353	1040	35000	443	2750	108	114
25	38	266	418	139	346	287	839	36800	884	1280	99	93
26	36	195	311	136	309	307	935	16500	1760	755	94	81
27	36	201	247	140	276	3070	4160	9170	3810	601	102	73
28	35	336	213	150	263	2710	7230	21600	8600	586	98	69
29	34	307	195	190	---	1200	2820	15200	6670	434	84	73
30	35	300	181	300	---	832	1750	6690	2730	359	75	83
31	40	---	172	381	---	657	---	4270	---	305	69	---
MEAN	53.9	156	295	103	407	591	2449	14820	3259	3873	245	105
MAX	170	569	1250	381	1350	3070	13200	37200	10500	32100	1250	241
MIN	31	38	103	31	240	124	318	1550	443	305	69	57
IN.	.03	.08	.15	.05	.19	.30	1.21	7.60	1.62	1.99	.13	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1995, BY WATER YEAR (WY)

	MEAN	817	860	538	499	942	1724	1905	1897	2311	1678	544	1112
MAX	8965	8613	5463	4212	6196	8760	7906	14820	22670	33930	4136	11610	
(WY)	1974	1929	1983	1932	1962	1979	1927	1995	1947	1993	1987	1926	
MIN	3.09	8.18	6.15	3.94	5.61	18.7	12.0	15.4	51.9	13.3	7.05	10.2	
(WY)	1957	1939	1939	1940	1939	1938	1956	1956	1988	1936	1936	1955	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1921 - 1995
ANNUAL MEAN	497	2219	1234
HIGHEST ANNUAL MEAN			5740
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	9080	Feb 21	37200
LOWEST DAILY MEAN	27	Sep 21	31
ANNUAL SEVEN-DAY MINIMUM	31	Sep 18	35
INSTANTANEOUS PEAK FLOW	---		37700
INSTANTANEOUS PEAK STAGE	---		31.13
INSTANTANEOUS LOW FLOW	---		28
ANNUAL RUNOFF (INCHES)	3.00		13.39
10 PERCENT EXCEEDS	1130		4770
50 PERCENT EXCEEDS	234		293
90 PERCENT EXCEEDS	39		43
			26

06899500 THOMPSON RIVER AT TRENTON, MO

LOCATION.--Lat 40°04'45", long 93°38'39" in NE 1/4 SW 1/4 sec.18, T.61 N., R.24 W., Grundy County, Hydrologic Unit 10280102, at downstream side of center pier of bridge in Trenton, 1.8 mi downstream from Weldon River and at mile 26.0.

DRAINAGE AREA.--1,670 mi², approximately.

PERIOD OF RECORD.--June 1921 to September 1923, published as "near Hickory", August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected in vicinity 1910-14 and since 1925 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1116: 1945(M). WDR MO-83-1: 1981.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 721.87 ft above sea level. June 25, 1921, to Aug. 26, 1923, nonrecording gage at two sites 12 mi downstream (by old channel route) at different datums; Aug. 1, 1928, to Sept. 15, 1930, nonrecording gage at present site and datum; Sept. 16, 1930, to May 31 1945, nonrecording gage at site 1.5 mi downstream at datum 3.46 ft lower; June 1, 1945, to Dec. 7, 1959, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 11-14, Jan. 1-26, Feb. 6-8, Mar. 14-18, Apr. 16, Sept. 11-15, and 20-30. Records poor. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 30.7 ft, July 6, 1909, present site and datum, from information by local residents, discharge, 50,000 ft³/s, determined by U.S. Army Corps of Engineers, occurred before new channel was dredged.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	85	197	96	476	305	585	2090	2230	2240	383	153
2	62	56	164	92	198	239	501	1820	2260	1480	365	131
3	88	62	145	90	493	197	419	1580	2280	1110	357	129
4	98	84	133	87	2400	154	355	1940	2020	6570	340	127
5	79	89	126	85	1610	148	296	2890	3580	25100	344	119
6	72	120	166	85	1400	155	250	2080	8640	8880	320	113
7	65	115	1660	85	1110	184	232	1800	5430	5530	384	121
8	69	75	1020	85	668	197	208	18400	6420	12600	305	117
9	73	68	624	90	850	215	720	12900	6690	5310	268	110
10	75	66	358	91	1150	252	2070	9180	3990	2760	271	111
11	68	63	305	101	700	480	8090	6900	2260	2100	2140	100
12	59	61	220	100	635	1350	6450	4700	1580	1700	1150	106
13	55	67	205	106	654	1290	3730	20600	1200	1420	492	108
14	61	71	160	104	620	1100	2400	13600	970	1200	341	107
15	70	67	153	84	502	900	1730	5980	813	1040	391	106
16	96	79	131	91	404	700	1300	6190	698	964	1160	104
17	105	67	125	106	385	550	1160	14400	612	2210	938	96
18	90	75	131	104	433	450	2690	14700	539	2000	392	92
19	68	79	138	150	517	374	4310	8580	463	1220	283	101
20	71	184	174	170	376	334	2570	5040	407	958	223	110
21	80	705	179	139	341	536	1830	3160	361	795	203	106
22	74	553	211	121	348	400	1690	3620	323	852	189	104
23	57	306	298	118	350	306	1390	19700	292	2280	177	100
24	47	218	252	115	386	240	1110	32800	265	1430	169	96
25	41	178	198	105	385	203	855	9540	371	1320	160	92
26	58	149	152	102	363	1250	1090	5180	2090	848	155	88
27	45	297	119	111	356	3180	4820	11000	3770	762	148	84
28	54	484	111	1230	353	1760	6420	16600	6610	607	143	84
29	54	403	102	1570	---	1220	3990	7280	6070	527	138	88
30	71	257	101	1340	---	985	2490	4330	4970	468	136	90
31	98	---	99	1110	---	718	---	2900	---	421	130	---
MEAN	70.0	173	263	260	659	657	2192	8757	2607	3119	406	106
MAX	105	705	1660	1570	2400	3180	8090	32800	8640	25100	2140	153
MIN	41	56	99	84	198	148	208	1580	265	421	130	84
IN.	.05	.12	.18	.18	.41	.45	1.46	6.05	1.74	2.15	.28	.07

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	596	673	492	472	902	1598	1692	1676	1793	1126	539	736
MEAN	596	673	492	472	902	1598	1692	1676	1793	1126	539	736
MAX	4678	6280	4209	3682	4377	5765	5580	8757	16460	18860	3990	8443
(WY)	1974	1962	1983	1946	1962	1979	1973	1995	1947	1993	1959	1992
MIN	11.1	9.53	6.48	4.74	13.0	17.6	10.7	10.2	13.9	6.00	9.32	12.9
(WY)	1957	1956	1956	1956	1956	1938	1956	1956	1956	1934	1936	1955

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	492	1617	1024
HIGHEST ANNUAL MEAN			3576
LOWEST ANNUAL MEAN			117
HIGHEST DAILY MEAN	6340	Feb 20	32800
LOWEST DAILY MEAN	41	Oct 25	41
ANNUAL SEVEN-DAY MINIMUM	51	Oct 23	51
INSTANTANEOUS PEAK FLOW	---		42300
INSTANTANEOUS PEAK STAGE	---		18.22
INSTANTANEOUS LOW FLOW	---		31
ANNUAL RUNOFF (INCHES)	4.00		13.15
10 PERCENT EXCEEDS	1160		4750
50 PERCENT EXCEEDS	297		341
90 PERCENT EXCEEDS	70		79

06902000 GRAND RIVER NEAR SUMNER, MO

LOCATION.--Lat 39°38'25", long 93°16'25", in NE 1/4 sec.29, T.56 N., R.21 W., Livingston County, Hydrologic Unit 10280103, near right bank on downstream side of pier of bridge on State Highway 139, 240 ft downstream from Chicago, Burlington and Quincy Railroad Bridge, 2.0 mi southwest of Sumner, 2.5 mi downstream from Locust Creek and at mile 41.0.

DRAINAGE AREA.--6,880 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to current year. Prior to April 1924 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 631.18 ft above sea level. Prior to July 11, 1926, nonrecording gage at site 200 ft upstream at same datum; July 11, 1926, to July 9, 1939, nonrecording gage at same site and datum; July 10, 1939, to Aug. 8, 1952, water-stage recorder at site 200 ft upstream at same datum; Aug. 9, 1952, to Nov. 12, 1953, nonrecording gage at site 120 ft upstream and at same datum; Nov. 13, 1953, to July 6, 1964, water-stage recorder and nonrecording gage, for stages below 8.3 ft, at site 120 ft upstream and at same datum; July 7, 1964, to May 26, 1965, nonrecording gage at present site and datum. Auxiliary water-stage recorder at site 3.2 mi downstream from base gage at datum 631.30 ft above sea level; Mar. 15, 1939, to Aug. 4, 1942, auxiliary nonrecording gage at various sites; Aug. 5, 1942, to Dec. 14, 1956, auxiliary nonrecording gage at present site.

REMARKS.--Estimated daily discharges: Dec. 8 and 9. Water-discharge records fair. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 9, 1909, reached a stage of 36.7 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	674	953	636	1590	1160	1670	5050	16500	7320	1660	533
2	203	627	749	402	1470	899	1450	6460	11700	4700	2160	500
3	194	442	618	419	1480	743	1280	6150	12200	3440	2740	487
4	252	239	532	370	2580	657	1150	5100	9500	5140	3610	504
5	280	250	478	350	4130	663	1040	8950	8200	44200	2250	491
6	376	899	508	335	2840	726	944	8380	14600	61300	1950	454
7	359	1000	9770	289	2580	869	883	5350	19900	65700	1580	458
8	284	562	12000	251	1890	769	829	33500	25000	52400	1540	506
9	252	350	5000	248	1620	678	1180	60900	32300	41300	1430	471
10	218	265	3100	255	1630	771	4040	64900	25200	21100	1120	529
11	200	218	2200	266	1440	814	16500	62400	12200	9240	1630	454
12	192	194	1450	304	928	1250	35400	40200	7550	5670	2950	426
13	181	196	1210	366	897	2060	21800	31900	5680	4250	2330	442
14	167	208	1110	462	905	2330	9140	56900	4390	3500	1550	442
15	163	264	1050	529	925	2300	5400	71200	3650	2970	1220	414
16	179	252	1020	564	900	1990	3960	57800	3150	2520	3710	398
17	183	226	960	573	823	1670	4640	55500	2750	2980	7940	378
18	190	201	910	582	790	1460	6210	75300	2440	4650	5540	358
19	193	186	866	542	835	1280	9260	76200	2190	3610	2800	350
20	173	446	803	487	859	1170	9460	64600	2350	2530	2120	350
21	164	5460	817	479	864	1090	5960	38300	2250	2220	1530	350
22	161	4090	887	422	880	1100	4700	17900	2070	2260	1100	374
23	154	2250	908	471	890	1260	4470	18300	1920	2200	911	438
24	144	1460	931	500	882	1080	3440	52900	1820	3800	794	414
25	140	1100	1040	512	892	925	2770	72700	2130	4110	709	376
26	136	875	1070	450	899	940	2450	78300	5880	3110	643	358
27	131	746	944	512	1040	2720	5160	66500	11700	2310	596	343
28	135	1110	818	1430	1370	5950	15000	61400	17900	2300	553	335
29	126	1450	748	3190	---	4160	12000	63300	19800	2000	527	339
30	135	1170	713	2640	---	2600	6650	50900	12200	1650	504	339
31	231	---	676	1840	---	2080	---	29800	---	1430	487	---
MEAN	197	914	1769	667	1387	1554	6628	43450	9971	12130	1941	420
MAX	376	5460	12000	3190	4130	5950	35400	78300	32300	65700	7940	533
MIN	126	186	478	248	790	657	829	5050	1820	1430	487	335
IN.	.03	.15	.30	.11	.21	.26	1.08	7.28	1.62	2.03	.33	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995, BY WATER YEAR (WY)

	MEAN	2669	2961	2085	1995	3637	6050	6902	6170	7281	4845	1791	3214
MAX	20630	29030	15440	14750	19250	34220	26680	43450	67270	87900	9194	28090	
(WY)	1974	1932	1983	1932	1962	1979	1973	1995	1947	1993	1987	1926	
MIN	37.1	40.3	53.0	32.1	57.0	79.5	67.3	130	176	52.8	41.0	62.5	
(WY)	1957	1957	1956	1940	1939	1957	1956	1956	1988	1934	1936	1955	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1925 - 1995
ANNUAL MEAN	2066	6821	4127
HIGHEST ANNUAL MEAN			17390
LOWEST ANNUAL MEAN			367
HIGHEST DAILY MEAN	35000	78300	166000
LOWEST DAILY MEAN	126	126	10
ANNUAL SEVEN-DAY MINIMUM	135	135	12
INSTANTANEOUS PEAK FLOW	---	80400	180000
INSTANTANEOUS PEAK STAGE	---	38.80	42.52
INSTANTANEOUS LOW FLOW	---	126	10
ANNUAL RUNOFF (INCHES)	4.08	13.46	8.15
10 PERCENT EXCEEDS	4110	18100	10300
50 PERCENT EXCEEDS	959	1150	975
90 PERCENT EXCEEDS	199	252	125

06902000 GRAND RIVER NEAR SUMNER, MO--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1962 to June 1963, August 1967 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1974 to September 1981.

WATER TEMPERATURE: January 1974 to September 1981.

REMARKS.--Ambient water-quality monitoring network station since October 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)	
OCT													
26...	0830	136	467	8.00	10.5	18	8.8	78	53	64	220	67	
NOV													
30...	0900	1200	308	8.00	3.0	130	12.8	94	K70000	9730	130	40	
DEC													
14...	0915	1140	351	8.30	0.5	36	13.3	90	1370	3200	140	45	
JAN													
05...	0900	350	517	7.90	0.5	3.3	12.6	85	51	26	240	74	
FEB													
08...	0830	2060	301	7.90	0.5	130	12.9	87	513	K4900	130	40	
MAR													
30...	0730	2720	305	7.90	6.0	340	12.0	96	13900	17000	130	39	
APR													
18...	0900	5660	284	8.00	13.0	470	8.8	91	13500	23300	120	37	
MAY													
24...	0930	51600	155	7.07	14.5	1200	7.8	76	32000	60000	68	21	
JUN													
14...	1000	4450	340	7.97	22.0	52	7.1	81	K530	K67	160	50	
JUL													
12...	0830	6100	245	7.50	27.5	220	5.6	71	K870	970	100	32	
AUG													
02...	0850	2030	365	7.80	26.0	240	6.0	74	K7500	5100	160	49	
SEP													
05...	0945	496	490	8.10	25.5	16	7.8	95	K27	K10	210	66	
DATE		MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT													
26...	13	15	3.0	183	184	0	225	35	12	0.20	8.1	280	
NOV													
30...	7.4	8.5	5.2	108	109	0	133	27	8.4	0.20	9.2	184	
DEC													
14...	7.8	9.2	5.3	128	122	0	149	34	10	0.10	8.7	214	
JAN													
05...	14	16	4.3	227	220	0	268	52	13	0.20	12	336	
FEB													
08...	7.2	9.0	4.5	100	101	0	123	27	12	0.20	9.8	202	
MAR													
30...	7.1	11	4.3	102	98	0	120	32	9.7	0.30	9.5	208	
APR													
18...	6.7	7.7	4.0	104	103	0	126	28	7.8	0.10	9.3	180	
MAY													
24...	3.7	2.4	2.5	61	62	0	75	7.6	1.7	0.20	6.7	96	
JUN													
14...	8.5	7.1	3.7	151	152	0	185	23	4.7	0.20	11	210	
JUL													
12...	5.6	4.7	4.0	95	92	0	113	15	3.6	0.20	9.9	152	
AUG													
02...	9.0	9.0	4.0	145	152	0	175	24	6.7	0.30	10	209	
SEP													
05...	12	12	3.9	228	228	0	278	34	9.4	0.20	12	293	

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06902000 GRAND RIVER NEAR SUMNER, MO--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS-SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI- MENT, SUS- PENDED (MG/L) (80154)
OCT 26...	265	0.38	103	<0.010	<0.02	0.070	<0.010	0.3	0.130	0.040	<0.010	--
NOV 30...	174	0.25	596	<0.010	0.38	--	0.010	1.6	0.150	0.040	0.020	--
DEC 14...	197	0.29	659	0.010	0.79	--	0.090	1.0	0.200	0.020	0.010	--
JAN 05...	322	0.46	318	0.010	0.75	--	0.080	0.6	0.030	<0.020	<0.010	25
FEB 08...	179	0.27	1120	0.010	1.10	--	0.120	1.6	0.270	0.020	0.010	--
MAR 30...	178	0.28	1530	0.010	1.20	--	0.010	2.3	0.130	<0.020	0.010	1450
APR 18...	169	0.24	2750	0.030	1.30	--	0.110	6.6	0.410	0.080	0.060	--
MAY 24...	84	0.13	13400	0.010	0.34	--	0.040	2.5	0.400	<0.020	0.020	--
JUN 14...	202	0.29	2520	0.010	0.55	--	<0.010	0.9	0.200	0.070	0.050	571
JUL 12...	134	0.21	2500	0.020	0.59	--	0.060	2.2	0.140	0.040	0.070	--
AUG 02...	200	0.28	1150	0.010	0.15	--	0.070	1.6	0.390	0.030	0.050	--
SEP 05...	287	0.40	392	<0.010	<0.05	--	<0.015	1.2	0.130	0.030	0.030	84

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	ALUM- INUM, DIS-SOLVED (µG/L AS AL) (01106)	BARIUM, DIS-SOLVED (µG/L AS BA) (01005)	COBALT, DIS-SOLVED (µG/L AS CO) (01035)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LITHIUM DIS-SOLVED (µG/L AS LI) (01130)	MANGA- NESE, DIS-SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS-SOLVED (µG/L AS MO) (01060)	NICKEL, DIS-SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS-SOLVED (µG/L AS SE) (01145)	SILVER, DIS-SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS-SOLVED (µG/L AS SR) (01080)
OCT 26...	--	20	94	3	7	11	770	<10	2	<1	<1.0	270
NOV 30...	--	220	72	<3	210	7	27	20	3	1	<1.0	140
DEC 14...	--	40	82	<3	47	9	110	<10	3	<1	<1.0	150
JAN 05...	48	<10	120	<3	9	4	660	<10	3	<1	<1.0	270
FEB 08...	--	3000	86	<3	340	<4	82	<10	5	<1	<1.0	150
MAR 30...	99	300	90	<3	360	6	20	<10	4	<1	<1.0	140
APR 18...	--	110	95	<3	200	<4	21	<10	3	1	<1.0	130
MAY 24...	--	<10	57	<3	13	8	8	<10	3	<1	<1.0	73
JUN 14...	94	<10	120	<3	12	7	35	<10	2	<1	<1.0	180
JUL 12...	--	<10	94	<3	11	<4	18	10	3	<1	<1.0	120
AUG 02...	--	<10	120	<3	5	<4	260	<10	2	<1	<1.0	180
SEP 05...	94	<10	110	<3	15	16	110	<10	3	<1	<1.0	250

06902000 GRAND RIVER NEAR SUMNER, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	FONOFOS WATER DISS REC (µG/L) (04095)
OCT 26...	<6	--	--	--	--	--	--	--	--	--	--	--
NOV 30...	<6	0.009	<0.008	E0.03	0.05	0.06	0.23	0.02	<0.01	<0.02	<0.008	<0.008
DEC 14...	<6	--	--	--	--	--	--	--	--	--	--	--
JAN 05...	<6	--	--	--	--	--	--	--	--	--	--	--
FEB 08...	<6	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	<6	0.01	<0.008	E0.04	0.07	0.04	0.17	0.14	0.02	E0.004	<0.008	<0.008
APR 18...	<6	--	--	--	--	--	--	--	--	--	--	--
MAY 24...	<6	0.01	E0.006	E0.06	0.35	0.61	1.3	0.02	<0.01	<0.02	<0.008	<0.008
JUN 14...	<6	0.08	<0.02	E0.08	0.59	0.54	1.4	0.02	0.01	<0.007	<0.002	<0.003
JUL 12...	<6	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	<6	0.01	E0.01	E0.07	0.20	0.17	0.55	0.004	0.02	<0.007	<0.002	<0.003
SEP 05...	<6	--	--	--	--	--	--	--	--	--	--	--

DATE	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P,P' DDE DISSOLV (µG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	D1- AZINON, DIS- SOLVED (µG/L) (39572)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U (µG/L) (82665)
NOV 30...	<0.007	<0.01	<0.005	<0.01	<0.008	<0.01	<0.02	<0.008	<0.006	<0.01	<0.01	<0.03
MAR 30...	<0.007	<0.01	<0.005	<0.01	<0.008	<0.01	<0.02	<0.008	<0.006	<0.01	<0.01	<0.03
APR 18...	<0.007	<0.01	<0.005	<0.01	<0.008	<0.01	<0.02	<0.008	<0.006	<0.01	<0.01	<0.03
MAY 24...	<0.007	<0.01	0.02	<0.01	<0.008	<0.01	<0.02	<0.008	<0.006	<0.01	<0.01	<0.03
JUN 14...	<0.002	<0.006	<0.004	<0.004	<0.001	<0.005	<0.004	<0.002	<0.003	<0.004	<0.002	<0.007
AUG 02...	<0.002	<0.006	<0.004	<0.004	<0.001	<0.005	<0.004	0.01	<0.003	<0.004	<0.002	<0.007

E--Laboratory estimated value.

06902000 GRAND RIVER NEAR SUMNER, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
NOV 30...	<0.04	<0.03	<0.005	<0.009	E0.005	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
MAR 30...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
APR 18...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
MAY 24...	<0.04	<0.03	0.02	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
JUN 14...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
AUG 02...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
NOV 30...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAR 30...	<0.06	<0.008	<0.02	E0.008	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
APR 18...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAY 24...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 14...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005
AUG 02...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06904050 CHARITON RIVER AT LIVONIA, MO

LOCATION.--Lat 40°29'00", long 92°41'10", in NW 1/4 SE 1/4 NW 1/4 sec.34, T.66 N., R.16 W., Schuyler County, Hydrologic Unit 10280201, on left bank 10 ft downstream from bridge on U.S. Highway 136, 1.0 mi upstream from Shoal Creek, 0.5 mi east of Livonia and at mile 90.9.

DRAINAGE AREA.--864 mi².

PERIOD OF RECORD.--May 1974 to current year. Occasional discharge measurements were made from October 1962 to May 1974.

REVISED RECORDS.--WDR MO-83-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 770.00 ft above sea level.

REMARKS.--Estimated daily discharges: Dec. 6-9, 20, 21, 24-27, Jan. 1-26, Feb. 5-6, 10-12, Mar. 1-7, and Aug. 23-25. Records fair except for the month of May and estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. Considerable regulation by Rathbun Lake (station 06903880), 51.0 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	45	79	35	191	110	135	699	964	1020	1260	540
2	33	50	64	40	331	90	124	775	1200	1280	1250	1180
3	32	44	59	43	930	79	113	759	1180	1290	1240	1190
4	41	42	58	38	816	90	101	767	1070	2620	1240	1210
5	40	47	57	40	450	93	90	858	1050	4630	1240	1220
6	37	62	71	42	350	74	80	994	1100	3170	1230	1220
7	33	57	289	44	389	72	77	989	1040	1800	1240	887
8	32	50	353	41	313	75	79	4080	1490	1810	1230	384
9	32	51	216	43	237	63	490	3010	2040	1680	1180	131
10	32	48	151	45	180	80	1660	2720	1050	1010	1260	69
11	31	48	135	50	160	101	3050	1750	879	1120	1280	51
12	30	48	109	54	150	160	2850	1030	952	1400	1280	54
13	31	45	118	64	147	192	2170	3810	992	1370	1270	47
14	31	47	93	64	146	192	952	3120	1090	1350	1260	37
15	31	49	72	54	141	165	458	1930	1330	1330	1260	30
16	33	51	69	60	142	137	321	1090	1330	1310	1330	26
17	35	47	93	70	141	117	254	3060	1320	1300	1300	89
18	37	44	110	73	141	101	541	2610	1310	1300	1260	166
19	37	42	130	65	189	82	692	2220	1310	1280	1240	170
20	29	58	129	63	321	84	435	1210	1300	1280	1240	257
21	26	108	112	62	312	93	304	897	1300	1270	1280	790
22	33	219	105	60	248	125	250	979	1290	1290	1270	813
23	33	124	105	60	185	105	204	3040	1280	1300	1260	815
24	34	84	90	58	171	88	171	5610	1290	1280	1260	814
25	33	62	73	62	134	74	149	5380	1360	1310	1260	676
26	34	52	76	80	118	312	197	4250	1530	1320	1260	474
27	34	61	70	107	123	1030	1070	3530	1360	1280	1250	393
28	33	129	68	249	123	603	903	3150	1080	1250	1250	140
29	32	173	66	307	---	307	708	2590	993	1230	1240	84
30	33	107	63	266	---	202	673	1710	951	1250	1220	85
31	41	---	57	205	---	159	---	788	---	1260	1090	---
MEAN	33.5	69.8	108	82.1	260	170	643	2239	1214	1529	1249	468
MAX	41	219	353	307	930	1030	3050	5610	2040	4630	1330	1220
MIN	26	42	57	35	118	63	77	699	879	1010	1090	26
IN.	.04	.09	.14	.11	.31	.23	.83	2.99	1.57	2.04	1.67	.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1995, BY WATER YEAR (WY)

	MEAN	483	538	641	362	543	873	873	873	828	1092	659	570
MAX	1764	1714	2005	1797	1956	2046	1898	2239	1839	3923	2045	2029	
(WY)	1994	1994	1983	1993	1983	1993	1983	1995	1980	1993	1993	1993	
MIN	27.2	26.2	19.9	13.6	23.0	58.6	31.1	52.1	33.6	23.6	32.3	29.6	
(WY)	1977	1990	1977	1977	1989	1989	1989	1980	1988	1988	1988	1976	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1974 - 1995	
ANNUAL MEAN	282		676		696	
HIGHEST ANNUAL MEAN					1838	
LOWEST ANNUAL MEAN					69.3	
HIGHEST DAILY MEAN	3410		5610		8960	
LOWEST DAILY MEAN	26		26		13	
ANNUAL SEVEN-DAY MINIMUM	31		31		13	
INSTANTANEOUS PEAK FLOW	---		5870		9200	
INSTANTANEOUS PEAK STAGE	---		22.56		28.33	
INSTANTANEOUS LOW FLOW	---		21		13	
ANNUAL RUNOFF (INCHES)	4.43		10.63		10.95	
10 PERCENT EXCEEDS	906		1340		1650	
50 PERCENT EXCEEDS	100		197		406	
90 PERCENT EXCEEDS	35		41		33	

06904500 CHARITON RIVER AT NOVINGER, MO

LOCATION.--Lat 40°14'05", long 92°41'14", on south line of SE 1/4 NE 1/4 sec.28, T.63 N., R.16 W., Adair County, Hydrologic Unit 10280202, on downstream side of center pier of bridge on State Highway 6, 0.6 mi east of Novinger, 1.0 mi downstream from Rye Creek, 2.0 mi upstream from Spring Creek and at mile 73.1.

DRAINAGE AREA.--1,370 mi², approximately.

PERIOD OF RECORD.--October 1930 to September 1952. October 1954 to current year. Prior to February 1931 monthly discharge only, published in WSP 1310.

REVISED RECORDS.--WSP 896: 1939. WSP 1116: 1932(M).

GAGE.--Water-stage recorder. Datum of gage is 737.65 ft above sea level. Prior to Dec. 20, 1939, nonrecording gage at bridge over old channel, 500 ft east, at the same datum; Dec. 20, 1939, to Sept. 30, 1952 and Oct. 1, 1954, to Aug. 1, 1956, water-stage recorder, supplemented by nonrecording gage, at same site and datum; Aug. 3, 1956, to May 16, 1957, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 12-14, Jan. 1-26, Feb. 5-8, 11-16, Mar. 1-4, 8, and 9. Records poor. Several observations of water temperature and specific conductance were made during the year. Some regulation by Rathbun Lake (Iowa station 06903880). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,900 ft³/s, June 13, 1947; gage height, 28.50 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.6 ft, June 1917.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	51	129	38	538	160	229	756	1450	879	1270	712
2	35	50	102	42	775	125	211	813	1770	1150	1280	1030
3	36	54	85	48	1950	110	193	780	2160	1220	1280	1240
4	39	53	79	50	1920	110	168	853	1530	5640	1280	1230
5	43	66	76	50	900	144	148	920	1430	15200	1270	1260
6	45	78	203	51	540	149	135	1030	1530	7940	1260	1250
7	41	82	1220	51	390	133	125	1040	1340	3710	1260	1260
8	38	66	531	45	450	90	127	14800	2640	4330	1260	675
9	38	65	332	47	356	95	390	7810	3510	3550	1220	336
10	38	65	228	54	267	125	2230	4930	1890	1950	1370	173
11	37	57	130	62	180	167	6630	3320	1210	1490	1460	129
12	36	58	140	69	170	242	5980	1740	1110	1800	1350	121
13	35	58	129	73	160	289	3450	11400	1130	1730	1310	124
14	35	61	131	80	160	294	1790	12100	1100	1640	1300	103
15	37	61	120	75	150	260	948	4120	1370	1580	1580	87
16	39	59	111	80	150	224	683	2500	1390	1540	3500	80
17	38	63	131	90	160	188	569	9240	1350	1490	1970	74
18	39	57	133	94	170	168	1650	6720	1320	1450	1550	156
19	39	50	144	84	192	146	1330	5090	1300	1420	1450	185
20	39	89	166	80	324	138	789	2760	1270	1390	1400	184
21	32	239	162	75	349	144	550	1690	1250	1360	1390	604
22	31	294	140	73	317	157	454	1470	1240	1390	1390	819
23	38	215	131	80	298	153	381	6640	1220	1420	1370	807
24	37	140	121	85	232	135	327	16800	1210	1370	1360	804
25	35	107	108	88	240	117	286	14400	1230	1410	1350	782
26	35	86	92	100	236	495	414	8260	1530	1460	1340	512
27	36	115	78	129	284	1540	3800	8460	1540	1350	1320	455
28	35	173	81	433	238	968	1720	8490	1160	1300	1300	249
29	36	252	79	778	---	479	994	4880	970	1270	1290	146
30	37	173	74	609	---	326	835	3270	916	1270	1280	234
31	52	---	66	516	---	263	---	1760	---	1280	1250	---
MEAN	37.6	101	176	136	432	262	1251	5447	1469	2451	1428	527
MAX	52	294	1220	778	1950	1540	6630	16800	3510	15200	3500	1260
MIN	31	50	66	38	150	90	125	756	916	879	1220	74
IN.	.03	.08	.15	.11	.33	.22	1.02	4.58	1.20	2.06	1.20	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1995^a, BY WATER YEAR (WY)

	MEAN	843	810	957	592	950	1578	1586	1686	1231	1637	831	860
MAX	3352	2403	3318	2686	2487	4105	5302	5447	3462	9877	2770	3232	3232
(WY)	1974	1993	1983	1993	1983	1993	1973	1995	1990	1993	1993	1993	1993
MIN	25.6	30.2	20.0	13.6	28.0	87.1	35.8	68.4	46.1	32.2	28.1	39.3	39.3
(WY)	1972	1990	1977	1977	1989	1989	1989	1980	1988	1970	1971	1988	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1970 - 1995 ^a
ANNUAL MEAN	441	1152	1132
HIGHEST ANNUAL MEAN			3299
LOWEST ANNUAL MEAN			114
HIGHEST DAILY MEAN	6070	May 7	20300
LOWEST DAILY MEAN	30	Sep 20	11
ANNUAL SEVEN-DAY MINIMUM	33	Sep 15	12
INSTANTANEOUS PEAK FLOW	---		18100
INSTANTANEOUS PEAK STAGE	---		22.70
INSTANTANEOUS LOW FLOW	---		11
ANNUAL RUNOFF (INCHES)	4.37		11.22
10 PERCENT EXCEEDS	1200		1960
50 PERCENT EXCEEDS	173		324
90 PERCENT EXCEEDS	38		50

^aPost-regulation period.

^bMay have been less during period of ice Jan. 1-26.

06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO

LOCATION.--Lat 39°32'25", long 92°47'23", in NW 1/4 SW 1/4 sec.26, T.55 N., R.17 W., Chariton County, Hydrologic Unit 10280202, on right bank on downstream side of road at bridge on State Highway 129, 3.2 mi northwest of Prairie Hill, 13.5 mi upstream from Puzzle Creek and at mile 19.6.

DRAINAGE AREA.--1,870 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Prior to Oct. 1, 1953, published as "near Keytesville". Prior to May 1929, monthly discharge only, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 632.05 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1953, nonrecording gage at site 8.2 mi downstream at datum 13.68 ft lower; Oct. 1, 1953, to July 2, 1958, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 4-24, Feb. 8-15, and Apr. 18. Water-discharge records fair except for estimated daily discharges, which are poor. Some regulation by Rathbun Lake (Iowa station 06903880). National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	161	393	76	837	397	395	1020	1730	1050	1590	1310
2	47	133	320	63	1010	273	338	911	1770	996	3150	881
3	49	93	258	69	1590	202	297	930	2260	1230	4440	937
4	48	89	222	65	3290	176	264	1110	2120	4260	2760	1290
5	52	138	202	60	1980	201	234	1380	1880	17800	1740	1280
6	53	267	284	66	1040	266	209	1210	2760	18500	1520	1310
7	56	266	3890	70	771	364	193	1320	1880	7840	1560	1340
8	74	159	2350	70	670	311	178	21200	7460	3770	1440	1310
9	73	132	1020	70	650	234	1080	21600	7280	5840	1400	806
10	58	106	737	74	660	226	2090	9780	3990	3240	8440	511
11	51	95	495	76	560	257	6910	5840	1990	1990	5050	317
12	49	93	331	84	470	276	10400	3490	1340	1540	2210	225
13	52	89	234	90	470	354	5940	5080	1190	1860	1670	190
14	47	100	213	96	400	430	3470	19700	1180	1780	1490	168
15	45	103	221	96	380	441	1810	10700	1140	1700	1460	152
16	52	95	226	100	373	403	1060	4850	1370	1640	6250	129
17	53	86	241	120	337	351	919	22600	1390	1590	4890	109
18	53	84	240	135	312	302	2110	19400	1360	1550	2290	96
19	57	83	252	125	286	269	3090	12000	1340	1530	1710	92
20	52	410	209	120	266	256	1650	5690	1320	1520	1540	172
21	52	1260	263	120	336	233	1060	2730	1310	1460	1460	206
22	68	721	258	120	466	225	761	1730	1290	1490	1440	359
23	55	512	233	135	429	220	611	1810	1280	1630	1440	837
24	49	450	193	140	399	232	519	24600	1270	1590	1410	839
25	53	339	172	145	343	209	440	27000	1340	1530	1390	850
26	54	272	153	155	316	209	395	17500	1640	1570	1390	839
27	54	463	145	174	381	589	2750	13700	2490	1590	1380	650
28	55	903	122	1330	503	1470	4150	19400	2650	1460	1370	542
29	54	502	107	1220	---	1050	1840	9860	1520	1400	1350	469
30	62	432	98	897	---	673	1210	5140	1170	1370	1330	350
31	124	---	101	692	---	499	---	3070	---	1360	1340	---
MEAN	56.7	288	458	221	697	374	1879	9560	2090	3151	2319	619
MAX	124	1260	3890	1330	3290	1470	10400	27000	7460	18500	8440	1340
MIN	45	83	98	60	266	176	178	911	1140	996	1330	92
IN.	.03	.17	.28	.14	.39	.23	1.12	5.90	1.25	1.94	1.43	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1995, BY WATER YEAR (WY)

	MEAN	746	844	760	727	1107	1915	2041	1972	2000	1459	724	757
MAX	5695	6574	5449	4516	4102	5724	8981	9560	14830	15980	4856	5203	
(WY)	1974	1962	1983	1946	1937	1973	1973	1995	1947	1993	1932	1993	
MIN	9.59	9.77	13.0	12.9	18.1	37.3	45.9	84.1	25.8	13.4	7.97	13.6	
(WY)	1957	1957	1957	1957	1957	1957	1956	1956	1934	1934	1936	1953	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1929 - 1995

ANNUAL MEAN	684	1825	1252	
HIGHEST ANNUAL MEAN			4320	1993
LOWEST ANNUAL MEAN			166	1989
HIGHEST DAILY MEAN	8900	Apr 29	27000	May 25
LOWEST DAILY MEAN	33	Sep 29	45	Oct 15
ANNUAL SEVEN-DAY MINIMUM	43	Sep 24	50	Oct 11
INSTANTANEOUS PEAK FLOW	---		31600	May 24
INSTANTANEOUS PEAK STAGE	---		21.96	May 24
INSTANTANEOUS LOW FLOW	---		42	Oct 16
ANNUAL RUNOFF (INCHES)	4.97		13.25	
10 PERCENT EXCEEDS	1490		3930	
50 PERCENT EXCEEDS	280		542	
90 PERCENT EXCEEDS	54		72	

06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1962 to June 1963, August 1967 to July 1975, January 1978 to September 1986, November 1992 to current year.

REMARKS.--National stream-quality accounting network station from January 1978 to September 1986 and an ambient water-quality monitoring network station from November 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT 26...	1130	54	9.5	308	8.03	12.6	109	--	50	78	130
NOV 30...	1230	432	4.5	381	8.06	12.6	96	<10	1600	2900	100
DEC 14...	1200	213	0.5	396	8.36	13.3	92	--	280	1000	126
JAN 05...	1230	V60	0.5	625	7.83	15.1	103	<10	10	33	217
FEB 08...	1215	670	0.5	383	7.92	15.7	106	--	92	1100	101
MAR 30...	1300	665	8.5	388	7.86	13.3	114	--	7200	4100	103
APR 18...	1300	2340	14.0	245	7.24	7.9	80	--	21000	43000	70
MAY 24...	1420	29300	14.0	125	7.20	8.0	77	--	17000	61000	57
JUN 14...	1430	1190	23.5	337	8.06	8.1	96	<10	K500	K350	86
JUL 12...	1315	1540	28.0	285	7.87	7.2	92	--	1400	440	101
AUG 02...	1325	2910	24.5	185	7.67	7.4	89	20	10000	23000	67
SEP 05...	1330	1290	27.0	245	8.06	7.4	93	--	120	K130	96

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (mg/L AS CAO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
26...	159	0	<0.020	<0.010	0.040	1.1	0.050	<0.010	--	--
NOV										
30...	121	0	0.320	0.020	0.120	0.97	0.350	0.110	160	46
DEC										
14...	140	3	0.480	0.010	0.110	0.84	0.120	0.040	--	--
JAN										
05...	264	0	0.320	<0.010	0.120	0.58	0.030	<0.010	300	89
FEB										
08...	124	0	<0.020	<0.010	0.010	<0.20	<0.020	<0.010	--	--
MAR										
30...	125	0	1.10	0.020	0.040	2.1	0.100	0.060	--	--
APR										
18...	86	0	1.10	0.050	0.130	3.0	0.420	0.140	--	--
MAY										
24...	66	0	0.190	0.060	0.090	2.0	0.250	0.220	--	--
JUN										
14...	103	0	0.450	0.010	0.020	0.99	0.260	0.080	150	44
JUL										
12...	121	0	0.520	0.010	0.030	2.0	0.070	0.090	--	--
AUG										
02...	79	0	0.530	0.020	0.080	2.8	0.300	0.130	73	22
SEP										
05...	118	0	0.270	0.010	0.020	1.3	0.060	0.070	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).
V--Estimated value due to ice.

CHARITON RIVER BASIN

06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
NOV 30...	10	9.2	3.8	73	7.1	0.20	226	120	1900	50
JAN 05...	20	20	4.6	120	13	0.20	422	12	250	<20
JUN 14...	8.9	8.3	3.9	43	5.2	0.20	212	42	3500	20
AUG 02...	4.5	4.1	4.4	15	3.8	0.20	108	510	6700	20

DATE	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)
NOV 30...	<1	<1.0	3	58	4	<1	24	<0.10	10	8
JAN 05...	<1	<1.0	2	10	20	<1	380	<0.10	10	9
JUN 14...	<1	<1.0	3	6	5	<1	9	<0.10	20	12
AUG 02...	1	1.0	3	37	10	1	110	0.10	30	7

06906190 LONG BRANCH RESERVOIR NEAR MACON, MO

LOCATION.--Lat 39°45'05", long 92°30'20", NW 1/4 sec.10, T.57 N., R.14 W., Macon County, Hydrologic Unit 10280203, in Administration Building at left end of dam on East Fork Little Chariton River, 2.0 mi west of junction U.S. Highways 63 and 36 in Macon and 2.0 mi below confluence with Long Branch.

DRAINAGE AREA.--109 mi².

PERIOD OF RECORD.--September 1978 to current year. Contents published 1982 to current year. Records collected at same site since 1978 are available from U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by a rolled earthfill type dam. Closure began on Sept. 3, 1976. Storage began on Aug. 2, 1978. An uncontrolled limited service type spillway, 50 ft wide, is located at the right abutment. Capacity of surcharge pool 98,590 ac-ft (elevation 801.1 ft to 820.7 ft); of flood control pool 30,600 ac-ft (elevation 791.1 ft to 801.0 ft); and of multipurpose pool 34,640 ac-ft (elevation 751.1 ft to 791.0 ft). Lake is used for flood control, water supply, water-quality control and recreation.

COOPERATION.--Records furnished by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 61,800 ac-ft, May 28, 1995, elevation, 800.25 ft; minimum, 14,300 ac-ft, Dec. 5, 1980, elevation, 780.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 61,800 ac-ft, May 28, elevation, 800.25 ft; minimum, 26,400 ac-ft, Oct. 29, elevation, 787.53 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	787.98	787.67	788.85	789.69	789.80	790.79	790.12	792.83	798.70	793.45	792.35	791.98
2	787.98	787.64	788.84	789.63	790.01	790.71	790.12	792.73	798.32	793.29	792.37	791.88
3	787.96	787.62	788.83	789.61	790.38	790.69	790.09	792.63	797.97	793.14	793.07	791.80
4	787.95	787.62	788.84	789.55	790.86	790.65	790.09	792.60	797.63	793.07	793.13	791.74
5	787.92	787.66	788.85	789.50	791.11	790.64	790.07	792.60	797.31	793.65	793.08	791.60
6	787.90	787.72	788.83	789.48	791.13	790.63	790.04	792.60	797.13	795.76	792.97	791.59
7	787.85	787.76	789.24	789.44	791.15	790.67	790.05	792.54	796.91	796.01	792.97	791.63
8	787.88	787.77	790.11	789.38	791.16	790.69	790.07	793.34	796.82	795.80	793.03	791.58
9	787.86	787.82	790.25	789.36	791.12	790.64	790.21	795.47	797.23	795.63	792.96	791.50
10	787.85	787.79	790.27	789.32	791.19	790.60	790.88	795.96	797.13	795.40	793.15	791.44
11	787.82	787.78	790.27	789.30	791.08	790.57	791.62	795.85	796.89	795.19	793.27	791.38
12	787.80	787.77	790.24	789.26	791.03	790.54	792.86	795.67	796.61	794.98	793.15	791.33
13	787.78	787.72	790.23	789.23	791.00	790.53	793.19	795.47	796.34	794.76	793.03	791.30
14	787.75	787.80	790.20	789.27	790.96	790.52	793.15	795.44	796.10	794.55	792.89	791.27
15	787.74	787.76	790.15	789.27	790.92	790.51	793.05	795.35	795.90	794.34	792.78	791.21
16	787.73	787.76	790.13	789.27	790.91	790.48	792.98	795.19	795.62	794.17	792.88	791.15
17	787.71	787.74	790.13	789.25	790.86	790.45	792.90	796.97	795.39	793.94	793.56	791.12
18	787.68	787.71	790.14	789.25	790.83	790.42	792.95	799.46	795.17	793.73	793.55	791.04
19	787.69	787.70	790.11	789.29	790.81	790.38	793.17	799.93	794.95	793.55	793.42	790.98
20	787.68	787.72	790.07	789.25	790.77	790.38	793.12	799.56	794.74	793.43	793.26	791.02
21	787.67	788.00	790.06	789.22	790.76	790.34	793.05	799.07	794.52	793.28	793.11	791.00
22	787.69	788.28	790.04	789.16	790.75	790.31	792.95	798.50	794.30	793.13	792.97	790.97
23	787.67	788.32	790.01	789.13	790.73	790.28	792.84	798.14	794.10	793.17	792.85	790.94
24	787.66	788.30	789.99	789.09	790.71	790.25	792.73	798.43	793.90	793.09	792.71	790.92
25	787.64	788.32	789.94	789.06	790.68	790.18	792.64	799.93	793.71	792.97	792.60	790.88
26	787.62	788.32	789.90	789.02	790.66	790.18	792.56	799.99	793.68	792.87	792.48	790.86
27	787.60	788.35	789.86	789.01	790.70	790.17	792.68	799.50	793.64	792.74	792.37	790.83
28	787.55	788.72	789.83	789.12	790.74	790.20	793.01	800.25	793.69	792.62	792.28	790.81
29	787.53	788.83	789.80	789.39	---	790.20	792.98	800.22	793.75	792.52	792.18	790.78
30	787.53	788.86	789.76	789.65	---	790.17	792.91	799.72	793.62	792.41	792.11	790.86
31	787.63	---	789.73	789.73	---	790.13	---	799.20	---	792.31	792.02	---
MAX	787.98	788.86	790.27	789.73	791.19	790.79	793.19	800.25	798.70	796.01	793.56	791.98
MIN	787.53	787.62	788.83	789.01	789.80	790.13	790.04	792.54	793.62	792.31	792.02	790.78
(-)	26600	29200	31200	31200	33600	32100	39000	58100	40900	37500	36700	33800
(=)	-800	+2600	+2000	0	+2400	-1500	+6900	+19100	-17200	-3400	-800	-2900

CAL YR 1994...-2600

WTR YR 1995...+6400

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

06906200 EAST FORK LITTLE CHARITON RIVER NEAR MACON, MO

LOCATION.--Lat 39°44'59", long 92°31'03", NW 1/4 NW 1/4 NW 1/4 sec.18, T.57 N., R.14 W., Macon County, Hydrologic Unit 10280203, on right bank 250 ft downstream from Long Branch Lake and 3.0 mi west of Macon.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--September 1971 to current year. Partial-record station May 1970 to August 1971.

GAGE.--Water-stage recorder. Datum of gage is 741.43 ft above sea level. Sept. 8, 1971, to Aug. 1, 1985, water-stage recorder at site 400 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. Complete regulation by Long Branch Reservoir (station 06906190), 250 ft upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,700 ft³/s, Apr. 21, 1973; gage height, 20.60 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	8.2	8.4	47	49	47	23	174	938	227	145	76
2	7.6	8.2	8.4	46	48	47	23	165	748	215	179	68
3	7.5	8.3	8.5	46	48	46	23	159	610	203	208	64
4	7.8	8.4	8.9	46	48	46	23	156	514	203	208	60
5	7.8	8.4	9.1	46	48	46	23	158	456	262	202	58
6	7.8	8.2	9.1	46	49	46	23	156	415	323	194	55
7	7.8	8.0	9.1	46	50	46	23	164	388	328	194	56
8	7.8	8.2	31	46	48	46	23	241	415	323	197	53
9	7.8	8.2	47	47	48	46	23	310	439	319	192	52
10	7.8	8.2	47	47	48	46	24	319	419	313	221	50
11	7.8	8.2	47	47	48	47	52	317	388	308	219	49
12	7.8	8.2	47	47	48	47	145	312	360	301	209	49
13	7.8	8.2	48	47	48	47	187	307	338	296	197	48
14	7.8	8.2	47	47	48	47	199	306	322	289	187	47
15	8.0	8.2	47	47	48	47	192	300	315	283	176	46
16	7.9	8.2	47	47	47	47	184	387	309	275	197	45
17	7.9	8.1	47	47	48	47	179	762	303	266	240	45
18	8.0	8.2	47	47	48	47	191	1380	297	257	236	44
19	8.0	8.2	47	47	47	47	202	1260	291	247	226	24
20	8.0	8.3	47	47	47	47	197	1220	284	238	214	13
21	8.1	8.4	47	47	47	47	190	1110	278	227	199	13
22	8.2	8.4	47	47	47	48	182	880	270	219	189	12
23	8.2	8.4	46	47	47	48	174	710	261	220	178	12
24	6.9	8.4	46	47	47	48	166	1120	252	212	166	12
25	8.0	8.4	46	47	47	48	157	1270	245	202	153	12
26	8.0	8.4	46	47	47	49	153	1230	243	193	144	13
27	8.0	8.7	46	48	47	49	176	1320	238	182	132	13
28	8.0	8.7	47	49	47	49	190	1300	243	173	119	13
29	8.0	8.5	47	48	---	49	187	1250	246	161	102	13
30	8.0	8.4	47	48	---	49	182	1210	238	148	89	13
31	8.3	---	47	48	---	33	---	1140	---	136	82	---
MEAN	7.87	8.30	37.7	47.0	47.7	46.7	124	680	369	244	180	37.6
MAX	8.3	8.7	48	49	50	49	202	1380	938	328	240	76
MIN	6.9	8.0	8.4	46	47	33	23	156	238	136	82	12
IN.	.08	.08	.39	.48	.44	.48	1.23	7.01	3.67	2.51	1.86	.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1995^a, BY WATER YEAR (WY)

	MEAN	58.6	71.9	97.4	55.8	57.7	118	128	169	125	131	80.2	61.3
MAX	406	354	304	223	148	502	475	680	369	743	401	341	
(WY)	1987	1986	1993	1993	1985	1985	1983	1995	1995	1993	1981	1981	
MIN	.16	.27	.000	.000	.000	7.30	7.27	7.21	5.45	5.52	2.48	7.06	
(WY)	1979	1979	1979	1979	1979	1989	1989	1988	1988	1989	1980	1984	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1979 - 1995 ^a
ANNUAL MEAN	53.4	154	96.4
HIGHEST ANNUAL MEAN			242
LOWEST ANNUAL MEAN			7.13
HIGHEST DAILY MEAN	344	May 1	1380
LOWEST DAILY MEAN	.00	Jul 18, 19	.00
ANNUAL SEVEN-DAY MINIMUM	5.0	Jul 18	.00
INSTANTANEOUS PEAK FLOW	---	1550	1550
INSTANTANEOUS PEAK STAGE	---	14.77	14.77
INSTANTANEOUS LOW FLOW	---	.42	.00
ANNUAL RUNOFF (INCHES)	6.48	18.62	11.69
10 PERCENT EXCEEDS	114	316	287
50 PERCENT EXCEEDS	50	48	48
90 PERCENT EXCEEDS	7.8	8.2	5.7

^aPost-regulation period.

06906300 EAST FORK LITTLE CHARITON RIVER NEAR HUNTSVILLE, MO

LOCATION.--Lat 39°27'18", long 92°34'07", in NW 1/4 NW 1/4 NW 1/4 sec.26, T.54 N., R.15 W., Randolph County, Hydrologic Unit 10280203, on right bank downstream end of bridge on State Highway C, 1.0 mi downstream from Sugar Creek and 1.5 mi northwest of Huntsville.

DRAINAGE AREA.--220 mi².

PERIOD OF RECORD.--October 1962 to current year. Occasional low-flow measurements, water years 1942-43, 1945-46.

GAGE.--Water-stage recorder. Datum of gage is 655.86 ft above sea level (levels by Missouri State Highways and Transportation Commission). From July 18, 1972 to Sept. 23, 1974, at datum 0.63 ft higher.

REMARKS.--Estimated daily discharges: Jan. 2-11, 19-27, Feb. 6-13, and 16-18. Records good except for estimated daily discharges, which are poor. Some regulation by Long Branch Reservoir (station 06906190), 34 mi upstream since 1978. Low flow affected by operation of pumps 7 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft³/s, Apr. 21, 1973; gage height, 20.78 ft, former datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	71	23	65	275	101	53	238	917	278	460	124
2	8.0	24	21	65	305	90	34	224	938	251	2130	114
3	7.9	14	19	64	604	84	32	195	813	232	2450	107
4	7.9	19	18	61	403	84	30	383	664	256	872	103
5	7.9	61	18	60	193	113	27	306	608	298	470	100
6	8.8	92	104	62	130	118	27	224	560	412	418	96
7	8.0	33	606	60	115	169	27	318	503	390	344	110
8	8.7	17	135	61	105	127	29	2790	1700	378	261	99
9	11	15	107	63	100	105	74	960	868	364	238	94
10	10	14	100	66	95	99	266	508	601	349	868	88
11	9.0	12	85	69	90	96	1400	433	518	337	409	85
12	9.0	12	84	76	75	93	523	385	466	326	285	85
13	8.8	12	80	87	80	92	288	373	426	312	241	86
14	8.7	15	74	734	85	87	251	346	399	302	214	83
15	8.8	16	74	226	83	85	221	333	381	290	198	78
16	9.5	13	103	136	82	82	201	361	368	277	265	75
17	9.7	12	115	115	80	80	215	2240	355	269	261	74
18	9.8	12	90	95	79	79	1340	3380	345	255	264	72
19	9.3	13	82	90	78	79	408	2710	333	243	250	74
20	8.9	415	80	82	80	80	296	1200	323	242	233	49
21	10	364	80	78	80	79	244	1000	313	225	214	23
22	28	82	76	76	79	77	215	894	308	217	200	21
23	18	44	72	72	80	76	200	843	295	214	184	20
24	11	33	71	72	77	75	185	3940	286	205	173	19
25	9.9	26	70	74	82	74	170	3840	359	194	163	19
26	8.2	23	69	76	91	79	165	1710	793	201	153	17
27	9.2	43	69	100	149	96	371	1970	746	183	143	17
28	9.5	90	69	1330	124	84	268	1890	976	171	139	17
29	9.1	38	67	538	---	79	231	1190	395	160	134	19
30	9.2	26	67	257	---	78	216	1050	318	152	127	44
31	74	---	66	191	---	76	---	988	---	144	122	---
MEAN	12.1	55.4	90.1	168	139	90.8	267	1201	562	262	416	67.1
MAX	74	415	606	1330	604	169	1400	3940	1700	412	2450	124
MIN	7.9	12	18	60	75	74	27	195	286	144	122	17
IN.	.06	.28	.47	.88	.66	.48	1.35	6.29	2.85	1.37	2.18	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1995^a, BY WATER YEAR (WY)

MEAN	115	151	176	106	174	248	252	309	210	254	124	136
MAX	1019	756	666	362	732	945	935	1201	562	1569	514	774
(WY)	1987	1986	1983	1993	1985	1985	1983	1995	1995	1993	1993	1993
MIN	6.44	2.66	4.95	6.48	7.59	10.6	10.2	12.1	2.56	5.34	3.64	2.70
(WY)	1981	1981	1989	1989	1989	1989	1989	1988	1988	1989	1980	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1979 - 1995 ^a
ANNUAL MEAN	132	279	188
HIGHEST ANNUAL MEAN			468
LOWEST ANNUAL MEAN			17.3
HIGHEST DAILY MEAN	3220	Feb 20	7760
LOWEST DAILY MEAN	5.1	Jul 21	.00
ANNUAL SEVEN-DAY MINIMUM	8.0	Sep 29	.40
INSTANTANEOUS PEAK FLOW	---	5170	10400
INSTANTANEOUS PEAK STAGE	---	17.20	19.30
INSTANTANEOUS LOW FLOW	---	7.3	.00
ANNUAL RUNOFF (INCHES)	8.12	17.23	11.62
10 PERCENT EXCEEDS	238	605	397
50 PERCENT EXCEEDS	75	100	71
90 PERCENT EXCEEDS	10	14	7.1

^aPost-regulation period.

06906800 LAMINE RIVER NEAR OTTERVILLE, MO

LOCATION.--Lat 38°42'09", long 92°58'42", in NE 1/4 NE 1/4 NW 1/4 sec.2, T.45 N., R.19 W., Cooper County, Hydrologic Unit 10300103, on left bank at the left downstream end of Highway A, 7.2 mi downstream from confluence of Flat Creek and Richland Creek, 2.2 mi upstream from Otter Creek and 1.1 mi east of Otterville.

DRAINAGE AREA.--543 mi².

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 652.87 ft above sea level.

REMARKS.--Estimated daily discharges: May 18 to June 7. Records good except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	361	177	74	569	291	95	3930	490	149	394	18
2	11	290	154	71	505	226	91	3340	510	117	701	17
3	9.7	152	140	68	1360	198	87	973	360	97	939	20
4	9.3	337	128	62	1510	190	82	898	290	411	3570	18
5	10	923	117	57	662	235	77	1110	350	828	15200	17
6	20	1260	111	57	436	512	74	626	210	472	1410	15
7	15	536	155	57	349	734	73	502	170	281	2380	15
8	27	244	283	56	274	816	70	13700	170	143	512	15
9	96	350	228	55	241	506	67	6000	633	103	241	14
10	87	1090	180	56	233	428	82	885	1730	77	156	14
11	52	336	150	62	213	380	1210	572	933	63	115	14
12	34	201	131	75	179	321	1230	453	357	54	89	13
13	28	149	119	1350	159	280	576	368	219	47	72	14
14	25	122	111	9420	151	247	346	298	164	41	59	13
15	21	108	106	1930	154	219	255	227	132	37	51	13
16	21	104	108	797	155	198	207	1580	112	33	47	12
17	24	106	131	525	144	183	270	22200	96	31	43	11
18	23	91	156	374	137	170	6010	47000	84	28	39	11
19	27	82	148	318	135	161	1420	18500	73	26	37	11
20	26	10900	127	292	134	151	1220	3500	64	26	35	13
21	22	19900	117	261	125	137	779	1100	61	46	32	13
22	21	1710	112	228	123	128	467	590	55	93	30	12
23	19	654	107	215	122	122	380	450	51	703	27	11
24	16	425	102	190	114	116	587	3800	63	391	26	11
25	14	315	97	182	109	107	419	2700	383	126	25	10
26	13	253	93	170	115	107	316	1400	6790	88	24	10
27	12	408	89	311	286	122	411	2600	6900	67	23	9.6
28	12	505	86	5830	372	134	449	3900	663	42	22	9.3
29	12	292	82	2110	---	117	4850	800	328	34	22	9.9
30	12	215	79	974	---	107	4710	600	207	28	21	11
31	32	---	76	628	---	98	---	560	---	25	20	---
MEAN	24.7	1414	129	866	324	250	897	4683	755	152	850	13.2
MAX	96	19900	283	9420	1510	816	6010	47000	6900	828	15200	20
MIN	9.3	82	76	55	109	98	67	227	51	25	20	9.3
IN.	.05	2.91	.27	1.84	.62	.53	1.84	9.94	1.55	.32	1.81	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	MEAN	49.0	817	471	332	357	537	1135	1516	355	640	202	490
MAX	277	3347	1564	922	756	1580	3809	4718	961	4077	850	3689	
(WY)	1994	1993	1993	1993	1988	1990	1994	1990	1993	1993	1995	1993	
MIN	7.73	20.3	11.1	45.4	124	122	279	38.8	10.5	11.0	3.40	6.00	
(WY)	1993	1990	1990	1990	1991	1991	1991	1992	1988	1988	1991	1988	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1987 - 1995

ANNUAL MEAN	595	869	576	
HIGHEST ANNUAL MEAN			1464	1993
LOWEST ANNUAL MEAN			155	1992
HIGHEST DAILY MEAN	31800	Apr 11	47000	May 18 1995
LOWEST DAILY MEAN	5.5	Aug 28	9.3	Oct 4, Sep 28 1991
ANNUAL SEVEN-DAY MINIMUM	6.3	Aug 22	10	Sep 23 1991
INSTANTANEOUS PEAK FLOW	---		84900	May 18 1995
INSTANTANEOUS PEAK STAGE	---		29.43	May 18 1995
INSTANTANEOUS LOW FLOW	---		8.8	Oct 5, Sep 29 1991
ANNUAL RUNOFF (INCHES)	14.89		21.72	14.40
10 PERCENT EXCEEDS	709		1240	759
50 PERCENT EXCEEDS	87		137	76
90 PERCENT EXCEEDS	11		15	8.8

06908000 BLACKWATER RIVER AT BLUE LICK, MO

LOCATION.--Lat 38°59'32", long 93°11'48", in SW 1/4 SW 1/4 SW 1/4 sec.26, T.49 N., R.21 W., Saline County, Hydrologic Unit 10300104, on left bank at upstream side of bridge on northbound lane of U.S. Highway 65, 1.2 mi downstream from Finney Creek, 1.8 mi southeast of Blue Lick and at mile 30.3.

DRAINAGE AREA.--1,120 mi².

PERIOD OF RECORD.--June 1922 to September 1933, May 1938 to current year.

REVISED RECORDS.--WSP 1006: 1929. WDR MO-83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 593.79 ft above sea level. Prior to July 25, 1925, nonrecording gage at site 75 ft downstream at datum 0.10 ft lower; July 25 to Sept. 30, 1933, and May 23, 1938 to Dec. 3, 1956, nonrecording gage at site 25 ft downstream at same datum. Dec. 4, 1956, to Oct. 1, 1986, at site 0.5 mi upstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 9-13, Jan. 3-5, 21-25, Feb. 3-8, 10-12, and 15-17. Records poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	1740	358	152	1200	687	112	5150	4740	1880	238	17
2	15	855	258	140	845	378	108	5680	2050	665	1480	19
3	11	235	205	110	1490	267	106	4830	2350	421	4270	19
4	9.5	115	179	100	2150	240	103	3660	1440	2170	9180	17
5	7.6	415	154	98	1070	538	102	3390	1480	5770	9450	17
6	16	2370	154	98	655	1220	101	1990	2360	6780	6580	17
7	18	1950	2630	75	451	1250	128	1830	1260	6140	2170	17
8	19	498	3730	81	342	1090	97	9060	1710	1700	1140	16
9	15	201	2050	88	267	640	95	10200	4050	623	494	16
10	25	126	724	86	250	501	97	11900	5460	326	282	15
11	45	94	429	89	210	478	194	11900	6160	226	201	14
12	32	78	283	107	190	402	1060	10100	5560	178	158	14
13	25	67	229	174	177	325	867	5920	2080	147	130	14
14	20	67	197	659	164	293	392	1410	869	125	121	14
15	15	106	189	627	155	259	268	694	495	108	116	14
16	13	167	241	451	150	234	239	634	332	95	146	13
17	11	108	997	301	150	208	3100	9070	255	84	226	12
18	9.9	78	767	244	154	195	6980	14500	212	93	305	12
19	9.9	61	439	184	161	192	6850	19100	185	117	178	13
20	10	2640	326	156	161	182	6880	20300	161	148	115	13
21	9.5	6310	280	140	157	171	6190	17000	143	472	85	14
22	10	6220	315	130	151	154	1910	12800	127	981	65	15
23	11	6510	483	120	139	138	688	9670	116	3580	51	14
24	9.4	5880	365	115	127	134	653	7910	129	3720	43	14
25	7.9	1370	276	112	119	125	617	7170	213	859	33	14
26	6.3	474	232	130	126	131	449	6980	4570	395	29	14
27	5.9	1030	211	306	1030	170	1210	5830	7290	186	27	15
28	5.2	3460	200	3940	1230	189	1380	6540	8530	122	24	14
29	7.1	2410	193	4850	---	146	1720	7590	9190	91	22	13
30	6.8	736	173	4750	---	123	3860	9160	7540	70	19	15
31	481	---	159	2430	---	118	---	8820	---	56	18	---
MEAN	29.3	1546	562	679	481	361	1552	8090	2702	1236	1206	14.8
MAX	481	6510	3730	4850	2150	1250	6980	20300	9190	6780	9450	19
MIN	5.2	61	154	75	119	118	95	634	116	56	18	12
IN.	.03	1.54	.58	.70	.45	.37	1.55	8.33	2.69	1.27	1.24	.01

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	550	621	460	466	689	1042	1438	1222	1222	824	294	597
MAX	9500	6100	3359	2326	5206	4706	8473	8090	4416	8855	1668	5979	
(WY)	1987	1929	1983	1974	1985	1973	1973	1995	1969	1951	1951	1961	
MIN	.13	.32	1.66	1.55	5.54	9.50	29.6	9.93	18.4	1.78	1.61	.13	
(WY)	1957	1957	1957	1957	1954	1956	1977	1932	1956	1933	1930	1956	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	1173		1548		788	
HIGHEST ANNUAL MEAN					2540	1993
LOWEST ANNUAL MEAN					95.8	1957
HIGHEST DAILY MEAN	25000	Apr 14	20300	May 20	48400	Nov 18 1928
LOWEST DAILY MEAN	5.2	Oct 28	5.2	Oct 28	.00	Jul 17-31 1980
ANNUAL SEVEN-DAY MINIMUM	6.9	Oct 24	6.9	Oct 24	.00	Jul 17 1980
INSTANTANEOUS PEAK FLOW	---		20700	May 20	54000	Nov 18 1928
INSTANTANEOUS PEAK STAGE	---		35.36	May 20	41.53	Oct 3 1986
INSTANTANEOUS LOW FLOW	---		4.4	Oct 28	.00	Jul 17-31 1980
ANNUAL RUNOFF (INCHES)	14.22		18.76		9.56	
10 PERCENT EXCEEDS	3300		6010		2330	
50 PERCENT EXCEEDS	121		208		88	
90 PERCENT EXCEEDS	15		15		4.2	

06909000 MISSOURI RIVER AT BOONVILLE, MO

LOCATION.--Lat 38°58'42", long 92°45'13", sec.35, T.49 N., R.17 W., Cooper County, Hydrologic Unit 10300102, on downstream side of second pier from right abutment of Missouri-Kansas-Texas Railroad Company Bridge at Boonville and at mile 196.6.

DRAINAGE AREA.--501,700 mi², approximately.

PERIOD OF RECORD.--October 1925 to current year. Gage-height records collected at same site 1893-99 are contained in reports of Missouri River Commission; since 1900 in reports of National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 565.42 ft above sea level. Prior to Oct. 1, 1928, nonrecording gage at site 0.4 mi downstream at datum 3.14 ft lower; Oct. 1, 1928 to May 9, 1931, nonrecording gage at site 50 ft upstream from present site at present datum; May 10, 1931 to Apr. 12, 1934, water-stage recorder at site 0.4 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Some regulation from many upstream reservoirs. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 21, 1844, reached a stage of 32.7 ft, discharge, about 710,000 ft³/s, computed by U.S. Army Corps of Engineers. Flood of June 6, 1903, reached a stage of 30.5 ft, discharge, about 612,000 ft³/s, computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45300	48500	47000	38800	44800	47300	69500	123000	275000	160000	80600	73400
2	44500	49200	45100	39200	43300	45200	70500	117000	252000	144000	92400	74400
3	44100	47600	43500	38500	45400	44200	69500	112000	237000	131000	102000	74700
4	43800	45900	41200	37400	51100	43600	63500	106000	225000	124000	131000	74500
5	45400	46000	40100	36300	49800	42900	61900	109000	213000	141000	141000	74800
6	50600	49500	39900	35000	48000	41900	60300	111000	205000	169000	127000	74900
7	49400	52000	44000	33200	48700	41600	58500	116000	202000	182000	110000	74500
8	46500	50500	63300	32100	50500	42500	57400	152000	205000	189000	87500	73600
9	46200	47700	63200	31600	48200	42000	56200	209000	216000	182000	78800	73100
10	46500	46700	53000	31100	45800	40800	56600	248000	222000	174000	77700	72200
11	46700	46900	46600	30400	44000	39000	64100	256000	226000	163000	86900	72000
12	46200	45100	41200	30200	42200	36400	85200	249000	222000	144000	85800	71900
13	45500	45600	37800	30900	40600	35500	95400	232000	208000	122000	84700	72000
14	44800	45500	36900	36200	39500	36300	92200	212000	192000	109000	81100	72200
15	44200	45500	37000	43300	39700	39000	85300	218000	181000	102000	78500	72200
16	44100	45600	37300	37700	40000	60000	76800	234000	173000	96400	80000	72300
17	43800	45700	37600	35100	37700	73500	75600	270000	168000	92700	96500	71600
18	43400	45600	38000	36500	35100	64800	89200	314000	162000	90500	106000	70500
19	43800	45000	38300	37900	34400	59800	96300	354000	158000	90800	104000	70000
20	45200	48800	38900	37600	35800	57400	93100	353000	155000	89800	97100	70200
21	47100	66800	38600	37200	36800	56200	93100	333000	151000	97200	92000	73200
22	47600	80600	38500	38000	36400	55000	89200	300000	149000	107000	89000	78100
23	47000	69900	39100	38200	36800	53300	89000	269000	147000	106000	86700	80500
24	46800	58200	39200	37600	38800	53300	93600	265000	146000	108000	84000	80300
25	46800	54800	38800	36500	43100	54200	90700	272000	145000	101000	81600	80300
26	47100	52000	39000	35800	48000	55800	87200	278000	155000	96100	80000	79000
27	47000	50800	39100	35400	50000	57000	89400	291000	168000	92200	81300	77700
28	46700	52700	38400	43900	49300	59600	100000	296000	177000	89200	83600	76100
29	46500	53300	37800	58500	---	68400	120000	296000	176000	86000	80100	75000
30	46300	50400	37800	58000	---	72500	130000	293000	171000	83100	76300	74100
31	47200	---	38200	50900	---	70500	---	289000	---	81300	73500	---
MEAN	46000	51110	41750	38030	42990	51270	81980	234700	189400	120800	91510	74310
MAX	50600	80600	63300	58500	51100	73500	130000	354000	275000	189000	141000	80500
MIN	43400	45000	36900	30200	34400	35500	56200	106000	145000	81300	73500	70000
IN.	.11	.11	.10	.09	.09	.12	.18	.54	.42	.28	.21	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995^a, BY WATER YEAR (WY)

	MEAN	64230	58800	43030	34830	47480	70970	88980	89500	90470	83870	63080	66860
MAX	187800	108800	106200	90150	106300	183900	212700	234700	201100	375200	213600	165900	
(WY)	1974	1962	1983	1973	1982	1973	1973	1995	1984	1993	1993	1993	
MIN	36280	24600	13840	14770	17620	19460	39060	40770	41990	41560	36570	36730	
(WY)	1965	1991	1964	1963	1964	1964	1989	1989	1988	1988	1991	1991	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1958 - 1995 ^a
ANNUAL MEAN	62420	88910	66080
HIGHEST ANNUAL MEAN			140500
LOWEST ANNUAL MEAN			39070
HIGHEST DAILY MEAN	201000	Apr 30	721000
LOWEST DAILY MEAN	36800	Jan 22	5000
ANNUAL SEVEN-DAY MINIMUM	37300	Jan 17	5730
INSTANTANEOUS PEAK FLOW	---	May 19	755000
INSTANTANEOUS PEAK STAGE	---	May 19	37.10
INSTANTANEOUS LOW FLOW	---	Jan 12	5500
ANNUAL RUNOFF (INCHES)	1.69	2.41	1.79
10 PERCENT EXCEEDS	87800	196000	121000
50 PERCENT EXCEEDS	52700	64800	53500
90 PERCENT EXCEEDS	40100	37800	27600

^aPost-regulation period.

06917630 EAST FORK DRYWOOD CREEK AT PRAIRIE STATE PARK
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°32'28", long 94°33'28", NE 1/4 NW 1/4 sec. 16, T. 32 N., R. 33 W., Barton County, Hydrologic Unit 11070207. Sampling site is located on the northeast edge of the park.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station. Several periods of no flow during the year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DEMAND, (PERCENT SATURATION) (MG/L) (00301)	OXYGEN, DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 29...	0900	3.00	4.5	113	6.70	11.9	90	--	K2	48	14
JAN 09...	1400	0.930	0.5	149	7.20	13.8	95	<10	K8	K16	22
MAR 07...	1200	3.00	2.0	108	6.80	13.9	102	--	K23	144	19
APR 14...	0900	0.90	15.5	131	6.90	8.80	89	--	620	85	28
MAY 16...	1230	0.949	24.0	105	7.37	9.00	108	--	196	66	26
JUN 27...	1300	2.00	23.5	120	6.68	7.60	86	12	192	204	21

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (00665)	PHOSPHORUS TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (mg/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)
NOV 29...	17	0	<0.020	0.010	<0.020	0.30	0.020	0.020	--	--	--
JAN 09...	25	0	<0.020	<0.010	0.010	0.22	0.050	0.010	49	12	4.7
MAR 07...	22	0	<0.020	0.010	0.020	0.39	0.040	0.020	--	--	--
APR 14...	32	0	<0.020	0.010	0.030	0.63	0.030	0.030	--	--	--
MAY 16...	32	0	<0.020	<0.010	0.020	0.30	<0.020	0.010	--	--	--
JUN 27...	23	0	<0.020	0.010	0.010	0.69	0.050	0.020	43	12	3.2

DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS AL) (01106)	CADMIUM, TOTAL RECOVERABLE (µg/L AS CD) (01027)	CADMIUM, DIS-SOLVED (µg/L AS CD) (01025)
JAN 09...	8.3	1.5	45	2.8	<0.10	92	14	320	<20	<1	<1.0
JUN 27...	4.9	4.0	25	7.6	<0.10	88	14	180	110	1	<1.0

K--Results are based on colony count outside the acceptable range (non-ideal colony count).

06917630 East Drywood Creek at Prairie State Park--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)
JAN 09...	2	42	1	<1	14	<0.10	6	4	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	<0.007	<0.002	<0.005
JUN 27...	9	280	2	1	7	<0.10	10	8	--	--	--
DATE	PRO- MOTON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	FONOFOS WATER, DISS, REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P, P' DDE DISSOLV (µG/L) (34653)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	METRI- BUZIN WATER, DISSOLV (µG/L) (82630)
MAY 16...	<0.02	E0.003	<0.004	<0.003	<0.002	<0.006	0.004	<0.004	<0.001	0.01	<0.004
DATE	FONOFOS WATER, DISS, REC (µG/L) (04095)	CHLOR- PYRIFOS WATER, DISS, SOLVED (µG/L) (38933)	MALA- THION, WATER, DISS, SOLVED (µG/L) (39532)	PARA- THION, WATER, DISS, SOLVED (µG/L) (39542)	DI- AZINON, WATER, DISS, SOLVED (µG/L) (39572)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
MAY 16...	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	<0.003	<0.004	<0.002	<0.007
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
MAY 16...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
MAY 16...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO

LOCATION.--Lat 38°03'20", long 94°08'44", in SE 1/4 SW 1/4 NW 1/4 sec.20, T.38 N., R.29 W., Bates County, Hydrologic Unit 10290105, on downstream side of left pier of bridge on State Highway M, 0.8 mi downstream from Shaw Branch, 0.2 mi upstream from McKenzie Creek and 3.0 mi northwest of Schell City.

DRAINAGE AREA.--5,410 mi², by U.S. Army Corps of Engineers.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1981 to current year.

GAGE.--Water-stage recorder and slope gage 1.7 miles downstream. Datum of gage is 700.00 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 16-31, Nov. 20-29, Jan. 4-11, July 28 to Aug. 16, and Sept. 10-30. Water-discharge records poor. Periods of low flow could not be calculated using fall computations. Stage-discharge relation affected by backwater from Truman Reservoir. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 133,000 ft³/s, Oct. 5, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 57,200 ft³/s, June 13. gage height 39.17, June 14; minimum daily discharge, 140 ft³/s, Sept. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	550	5320	1110	5520	1800	729	8540	28000	18900	1200	142
2	210	2260	4080	962	3700	1270	635	10900	22600	18500	1580	151
3	205	1760	3150	859	2920	1060	590	11900	21000	17800	3170	156
4	205	1150	2350	773	2540	910	506	11400	19000	16800	6310	173
5	200	3060	1850	757	2330	880	411	10800	18200	16500	9330	187
6	200	7270	1540	827	2020	920	344	10100	20800	16100	8720	170
7	200	8420	2290	811	1790	1180	340	8260	20600	14400	8420	155
8	232	6980	5400	798	1610	1300	360	17700	21100	13600	7920	146
9	243	4110	5080	778	1440	1460	352	23900	27500	12700	5060	140
10	300	2760	3940	732	1300	1470	364	28900	32600	12000	2190	164
11	335	3200	3010	716	1210	1360	437	31800	35800	11400	1120	170
12	311	2050	2400	726	1120	1310	923	29500	49700	10600	684	168
13	251	1240	2010	744	1010	1190	1640	23200	57200	8550	496	164
14	227	939	1850	1290	924	1040	1490	18700	55500	7180	476	160
15	230	846	1830	1940	866	951	1100	14600	47300	6350	349	156
16	250	946	1830	2130	861	897	894	10200	39900	4680	319	152
17	270	1120	2130	1520	878	1310	1160	17700	27500	3860	296	150
18	260	1060	2430	1180	865	1390	8000	37500	20800	3450	288	150
19	250	853	2340	1090	833	1530	10100	41000	20000	3340	323	148
20	230	9780	2030	1040	809	1510	9650	48000	19600	3240	385	148
21	215	21300	1810	1010	775	1450	7900	54800	18400	3230	413	146
22	205	24800	1690	1170	732	1390	5730	56100	17100	3380	341	200
23	195	28900	1590	1210	691	1330	3500	53900	16400	3470	284	190
24	185	27900	1530	1100	652	1310	3200	49200	16300	3070	253	175
25	175	24400	1460	969	611	1270	3880	37900	19100	2410	224	165
26	170	20200	1400	999	627	1260	3100	32100	21900	2060	231	160
27	164	17100	1340	2060	1570	1140	2320	32700	21800	1930	232	156
28	162	15200	1290	6970	2860	944	1960	34600	20900	1710	208	154
29	141	11600	1250	10800	---	844	2590	35700	19900	1550	198	152
30	183	7530	1200	10400	---	801	4380	38200	19400	1330	190	150
31	222	---	1160	8340	---	784	---	36300	---	1180	192	---
MEAN	221	8643	2341	2123	1538	1202	2619	28260	26530	7912	1981	160
MAX	335	28900	5400	10800	5520	1800	10100	56100	57200	18900	9330	200
MIN	141	550	1160	716	611	784	340	8260	16300	1180	190	140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

	1992	1993	1994	1995
MEAN	1573	8083	5315	2869
MAX	5740	18430	15700	8103
(WY)	1994	1993	1993	1993
MIN	33.1	73.2	733	312
(WY)	1992	1992	1992	1992

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1979 to September 1993, November 1994 to current year, formerly published as 06918080 Osage River near Schell City, Missouri.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1979 to September 1981.

WATER TEMPERATURE: March 1979 to September 1981.

SUSPENDED-SEDIMENT: February 1991 to current year.

REMARKS.--Sediment records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,950 microsiemens, Oct. 11, 1980; minimum daily, 114 microsiemens, June 12, 1981.

WATER TEMPERATURE: Maximum daily, 32.0° C, July 11, 1980; minimum daily, 0.0° C, Feb. 5, 1980, and Feb. 11-14, 1981.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,760 mg/L, Apr. 17, 1992; minimum daily mean, 8 mg/L, Aug. 4 and 5, 1993, and Jan. 10-12, 1995.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 105,000 tons, Apr. 11, 1994; minimum daily, 1.7 tons, Nov. 7-13, 1991.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,700 mg/L, Aug. 4; minimum daily mean, 8 mg/L, Jan. 10-12.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 88,600 tons, May 9; minimum daily, 15 tons, Jan. 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT IT FIELD MG/L AS CaCO ₃ (00419)
NOV										
29...	1300	13900	7.5	243	7.30	9.70	79	<10	K5	83
MAR										
07...	1630	1430	3.5	544	8.00	13.8	105	--	124	152
APR										
13...	1330	1860	14.0	663	7.40	9.10	88	--	K1620	136
25...	1100	--	--	--	--	--	--	--	--	--
MAY										
16...	1600	13900	20.5	328	7.70	6.50	73	--	220	110
JUN										
27...	1630	45400	21.5	276	7.50	6.10	69	10	740	84
AUG										
22...	1310	822	29.0	397	7.82	5.00	66	<10	46	142

DATE	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO ₃ (00450)	CAR- BONATE WATER WH IT FIELD MG/L AS CO ₃ (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (mg/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
NOV											
29...	102	0	0.430	0.040	0.120	1.3	0.280	0.220	110	34	5.1
MAR											
07...	182	0	0.370	0.010	0.060	0.78	0.110	0.030	--	--	--
APR											
13...	166	0	0.230	0.010	0.120	0.94	0.170	0.030	--	--	--
MAY											
16...	134	0	0.510	0.030	0.090	0.94	0.130	0.070	--	--	--
JUN											
27...	103	0	0.640	0.010	0.090	0.97	0.140	0.090	110	35	6.2
AUG											
22...	173	0	0.670	0.010	0.030	0.78	0.150	0.090	170	51	9.2

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)
NOV 29...	5.7	3.4	32	6.7	0.10	152	270	5600	20	<1	<1.0
JUN 27...	7.1	3.9	35	6.5	0.20	172	140	2800	160	1	1.0
AUG 22...	14	3.9	55	8.5	0.30	244	82	1800	<20	<1	<1.0
DATE	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)	PROP- CHLOR, WATER, DISS, REC (MG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (MG/L) (04028)	SI- MAZINE, WATER, DISS, REC (MG/L) (04035)
NOV 29...	3	37	10	<1	22	1.2	50	<4	<0.02	<0.008	<0.008
MAR 07...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
APR 25...	--	--	--	--	--	--	--	--	E0.006	<0.008	0.05
MAY 16...	--	--	--	--	--	--	--	--	<0.02	<0.008	0.03
JUN 27...	3	200	4	1	7	0.10	20	4	0.47	<0.002	0.02
AUG 22...	2	12	6	<1	83	<0.10	10	<4	<0.007	<0.002	0.02
DATE	PRO- METON, WATER, DISS, REC (MG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (MG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (MG/L) (04041)	FONOFOS WATER, DISS, REC (MG/L) (04095)	ALPHA BHC DIS- SOLVED (MG/L) (34253)	P,P' DDE DISSOLV (MG/L) (34653)	METO- LACHLOR WATER DISSOLV (MG/L) (39415)	LINDANE DIS- SOLVED (MG/L) (39341)	DI- ELDRIN DIS- SOLVED (MG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (MG/L) (39632)	METRI- BUZIN SENCOR WATER DISSOLV (MG/L) (82630)
NOV 29...	0.03	E0.005	<0.01	<0.008	<0.007	<0.01	<0.009	E0.008	<0.008	E0.005	<0.01
MAR 07...	E0.007	E0.02	<0.01	<0.008	<0.007	<0.01	0.02	<0.01	<0.008	0.13	<0.01
APR 25...	0.02	E0.06	0.02	<0.008	<0.007	<0.01	0.46	<0.01	<0.008	2.00	<0.01
MAY 16...	0.01	E0.10	0.02	<0.008	<0.007	<0.01	0.53	<0.01	<0.008	1.60	<0.01
JUN 27...	0.02	E0.13	0.02	<0.003	<0.002	<0.006	1.40	<0.004	<0.001	3.10	0.14
AUG 22...	0.06	E0.08	<0.004	<0.003	<0.002	<0.006	0.08	<0.004	<0.001	1.10	0.004

E--Laboratory estimated value.

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	FONOFOS WATER DISS REC (µG/L) (04095)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
NOV 29...	<0.008	<0.005	<0.01	<0.02	E0.004	<0.009	<0.00	<0.006	<0.01	<0.01	<0.03
MAR 07...	<0.008	<0.005	<0.01	<0.02	<0.008	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
APR 25...	<0.008	<0.09	<0.01	<0.02	<0.008	0.17	0.12	<0.006	<0.01	<0.01	<0.03
MAY 16...	<0.008	<0.005	<0.01	<0.02	<0.008	0.04	0.03	<0.006	<0.01	<0.01	<0.03
JUN 27...	<0.003	<0.004	<0.005	<0.004	<0.002	0.65	0.02	<0.003	<0.004	<0.002	<0.007
AUG 22...	<0.003	<0.004	<0.005	<0.004	E0.002	0.02	<0.002	<0.003	<0.004	<0.002	E0.007
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
NOV 29...	<0.04	<0.03	<0.005	<0.009	0.03	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
MAR 07...	<0.04	<0.03	<0.005	<0.009	E0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
APR 25...	<0.04	<0.03	<0.005	<0.009	0.02	<0.007	<0.01	<0.01	E0.04	<0.01	<0.009
MAY 16...	<0.04	<0.03	<0.005	<0.009	E0.006	<0.007	<0.01	<0.01	E0.04	<0.01	<0.009
JUN 27...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	E0.008	<0.01	<0.003
AUG 22...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
NOV 29...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAR 07...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
APR 25...	<0.06	<0.008	<0.02	<0.05	<0.008	E0.001	0.01	<0.01	<0.006	<0.04	<0.02
MAY 16...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 27...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005
AUG 22...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	220	133	79	550	206	344	5320	145	2080
2	210	107	61	2260	289	1790	4080	148	1630
3	205	119	66	1760	346	1600	3150	186	1570
4	205	127	70	1150	527	1620	2350	171	1080
5	200	111	60	3060	614	5420	1850	198	975
6	200	102	55	7270	649	12800	1540	255	1060
7	200	106	57	8420	494	11200	2290	308	2000
8	232	119	74	6980	296	5640	5400	408	5980
9	243	108	71	4110	210	2330	5080	298	4090
10	300	119	96	2760	209	1570	3940	212	2260
11	335	119	108	3200	269	2330	3010	153	1240
12	311	115	97	2050	201	1110	2400	150	968
13	251	112	76	1240	168	563	2010	135	730
14	227	114	70	939	132	333	1850	119	596
15	230	101	62	846	123	279	1830	103	511
16	250	98	66	946	127	325	1830	95	472
17	270	95	69	1120	129	391	2130	98	563
18	260	96	67	1060	125	357	2430	81	530
19	250	108	73	853	156	371	2340	85	534
20	230	101	63	9780	1470	38800	2030	79	432
21	215	115	67	21300	969	55700	1810	72	351
22	205	128	71	24800	649	43500	1690	66	303
23	195	122	64	28900	439	34300	1590	59	256
24	185	113	57	27900	217	16400	1530	60	248
25	175	98	47	24400	123	8080	1460	53	210
26	170	94	43	20200	120	6520	1400	49	183
27	164	100	44	17100	138	6370	1340	51	183
28	162	98	43	15200	195	7990	1290	40	138
29	141	99	38	11600	204	6400	1250	20	66
30	183	102	50	7530	196	3990	1200	21	68
31	222	113	68	---	---	---	1160	16	50
JANUARY			FEBRUARY			MARCH			
1	1110	16	48	5520	132	1960	1800	301	1480
2	962	17	45	3700	132	1300	1270	181	621
3	859	19	44	2920	107	846	1060	108	308
4	773	19	41	2540	86	586	910	93	229
5	757	14	29	2330	79	495	880	76	180
6	827	10	23	2020	74	404	920	65	161
7	811	9	19	1790	73	351	1180	80	258
8	798	9	18	1610	72	311	1300	79	276
9	778	10	21	1440	70	272	1460	74	293
10	732	8	16	1300	65	228	1470	79	315
11	716	8	15	1210	53	172	1360	77	284
12	726	8	16	1120	36	108	1310	90	316
13	744	11	22	1010	24	65	1190	103	328
14	1290	108	406	924	18	44	1040	118	332
15	1940	168	897	866	19	44	951	125	321
16	2130	210	1210	861	19	45	897	124	303
17	1520	102	421	878	21	49	1310	183	646
18	1180	71	228	865	22	51	1390	177	663
19	1090	51	150	833	23	52	1530	157	650
20	1040	47	130	809	25	55	1510	157	639
21	1010	50	137	775	30	62	1450	158	617
22	1170	57	181	732	36	71	1390	182	683
23	1210	66	213	691	41	76	1330	168	604
24	1100	66	195	652	49	86	1310	137	485
25	969	64	166	611	49	80	1270	131	448
26	999	64	173	627	51	87	1260	129	442
27	2060	231	1470	1570	350	2010	1140	119	363
28	6970	579	11700	2860	487	3780	944	125	317
29	10800	499	14600	---	---	---	844	105	239
30	10400	324	9100	---	---	---	801	98	212
31	8340	180	4070	---	---	---	784	95	201

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	729	98	193	8540	517	11600	28000	85	6390
2	635	104	178	10900	380	11300	22600	115	7030
3	590	105	167	11900	399	12800	21000	129	7340
4	506	90	123	11400	308	9510	19000	118	6040
5	411	80	83	10800	296	8600	18200	109	5420
6	344	81	75	10100	311	8470	20800	134	7540
7	340	93	83	8260	387	8690	20600	140	7750
8	360	106	97	17700	1510	76500	21100	140	7850
9	352	100	94	23900	1390	88600	27500	149	11200
10	364	108	94	28900	709	55000	32600	169	14800
11	437	132	141	31800	376	32200	35800	161	15600
12	923	147	374	29500	195	15700	49700	128	17000
13	1640	193	867	23200	150	9380	57200	102	15800
14	1490	174	696	18700	137	6890	55500	96	14400
15	1100	159	470	14600	119	4650	47300	118	15000
16	894	181	434	10200	141	3840	39900	119	12900
17	1160	315	986	17700	983	61200	27500	135	10000
18	8000	1350	29800	37500	617	61800	20800	150	8430
19	10100	1340	36500	41000	341	37800	20000	162	8740
20	9650	723	19000	48000	256	33000	19600	166	8810
21	7900	440	9350	54800	258	38000	18400	164	8140
22	5730	348	5380	56100	237	36000	17100	188	8650
23	3500	312	2930	53900	175	25500	16400	195	8570
24	3200	2820	2470	49200	129	17200	16300	215	9510
25	3880	330	3450	37900	107	10900	19100	264	13900
26	3100	205	1710	32100	125	10800	21900	338	20000
27	2320	179	1120	32700	150	13300	21800	272	16000
28	1960	149	788	34600	167	15600	20900	242	13600
29	2590	423	3120	35700	161	15400	19900	228	12200
30	4380	484	5860	38200	135	13800	19400	159	8330
31	---	---	---	36300	102	9990	---	---	---
JULY			AUGUST			SEPTEMBER			
1	18900	175	8990	1200	120	390	142	90	36
2	18500	174	8690	1580	218	930	151	107	44
3	17800	187	8980	3170	559	4790	156	129	55
4	16800	189	8590	6310	1700	28900	173	140	65
5	16500	186	8290	9330	863	21700	187	117	59
6	16100	223	9620	8720	573	13500	170	105	48
7	14400	268	10500	8420	414	9420	155	117	49
8	13600	229	8400	7920	316	6750	146	127	50
9	12700	212	7280	5060	195	2670	140	125	47
10	12000	217	7040	2190	151	891	164	118	52
11	11400	210	6470	1120	119	361	170	97	45
12	10600	202	5770	684	113	209	168	89	40
13	8550	180	4150	496	105	140	164	109	48
14	7180	177	3420	476	93	119	160	132	57
15	6350	189	3230	349	91	86	156	135	57
16	4680	150	1900	319	108	93	152	138	57
17	3860	113	1180	296	91	72	150	141	57
18	3450	117	1090	288	85	67	150	143	58
19	3340	119	1080	323	82	72	148	144	58
20	3240	124	1080	385	86	89	148	141	56
21	3230	123	1080	413	92	102	146	123	49
22	3380	150	1370	341	103	94	200	136	73
23	3470	160	1490	284	109	84	190	168	86
24	3070	146	1210	253	99	68	175	150	71
25	2410	127	824	224	93	58	165	131	58
26	2060	106	595	231	99	60	160	106	46
27	1930	92	479	232	106	66	156	90	38
28	1710	94	435	208	110	64	154	85	35
29	1550	92	385	198	106	60	152	82	34
30	1330	93	334	190	100	51	150	82	33
31	1180	103	329	192	91	35	---	---	---

06918440 SAC RIVER NEAR DADEVILLE, MO

LOCATION.--Lat 37°26'35", long 93°41'05", in NE 1/4 NE 1/4 NW 1/4 sec.9, T.31 N., R.25 W., Dade County, Hydrologic Unit 10290106, on downstream side of bridge on State Highway 245, 2 mi upstream from Cave Spring Branch and 2 mi south of Dadeville.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--June 1966 to current year. Annual maximum, water years 1965-66.

GAGE.--Water-stage recorder. Datum of gage is 869.78 ft above sea level (levels by Missouri State Highways and Transportation Commission). Prior to June 1966, crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: May 20 to July 18, July 20, 22-24, July 26 to Aug. 6, Aug. 24, and Sept. 30. Records fair, except for period May 20 to Aug. 6, which is poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	121	340	131	811	211	139	2230	750	270	96	43
2	37	110	322	124	715	201	134	2560	700	250	140	46
3	38	105	302	118	644	198	130	1560	680	230	145	38
4	39	1140	287	113	582	192	125	1410	750	255	135	35
5	33	2520	272	105	527	189	119	1170	730	245	125	33
6	35	2260	259	108	483	183	115	1010	800	230	115	32
7	47	1400	253	107	443	244	113	1070	750	215	105	31
8	225	948	242	103	407	357	109	1880	700	200	96	31
9	316	1730	233	102	383	394	107	1930	720	190	89	32
10	224	1600	220	100	368	386	110	1350	5000	180	83	32
11	174	1100	209	100	347	362	241	1090	3000	170	78	30
12	144	881	198	100	324	339	353	930	1500	160	74	30
13	126	747	191	359	306	328	331	808	1200	150	69	29
14	111	656	181	1180	295	310	289	704	900	140	67	28
15	102	580	177	1030	292	292	261	622	700	130	65	28
16	98	522	181	803	281	278	240	565	600	125	63	27
17	94	477	179	674	265	266	222	750	500	120	59	28
18	258	436	169	593	252	255	273	819	420	115	56	28
19	341	418	162	571	242	244	256	677	360	110	53	29
20	255	992	156	508	231	238	361	550	340	105	50	36
21	219	1120	156	468	221	226	515	450	320	100	49	35
22	409	851	159	436	212	217	456	420	310	100	48	33
23	280	711	161	415	205	207	463	380	300	98	46	31
24	242	627	161	393	194	195	678	900	350	105	44	29
25	213	564	156	385	188	184	638	1100	400	115	42	28
26	186	509	152	385	183	179	567	1000	450	110	42	27
27	167	479	148	506	218	177	518	1200	375	106	41	27
28	150	432	143	1040	222	166	452	2000	350	102	38	27
29	138	394	139	1430	---	158	1060	1500	330	100	36	26
30	125	364	134	1140	---	151	2400	1100	300	98	35	25
31	124	---	131	941	---	144	---	900	---	96	35	---
MEAN	161	826	199	470	351	241	392	1117	819	152	71.6	31.1
MAX	409	2520	340	1430	811	394	2400	2560	5000	270	145	46
MIN	33	105	131	100	183	144	107	380	300	96	35	25
IN.	.72	3.59	.89	2.11	1.42	1.08	1.70	5.01	3.56	.68	.32	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

MEAN	141	318	330	251	293	444	422	352	231	119	66.3	121
MAX	780	1139	1058	743	918	1170	1427	1746	819	392	205	1545
(WY)	1987	1986	1993	1991	1985	1975	1994	1990	1995	1993	1968	1993
MIN	16.6	16.8	19.7	14.0	23.5	32.7	30.1	30.1	39.2	22.1	10.1	6.78
(WY)	1992	1981	1977	1981	1981	1981	1981	1977	1972	1980	1980	1980

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1966 - 1995

	1994	1995	1966-1995
ANNUAL MEAN	399	402	257
HIGHEST ANNUAL MEAN			560
LOWEST ANNUAL MEAN			50.2
HIGHEST DAILY MEAN	8160	5000	23300
LOWEST DAILY MEAN	33	25	4.5
ANNUAL SEVEN-DAY MINIMUM	37	27	5.3
INSTANTANEOUS PEAK FLOW	---	Unknown ^a	36100
INSTANTANEOUS PEAK STAGE	---	18.30 ^b	27.56
INSTANTANEOUS LOW FLOW	---	25	4.0
ANNUAL RUNOFF (INCHES)	21.10	21.23	13.61
10 PERCENT EXCEEDS	939	995	548
50 PERCENT EXCEEDS	170	226	121
90 PERCENT EXCEEDS	54	39	25

^aDue to backwater from Stockton Lake.

^bFrom highwater mark.

06918460 TURNBACK CREEK ABOVE GREENFIELD, MO

LOCATION.--Lat 37°24'09", long 93°48'06", on line between secs.21 and 28, T.31 N., R.26 W., Dade County, Hydrologic Unit 10290106, on left downstream side of bridge pier on State Highway O, 1.5 mi downstream from Limestone Creek and 2.0 mi southeast of Greenfield.

DRAINAGE AREA.--252 mi².

PERIOD OF RECORD.--September 1965 to current year.

REVISED RECORDS.--WDR MO-84-1 1968, 1970, 1972-74, 1976, 1978-79, 1983, 1986 (p).

GAGE.--Water-stage recorder. Datum of gage is 870.49 ft above sea level (levels by Missouri State Highway and Transportation Commission).

REMARKS.--Estimated daily discharges: Nov. 11-14, Jan. 5-11, Jan. 17-25, and May 21 to July 17. Records fair except for estimated daily discharges, May 21 to July 17, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

REVISIONS.--The maximum discharge for the water year 1987 has been revised to 30,500 ft³/s, Oct. 1, 1986, gage height, 24.5 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	120	348	173	710	204	173	2750	750	630	108	59
2	36	112	326	171	634	199	169	1840	725	550	140	62
3	39	106	309	166	572	197	166	1330	700	490	146	61
4	40	1770	294	163	516	195	166	1240	750	445	134	58
5	37	3510	280	160	472	192	158	1020	700	398	124	56
6	36	2400	268	156	437	190	154	970	750	365	117	54
7	40	1240	260	152	407	384	149	1040	700	340	111	56
8	229	937	250	150	378	420	145	2310	650	315	107	56
9	245	2370	242	148	359	409	142	1820	850	295	100	57
10	160	1410	230	146	345	394	148	1280	4000	275	96	55
11	139	1150	219	147	324	373	444	984	2500	255	92	54
12	122	900	211	141	302	353	496	847	1500	240	88	54
13	110	750	204	473	289	335	372	746	1240	225	86	52
14	99	650	198	1470	282	317	322	650	1000	215	90	50
15	89	558	191	1110	281	302	290	580	820	205	91	49
16	87	499	195	893	272	286	264	534	700	195	87	49
17	82	456	200	650	254	274	247	671	620	185	83	50
18	319	412	189	550	244	262	357	700	550	175	80	48
19	361	391	183	475	235	253	337	562	495	165	78	53
20	281	1550	178	440	226	249	528	498	455	152	75	60
21	297	1410	179	410	217	238	544	450	425	149	72	58
22	446	969	198	390	210	231	486	410	400	142	70	53
23	261	793	200	370	203	221	609	410	400	137	70	51
24	219	686	196	360	195	213	827	1000	420	136	68	48
25	196	603	193	360	190	206	709	1100	470	139	66	46
26	174	540	190	431	187	202	617	900	450	134	63	45
27	159	505	187	689	229	201	553	1200	422	127	62	45
28	147	453	185	954	217	191	490	2000	400	121	61	43
29	135	408	181	1050	---	186	3450	1500	380	116	60	40
30	126	373	177	907	---	181	2130	1200	700	112	58	39
31	122	---	174	798	---	176	---	900	---	109	57	---
MEAN	157	934	220	473	328	259	521	1079	831	243	88.4	52.0
MAX	446	3510	348	1470	710	420	3450	2750	4000	630	146	62
MIN	36	106	174	141	187	176	142	410	380	109	57	39
IN.	.72	4.14	1.01	2.16	1.36	1.19	2.31	4.94	3.68	1.11	.40	.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995, BY WATER YEAR (WY)

	MEAN	150	340	323	260	320	471	462	373	270	157	94.9	145
MAX	921	1385	982	765	1020	1377	1410	1797	874	636	354	1579	
(WY)	1987	1986	1988	1973	1985	1973	1994	1990	1993	1992	1982	1993	
MIN	23.4	21.7	20.2	19.9	27.5	39.5	39.3	93.9	44.3	24.2	14.4	11.6	
(WY)	1979	1981	1990	1981	1981	1981	1981	1981	1972	1972	1980	1980	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1965 - 1995

ANNUAL MEAN	385	431	280	
HIGHEST ANNUAL MEAN			612	1993
LOWEST ANNUAL MEAN			84.1	1981
HIGHEST DAILY MEAN	9460	Apr 12	4000	Jun 10
LOWEST DAILY MEAN	28	Aug 29	36	Oct 2, 6
ANNUAL SEVEN-DAY MINIMUM	32	Aug 23	38	Oct 1
INSTANTANEOUS PEAK FLOW	---		Unknown ^a	Jun 10
INSTANTANEOUS PEAK STAGE	---		18.60	Jun 10
INSTANTANEOUS LOW FLOW	---		35	Oct 6-7
ANNUAL RUNOFF (INCHES)	20.76		23.24	
10 PERCENT EXCEEDS	796		969	
50 PERCENT EXCEEDS	185		247	
90 PERCENT EXCEEDS	50		60	

^aDue to backwater from Stockton Lake.

06918600 LITTLE SAC RIVER AT WALNUT GROVE, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°23'55", long 93°24'36", NE 1/4 SW 1/4 sec. 24, T.31 N., R.23 W., in Greene County, Hydrologic Unit 10290106. Sampling site in on Highway BB about 7.5 mi east of Walnut Grove and 6 mi south of Morrisville.

DRAINAGE AREA.--119 mi².

PERIOD OF RECORD: Water years 1974 to 1978, 1984 to 1986, 1988 to 1990, November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY, WAT WH TOT FET FIELD MG/L AS CACO ₃ (00410)
NOV 23...	1030	163	8.5	456	8.00	11.8	99	--	800	430	182
JAN 10...	1500	21	4.0	618	8.14	15.9	121	<10	K7	K13	198
MAR 09...	0815	150	4.5	439	7.08	12.0	94	--	180	81	156
APR 12...	1600	145	12.5	286	7.86	10.7	101	--	1200	150	162
JUN 29...	0730	120	21.0	435	7.80	7.5	83	<10	K350	380	171
AUG 24...	0745	11	23.0	1090	7.88	5.5	66	--	170	230	215

DATE	BICAR-BONATE WATER WH IT FIELD MG/L AS HCO ₃ (00450)	CAR-BONATE WATER WH IT FIELD MG/L AS CO ₃ (00447)	NITRO-GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD-NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 23...	223	0	<0.02	<0.010	<0.010	<0.20	<0.020	<0.010	--	--
JAN 10...	242	0	1.10	0.010	0.010	0.30	0.040	0.020	220	77
MAR 09...	195	0	1.10	<0.010	0.010	<0.20	0.030	0.020	--	--
APR 12...	199	0	0.88	0.010	0.020	0.30	0.060	0.040	--	--
JUN 29...	211	0	1.00	<0.010	0.020	0.31	0.020	0.040	190	67
AUG 24...	263	0	1.90	0.010	0.030	0.55	0.780	0.750	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUM-INUM, TOTAL RECOV-ERABLE (µG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)
JAN 10...	7.7	43	4.7	26	61	0.20	346	6	40	<20
JUN 29...	5.2	14	2.6	9.8	21	<0.10	246	14	260	50

DATE	CADMIUM TOTAL RECOV-ERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 10...	<1	<1.0	2	18	2	1	9	0.30	20	17
JUN 29...	1	1.0	3	32	2	1	7	0.10	10	9

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06918740 LITTLE SAC RIVER NEAR MORRISVILLE, MO

LOCATION.--Lat 37°28'58", long 93°29'07", SW 1/4 SW 1/4 sec.20, T.32 N., R.23 W., Polk County, Hydrologic Unit 10290106, on downstream side of center pier of Hamilton Bridge on State Highway 215, 0.7 mi upstream from Slagle Creek and 3 mi west of Morrisville.

DRAINAGE AREA.--237 mi².

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

REVISED RECORDS.--WDR MO-84-1 1969-70, 1972-75, 1977-79, 1981, 1983 (P).

GAGE.--Water-stage recorder. Elevation of gage is 881 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 4-8. Records fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	48	166	62	595	179	104	3820	714	193	36	10
2	9.3	46	157	57	495	165	97	1920	659	161	45	9.6
3	9.4	43	152	54	428	157	92	1200	524	150	52	13
4	9.8	963	145	53	376	152	87	1220	655	146	55	13
5	9.5	3570	139	53	332	149	81	919	629	158	48	11
6	11	2040	132	54	298	147	80	854	1480	144	35	10
7	12	801	125	54	276	639	73	984	989	122	31	11
8	394	518	108	54	248	563	71	2180	695	107	28	13
9	279	1940	103	50	235	411	67	1340	906	100	25	17
10	156	980	95	48	224	348	73	1020	10300	87	23	14
11	116	605	89	51	209	300	998	904	2730	78	19	12
12	91	484	82	54	193	271	687	719	1460	71	20	12
13	76	392	78	1100	182	249	364	557	1040	64	19	11
14	64	327	77	2110	177	230	270	411	831	58	19	9.6
15	59	282	74	986	182	211	226	354	651	55	19	9.2
16	55	246	81	667	174	200	197	330	508	51	18	10
17	53	222	88	517	167	185	177	782	401	51	17	10
18	133	201	85	423	151	172	249	736	335	48	19	12
19	180	198	78	447	152	166	224	465	292	46	19	13
20	137	955	75	389	145	162	973	353	257	45	19	17
21	114	890	76	363	142	154	626	368	226	46	18	18
22	103	511	80	349	141	148	443	450	205	45	16	18
23	99	382	87	328	135	142	595	395	187	43	14	18
24	88	316	85	304	124	135	727	1290	216	51	13	16
25	76	273	80	311	122	129	554	1740	425	66	12	15
26	69	245	77	340	123	129	431	1090	533	60	12	16
27	61	231	71	1190	202	145	445	1190	418	54	12	16
28	56	208	70	1870	207	132	348	2520	273	48	11	15
29	51	193	67	1440	---	123	2120	1080	282	39	11	14
30	48	178	67	943	---	117	2030	744	233	37	12	13
31	49	---	64	728	---	112	---	767	---	36	12	---
MEAN	86.4	610	95.3	498	230	210	450	1055	968	79.4	22.9	13.2
MAX	394	3570	166	2110	595	639	2120	3820	10300	193	55	18
MIN	9.3	43	64	48	122	112	67	330	187	36	11	9.2
IN.	.42	2.87	.46	2.42	1.01	1.02	2.12	5.13	4.56	.39	.11	.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

	129	343	315	245	281	477	435	330	222	78.6	36.6	206
MAX	809	1256	1045	752	1139	1290	1409	1359	968	342	145	2033
(WY)	1987	1986	1988	1991	1985	1973	1994	1990	1995	1979	1988	1968
MIN	13.6	10.8	10.7	9.05	31.1	38.9	32.7	30.9	20.7	11.6	4.90	3.15
(WY)	1990	1981	1990	1981	1981	1972	1981	1977	1972	1980	1980	1980

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1968 - 1995

ANNUAL MEAN	336	359	252
HIGHEST ANNUAL MEAN			516
LOWEST ANNUAL MEAN			58.6
HIGHEST DAILY MEAN	8440	Apr 11	10300
LOWEST DAILY MEAN	9.3	Oct 2	9.2
ANNUAL SEVEN-DAY MINIMUM	10	Sep 30	10
INSTANTANEOUS PEAK FLOW	---		19100
INSTANTANEOUS PEAK STAGE	---		20.65
INSTANTANEOUS LOW FLOW	---		8.0
ANNUAL RUNOFF (INCHES)	19.27		20.59
10 PERCENT EXCEEDS	718		948
50 PERCENT EXCEEDS	104		145
90 PERCENT EXCEEDS	20		15
			13

06918990 STOCKTON LAKE NEAR STOCKTON, MO

LOCATION.--Lat 37°41'38", long 93°45'55", SW 1/4 SE 1/4 SW 14 sec.10, T.34 N., R.26 W., Cedar County, Hydrologic Unit 10290106, in power house at dam on Sac River, 2 mi east of Stockton.

DRAINAGE AREA.--1,160 mi².

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Nonrecording gage prior to May 30, 1973. Datum of gage is sea level (level by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by a rock shell earthfill type dam. Spillway is equipped with 4 taintor gates, 40 ft by 30.5 ft, crest elevation, 861.5 ft. Embankment closed and river diverted on Sept. 23, 1968. Gates closed and storage began on Dec. 12, 1969; minimum power elevation 830.0 ft reached on May 1, 1970. Gross storage at top of flood control pool is 1,666,659 ac-ft at elevation 892.0 ft, of which 779,550 ac-ft between elevations 867.0 ft and 892.0 ft is used for flood control, and 887,109 ac-ft between elevations 760.0 ft and 867.0 ft is used for multipurpose and power. Sedimentation reserve is 25,000 ac-ft. Lake is used for flood control, hydroelectric power, and recreational purposes.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,450,000 ac-ft, Apr. 28, 1973, elevation, 885.94 ft; minimum, since initial filling to minimum power pool level, 352,000 ac-ft, Aug. 27 to Sept. 4, 1970, elevation, 839.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,340,000 ac-ft, June 13, elevation, 883.32 ft; minimum, 786,000 ac-ft, Oct. 1, elevation, 863.30 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 24:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863.30	864.43	868.00	865.15	868.31	866.39	865.90	870.68	879.96	880.65	871.14	865.97
2	863.32	864.47	867.95	865.16	868.27	866.26	865.95	871.33	879.82	880.39	870.82	865.94
3	863.33	864.50	867.94	864.99	868.15	866.15	865.94	871.75	879.76	880.17	870.57	865.92
4	863.34	865.14	868.00	864.83	868.09	865.98	865.97	872.07	879.65	879.94	870.26	865.90
5	863.36	866.28	867.83	864.75	867.97	866.00	866.00	872.19	879.55	879.64	869.91	865.87
6	863.37	866.95	867.73	864.69	867.84	865.76	866.01	872.36	879.48	879.37	869.55	865.86
7	863.40	867.06	867.56	864.62	867.67	865.79	866.05	872.63	879.39	879.10	869.23	865.85
8	863.58	867.06	867.34	864.61	867.56	865.72	866.08	873.59	879.28	878.79	869.01	865.85
9	863.59	867.47	867.12	864.56	867.44	865.74	866.08	874.06	879.47	878.55	868.89	865.81
10	863.61	867.66	866.94	864.36	867.39	865.77	866.20	874.36	882.06	878.24	868.77	865.80
11	863.64	867.66	866.73	864.38	867.32	865.86	866.44	874.55	882.82	877.91	868.61	865.65
12	863.65	867.62	866.49	864.37	867.28	865.99	866.44	874.60	883.19	877.62	868.40	865.57
13	863.67	867.57	866.25	864.83	867.15	865.97	866.48	874.56	883.32	877.34	868.27	865.36
14	863.69	867.47	866.12	865.51	867.07	866.00	866.59	874.50	883.29	877.02	868.26	865.29
15	863.74	867.33	866.02	865.91	866.97	865.91	866.60	874.46	883.13	876.72	868.14	865.24
16	863.76	867.21	865.83	866.14	866.83	865.87	866.66	874.45	882.96	876.40	867.93	865.21
17	863.78	867.07	865.56	866.37	866.79	865.88	866.78	875.23	882.79	876.08	867.75	865.20
18	863.92	867.00	865.51	866.42	866.84	865.88	866.85	875.56	882.60	875.74	867.60	865.06
19	863.99	867.08	865.30	866.69	866.90	865.98	867.00	875.76	882.42	875.38	867.53	864.99
20	864.04	868.01	865.12	866.76	866.92	865.95	867.18	875.90	882.20	875.08	867.41	864.99
21	864.10	868.41	865.04	866.89	866.95	865.82	867.35	876.01	881.98	874.75	867.25	864.99
22	864.17	868.66	865.05	866.99	866.88	865.69	867.48	876.03	881.72	874.41	867.11	864.98
23	864.20	868.79	864.93	867.01	866.79	865.64	867.71	876.30	881.48	874.16	867.00	864.95
24	864.25	868.72	864.94	866.98	866.81	865.68	867.87	876.95	881.39	873.81	866.81	864.94
25	864.28	868.65	864.97	867.01	866.84	865.72	868.03	877.46	881.28	873.49	866.64	864.93
26	864.29	868.57	865.01	867.11	866.90	865.76	868.16	878.05	881.19	873.14	866.47	864.92
27	864.33	868.49	865.05	867.31	866.79	865.78	868.27	878.58	881.19	872.70	866.33	864.91
28	864.32	868.35	865.01	867.77	866.58	865.79	868.24	879.29	880.85	872.43	866.15	864.92
29	864.31	868.17	865.05	868.18	---	865.81	869.02	879.59	880.76	872.08	866.01	864.93
30	864.35	868.04	---	868.29	---	865.84	869.59	879.78	880.70	871.72	866.00	864.93
31	864.41	---	---	868.32	---	865.88	---	879.96	---	871.36	865.95	---
MAX	864.41	868.79	---	868.32	868.31	866.39	869.59	879.96	883.32	880.65	871.14	865.97
MIN	863.30	864.43	---	864.36	866.58	865.64	865.90	870.68	879.28	871.36	865.95	864.91
(-)	812000	901000	827000	908000	865000	848000	940000	1230000	1260000	986000	849000	825000
(=)	+26000	+89000	-74000	+81000	-43000	-17000	+92000	+290000	+30000	-274000	-137000	-24000
CAL YR 1994....	-43000											
WTR YR 1995....	+39000											

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

06919020 SAC RIVER AT HIGHWAY J BELOW STOCKTON, MO

LOCATION.--Lat 37°44'07", long 93°46'47", NW 1/4 sec.4, T.34 N., R.26 W., Cedar County, Hydrologic Unit 10290106, on right bank on downstream side of bridge on State Highway J, 4.5 mi downstream from Bear Creek, 6.3 mi downstream from Stockton Lake, 3.0 mi north of Stockton and at mile 44.9.

DRAINAGE AREA.--1,292 mi², approximately.

PERIOD OF RECORD.--October 1973 to current year. Occasional discharge measurements in water year 1973.

GAGE.--Water-stage recorder. Datum of gage is 750.19 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. Several observations of water temperature and specific conductance were made during the year. Considerable regulation by Stockton Lake (station 06918990), 6.3 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	56	1990	127	3060	2690	125	2880	3890	1360	5000	136
2	56	53	1790	121	2890	2380	123	1060	5060	4800	5080	77
3	61	50	654	1640	2990	1820	124	627	4910	4960	5080	75
4	69	103	177	2200	3130	2950	124	1570	5110	4900	5160	73
5	65	689	2120	1850	3300	480	119	2890	4910	4890	5050	70
6	61	849	2470	578	3000	2500	116	2840	5030	5020	5080	69
7	64	2760	2820	1420	3110	2430	116	3380	4620	4990	4480	69
8	94	3090	3220	295	3380	3000	115	3020	4830	5020	3270	69
9	98	3480	3010	1240	2640	1740	114	887	4500	4950	2280	71
10	94	3050	2500	1990	1820	1230	716	548	6970	5030	1280	69
11	76	3500	3340	669	1290	230	459	1360	1990	5110	2080	1000
12	70	3340	2880	134	1470	211	1510	2700	698	5000	2370	1620
13	68	3040	3820	373	2760	780	1530	3400	1600	5130	1700	1880
14	67	2860	2310	1390	2080	897	233	3030	5060	4500	746	477
15	65	3200	1400	605	1790	1740	718	2740	4790	4200	2110	842
16	67	3390	3000	421	2660	1450	186	1650	5030	4150	2480	397
17	66	3160	3200	343	1350	1040	527	2550	4910	4070	2520	76
18	67	2170	1420	525	370	458	1260	3280	4770	4070	1310	1410
19	140	1640	3110	703	172	422	612	767	5060	4520	1540	1340
20	123	3450	2640	1090	165	1030	757	505	4890	4980	934	101
21	94	1800	1550	429	469	2080	748	1420	5090	4980	1580	80
22	85	531	531	242	1390	2080	296	2960	4940	4990	1590	77
23	77	1310	1920	1290	1440	1670	385	2950	4980	4980	1210	74
24	75	2920	340	1690	672	173	1370	2690	4880	4830	1590	73
25	70	2850	158	1090	300	148	806	1190	5290	4780	1750	71
26	53	2580	151	914	148	144	270	1200	4250	4810	1710	70
27	51	2860	146	957	1670	146	942	1790	2080	4920	1720	70
28	50	3050	478	720	2980	140	1620	2500	4740	5120	2010	69
29	49	2970	261	579	---	134	2000	795	4880	5120	1430	69
30	50	2760	129	2360	---	130	1930	536	3700	5220	492	70
31	59	---	125	3190	---	127	---	2350	---	5120	648	---
MEAN	72.3	2252	1731	1006	1875	1176	665	2002	4449	4726	2428	355
MAX	140	3500	3820	3190	3380	3000	2000	3400	6970	5220	5160	1880
MIN	49	50	125	121	148	127	114	505	698	1360	492	69
IN.	.06	1.95	1.55	.90	1.51	1.05	.57	1.79	3.84	4.22	2.17	.31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1995, BY WATER YEAR (WY)

	MEAN	730	904	1329	1367	1213	1556	1907	1743	1641	1239	925	907
MAX	4922	4697	3983	4464	2763	4230	4613	3403	4863	4726	2488	1949	
(WY)	1994	1994	1986	1993	1988	1975	1974	1994	1990	1995	1992	1993	
MIN	51.1	60.1	61.9	66.7	98.8	64.8	60.5	113	186	121	71.6	80.4	
(WY)	1974	1981	1981	1981	1981	1977	1981	1977	1991	1977	1991	1991	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1974 - 1995

ANNUAL MEAN	1704	1895	1288	
HIGHEST ANNUAL MEAN			2450	1994
LOWEST ANNUAL MEAN			256	1977
HIGHEST DAILY MEAN	8360	Apr 12	6970	Jun 10
LOWEST DAILY MEAN	49	Oct 29	49	Oct 29
ANNUAL SEVEN-DAY MINIMUM	52	Oct 28	52	Oct 28
INSTANTANEOUS PEAK FLOW	---		8260	Jun 10
INSTANTANEOUS PEAK STAGE	---		19.93	Jun 10
INSTANTANEOUS LOW FLOW	---		46	Nov 3
ANNUAL RUNOFF (INCHES)	17.91		19.91	
10 PERCENT EXCEEDS	4780		4910	
50 PERCENT EXCEEDS	1150		1510	
90 PERCENT EXCEEDS	66		72	

06919500 CEDAR CREEK NEAR PLEASANT VIEW, MO

LOCATION.--Lat 37°50'03", long 93°52'31", in NE 1/4 sec.2, T.35 N., R.27 W., Cedar County, Hydrologic Unit 10290106, on downstream side of right pier of bridge on State Highway 39, 1.5 mi north of Pleasant View, 1.8 mi downstream from Alder Creek and 5.8 mi upstream from mouth.

DRAINAGE AREA.--420 mi², approximately.

PERIOD OF RECORD.--April 1923 to September 1926, October 1948 to current year.

REVISED RECORDS.--WSP 1146: 1923-26, drainage area. WSP 1176: 1924(M).

GAGE.--Water-stage recorder. Datum of gage is 739.46 ft above sea level. Apr. 22, 1923, to Sept. 30, 1926, and Oct. 1, 1948, to May 10, 1950, nonrecording gage at site 50 ft downstream at same datum; May 11, 1950, to Dec. 17, 1952, nonrecording gage, at present site and datum.

REMARKS.--Estimated daily discharges: Sept. 2-30. Records good except for period of Oct. 1 to Nov. 3 and Sept. 2-30, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 27.7 ft, July 20, 1909, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.9	177	78	593	117	63	4110	2070	2640	277	4.0
2	.98	3.7	154	75	471	108	61	4700	2260	570	601	3.8
3	.91	5.0	138	72	395	103	59	1520	762	298	520	3.6
4	1.1	13	126	70	341	97	61	1100	569	238	439	3.4
5	1.2	102	116	70	301	99	59	1080	675	195	564	3.2
6	1.2	805	106	68	270	103	57	783	622	164	247	3.0
7	1.3	400	106	66	244	145	54	1390	407	152	119	2.8
8	5.2	171	106	65	216	581	51	8640	390	110	79	2.7
9	8.2	307	112	61	197	426	48	9430	1710	91	59	2.6
10	6.1	202	111	61	189	303	52	4770	8710	79	46	2.5
11	3.9	246	105	70	178	265	428	944	10200	68	37	2.5
12	2.8	147	97	77	162	231	1180	680	6800	59	29	2.4
13	7.2	96	90	226	146	203	623	579	1340	51	24	2.3
14	7.4	74	85	2750	137	184	354	449	600	44	20	2.2
15	6.4	63	82	2660	139	167	265	343	431	38	17	2.0
16	5.5	65	83	1030	140	156	214	301	325	33	15	1.9
17	4.9	53	90	679	135	146	234	1180	260	29	12	1.8
18	5.6	49	94	506	127	135	3200	7320	216	26	11	1.8
19	10	52	93	430	119	126	2420	6480	184	23	9.6	1.7
20	11	3730	92	389	113	118	1120	2060	158	22	8.6	1.7
21	10	6370	86	368	106	134	1150	803	137	22	7.8	1.6
22	8.4	3170	90	342	101	132	700	951	118	21	6.8	1.6
23	7.0	692	98	305	95	127	738	1020	111	27	6.2	1.5
24	5.6	455	111	273	89	108	1650	1240	213	538	5.5	1.5
25	5.0	344	111	265	84	96	990	2960	483	92	5.6	1.4
26	4.3	280	109	313	81	91	640	2380	2430	62	5.3	1.4
27	4.0	341	101	766	85	87	530	5090	1940	63	4.9	1.3
28	3.3	438	94	1730	125	80	432	5700	596	38	4.9	1.2
29	3.0	297	88	1940	---	74	1050	2960	321	29	4.9	1.2
30	2.7	217	83	1210	---	70	2990	993	1790	23	4.6	1.1
31	3.2	---	79	782	---	66	---	707	---	19	4.4	---
MEAN	4.79	640	104	574	192	157	716	2667	1561	189	103	2.19
MAX	11	6370	177	2750	593	581	3200	9430	10200	2640	601	4.0
MIN	.91	2.9	79	61	81	66	48	301	111	19	4.4	1.1
IN.	.01	1.70	.28	1.58	.48	.43	1.90	7.32	4.15	.52	.28	.01

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	176	347	302	269	389	568	563	511	372	247	84.9	190
MAX	3055	1923	1490	1063	2307	2275	2766	2969	1753	2229	641	2033	
(WY)	1987	1993	1993	1949	1985	1973	1994	1961	1981	1958	1950	1993	
MIN	.000	.000	.058	.12	.14	.23	4.09	39.1	4.52	.029	.000	.000	
(WY)	1954	1954	1954	1954	1954	1954	1956	1988	1991	1954	1954	1953	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	457	577	334
HIGHEST ANNUAL MEAN			807
LOWEST ANNUAL MEAN			16.0
HIGHEST DAILY MEAN	21900	10200	26200
LOWEST DAILY MEAN	.91	.91	.00
ANNUAL SEVEN-DAY MINIMUM	1.1	1.1	.00
INSTANTANEOUS PEAK FLOW	---	14100	37000
INSTANTANEOUS PEAK STAGE	---	23.35	27.36
INSTANTANEOUS LOW FLOW	---	.78	.00
ANNUAL RUNOFF (INCHES)	14.79	18.66	10.80
10 PERCENT EXCEEDS	540	1360	674
50 PERCENT EXCEEDS	84	109	74
90 PERCENT EXCEEDS	3.0	3.1	1.1

06919900 SAC RIVER NEAR CAPLINGER MILLS, MO

LOCATION.--Lat 37°52'12", long 93°48'11", in NW 1/4 NE 1/4 SW 1/4 sec.21, T.36 N., R.26 W., St. Clair County, Hydrologic Unit 10290106, on right downstream wingwall of bridge on State Highway W, 1.5 mi downstream from Cedar Creek and 5.0 mi north of Caplinger Mills.

DRAINAGE AREA.--1,810 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 720.82 ft above sea level.

REMARKS.--Estimated daily discharges: May 22 to June 29. Records fair except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. Some regulation from Stockton Lake (station 06918990). U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	78	2730	218	4130	3260	178	9020	6500	5030	5200	521
2	64	76	2860	271	3630	2740	173	7710	8000	5960	5690	127
3	67	75	1210	808	3580	1880	170	2870	6500	6020	5690	108
4	72	103	504	2570	3870	3290	170	2180	6400	5820	5700	97
5	75	527	1640	2870	3810	1670	170	4310	6300	5580	5580	91
6	71	1910	3070	907	3460	1680	165	3930	6200	5630	5400	84
7	69	2360	2800	1350	3340	2870	160	5370	6100	5500	4850	81
8	90	3560	3550	1000	3420	3710	158	14200	6000	5290	3480	77
9	97	4140	3510	930	3290	2850	154	13500	7500	5290	3210	79
10	101	3680	3010	2090	2530	2170	538	7550	16000	5330	955	76
11	98	3730	3840	1490	1340	662	1270	2040	18000	5370	2280	120
12	90	3900	3410	331	1940	474	2050	3690	9000	5220	2300	1530
13	84	3310	4300	588	3110	423	3330	4040	3500	5280	2270	2340
14	82	3290	2800	4910	2860	1490	783	3890	6500	5150	1020	969
15	80	3390	1640	4460	1640	1830	974	3500	6400	5220	1810	645
16	76	3830	3470	1940	2840	1980	545	2480	6400	5180	2360	967
17	76	3360	3480	1260	2140	1730	479	4700	6300	5030	2860	121
18	78	3120	2050	983	985	415	5500	12400	6200	5060	1760	379
19	77	1500	3200	1250	312	916	4290	9460	6100	5060	1990	2360
20	113	8500	3190	1720	281	751	1990	4060	6000	5060	552	275
21	115	10700	1730	1370	265	2340	2570	2140	5900	5060	1480	106
22	107	5430	1360	698	1350	2390	1190	4500	5800	5090	1920	94
23	94	1580	1470	1260	1920	2310	1310	4700	5700	5020	1530	90
24	86	3700	1180	2280	916	505	3340	5000	5600	5600	1380	88
25	81	3540	315	2040	780	250	2180	5200	6500	5200	1980	85
26	78	3430	288	1410	244	231	1100	4800	7500	5200	1860	83
27	86	3520	267	1830	902	218	941	8000	5500	5130	2030	82
28	80	3920	252	2880	3090	209	2520	9000	6000	5110	2150	81
29	75	3450	761	3190	---	198	3800	6000	5800	5040	1780	79
30	71	3550	252	3020	---	188	5330	4000	7170	5120	1530	76
31	81	---	226	4450	---	181	---	5000	---	5110	383	---
MEAN	83.2	3242	2076	1819	2213	1478	1584	5782	7046	5283	2677	397
MAX	115	10700	4300	4910	4130	3710	5500	14200	18000	6020	5700	2360
MIN	64	75	226	218	244	181	154	2040	3500	5020	383	76
IN.	.05	2.00	1.32	1.16	1.27	.94	.98	3.68	4.34	3.37	1.71	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
MEAN	1351	1560	1904	1680	1794	2321	2675	2545	2160	1496	1021	1158									
MAX	11070	5392	5838	5487	5202	5630	6805	5782	7046	5283	2850	5283									
(WY)	1987	1994	1986	1993	1985	1985	1994	1995	1995	1995	1992	1993									
MIN	61.1	66.7	56.6	53.5	101	82.7	76.3	278	241	170	77.3	103									
(WY)	1981	1981	1981	1981	1981	1981	1981	1981	1991	1988	1991	1991									

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1975 - 1995

	1994	1995	1975-1995
ANNUAL MEAN	2498	2809	1805
HIGHEST ANNUAL MEAN			3267
LOWEST ANNUAL MEAN			399
HIGHEST DAILY MEAN	50300	18000	51200
LOWEST DAILY MEAN	64	64	44
ANNUAL SEVEN-DAY MINIMUM	69	69	47
INSTANTANEOUS PEAK FLOW	---	Unknown ^a	61500
INSTANTANEOUS PEAK STAGE	---	25.48	30.95
INSTANTANEOUS LOW FLOW	---	64	44
ANNUAL RUNOFF (INCHES)	18.74	21.07	13.55
10 PERCENT EXCEEDS	5020	5980	4410
50 PERCENT EXCEEDS	1890	2180	1090
90 PERCENT EXCEEDS	84	87	92

^aDue to backwater from Truman Lake.

06919950 BRUSH CREEK NEAR COLLINS, MO

LOCATION.--Lat 37°52'44", long 93°43'11", in NE 1/4 SE 1/4 SE 1/4 sec. 18, T.36 N., R.25 W., St. Clair County, Hydrologic Unit 10290106, on left bank 100 ft upstream from Highway J bridge, 4.5 miles west of Collins.

DRAINAGE AREA.--81.2 mi².

PERIOD OF RECORD.--March 23, 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 733.98 ft. above sea level.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 6,840 ft³/s, June 10, gage height, 13.48; minimum, 1.3 ft³/s, Sept. 18-19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	22	2000	1030	55	9.2	1.9
2	---	---	---	---	---	---	20	419	409	47	15	2.0
3	---	---	---	---	---	---	20	228	173	45	11	2.0
4	---	---	---	---	---	---	21	236	138	44	9.2	1.9
5	---	---	---	---	---	---	20	178	116	38	8.7	1.9
6	---	---	---	---	---	---	18	158	290	36	7.7	1.8
7	---	---	---	---	---	---	17	422	192	28	6.9	1.7
8	---	---	---	---	---	---	17	2480	156	25	6.1	1.9
9	---	---	---	---	---	---	16	356	890	22	5.3	2.0
10	---	---	---	---	---	---	28	191	3350	19	4.7	1.8
11	---	---	---	---	---	---	433	149	641	17	4.4	1.7
12	---	---	---	---	---	---	207	146	202	15	4.4	1.9
13	---	---	---	---	---	---	115	177	134	13	4.3	1.9
14	---	---	---	---	---	---	89	109	105	12	4.2	1.8
15	---	---	---	---	---	---	73	91	86	11	3.9	1.7
16	---	---	---	---	---	---	64	103	72	9.7	3.9	1.7
17	---	---	---	---	---	---	126	1700	62	9.1	3.6	1.8
18	---	---	---	---	---	---	922	1420	53	8.4	3.3	1.5
19	---	---	---	---	---	---	206	281	47	7.8	3.2	2.0
20	---	---	---	---	---	---	392	166	41	8.7	3.1	1.9
21	---	---	---	---	---	---	185	143	37	8.0	2.8	1.8
22	---	---	---	---	---	---	127	123	34	7.8	2.7	1.8
23	---	---	---	---	---	34	280	101	31	7.6	2.5	1.5
24	---	---	---	---	---	33	224	265	34	8.4	2.5	1.6
25	---	---	---	---	---	30	147	335	459	8.9	2.4	1.6
26	---	---	---	---	---	29	117	811	942	20	2.3	1.8
27	---	---	---	---	---	31	132	1100	206	16	2.2	1.8
28	---	---	---	---	---	31	104	1040	112	9.5	2.1	1.7
29	---	---	---	---	---	27	742	234	84	7.4	2.0	1.7
30	---	---	---	---	---	25	333	152	67	6.3	1.9	1.8
31	---	---	---	---	---	24	---	127	---	6.1	1.9	---
MEAN	---	---	---	---	---	---	174	498	340	18.6	4.75	1.80
MAX	---	---	---	---	---	---	922	2480	3350	55	15	2.0
MIN	---	---	---	---	---	---	16	91	31	6.1	1.9	1.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1995, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	---	---	---	---	---	---	174	498	340	18.6	4.75	1.80
MAX	---	---	---	---	---	---	174	498	340	18.6	4.75	1.80
(WY)	---	---	---	---	---	---	1995	1995	1995	1995	1995	1995
MIN	---	---	---	---	---	---	174	498	340	18.6	4.75	1.80
(WY)	---	---	---	---	---	---	1995	1995	1995	1995	1995	1995

06921070 POMME DE TERRE RIVER NEAR POLK, MO

LOCATION.--Lat 37°40'56", long 93°22'12", in NE 1/4 NW 1/4 NW 1/4 sec.17, T.34 N., R.22 W., Polk County, Hydrologic Unit 10290107, on right bank 150 ft upstream from Jefferson Bridge on State Highway D and 5 mi southwest of Polk.

DRAINAGE AREA.--276 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 872.61 ft above sea level.

REMARKS.--Estimated daily discharges: Jan. 27-29. Water-discharge records fair. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	34	167	84	646	184	82	5900	675	398	27	8.1
2	9.0	30	155	80	545	158	78	2040	682	302	30	7.4
3	8.8	29	144	74	487	147	75	1180	501	281	44	22
4	10	1370	137	71	442	143	73	1570	587	374	46	17
5	10	5240	130	69	383	142	68	1040	517	384	79	12
6	9.6	4920	124	67	335	138	65	975	1220	307	54	10
7	10	1090	132	69	305	1070	63	1370	934	250	41	8.9
8	677	708	125	66	265	854	60	2680	509	187	35	7.9
9	489	2580	119	64	240	528	58	1290	746	157	29	7.7
10	180	1300	115	64	233	420	66	804	14000	134	25	7.7
11	95	696	106	66	213	343	1060	616	2940	118	23	8.0
12	65	475	101	68	187	291	1000	505	1300	105	21	8.2
13	51	345	97	1690	171	254	486	421	849	94	19	8.1
14	42	281	93	4120	167	224	315	343	637	84	18	8.0
15	36	233	91	1260	173	202	234	285	496	76	17	8.0
16	35	194	103	818	174	184	188	268	402	69	16	8.0
17	34	168	120	610	160	168	164	2640	331	65	15	8.1
18	369	146	120	487	148	155	277	1790	280	60	14	7.9
19	296	159	111	532	141	145	261	923	246	55	13	9.9
20	112	2040	104	510	133	141	2230	541	216	54	13	13
21	75	1280	102	513	126	131	999	453	190	52	11	14
22	59	650	120	504	119	121	583	561	171	57	11	15
23	49	467	124	472	114	114	654	600	160	52	10	14
24	43	382	115	429	106	106	1000	3190	183	48	9.8	13
25	37	326	110	441	101	98	632	2390	1790	48	9.4	11
26	32	287	103	493	99	96	463	1470	2210	53	9.3	11
27	29	275	99	2500	180	131	470	1560	2430	47	9.1	11
28	27	239	94	3000	220	114	357	4040	711	40	9.2	10
29	27	204	91	1500	---	102	2790	1170	1040	35	8.9	9.7
30	26	182	87	996	---	93	2430	755	599	32	8.6	9.4
31	30	---	83	765	---	87	---	701	---	29	8.3	---
MEAN	96.2	878	114	725	236	229	576	1422	1252	131	22.1	10.5
MAX	677	5240	167	4120	646	1070	2790	5900	14000	398	79	22
MIN	8.8	29	83	64	99	87	58	268	160	29	8.3	7.4
IN.	.40	3.55	.47	3.03	.89	.95	2.33	5.94	5.06	.55	.09	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1995, BY WATER YEAR (WY)

MEAN	155	390	367	285	334	551	551	385	252	79.3	41.7	172
MAX	1094	1408	1488	822	1496	1673	1978	1422	1252	326	154	2348
(WY)	1987	1986	1983	1991	1985	1973	1994	1995	1995	1976	1985	1993
MIN	8.88	9.94	8.94	10.8	42.5	61.6	26.8	41.5	15.9	4.16	2.72	1.70
(WY)	1979	1990	1990	1977	1981	1981	1981	1988	1988	1980	1980	1980

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1969 - 1995

ANNUAL MEAN	417	474	296
HIGHEST ANNUAL MEAN			554
LOWEST ANNUAL MEAN			124
HIGHEST DAILY MEAN	14400	Apr 11	24300
LOWEST DAILY MEAN	8.8	Oct 3	.30
ANNUAL SEVEN-DAY MINIMUM	9.5	Sep 30	.34
INSTANTANEOUS PEAK FLOW	---		34300
INSTANTANEOUS PEAK STAGE	---		27.10
INSTANTANEOUS LOW FLOW	---		.30
ANNUAL RUNOFF (INCHES)	20.50		14.57
10 PERCENT EXCEEDS	779		593
50 PERCENT EXCEEDS	100		92
90 PERCENT EXCEEDS	14		11

06921070 POMME DE TERRE RIVER NEAR POLK, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1983 to February 1986, November 1992 to current year.

REMARKS.--Reestablished ambient water-quality monitoring network station November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO ₃ (00410)
OCT 06...	1045	10	19.5	356	7.70	7.1	78	--	115	28	186
NOV 23...	0800	475	7.5	346	8.10	11.3	92	<10	115	104	146
DEC 20...	1430	103	5.5	414	8.10	14.2	113	--	K12	15	211
JAN 11...	0730	66	3.5	455	7.80	14.4	108	11	20	K18	194
FEB 06...	1100	335	3.5	391	7.40	14.2	106	--	K18	K7	157
MAR 09...	0930	543	2.5	291	7.90	13.3	99	--	K1980	K1380	125
APR 13...	0830	489	10.0	370	7.90	10.8	95	--	K3460	1200	106
MAY 17...	1730	8090	19.0	133	7.55	8.3	91	--	K37400	K57400	58
JUN 29...	1030	1660	22.0	337	7.99	7.3	84	<10	K2820	1680	155
JUL 11...	0945	118	25.5	398	8.22	6.6	81	--	208	K67	183
AUG 24...	1105	10	24.5	419	7.91	5.4	66	<10	49	195	193
SEP 06...	1300	10	26.5	394	7.96	6.6	82	--	170	160	183

DATE	BICAR- BONATE WATER WH IT FIELD MG/L AS HCO ₃ (00450)	CAR- BONATE WATER WH IT FIELD MG/L AS CO ₃ (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CAO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
06...	226	0	0.040	<0.010	0.030	0.38	0.050	0.030	--	--
NOV										
23...	178	0	0.950	<0.010	<0.020	0.27	0.060	0.070	170	36
DEC										
20...	255	0	0.100	<0.010	0.020	<0.20	<0.020	0.010	--	--
JAN										
11...	237	0	0.270	<0.010	0.020	<0.20	0.020	<0.010	220	45
FEB										
06...	194	0	0.860	<0.010	0.010	<0.20	0.030	0.030	--	--
MAR										
09...	152	0	0.660	0.010	0.030	0.54	0.110	0.050	--	--
APR										
13...	130	0	0.420	0.010	0.040	0.64	0.090	0.080	--	--
MAY										
17...	68	0	0.250	0.040	0.170	4.0	0.460	0.260	--	--
JUN										
29...	190	0	0.560	0.010	0.040	0.56	0.120	0.080	160	36
JUL										
11...	224	0	0.220	0.010	0.010	0.34	0.050	0.040	--	--
AUG										
24...	241	0	<0.020	<0.010	<0.010	<0.20	0.020	<0.010	210	38
SEP										
06...	226	0	0.030	0.010	0.020	0.32	0.060	0.040	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).

OSAGE RIVER BASIN

06921070 POMME DE TERRE RIVER NEAR POLK, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
NOV 23...	19	4.5	3.1	9.8	9.6	<0.10	196	44	150	<20
JAN 11...	26	5.6	1.9	12	14	<0.10	228	4	40	<20
JUN 29...	17	3.8	3.4	6.7	6.3	<0.10	190	56	850	40
AUG 24...	27	5.1	3.1	6.6	9.6	0.50	218	26	240	<20

DATE	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)
NOV 23...	<1	<1.0	2	13	1	<1	22	<0.10	<4	<4
JAN 11...	<1	<1.0	1	32	<1	<1	14	0.10	<4	<4
JUN 29...	1	1.0	2	47	3	1	14	0.10	8	5
AUG 24...	<1	<1.0	<1	7	3	<1	34	0.20	7	<4

06921200 LINDLEY CREEK NEAR POLK, MO

LOCATION.--Lat 37°45'02", long 93°15'58", in NE 1/4 SE 1/4 sec.29, T.35 N., R.21 W., Polk County, Hydrologic Unit 10290107, on left bank 30 ft upstream from county highway bridge, 0.5 mi downstream from Panther Creek, 2.5 mi northeast of Polk and 11 mi upstream from Ingalls Creek.

DRAINAGE AREA.--112 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 884.08 ft above sea level. Prior to Sept. 25, 1957, nonrecording gage at site 30 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 1-3, 5, and June 12-22. Records fair except for discharges below 10 ft³/s, and Aug. 10 to Sept. 30, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	20	77	32	198	81	21	2680	188	151	2.3	.40
2	1.4	18	71	29	178	68	19	715	185	122	2.1	.32
3	1.3	15	65	26	173	65	19	482	143	135	60	.24
4	1.2	721	59	23	157	65	20	642	180	192	162	.18
5	1.2	1750	55	24	142	69	17	470	158	198	44	.14
6	1.2	596	52	22	128	66	16	494	365	333	20	.13
7	1.5	224	66	24	120	262	16	660	279	175	27	.09
8	298	168	59	22	104	178	15	1450	158	120	59	.08
9	130	1150	59	21	101	145	15	532	260	87	12	.06
10	48	313	55	22	102	131	21	394	3750	65	5.4	.05
11	25	200	46	27	89	114	352	353	543	50	4.2	.04
12	17	158	42	30	72	102	235	323	300	39	3.8	.03
13	14	136	41	991	67	92	137	295	265	29	3.4	.03
14	12	124	38	1170	68	82	103	259	230	21	3.0	.02
15	10	114	36	302	77	74	80	234	200	14	2.7	.02
16	10	100	50	210	76	68	64	241	175	11	2.4	.01
17	16	89	71	152	63	61	55	1450	155	7.5	2.1	.01
18	241	77	51	144	58	55	125	2130	140	5.9	1.9	.01
19	203	93	45	159	55	50	100	342	125	4.9	1.7	.01
20	85	2150	42	162	51	51	484	218	115	4.7	1.5	.01
21	51	593	42	170	47	45	195	182	105	4.5	1.4	.01
22	34	230	49	167	44	40	134	170	98	4.1	1.2	.02
23	24	176	48	162	41	37	149	242	92	4.1	1.2	.02
24	19	153	44	157	36	31	172	2510	99	3.8	1.1	.01
25	15	135	41	149	34	28	130	661	470	3.7	.99	.01
26	12	124	38	156	34	28	109	544	656	4.2	.89	.01
27	11	136	37	1240	96	49	117	600	425	4.0	.79	.01
28	11	116	34	1220	109	34	96	1790	262	3.6	.66	.01
29	11	97	32	417	---	27	790	323	219	3.3	.54	.01
30	9.9	85	31	250	---	24	365	222	184	2.9	.53	.01
31	13	---	30	207	---	22	---	202	---	2.6	.44	---
MEAN	42.9	335	48.6	254	90.0	72.4	139	704	351	58.3	13.9	.067
MAX	298	2150	77	1240	198	262	790	2680	3750	333	162	.40
MIN	1.2	15	30	21	34	22	15	170	92	2.6	.44	.01
IN.	.44	3.34	.50	2.62	.84	.75	1.39	7.24	3.50	.60	.14	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1995, BY WATER YEAR (WY)

MEAN	80.3	112	127	99.5	126	193	186	160	83.0	35.4	14.5	59.3
MAX	812	566	526	358	764	855	903	843	421	534	100	1134
(WY)	1987	1986	1983	1973	1985	1973	1994	1961	1985	1958	1958	1993
MIN	.000	.037	.38	.75	1.49	16.9	4.86	8.23	.73	.081	.000	.000
(WY)	1977	1964	1964	1964	1964	1981	1981	1988	1988	1980	1980	1960

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1957 - 1995	
ANNUAL MEAN	165		176		106	
HIGHEST ANNUAL MEAN					247	
LOWEST ANNUAL MEAN					25.9	
HIGHEST DAILY MEAN	10100	Apr 11	3750	Jun 10	12000	Oct 1 1986
LOWEST DAILY MEAN	.05	Sep 23	.01	Sep 16-21, 24-30	.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	.14	Sep 17	.01	Sep 24	.00	Many Years
INSTANTANEOUS PEAK FLOW	---		8010	May 17	31900	Oct 1 1986
INSTANTANEOUS PEAK STAGE	---		16.43	May 17	23.60	May 5 1961
INSTANTANEOUS LOW FLOW	---		.01	Sep 15-21, 24-30	.00	Many Years
ANNUAL RUNOFF (INCHES)	19.96		21.35		12.84	
10 PERCENT EXCEEDS	201		365		188	
50 PERCENT EXCEEDS	40		61		26	
90 PERCENT EXCEEDS	.81		.95		.45	

06921325 POMME DE TERRE LAKE NEAR HERMITAGE, MO

LOCATION.--Lat 37°54'06", long 93°19'05", in NE 1/4 sec.2, T.36 N., R.22 W., Hickory County, Hydrologic Unit 10290107, in intake tower at dam on Pomme de Terre River, 3.0 mi southwest of Hermitage.

DRAINAGE AREA.--611 mi².

PERIOD OF RECORD.--June 1960 to current year.

GAGE.--Water-stage recorder. Nonrecording gage prior to Nov. 9, 1961. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by earthfill embankment with a concrete gravity section-type dam. Closure operation began on June 28, 1960; conservation pool level reached June 15, 1963. Capacity at top of flood control pool, 648,700 ac-ft at elevation 874.0 ft, crest of spillway, of which 407,200 ac-ft between elevations 839.0 ft and 874.0 ft is used for flood control, and 228,700 ac-ft between elevation 783.0 ft and 839.0 ft is used for conservation and 12,840 ac-ft below elevation 783.0 ft is sediment storage. Lake is used for flood control and recreational purposes.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 506,000 ac-ft, Sept. 27, 1993, elevation, 864.58 ft; minimum, since initial filling to conservation pool level, 216,000 ac-ft, Mar. 3, 1964, elevation, 835.61 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 480,000 ac-ft, June 12, elevation 862.65 ft; minimum, 232,000 ac-ft, Sept. 30, elevation, 838.34 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	839.04	839.42	839.38	839.10	841.13	839.30	840.70	843.70	856.27	855.94	840.75	839.03
2	839.03	839.37	839.29	839.12	840.94	839.36	840.70	846.28	856.51	855.70	840.58	839.00
3	839.01	839.29	839.25	839.11	840.70	839.40	840.70	846.40	856.67	855.45	840.35	838.97
4	839.03	839.26	839.20	839.12	840.47	839.43	840.71	846.34	856.76	855.12	840.26	838.94
5	839.03	840.21	839.15	839.12	840.19	839.49	840.72	846.38	856.97	854.86	840.19	838.91
6	839.01	842.44	839.11	839.12	839.89	839.53	840.72	846.50	857.07	854.60	840.13	838.88
7	838.99	843.53	839.10	839.12	839.58	839.65	840.72	846.87	857.51	854.31	840.07	838.86
8	839.17	843.61	839.05	839.12	839.40	840.11	840.72	847.60	857.70	853.99	840.00	838.82
9	839.43	843.55	839.02	839.13	839.24	840.35	840.71	848.32	857.99	853.64	839.90	838.80
10	839.45	844.35	839.03	839.14	839.18	840.51	840.71	848.18	859.30	853.25	839.80	838.77
11	839.57	844.26	839.05	839.14	839.19	840.64	841.04	847.90	862.56	852.75	839.77	838.74
12	839.58	844.02	839.07	839.15	839.21	840.76	841.68	847.48	862.65	852.17	839.74	838.71
13	839.58	843.71	839.08	839.23	839.19	840.84	841.85	847.03	862.33	851.48	839.70	838.68
14	839.60	843.38	839.10	841.13	839.18	840.93	841.79	846.53	861.89	850.79	839.67	838.66
15	839.60	842.90	839.12	842.47	839.18	841.00	841.66	846.00	861.43	850.08	839.68	838.63
16	839.62	842.42	839.17	842.86	839.18	841.05	841.51	845.45	860.93	849.37	839.65	838.61
17	839.62	841.91	839.18	843.15	839.19	841.07	841.34	844.94	860.41	848.64	839.62	838.60
18	839.62	841.37	839.21	842.90	839.17	841.06	841.44	847.98	859.89	847.90	839.58	838.57
19	839.91	840.92	839.23	842.55	839.15	841.04	841.45	848.75	859.34	847.17	839.55	838.53
20	839.98	841.01	839.25	842.16	839.12	841.09	841.52	849.05	858.79	846.38	839.50	838.57
21	839.96	842.54	839.28	841.76	839.11	841.07	842.12	849.24	858.21	845.64	839.47	838.54
22	839.94	842.55	839.25	841.34	839.09	841.04	842.06	849.38	857.63	845.06	839.42	838.54
23	839.85	842.33	839.21	840.89	839.05	841.03	841.89	849.55	857.04	844.50	839.38	838.50
24	839.84	842.02	839.16	840.45	839.08	840.99	841.89	850.38	856.46	843.96	839.34	838.48
25	839.77	841.68	839.12	839.99	839.10	840.95	841.82	851.95	855.98	843.50	839.29	838.45
26	839.70	841.29	839.08	839.55	839.11	840.92	841.62	852.58	855.88	843.05	839.26	838.43
27	839.62	840.93	839.03	839.33	839.18	840.90	841.43	853.36	856.40	842.60	839.22	838.40
28	839.62	840.56	839.04	840.50	839.25	840.85	841.20	854.58	856.43	842.13	839.18	838.38
29	839.55	840.16	839.06	841.25	---	840.80	841.12	855.63	856.26	841.76	839.14	838.37
30	839.48	839.72	839.07	841.39	---	840.76	841.13	855.90	856.14	841.39	839.10	838.34
31	839.45	---	839.08	841.30	---	840.71	---	856.03	---	841.01	839.07	---
MEAN	839.50	841.82	839.14	840.44	839.48	840.54	841.29	848.91	858.31	848.97	839.69	838.66
MAX	839.98	844.35	839.38	843.15	841.13	841.09	842.12	856.03	862.65	855.94	840.75	839.03
MIN	838.99	839.26	839.02	839.10	839.05	839.30	840.70	843.70	855.88	841.01	839.07	838.34
(-)	241000	243000	238000	256000	239000	251000	254000	400000	401000	253000	238000	232000
(=)	+3000	+2000	-5000	+18000	-17000	+12000	+3000	+146000	+1000	-148000	-15000	-6000

CAL YR 1994...-7000

WTR YR 1995...-6000

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

06921350 POMME DE TERRE RIVER NEAR HERMITAGE, MO

LOCATION.--Lat 37°54'20", long 93°19'45", in NW 1/4 NW 1/4 sec.2, T.36 N., R.22 W., Hickory County, Hydrologic Unit 10290107, on right bank 2,000 ft downstream from outlet of Pomme de Terre Lake, 2.5 mi southwest of Hermitage, 4.5 mi upstream from Green Branch and at mile 43.4.

DRAINAGE AREA.--615 mi².

PERIOD OF RECORD.--August 1960 to current year.

GAGE.-- Water-stage recorder. Datum of gage is 749.33 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. Flow regulated by Pomme de Terre Lake (station 06921325) 0.5 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREME FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft³/s, May 9, 1961; gage height, 15.02 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	285	979	87	1700	98	108	599	101	1520	951	64
2	49	285	422	87	1700	98	110	607	101	1520	969	40
3	49	285	344	87	1700	97	107	1370	100	1660	707	40
4	49	293	344	88	1690	97	101	2240	100	1900	412	40
5	49	297	343	87	1690	98	104	2320	99	1900	337	41
6	49	293	343	87	1690	98	108	2290	98	1900	337	41
7	51	655	343	87	1330	102	112	692	97	1900	337	41
8	53	1230	342	86	1010	101	117	595	97	1910	337	41
9	51	1500	205	86	758	100	121	877	171	1910	336	41
10	50	1760	86	86	390	99	128	2410	711	2260	231	41
11	50	1970	85	86	283	100	237	2410	1680	2760	85	41
12	50	1960	85	86	283	100	377	2490	3050	3220	85	41
13	50	1950	85	96	282	101	376	2780	3560	3530	85	41
14	50	2160	85	94	281	102	435	2770	3550	3510	85	41
15	50	2360	85	90	281	103	724	2760	3540	3500	85	41
16	51	2350	86	89	281	178	1080	2740	3540	3500	85	41
17	51	2340	86	1030	281	295	1070	2730	3530	3480	85	41
18	52	2110	86	2310	281	297	1060	1290	3520	3470	85	41
19	171	1900	86	2310	281	297	1060	104	3510	3450	85	41
20	283	1940	86	2300	281	307	1070	97	3500	3450	86	41
21	284	1930	217	2300	281	304	1060	95	3490	2830	85	41
22	284	1920	332	2290	281	305	1060	95	3480	2300	85	41
23	284	1910	332	2280	174	307	1360	96	3470	2290	86	41
24	284	1910	332	2280	95	308	1580	99	3470	2050	86	41
25	284	1900	332	2270	95	310	1570	103	3470	1820	86	41
26	283	1900	332	1930	96	313	1560	101	2470	1840	86	41
27	142	1900	189	1690	97	316	1560	108	1520	1830	86	41
28	125	1900	86	1700	97	319	1560	119	1520	1600	86	41
29	286	1900	86	1700	---	321	1560	104	1520	1430	86	41
30	285	1700	86	1700	---	323	794	102	1520	1430	86	42
31	286	---	87	1700	---	210	---	102	---	1160	86	---
MEAN	135	1560	226	1006	632	200	742	1139	2019	2349	218	41.7
MAX	288	2360	979	2310	1700	323	1580	2780	3560	3530	969	64
MIN	49	285	85	86	95	97	101	95	97	1160	85	40
IN.	.25	2.83	.42	1.89	1.07	.38	1.35	2.13	3.66	4.41	.41	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995^a, BY WATER YEAR (WY)

	MEAN	347	631	748	599	636	862	926	820	626	388	114	143
MAX	3116	2872	2886	2042	2100	3487	2948	4151	2157	2349	480	1110	
(WY)	1994	1987	1986	1993	1975	1985	1984	1973	1985	1995	1978	1993	
MIN	13.1	7.50	43.2	42.5	48.9	48.0	45.0	49.4	31.9	26.0	26.3	26.2	
(WY)	1969	1977	1977	1990	1965	1981	1981	1975	1969	1970	1969	1968	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1964 - 1995 ^a
ANNUAL MEAN	775	855	569
HIGHEST ANNUAL MEAN			1163
LOWEST ANNUAL MEAN			145
HIGHEST DAILY MEAN	2890	May 8	5760
LOWEST DAILY MEAN	48	Jul 27-Aug 3	.00
ANNUAL SEVEN-DAY MINIMUM	48	Jul 27	.00
INSTANTANEOUS PEAK FLOW	---	3600	5910
INSTANTANEOUS PEAK STAGE	---	9.26	12.15
INSTANTANEOUS LOW FLOW	---	40	.00
ANNUAL RUNOFF (INCHES)	7.11	18.88	12.58
10 PERCENT EXCEEDS	2790	2340	1990
50 PERCENT EXCEEDS	284	285	109
90 PERCENT EXCEEDS	49	50	45

^aPost-regulation period

06921760 SOUTH GRAND RIVER NEAR CLINTON, MO

LOCATION.--Lat 38°22'16", long 93°51'23", in NW 1/4 SW 1/4 SE 1/4 sec. 1, T.41 N., R.27 W., Henry County, Hydrologic Unit 10290108 at right upstream end of bridge on State Highway 18, 4.4 mi west of Clinton and 5.4 mi downstream from Big Creek.

DRAINAGE AREA.--1,270 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above sea level. Auxiliary water-stage recorder 3.3 mi upstream from base gage at same datum.

REMARKS.--Estimated daily discharges: May 30 to July 31 and Aug. 25 to Sept. 7. Discharge is calculated using fall computations due to backwater from Harry S. Truman Reservoir. Water-discharge records poor. U.S. Army Corps of Engineers satellite telemeter at base and auxiliary gage.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 42,500 ft³/s, May 18, gage height, 33.62, June 16; minimum daily, 28 ft³/s, Sept. 10 and 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	2020	1470	310	1510	1440	177	1250	6000	1300	240	44
2	135	2940	1050	305	1200	964	172	2340	3500	1000	325	42
3	120	1390	892	300	1030	684	167	3140	2500	800	485	40
4	105	849	788	290	1090	565	161	2170	2200	1800	1500	39
5	95	1690	701	300	1130	576	157	2120	1900	2000	2340	39
6	91	4400	609	270	976	777	149	2000	1700	2500	1260	38
7	85	6430	1270	240	795	877	147	1540	1600	1700	870	38
8	87	3600	4150	220	650	867	145	4610	1800	1300	630	37
9	90	1550	3300	215	573	807	144	15500	2500	900	450	35
10	114	1010	1930	205	508	702	165	10500	2800	500	330	28
11	119	747	1240	215	469	643	288	6050	1800	300	250	28
12	115	588	961	235	427	596	643	4340	1100	260	195	35
13	108	485	809	276	371	547	877	3290	600	230	160	33
14	99	461	677	420	337	494	711	2750	450	200	140	37
15	87	573	620	520	324	450	529	2280	350	170	120	37
16	82	599	610	505	319	414	449	4720	300	160	115	35
17	84	506	780	450	311	379	1860	24800	250	150	115	35
18	82	418	960	405	306	350	4730	42500	230	140	110	38
19	83	359	825	380	314	336	6700	37100	200	180	130	42
20	86	2960	696	360	303	338	4210	17200	180	200	115	41
21	77	19500	613	350	288	322	2100	6970	170	600	114	40
22	68	17000	581	355	276	301	1350	4760	160	1000	110	40
23	68	6980	605	340	264	272	1050	4840	150	1200	100	44
24	67	3680	550	320	255	261	985	6160	160	800	85	35
25	62	2060	515	290	246	238	930	6510	200	600	80	33
26	63	1440	480	269	258	226	800	6960	2000	400	70	35
27	64	1360	445	338	732	225	780	7490	3500	300	65	37
28	65	4410	415	1760	1870	234	900	9080	4000	250	60	37
29	65	4840	390	5170	---	226	925	7140	2500	200	56	37
30	64	2460	360	4640	---	206	985	6500	1800	160	52	39
31	163	---	340	2490	---	188	---	8000	---	150	48	---
MEAN	92.1	3243	956	734	612	500	1113	8536	1553	692	346	37.3
MAX	163	19500	4150	5170	1870	1440	6700	42500	6000	2500	2340	44
MIN	62	359	340	205	246	188	144	1250	150	140	48	28

06921760 SOUTH GRAND RIVER NEAR CLINTON, MO--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Sediment records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,910 mg/L, Apr. 20, 1991; minimum daily mean, 4 mg/L, Aug. 18 and 30, 1993.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 82,800 tons, July 7, 1993; minimum daily, 1.5 tons, Oct. 10, 1992.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 786 mg/L, Apr. 17; minimum daily mean, 22 mg/L, June 22 and 27.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 58,300 tons, May 18; minimum daily, 6.4 tons, Sept. 25.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	161	131	52	2020	772	4740	1470	143	567
2	135	115	42	2940	382	3080	1050	111	314
3	120	126	41	1390	249	929	892	100	241
4	105	107	30	849	263	600	788	93	197
5	95	101	26	1690	331	1590	701	89	168
6	91	108	26	4400	436	5250	609	87	143
7	85	98	23	6430	255	4450	1270	168	576
8	87	103	24	3600	181	1750	4150	236	2640
9	90	108	26	1550	159	659	3300	155	1380
10	114	108	33	1010	144	389	1930	143	744
11	119	108	35	747	140	281	1240	132	444
12	115	105	33	588	138	217	961	101	262
13	108	101	29	485	135	176	809	86	188
14	99	99	26	461	133	166	677	77	140
15	87	105	25	573	132	206	620	81	135
16	82	107	24	599	127	206	610	85	140
17	84	100	23	506	113	154	780	80	168
18	82	113	25	418	105	118	960	80	208
19	83	111	25	359	83	81	825	91	202
20	86	112	26	2960	319	3680	696	101	188
21	77	108	22	19500	372	18600	613	91	150
22	68	101	18	17000	182	8520	581	79	124
23	68	96	18	6980	136	2560	605	80	131
24	67	100	18	3680	121	1190	550	73	108
25	62	90	15	2060	104	578	515	65	91
26	63	89	15	1440	93	361	480	60	77
27	64	93	16	1360	113	455	445	60	72
28	65	100	18	4410	390	4740	415	61	69
29	65	86	15	4840	240	3140	390	61	64
30	64	80	14	2460	190	1240	360	57	55
31	163	93	57	---	---	---	340	54	50

06921760 SOUTH GRAND RIVER NEAR CLINTON, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	310	52	43	1510	150	610	1440	340	1330
2	305	50	41	1200	134	431	964	247	641
3	300	49	40	1030	127	354	684	208	382
4	290	49	38	1090	116	344	565	173	263
5	300	48	39	1130	111	340	576	144	224
6	270	48	35	976	116	304	777	128	270
7	240	47	31	795	127	271	877	137	324
8	220	47	28	650	127	223	867	142	333
9	215	46	27	573	97	150	807	117	254
10	205	47	26	508	82	112	702	101	190
11	215	49	29	469	87	109	643	111	192
12	235	33	21	427	92	106	596	116	187
13	276	49	36	371	90	90	547	139	205
14	420	59	67	337	88	80	494	164	219
15	520	67	94	324	82	72	450	178	215
16	505	64	87	319	67	58	414	202	226
17	450	55	67	311	59	49	379	198	202
18	405	53	58	306	57	47	350	188	177
19	380	48	49	314	63	54	336	180	163
20	360	47	45	303	77	63	338	194	177
21	350	59	55	288	70	55	322	183	159
22	355	65	63	276	66	49	301	181	147
23	340	51	47	264	72	51	272	175	128
24	320	50	44	255	77	53	261	144	101
25	290	52	40	246	68	45	238	114	73
26	269	48	35	258	118	84	226	110	67
27	338	61	57	732	312	803	225	122	74
28	1760	440	2730	1870	547	2750	234	117	74
29	5170	503	6250	---	---	---	226	97	59
30	4640	282	3560	---	---	---	206	67	37
31	2490	200	1340	---	---	---	188	66	33
APRIL			MAY			JUNE			
1	177	89	42	1250	189	639	6000	55	885
2	172	96	45	2340	274	1730	3500	44	418
3	167	95	43	3140	217	1840	2500	39	264
4	161	88	38	2170	199	1160	2200	36	217
5	157	94	39	2120	181	1040	1900	35	179
6	149	159	64	2000	162	875	1700	37	172
7	147	141	56	1540	165	685	1600	34	149
8	145	167	65	4610	308	3830	1800	31	148
9	144	193	75	15500	407	17000	2500	25	171
10	165	177	79	10500	239	6790	2800	30	226
11	288	187	149	6050	214	3490	1800	33	161
12	643	245	441	4340	188	2200	1100	31	92
13	877	286	678	3290	140	1240	600	30	48
14	711	247	475	2750	113	837	450	40	49
15	529	169	242	2280	89	545	350	47	44
16	449	221	274	4720	118	1500	300	29	24
17	1860	786	3940	24800	493	33000	250	27	18
18	4730	699	8930	42500	508	58300	230	26	16
19	6700	343	6210	37100	372	37300	200	25	14
20	4210	269	3060	17200	210	9750	180	25	12
21	2100	275	1560	6970	132	2480	170	23	11
22	1350	225	821	4760	109	1400	160	22	9.6
23	1050	178	505	4840	99	1300	150	23	9.2
24	985	169	449	6160	83	1370	160	24	10
25	930	158	396	6510	73	1280	200	24	13
26	800	170	368	6960	75	1410	2000	24	131
27	780	194	408	7490	77	1560	3500	22	209
28	900	214	521	9080	80	1950	4000	26	285
29	925	198	494	7140	65	1250	2500	29	197
30	985	180	478	6500	75	1320	1800	31	153
31	---	---	---	8000	69	1490	---	---	---

06921760 SOUTH GRAND RIVER NEAR CLINTON, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	1300	34	120	240	71	46	44	98	12
2	1000	37	100	325	79	69	42	103	12
3	800	40	86	485	171	224	40	160	17
4	1800	39	191	1500	227	920	39	156	16
5	2000	33	180	2340	250	1580	39	137	14
6	2500	31	212	1260	261	889	38	130	13
7	1700	33	153	870	212	497	38	118	12
8	1300	38	134	630	180	306	37	112	11
9	900	34	82	450	188	229	35	107	10
10	500	34	46	330	175	156	28	109	8.3
11	300	37	30	250	162	110	28	101	7.6
12	260	33	23	195	153	81	35	115	11
13	230	44	28	160	144	62	33	137	12
14	200	40	21	140	136	51	37	113	12
15	170	32	15	120	141	46	37	130	13
16	160	29	13	115	140	44	35	105	10
17	150	33	13	115	124	38	35	96	8.9
18	140	56	21	110	107	32	38	111	12
19	180	39	19	130	98	34	42	129	14
20	200	41	22	115	107	33	41	145	16
21	600	46	74	114	128	39	40	121	13
22	1000	59	161	110	114	34	40	94	10
23	1200	62	200	100	131	35	44	88	10
24	800	76	164	85	121	28	35	86	8.0
25	600	86	140	80	150	32	33	73	6.4
26	400	97	105	70	127	24	35	74	6.9
27	300	90	73	65	109	19	37	83	8.2
28	250	90	60	60	91	15	37	102	10
29	200	97	52	56	107	16	37	95	10
30	160	78	34	52	132	19	39	90	9.6
31	150	71	29	48	106	14	---	---	---

06922440 HARRY S. TRUMAN RESERVOIR AT WARSAW, MO

LOCATION.-- Lat 38°15'30", long 93°23'40", in NW 1/4 NE 1/4 sec.7, T.40 N., R.22 W., Benton County, Hydrologic Unit 10290105, in control room near middle of dam on Osage River, 1.5 mi northwest of Warsaw and at mile 175.

DRAINAGE AREA.--11,500 mi².

PERIOD OF RECORD.--October 1981 to current year. Records collected at same site since 1977 are available from U.S. Army Corps of Engineers.

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

REMARKS.--Lake is formed by a rolled earthfill type dam. Storage began on July 21, 1977. Spillway is equipped with 4 tainter gates 40 ft wide by 47.3 ft high. Capacity of surcharge pool 2,911,000 ac-ft (elevation 739.6 ft to 751.1 ft); of flood control pool 4,006,000 ac-ft (elevation 706.0 ft to 739.6 ft); and of multipurpose pool 1,203,000 ac-ft (elevation 635.0 ft to 706.0). Lake is used for flood control, hydroelectric power, recreation, and fish and wildlife enhancement.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,020,000 ac-ft, Oct. 11, 12, 1986, elevation, 738.69 ft, Oct. 11, 1986; minimum, 41,700 ac-ft, Nov. 14, 1978, elevation, 661.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,020,000 ac-ft, June 16, elevation, 733.40 ft; minimum, 1,160,000 ac-ft, Sept. 10, elevation, 705.59 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 24:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	706.11	706.57	711.96	706.32	708.60	706.71	706.06	709.24	732.51	729.18	710.70	705.84
2	706.11	706.63	711.30	706.22	708.48	706.60	706.10	709.96	732.51	728.74	710.20	705.81
3	706.21	706.69	710.51	706.16	708.34	706.45	706.12	710.36	732.40	728.27	709.81	705.81
4	706.23	706.75	709.66	706.13	708.11	706.52	706.13	710.47	732.25	727.90	710.08	705.78
5	706.19	706.99	708.75	706.18	707.90	706.63	706.15	710.42	732.05	727.39	709.89	705.73
6	706.17	707.40	708.04	706.18	707.67	706.69	706.17	710.29	731.85	727.03	709.61	705.70
7	706.18	707.50	707.60	706.22	707.39	706.76	706.20	710.51	731.60	726.83	709.19	705.67
8	706.29	707.58	707.50	706.33	707.07	706.67	706.22	712.48	731.49	726.43	708.74	705.64
9	706.28	707.87	707.55	706.14	706.82	706.58	706.18	713.93	731.71	725.82	708.24	705.61
10	706.28	707.75	707.44	706.16	706.68	706.40	706.37	715.10	732.58	725.23	707.62	705.59
11	706.28	707.59	707.34	706.22	706.51	706.55	706.76	715.75	732.92	724.63	707.31	705.59
12	706.25	707.36	707.24	706.22	706.34	706.70	706.72	716.14	733.17	724.01	707.02	705.63
13	706.26	707.08	707.05	706.62	706.33	706.47	706.58	716.43	733.24	723.38	707.09	705.69
14	706.20	706.79	706.81	707.14	706.38	706.38	706.57	716.64	733.31	722.72	706.92	705.74
15	706.22	706.75	706.66	707.14	706.35	706.30	706.58	716.75	733.37	722.00	706.88	705.75
16	706.26	705.76	706.65	707.99	706.38	706.20	706.65	717.23	733.40	721.26	706.80	705.78
17	706.28	706.78	706.59	707.93	706.43	706.31	706.76	721.90	733.34	720.47	706.73	705.76
18	706.32	705.67	706.53	707.56	706.40	706.44	707.85	724.85	733.17	719.62	706.61	705.74
19	706.33	706.70	706.44	707.25	706.46	706.58	708.46	726.63	732.96	718.75	706.61	705.86
20	706.28	710.10	706.37	706.87	706.51	706.56	708.83	727.64	732.60	717.98	706.66	705.87
21	706.21	711.74	706.36	706.88	706.46	706.55	708.85	727.90	732.25	717.37	706.63	705.89
22	706.25	712.78	706.28	706.83	706.44	706.59	708.65	728.00	731.84	716.89	706.58	705.87
23	706.23	713.04	706.12	706.79	706.46	706.56	708.46	728.20	731.44	716.44	706.57	705.86
24	706.26	713.09	706.31	706.78	706.48	706.48	708.21	728.88	731.07	715.94	706.44	705.87
25	706.26	713.07	706.43	706.72	706.57	706.43	707.93	729.76	730.86	715.41	706.36	705.89
26	706.27	713.02	706.54	706.64	706.70	706.46	707.70	730.59	730.89	714.80	706.37	705.88
27	706.28	713.10	706.60	706.80	706.81	706.34	707.36	731.37	730.67	714.19	706.42	705.88
28	706.27	712.92	706.48	707.32	706.76	706.23	707.05	732.28	730.34	713.52	706.32	705.87
29	706.27	712.79	706.44	707.96	---	706.14	707.58	732.63	729.97	712.83	706.16	705.89
30	706.29	712.49	706.40	708.36	---	706.04	707.93	732.58	729.59	712.11	706.18	705.93
31	706.50	---	706.36	708.56	---	706.01	---	732.49	---	711.37	705.87	---
MAX	706.50	713.10	711.96	708.56	708.60	706.76	708.85	732.63	733.40	729.18	710.70	705.93
MIN	706.11	706.57	706.12	706.13	706.33	706.01	706.06	709.24	729.59	711.37	705.87	705.59
(-)	1210000	1600000	1200000	1330000	1220000	1180000	1290000	3860000	3420000	1520000	1170000	1180000
(=)	+20000	+390000	-400000	+130000	-110000	-40000	+110000	+2570000	-440000	-1900000	-350000	+10000

CAL YR 1994...-70000

WTR YR 1995...-10000

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

06922450 OSAGE RIVER BELOW HARRY S. TRUMAN DAM AT WARSAW, MO

LOCATION.--Lat 38°15'41", long 93°24'16", NE 1/4 SW 1/4 sec.17, T.40 N., R.22 W., Benton County, Hydrologic Unit 10290109, on right bank 2,000 ft below Harry S. Truman Dam and 1.5 mi northwest of Warsaw.

DRAINAGE AREA.--7,856 mi² uncontrolled area below other reservoirs.

PERIOD OF RECORD.--May 1978 to current year.

GAGE.--Acoustic flow monitor. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records not published prior to 1982 water year due to test period of acoustic flow monitor which included periods of unreliable record. Flow completely regulated by Harry S. Truman Dam (station 06922440), 2,000 ft upstream.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	250	1290	32100	3960	15100	9720	500	8160	48500	50100	32500	500
2	250	3510	32300	3740	16100	9650	500	12000	48500	50100	32400	500
3	125	3670	31800	3570	16100	9730	500	16000	48500	51800	22000	500
4	0	5900	32000	4390	16100	3220	500	20500	48600	51800	26600	500
5	1540	8630	32200	2550	16200	1670	500	24300	48600	51900	27400	1890
6	250	6360	30600	3240	16200	4540	500	24300	49500	41900	27800	500
7	250	13100	17100	0	16200	7850	500	24300	48700	31400	26400	500
8	250	16300	16300	0	16300	9920	500	9790	48700	42000	26600	500
9	250	16300	12500	6060	14700	9980	500	11800	49200	52700	24600	500
10	250	16400	13100	3580	8150	10900	500	14600	33700	52000	23200	500
11	250	16100	10800	1420	10200	0	2850	14300	37700	51700	12000	198
12	1340	15900	10500	2230	8470	0	8780	19300	38100	51600	11200	250
13	250	16200	11600	0	5090	9870	11500	24300	44000	51500	500	250
14	996	15700	12700	1050	3450	6220	6250	24300	48600	51200	7470	250
15	0	9920	10100	1070	4680	6370	4100	24200	50000	51100	3150	250
16	0	8270	6510	1040	4120	6750	4100	24200	50200	50900	3770	250
17	167	8140	8120	7710	3980	846	10500	8860	50200	51000	5450	250
18	0	8100	8190	17000	3620	0	9270	0	49900	50800	6530	250
19	0	6970	8240	17000	0	0	13000	0	50300	50400	500	250
20	1820	400	7930	17100	1320	3050	17900	12200	49500	48000	500	250
21	2340	9470	5800	7020	3020	4000	19900	32100	50500	38200	2530	99
22	0	24400	8480	7700	3010	4890	20000	44000	50600	31500	3240	0
23	0	30400	7660	6590	2670	4000	20200	48100	50300	29900	2210	0
24	0	31900	0	7350	2000	4720	20400	29600	50800	31600	5080	0
25	0	31700	0	8320	0	4000	20400	11900	50800	31500	4020	0
26	0	31900	0	8270	0	4000	18400	11700	50200	31700	1900	0
27	0	31800	1990	8280	4680	4000	16400	21700	50500	31700	500	0
28	0	31700	4820	6830	10100	4000	16400	21600	51000	31900	5540	0
29	0	31800	4730	6970	---	4060	8210	27000	51000	32200	5840	0
30	0	31900	4470	11600	---	4000	8250	42400	50600	32200	500	0
31	0	---	4220	16200	---	2080	---	46400	---	31400	8970	---
MEAN	341	16140	12480	6188	7913	4969	8727	21090	48240	43150	11640	298
MAX	2340	31900	32300	17100	16300	10900	20400	48100	51000	52700	32500	1890
MIN	0	400	0	0	0	0	500	0	33700	29900	500	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1995^a, BY WATER YEAR (WY)

	MEAN	10620	12220	14750	9327	9332	13820	16380	17670	17170	9650	6289	3709
MAX	52090	42250	43020	32520	20050	44920	32720	48830	48240	43150	28320	18300	
(WY)	1987	1987	1993	1993	1982	1985	1984	1994	1995	1995	1993	1993	
MIN	341	689	1558	1854	2986	1648	2432	2512	585	551	367	196	
(WY)	1995	1992	1991	1992	1992	1991	1991	1992	1988	1991	1991	1991	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1982 - 1995 ^a
ANNUAL MEAN	14050	15120	12270
HIGHEST ANNUAL MEAN			18760
LOWEST ANNUAL MEAN			2516
HIGHEST DAILY MEAN	53900 Jun 4	52700 Jul 9	71100 Oct 20 1986
LOWEST DAILY MEAN	0 Many Days	0 Many Days	0 Most Years

^aPost-regulation period.

06922850 BIG BUFFALO CREEK AT BIG BUFFALO WILDLIFE AREA

(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°20'06", long 93°05'05", SE 1/4 NW 1/4 sec. 12, T.41 N., R.19 W., Morgan County, Hydrologic Unit 10290109. Sampling site is reached by taking Highway FF to the end, turn right onto dirt road and travel about 2 mi.

DRAINAGE AREA.--24.5 mi².

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR PER (COLS./100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 16...	0900	23	9.5	333	8.25	9.6	83	--	K1	45	164
JAN 25...	1100	13	1.5	334	7.48	14.0	97	<10	K5	500	184
MAR 28...	0800	10	10.0	373	7.94	10.4	90	--	K1	K1	207
APR 25...	1300	48	13.5	244	7.74	10.4	99	--	K18	23	124
JUN 23...	1030	20	22.0	354	7.63	8.5	96	<10	M	170	199
JUL 19...	0820	4	22.5	422	7.77	6.5	76	--	K4	42	210
AUG 30...	1005	3	26.0	456	7.68	6.3	79	--	31	35	234

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 16...	200	0	0.080	<0.010	<0.030	<0.20	0.090	0.090	--	--
JAN 25...	225	0	0.070	<0.010	0.010	<0.20	<0.020	<0.010	170	34
MAR 28...	245	0	0.070	<0.010	0.020	0.25	<0.020	<0.010	--	--
APR 25...	154	0	0.020	<0.010	0.030	<0.20	<0.020	0.010	--	--
JUN 23...	244	0	0.090	<0.010	0.030	<0.20	<0.020	<0.010	200	41
JUL 19...	258	0	0.100	0.010	0.020	<0.20	<0.020	<0.010	--	--
AUG 30...	290	0	0.090	0.010	0.010	0.20	0.020	0.010	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS Al) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS Al) (01106)
JAN 25...	20	2.0	0.80	8.1	2.2	<0.10	174	2	30	<20
JUN 23...	24	2.3	1.30	6.3	1.9	<0.10	190	4	60	30

DATE	CADMIUM TOTAL RECOVERABLE (µg/L AS Cd) (01027)	CADMIUM DIS-SOLVED (µg/L AS Cd) (01025)	COPPER, DIS-SOLVED (µg/L AS Cu) (01040)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	LEAD, TOTAL RECOVERABLE (µg/L AS Pb) (01051)	LEAD, DIS-SOLVED (µg/L AS Pb) (01049)	MANGANESE, DIS-SOLVED (µg/L AS Mn) (01056)	MERCURY TOTAL RECOVERABLE (µg/L AS Hg) (71900)	ZINC, TOTAL RECOVERABLE (µg/L AS Zn) (01092)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)
JAN 25...	<1	<1.0	<1	3	<1	<1	2	0.20	<4	<4
JUN 23...	1	1.0	<1	3	1	1	5	0.20	8	5

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

06923150 DOUSINBURY CREEK ON HIGHWAY JJ NEAR WALL STREET, MO

LOCATION.--Lat 37°35'38", long 92°58'00", SW 1/4 SW 1/4 NE 1/4 sec. 12, T.33 N., R.19 W., Dallas County, Hydrologic Unit 10290110, on downstream end of center pier of bridge on State Highway JJ, 1 mi upstream from Niangua River, and 1.5 mi southwest of Wall Street.

DRAINAGE AREA.--39.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1993 to current year.

GAGE.--Water stage recorder. Datum of gage is 1,014.05 ft above sea level.

REMARKS.--Estimated daily discharges: Oct. 1-2 and Dec. 19 to Jan. 5. Water-discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6780 ft³/s, Sept. 25, 1993, gage height, 10.14 ft; minimum, 0.40 ft³/s, Aug. 30, 1993.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	4.3	15	5.6	53	14	8.5	1050	55	12	3.6	1.0
2	1.2	4.0	15	5.3	46	14	8.1	202	48	11	4.8	1.2
3	1.1	4.0	14	5.1	43	13	7.9	139	40	38	12	1.1
4	2.3	264	14	4.9	39	13	7.4	170	45	24	9.8	.97
5	2.9	931	14	4.7	33	13	6.8	103	39	23	8.1	.90
6	3.1	293	13	4.5	30	12	6.7	107	40	18	5.6	.83
7	12	85	13	4.4	27	144	6.4	113	37	15	23	2.0
8	348	52	12	4.1	24	53	6.2	210	31	13	10	2.1
9	50	376	12	4.0	24	37	6.1	125	38	12	7.0	1.7
10	22	125	12	4.2	23	31	14	74	1200	11	6.2	1.5
11	15	65	11	4.6	21	26	276	55	178	11	5.3	1.3
12	11	46	11	4.7	18	23	93	43	93	9.1	4.6	1.2
13	8.5	37	11	657	18	22	45	36	58	8.4	4.1	1.2
14	7.3	31	10	424	18	21	30	28	43	7.7	3.8	1.1
15	6.4	27	9.7	109	18	21	23	24	35	7.6	4.2	1.0
16	6.0	24	12	63	17	19	19	32	28	7.2	3.6	1.4
17	5.5	23	13	45	16	17	17	518	23	7.2	3.1	1.5
18	5.9	21	12	36	15	15	23	259	20	6.2	2.9	.98
19	6.5	22	11	41	14	13	17	118	19	5.9	2.6	2.8
20	6.1	66	10	36	14	12	509	76	17	6.3	2.3	3.5
21	6.2	67	9.8	35	13	11	86	63	15	5.9	2.2	1.9
22	6.1	38	9.3	34	13	9.3	61	52	14	5.1	1.9	1.7
23	5.7	30	8.8	31	13	8.1	87	46	13	5.2	1.8	1.4
24	5.4	26	8.3	29	13	8.3	73	161	43	6.2	1.7	1.4
25	5.0	23	7.9	33	12	7.4	54	185	19	5.2	1.6	1.4
26	4.7	21	7.5	37	12	11	41	269	23	4.9	1.5	1.3
27	4.4	20	7.1	302	14	21	51	292	19	4.3	1.4	1.2
28	4.3	18	6.7	331	15	13	35	574	15	4.0	1.3	1.1
29	4.2	16	6.4	134	---	11	491	121	15	3.4	1.2	.93
30	4.0	15	6.1	83	---	9.6	156	81	13	3.2	1.1	1.2
31	4.2	---	5.9	61	---	8.7	---	65	---	3.1	1.0	---
MEAN	18.6	92.5	10.6	83.1	22.0	21.0	75.5	174	75.9	9.81	4.62	1.43
MAX	348	931	15	657	53	144	509	1050	1200	38	23	3.5
MIN	1.1	4.0	5.9	4.0	12	7.4	6.1	24	13	3.1	1.0	.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	MEAN	16.7	71.0	18.0	49.9	23.8	19.8	154	109	46.4	8.38	8.24	104
MAX	18.6	92.5	25.4	83.1	25.6	21.0	232	174	75.9	9.81	17.4	305	
(WY)	1995	1995	1994	1995	1994	1995	1995	1994	1995	1995	1994	1993	
MIN	14.9	49.5	10.6	16.8	22.0	18.5	75.5	36.2	11.5	7.28	2.70	1.43	
(WY)	1994	1994	1995	1994	1995	1994	1995	1993	1994	1993	1993	1995	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL MEAN	47.5	49.2	47.0	
HIGHEST ANNUAL MEAN			49.2	1995
LOWEST ANNUAL MEAN			44.9	1994
HIGHEST DAILY MEAN	2090	Apr 11	3330	Sep 24 1993
LOWEST DAILY MEAN	1.1	Sep 22,23,Oct 3	.50	Aug 28 1993
ANNUAL SEVEN-DAY MINIMUM	1.3	Sep 17	.55	Aug 24 1993
INSTANTANEOUS PEAK FLOW	---		3470	Jun 10
INSTANTANEOUS PEAK STAGE	---		7.73	Jun 10
INSTANTANEOUS LOW FLOW	---		.74	Sep 6-7,18,29-30
10 PERCENT EXCEEDS	62		105	
50 PERCENT EXCEEDS	9.8		13	
90 PERCENT EXCEEDS	2.0		1.8	

06923150 DOUSINBURY CREEK ON HIGHWAY JJ NEAR WALL STREET, MO--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (MS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)
OCT											
04...	1530	2.3	22.0	333	8.2	9.1	104	K1600	1500	300	173
31...	1200	4.3	12.0	353	8.1	9.9	93	K1400	1600	430	186
DEC											
06...	1130	13	8.5	324	8.1	12.1	104	K140	120	32	159
JAN											
09...	1200	4.0	2.0	349	8.2	15.8	114	23	24	K15	170
FEB											
06...	1500	30	5.5	267	8.2	14.6	116	K16	K16	20	126
MAR											
08...	1200	48	1.5	236	8.1	14.7	103	420	300	600	113
APR											
03...	1500	7.8	11.0	324	8.4	12.6	115	240	180	83	156
MAY											
17...	1500	137	16.5	179	7.9	9.2	94	K34000	K33000	K41000	83
JUN											
20...	1600	17	24.5	280	8.6	11.2	134	130	60	58	138
JUL											
12...	1500	9.3	27.5	309	8.3	9.0	115	280	260	52	157
AUG											
16...	1300	3.7	28.5	323	8.2	8.4	108	2000	1200	120	159

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
OCT											
04...	211	0	0.120	<0.010	<0.015	<0.20	<0.20	0.010	<0.010	0.020	170
31...	227	0	0.110	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	<0.010	180
DEC											
06...	194	0	0.410	<0.010	<0.015	<0.20	<0.20	0.030	<0.010	<0.010	160
JAN											
09...	207	0	0.390	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	<0.010	180
FEB											
06...	154	0	0.620	0.040	<0.015	<0.20	<0.20	0.010	0.020	<0.010	130
MAR											
08...	138	0	0.220	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	120
APR											
03...	191	0	0.090	0.030	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	160
MAY											
17...	101	0	0.200	0.010	0.050	0.40	0.40	0.100	0.080	0.090	86
JUN											
20...	168	0	0.130	<0.010	0.030	<0.20	<0.20	<0.010	0.010	0.010	140
JUL											
12...	191	0	0.260	0.010	0.030	<0.20	<0.20	0.010	<0.010	<0.010	160
AUG											
16...	194	0	0.130	<0.010	0.020	0.40	0.30	0.030	0.020	0.020	160

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06923150 DOUSINBURY CREEK ON JJ NEAR WALL STREET, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT										
04...	34	21	2.8	2.1	4.9	6.3	<0.10	7.3	188	10
31...	36	22	2.8	2.3	5.5	6.8	<0.10	5.3	196	3
DEC										
06...	33	20	2.8	1.7	5.5	6.5	<0.10	5.5	169	10
JAN										
09...	34	22	2.7	1.4	6.2	7.2	<0.10	3.8	180	3
FEB										
06...	27	16	2.4	1.3	4.4	5.9	<0.10	5.7	140	2
MAR										
08...	25	14	2.1	1.3	6.1	4.8	<0.10	6.4	139	6
APR										
03...	33	20	2.7	1.4	5.2	7.2	<0.10	2.6	162	23
MAY										
17...	18	10	1.7	2.4	2.7	3.4	<0.10	6.4	109	336
JUN										
20...	29	17	2.6	1.8	4.1	5.2	<0.10	5.9	155	20
JUL										
12...	32	19	2.7	2.2	4.2	6.0	<0.10	8.4	166	35
AUG										
16...	33	20	2.9	2.7	3.8	6.6	<0.10	10	168	24

DATE	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (MG/L AS BE) (01010)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR) (01030)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)
OCT									
04...	--	--	--	--	--	--	--	8	--
31...	--	--	--	--	--	--	--	<3	--
DEC									
06...	<1	65	<1	<1	3	<1	<1	7	<1
JAN									
09...	--	--	--	--	--	--	--	<3	--
FEB									
06...	<1	46	<1	<1	2	<1	<1	5	<1
MAR									
08...	--	--	--	--	--	--	--	53	--
APR									
03...	<1	71	<1	<1	3	<1	<1	<3	<1
MAY									
17...	--	--	--	--	--	--	--	200	--
JUN									
20...	<1	62	<1	<1	<1	<1	<1	<3	<1
JUL									
12...	--	--	--	--	--	--	--	4	--
AUG									
16...	<1	78	<1	<1	1	<1	1	7	<1

06923150 DOUSINBURY CREEK ON JJ NEAR WALL STREET, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEDED TOTAL (MG/L AS C) (00689)
OCT								
04...	18	--	--	--	--	--	1.2	0.2
31...	11	--	--	--	--	--	1.0	0.1
DEC								
06...	5	<1	2	<1	<1	3	2.0	0.2
JAN								
09...	3	--	--	--	--	--	0.9	0.1
FEB								
06...	3	<1	2	<1	<1	2	1.1	0.1
MAR								
08...	5	--	--	--	--	--	3.0	0.3
APR								
03...	21	<1	2	<1	<1	<1	1.2	0.2
MAY								
17...	48	--	--	--	--	--	7.1	>5.0
JUN								
20...	5	<1	3	<1	<1	<1	1.3	0.1
JUL								
12...	10	--	--	--	--	--	1.3	0.2
AUG								
16...	34	<1	1	<1	<1	2	1.5	0.3

06923150 DOUSINBURY CREEK ON JJ NEAR WALL STREET, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)
DEC 06...	--	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
APR 03...	<0.01	<0.01	<0.01	E0.002	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
JUN 20...	<0.002	<0.002	<0.002	0.01	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
	P, P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)
DEC 06...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
APR 03...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
JUN 20...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
DEC 06...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
APR 03...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
JUN 20...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.002
	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUPOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)	
DEC 06...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
APR 03...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
JUN 20...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	<0.002

E--Laboratory estimated value.

06923250 NIANGUA RIVER NEAR WINDYVILLE, MO

LOCATION.--Lat 37°41'03", long 92°55'27", in NW 1/4 SE 1/4 NE 1/4, sec.8, T.34 N., R.18 W., Dallas County, Hydrologic Unit 10290110, at bridge on State Highway K, 1.75 mi south of Windyville, and 0.4 mi above Fourmile Creek.

DRAINAGE AREA.--338 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 24, 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 900 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 5-8. Water-discharge records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	92	241	112	664	269	132	5270	587	323	75	35
2	33	84	228	111	596	244	127	3660	518	263	162	39
3	34	78	217	109	547	231	123	1230	443	316	627	56
4	38	1000	207	108	515	224	120	1430	401	517	328	44
5	41	4070	198	107	467	222	114	1080	446	388	290	36
6	39	5230	188	106	426	219	111	884	503	1050	203	34
7	58	1150	188	105	396	842	109	1230	522	582	157	34
8	1610	733	180	104	363	859	108	1750	400	333	244	36
9	764	2400	173	103	339	571	106	1340	384	258	172	37
10	383	1530	167	101	328	479	104	854	6680	214	123	36
11	271	805	158	100	311	419	885	688	5210	185	100	34
12	211	611	150	99	286	375	1170	602	1580	164	87	33
13	175	509	146	1210	266	342	634	532	999	145	78	32
14	149	443	141	4900	257	312	467	469	758	131	66	31
15	131	389	137	1390	259	286	388	415	616	117	72	29
16	124	346	141	849	257	266	337	404	518	106	84	30
17	119	312	153	649	245	248	302	2460	446	95	65	32
18	254	281	163	539	231	231	364	2650	390	88	59	31
19	359	268	159	559	222	219	361	1230	352	79	52	36
20	240	920	151	524	213	211	2380	700	319	75	50	52
21	187	955	149	510	204	200	1210	554	290	74	47	53
22	158	618	145	501	196	188	700	542	264	72	46	42
23	137	488	141	483	190	178	645	475	243	69	45	35
24	122	428	137	460	181	165	923	1690	571	71	42	33
25	109	389	134	451	174	155	682	2050	665	85	40	31
26	99	356	129	479	171	153	559	1250	429	87	40	30
27	92	338	125	1280	239	193	551	2030	1570	74	39	29
28	84	312	123	3180	287	191	484	4830	576	63	38	27
29	80	282	119	1640	---	166	1750	1360	467	54	39	27
30	79	258	116	990	---	151	2820	823	467	47	36	26
31	81	---	113	760	---	140	---	655	---	42	35	---
MEAN	203	856	159	730	315	289	626	1456	920	199	114	35.3
MAX	1610	5230	241	4900	664	859	2820	5270	6680	1050	627	56
MIN	33	78	113	99	171	140	104	404	243	42	35	26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1995, BY WATER YEAR (WY)

	1991	1992	1993	1994	1995
MEAN	126	638	409	420	333
MAX	230	856	559	730	407
(WY)	1994	1995	1993	1995	1994
MIN	22.5	412	159	175	220
(WY)	1993	1992	1995	1992	1993

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1991 - 1995
ANNUAL MEAN	483	492	441
HIGHEST ANNUAL MEAN			583
LOWEST ANNUAL MEAN			206
HIGHEST DAILY MEAN	12000	Apr 11	31000
LOWEST DAILY MEAN	21	Aug 29	13
ANNUAL SEVEN-DAY MINIMUM	27	Aug 23	17
INSTANTANEOUS PEAK FLOW	---		12100
INSTANTANEOUS PEAK STAGE	---		15.34
INSTANTANEOUS LOW FLOW	---		23
10 PERCENT EXCEEDS	843	1160	799
50 PERCENT EXCEEDS	176	231	186
90 PERCENT EXCEEDS	42	40	33

06923250 NIANGUA RIVER NEAR WINDYVILLE, MO--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1991 to current year. National water-quality assessment station since April 1993.

REMARKS.--Discontinued ambient water-quality monitoring network station February 1995. National water-quality assessment station April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	E. COLI WATER TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)
OCT											
04...	1130	38	18.0	383	8.1	7.5	78	600	460	280	204
NOV											
01...	1230	88	11.0	406	8.0	9.0	82	96	84	81	210
DEC											
06...	1600	186	9.0	359	8.1	11.3	98	55	49	71	178
JAN											
10...	1200	101	0.5	384	8.2	14.4	100	K2	K2	K2	189
FEB											
06...	1230	425	3.5	297	8.0	13.0	97	K10	K10	28	147
MAR											
09...	1200	569	2.0	271	8.0	13.3	95	K650	610	780	136
APR											
03...	1130	123	11.5	368	8.3	9.8	90	K7	K9	34	176
MAY											
17...	1130	438	19.0	309	8.1	7.5	82	K950	720	840	152
JUN											
20...	1230	319	21.5	323	8.1	8.0	90	78	54	56	160
JUL											
12...	1100	164	24.5	337	8.1	6.2	75	130	110	80	171
AUG											
16...	1030	94	26.0	353	8.1	5.8	72	92	98	120	178

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
OCT											
04...	249	0	0.060	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	0.020	200
NOV											
01...	256	0	<0.050	<0.010	<0.015	<0.20	<0.20	0.020	0.010	0.010	210
DEC											
06...	217	0	0.330	<0.010	<0.015	<0.20	<0.20	0.030	0.010	<0.010	190
JAN											
10...	231	0	0.200	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	<0.010	190
FEB											
06...	179	0	0.690	0.020	<0.015	<0.20	<0.20	<0.010	0.010	0.010	150
MAR											
09...	165	0	0.390	0.010	0.030	<0.20	0.20	<0.010	<0.010	0.020	140
APR											
03...	176	0	<0.050	0.030	0.030	<0.20	<0.20	0.020	0.010	<0.010	190
MAY											
17...	185	0	0.160	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	0.010	160
JUN											
20...	195	0	0.310	<0.010	0.030	<0.20	<0.20	0.020	0.020	0.020	160
JUL											
12...	209	0	0.380	<0.010	0.020	<0.20	<0.20	0.020	0.020	0.010	170
AUG											
16...	217	0	0.200	<0.010	<0.015	0.20	<0.20	0.040	0.040	0.030	180

K--Results based on colony count outside the acceptable range (non-ideal colony count).

OSAGE RIVER BASIN

06923250 NIANGUA RIVER AT WINDYVILLE, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)
OCT 04...	40	24	3.6	1.6	5.4	6.1	<0.10	7.1	208	25
NOV 01...	42	25	3.8	2.2	6.6	6.8	<0.10	6.9	231	8
DEC 06...	38	23	4.2	1.9	6.9	7.5	<0.10	5.9	193	55
JAN 10...	38	24	4.1	1.5	7.3	8.0	<0.10	3.3	203	10
FEB 06...	30	18	3.8	1.6	5.8	7.6	<0.10	6.8	144	5
MAR 09...	28	16	4.3	2.0	7.2	8.4	<0.10	6.9	157	18
APR 03...	38	22	4.3	1.6	6.2	8.5	<0.10	1.3	189	27
MAY 17...	33	18	3.5	1.8	4.6	6.1	<0.10	5.3	166	33
JUN 20...	34	19	3.6	1.9	5.3	5.6	0.10	7.3	176	31
JUL 12...	35	20	3.7	2.3	5.1	6.6	<0.10	8.6	183	32
AUG 16...	37	21	3.6	2.4	4.4	6.3	<0.10	10	194	42

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)
OCT 04...	--	--	--	--	--	--	--	8	--
NOV 01...	--	--	--	--	--	--	--	32	--
DEC 06...	<1	74	<1	<1	3	<1	<1	20	<1
JAN 10...	--	--	--	--	--	--	--	28	--
FEB 06...	<1	51	<1	<1	2	<1	<1	16	<1
MAR 09...	--	--	--	--	--	--	--	80	--
APR 03...	<1	62	<1	<1	2	<1	<1	30	<1
MAY 17...	--	--	--	--	--	--	--	22	--
JUN 20...	<1	69	<1	<1	<1	<1	<1	11	<1
JUL 12...	--	--	--	--	--	--	--	10	--
AUG 16...	<1	80	<1	<1	1	<1	<1	5	<1

06923250 NIANGUA RIVER AT WINDYVILLE, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDEED TOTAL (MG/L AS C) (00689)
OCT								
04...	31	--	--	--	--	--	1.4	0.4
NOV								
01...	33	--	--	--	--	--	3.0	0.2
DEC								
06...	15	<1	3	<1	<1	1	1.2	0.2
JAN								
10...	19	--	--	--	--	--	0.9	0.1
FEB								
06...	10	<1	2	<1	<1	1	1.4	0.2
MAR								
09...	11	--	--	--	--	--	3.8	0.7
APR								
03...	5	<1	2	<1	<1	<1	1.3	0.4
MAY								
17...	10	--	--	--	--	--	1.6	0.6
JUN								
20...	12	<1	4	<1	<1	2	1.4	0.2
JUL								
12...	26	--	--	--	--	--	1.7	0.4
AUG								
16...	26	<1	2	<1	<1	1	1.6	0.3

06923250 NIANGUA RIVER AT WINDYVILLE, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)
APR 03...	<0.01	<0.01	<0.01	E0.002	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
MAY 17...	<0.002	<0.002	<0.002	0.01	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
JUN 20...	<0.002	<0.002	<0.002	0.02	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
	P,P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THON, DIS- SOLVED (µG/L) (39532)
APR 03...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
MAY 17...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
JUN 20...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U GF, REC (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	FEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
APR 03...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
MAY 17...	<0.001	<0.01	E0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02
JUN 20...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02
	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)	
APR 03...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	
MAY 17...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	
JUN 20...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	

E--Laboratory estimated value.

06923500 BENNETT SPRING AT BENNETT SPRINGS, MO

LOCATION.--Lat 37°43'03", long 92°51'26", in NW 1/4 sec.1, T.34 N., R.18 W., Dallas County, Hydrologic Unit 10290110, on left bank 300 ft downstream from spring outlet, 1.5 mi upstream from Niangua River and at Bennett Springs.

PERIOD OF RECORD.--September 1916 to March 1920, October 1928 to September 1941, October 1965 to current year. Prior to March 1920 and from October 1939 to September 1941 monthly discharge only published in WSP 1310. Occasional discharge measurements 1923, 1964 and 1965.

GAGE.--Water-stage recorder. Prior to May 26, 1987, nonrecording gage. Datum of gage 864.71 ft above sea level. Sept. 1916 to Mar. 1920, in the vicinity, datum unknown; Oct. 17, 1928, to Apr. 11, 1934, at site 1,780 ft downstream at datum 2.30 ft lower; Apr. 12 to Dec. 13, 1934, nonrecording gage; Dec. 14, 1934, to Sept. 17, 1941, water-stage recorder at present site and datum; and Sept 18, 1941, to May 25, 1987, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Jan. 14-16. Records good. Occasional runoff from drainage area of 42.4 mi² included in records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	161	225	168	481	278	204	1090	484	329	232	186
2	147	161	222	168	465	267	202	730	461	326	235	186
3	146	160	219	168	448	262	200	609	434	340	298	182
4	145	275	215	166	432	261	197	564	412	389	278	181
5	145	1010	210	165	420	259	195	529	395	371	310	179
6	146	814	206	166	397	259	195	500	388	757	285	177
7	149	594	204	167	381	336	192	501	380	471	267	177
8	410	504	200	165	364	386	189	552	362	404	268	181
9	396	608	198	164	356	368	189	549	353	376	251	180
10	297	575	194	163	352	353	187	506	488	351	240	178
11	257	489	192	163	337	335	397	467	546	335	233	175
12	231	434	190	163	322	322	442	441	499	322	227	174
13	216	400	189	161	313	310	376	423	465	310	223	173
14	206	369	188	350	308	303	342	400	440	300	220	173
15	198	342	186	650	306	291	321	383	417	293	220	173
16	190	321	188	580	296	285	297	376	395	321	224	173
17	185	309	192	513	286	274	281	894	383	301	217	173
18	195	294	190	477	280	263	275	766	369	291	212	173
19	220	279	187	447	274	259	264	606	358	283	209	173
20	202	292	186	423	265	259	549	538	350	278	207	178
21	191	337	185	404	261	254	467	490	342	276	205	173
22	186	324	182	387	257	250	398	456	338	272	199	170
23	180	307	181	373	255	247	375	431	334	266	197	169
24	176	297	181	360	251	240	399	425	429	259	197	167
25	170	286	178	351	249	234	384	447	400	253	197	168
26	168	275	178	347	247	223	361	452	389	247	197	165
27	166	269	178	380	263	227	350	546	369	246	196	164
28	165	260	177	625	289	221	338	895	352	242	195	163
29	165	245	174	591	---	215	452	627	341	239	195	162
30	163	232	173	540	---	211	548	553	334	235	194	161
31	162	---	173	506	---	206	---	511	---	234	189	---
MEAN	197	374	192	337	327	273	319	557	400	320	226	174
MAX	410	1010	225	650	481	386	549	1090	546	757	310	186
MIN	145	160	173	161	247	206	187	376	334	234	189	161
IN.	2.28	4.17	2.21	3.89	3.41	3.15	3.56	6.42	4.47	3.69	2.61	1.94

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	138	165	174	171	190	233	261	255	199	151	131	130
MEAN	138	165	174	171	190	233	261	255	199	151	131	130
MAX	578	508	436	337	447	712	546	557	704	320	226	456
(WY)	1987	1973	1983	1995	1985	1973	1994	1995	1935	1995	1995	1993
MIN	81.3	76.0	78.9	78.6	81.3	85.2	84.8	92.3	85.0	79.7	77.5	73.6
(WY)	1938	1938	1938	1940	1934	1936	1936	1934	1936	1934	1936	1937

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	298	308	183
HIGHEST ANNUAL MEAN			308
LOWEST ANNUAL MEAN			93.4
HIGHEST DAILY MEAN	1940	Apr 11	6350
LOWEST DAILY MEAN	145	Oct 4-5	55
ANNUAL SEVEN-DAY MINIMUM	147	Sep 30	58
INSTANTANEOUS PEAK FLOW	---		14400
INSTANTANEOUS PEAK STAGE	---		11.10
INSTANTANEOUS LOW FLOW	---		55
ANNUAL RUNOFF (INCHES)	40.45	41.78	24.88
10 PERCENT EXCEEDS	504	499	306
50 PERCENT EXCEEDS	241	269	140
90 PERCENT EXCEEDS	168	169	90

06923700 NIANGUA RIVER BELOW BENNETT SPRINGS, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°44'17", long 92°51'37", in SE 1/4 sec.25, T.35 N., R.18 W., Dallas County, Hydrologic Unit 10290110, at bridge on Highway 64, 1,200 ft downstream inflow of Bennett Springs Branch.

PERIOD OF RECORD.--October 1982 to September 1988, 1991 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00301)	COLIFORM, FECALE, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECALE, PER (COLS./100 ML) (31673)	ALKALINITY, WAT WH TOT FIELD (MG/L AS CaCO3) (00410)	
OCT 27...	0810	175	12.0	380	7.70	8.8	81	--	170	140	166
NOV 15...	1045	1000	12.5	292	8.04	9.4	88	--	K1	220	130
JAN 26...	1000	747	3.5	314	7.60	13.1	97	<10	30	61	141
FEB 07...	1000	800	6.5	285	7.57	12.1	97	--	23	24	134
MAR 28...	1130	340	14.0	353	7.95	11.8	112	--	K7	K11	172
APR 26...	0730	1050	12.5	291	7.75	9.7	91	--	140	96	138
JUN 30...	0900	840	20.5	290	7.73	7.3	80	13	32	210	139
AUG 29...	1120	170	18.0	381	7.62	9.5	102	--	58	64	185

DATE	BICARBONATE WATER FIELD (MG/L AS HCO_3) (00450)	CARBONATE WATER FIELD (MG/L AS CO_3) (00447)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO_3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
OCT 27...	203	0	0.700	--	--	<0.20	0.020	--	--	--
NOV 15...	159	0	<0.020	<0.010	<0.030	<0.20	<0.020	0.030	--	--
JAN 26...	172	0	0.950	<0.010	0.010	<0.20	0.020	0.020	150	30
FEB 07...	160	0	0.840	--	--	<0.20	0.020	--	--	--
MAR 28...	212	0	0.300	<0.010	0.010	<0.20	<0.020	0.010	--	--
APR 26...	168	0	0.590	<0.010	0.040	0.42	<0.020	0.030	--	--
JUN 30...	170	0	0.570	0.010	0.010	0.30	<0.020	0.020	150	32
AUG 29...	227	0	0.890	0.010	0.020	0.20	0.020	0.020	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO_4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (MG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (MG/L AS AL) (01106)
JAN 26...	18	3.4	1.6	6.8	7.2	<0.10	166	4	90	40
JUN 30...	18	3.0	2.3	5.3	5.6	<0.10	160	22	240	40

DATE	CADMIUM TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 26...	<1	<1.0	<1	27	<1	<1	4	0.10	<4	<4
JUN 30...	1	1.0	<1	27	1	1	10	0.30	4	4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06924500 HA HA TONKA SPRING AT HA HA TONKA STATE PARK

(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°58'26", long 92°46'01", in SE 1/4 NW 1/4 sec. 2, T.37 N., R.16 W., Camden County, Hydrologic Unit 10290110. Take Highway D about 2 mi west of Camdenton.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	
NOV 15...	1400	177	12.5	227	7.30	8.20	76	<10	K2	350	98	
APR 24...	1300	170	13.0	320	7.40	10.10	95	<10	725	1010	155	
JUN 26...	1330	250	14.0	313	7.26	9.30	90	<10	K53	96	150	
AUG 29...	1350	104	14.0	401	7.55	9.70	95	<10	33	72	200	
DATE		BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO-GEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD-NESS TOTAL (mg/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV 15...	119	0	0.810	<0.010	<0.030	<0.20	0.060	0.030	110	23	13	
APR 24...	191	0	0.830	<0.010	0.020	<0.20	0.030	0.050	160	34	18	
JUN 26...	184	0	0.820	<0.010	0.040	0.32	<0.020	0.010	160	33	19	
AUG 29...	249	0	1.100	<0.010	0.010	<0.20	0.020	0.030	220	45	25	
DATE		SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUM-INUM, TOTAL RECOV-ERABLE (µG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)	CADMIUM TOTAL RECOV-ERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)
NOV 15...	2.6	1.8	5.2	6.5	<0.10	116	32	340	30	<1	<1.0	
APR 24...	3.1	1.3	5.7	5.2	<0.10	176	8	170	<20	<1	<1.0	
JUN 26...	2.8	1.7	5.4	4.5	<0.10	176	6	150	20	1	1.0	
AUG 29...	3.0	1.3	4.4	4.7	<0.10	238	2	70	<20	<1	<1.0	
DATE		COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)	PROP-CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (µG/L) (04028)	SI-MAZINE, WATER, DISS, REC (µG/L) (04035)
NOV 15...	<1	11	2	<1	2	<0.10	10	<4	--	--	--	
APR 24...	<1	11	3	<1	1	0.20	<4	<4	<0.02	<0.008	<0.008	
JUN 26...	1	10	1	1	3	0.10	40	37	<0.007	<0.002	<0.005	
AUG 29...	<1	<3	3	<1	1	<0.10	<4	<4	--	--	--	

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06924500 HA HA TONKA SPRING AT HA HA TONKA STATE PARK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PRO-METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	FONOFOS WATER DISS REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P,P' DDE DISSOLV (µG/L) (34653)	METC- LACHLOR WATER DISSOLV (µG/L) (39415)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)
APR 24...	<0.008	E0.005	<0.01	<0.008	<0.007	E0.001	E0.005	<0.01	<0.008	E0.006	<0.01
JUN 26...	<0.02	E0.004	<0.004	<0.003	<0.002	<0.006	E0.003	<0.004	<0.001	0.03	<0.004
DATE	FONOFOS WATER DISS REC (µG/L) (04095)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	MAIA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD REC (µG/L) (82664)	TER- BACIL WATER FLTRD REC (µG/L) (82665)
APR 24...	<0.008	<0.09	<0.01	<0.02	<0.008	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
JUN 26...	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	<0.003	<0.004	<0.002	<0.007
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
APR 24...	<0.04	<0.03	<0.005	<0.009	E0.008	<0.007	E0.003	<0.01	<0.01	<0.01	<0.009
JUN 26...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
APR 24...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 26...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06925445 COAKLEY HOLLOW SPRING BRANCH AT LAKE OF THE OZARKS SPRING

(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°03'12", long 92°34'58", SE 1/4 SW 1/4 sec. 4, T.38 N., R.16 W., Camden County, Hydrologic Unit 10290109. Turn west off of Highway A, 1/4 mi after the Church of Christ, follow for 2 mi, take first paved road to the right go to the bottom of the hill.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DEMAND, (PER-CENT SATURATION) (00301)	OXYGEN, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY, WAT WH TOT FET (MG/L AS CaCO ₃) (00410)
------	------	---	-----------------------------	--------------------------------------	---	-----------------------------------	---	--	--	--	---

NOV 15...	1630	2	12.0	316	7.30	10.2	93	<10	K1	46	164
APR 24...	1530	11	11.5	127	7.00	10.3	94	<10	52	220	79
JUN 26...	1130	1	13.5	486	7.70	9.8	94	<10	K77	210	264
AUG 30...	1300	0.2	13.5	460	7.51	9.5	93	<10	21	K22	278

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (00507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)
------	---	--	--	---	---	---	--------------------------------------	--	---	---	--

NOV 15...	200	0	0.160	<0.010	<0.020	<0.20	<0.020	0.020	170	34	20
APR 24...	96	0	0.110	0.010	0.030	0.21	<0.020	0.020	86	18	10
JUN 26...	327	0	0.290	0.010	0.010	<0.20	<0.020	<0.010	270	54	32
AUG 30...	341	0	0.420	<0.010	0.010	<0.20	0.020	0.010	290	60	35

DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (00300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µG/L AS AL) (01106)	CADMIUM, TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM, DIS-SOLVED (µG/L AS CD) (01025)
------	---	---	--	---	--	---	--	--	---	---	--

NOV 15...	2.4	1.2	6.1	2.5	<0.10	166	8	160	<20	<1	<1.0
APR 24...	2.0	1.1	6.1	2.5	<0.10	106	6	460	170	<1	<1.0
JUN 26...	3.1	1.1	6.4	4.1	<0.10	262	2	50	30	1	1.0
AUG 30...	2.7	1.0	6.3	4.5	<0.10	298	6	30	<20	<1	<1.0

DATE	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY, TOTAL RECOVERABLE (µG/L AS HG) (01900)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)	PROP-CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL-ATE, WATER, DISS, REC (µG/L) (04028)	SI-MAZINE, WATER, DISS, REC (µG/L) (04035)
------	---	---------------------------------------	--	---------------------------------------	--	---	--	---------------------------------------	---	--	--

NOV 15...	<1	<3	<1	<1	<1	<0.10	5	<4	--	--	--
APR 24...	<1	110	3	1	3	<0.10	5	<4	<0.02	<0.008	<0.008
JUN 26...	<1	4	1	1	2	0.01	8	6	<0.007	<0.002	<0.005
AUG 30...	<1	<3	4	<1	<1	<0.10	9	5	--	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06925445 COAKLEY HOLLOW SPRING BRANCH AT LAKE OZARKS SPRING--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	FONOFOS WATER DISS REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P,P' DDE DISSOLV (µG/L) (34653)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	METRI- BUZIN SENSOR WATER DISSOLV (µG/L) (82630)
APR 24...	<0.008	<0.003	<0.01	<0.008	<0.007	<0.01	<0.009	<0.01	<0.008	<0.02	<0.01
JUN 26...	<0.02	<0.002	<0.004	<0.003	<0.002	<0.006	<0.002	<0.004	<0.001	<0.001	<0.004
DATE	FONOFOS WATER DISS REC (µG/L) (04095)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
APR 24...	<0.008	<0.005	<0.01	<0.02	<0.008	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
JUN 26...	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	<0.003	<0.004	<0.002	<0.007
DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
APR 24...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
JUN 26...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
APR 24...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 26...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

06925500 LAKE OF THE OZARKS NEAR BAGNELL, MO

LOCATION.--Lat 38°12'19", long 92°37'21", in SE 1/4 sec.19, T.40 N., R.15 W., Miller County, Hydrologic Unit 10290111, at left end of powerhouse section near left end of Bagnell Dam on Osage River, 2 mi southwest of Bagnell, and at mile 81.7.

DRAINAGE AREA.--14,000 mi².

PERIOD OF RECORD.--April 1931 to current year. Gage-height records collected at same site since 1932 and are contained in reports of the National Weather Service, published as "Osage River at Bagnell Dam, Lakeside".

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. To obtain sea level subtract 0.88 ft.

REMARKS.--Lake is formed by concrete gravity dam. Spillway is equipped with 12 taintor gates 34 ft wide by 22 ft high. Storage began in 1931. Usable capacity 1,218,000 ac-ft between elevation 630.00 ft (maximum draw-down) and 660.00 ft (top of gates). Dead storage, 708,800 ac-ft. Figures given herein are usable contents. Lake is used for flood control, power, and recreational purposes.

COOPERATION.--Records were provided by Union Electric Company of Missouri.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,527,000 ac-ft, May 22, 1943, elevation, 665.45 ft; minimum, 322,100 ac-ft, Feb. 13, 1948, elevation, 639.95 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,269,000 ac-ft, May 17, elevation, 660.95 ft; minimum, 853,000 ac-ft, Mar. 6, elevation, 653.12 ft.

MONTH END ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

Date	Elevation (ft)	Contents (ac-ft)	Change in contents (ac-ft)
Sept. 30	657.03	1,052,000	-----
Oct. 31	657.49	1,076,000	+24,000
Nov. 30	659.43	1,185,000	+109,000
Dec. 31	659.55	1,192,000	+7,000
CAL YR 1994	-----	-----	+51,000
Jan. 31	656.94	1,047,000	-145,000
Feb. 28	654.16	904,000	-143,000
Mar. 31	654.24	908,000	+4,000
Apr. 30	657.59	1,082,000	+174,000
May 31	659.68	1,199,000	+117,000
June 30	659.64	1,197,000	-2,000
July 31	659.49	1,188,000	-9,000
Aug. 31	658.07	1,108,000	-80,000
Sept. 30	656.95	1,047,000	-61,000
WTR YR 1995	-----	-----	-5,000

06926000 OSAGE RIVER NEAR BAGNELL, MO

LOCATION.--Lat 38°11'29", long 92°36'26", in NW 1/4 NE 1/4 SE 1/4 sec.29, T.40 N., R.15 W., Miller County, Hydrologic Unit 10290111, on center pier of U.S. Highway 54 bridge, 1.3 mi downstream from hydroelectric plant of Union Electric Company of Missouri and at mile 80.5.

DRAINAGE AREA.--14,000 mi², approximately.

PERIOD OF RECORD.--October 1880 to current year. Monthly discharge only for some periods published in WSP 1310. Gage-height records collected in this vicinity 1880-1931 are contained in reports of Missouri River Commission or National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 549.13 ft above sea level (levels by Missouri State Highway and Transportation Commission). Nonrecording gage from Oct. 1880 to Oct. 15, 1930 and recording gage from Oct. 15, 1930, to Sept. 30, 1979, at site 1.7 mi downstream at datum 0.56 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Several observations of water temperature and specific conductance were made during the year. Flow regulated by Lake of the Ozarks (station 06925500), 1.3 mi upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximim stage prior to 1943, 43.1 ft in June 1844 (former site and datum), discharge, 164,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1130	814	29900	1610	22100	19900	1780	31700	48000	49100	30500	1600
2	2160	767	33100	3230	20400	16900	1030	30700	48000	49100	31200	779
3	2410	2790	33100	13300	24000	12400	430	30900	47900	48100	31300	731
4	819	11400	33100	13600	22800	9580	2150	31000	47700	47300	30700	738
5	493	3420	33000	12400	22000	4800	3770	30900	47700	47200	30600	2070
6	1230	4560	32000	13900	22800	9380	1090	30800	47600	41300	30100	2570
7	578	26400	19900	6660	21900	6380	1690	30800	47600	31000	23300	4360
8	740	31700	16900	6720	19400	14500	8490	31200	47500	36000	19100	1640
9	871	32200	21600	6230	21600	11600	2960	25800	47600	47000	20300	773
10	436	31800	5770	4890	12200	5550	4880	22500	48000	47500	27100	1160
11	717	31100	4180	1540	8130	9680	2220	25700	47900	47500	23700	2010
12	433	21500	12500	950	2550	2100	1210	25300	47800	47600	19600	2360
13	1430	5590	17200	8880	13200	1400	924	30500	47600	47600	5000	2200
14	1240	12800	7270	16700	14100	825	461	26800	47500	47500	13200	2080
15	1740	10700	11500	12400	18200	594	1080	25300	47500	47500	16100	2250
16	2570	12600	16500	5690	15000	760	1040	29500	47500	47500	15300	2130
17	3260	9930	1810	14400	11900	1580	11400	52300	47500	47500	11900	2130
18	661	12700	1950	19400	2120	1600	20500	78200	47500	47400	8860	2870
19	2530	12700	8950	22600	1140	866	25300	36100	47500	46700	1180	2120
20	5240	16300	8770	28300	698	842	24900	25100	48300	46100	759	1780
21	2390	33600	8910	21300	3660	1030	18600	32100	49400	40000	4440	811
22	1020	33200	5630	11400	4060	5290	14000	39400	49400	31000	867	776
23	2390	33100	3160	19900	1780	7730	14600	45900	49300	30800	755	712
24	1450	33000	6570	17600	3700	5200	17600	44100	49300	29100	1190	723
25	1500	31600	1050	17400	812	5280	27600	27300	49300	29400	4440	766
26	2640	33100	5050	18900	546	1970	25200	30400	49300	30600	1110	720
27	1170	32100	7740	17000	11100	5050	24000	32800	49300	30400	734	500
28	499	31400	8800	10500	11500	6840	16300	32800	49300	30500	735	880
29	456	31400	5130	4210	---	10000	6400	32700	49300	30500	2540	535
30	473	26500	1600	15900	---	13300	18000	41000	49200	30500	3860	764
31	524	---	692	24800	---	5280	---	47700	---	30500	2730	---
MEAN	1458	20360	13010	12660	11910	6394	9987	34110	48240	40640	13330	1518
MAX	5240	33600	33100	28300	24000	19900	78200	78200	49400	49100	31300	4360
MIN	433	767	692	950	546	594	430	22500	47500	29100	734	500
IN.	.12	1.62	1.07	1.04	.89	.53	.80	2.81	3.85	3.35	1.10	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995^a, BY WATER YEAR (WY)

	MEAN	6180	8575	8237	8198	9931	13450	16000	15790	15110	9620	5026	5887
MAX	59310	45280	45050	34700	34720	57300	70040	92260	78160	96780	26500	54540	
(WY)	1942	1987	1993	1993	1949	1973	1973	1943	1935	1951	1993	1951	
MIN	471	538	717	586	535	359	452	516	515	492	510	486	
(WY)	1957	1957	1940	1940	1964	1931	1931	1956	1931	1931	1956	1954	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1931 - 1995 ^a
ANNUAL MEAN	16770	17820	10080
HIGHEST ANNUAL MEAN			23360
LOWEST ANNUAL MEAN			1046
HIGHEST DAILY MEAN	108000	Apr 12	212000
LOWEST DAILY MEAN	433	Oct 12	235
ANNUAL SEVEN-DAY MINIMUM	672	Oct 27	320
INSTANTANEOUS PEAK FLOW	---		84000
INSTANTANEOUS PEAK STAGE	---		30.00
INSTANTANEOUS LOW FLOW	---		430
ANNUAL RUNOFF (INCHES)	16.26		17.29
10 PERCENT EXCEEDS	49800		47500
50 PERCENT EXCEEDS	8520		12700
90 PERCENT EXCEEDS	715		812
			510

^aPost-regulation period.

06926500 OSAGE RIVER NEAR ST. THOMAS, MO

LOCATION.--Lat 38°20'20", long 92°13'34", in SE 1/4 SW 1/4 sec.35, T.42 N., R.12 W., Cole County, Hydrologic Unit 10290111, on left bank 0.5 mi downstream from Sugar Creek, 2.5 mi south of St. Thomas and at mile 43.1.

DRAINAGE AREA.--14,500 mi², approximately.

PERIOD OF RECORD.--August 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 528.06 ft above sea level.

REMARKS.--Estimated daily discharges: May 18 to June 4, due to backwater from the Missouri River. Records good, except for estimated daily discharges, which are fair. Several observations of water temperature and specific conductance were made during the year. Considerable regulation by Lake of the Ozarks (station 06925500), 38.6 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage prior to 1943, about 39.4 ft in June 1844.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	982	766	27100	1560	24600	18800	4770	37500	56000	53900	31600	2730
2	1240	996	33400	1750	22900	16300	1800	40100	56000	53600	31900	1760
3	2510	1060	34300	7550	25500	15000	1330	34800	56000	52700	33200	1030
4	2200	6750	34300	12000	26400	10300	918	35000	56000	51000	32500	894
5	1100	9500	34300	14500	23900	8060	3650	34700	56600	50500	32600	886
6	800	8510	34200	10600	24200	7470	3050	33700	55700	49500	32800	2070
7	1320	17000	24000	6470	22500	7710	1600	33300	54900	37000	28600	3030
8	1480	30400	19800	7010	22100	10700	3040	35200	54500	35300	22800	4330
9	2040	35600	19800	7290	20900	13400	9120	34700	54700	48000	19700	1590
10	1330	35600	15700	6070	19700	10700	3550	27200	57400	52100	25100	1090
11	851	33400	3480	4650	8110	7150	6740	31000	57400	52300	25500	1350
12	983	24600	7320	1670	6820	6550	4620	31500	56300	52000	23100	2180
13	756	16700	16500	5250	5560	2560	2590	35700	55800	51500	10900	2420
14	1500	7890	10200	26100	15600	1930	1910	35700	55100	50900	5800	2290
15	1480	13500	8240	18100	17900	1390	1310	30200	54100	50600	15500	2240
16	1850	13100	15900	9980	16400	1150	1790	32000	53300	50500	15200	2380
17	2900	9460	9610	9800	16600	1230	5440	63400	52700	50500	15400	2280
18	3020	10100	2070	16900	5800	1950	16700	90000	52300	50400	13800	2290
19	1160	15200	4610	22800	2460	1990	28100	63000	52000	50100	6820	2350
20	4010	15500	7290	27700	1580	1410	27800	40000	52000	49100	1560	2310
21	4530	37100	9720	28800	1570	1310	22400	35000	53200	47400	1970	1770
22	2590	36200	7110	13000	5090	1670	16300	45000	53500	35300	4360	1010
23	1430	35100	5710	17300	3290	6350	15600	50000	53400	32400	1210	908
24	2490	34700	4950	20100	2950	7790	17200	55000	53300	31700	948	841
25	1690	33100	4560	15800	3180	5660	27100	42000	53300	29500	1700	836
26	1620	34100	1530	18500	1300	6110	28200	37000	53500	31500	5380	862
27	2680	34400	6870	18900	4320	2230	26200	40000	54000	31700	1400	859
28	1370	32100	7570	18700	11200	6700	19600	43000	54000	31600	952	755
29	777	32500	7220	12800	---	8060	19300	42000	54100	31700	1110	1020
30	679	30500	4530	9670	---	10200	17800	46000	54100	31600	2410	692
31	703	---	2100	25500	---	12500	---	56000	---	31600	2830	---
MEAN	1744	21510	13680	13450	12940	6914	11320	41600	54510	43790	14470	1702
MAX	4530	37100	34300	28800	26400	18800	28200	90000	57400	53900	33200	4330
MIN	679	766	1530	1560	1300	1150	918	27200	52000	29500	948	692
IN.	.14	1.66	1.09	1.07	.93	.55	.87	3.31	4.20	3.48	1.15	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1995, BY WATER YEAR (WY)

	MEAN	7471	9147	8702	8696	10530	14360	17170	17050	16280	10470	5348	6254
MAX	68630	45630	47570	37350	36660	60660	71820	92370	82990	103400	28630	57610	
(WY)	1987	1987	1993	1993	1975	1973	1973	1943	1935	1951	1993	1951	
MIN	550	628	781	640	684	798	626	715	924	706	620	564	
(WY)	1961	1957	1940	1940	1964	1954	1956	1932	1956	1956	1956	1956	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1931 - 1995
ANNUAL MEAN	18430	19830	10950
HIGHEST ANNUAL MEAN			25240
LOWEST ANNUAL MEAN			1237
HIGHEST DAILY MEAN	119000	90000	215000
LOWEST DAILY MEAN	679	679	373
ANNUAL SEVEN-DAY MINIMUM	907	838	426
INSTANTANEOUS PEAK FLOW	---	Unknown ^a	216000
INSTANTANEOUS PEAK STAGE	---	29.09	43.80
INSTANTANEOUS LOW FLOW	---	656	346
ANNUAL RUNOFF (INCHES)	17.25	18.57	10.26
10 PERCENT EXCEEDS	52900	52300	31600
50 PERCENT EXCEEDS	8100	13800	4540
90 PERCENT EXCEEDS	1190	1310	721

^aDue to backwater from Missouri River

06926510 OSAGE RIVER BELOW ST. THOMAS, MO
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°25'18", long 92°12'31", in NW 1/4 NW 1/4 sec.1, T.42 N., R.12 W., Cole County, Hydrologic Unit 10290111, at bridge on State Highway B, 3.8 mi north of St. Thomas, 8.6 mi downstream from gaging station, and at mile 34.5.

DRAINAGE AREA.--14,500 mi², approximately.

PERIOD OF RECORD.--Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURE: October 1974 to September 1981.

REMARKS.--Records of discharge are given for gaging station 06926500 Osage River near St. Thomas.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 398 microsiemens, Jan. 1, 1981; minimum daily, 140 microsiemens, Sept. 3, 1981.

WATER TEMPERATURE: Maximum daily, 30.0° C, July 29, 1977, and July 25 and Aug. 11, 1980; minimum daily, 0.0° C, Jan. 21, 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV												
16...	1315	12300	272	7.74	15.5	5.8	9.0	89	K1	475	130	34
JAN												
24...	1015	21600	254	7.24	3.0	8.2	12.6	94	K13	115	110	33
MAR												
27...	1130	1120	268	8.02	10.5	26.0	12.2	106	38	86	130	35
MAY												
25...	1030	52700	281	7.73	19.0	8.5	9.7	102	1100	1260	130	34
JUL												
19...	1200	48500	230	7.66	26.0	--	6.8	85	K14	39	--	--
31...	1600	31600	248	7.50	27.5	3.1	3.9	50	K5	205	110	34
SEP												
07...	0920	1970	262	8.12	26.0	3.0	8.9	108	K61	205	130	36

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
NOV												
16...	9.8	4.3	2.8	102	102	125	0	18	8.9	0.10	3.0	155
JAN												
24...	7.9	5.7	3.4	83	81	99	0	22	8.4	0.10	5.0	216
MAR												
27...	11	4.5	2.9	115	114	140	0	17	6.0	0.10	4.0	154
MAY												
25...	10	4.5	2.3	105	103	126	0	20	5.4	<0.10	4.4	158
JUL												
31...	6.9	8.2	3.0	89	90	109	0	17	3.7	0.10	4.6	142
SEP												
07...	8.7	4.8	3.1	95	96	117	0	17	4.5	0.10	6.0	157

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06926510 OSAGE RIVER BELOW ST. THOMAS, MO--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO ₂ +NO ₃ DIS-SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS-SOLVED (MG/L AS AL) (01106)
NOV 16...	143	0.21	5150	0.030	0.120	--	0.010	0.41	0.030	0.030	<0.010	<10
JAN 24...	136	0.29	12600	<0.010	0.480	--	0.010	0.34	0.070	0.030	0.030	--
MAR 27...	151	0.21	466	<0.010	0.340	--	0.020	0.46	0.090	<0.020	0.010	<10
MAY 25...	144	0.21	22500	0.010	0.240	--	0.020	0.43	0.110	0.090	0.010	80
JUL 19...	--	--	--	--	--	0.040	--	0.46	0.050	--	--	--
31...	206	0.19	12100	<0.010	0.170	--	0.030	0.50	0.040	0.020	0.020	--
SEP 07...	138	0.21	835	0.010	0.020	--	0.010	0.49	0.070	0.080	0.040	10

DATE	BARIUM, DIS-SOLVED (MG/L AS BA) (01005)	COBALT, DIS-SOLVED (MG/L AS CO) (01035)	IRON, DIS-SOLVED (MG/L AS FE) (01046)	LITHIUM DIS-SOLVED (MG/L AS LI) (01130)	MANGA- NESE, DIS-SOLVED (MG/L AS MN) (01056)	MOLYB- DENUM, DIS-SOLVED (MG/L AS MO) (01060)	NICKEL, DIS-SOLVED (MG/L AS NI) (01065)	SELE- NIUM, DIS-SOLVED (MG/L AS SE) (01145)	SILVER, DIS-SOLVED (MG/L AS AG) (01075)	STRON- TIUM, DIS-SOLVED (MG/L AS SR) (01080)	VANA- DIUM, DIS-SOLVED (MG/L AS V) (01085)
NOV 16...	67	<3	6	<4	6	10	<1	<1	<1.0	97	<6
MAR 27...	60	4	13	<4	69	<10	<1	<1	<1.0	89	<6
MAY 25...	61	<3	93	<4	7	<10	<1	<1	<1.0	83	<6
SEP 07...	51	<3	<3	<4	6	<10	1	<2	<1.0	120	<6

06928440 ROUBIDOUX SPRING AT WAYNESVILLE, MO

(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°49'30", long 92°11'53", NE 1/4 NW 1/4 sec. 25 T.36 N., R.12 W., Pulaski County, Hydrologic Unit 10290201. Take business loop 44 through Waynesville, turn south along river and follow up to spring.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCOCCI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	
NOV 16...	1600	101	13.0	318	7.70	7.00	66	--	K1	93	148
JAN 23...	1530	500	8.5	262	7.30	10.0	84	<10	40	58	120
MAR 28...	1500	670	12.0	319	7.60	8.60	78	--	53	190	156
APR 24...	1100	750	13.0	238	7.30	8.30	78	--	184	280	121
JUN 23...	1030	113	16.0	310	7.84	6.10	61	<10	K6	36	154
AUG 29...	0800	23	17.5	390	7.11	5.50	58	--	K810	K5	193

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P) (70507)	HARDNESS, TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM, DIS-SOLVED (MG/L AS Ca) (00915)
NOV 16...	180	0	0.540	0.540	<0.010	<0.20	<0.020	0.010	--	--
JAN 23...	147	0	0.690	<0.010	0.010	<0.20	<0.020	0.010	130	27
MAR 28...	190	0	0.210	<0.010	0.010	<0.20	0.020	0.010	--	--
APR 24...	146	0	0.310	<0.010	0.020	<0.20	<0.020	0.020	--	--
JUN 23...	189	0	0.280	<0.010	0.020	<0.20	<0.020	0.010	160	33
AUG 29...	239	0	0.410	0.010	0.010	0.20	0.020	0.010	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS Al) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS Al) (01106)
JAN 23...	16	2.0	1.3	7.1	4.1	<0.10	150	4	140	20
JUN 23...	20	2.1	1.6	6.5	3.0	<0.10	170	4	70	20

DATE	CADMIUM TOTAL RECOVERABLE (µg/L AS Cd) (01027)	CADMIUM DIS-SOLVED (µg/L AS Cd) (01025)	COPPER, DIS-SOLVED (µg/L AS Cu) (01040)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	LEAD, TOTAL RECOVERABLE (µg/L AS Pb) (01051)	LEAD, DIS-SOLVED (µg/L AS Pb) (01049)	MANGANESE, DIS-SOLVED (µg/L AS Mn) (01056)	MERCURY TOTAL RECOVERABLE (µg/L AS Hg) (71900)	ZINC, TOTAL RECOVERABLE (µg/L AS Zn) (01092)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)
JAN 23...	<1	<1.0	<1	16	1	<1	2	0.10	4	<4
JUN 23...	1	1.0	<1	5	1	1	1	0.10	7	4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06929315 PADDY CREEK ABOVE SLABTOWN SPRING, MO

LOCATION.--Lat 37°33'29", long 92°02'55", in SE 1/4 NE 1/4 NE 1/4 sec. 20, T.33 N., R.10 W., Texas County, Hydrologic Unit 10290202, on the right bank 75 ft upstream from a concrete ford on a county road, 1 mi upstream from Big Piney River, and 12 mi west of Licking.

DRAINAGE AREA.--34.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 22, 1993 to current year.

GAGE.--Water stage recorder. Elevation of gage is 900 ft above sea level, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 4-13, Jan. 3-9, Mar. 15 to May 12, July 22 to Aug. 1, and Aug. 14 to Sept. 30. Water-discharge records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.6	4.1	3.4	23	26	7.0	501	24	15	1.2	.70
2	1.3	1.8	3.4	3.4	19	20	6.0	100	24	10	2.1	.70
3	1.6	2.0	3.4	3.1	16	15	5.5	70	18	130	2.6	.70
4	1.7	11	3.3	3.1	13	12	5.0	50	15	66	2.0	.70
5	1.5	20	2.8	2.9	10	11	4.8	40	12	37	1.7	.68
6	1.8	11	2.7	2.9	8.4	9.3	4.6	35	11	30	1.7	.68
7	2.6	8.0	2.7	2.9	7.2	543	4.4	30	9.7	25	2.0	.68
8	1.8	7.0	3.0	2.7	5.9	91	5.4	70	8.3	21	2.6	.66
9	1.9	14	3.4	2.7	5.4	56	98	60	7.2	14	2.2	.66
10	1.9	12	3.1	2.7	5.1	41	1210	45	98	11	1.7	.66
11	1.8	10	2.8	3.1	5.0	32	527	35	71	9.1	1.5	.66
12	1.7	9.0	2.7	3.4	4.1	26	109	30	46	6.3	1.4	.66
13	1.5	8.0	2.7	5.7	3.4	21	64	28	33	5.3	1.3	.66
14	1.5	7.0	2.7	161	4.3	18	40	24	24	5.0	1.2	.66
15	1.4	6.1	2.9	108	5.3	14	18	20	19	3.9	1.2	.66
16	1.6	5.2	3.4	64	5.0	12	14	19	15	3.1	1.1	.64
17	1.7	4.3	3.4	43	4.7	10	12	36	11	3.2	1.0	.64
18	2.3	4.0	3.4	29	5.0	8.5	15	64	9.1	2.8	1.0	.64
19	3.1	2.8	3.4	49	4.5	7.5	14	42	7.2	2.4	.98	.64
20	2.7	4.2	3.4	54	4.5	6.3	30	31	6.2	2.5	.96	.64
21	2.6	33	5.1	31	5.3	5.4	55	24	5.5	2.3	.90	.64
22	2.2	18	5.4	27	5.0	5.0	35	20	4.8	2.1	.88	.62
23	2.0	12	5.4	25	4.9	4.8	65	16	4.3	2.0	.86	.62
24	1.9	9.6	4.4	22	4.3	4.6	70	14	4.0	1.9	.84	.62
25	1.8	8.7	3.9	20	4.2	4.4	60	34	6.9	1.8	.82	.62
26	1.7	7.2	4.0	15	4.6	4.2	45	36	7.0	1.7	.80	.62
27	1.6	7.0	3.5	23	26	4.0	35	70	5.8	1.6	.80	.62
28	1.5	6.6	3.4	89	37	8.0	25	89	5.8	1.5	.78	.62
29	1.5	5.5	3.5	78	---	20	100	52	11	1.4	.74	.62
30	1.4	4.5	3.4	40	---	12	150	36	19	1.3	.72	.62
31	1.5	---	3.4	30	---	9.0	---	28	---	1.2	.72	---
MEAN	1.82	8.70	3.49	32.3	8.93	34.2	96.5	56.4	18.1	13.6	1.30	.65
MAX	3.1	33	5.4	161	37	543	1210	501	98	130	2.6	.70
MIN	1.2	1.6	2.7	2.7	3.4	4.0	4.4	14	4.0	1.2	.72	.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1994	1995	1994	1995	1994	1995	1993	1994	1995
MEAN	4.04	62.9	9.61	19.1	12.9	26.1	117	59.4	13.8	5.94	1.29	47.1
MAX	6.27	117	15.7	32.3	16.9	34.2	138	62.3	18.1	13.6	1.54	139
(WY)	1994	1994	1994	1995	1994	1995	1994	1995	1995	1995	1994	1993
MIN	1.82	8.70	3.49	5.91	8.93	18.0	96.5	56.4	9.60	1.29	1.02	.65
(WY)	1995	1995	1995	1994	1995	1994	1995	1995	1994	1993	1993	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL MEAN	22.5	23.0	27.9
HIGHEST ANNUAL MEAN			32.8
LOWEST ANNUAL MEAN			23.0
HIGHEST DAILY MEAN	1000	1210	2320
LOWEST DAILY MEAN	.97	.62	.59
ANNUAL SEVEN-DAY MINIMUM	1.1	.62	.62
INSTANTANEOUS PEAK FLOW	---	2430	8610
INSTANTANEOUS PEAK STAGE	---	5.50	9.90
INSTANTANEOUS LOW FLOW	---	.62	.22
10 PERCENT EXCEEDS	40	49	54
50 PERCENT EXCEEDS	3.8	5.0	4.3
90 PERCENT EXCEEDS	1.4	.81	.91

06929315 PADDY CREEK ABOVE SLABTOWN SPRING, MO--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN, (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)
OCT											
18...	1100	2.3	15.5	324	7.9	7.5	75	20	K17	160	176
NOV											
28...	1300	6.6	7.5	256	8.1	11.0	92	K3	<1	K12	137
DEC											
15...	1600	2.9	6.5	288	8.1	12.2	98	K2	<1	K2	169
FEB											
01...	1200	19	3.5	172	8.0	13.4	101	K5	K1	K6	88
22...	1200	5.0	3.5	246	8.1	13.1	99	K1	K1	K1	134
MAR											
20...	1200	6.3	11.5	218	8.1	9.7	90	K8	K4	K16	110
APR											
11...	1130	282	11.5	91	7.6	10.1	93	1200	690	3000	37
MAY											
01...	1315	1310	9.5	60	7.6	10.5	93	2400	2400	5200	42
16...	1530	19	18.0	196	8.1	9.6	102	48	42	46	101
JUN											
16...	1100	15	16.5	215	8.1	9.3	94	54	K24	150	108
JUL											
05...	1200	37	17.5	190	8.0	8.7	91	100	110	260	95
AUG											
11...	1100	1.5	22.5	295	8.0	6.4	74	20	27	41	154

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
OCT											
18...	215	0	<0.050	<0.010	<0.015	0.30	<0.20	<0.010	<0.010	<0.010	170
NOV											
28...	167	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	130
DEC											
15...	206	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	150
FEB											
01...	107	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	86
22...	164	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	130
MAR											
20...	135	0	<0.050	0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	110
APR											
11...	45	0	<0.050	<0.010	<0.015	0.30	0.30	0.020	0.010	<0.010	42
MAY											
01...	52	0	<0.050	<0.010	<0.015	0.40	0.30	0.030	0.010	0.020	26
16...	123	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	100
JUN											
16...	132	0	<0.050	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	110
JUL											
05...	116	0	<0.050	<0.010	0.020	<0.20	<0.20	0.010	<0.010	<0.010	95
AUG											
11...	188	0	<0.050	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	<0.010	150

K--Results based on colony count outside the acceptable range(non-ideal colony count).

06929315 PADDY CREEK ABOVE SLABTOWN SPRING, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
OCT 18...	34	20	1.3	1.2	2.8	2.1	<0.10	8.6	170	1
NOV 28...	27	16	1.4	0.80	4.1	2.1	<0.10	7.5	145	12
DEC 15...	31	18	1.4	0.70	3.6	2.3	<0.10	7.0	148	1
FEB 01...	18	10	1.1	0.70	3.9	1.4	<0.10	6.8	96	1
FEB 22...	26	15	1.3	0.70	4.0	2.0	<0.10	6.1	124	1
MAR 20...	23	13	1.2	0.90	4.0	1.7	<0.10	6.6	109	2
APR 11...	8.9	4.8	0.90	1.2	3.0	1.7	<0.10	6.8	66	28
MAY 01...	5.7	2.9	0.70	1.2	2.6	1.1	<0.10	6.0	51	80
MAY 16...	21	12	1.2	1.0	3.0	1.4	<0.10	7.8	111	10
JUN 16...	23	13	1.3	0.90	3.5	1.2	<0.10	8.4	119	15
JUL 05...	20	11	1.1	0.90	2.9	1.2	<0.10	8.8	106	29
AUG 11...	32	18	1.4	1.2	2.7	1.5	<0.10	10	158	40

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)
OCT 18...	--	--	--	--	--	--	--	8	--
NOV 28...	<1	34	<1	<1	<1	<1	<1	5	<1
DEC 15...	<1	39	<1	<1	3	<1	<1	4	<1
FEB 01...	<1	27	<1	<1	<1	<1	<1	20	<1
FEB 22...	<1	31	<1	<1	<1	<1	<1	<3	<1
MAR 20...	--	--	--	--	--	--	--	5	--
APR 11...	<1	25	<1	<1	2	<1	1	100	<1
MAY 01...	<1	20	<1	<1	<1	<1	1	140	<1
MAY 16...	--	--	--	--	--	--	--	12	--
JUN 16...	<1	37	<1	<1	<1	<1	<1	12	<1
JUL 05...	--	--	--	--	--	--	--	30	--
AUG 11...	<1	54	<1	<1	1	<1	<1	7	<1

GASCONADE RIVER BASIN

06929315 PADDY CREEK ABOVE SLABTOWN SPRING, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
OCT 18...	5	--	--	--	--	--	0.7	0.1
NOV 28...	1	<1	1	<1	<1	4	1.0	0.1
DEC 15...	<1	<1	2	<1	<1	2	0.7	0.1
FEB 01...	1	<1	<1	<1	<1	1	1.3	0.1
22...	<1	<1	<1	<1	<1	1	0.7	0.1
MAR 20...	2	--	--	--	--	--	1.1	--
APR 11...	8	<1	1	<1	<1	2	6.4	0.3
MAY 01...	8	<1	1	<1	<1	7	6.9	2.4
16...	4	--	--	--	--	--	1.1	0.1
JUN 16...	3	<1	2	<1	<1	2	1.2	0.1
JUL 05...	3	--	--	--	--	--	2.0	0.1
AUG 11...	8	<1	2	<1	<1	1	0.9	0.1

06929315 PADDY CREEK ABOVE SLABTOWN SPRING, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DISS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER, FLTRD 0.7 U (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U (µG/L) (82682)
APR 11...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
MAY 01...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
16...	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
JUN 16...	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
DATE	P,P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U (µG/L) (82677)	EPTC WATER FLTRD 0.7 U (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)
APR 11...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
MAY 01...	<0.01	E0.003	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
16...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
JUN 16...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
APR 11...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
MAY 01...	<0.04	<0.03	E0.002	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
16...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02
JUN 16...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02
DATE	PRON- AMIDE WATER FLTRD 0.7 U (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U (µG/L) (82661)	
APR 11...	<0.01	<0.02	<0.02	<0.01	<0.01	E0.01	<0.03	<0.01	<0.01	<0.01	<0.01	
MAY 01...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	
16...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	
JUN 16...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	

06930000 BIG PINEY RIVER NEAR BIG PINEY, MO

LOCATION.--Lat 37°39'58", long 92°03'02", in NE 1/4 SE 1/4 sec.8. T.34 N., R.10 W., Pulaski County, Hydrologic Unit 10290202, on downstream side of left pier of Ross Bridge, 3.0 mi east of Big Piney, 14.8 mi upstream from Spring Creek and at mile 22.

DRAINAGE AREA.--560 mi², approximately.

PERIOD OF RECORD.--October 1921 to September 30, 1982, April 4, 1988 to current year.

REVISED RECORDS.--WSP 826: 1935. WSP 1176: 1943, 1945. WSP 1340: 1922-23, 1927-28(M), 1933(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 800.99 ft above sea level. Prior to July 12, 1961, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of water-temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 24.54 ft, December 4, 1982, from floodmark, present datum; discharge, 81,200 ft³/s, from indirect measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	182	189	357	259	902	1590	541	3820	1130	506	237	206
2	179	189	335	251	808	1120	518	8690	1000	452	245	195
3	179	190	317	242	736	894	499	2850	926	642	254	183
4	181	241	304	232	670	772	480	2200	838	2200	251	180
5	178	2020	293	228	611	698	460	1880	716	1190	245	179
6	182	5520	283	230	570	641	447	1550	647	890	240	175
7	179	1720	274	229	536	4920	438	1360	614	837	243	181
8	192	1030	267	227	505	10500	430	1600	615	704	236	180
9	199	843	270	220	474	2560	423	2970	589	600	233	183
10	196	1420	341	217	452	1960	535	2000	1710	529	235	185
11	193	1220	520	220	439	1580	4000	1530	5150	477	835	181
12	189	861	456	224	416	1280	3510	1240	2390	438	490	179
13	190	702	404	962	395	1050	1960	1080	1740	407	355	179
14	186	617	368	8620	383	855	1430	945	1300	383	299	176
15	186	640	339	4150	389	758	1140	808	1040	363	271	173
16	185	748	328	2170	407	705	956	740	874	344	253	178
17	184	670	319	1600	532	665	829	794	754	329	239	177
18	191	593	345	1260	532	630	769	1220	667	315	231	176
19	205	524	346	1350	502	605	709	1200	611	302	222	177
20	236	488	337	1610	476	588	1520	992	568	295	216	182
21	229	1210	330	1320	452	569	2550	800	534	289	211	181
22	210	1640	346	1160	432	548	1670	706	503	283	205	181
23	202	1020	359	1020	413	532	1390	654	474	283	199	177
24	197	778	347	907	396	515	1830	595	522	277	195	174
25	190	654	332	815	378	497	1690	1180	991	327	193	173
26	186	573	317	783	368	556	1330	1810	921	342	195	173
27	187	517	303	846	525	798	1120	2560	646	308	192	174
28	186	470	293	1340	3090	860	953	4190	573	283	188	173
29	186	425	282	1510	---	741	942	2890	575	267	186	171
30	186	386	272	1220	---	639	1920	1730	543	253	184	170
31	187	---	265	1020	---	575	---	1300	---	244	184	---
MEAN	192	937	331	1176	600	1329	1233	1867	1005	495	257	179
MAX	236	5520	520	8620	3090	10500	4000	8690	5150	2200	835	206
MIN	178	189	265	217	368	497	423	595	474	244	184	170
IN.	.39	1.87	.68	2.42	1.12	2.74	2.46	3.85	2.00	1.02	.53	.36

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	273	492	460	567	638	847	1003	923	622	295	243	256
MAX	1261	2127	1940	2554	2237	2565	3637	3324	4490	1969	1947	1959	
(WY)	1950	1952	1943	1950	1982	1945	1927	1990	1983	1951	1927	1993	
MIN	82.3	106	98.5	98.5	127	154	188	142	111	89.3	93.5	72.9	
(WY)	1957	1965	1956	1956	1934	1981	1954	1932	1934	1934	1954	1954	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	768		801		547	
HIGHEST ANNUAL MEAN					1179	1927
LOWEST ANNUAL MEAN					149	1954
HIGHEST DAILY MEAN	11300	Apr 11	10500	Mar 8	22900	Sep 26 1993
LOWEST DAILY MEAN	178	Oct 5	170	Sep 30	69	Sep 17-18 1954
ANNUAL SEVEN-DAY MINIMUM	180	Oct 1	173	Sep 24	71	Sep 14 1954
INSTANTANEOUS PEAK FLOW	---		18000	Mar 8	32700	Dec 27 1942
INSTANTANEOUS PEAK STAGE	---		16.32	Mar 8	20.70	Dec 27 1942
INSTANTANEOUS LOW FLOW	---		170	Sep 29-30	69	Sep 17-18 1954
ANNUAL RUNOFF (INCHES)	18.61		19.43		13.28	
10 PERCENT EXCEEDS	1490		1650		1090	
50 PERCENT EXCEEDS	370		480		259	
90 PERCENT EXCEEDS	192		184		124	

06930400 SHANGHAI SPRING NEAR WAYNESVILLE, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°45'54", long 92°01'00", in sec. 24, T.36N, R.11 W., Pulaski County, Hydrologic Unit 10290202.
Take exit 163 south outer road going east toward Devil's Elbow, turn right on first gravel road, continue about 5 mi until you reach a wooden bridge.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00301)	COLIFORM, FECA, µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	BICARBONATE, WH IT FIELD (MG/L AS HCO ₃) (00450)	
NOV 14...	1700	33.5	13.5	303	7.20	8.10	77	--	K1	390	134	163
JAN 27...	0930	50.7	11.5	315	7.30	8.20	75	<10	K29	40	144	176
MAR 29...	0700	43.5	13.5	388	7.10	8.30	77	--	K72	280	170	210
APR 05...	1245	26.1	13.5	382	7.11	10.10	95	<10	28	76	172	212
26...	1230	97.4	13.0	232	7.40	8.80	83	--	K71	323	113	137
JUN 27...	1500	36.9	14.5	385	7.42	7.90	77	<10	K307	660	176	218
AUG 15...	1445	26.0	15.5	434	7.71	6.90	69	10	36	35	211	257
28...	1500	25.4	15.0	458	7.24	7.20	73	--	60	K7	213	262

DATE	CARBONATE, WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS, TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM, DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV 14...	0	0.90	0.010	<0.030	<0.20	0.100	0.100	--	--	--	--	--
JAN 27...	0	1.60	<0.010	0.010	0.25	0.110	0.100	140	30	16	8.0	1.6
MAR 29...	0	1.90	<0.010	0.020	<0.20	0.090	0.110	--	--	--	--	--
APR 05...	0	1.40	<0.001	0.050	--	0.070	--	180	38	21	7.0	1.7
26...	0	0.72	0.010	0.030	<0.20	0.050	0.060	--	--	--	--	--
JUN 27...	0	1.80	0.010	0.020	<0.20	0.190	0.200	190	40	23	6.4	2.2
AUG 15...	0	2.00	0.001	0.010	--	0.380	--	220	45	25	7.0	2.3

DATE	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C SUSPENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS AL) (01106)	CADMIUM, TOTAL RECOVERABLE (µg/L AS CD) (01027)	CADMIUM, DIS-SOLVED (µg/L AS CD) (01025)	COPPER, DIS-SOLVED (µg/L AS CU) (01040)	IRON, DIS-SOLVED (µg/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µg/L AS PB) (01051)
JAN 27...	9.8	17.0	0.10	180	10	360	30	<1	<1.0	2	23	2
APR 05...	10.0	9.6	0.10	208	--	--	--	<1	2.0	<10	8	<10
JUN 27...	9.0	7.8	0.10	202	12	190	20	1	1.0	<1	8	1
AUG 15...	9.1	8.5	0.20	252	--	--	--	1	<1.0	<10	5	10

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06930400 SHANGHAI SPRING NEAR WAYNESVILLE, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055)	MANGA- NESE, TOTAL DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	PROP- CHLOR, WATER, DISS, REC (MG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (MG/L) (04028)	SI- MAZINE, WATER, DISS, REC (MG/L) (04035)	PRO- METON, WATER, DISS, REC (MG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (MG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (MG/L) (04041)
JAN 27...	<1	--	<1	0.10	7	4	--	--	--	--	--	--
APR 05...	<10	3	1	0.20	<4	3	<0.02	<0.008	E0.006	E0.008	<0.003	<0.01
JUN 27...	1	--	3	0.10	10	4	--	--	--	--	--	--
AUG 15...	10	1	<1	0.10	4	5	<0.007	<0.002	E0.005	E0.004	<0.002	<0.004
DATE	FONOFOS WATER DISS REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P,P' DDE DISSOLV (µG/L) (34653)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)	FONOFOS WATER DISS REC (µG/L) (04095)	DI- BROMO- METHANE WATER WHOLE RECOVER (µG/L) (30217)	DI- CHLORO- BROMO- METHANE TOTAL (µG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (µG/L) (32102)
APR 05...	<0.008	<0.007	<0.01	<0.009	<0.01	<0.008	<0.02	<0.01	<0.008	<0.2	<0.2	<0.2
AUG 15...	<0.003	<0.002	<0.006	<0.002	<0.004	<0.001	E0.002	<0.004	<0.003	<0.2	<0.2	<0.2
DATE	1,2-DI- CHLORO- ETHANE TOTAL (µG/L) (32103)	BROMO- FORM TOTAL (µG/L) (32104)	CHLORO- DI- BROMO- METHANE TOTAL (µG/L) (32105)	CHLORO- FORM TOTAL (µG/L) (32106)	TOLUENE TOTAL (µG/L) (34010)	BENZENE TOTAL (µG/L) (34030)	CHLORO- BENZENE TOTAL (µG/L) (34301)	CHLORO- ETHANE TOTAL (µG/L) (34311)	ETHYL- BENZENE TOTAL (µG/L) (34371)	METHYL- BROMIDE TOTAL (µG/L) (34413)	METHYL- CHLO- RIDE TOTAL (µG/L) (34418)	METHYL- ENE CHLO- RIDE TOTAL (µG/L) (34423)
APR 05...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2
AUG 15...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2
DATE	TETRA- CHLORO- ETHYL- ENE TOTAL (µG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (µG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (µG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (µG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (µG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (µG/L) (34511)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (µG/L) (34516)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (µG/L) (34536)	1,2-DI- CHLORO- PROPANE TOTAL (µG/L) (34541)	1,2- TRANSDI CHLORO- ETHENE TOTAL (µG/L) (34546)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (µG/L) (34551)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (µG/L) (34566)
APR 05...	1.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.20	<0.20
AUG 15...	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2	<0.2	<0.20	<0.20
DATE	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (µG/L) (34571)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (µG/L) (34576)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (µG/L) (34668)	NAPHTH- ALENE TOTAL (µG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (µG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (µG/L) (34704)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	VINYL CHLO- RIDE TOTAL (µG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (µG/L) (39180)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	
APR 05...	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.005	<0.2	<0.2	<0.01	<0.02	
AUG 15...	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.004	<0.2	<0.2	<0.005	<0.004	

E--Laboratory estimated value.

06930400 SHANGHAI SPRING NEAR WAYNESVILLE, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	DI- AZINON, DIS- SOLVED (µG/L) (39572)	HEXA- CHLORO- BUT- ADIENE TOTAL (µG/L) (39702)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL (µG/L) (77093)	STYRENE TOTAL (µG/L) (77128)	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (µG/L) (77168)	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (µG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT, WH TOTAL (µG/L) (77173)	BENZENE 124-TRI METHYL UNFLT RECOVER (µG/L) (77222)	ISO- PROPYL- BENZENE WATER WHOLE REC (µG/L) (77223)
APR 05...	<0.008	<0.2	<0.009	<0.009	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20
AUG 15...	0.006	<0.2	<0.002	<0.002	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.20

DATE	BENZENE N-PROPYL WATER UNFLT REC (µG/L) (77224)	BENZENE 135-TRI METHYL WATER UNFLT REC (µG/L) (77226)	O- CHLORO- TOLUENE WATER WHOLE TOTAL (µG/L) (77275)	TOLUENE P-CHLOR WATER UNFLT REC (µG/L) (77277)	METHANE BROMO CHLORO- WAT UNFLT REC (µG/L) (77297)	BENZENE N-BUTYL WATER UNFLT REC (µG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLT REC (µG/L) (77350)	BENZENE TERT- BUTYL- WATER UNFLT REC (µG/L) (77353)	P-ISO- PROPYL- PROPANE WATER WHOLE REC (µG/L) (77356)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (µG/L) (77443)	ETHANE, 1112- TETRA- CHLORO- WAT UNF REC (µG/L) (77562)
APR 05...	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2
AUG 15...	<0.20	<0.20	<0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2

DATE	1,2,3- TRI- CHLORO BENZENE WAT, WH REC (µG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (µG/L) (77651)	FREON- 113 WATER UNFLT REC (µG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (µG/L) (78032)	XYLENE WATER UNFLT REC (µG/L) (81551)	BROMO- BENZENE WATER, WHOLE, TOTAL (µG/L) (81555)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (µG/L) (82625)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
APR 05...	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0	<0.006	<0.01	<0.01	<0.03
AUG 15...	<0.20	<0.2	<0.2	<0.2	<0.20	<0.2	<1.0	<0.003	<0.004	<0.002	<0.007

DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
APR 05...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
AUG 15...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
APR 05...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
AUG 15...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

06930450 BIG PINEY RIVER AT DEVIL'S ELBOW, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°50'53", long 92°03'44, in SE 1/4 NE 1/4 sec.18, T.36 N., R.10 W., Pulaski County, Hydrologic Unit 1929020, at bridge on County Highway V at Devil's Elbow.

PERIOD OF RECORD.--July 1977 to October 1989, November 1992 to current year.

REMARKS.--Reestablished as an ambient water-quality monitoring network station November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	
NOV 17...	0800	790	9.5	297	8.08	10.6	92	--	K1	26	149
JAN 23...	1045	1180	4.5	259	7.86	13.6	103	<10	K14	K25	136
MAR 29...	0930	960	12.5	263	7.86	10.4	95	--	350	69	130
APR 21...	1500	3730	16.0	211	7.26	9.9	98	--	1000	540	92
JUN 30...	1230	622	22.0	273	7.46	9.1	102	<10	28	20	134
AUG 28...	1315	360	25.0	333	8.11	9.0	110	--	58	32	161

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 17...	182	0	0.650	0.650	<0.070	0.29	0.020	0.010	--	--
JAN 23...	166	0	0.630	0.010	0.010	<0.20	<0.020	0.010	130	26
MAR 29...	158	0	0.150	<0.010	0.020	<0.20	<0.020	0.010	--	--
APR 21...	113	0	0.200	<0.010	0.090	0.73	0.020	0.010	--	--
JUN 30...	164	0	0.230	0.010	0.010	0.31	<0.020	0.010	140	30
AUG 28...	198	0	0.150	0.010	0.020	0.20	0.030	0.020	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS Al) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS Al) (01106)
JAN 23...	15	2.5	1.4	6.4	5.2	<0.10	158	10	140	40
JUN 30...	17	2.4	1.9	5.3	3.5	<0.10	150	10	500	30

DATE	CADMIUM TOTAL RECOVERABLE (µg/L AS Cd) (01027)	CADMIUM DIS-SOLVED (µg/L AS Cd) (01025)	COPPER, DIS-SOLVED (µg/L AS Cu) (01040)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	LEAD, TOTAL RECOVERABLE (µg/L AS Pb) (01051)	LEAD, DIS-SOLVED (µg/L AS Pb) (01049)	MANGANESE, DIS-SOLVED (µg/L AS Mn) (01056)	MERCURY TOTAL RECOVERABLE (µg/L AS Hg) (71900)	ZINC, TOTAL RECOVERABLE (µg/L AS Zn) (01092)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)
JAN 23...	<1	<1.0	<1	35	18	<1	7	0.20	5	<4
JUN 30...	1	1.1	4	17	6	1	11	0.20	20	10

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06930800 GASCONADE RIVER ABOVE JEROME, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°55'12", long 91°58'33", in NE 1/4 sec.24, T.37 N., R.10 W., Phelps County, Hydrologic Unit 10290203, at bridge on County Highway D at Jerome, 150 ft upstream from Little Piney Creek, and 0.7 mi upstream from gaging station.

DRAINAGE AREA.--2,570 mi².

PERIOD OF RECORD.--January 1978 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1978 to September 1981.

WATER TEMPERATURE: March 1978 to September 1981.

REMARKS.--Established as an ambient water-quality monitoring network station November 1993.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 588 microsiemens, Sept. 23, 1981; minimum, 133 microsiemens, Sept. 1, 1981.

WATER TEMPERATURE: Maximum daily, 34.0° C, Aug. 11 and 17, 1980; minimum, 0.0° C on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT										
20...	0700	807	16.5	340	7.66	8.4	84	320	56	161
NOV										
14...	1130	2720	14.0	301	7.97	8.0	77	K1	79	139
DEC										
05...	1130	1180	10.5	337	7.97	11.6	102	K7	K10	161
JAN										
26...	1400	3460	5.5	296	7.39	13.6	105	K11	86	128
FEB										
21...	1030	1730	6.5	212	8.20	12.9	103	K2	K8	186
MAR										
27...	1400	3610	15.5	291	8.03	10.4	102	500	300	135
APR										
26...	1400	7290	13.5	260	7.96	10.5	100	84	96	122
MAY										
24...	1145	3990	20.5	263	7.86	8.4	92	120	100	120
JUN										
28...	1600	2880	23.5	288	8.14	8.9	105	42	K17	124
JUL										
11...	1345	2070	26.0	313	7.92	8.1	99	33	K3	139
AUG										
28...	1010	618	25.0	346	8.01	8.4	103	31	23	167
SEP										
07...	1130	603	24.0	320	8.29	10.5	123	240	160	148

K--Results based on colony count outside the acceptable range (non-ideal colony count).

06930800 GASCONADE RIVER ABOVE JEROME, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (00507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT										
20...	196	0	0.240	<0.010	0.020	<0.20	0.030	0.020	--	--
NOV										
14...	170	0	0.730	<0.010	0.100	0.45	0.030	0.030	150	31
DEC										
05...	197	0	0.430	<0.010	<0.020	<0.20	0.030	0.010	--	--
JAN										
26...	158	0	0.960	<0.010	0.010	<0.20	0.030	0.020	150	31
FEB										
21...	229	0	0.410	<0.010	0.020	<0.20	<0.020	<0.010	--	--
MAR										
27...	167	0	0.130	<0.010	0.020	0.32	<0.020	0.010	--	--
APR										
26...	150	0	0.400	<0.010	0.030	0.49	0.020	0.030	--	--
MAY										
24...	147	0	0.340	0.010	0.090	0.62	0.020	0.010	--	--
JUN										
28...	153	0	0.280	0.010	0.030	0.30	0.030	0.010	140	28
JUL										
11...	171	0	0.360	0.010	0.030	0.25	0.020	0.010	--	--
AUG										
28...	203	0	0.130	0.010	0.010	<0.20	<0.020	0.010	170	35
SEP										
07...	180	0	0.080	0.010	0.030	0.20	0.030	0.010	--	--
DATE	MAGNESIUM, DIS- SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS- SOLVED (MG/L AS Na) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS- SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (00300)	ALUMINUM, DIS- SOLVED (MG/L) (01106)	IRON, DIS- SOLVED (MG/L AS Fe) (01046)	MANGANESE, DIS- SOLVED (MG/L AS Mn) (01056)
NOV										
14...	17	2.8	2.3	6.2	6.6	<0.10	172	10	18	8
JAN										
26...	17	2.8	1.6	6.5	6.2	<0.10	161	30	24	6
JUN										
28...	16	2.3	2.2	4.5	4.7	<0.10	142	20	20	7
AUG										
28...	20	2.6	1.6	3.5	4.4	<0.10	185	<10	6	14

06932000 LITTLE PINEY CREEK AT NEWBURG, MO

LOCATION.--Lat 37°54'35", long 91°54'12", in SW 1/4 SE 1/4 sec.22, T.37 N., R.9 W., Phelps County, Hydrologic Unit 10290203, on left bank at downstream side of bridge on State Highway P and T at Newburg and 2 mi upstream from Mill Creek.

DRAINAGE AREA.--199 mi², approximately.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 693.40 ft above sea level. Prior to Oct. 1, 1951, all gages at datum 3.0 ft higher. Prior to Nov. 21, 1963, nonrecording gage at site 100 ft downstream; Nov. 21, 1963, to May 9, 1966, nonrecording gage at present site.

REMARKS.--Estimated daily discharges: Mar. 4 and 5. Records fair. Several observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 16.7 ft, August 20, 1915, from floodmark, present datum; discharge, 30,000 ft³/s, from rating curve based on discharge measurements made in 1935 and extended above 25,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	84	104	105	249	162	163	1580	302	137	100	80
2	76	83	106	101	228	153	153	1500	288	134	127	80
3	75	84	104	101	234	145	145	662	263	145	106	81
4	75	208	102	96	241	144	144	581	243	137	102	82
5	75	875	98	95	224	145	133	516	225	235	102	82
6	74	442	97	99	210	142	130	433	213	194	103	82
7	75	263	99	99	206	1500	127	407	202	152	103	91
8	89	204	95	98	186	589	124	522	385	199	99	85
9	90	350	101	99	178	413	122	519	580	140	97	84
10	84	275	96	99	176	347	121	428	1550	127	100	85
11	81	219	94	102	166	298	1040	377	615	123	96	84
12	80	186	94	103	152	262	621	360	446	119	94	81
13	82	167	94	2230	148	238	440	365	372	116	89	85
14	84	155	95	3190	147	205	357	313	326	119	90	82
15	83	143	95	745	150	194	311	274	295	110	91	78
16	82	132	98	533	147	175	278	252	265	105	90	83
17	82	125	99	440	140	165	256	2990	240	104	90	82
18	148	118	98	389	137	155	290	3060	222	102	89	81
19	117	110	96	488	138	150	255	992	209	101	87	86
20	99	144	99	408	136	145	626	581	199	107	89	82
21	93	313	103	367	133	140	566	484	189	112	88	84
22	88	230	107	322	132	135	445	404	176	115	86	79
23	84	185	112	283	127	130	444	344	189	119	89	76
24	82	160	106	252	120	125	599	373	178	110	83	72
25	83	147	107	236	118	120	498	410	166	109	85	73
26	82	136	105	225	122	200	416	380	205	110	85	71
27	81	136	106	321	174	300	376	464	170	100	82	71
28	82	125	107	451	180	250	325	487	159	104	81	74
29	79	114	107	364	---	220	392	380	153	101	85	70
30	79	107	105	305	---	201	635	333	144	98	82	69
31	84	---	106	273	---	177	---	317	---	97	81	---
MEAN	85.4	201	101	420	168	249	351	680	306	125	92.6	79.8
MAX	148	875	112	3190	249	1500	1040	3060	1550	235	127	91
MIN	74	83	94	95	118	120	121	252	144	97	81	69
IN.	.49	1.12	.58	2.42	.87	1.44	1.96	3.92	1.71	.72	.53	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1995, BY WATER YEAR (WY)

MEAN	99.2	133	152	152	176	225	264	267	206	101	81.8	87.8
MAX	913	694	1300	770	678	822	1335	871	1545	525	493	706
(WY)	1950	1994	1983	1950	1985	1945	1945	1957	1935	1951	1946	1993
MIN	26.9	33.1	35.7	34.9	35.6	42.8	42.0	43.7	32.2	27.6	27.6	28.1
(WY)	1957	1957	1956	1956	1934	1956	1956	1932	1934	1934	1936	1954

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1929 - 1995

ANNUAL MEAN	239	239	161
HIGHEST ANNUAL MEAN			391
LOWEST ANNUAL MEAN			47.0
HIGHEST DAILY MEAN	6640	Apr 11	19600
LOWEST DAILY MEAN	74	Oct 6	24
ANNUAL SEVEN-DAY MINIMUM	75	Oct 1	24
INSTANTANEOUS PEAK FLOW	---		32500
INSTANTANEOUS PEAK STAGE	---		16.60
INSTANTANEOUS LOW FLOW	---		24
ANNUAL RUNOFF (INCHES)	16.24		10.96
10 PERCENT EXCEEDS	326		284
50 PERCENT EXCEEDS	128		85
90 PERCENT EXCEEDS	82		43

06933500 GASCONADE RIVER AT JEROME, MO

LOCATION.--Lat 37°55'47", long 91°58'38", in NE 1/4 NE 1/4 SE 1/4 sec.13, T.37 N., R.10 W., Phelps County, Hydrologic Unit 10290203, on left bank at Jerome, 0.5 mi downstream from Little Piney Creek and at mile 107.

DRAINAGE AREA.--2,840 mi², approximately.

PERIOD OF RECORD.--April 1903 to July 1906 (published as "at Arlington"), January 1923 to current year. October to December 1922 monthly discharge only, published in WSP 1310. Gage-height records collected intermittently in the vicinity 1885-1926 and at same site since 1938 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 172: 1904. WSP 566: Drainage area. WSP 1340: 1903-04, 1928(M).

GAGE.--Water-stage recorder. Datum of gage is 657.64 ft above sea level. Prior to July 26, 1904, nonrecording gage at site 0.8 mi downstream at different datum; July 26, 1904, to July 21, 1906, nonrecording gage at site 0.5 mi upstream from present site at datum about 0.85 ft higher than present gage; Jan. 3, 1923, to Sept. 29, 1928, nonrecording gage at site 400 ft downstream from present site at datum 0.14 ft lower than present datum; Sept. 30, 1928, to Jan. 17, 1939, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: June 30, July 1, Aug. 24, and Sept. 30. Records good. Several observations of water temperature and specified conductance were made during the year. National Weather Service gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 6, 1897, reached a stage of about 29.0 ft, discharge, 120,000 ft³/s. A stage of 28.6 ft was reached on August 20 and 22, 1915, discharge, 114,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	671	721	1600	1090	6030	4340	2410	17500	6560	2500	968	666
2	668	708	1500	1060	5210	4530	2180	28500	5960	2310	985	673
3	662	703	1420	1030	4750	3840	2020	30600	5330	2160	980	665
4	662	1000	1350	1000	4480	3300	1900	24600	5400	4130	985	649
5	662	2920	1300	970	4020	2950	1760	12400	4740	5780	1030	642
6	661	9570	1250	972	3590	2700	1690	10200	4230	4210	992	630
7	663	12000	1230	979	3290	5620	1630	8380	3800	3450	1020	671
8	763	6790	1170	956	2960	14700	1580	8180	4570	3750	1010	660
9	871	5090	1160	941	2710	17400	1530	10100	4700	3190	1150	650
10	1060	4670	1140	929	2540	9470	1660	10800	7930	2590	1130	646
11	988	5100	1160	927	2360	6680	9130	8660	15000	2230	1130	645
12	882	4180	1310	927	2170	5470	17600	6930	18300	2000	1460	652
13	862	3460	1250	3510	2040	4660	15500	6190	14600	1810	1170	657
14	840	2910	1250	19300	1920	4080	9580	5280	8030	1670	1130	649
15	805	2520	1240	30700	1870	3650	6740	4610	6190	1570	1110	636
16	775	2340	1230	29200	1800	3290	5410	4270	5110	1480	1010	637
17	762	2250	1260	14500	1750	2980	4600	11200	4350	1410	947	636
18	860	2670	1260	7570	1850	2730	4230	18800	3800	1340	901	624
19	984	1920	1250	6520	1910	2530	3760	14200	3450	1280	866	640
20	899	1910	1280	6180	1950	2380	5830	9370	3140	1250	837	671
21	863	2930	1320	6110	1880	2220	10200	6780	2840	1190	812	661
22	842	3960	1330	5560	1800	2100	11400	5450	2620	1150	778	654
23	805	3950	1330	5020	1730	2000	8560	4720	2430	1150	765	641
24	773	3710	1330	4510	1660	1870	8350	4370	2290	1140	750	637
25	757	3150	1320	4090	1600	1770	8850	4510	2460	1090	732	637
26	740	2690	1280	3750	1560	2000	7880	5840	3040	1130	719	633
27	733	2380	1240	3790	1660	3980	6540	8330	3990	1100	713	624
28	727	2130	1210	5550	2930	3870	5550	15600	3130	1060	707	617
29	721	1910	1170	9080	---	3410	5980	18300	2780	1030	698	609
30	721	1730	1140	8990	---	3190	9150	13500	2600	1000	684	605
31	726	---	1110	7510	---	2730	---	8530	---	980	673	---
MEAN	787	3379	1271	6233	2644	4401	6107	11180	5446	2004	930	644
MAX	1060	12000	1600	30700	6030	17400	17600	30600	18300	5780	1460	673
MIN	661	703	1110	927	1560	1770	1530	4270	2290	980	673	605
IN.	.32	1.33	.52	2.53	.97	1.79	2.40	4.54	2.14	.81	.38	.25

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	1417	2359	2532	2463	2949	3992	4684	4393	3123	1567	1197	1303
MAX	10390	10400	17740	10980	11540	13110	20450	15390	18500	10730	9244	12580	
(WY)	1950	1994	1983	1950	1985	1945	1945	1990	1935	1951	1927	1993	
MIN	289	368	392	368	491	597	504	668	518	339	324	293	
(WY)	1957	1957	1956	1956	1964	1956	1956	1932	1934	1934	1936	1956	

SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	3527	3760	2653
HIGHEST ANNUAL MEAN			6491
LOWEST ANNUAL MEAN			544
HIGHEST DAILY MEAN	53000	Apr 12	30700
LOWEST DAILY MEAN	661	Oct 6	605
ANNUAL SEVEN-DAY MINIMUM	664	Oct 1	623
INSTANTANEOUS PEAK FLOW	---		34100
INSTANTANEOUS PEAK STAGE	---		16.20
INSTANTANEOUS LOW FLOW	---		605
ANNUAL RUNOFF (INCHES)	16.86		17.98
10 PERCENT EXCEEDS	6510		8910
50 PERCENT EXCEEDS	1500		1920
90 PERCENT EXCEEDS	735		672

*Sept. 30 estimated

LOCATION.--Lat 38°23'20", long 91°49'15", in SE 1/4 sec.16, T.41 N., R.8 W., Osage County, Hydrologic Unit 10290203, on downstream side of State Highway 89 bridge, 100 ft downstream from Brush Creek Slough, 800 ft upstream from Swan Creek and 4 mi east of Rich Fountain.

PERIOD OF RECORD.--October 1921 to September 1959, October 31, 1986 to current year. From 1959 to 1986 annual peaks only.

GAGE.--Water-stage recorder. Datum of gage 553.70 ft above sea level. From Oct. 10, 1921, to Sept. 13, 1932, chain gage on former bridge, 50 ft downstream; Sept. 14, 1932, to Mar. 9, 1934, wire-weight gage on former bridge. Mar. 10, 1934, to Aug. 26, 1956, water-stage recorder on former bridge; Aug. 26, 1956, to May 11, 1966, gage readings were obtained by measuring from a reference point on present bridge; May 11, 1966, to Oct. 31, 1986, Type-A wire-weight gage on present bridge. All gages have been maintained at present datum.

REMARKS.--Estimated daily discharges: Aug. 24 and Sept. 30. Records good except for estimated daily discharges, which are fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	704	825	2030	1330	7590	3810	2840	15300	8420	2650	1100	709
2	695	821	1900	1270	6370	4320	2580	25100	6810	2610	1230	696
3	694	808	1800	1230	5970	4360	2390	30200	5990	2450	1260	712
4	688	863	1710	1190	5640	3730	2250	33600	5520	2330	1220	702
5	681	2210	1620	1150	4970	3310	2120	26900	5350	5010	1380	682
6	679	6140	1550	1140	4330	3030	2000	13400	5140	5400	1420	675
7	695	11900	1500	1130	3850	5260	1910	10500	4470	4020	1300	680
8	774	10500	1460	1120	3480	9600	1830	9430	4090	3510	1300	712
9	866	7830	1470	1100	3180	18800	1770	9570	7100	3800	1250	701
10	935	6190	1470	1080	2960	15900	1730	11500	9760	3130	1310	692
11	1140	5280	1480	1080	2780	8590	7490	11000	11100	2680	1320	687
12	1070	5120	1460	1090	2600	6500	14600	8410	17900	2390	1280	682
13	970	4240	1470	2500	2430	5410	19100	7180	19500	2190	1610	692
14	939	3560	1460	14800	2300	4640	15200	6190	13200	2030	1440	694
15	919	3090	1450	22600	2210	4090	8850	5260	7500	1890	1400	689
16	881	2770	1470	30400	2150	3660	6500	4660	5860	1770	1330	685
17	850	2650	1470	30000	2080	3330	5470	18100	4900	1670	1190	674
18	846	2510	1470	13900	2040	3060	4750	27700	4250	1580	1100	667
19	1170	2350	1480	7920	2120	2850	4270	26500	3790	1500	1030	675
20	1180	3550	1530	6910	2170	2690	5880	15500	3490	1450	982	692
21	1040	5050	1600	6660	2160	2540	8050	9840	3210	1450	940	710
22	995	3890	1660	6370	2100	2400	11900	6880	2970	1380	903	703
23	966	4540	1640	5740	2020	2280	11200	5580	2780	1340	868	692
24	914	4150	1620	5180	1940	2170	9070	5530	2630	1330	841	688
25	866	3800	1600	4670	1870	2050	9080	6560	2570	1310	814	681
26	841	3280	1560	4220	1830	1990	9030	5510	2800	1290	798	678
27	827	2930	1510	4520	1950	4950	7740	7940	3910	1290	783	673
28	816	2630	1470	7030	2150	4310	6420	17200	3810	1260	768	663
29	808	2390	1420	8250	---	3990	7630	19300	3130	1200	749	656
30	806	2200	1380	10400	---	3530	10200	19200	2860	1160	736	650
31	816	---	1340	9190	---	3220	---	13200	---	1140	722	---
MEAN	873	3936	1550	6941	3116	4851	6795	13960	6160	2200	1109	686
MAX	1180	11900	2030	30400	7590	18800	19100	33600	19500	5400	1610	712
MIN	679	1808	1340	1080	1830	1990	1730	4660	2570	1140	722	650
IN.	.32	1.38	.56	2.52								

MEAN	1734	2521	2563	2939	3194	4443	5742	5390	3956	1854	1397	1470
MAX	12060	12230	12750	12700	7637	14640	22720	18300	19810	12630	9365	15330
(WY)	1950	1994	1988	1950	1949	1945	1945	1990	1935	1951	1927	1993
MIN	288	394	403	374	558	620	531	717	647	385	334	295
(WY)	1957	1957	1956	1956	1954	1956	1956	1932	1934	1954	1936	1954

ANNUAL MEAN	4115		4358		3097	
HIGHEST ANNUAL MEAN					6560	1927
LOWEST ANNUAL MEAN					629	1954
HIGHEST DAILY MEAN	56600	Apr 12	33600	May 4	101000	Sep 28 1993
LOWEST DAILY MEAN	679	Oct 6	650	Sep 30	275	Sep 19 1954
ANNUAL SEVEN-DAY MINIMUM	691	Oct 1	670	Sep 24	279	Oct 6 1956
INSTANTANEOUS PEAK FLOW	---		34600	May 4	134000	Dec 6 1982
INSTANTANEOUS PEAK STAGE	---		17.82	May 4	33.27	Dec 6 1982
INSTANTANEOUS LOW FLOW	---		650	Sep 29, 30 ^a	275	Sep 19 1954
ANNUAL RUNOFF (INCHES)	17.57		18.61		13.23	
10 PERCENT EXCEEDS	7520		10300		6590	
50 PERCENT EXCEEDS	1880		2210		1520	
90 PERCENT EXCEEDS	812		712		568	

^aSept. 30 estimated.

06934500 MISSOURI RIVER AT HERMANN, MO

LOCATION.--Lat 38°42'36", long 91°26'21", in SW 1/4 sec.25, T.46 N., R.5 W., Montgomery County, Hydrologic Unit 10300200, on downstream side of third pier from right abutment of bridge on State Highway 19 at Hermann and at mile 97.9.

DRAINAGE AREA.--524,200 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only published in WSP 1310. Gage-height records 1873-99 collected at site 480 ft downstream are contained in reports of Missouri River Commission; since 1900 in reports of National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 481.56 ft above sea level. Prior to Sept. 26, 1930, nonrecording gage at site 480 ft downstream at datum 0.07 ft lower; Sept. 26, 1930, to Mar. 27, 1932, nonrecording gage; Mar. 28, 1932, to June 12, 1945, water-stage recorder; June 13, 1945, to Apr. 2, 1946, May 13 to Sept. 30, 1978, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 5-8, June 4, Aug. 24, and Sept. 30. Water-discharge records good. Some regulation from many upstream reservoirs. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1844 reached a stage of 35.5 ft, discharge, about 892,000 ft³/s, computed by U. S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52500	49000	87100	43500	99000	67200	87000	201000	386000	247000	119000	83500
2	48400	50800	83700	43000	94000	72800	80200	220000	379000	238000	119000	82400
3	45100	52500	85200	43400	99700	68900	75500	204000	367000	221000	135000	82400
4	46000	51900	84000	49300	116000	64400	71200	192000	334000	205000	150000	81600
5	46300	57000	83000	56300	104000	59600	68200	192000	311000	194000	179000	80600
6	45900	74500	83000	57100	91700	56500	67400	190000	303000	209000	192000	80500
7	50200	78500	82000	51000	86500	60500	66500	177000	297000	223000	197000	81200
8	53700	90900	86000	43500	83400	66200	63100	197000	293000	226000	166000	82200
9	51600	97600	94300	41500	83000	72100	63300	243000	292000	231000	127000	83100
10	49300	100000	94900	40700	80200	78600	67700	265000	295000	235000	113000	81300
11	49100	92600	79500	39000	73200	70600	73500	276000	299000	232000	115000	79900
12	49000	87200	62000	36800	61700	59400	99000	288000	301000	225000	121000	79700
13	48900	78100	58200	37400	56500	52700	119000	287000	303000	210000	118000	80400
14	48100	66200	62100	90700	53700	43700	126000	283000	301000	186000	106000	81100
15	47200	58700	53700	113000	60700	41000	116000	271000	292000	169000	101000	81500
16	47200	61200	51600	97900	62700	40800	104000	269000	281000	160000	105000	81900
17	47100	60900	59600	86000	61400	56200	101000	338000	271000	154000	107000	82200
18	48000	57900	53700	83600	58600	80400	129000	465000	263000	149000	119000	82000
19	48800	59000	46100	81100	45600	72400	145000	523000	256000	146000	128000	81400
20	47300	70700	46500	78000	39400	64200	151000	486000	249000	145000	120000	81300
21	49300	117000	52300	81100	38400	59900	147000	386000	243000	144000	110000	80800
22	53500	135000	54900	79000	38900	58100	137000	358000	239000	148000	104000	82800
23	52900	134000	52200	66800	40700	57300	129000	350000	236000	149000	102000	87100
24	51200	117000	49900	69600	41000	60200	128000	355000	232000	148000	98000	89300
25	50400	102000	49000	69900	40300	61800	134000	375000	230000	147000	94100	90000
26	50100	96300	49100	65300	43900	61000	138000	377000	231000	139000	91900	89200
27	49700	93900	45500	68500	49300	65400	135000	373000	238000	135000	92400	87800
28	50200	91600	49200	84700	58700	65900	135000	384000	246000	131000	91100	86000
29	49800	91800	51800	101000	---	70400	145000	396000	250000	127000	92100	84400
30	48300	92800	50200	103000	---	82200	191000	392000	251000	124000	89100	83000
31	48000	---	46300	98400	---	90500	---	390000	---	121000	85000	---
MEAN	49160	82220	64080	67750	66510	63900	109400	313000	282300	178000	118900	83030
MAX	53700	135000	94900	113000	116000	90500	191000	523000	386000	247000	197000	90000
MIN	45900	49000	45500	36800	38400	40800	63100	177000	230000	121000	85000	79700
IN.	.11	.18	.14	.15	.13	.14	.23	.69	.60	.39	.26	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995^a, BY WATER YEAR (WY)

	MEAN	77900	77030	61930	50110	66460	97490	121600	119100	115600	100300	74190	77760
MAX	286700	152700	178900	129000	136800	267500	333400	313000	282300	376300	306600	243500	
(WY)	1987	1986	1983	1973	1982	1973	1973	1995	1995	1993	1993	1993	
MIN	36680	29400	17060	17350	19250	22810	45800	47710	46150	44010	39540	37800	
(WY)	1964	1991	1964	1963	1964	1964	1963	1989	1988	1988	1991	1963	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1958 - 1995^a

ANNUAL MEAN	93670	123500	85550
HIGHEST ANNUAL MEAN			181800
LOWEST ANNUAL MEAN			44980
HIGHEST DAILY MEAN	437000	Apr 13	523000
LOWEST DAILY MEAN	45500	Dec 27	36800
ANNUAL SEVEN-DAY MINIMUM	47700	Oct 14	40400
INSTANTANEOUS PEAK FLOW	---		579000
INSTANTANEOUS PEAK STAGE	---		36.22
INSTANTANEOUS LOW FLOW	---		34800
ANNUAL RUNOFF (INCHES)	2.43		3.20
10 PERCENT EXCEEDS	152000		271000
50 PERCENT EXCEEDS	78100		85200
90 PERCENT EXCEEDS	50000		48400
			36000

^a Post-regulation period.

06934500 MISSOURI RIVER AT HERMANN, MO--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1969 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to current year.

WATER TEMPERATURE: October 1974 to current year.

DISSOLVED OXYGEN: June 1984 to September 1984, April 1985 to September 1985, April 1986 to September 1986.

INSTRUMENTATION.--Water-quality monitor, June 1984 to September 1984, April 1985 to September 1985, April 1986 to September 1986.

REMARKS.--Water temperature and specific conductance samples collected daily by observer.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: (water years 1976 to current year): Maximum daily, 2,150 microsiemens, Dec. 9, 1978; minimum daily, 205 microsiemens, Apr. 16, 1979.

WATER TEMPERATURE: (water years 1976 to current year): Maximum daily, 32.5° C, July 31, 1987; minimum daily, 0.0° C on many days during winter period.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 819 microsiemens, Sept. 11; minimum daily, 227 microsiemens, May 19.
WATER TEMPERATURE: Maximum daily, 30.0° C, Aug. 11-16; minimum daily, 1.5° C, Feb. 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED SATUR-ATION (00301)	COLI-FORM, FECAL, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCHI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
------	------	---	---	--	------------------------------------	---------------------------	-----------------------------------	--	--	---	--	---

NOV	04...	1000	52300	690	7.80	13.5	26	10.00	95	267	860	240	63
MAR	22...	1030	58200	507	7.67	14.5	93	8.60	83	200	400	200	55
MAY	26...	1100	379000	350	7.79	17.5	160	7.10	73	1350	3200	150	43
JUN	22...	1000	240000	464	7.84	24.5	76	6.50	77	M	100	210	59
JUL	28...	1100	131000	599	7.75	28.0	--	6.30	82	590	80	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO ₃) (00410)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO ₃) (39086)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
------	---	---	--	---	---	---	--	---	--	---	--	---

NOV	04...	20	57	5.9	170	170	0	207	150	25	0.40	10	448
MAR	22...	16	33	5.8	153	152	0	185	82	20	0.40	13	345
MAY	26...	11	12	4.8	114	114	0	140	50	8.8	0.20	9.6	28
JUN	22...	16	26	6.6	145	148	0	180	93	16	0.30	11	350
JUL	28...	--	--	--	141	140	0	171	--	--	--	--	--

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO ₂ +NO ₃ DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
------	---	---	---	---	--	---	---	---------------------------------------	--	---	--------------------------------------	---

NOV	04...	437	0.61	63300	0.010	0.730	0.010	0.65	0.170	0.070	0.020	143	54
MAR	22...	326	0.47	54200	0.040	2.00	<0.015	1.0	0.330	0.110	0.090	558	85
MAY	26...	214	0.31	233000	0.040	1.20	0.050	1.5	0.100	0.050	0.060	652	73
JUN	22...	323	0.48	227000	0.010	1.30	0.020	0.91	0.400	0.070	0.090	611	65
JUL	28...	--	--	--	0.010	1.10	0.050	0.70	0.160	0.080	0.080	377	73

M--Result compromised due to contaminated bacteria media.

MISSOURI RIVER MAIN STEM

06934500 MISSOURI RIVER AT HERMANN, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ALUM- INUM, DIS- SOLVED (µG/L) (01106)	BARIUM, DIS- SOLVED (µG/L) (01005)	COBALT, DIS- SOLVED (µG/L) (01035)	IRON, DIS- SOLVED (µG/L) (01046)	LITHIUM, DIS- SOLVED (µG/L) (01130)	MANGA- NESE, DIS- SOLVED (µG/L) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L) (01060)	NICKEL, DIS- SOLVED (µG/L) (01065)	SELE- NIUM, DIS- SOLVED (µG/L) (01145)	SILVER, DIS- SOLVED (µG/L) (01075)	STRON- TIUM, DIS- SOLVED (µG/L) (01080)	VANA- DIUM, DIS- SOLVED (µG/L) (01085)
NOV 04...	<10	89	<3	4	37	2	20	2	<2	<1.0	470	<6
MAR 22...	20	85	<3	10	15	<1	<10	2	2	<1.0	370	<6
MAY 26...	100	99	<3	78	8	4	10	2	<1	<1.0	200	<6
JUN 22...	40	120	<3	22	<4	2	<10	2	1	<1.0	330	<6

DATE	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	METO- LACHLOR WATER, DISSOLV (µG/L) (39415)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	METRI- BUZIN WATER, DISSOLV (µG/L) (82630)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	FONOFOS WATER, DISS, REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)
MAY 26...	0.02	0.009	E0.05	0.56	0.56	1.3	0.05	0.01	<0.02	<0.008	<0.008	<0.007
JUN 22...	0.02	E0.01	E0.10	0.40	0.67	1.8	0.10	0.02	<0.007	<0.002	<0.003	<0.002

DATE	F,P,P' DDE DISSOLV (µG/L) (34653)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLT 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLT 0.7 U GF, REC (µG/L) (82665)
MAY 26...	<0.01	0.02	<0.01	<0.008	<0.01	<0.02	<0.008	<0.006	<0.01	<0.01	<0.03
JUN 22...	<0.006	<0.004	<0.004	<0.001	<0.005	<0.004	<0.002	<0.003	<0.004	<0.002	<0.007

DATE	LIN- URON WATER FLT 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPTC WATER FLT 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FLT 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLT 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLT 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLT 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLT 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLT 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLT 0.7 U GF, REC (µG/L) (82676)
MAY 26...	<0.04	<0.03	0.01	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
JUN 22...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003

DATE	DISUL- FOTON WATER FLT 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLT 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLT 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLT 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLT 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLT 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLT 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLT 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
MAY 26...	<0.06	<0.008	<0.02	<0.05	<0.008	E0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 22...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

06934500 MISSOURI RIVER AT HERMANN, MO--Continued

SPECIFIC CONDUCTANCE, $\mu\text{S}/\text{CM}$ AT 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 12:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	429	627	---	367	521	534	371	329	448	503	712
2	709	428	627	---	347	491	571	317	348	444	508	710
3	708	428	628	---	349	429	599	317	371	445	515	746
4	708	429	626	---	345	413	601	304	375	458	471	780
5	709	428	627	---	354	444	616	337	381	464	459	790
6	708	428	628	---	374	495	627	334	398	475	415	790
7	708	428	628	---	420	470	627	392	417	456	377	775
8	707	430	627	---	439	430	651	470	425	473	392	761
9	708	428	628	---	428	414	663	418	418	406	498	763
10	710	428	626	---	461	385	599	405	396	384	543	798
11	709	425	630	---	477	363	586	411	390	405	526	819
12	708	428	628	---	546	420	474	431	384	406	521	816
13	708	428	628	---	763	513	449	447	375	398	524	816
14	708	428	628	---	743	521	471	391	389	464	637	806
15	708	428	628	---	514	553	436	414	426	466	608	812
16	708	428	627	---	437	595	526	421	444	477	605	803
17	709	428	627	---	446	653	487	384	450	468	623	809
18	709	428	628	332	443	695	484	281	450	457	587	811
19	707	428	627	362	514	648	444	227	461	475	587	809
20	709	428	627	389	601	570	384	247	465	470	639	792
21	708	429	627	403	623	537	390	285	483	471	639	799
22	708	428	627	385	657	618	399	305	471	498	668	797
23	708	428	627	470	641	564	428	329	477	503	708	815
24	708	429	627	484	625	573	468	351	480	477	707	810
25	706	428	627	417	663	539	444	360	480	471	736	790
26	708	428	628	451	653	558	447	361	481	465	757	784
27	708	428	627	460	659	541	429	364	478	480	727	748
28	707	428	625	386	651	564	443	334	455	492	810	743
29	708	428	626	382	---	548	450	317	450	482	796	745
30	708	428	627	361	---	685	415	326	450	485	797	763
31	707	---	631	404	---	557	---	332	---	496	760	---
MEAN	708	428	627	---	519	526	505	354	427	460	601	784
MAX	718	430	631	---	763	695	663	470	483	503	810	819
MIN	706	425	625	---	345	363	384	227	329	384	377	710

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 12:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	18.0	8.0	---	6.0	6.5	11.0	13.0	20.0	23.0	28.0	27.0
2	---	18.0	8.0	---	5.0	6.0	12.0	13.0	21.0	24.0	22.0	26.0
3	---	18.0	8.0	---	4.0	7.0	14.0	13.0	21.0	24.0	30.0	26.5
4	---	18.0	8.0	---	4.0	5.5	12.5	13.0	21.5	25.0	28.0	27.0
5	---	18.0	8.0	---	3.0	8.0	11.0	14.0	23.0	25.5	28.0	26.0
6	---	18.0	8.0	---	2.0	7.5	17.0	14.0	22.5	24.5	28.0	26.0
7	---	18.0	8.0	---	2.0	6.0	17.5	15.0	23.0	25.5	27.0	24.5
8	---	18.0	8.0	---	1.5	5.0	16.0	16.0	23.0	25.0	28.0	24.0
9	---	18.0	8.0	---	5.5	5.0	15.0	17.0	24.0	25.0	29.0	23.0
10	---	18.0	8.0	---	6.0	9.0	15.5	16.5	23.0	26.0	29.0	22.0
11	---	18.0	8.0	---	6.0	9.0	13.0	17.5	21.5	27.0	30.0	23.0
12	---	18.0	8.0	---	2.0	14.0	13.0	17.0	22.0	27.0	30.0	23.0
13	---	15.0	8.0	---	3.5	17.0	13.0	19.0	22.0	28.0	30.0	23.0
14	---	15.0	8.0	---	3.0	12.0	13.0	19.0	22.5	27.0	30.0	23.5
15	---	15.0	8.0	---	3.0	15.0	13.5	18.0	23.0	27.5	30.0	24.0
16	---	15.0	8.0	---	2.5	13.0	14.0	22.0	24.0	29.0	30.0	23.0
17	---	15.0	8.0	---	6.0	13.5	14.0	19.0	23.5	29.0	29.0	22.0
18	---	15.0	8.0	5.0	5.0	13.0	13.5	18.0	24.0	28.5	29.0	21.0
19	---	15.0	8.0	4.0	8.0	14.5	16.0	18.0	24.0	28.0	29.0	21.0
20	---	15.0	8.0	2.0	6.0	15.5	15.0	19.5	25.0	28.0	28.0	20.0
21	---	14.0	8.0	3.0	7.0	17.0	14.0	19.5	26.5	28.0	28.0	18.0
22	---	14.0	8.0	3.0	9.5	14.0	16.0	21.0	26.0	27.5	27.0	19.0
23	---	14.0	8.0	2.0	9.0	13.0	14.0	22.0	26.0	28.0	27.0	18.0
24	---	12.0	8.0	2.0	7.0	13.0	15.0	20.0	25.5	27.0	27.0	17.0
25	---	12.0	8.0	2.0	10.0	14.0	14.0	19.5	25.0	28.0	27.5	17.5
26	---	12.0	8.0	3.0	10.0	15.0	17.0	19.0	25.0	28.0	27.0	18.0
27	---	12.0	8.0	3.5	9.0	14.5	14.0	19.0	25.0	29.0	28.0	17.5
28	---	12.0	8.0	3.0	7.0	12.0	15.5	18.0	25.0	29.0	27.0	19.0
29	---	12.0	8.0	2.0	---	13.0	14.0	19.0	25.0	29.0	28.0	20.0
30	---	12.0	8.0	2.5	---	11.0	13.5	19.0	25.0	29.0	27.0	19.0
31	---	---	8.0	3.0	---	10.0	---	19.5	---	29.0	28.0	---
MEAN	---	15.4	8.0	---	5.4	11.2	14.2	17.6	23.6	27.0	28.2	21.9
MAX	---	18.0	8.0	---	10.0	17.0	17.5	22.0	26.5	29.0	30.0	27.0
MIN	---	12.0	8.0	---	1.5	5.0	11.0	13.0	20.0	23.0	22.0	17.0

MISSISSIPPI RIVER MAIN STEM

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO

LOCATION.--Lat 38°37'44", long 90°10'47", Hydrologic Unit 07140101, on downstream side of west pier of Eads Bridge at St. Louis, 15.0 mi downstream from Missouri River, 19.2 mi upstream from Meramec River and at mile 180.0 above the Ohio River.

DRAINAGE AREA.--697,000 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: January 1861 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE HEIGHT: March 1933 to current year in reports of Geological Survey. Since January 1861 in reports of Mississippi River Commission. Since January 1890 in reports of National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 379.94 ft above sea level. Prior to May 5, 1934, nonrecording gage 0.4 mi downstream; May 5, 1934, to Dec. 9, 1952, water-stage recorder at site 20 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River basin and by many reservoirs and diversions for irrigation in Missouri River basin. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 27, 1844, reached a stage of 41.32 ft, from floodmarks, discharge, 1,300,000 ft³/s, computed by U.S. Army Corps of Engineers. Flood in April 1785 may have reached a stage of 42.0 ft. Minimum flow of 18,000 ft³/s reached Dec. 23, 1863.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161000	137000	181000	121000	202000	151000	250000	388000	734000	385000	205000	172000
2	160000	138000	180000	118000	200000	161000	252000	413000	726000	378000	210000	166000
3	157000	145000	176000	106000	210000	161000	248000	428000	715000	363000	218000	159000
4	155000	147000	180000	93100	234000	153000	244000	425000	700000	349000	230000	159000
5	140000	153000	179000	85300	244000	148000	240000	420000	679000	335000	254000	164000
6	134000	166000	176000	88700	211000	136000	238000	415000	665000	340000	263000	164000
7	126000	171000	171000	89900	183000	156000	235000	408000	644000	370000	294000	167000
8	132000	179000	191000	94800	169000	186000	233000	399000	625000	397000	289000	178000
9	139000	190000	200000	88300	161000	175000	226000	416000	610000	403000	246000	187000
10	133000	204000	193000	88600	166000	172000	227000	456000	598000	395000	216000	183000
11	124000	203000	195000	91300	166000	173000	243000	484000	590000	377000	218000	178000
12	124000	188000	172000	93600	147000	158000	265000	506000	581000	363000	221000	168000
13	131000	179000	155000	105000	128000	143000	300000	525000	573000	344000	212000	166000
14	129000	175000	151000	151000	119000	149000	331000	534000	559000	318000	200000	155000
15	124000	160000	143000	216000	118000	156000	344000	533000	547000	297000	181000	145000
16	125000	147000	126000	227000	118000	165000	338000	537000	533000	279000	175000	143000
17	123000	150000	127000	204000	121000	182000	327000	577000	512000	267000	196000	138000
18	119000	147000	135000	197000	121000	194000	326000	640000	490000	259000	226000	132000
19	125000	144000	142000	194000	124000	215000	337000	705000	469000	250000	224000	131000
20	118000	136000	131000	195000	121000	222000	359000	755000	446000	248000	219000	131000
21	118000	156000	125000	164000	117000	214000	372000	781000	422000	245000	212000	128000
22	122000	198000	144000	166000	116000	206000	370000	796000	405000	242000	206000	129000
23	127000	216000	144000	169000	122000	208000	361000	776000	394000	244000	208000	129000
24	130000	211000	143000	159000	124000	210000	350000	747000	385000	241000	205000	129000
25	130000	193000	149000	158000	124000	213000	342000	733000	373000	238000	200000	122000
26	130000	178000	145000	164000	128000	215000	341000	732000	365000	241000	201000	124000
27	129000	182000	144000	163000	130000	219000	341000	739000	368000	232000	198000	138000
28	133000	184000	141000	175000	139000	221000	338000	745000	379000	228000	198000	144000
29	132000	172000	133000	202000	---	227000	339000	747000	389000	216000	197000	135000
30	137000	174000	128000	215000	---	229000	356000	746000	388000	210000	192000	124000
31	138000	---	124000	209000	---	237000	---	744000	---	208000	182000	---
MEAN	132400	170800	155600	148100	152200	185600	302400	588700	528800	298800	216000	149600
MAX	161000	216000	200000	227000	244000	237000	372000	796000	734000	403000	294000	187000
MIN	118000	136000	124000	85300	116000	136000	226000	388000	365000	208000	175000	122000
IN.	.22	.27	.26	.25	.23	.31	.48	.97	.85	.49	.36	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1995, BY WATER YEAR (WY)

	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
MEAN	139500	142400	123500	115200	142100	230500	306000	286200	263300	219100	143300	138200											
MAX	575300	359200	452400	307800	301400	521800	692500	588700	600600	808800	700200	531800											
(WY)	1987	1986	1983	1973	1974	1973	1973	1995	1947	1993	1993	1993											
MIN	44170	47920	42130	31340	41900	74550	110100	79500	70260	67130	43510	54640											
(WY)	1940	1940	1938	1940	1940	1964	1934	1934	1934	1936	1936	1939											

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1933 - 1995

ANNUAL MEAN	202000		252900		187900	
HIGHEST ANNUAL MEAN					429700	1993
LOWEST ANNUAL MEAN					67700	1934
HIGHEST DAILY MEAN	629000	Apr 15	796000	May 22	1050000	Aug 1 1993
LOWEST DAILY MEAN	104000	Sep 15, 17-18	85300	Jan 5	27800	Dec 12 1937
ANNUAL SEVEN-DAY MINIMUM	106000	Sep 12	89600	Jan 5	28200	Jan 18 1940
INSTANTANEOUS PEAK FLOW	---		800000	May 22	1070000	Aug 1 1993
INSTANTANEOUS PEAK STAGE	---		41.89	May 22	49.58	Aug 1 1993
INSTANTANEOUS LOW FLOW	---		79600	Jan 10	27800	Dec 12 1937
ANNUAL RUNOFF (INCHES)	3.94		4.93		3.66	
10 PERCENT EXCEEDS	337000		508000		365000	
50 PERCENT EXCEEDS	174000		195000		150000	
90 PERCENT EXCEEDS	120000		124000		68100	

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURES: October 1951 to current year.

SEDIMENT RECORDS: April 1948 to current year.

REMARKS.--Sediment discharge for many days computed from turbidity readings. Sediment records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,720 mg/L, Feb. 24, 1985; minimum daily mean, 19 mg/L, Jan. 21 and 22, 1967.

SEDIMENT LOADS: Maximum daily, 9,830,000 tons, Feb. 24, 1985; minimum daily, 2,800 tons, Jan. 21, 1967.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,780 mg/L, Apr. 15; minimum daily mean, 31 mg/L, Feb. 25.

SEDIMENT LOADS: Maximum daily, 2,770,000 tons, May 22; minimum daily, 10,300 tons, Jan. 10 and Feb. 25.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	161000	89	38700	137000	183	67700	181000	114	55600
2	160000	100	43200	138000	94	34900	180000	136	66000
3	157000	102	43000	145000	113	44400	176000	101	47800
4	155000	98	41000	147000	98	39100	180000	131	63500
5	140000	90	34200	153000	88	36600	179000	125	60500
6	134000	75	27200	166000	241	108000	176000	106	50400
7	126000	68	23000	171000	169	77900	171000	124	57000
8	132000	58	20700	179000	157	76000	191000	143	73600
9	139000	62	23400	190000	188	96400	200000	192	104000
10	133000	93	33500	204000	189	104000	193000	268	140000
11	124000	131	43800	203000	194	106000	195000	671	353000
12	124000	83	27900	188000	223	113000	172000	544	253000
13	131000	65	23100	179000	177	85700	155000	429	180000
14	129000	60	20900	175000	176	83100	151000	319	130000
15	124000	64	21500	160000	147	63400	143000	303	117000
16	125000	58	19700	147000	99	39200	126000	173	58800
17	123000	53	17500	150000	88	35500	127000	146	50100
18	119000	58	18500	147000	83	33100	135000	138	50400
19	125000	63	21400	144000	81	31500	142000	128	49300
20	118000	53	16700	136000	88	32200	131000	95	33500
21	118000	40	12700	156000	148	62300	125000	99	33400
22	122000	54	17600	198000	333	178000	144000	116	45000
23	127000	52	18000	216000	489	285000	144000	96	37300
24	130000	54	18900	211000	430	245000	143000	98	37900
25	130000	74	26000	193000	322	168000	149000	101	40700
26	130000	89	31200	178000	218	105000	145000	101	39600
27	129000	68	23700	182000	182	89700	144000	85	33000
28	133000	95	34100	184000	155	76800	141000	86	32800
29	132000	105	37500	172000	114	52900	133000	69	24700
30	137000	142	52700	174000	98	46100	128000	66	22800
31	138000	154	57500	---	---	---	124000	66	22000

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	121000	69	22500	202000	389	212000	151000	109	44500
2	118000	73	23400	200000	283	153000	161000	121	52400
3	106000	67	19100	210000	304	172000	161000	120	52400
4	93100	68	17200	234000	291	184000	153000	168	69600
5	85300	71	16300	244000	430	283000	148000	178	71100
6	88700	60	14400	211000	371	211000	136000	167	61300
7	89900	63	15200	183000	342	169000	156000	462	195000
8	94800	55	14100	169000	326	149000	186000	807	405000
9	88300	45	10800	161000	252	110000	175000	552	261000
10	88600	43	10300	166000	232	104000	172000	508	236000
11	91300	47	11500	166000	186	83500	173000	490	229000
12	93600	43	10800	147000	210	83400	158000	441	188000
13	105000	99	28200	128000	196	67800	143000	421	163000
14	151000	546	222000	119000	192	61700	149000	382	154000
15	216000	750	437000	118000	199	63300	156000	398	168000
16	227000	574	352000	118000	222	70600	165000	399	178000
17	204000	480	264000	121000	155	50600	182000	462	227000
18	197000	434	231000	121000	116	37900	194000	543	284000
19	194000	458	240000	124000	88	29400	215000	585	340000
20	195000	331	174000	121000	90	29300	222000	821	492000
21	164000	235	104000	117000	82	25900	214000	1140	659000
22	166000	243	109000	116000	76	23600	206000	1010	564000
23	169000	220	100000	122000	69	22700	208000	916	514000
24	159000	224	96300	124000	62	20700	210000	678	384000
25	158000	211	89900	124000	31	10300	213000	570	328000
26	164000	217	96200	128000	52	18100	215000	510	296000
27	163000	226	99600	130000	78	27400	219000	568	336000
28	175000	243	115000	139000	94	35200	221000	438	261000
29	202000	262	143000	---	---	---	227000	394	241000
30	215000	273	159000	---	---	---	229000	421	260000
31	209000	373	210000	---	---	---	237000	368	236000
APRIL			MAY			JUNE			
1	250000	486	328000	388000	841	881000	734000	372	736000
2	252000	456	310000	413000	1000	1120000	726000	381	746000
3	248000	536	359000	428000	916	1060000	715000	442	853000
4	244000	473	311000	425000	665	763000	700000	337	637000
5	240000	446	289000	420000	486	552000	679000	361	661000
6	238000	349	224000	415000	336	377000	665000	333	598000
7	235000	357	226000	408000	299	329000	644000	393	683000
8	233000	321	202000	399000	234	252000	625000	378	637000
9	226000	323	197000	416000	244	274000	610000	321	528000
10	227000	307	188000	456000	324	399000	598000	410	661000
11	243000	338	222000	484000	1300	1690000	590000	373	594000
12	265000	491	351000	506000	1190	1620000	581000	348	546000
13	300000	924	748000	525000	1210	1720000	573000	302	466000
14	331000	973	870000	534000	1250	1810000	559000	408	615000
15	344000	1780	1650000	533000	853	1230000	547000	310	458000
16	338000	1230	1120000	537000	728	1060000	533000	314	452000
17	327000	988	872000	577000	1310	2030000	512000	299	413000
18	326000	834	734000	640000	1050	1820000	490000	206	272000
19	337000	938	854000	705000	973	1850000	469000	313	396000
20	359000	823	798000	755000	1280	2610000	446000	204	245000
21	372000	1010	1030000	781000	1240	2620000	422000	221	252000
22	370000	863	862000	796000	1290	2770000	405000	385	421000
23	361000	695	678000	776000	1200	2580000	394000	329	350000
24	350000	511	483000	747000	798	1610000	385000	297	309000
25	342000	462	427000	733000	592	1170000	373000	298	300000
26	341000	447	412000	732000	418	826000	365000	296	292000
27	341000	445	410000	739000	449	895000	368000	321	319000
28	338000	429	392000	745000	459	923000	379000	396	405000
29	339000	453	414000	747000	334	674000	389000	446	468000
30	356000	537	516000	746000	323	651000	388000	460	482000
31	---	---	---	744000	426	856000	---	---	---

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	385000	462	480000	205000	272	150000	172000	120	55700
2	378000	435	444000	210000	175	99200	166000	207	92800
3	363000	468	459000	218000	150	88000	159000	286	123000
4	349000	368	346000	230000	220	137000	159000	264	113000
5	335000	238	215000	254000	351	241000	164000	210	92900
6	340000	266	244000	263000	537	382000	164000	165	72900
7	370000	309	308000	294000	689	547000	167000	129	58100
8	397000	676	725000	289000	351	274000	178000	131	63000
9	403000	1020	1110000	246000	302	200000	187000	146	73500
10	395000	1560	1670000	216000	150	87800	183000	131	64600
11	377000	1010	1030000	218000	141	83200	178000	122	58900
12	363000	604	592000	221000	104	61800	168000	123	55700
13	344000	604	561000	212000	118	67300	166000	117	52400
14	318000	406	349000	200000	152	82000	155000	105	44000
15	297000	280	225000	181000	139	67700	145000	103	40400
16	279000	244	184000	175000	120	56600	143000	99	38100
17	267000	238	172000	196000	132	70000	138000	95	35200
18	259000	183	128000	226000	140	85500	132000	84	30100
19	250000	162	109000	224000	170	103000	131000	91	32300
20	248000	144	96700	219000	384	227000	131000	104	36700
21	245000	148	97800	212000	322	185000	128000	88	30400
22	242000	108	70700	206000	266	148000	129000	96	33400
23	244000	143	94200	208000	314	177000	129000	77	27000
24	241000	196	128000	205000	248	137000	129000	69	24000
25	238000	455	292000	200000	209	113000	122000	66	21700
26	241000	494	322000	201000	174	94400	124000	69	23200
27	232000	337	211000	198000	171	91600	138000	95	35400
28	228000	310	191000	198000	166	88600	144000	63	24500
29	216000	257	150000	197000	135	71800	135000	61	22200
30	210000	261	148000	192000	138	71400	124000	90	30100
31	208000	263	148000	182000	132	64600	---	---	---

07010500 MARAMEC SPRING NEAR ST. JAMES, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°57'20", long 91°31'57", NW 1/4 SE 1/4 sec.1, T.37 N., R.6 W., Phelps County, Hydrologic Unit 07140102. Site is at Maramec Spring Park, about 5 mi east of St. James on Highway 8.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 03...	1200	130	14.0	337	7.09	8.8	84	--	42	35	160
JAN 13...	1025	285	13.0	311	7.67	8.8	84	<10	K8	23	145
MAR 22...	1350	90	13.0	216	7.90	9.8	92	--	21	160	98
APR 17...	1400	216	13.0	223	7.23	10.0	94	--	160	110	101
JUN 07...	1330	254	13.5	209	7.18	8.5	82	<10	K1	110	96
AUG 08...	1045	140	14.5	292	7.52	8.7	85	--	29	180	131

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 03...	195	0	0.800	<0.010	<0.010	<0.20	0.040	0.020	--	--
JAN 13...	177	0	0.770	<0.010	<0.010	<0.20	0.020	0.020	160	33
MAR 22...	118	0	0.720	<0.010	0.020	<0.20	0.050	0.020	--	--
APR 17...	128	0	0.580	<0.010	0.010	<0.20	<0.020	0.020	--	--
JUN 07...	118	0	0.540	<0.010	0.010	<0.20	<0.020	0.010	100	21
AUG 08...	161	0	0.730	<0.010	0.020	0.20	0.020	0.020	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C SUS- PENDED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)
JAN 13...	19	3.7	1.2	5.9	5.9	<0.10	166	4	50	<20
JUN 07...	12	2.2	1.4	5.7	3.5	0.10	122	4	110	40

DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD) (01027)	CADMIUM DIS- SOLVED (µG/L AS CU) (01025)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
JAN 13...	<1	<1.0	<1	5	<1	<1	<1	<0.10	<4	<4
JUN 07...	<1	<1.0	1	25	2	<1	<1	0.20	<4	<4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07013000 MERAMEC RIVER NEAR STEELVILLE, MO

LOCATION.--Lat 37°59'58", long 91°21'39", in NE 1/4 sec.21, T.38 N., R.4 W., Crawford County, Hydrologic Unit 07140102, on left bank 20 ft downstream from railroad bridge, 400 ft upstream from highway bridge, 0.8 mi upstream from Whittenburg Creek, 1.5 mi north of Steelville and at mile 146.4.

DRAINAGE AREA.--781 mi².

PERIOD OF RECORD.--October 1922 to current year. Prior to January 1923 monthly discharges only, published in WSP 1311. Gage-height records for 1916-33 at site 1.0 mi upstream in reports of National Weather Service.

REVISED RECORDS.--WSP 897: 1939. WSP 1007: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 681.68 ft above sea level. Prior to May 24, 1934, and from July 20, 1966, to July 20, 1967, nonrecording gage; May 24, 1934, to Oct. 10, 1942, water-stage recorder at site 400 ft downstream at present datum; July 21, 1967, to Feb. 13, 1973, at site 1,900 ft downstream and at datum 1.8 ft lower.

REMARKS.--Estimated daily discharges: Mar. 7-8 and Sept. 30. Records good. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 20, 1915, reached a stage of 26.5 ft, discharge, 60,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	212	394	291	764	777	573	3440	1050	515	244	189
2	192	212	373	281	716	685	537	8430	1300	476	268	184
3	191	212	358	271	696	621	509	3110	1350	468	267	209
4	188	254	343	256	742	573	483	2110	1010	502	275	223
5	187	1210	329	238	730	548	455	1740	894	566	280	225
6	179	2680	315	258	677	526	437	1470	825	685	281	219
7	182	1400	313	252	643	4500	420	1290	769	636	273	219
8	191	924	301	244	597	14000	406	1570	1010	518	267	208
9	203	1000	307	243	556	2910	399	2570	1980	736	252	203
10	250	1800	309	242	546	1880	394	1820	2460	599	244	202
11	239	1270	310	253	525	1490	1120	1410	3910	478	244	199
12	225	918	308	279	488	1250	1590	1210	2220	414	237	196
13	212	735	302	4310	461	1080	1260	1420	1570	381	226	195
14	212	649	296	10400	447	949	982	1140	1240	356	234	189
15	206	625	289	4720	454	847	840	948	1020	336	238	185
16	206	674	299	2450	450	767	742	876	883	323	242	193
17	212	620	319	1760	439	700	684	4890	781	311	224	191
18	229	584	338	1430	422	647	685	15700	704	299	219	191
19	288	521	328	1760	414	611	731	6010	667	287	212	193
20	335	500	326	1880	406	590	1960	2740	650	280	209	194
21	288	1100	333	1530	392	554	2450	1920	582	280	208	195
22	271	1350	391	1280	382	525	1660	1540	541	273	205	197
23	246	1040	427	1100	372	505	1390	1300	514	278	204	195
24	239	820	417	958	355	474	1980	1140	608	284	200	191
25	229	695	399	871	343	450	1860	1350	581	284	200	188
26	219	610	376	803	343	462	1470	1480	589	302	198	185
27	206	566	358	811	374	1340	1250	1530	1090	306	196	181
28	209	516	341	1100	633	1060	1080	2460	766	293	194	179
29	206	464	324	1010	---	834	1050	2520	615	274	193	178
30	206	423	314	895	---	713	2090	1540	559	261	190	177
31	212	---	305	816	---	629	---	1210	---	252	191	---
MEAN	221	819	337	1387	513	1403	1050	2641	1091	395	230	196
MAX	335	2680	427	10400	764	14000	2450	15700	3910	736	281	225
MIN	179	212	289	238	343	450	394	876	514	252	190	177
IN.	.33	1.17	.50	2.05	.68	2.07	1.50	3.90	1.56	.58	.34	.28

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	289	505	587	577	651	874	1095	984	738	351	265	285
MAX	2562	2995	4712	3155	2397	2842	4954	3665	4644	3287	1181	2664
(WY)	1950	1994	1983	1950	1985	1945	1994	1957	1935	1951	1982	1993
MIN	85.2	118	116	114	126	141	138	131	134	92.9	104	82.2
(WY)	1957	1965	1965	1956	1934	1954	1954	1977	1932	1934	1936	1956

SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	963	861	599
HIGHEST ANNUAL MEAN			1473
LOWEST ANNUAL MEAN			177
HIGHEST DAILY MEAN	30600	Apr 12	44500
LOWEST DAILY MEAN	179	Oct 6	76
ANNUAL SEVEN-DAY MINIMUM	187	Oct 2	78
INSTANTANEOUS PEAK FLOW	---		51200
INSTANTANEOUS PEAK STAGE	---		26.15
INSTANTANEOUS LOW FLOW	---		74
ANNUAL RUNOFF (INCHES)	16.74		10.42
10 PERCENT EXCEEDS	1390		1100
50 PERCENT EXCEEDS	423		267
90 PERCENT EXCEEDS	219		130

MERAMEC RIVER BASIN

07014000 HUZAZH CREEK NEAR STEELVILLE, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°58'29", long 91°12'16", in SE 1/4 SW 1/4 sec. 25, T.38 N., R.3 W., Crawford County, Hydrologic Unit 07140102. From Steelville take Highway 8 east for about 9 mi.

DRAINAGE AREA.--259 mi².

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	
NOV 03...	1045	81	14.0	399	7.7	10.6	101	--	K21	K18	198
JAN 13...	0915	352	8.5	361	8.0	11.1	95	<10	210	2100	165
MAR 20...	1010	245	14.0	315	7.9	10.6	102	--	K14	K11	143
APR 17...	1200	203	16.0	300	8.0	11.0	110	--	45	K9	170
JUN 07...	1130	285	20.5	325	8.1	9.4	105	<10	42	66	156
AUG 07...	1040	127	23.5	346	8.0	8.6	100	--	130	460	198

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED AS CA) (00915)
NOV 03...	241	0	0.090	<0.010	<0.010	<0.20	<0.020	<0.010	--	--
JAN 13...	199	0	0.220	<0.010	0.040	<0.20	0.030	<0.010	190	38
MAR 20...	173	0	0.220	<0.010	0.010	<0.20	0.020	0.010	--	--
APR 17...	210	0	0.080	<0.010	0.010	<0.20	<0.020	<0.010	--	--
JUN 07...	193	0	0.070	<0.010	0.010	<0.20	<0.020	<0.010	170	35
AUG 07...	243	0	0.190	0.010	0.010	0.20	0.020	<0.010	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	TOTAL AT 105 DEG. C SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)	
	JAN 13...	23	3.0	1.0	9.3	8.6	<0.10	184	8	100	20
	JUN 07...	20	2.6	1.1	7.6	2.4	0.20	174	12	40	20

DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD) (01027)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
JAN 13...	<1	<1.0	3	23	2	<1	4	<0.10	6	4
JUN 07...	<1	<1.0	1	11	2	<1	4	0.40	<4	<4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07014200 COURTOIS CREEK AT BERRYMAN, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°55'05", long 91°06'04", in SW 1/4 NE 1/4 sec. 13, T.37 N., R.1W., Crawford County, Hydrologic Unit 07140102. Take Highway 8 until you cross Courtois Creek, about 13 mi east of Steelville.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-I-CAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FE-CAL, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FE-CAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 03...	0900	48	13.5	416	7.3	9.1	86	--	20	100	199
JAN 12...	1325	85	9.5	382	8.1	13.5	119	<10	K1	K3	183
MAR 20...	1125	88	14.0	297	7.9	10.9	105	--	K6	K17	152
APR 17...	1000	123	16.0	350	8.0	10.4	104	--	24	K9	170
JUN 07...	0945	186	20.0	310	8.0	8.5	93	<10	24	32	158
AUG 07...	1220	45	25.0	349	7.9	8.4	101	--	75	190	172

DATE	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO-GEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD-NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 03...	243	0	0.030	<0.010	<0.010	<0.20	<0.020	<0.010	--	--
JAN 12...	221	0	0.040	<0.010	<0.010	<0.20	<0.020	<0.010	210	42
MAR 20...	184	0	0.090	<0.010	0.010	<0.20	<0.020	<0.010	--	--
APR 17...	211	0	0.020	<0.010	0.010	<0.20	<0.020	<0.010	--	--
JUN 07...	193	0	0.040	<0.010	0.020	<0.20	<0.020	<0.010	170	35
AUG 07...	213	0	0.090	0.010	0.010	0.20	0.020	<0.010	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUM-INUM, TOTAL RECOV-ERABLE (µG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)
JAN 12...	26	2.7	0.80	20	3.7	<0.10	204	6	30	<20
JUN 07...	20	2.0	1.0	9.6	2.2	0.30	184	12	40	20

DATE	CADMIUM TOTAL RECOV-ERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 12...	<1	<1.0	<1	7	2	<1	3	<0.10	5	<4
JUN 07...	<1	<1.0	2	9	2	1	4	0.90	6	5

K--Results based on colony count outside the acceptable range (non-ideal colony count).

MERAMEC RIVER BASIN

07014500 MERAMEC RIVER NEAR SULLIVAN, MO

LOCATION.--Lat 38°09'30", long 91°06'30", in SE 1/4 NE 1/4 sec.35, T.40 N., R.2 W., Crawford County, Hydrologic Unit 07140102, on right bank at upstream side of Sappington Bridge, 3.8 mi downstream from Brazil Creek, 4.0 mi southeast of Sullivan and at mile 117.0.

DRAINAGE AREA.--1,475 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1921 to September 1933, October 1943 to current year. Monthly discharge only for October 1943, published in WSP 1311.

REVISED RECORDS.--WSP 1007: 1922(M), 1924-30, 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 581.82 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 21, 1952, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Aug. 16-30. Water-discharge records good. Water diverted from river 0.5 mi above gage by mining company. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1915 reached a stage of 33.5 ft, from information by local residents, discharge, 90,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	443	459	926	681	1700	1820	1410	4890	2420	1190	589	370
2	442	454	861	646	1610	1650	1320	11900	2430	1100	609	366
3	438	454	818	625	1600	1480	1250	7950	2680	1080	812	388
4	437	564	781	595	1670	1350	1190	4390	2250	1180	699	415
5	433	1630	748	568	1660	1270	1120	3580	2020	1250	730	429
6	433	6380	717	575	1550	1210	1060	3020	2250	1230	671	430
7	433	3810	701	595	1470	12300	1030	2660	1920	1330	724	424
8	447	2420	675	581	1380	20800	996	3480	2200	1130	684	417
9	485	2020	676	568	1290	13400	965	5930	4720	1350	645	413
10	479	3690	692	567	1240	4490	941	4460	4310	1440	675	410
11	514	3080	710	587	1200	3420	1130	3280	6500	1180	739	405
12	481	2280	699	677	1120	2830	2330	2740	4820	1020	654	399
13	472	1830	672	6360	1060	2460	2240	2670	3350	935	586	392
14	459	1600	655	15200	1020	2190	1850	2560	2670	874	558	386
15	454	1560	640	16100	1020	1980	1630	2150	2270	824	573	379
16	453	1610	672	5610	1020	1810	1540	2000	2010	787	567	386
17	452	1520	706	3780	995	1680	1420	9270	1810	756	544	394
18	469	1380	751	3010	965	1560	1470	24900	1660	728	535	393
19	535	1240	752	3840	939	1470	1460	18100	1550	696	530	391
20	617	1150	758	4720	919	1430	2770	6450	1490	678	525	405
21	600	1950	840	3650	893	1350	4250	4380	1390	666	524	406
22	550	3080	987	2940	870	1270	3300	3490	1310	676	520	414
23	515	2450	1050	2520	848	1210	2790	2950	1250	700	519	407
24	486	1970	1020	2220	823	1150	3470	2580	1200	707	515	400
25	466	1670	969	1990	794	1100	3650	2690	1310	788	512	394
26	452	1470	910	1840	786	1140	3050	3250	1300	916	510	391
27	447	1330	852	1780	856	3110	2550	3190	1530	849	510	386
28	442	1210	805	2020	1340	2590	2240	4620	1730	765	508	383
29	442	1100	766	2180	---	1990	2070	5250	1410	699	505	376
30	439	1000	727	1980	---	1710	3020	3520	1280	651	489	370
31	443	---	701	1810	---	1530	---	2760	---	616	377	---
MEAN	473	1879	782	2930	1166	3185	1984	5325	2301	929	585	397
MAX	617	6380	1050	16100	1700	20800	4250	24900	6500	1440	812	430
MIN	433	454	640	567	786	1100	941	2000	1200	616	377	366
IN.	.37	1.42	.61	2.29	.82	2.49	1.50	4.16	1.74	.73	.46	.30

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	601	1071	1263	1243	1426	1921	2419	2006	1331	731	536	553
MAX	4307	5692	8307	6304	5264	5786	9435	7022	8742	6142	2030	5489	
(WY)	1950	1986	1983	1950	1982	1945	1994	1957	1945	1951	1982	1993	
MIN	156	249	232	216	281	295	347	292	263	205	199	146	
(WY)	1957	1957	1956	1956	1954	1954	1954	1932	1932	1954	1964	1956	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	1975		1835		1256			
HIGHEST ANNUAL MEAN					3014			1985
LOWEST ANNUAL MEAN					341			1954
HIGHEST DAILY MEAN	53500	Apr 12	24900	May 18	70600		Jun 9	1945
LOWEST DAILY MEAN	409	Aug 28	366	Sep 2	131		Sep 20	1956
ANNUAL SEVEN-DAY MINIMUM	416	Sep 18	386	Sep 24	133		Sep 16	1956
INSTANTANEOUS PEAK FLOW	---		27900	May 18	77300		Jun 9	1945
INSTANTANEOUS PEAK STAGE	---		20.62	May 18	32.00		Jun 9	1945
INSTANTANEOUS LOW FLOW	---		365	Sep 2, 3	131		Sep 20	1956
ANNUAL RUNOFF (INCHES)	18.18		16.90		11.57			
10 PERCENT EXCEEDS	2850		3500		2400			
50 PERCENT EXCEEDS	950		1100		601			
90 PERCENT EXCEEDS	450		439		271			

07014500 MERAMEC RIVER NEAR SULLIVAN, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1963 to July 1975, July 1977 to June 1990, November 1992 to current year.

REMARKS.--Reestablished as an ambient water-quality monitoring network station November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR PER (COLS. 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT											
12...	1100	480	14.5	359	8.10	10.5	101	--	K12	20	173
NOV											
02...	1440	456	13.0	367	8.00	11.8	112	<10	K10	K6	176
DEC											
07...	1030	716	10.5	314	7.90	10.4	91	--	K12	90	154
JAN											
04...	1400	592	0.5	311	7.50	13.4	100	<10	2	K5	293
FEB											
22...	1230	960	8.5	322	8.20	12.7	107	--	K1	140	157
MAR											
22...	1400	1270	14.0	290	7.70	12.0	115	--	K11	K5	165
APR											
24...	1300	3490	13.5	241	8.00	9.80	94	--	230	110	116
MAY											
09...	1415	5890	16.0	211	7.65	9.20	94	--	K2300	430	95
JUN											
12...	1300	4620	18.0	219	7.60	8.60	90	<10	M	117	109
JUL											
05...	1100	1260	22.0	315	8.15	9.50	108	--	22	45	164
18...	1215	727	26.0	332	8.02	7.10	88	--	55	47	160
AUG											
02...	1230	592	27.0	353	8.22	7.80	99	<10	K4	K8	167
SEP											
11...	1345	405	20.0	363	8.19	9.00	100	--	23	26	183

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT										
12...	211	0	0.200	<0.010	0.010	0.21	<0.020	<0.010	--	--
NOV										
02...	213	0	0.020	<0.010	<0.010	<0.20	<0.020	<0.010	190	37
DEC										
07...	189	0	0.160	<0.010	<0.010	<0.20	<0.020	0.010	--	--
JAN										
04...	358	0	0.170	<0.010	0.010	<0.20	<0.020	<0.010	180	37
FEB										
22...	191	0	0.140	<0.010	0.010	<0.20	<0.020	<0.010	--	--
MAR										
22...	199	0	0.200	<0.010	0.010	<0.20	0.020	0.010	--	--
APR										
24...	144	0	0.180	<0.010	0.020	0.26	<0.020	0.020	--	--
MAY										
09...	116	0	0.170	0.010	0.040	0.28	0.070	0.020	--	--
JUN										
12...	132	0	0.240	0.010	0.100	0.68	0.030	0.010	100	23
JUL										
05...	200	0	0.190	<0.010	0.030	0.23	<0.020	<0.010	--	--
18...	194	0	0.260	0.010	0.030	0.22	0.020	0.010	--	--
AUG										
02...	205	0	0.210	0.010	0.010	<0.20	<0.020	0.010	190	38
SEP										
11...	228	0	0.200	0.010	0.010	0.20	0.020	0.010	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

MERAMEC RIVER BASIN

07014500 MERAMEC RIVER NEAR SULLIVAN, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (μG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (μG/L AS AL) (01106)
NOV 02...	23	3.2	1.2	7.7	15	<0.10	202	6	30	<20
JAN 04...	22	3.0	1.0	8.6	6.7	<0.10	<1	<1	40	<20
JUN 12...	11	2.4	1.6	5.9	3.0	<0.10	110	40	510	60
AUG 02...	22	--	1.3	6.6	3.4	<0.10	176	22	90	<20

DATE	CADMIUM TOTAL RECOV- ERABLE (μG/L AS CD) (01027)	CADMIUM DIS- SOLVED (μG/L AS CD) (01025)	COPPER, DIS- SOLVED (μG/L AS CU) (01040)	IRON, DIS- SOLVED (μG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (μG/L AS PB) (01051)	LEAD, DIS- SOLVED (μG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (μG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (μG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (μG/L AS ZN) (01092)	ZINC, DIS- SOLVED (μG/L AS ZN) (01090)
NOV 02...	<1	<1.0	1	4	3	<1	11	<0.10	<4	<4
JAN 04...	<1	<1.0	2	<3	2	<1	8	<0.10	8	<4
JUN 12...	5	2.9	5	72	28	6	8	0.40	40	16
AUG 02...	< 1	<1.0	1	--	1	<1	7	<0.10	--	--

07015720 BOURBEUSE RIVER NEAR HIGH GATE, MO

LOCATION.--Lat 38°08'49", long 91°34'50", in SW 1/4 NE 1/4 sec.4, T.39 N., R.6 W., Phelps County, Hydrologic Unit 07140103, on downstream side of right bridge pier on State Highway B, 1.8 mi downstream from Lanes Fork, 5.0 mi east of High Gate and 11.0 mi north of St. James.

DRAINAGE AREA.--135 mi².

PERIOD OF RECORD.--July 1965 to current year. Occasional low-flow measurements 1963, 1964.

REVISED RECORDS.--WDR MO-83-1: 1982.

GAGE.--Water-stage recorder. Datum of gage is 804.1 ft above sea level (levels by Missouri State Highway and Transportation Commission). Prior to Aug. 17, 1966, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 11 to Dec. 19, Jan. 6-9, 23-25, Feb. 13-14, and May 26 to Aug. 21. Records fair except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1957 reached a stage of about 23 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	8.5	110	16	129	166	93	3300	180	30	8.2	.48
2	1.7	7.9	94	15	106	104	78	765	140	21	25	.56
3	1.6	7.7	82	14	251	81	70	402	110	17	250	3.3
4	1.5	117	72	15	406	73	70	809	92	16	210	2.8
5	1.4	2930	64	15	221	68	59	437	80	15	190	1.6
6	1.3	1000	58	14	135	62	54	286	160	72	400	1.3
7	1.2	275	52	13	104	3540	50	249	280	62	210	1.2
8	6.0	147	48	13	91	573	46	1070	120	35	100	1.1
9	24	1020	45	14	80	294	41	446	560	22	45	.98
10	24	1270	40	15	61	205	163	258	2500	16	25	.88
11	11	800	37	18	54	145	2160	188	1250	10	14	.84
12	6.2	450	34	25	51	110	649	154	500	7.0	7.0	.84
13	5.5	280	32	4340	46	87	319	376	300	4.8	5.2	.76
14	4.7	200	30	3920	44	71	212	178	200	3.1	3.6	.74
15	4.2	155	35	585	42	60	157	117	130	2.7	2.5	.74
16	3.5	110	34	305	39	53	182	151	88	2.6	1.9	.83
17	3.4	98	33	207	35	46	253	9880	62	2.5	1.6	.74
18	30	80	32	161	31	38	262	3960	50	2.5	1.5	.64
19	73	70	32	696	29	34	175	865	40	2.6	1.4	1.2
20	54	250	31	377	27	33	1700	368	34	2.5	1.3	.95
21	32	2000	41	248	24	29	444	259	28	2.6	1.2	.84
22	22	900	46	203	23	26	339	182	24	2.5	1.1	.75
23	17	500	39	189	21	24	628	136	20	6.6	1.0	.72
24	12	380	34	178	19	21	617	199	19	6.0	.89	.80
25	10	300	30	167	17	18	340	506	23	15	.86	.79
26	8.8	250	27	147	25	675	238	220	18	21	.75	.75
27	8.2	210	24	803	477	1990	203	300	17	60	.71	.74
28	7.8	175	22	1090	335	359	157	660	17	40	.61	.63
29	6.9	150	20	410	---	219	400	475	17	12	.60	.60
30	7.0	130	18	230	---	156	796	300	60	9.0	.59	1.1
31	7.8	---	17	158	---	116	---	225	---	7.0	.60	---
MEAN	12.9	476	42.4	471	104	306	365	894	237	17.0	48.8	1.01
MAX	73	2930	110	4340	477	3540	2160	9880	2500	72	400	3.3
MIN	1.2	7.7	17	13	17	18	41	117	17	2.5	.59	.48
IN.	.11	3.93	.36	4.02	.81	2.61	3.02	7.64	1.96	.15	.42	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995, BY WATER YEAR (WY)

	MEAN	52.9	170	208	144	176	227	269	187	109	38.4	33.2	54.4
MAX	552	799	1213	549	634	747	1191	894	963	473	373	865	865
(WY)	1987	1986	1983	1969	1985	1984	1994	1995	1985	1993	1982	1993	1993
MIN	.34	.94	1.68	.65	12.4	1.32	1.57	3.88	.95	.25	.19	.14	.14
(WY)	1967	1981	1990	1977	1981	1981	1981	1977	1972	1972	1971	1971	1971

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1965 - 1995
ANNUAL MEAN	191	249	138
HIGHEST ANNUAL MEAN			315
LOWEST ANNUAL MEAN			21.7
HIGHEST DAILY MEAN	11300	9880	21000
LOWEST DAILY MEAN	1.2	.48	.00
ANNUAL SEVEN-DAY MINIMUM	1.5	.59	.00
INSTANTANEOUS PEAK FLOW	---	16500	49300
INSTANTANEOUS PEAK STAGE	---	19.29	23.65
INSTANTANEOUS LOW FLOW	---	.42	.00
ANNUAL RUNOFF (INCHES)	19.21	25.03	13.87
10 PERCENT EXCEEDS	255	500	232
50 PERCENT EXCEEDS	31	46	21
90 PERCENT EXCEEDS	3.8	1.2	.72

MERAMEC RIVER BASIN

07016400 BOURBEUSE RIVER ABOVE UNION, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°25'55", long 91°01'11, in SW 1/4 NW 1/4 sec.34, T.43 N., R.1 W., Franklin County, Hydrologic Unit 07140103, at bridge on North Bend Drive, 5.5 mi upstream from gaging station, and 0.5 mi southwest of Union.

DRAINAGE AREA.--808 mi², approximately.

PERIOD OF RECORD.--November 1983 to October 1987, November 1993 to current year.

REMARKS.--Reestablished ambient water-quality monitoring network November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT											
11...	1030	74	15.5	267	6.9	8.9	87	--	K10	K1	115
NOV											
03...	0930	63	13.0	288	7.6	9.3	88	<10	21	K11	104
DEC											
07...	0800	195	9.0	243	7.5	10.0	85	--	25	46	89
JAN											
04...	1645	146	1.5	237	7.4	16.5	126	11	K2	23	192
FEB											
22...	1100	212	5.5	254	7.6	12.9	101	--	K4	460	92
MAR											
22...	0730	245	14.5	250	6.5	10.2	98	--	K11	K10	122
APR											
25...	1030	2030	13.5	155	7.6	9.5	90	--	220	K180	58
MAY											
09...	1230	3060	16.0	169	6.6	8.7	89	--	3000	1700	39
JUN											
14...	1430	927	21.5	151	6.9	8.0	89	<10	M	96	56
JUL											
07...	0800	274	24.5	263	8.2	7.2	85	--	120	39	127
18...	0900	92	29.0	279	7.8	5.9	77	--	60	40	121
AUG											
02...	0815	165	28.5	455	7.8	6.2	81	<10	K14	93	111
SEP											
11...	1200	52	22.0	268	8.0	8.2	94	--	230	K12	122

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT										
11...	141	0	0.030	<0.010	0.020	0.30	<0.020	0.010	--	--
NOV										
03...	128	0	<0.020	<0.010	<0.020	0.26	0.040	<0.010	130	24
DEC										
07...	109	0	0.340	<0.010	<0.040	<0.20	0.070	0.030	--	--
JAN										
04...	226	0	0.020	<0.010	0.010	<0.20	0.020	0.010	140	28
FEB										
22...	113	0	0.450	<0.010	0.010	0.20	<0.020	0.010	--	--
MAR										
22...	144	0	0.140	<0.010	0.030	0.29	0.050	0.010	--	--
APR										
25...	71	0	0.160	0.010	0.050	0.48	0.040	0.040	--	--
MAY										
09...	48	0	0.190	0.010	0.050	0.50	0.070	0.040	--	--
JUN										
14...	69	0	0.220	0.010	0.060	0.61	0.050	0.040	66	14
JUL										
07...	147	0	0.020	<0.010	0.050	0.32	<0.020	<0.010	--	--
18...	149	0	0.030	0.010	0.040	0.24	0.030	0.010	--	--
AUG										
02...	139	0	<0.020	0.010	0.010	0.24	0.020	0.010	140	26
SEP										
11...	150	0	0.020	0.010	0.010	0.28	0.050	0.010	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

07016400 BOURBEUSE RIVER ABOVE UNION, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
NOV 03...	16	4.1	2.3	14	17	<0.10	166	8	70	<20
JAN 04...	17	5.2	1.6	24	9.3	<0.10	<1	2	80	<20
JUN 14...	7.6	3.2	1.9	9.9	2.9	<0.10	82	48	730	140
AUG 02...	18	--	2.0	17	4.4	0.10	124	8	130	20
DATE	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)
NOV 03...	<1	<1.0	1	14	1	<1	52	<0.10	<4	<4
JAN 04...	<1	<1.0	2	10	<1	<1	64	<0.10	<4	<4
JUN 14...	<1	<1.0	5	200	7	1	38	0.40	10	7
AUG 02...	1	1.0	1	--	2	1	18	0.10	--	--

07016500 BOURBEUSE RIVER AT UNION, MO

LOCATION.--Lat 38°26'45", long 90°59'30", in SE 1/4 sec.26, T.43 N., R.1 W., Franklin County, Hydrologic Unit 07140103, on left bank at upstream side of the bridge on U.S. Highway 50, 800 ft upstream from Flat Creek, 0.5 mi east of Union, 7.0 mi upstream from Birch Creek and at mile 13.4.

DRAINAGE AREA.--808 mi².

PERIOD OF RECORD.--June 1921 to current year. Oct. 1916 to 1921 gage heights are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 957: 1941. WSP 1147: Drainage area. WSP 1281: 1924.

GAGE.--Water-stage recorder. Datum of gage is 488.58 ft above sea level. Prior to Oct. 1, 1948, datum of all gages 3.00 ft higher. Prior to Oct. 21, 1933, nonrecording gage, at site 30 ft upstream; Oct. 21, 1933, to June 11, 1944, nonrecording gage, at present site.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. National Weather Service telemark and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 22, 1915, reached a stage of 28.5 ft, present datum, from floodmarks, discharge, about 50,000 ft³/s, determined from extension of rating curve for main channel based on measurements made since 1921 and study of overflow areas in vicinity of gaging station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	68	262	163	971	1430	509	4350	884	218	127	54
2	74	65	244	157	828	911	421	6340	709	179	150	52
3	71	63	230	151	871	619	358	8400	630	164	504	58
4	69	87	222	146	1310	475	312	2340	554	154	855	60
5	67	493	211	149	2140	405	280	2190	472	145	668	55
6	66	1430	200	140	1340	364	260	2270	411	153	571	55
7	63	5300	195	135	887	3220	242	1320	455	229	1050	55
8	81	1650	187	131	680	8410	226	1270	746	185	927	54
9	86	1350	182	130	555	8880	209	2890	558	167	538	52
10	77	3180	176	130	479	1780	196	2780	5280	150	367	52
11	74	3340	168	132	425	1140	196	1300	7560	145	266	52
12	75	1110	164	138	381	855	2110	862	5400	141	207	54
13	85	652	159	2090	341	682	2800	686	1530	141	170	56
14	83	489	154	10400	308	565	1290	610	978	133	146	54
15	76	416	152	14400	289	481	790	652	697	119	128	53
16	71	388	165	17300	272	420	607	535	548	109	114	56
17	71	398	163	3270	261	372	530	4190	457	100	105	57
18	82	395	164	1250	252	335	628	12900	388	93	99	53
19	94	347	203	1860	239	306	616	20000	338	89	95	51
20	82	381	217	2980	227	284	1410	25900	298	91	90	53
21	126	1010	223	2140	214	265	4850	11300	269	90	87	51
22	313	4660	226	1310	208	245	3390	1810	242	91	81	49
23	196	2170	264	952	199	229	1270	1260	220	89	76	47
24	143	950	272	760	188	213	1100	938	208	126	71	46
25	112	629	260	635	182	200	1840	2880	197	119	69	47
26	93	483	234	557	180	225	1350	5330	208	190	67	47
27	82	408	213	615	202	438	884	2740	183	206	64	47
28	74	356	199	1340	907	4320	681	3290	175	364	63	46
29	70	325	187	4800	---	2220	598	6340	174	321	61	46
30	66	293	178	2800	---	966	1120	3060	175	207	58	46
31	67	---	170	1400	---	657	---	1200	---	153	56	---
MEAN	92.5	1096	201	2341	548	1352	1036	4578	1031	157	256	51.9
MAX	313	5300	272	17300	2140	8880	4850	25900	7560	364	1050	60
MIN	63	63	152	130	180	200	196	535	174	89	56	46
IN.	.13	1.51	.29	3.34	.71	1.93	1.43	6.53	1.42	.22	.37	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1995, BY WATER YEAR (WY)

	MEAN	318	543	674	647	767	1115	1289	1151	840	342	191	264
MAX	4575	3320	6107	3518	3214	4207	5303	4578	4583	3650	1927	4859	
(WY)	1950	1986	1983	1950	1985	1984	1994	1995	1942	1993	1993	1993	
MIN	15.0	28.0	35.4	30.7	41.1	42.0	94.9	66.6	33.7	23.9	21.0	19.2	
(WY)	1957	1954	1954	1956	1963	1954	1956	1932	1936	1936	1936	1956	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1921 - 1995

ANNUAL MEAN	866	1069	677
HIGHEST ANNUAL MEAN			1771
LOWEST ANNUAL MEAN			106
HIGHEST DAILY MEAN	38900	Apr 13	25900
LOWEST DAILY MEAN	46	Aug 29	46
ANNUAL SEVEN-DAY MINIMUM	49	Aug 26	46
INSTANTANEOUS PEAK FLOW	---		27200
INSTANTANEOUS PEAK STAGE	---		23.53
INSTANTANEOUS LOW FLOW	---		45
ANNUAL RUNOFF (INCHES)	14.56		17.96
10 PERCENT EXCEEDS	1300		2760
50 PERCENT EXCEEDS	208		252
90 PERCENT EXCEEDS	70		64
			63000
			12
			13
			73300
			33.80
			11
			11.38
			1320
			173
			40

07017200 BIG RIVER AT IRONDALE, MO

LOCATION.--Lat 37°49'48", long 90°41'27", in SE 1/4 SW 1/4 sec.15, T.36 N., R.3 E., Washington County, Hydrologic Unit 07140104, on right bank 50 ft upstream from bridge on State Highway U, 0.2 mi upstream from Mill Creek and 0.8 mi west of Irondale.

DRAINAGE AREA.--175 mi².

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 753.28 ft above sea level (Missouri State Highway and Transportation Commission bench mark).

REMARKS.--Estimated daily discharges: Jan. 5-13. Records good except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	14	75	73	136	217	122	2460	323	39	34	255
2	9.8	13	68	66	125	172	115	1200	280	37	32	31
3	9.4	14	64	61	125	149	108	661	249	40	36	25
4	9.3	41	61	53	148	140	103	548	191	48	32	26
5	9.1	900	56	52	130	134	94	473	181	43	31	23
6	9.0	417	51	53	115	123	88	405	359	42	30	21
7	9.0	185	50	55	110	4700	79	367	255	40	29	20
8	11	122	47	56	96	1090	74	1470	655	38	29	20
9	19	253	74	55	90	589	68	959	850	68	27	20
10	14	321	111	54	88	430	63	657	1200	56	84	20
11	12	184	94	60	86	351	78	499	745	43	37	20
12	11	135	84	81	74	297	103	424	504	40	30	19
13	13	110	77	88	71	257	91	374	313	38	26	20
14	14	120	71	1050	69	225	81	326	217	37	24	19
15	14	166	66	399	89	200	77	276	165	35	23	18
16	13	151	79	269	121	181	72	259	123	34	22	21
17	13	127	128	215	106	164	72	1050	99	33	23	21
18	15	107	109	192	98	147	71	3160	80	33	21	20
19	31	91	96	1430	95	133	59	979	69	32	20	19
20	22	98	92	481	91	134	121	568	59	31	20	21
21	17	554	94	313	85	122	153	445	54	32	19	21
22	15	264	163	239	80	113	136	378	52	82	19	20
23	14	178	156	198	77	109	170	325	47	47	18	19
24	12	141	132	165	70	98	331	279	67	125	18	18
25	12	120	116	145	67	88	255	1650	52	274	18	19
26	12	104	103	130	65	84	205	692	54	347	18	19
27	12	102	94	150	314	276	172	1170	58	109	18	19
28	13	117	86	249	337	219	139	1100	48	63	18	18
29	12	96	80	194	---	173	143	563	44	45	18	18
30	12	84	73	161	---	151	223	437	41	40	18	18
31	13	---	71	145	---	132	---	366	---	36	29	---
MEAN	13.3	178	87.8	224	113	368	122	791	248	64.7	26.5	28.3
MAX	31	900	163	1430	337	4700	331	3160	1200	347	84	255
MIN	9.0	13	47	52	65	84	59	259	41	31	18	18
IN.	.09	1.13	.58	1.47	.67	2.42	.78	5.21	1.58	.43	.17	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995, BY WATER YEAR (WY)

	MEAN	65.6	251	292	209	250	322	368	230	116	51.6	59.2	68.1
MAX	339	1147	1027	734	695	867	1329	843	872	262	393	669	
(WY)	1971	1994	1983	1969	1985	1978	1994	1990	1985	1981	1970	1993	
MIN	6.95	10.5	13.7	11.1	24.9	38.9	66.4	24.1	9.95	4.69	4.31	3.95	
(WY)	1981	1981	1977	1981	1977	1981	1977	1977	1980	1980	1980	1971	

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1965 - 1995

	ANNUAL MEAN	208	190	190
HIGHEST ANNUAL MEAN				449
LOWEST ANNUAL MEAN				56.6
HIGHEST DAILY MEAN	9080	Apr 11	4700	21300
LOWEST DAILY MEAN	8.9	Aug 28	9.0	2.5
ANNUAL SEVEN-DAY MINIMUM	9.3	Oct 1	9.3	2.7
INSTANTANEOUS PEAK FLOW	---		13500	49100
INSTANTANEOUS PEAK STAGE	---		14.42	28.95
INSTANTANEOUS LOW FLOW	---		8.7	2.2
ANNUAL RUNOFF (INCHES)	16.13		14.72	14.72
10 PERCENT EXCEEDS	304		410	366
50 PERCENT EXCEEDS	74		84	60
90 PERCENT EXCEEDS	12		18	11

07017605 COONVILLE CREEK AT ST. FRANCOIS STATE PARK
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°58'04", long 90°32'00", in sec.25, T.38 N., R.4 E., St. Francois County, Hydrologic Unit 07140104, at first set of culverts on park road off U.S. Route 67.

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

REMARKS.--Ambient water-quality monitoring network station since November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 01...	1100	0.96	11.0	519	7.5	10.7	97	--	--	K10 275
JAN 11...	1020	2.6	4.5	535	8.1	12.7	98	11	11	42 235
MAR 20...	1310	1.9	15.5	437	8.1	10.0	99	--	K5	K9 221
APR 26...	1600	2.7	15.5	386	8.3	10.0	100	--	K6	K21 193
JUN 08...	1000	3.0	17.0	412	8.2	8.3	85	<10	150	400 230
AUG 07...	1405	1.5	23.0	444	8.2	7.8	90	--	K15	140 261

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (00507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 01...	335	0	0.040	<0.010	<0.010	<0.20	<0.020	<0.010	--	--
JAN 11...	287	0	0.120	<0.010	<0.010	<0.20	<0.020	<0.010	260	52
MAR 20...	274	0	0.050	<0.010	0.010	<0.20	0.070	<0.010	--	--
APR 26...	239	0	0.040	<0.010	0.020	<0.20	<0.020	<0.010	--	--
JUN 08...	281	0	0.130	<0.010	0.010	<0.20	<0.020	<0.010	250	50
AUG 07...	320	0	0.100	<0.010	0.010	0.20	0.020	<0.010	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µG/L AS AL) (01106)
JAN 11...	32	8.5	0.60	13	19	<0.10	274	2	30	<20
JUN 08...	30	3.8	0.80	10	5.9	<0.10	250	8	40	30

DATE	CADMIUM TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 11...	<1	<1.0	<1	7	7	6	1	<0.10	120	110
JUN 08...	<1	<1.0	<1	8	8	6	2	0.10	110	110

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07018100 BIG RIVER NEAR RICHWOODS, MO

LOCATION.--Lat 38°09'34", long 90°42'22", in sec.33, T.40 N., R.3 E., Jefferson County, Hydrologic Unit 07140104, on left bank at downstream side of bridge on State Highway H, 1.8 mi east of Fletcher, 6.8 mi east of Richwoods and at mile 53.7.

DRAINAGE AREA.--735 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year. Prior to May 1949 monthly discharge only, published in WSP 1311. Prior to 1984 published as "Big River near De Soto, Mo."

GAGE.--Water-stage recorder. Datum of gage is 523.00 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1915 reached a stage of about 29.4 ft, (former datum) from floodmark, 1.0 mi downstream adjusted to gage site by comparison with recorded flood 5.5 ft lower; discharge, 70,500 ft³/s, from rating curve extended above 37,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	147	458	445	735	1130	535	2190	942	452	306	167
2	116	148	440	439	692	847	507	6430	844	404	307	283
3	114	144	427	425	681	731	486	2630	766	381	644	357
4	112	176	410	404	841	672	472	1680	702	423	491	275
5	112	679	396	399	858	646	446	1350	624	427	351	240
6	112	3190	387	405	750	621	427	1090	724	422	330	217
7	110	1340	385	422	680	10400	412	935	835	393	314	208
8	113	785	373	430	632	12100	406	1980	1040	366	281	199
9	133	657	381	424	594	3210	392	3820	3700	368	259	197
10	141	1300	427	415	575	2050	380	2160	3030	371	906	197
11	136	1070	474	464	558	1570	385	1490	3200	359	1070	194
12	136	752	460	653	527	1280	399	1170	1980	366	544	206
13	140	623	432	676	497	1080	398	990	1420	329	396	209
14	141	568	415	2980	484	936	398	899	1080	306	322	210
15	140	609	403	2980	496	840	386	781	892	291	283	209
16	138	660	414	1490	567	760	523	703	774	278	261	228
17	137	631	472	1080	615	692	538	5960	679	266	250	238
18	145	569	530	904	573	635	551	18800	615	246	240	230
19	181	521	516	3450	544	596	448	10000	570	227	226	223
20	188	492	491	4560	523	568	692	3060	536	221	231	232
21	173	1250	499	1980	505	544	717	1910	504	246	213	225
22	170	1610	948	1310	489	516	711	1460	501	254	200	217
23	157	942	1010	1040	472	491	731	1180	473	298	188	211
24	146	738	790	883	457	465	1180	980	448	362	183	203
25	140	630	671	789	446	443	1140	2000	437	756	177	197
26	141	566	596	726	439	452	901	3270	493	1400	178	201
27	139	531	547	703	461	1230	742	2160	521	1120	177	207
28	133	556	510	939	1370	999	628	4180	486	627	174	198
29	131	549	483	1070	---	799	581	2410	675	446	170	194
30	131	496	458	902	---	656	678	1490	567	373	171	193
31	135	---	445	793	---	581	---	1130	---	334	167	---
MEAN	137	764	505	1115	609	1566	573	2913	1002	423	323	219
MAX	188	3190	1010	4560	1370	12100	1180	18800	3700	1400	1070	357
MIN	110	144	373	399	439	443	380	703	437	221	167	167
IN.	.22	1.16	.79	1.75	.86	2.46	.87	4.57	1.52	.66	.51	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1995, BY WATER YEAR (WY)

	MEAN	284	699	870	731	916	1224	1314	1046	538	406	265	330
MAX	1641	4223	4332	3845	2935	2838	5642	3880	3150	2492	1357	4022	
(WY)	1950	1986	1983	1950	1985	1985	1994	1990	1985	1951	1950	1993	
MIN	47.5	87.9	90.5	84.0	124	123	271	170	110	86.0	69.9	40.6	
(WY)	1957	1977	1956	1977	1954	1954	1981	1965	1980	1980	1955	1956	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1949 - 1995

ANNUAL MEAN	1016	850	718	
HIGHEST ANNUAL MEAN			1766	1985
LOWEST ANNUAL MEAN			198	1954
HIGHEST DAILY MEAN	36300	Apr 12	18800	May 18
LOWEST DAILY MEAN	110	Oct 7	110	Oct 7
ANNUAL SEVEN-DAY MINIMUM	113	Oct 2	113	Oct 2
INSTANTANEOUS PEAK FLOW	---		21200	May 18
INSTANTANEOUS PEAK STAGE	---		20.35	May 18
INSTANTANEOUS LOW FLOW	---		109	Oct 7, 8
ANNUAL RUNOFF (INCHES)	18.77		15.70	
10 PERCENT EXCEEDS	1390		1470	
50 PERCENT EXCEEDS	483		496	
90 PERCENT EXCEEDS	133		174	

07018100 BIG RIVER NEAR RICHWOODS, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1963 to 1975, November 1983 to June 1987, November 1992 to current year.

REMARKS.--Reestablished ambient water-quality monitoring network station November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (MG/L) (00300)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	
NOV 02...	1230	148	12.5	535	8.4	9.3	86	--	21	210	247
JAN 04...	1030	406	1.0	435	7.9	12.1	82	<10	K9	K3	188
MAR 22...	1000	574	14.5	445	8.2	10.8	104	--	K4	K3	197
APR 25...	1300	1170	14.5	378	8.4	10.0	97	--	100	K61	165
JUN 14...	0830	1070	20.0	339	7.9	7.2	78	<10	M	84	164
JUL 07...	1100	393	24.5	480	7.8	8.5	100	--	42	21	228
AUG 02...	1000	299	27.0	446	8.1	6.6	83	--	K6	36	193

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
NOV 02...	294	4	<0.020	<0.010	<0.020	<0.20	0.030	0.010	--	--
JAN 04...	229	0	<0.020	<0.010	0.010	<0.20	<0.020	<0.010	250	52
MAR 22...	241	0	0.090	<0.010	0.020	<0.20	<0.020	0.010	--	--
APR 25...	193	4	0.090	<0.010	0.020	0.27	<0.020	0.010	--	--
JUN 14...	201	0	0.210	<0.010	0.020	0.44	<0.020	0.010	160	35
JUL 07...	276	0	0.130	<0.010	0.020	<0.20	<0.020	<0.010	--	--
AUG 02...	239	0	0.100	0.010	0.010	0.20	0.040	0.010	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)
JAN 04...	30	5.7	<1.5	41	11.0	<0.10	--	--	40	<20
JUN 14...	17	3.8	1.7	18	5.0	<0.10	180	6	220	20

DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD) (01027)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
JAN 04...	<1	<1.0	1.5	4	11	<1	22	<0.10	34	<4
JUN 14...	1	<1.0	6	19	64	6	23	0.30	40	15

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

07018500 BIG RIVER AT BYRNESVILLE, MO

LOCATION.--Lat 38°21'45", long 90°39'15", in SE 1/4 sec.12, T.42 N., R.3 E., Jefferson County, Hydrologic Unit 07140104, on right bank on downstream side of pier of privately owned bridge at Byrnesville, 4.0 mi upstream from Heads Creek and at mile 14.1.

DRAINAGE AREA.--917 mi².

PERIOD OF RECORD.--October 1921 to current year. Prior to June 1922 monthly discharge only, published WSP 1311.

REVISED RECORDS.--WSP 667: 1927. WSP 877: 1938. WSP 1007: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 433.69 ft above sea level. Prior to Mar. 9, 1940, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Mar. 7 to May 2. Records fair except for estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. National Weather Service telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 21, 1915, reached a stage of 30.2 ft from floodmarks, discharge, 80,000 ft³/s, by slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	163	415	364	913	1460	588	3070	1380	550	301	137
2	140	170	376	355	840	1130	558	6450	1210	428	455	131
3	133	178	354	347	833	880	535	5430	1020	386	411	143
4	130	206	338	330	977	768	519	2530	915	381	556	257
5	127	394	318	284	1070	759	491	1920	830	393	475	218
6	127	1600	304	297	990	756	470	1540	745	385	332	188
7	127	2530	293	316	863	1250	453	1270	881	373	299	168
8	132	1140	286	327	770	16300	447	2000	1100	348	277	156
9	140	782	286	339	711	4160	431	3800	2220	326	256	153
10	143	692	288	327	665	2460	418	3510	3880	316	2050	149
11	158	1310	318	327	633	1880	424	2130	3630	319	1130	146
12	159	969	366	403	599	1560	439	1610	3070	307	942	142
13	160	694	359	3430	562	1350	438	1380	1990	310	541	144
14	161	576	335	3350	529	1140	439	1450	1480	284	389	146
15	163	519	316	4120	517	1090	425	1140	1150	265	316	144
16	163	541	316	2560	518	912	575	945	943	248	275	144
17	159	586	327	1620	572	830	592	7220	807	236	250	153
18	166	551	373	1260	620	700	606	19300	709	223	233	157
19	176	488	428	2790	583	660	493	25600	637	213	222	155
20	195	448	431	5410	549	620	761	12500	586	211	210	152
21	219	614	438	3620	527	598	789	3520	547	206	202	152
22	206	1540	765	2040	506	619	782	2230	511	220	192	154
23	198	1390	1120	1500	484	540	804	1710	502	227	183	151
24	190	905	982	1230	462	512	1420	1410	472	256	175	144
25	177	703	768	1040	444	487	1370	2010	436	336	167	138
26	167	581	633	923	429	497	1040	3490	469	955	163	134
27	164	514	546	889	458	1620	816	2780	494	1530	159	131
28	164	461	487	1020	546	1200	691	3470	508	1040	154	133
29	157	471	441	1250	---	960	697	3970	493	614	150	130
30	154	468	406	1240	---	787	814	2280	647	440	145	123
31	157	---	379	1040	---	639	---	1620	---	353	141	---
MEAN	160	739	445	1431	649	1585	644	4300	1142	409	379	152
MAX	219	2530	1120	5410	1070	16300	1420	25600	3880	1530	2050	257
MIN	127	163	286	284	429	487	418	945	436	206	141	123
IN.	.20	.90	.56	1.80	.74	1.99	.78	5.41	1.39	.51	.48	.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

MEAN	338	730	905	924	1097	1434	1690	1435	806	497	297	362
MAX	2290	5084	5594	5064	3696	4539	7230	5196	4530	3895	1490	6464
(WY)	1950	1994	1983	1950	1982	1945	1994	1990	1928	1957	1950	1993
MIN	49.7	99.6	103	90.4	139	137	345	177	105	56.4	41.4	48.7
(WY)	1957	1977	1956	1977	1954	1954	1932	1932	1936	1936	1936	1956

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1922 - 1995

ANNUAL MEAN	1227	1009	876
HIGHEST ANNUAL MEAN			1934
LOWEST ANNUAL MEAN			227
HIGHEST DAILY MEAN	45100	Apr 12	57800
LOWEST DAILY MEAN	127	Oct 5-7	25
ANNUAL SEVEN-DAY MINIMUM	131	Oct 2	34
INSTANTANEOUS PEAK FLOW	---	27800	63600
INSTANTANEOUS PEAK STAGE	---	23.22	29.37
INSTANTANEOUS LOW FLOW	---	125	25
ANNUAL RUNOFF (INCHES)	18.17	14.95	12.98
10 PERCENT EXCEEDS	1770	2000	1730
50 PERCENT EXCEEDS	448	494	343
90 PERCENT EXCEEDS	158	154	117

07019000 MERAMEC RIVER NEAR EUREKA, MO

LOCATION.--Lat 38°30'20", long 90°35'30", in SE 1/4 sec.32, T.44 N., R.4 E., St. Louis County, Hydrologic Unit 07140102, on right bank, 44 ft upstream from bridge on north access roadway of I-44, 2.0 mi east of Eureka, 3.0 mi downstream from Big River and at mile 34.1.

DRAINAGE AREA.--3,788 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1903 to July 1906, October 1921 to current year. Monthly discharge only for January, February, and March 1904, published in WSP 1311.

REVISED RECORDS.--WSP 877: 1938(M). WSP 977: 1942. WSP 1007: Drainage area. WSP 1281: 1924-25.

GAGE.--Water-stage recorder. Datum of gage is 404.18 ft above sea level. Prior to Jan. 17, 1933, nonrecording gage at site 200 ft upstream at different datum; Jan. 17, 1933, to Sept. 22, 1937, nonrecording gage; Sept. 23, 1937, to Sept. 30, 1971, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Water-discharge records good. National Weather Service telemark and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 22, 1915, reached a stage of 40.2 ft, from floodmarks, present datum, discharge, 175,000 ft³/s, by slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	723	1870	1430	4570	3550	3150	6630	10300	2320	1190	592
2	672	732	1720	1380	3900	4300	2720	15100	9760	2110	1250	607
3	647	744	1620	1340	3900	3520	2450	21300	8200	1950	1600	599
4	628	814	1550	1280	4490	2910	2240	21100	7580	1900	1880	717
5	618	1150	1480	1200	5150	2580	2030	11500	6490	2010	2260	754
6	609	3980	1420	1210	5270	2360	1890	8710	5420	2000	1920	716
7	602	9170	1380	1210	4230	15800	1770	7160	5030	1980	2830	699
8	633	9730	1340	1200	3470	29300	1670	7490	5080	2010	2360	688
9	704	10000	1320	1210	3020	35900	1590	10200	5410	1950	1930	676
10	723	5620	1300	1200	2740	34100	1510	13300	11900	1800	3360	660
11	722	8500	1290	1200	2520	17100	1470	10500	16100	2010	2040	647
12	730	7080	1340	1290	2300	7540	1490	7290	18000	1880	2080	638
13	776	4540	1340	11400	2120	5900	4900	5910	13200	1700	1380	635
14	762	3500	1300	22000	1950	4960	4880	5380	7840	1570	1120	635
15	750	2940	1260	26700	1860	4310	3550	5120	6080	1460	993	622
16	733	2690	1280	29800	1790	3810	2820	4440	4900	1380	814	629
17	719	2690	1330	31400	1780	3400	2880	14700	4180	1310	739	630
18	741	2650	1350	13500	1820	3060	3030	38800	3670	1240	704	639
19	873	2440	1410	9790	1750	2790	3010	57500	3280	1190	770	638
20	863	2250	1510	13100	1680	2620	3790	67900	2990	1180	816	632
21	871	3230	1620	13100	1600	2440	6940	58700	2750	1160	729	631
22	939	5430	2220	8980	1540	2280	10200	36200	2570	1150	630	637
23	1060	8830	2450	6660	1490	2130	7440	15800	2390	1160	655	633
24	958	5560	2590	5390	1420	1980	6280	11600	2280	1140	658	633
25	870	4070	2310	4600	1380	1840	6740	13700	2130	1370	639	631
26	802	3230	2070	4020	1340	1780	7320	14800	2230	1940	553	616
27	760	2770	1880	3840	1370	3330	5880	15400	2300	2930	646	609
28	737	2450	1730	4350	1620	6020	4750	13600	2300	2380	561	595
29	719	2190	1630	6020	---	8530	4080	16300	2650	1920	491	593
30	700	2060	1540	8320	---	5210	3840	17600	2550	1600	482	576
31	706	---	1480	5860	---	3850	---	12900	---	1350	524	---
MEAN	753	4059	1611	7870	2574	7394	3877	18280	5985	1711	1245	640
MAX	1060	10000	2590	31400	5270	35900	10200	67900	18000	2930	3360	754
MIN	602	723	1260	1200	1340	1780	1470	4440	2130	1140	482	576
IN.	.23	1.20	.49	2.40	.71	2.25	1.14	5.56	1.76	.52	.38	.19

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	1456	2552	3079	3218	3829	5164	6330	5334	3587	1923	1176	1469
MAX	12120	15450	23620	17320	14730	13960	22580	18280	18070	12600	5441	18500
(WY)	1950	1986	1983	1950	1982	1978	1927	1995	1945	1951	1993	1993
MIN	236	464	426	374	538	514	945	708	503	318	255	244
(WY)	1957	1957	1956	1956	1954	1954	1954	1932	1936	1936	1936	1956

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	4672	4695	3245
HIGHEST ANNUAL MEAN			7407
LOWEST ANNUAL MEAN			751
HIGHEST DAILY MEAN	118000	67900	139000
LOWEST DAILY MEAN	602	482	196
ANNUAL SEVEN-DAY MINIMUM	630	550	209
INSTANTANEOUS PEAK FLOW	---	69700	145000
INSTANTANEOUS PEAK STAGE	---	31.18	42.89
INSTANTANEOUS LOW FLOW	---	482	196
ANNUAL RUNOFF (INCHES)	16.75	16.83	11.64
10 PERCENT EXCEEDS	7390	11400	6780
50 PERCENT EXCEEDS	1960	2040	1430
90 PERCENT EXCEEDS	744	647	523

07019280 MERAMEC RIVER AT PAULINA HILLS, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 38°27'46", long 90°24'53", Jefferson County, Hydrologic Unit 07140102, at bridge on State Highway 21 at Paulina Hills, 0.3 mi downstream from Saline Creek, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,950 mi², approximately.

PERIOD OF RECORD.--August 1963 to July 1975, 1982 to current year.

REMARKS.--Records of discharge are given for gaging station near Eureka plus a 10 percent correction.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT 12...	0800	803	16.5	410	8.00	7.80	78	--	K30	K11	167
NOV 02...	1050	805	13.5	471	8.40	10.7	101	<10	K68	23	174
DEC 06...	1530	1560	9.5	354	7.90	10.7	91	--	K515	81	153
JAN 04...	0730	1430	3.0	342	7.60	13.4	107	<10	400	240	96
FEB 22...	0830	1690	6.0	382	8.06	12.5	99	--	110	50	158
MAR 21...	1600	2670	15.5	335	7.90	10.0	99	--	133	55	139
APR 27...	0745	6690	14.5	241	8.20	9.30	90	--	K83	K42	106
MAY 09...	1030	10800	16.0	262	7.70	8.20	83	--	K1940	K3020	107
JUN 13...	1030	13600	24.0	157	7.48	7.00	81	14	M	200	91
JUL 06...	0930	2010	24.5	347	7.64	6.30	74	--	115	40	162
18...	0715	1380	28.5	394	7.78	4.70	61	--	58	31	152
AUG 01...	1530	1300	30.0	359	7.97	6.50	86	<10	480	280	149
SEP 11...	0930	718	21.5	416	7.91	7.20	82	--	26	221	178

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS Ca) (00915)
OCT										
12...	204	0	0.200	0.030	0.100	0.50	0.080	0.060	--	--
NOV										
02...	202	5	0.170	0.020	0.170	0.38	0.090	0.070	190	40
DEC										
06...	190	0	0.290	0.010	0.170	0.38	0.070	0.060	--	--
JAN										
04...	117	0	0.080	<0.010	0.190	0.41	0.030	0.040	190	40
FEB										
22...	194	0	0.290	0.010	0.180	0.32	<0.020	0.030	--	--
MAR										
21...	167	0	0.430	0.010	0.090	0.39	0.060	0.030	--	--
APR										
27...	132	0	0.180	0.010	0.080	0.44	0.040	0.040	--	--
MAY										
09...	133	0	0.270	0.010	0.120	0.53	0.100	0.050	--	--
JUN										
13...	113	0	0.210	0.020	0.060	0.54	0.070	0.060	86	19
JUL										
06...	200	0	0.180	0.010	0.120	0.65	0.140	0.020	--	--
18...	185	0	0.090	0.010	0.200	0.65	0.060	0.040	--	--
AUG										
01...	182	0	0.220	0.020	0.110	<0.20	0.100	0.050	170	37
SEP										
11...	221	0	0.320	0.050	0.220	0.67	0.090	0.090	--	--

K--Results based on colony count outside the ideal range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

MERAMEC RIVER BASIN

07019280 MERAMEC RIVER AT PAULINA HILLS, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
NOV 02...	23	10.0	2.0	24	14	0.10	222	12	190	<20
JAN 04...	22	7.5	1.5	21	19	0.10	<1	2	70	<20
JUN 13...	9.4	3.1	2.0	8.8	3.8	<0.10	110	310	3900	70
AUG 01...	20	--	2.1	17	9.0	<0.10	172	68	840	20
DATE	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)
NOV 02...	<1	<1.0	2	<3	5	<1	43	<0.10	7	<4
JAN 04...	3	2.4	3	5	4	<1	38	<0.10	10	<4
JUN 13...	<1	<1.0	2	89	91	1	13	0.30	50	6
AUG 01...	<1	<1.0	<1	13	28	<1	52	<0.10	10	<4

07020200 PICKLE CREEK AT HAWN STATE PARK
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°50'05", long 90°13'48, in NE 1/4 NW 1/4 sec.14 T.36 N., R.7 E., Ste. Genevieve County, at foot bridge on walking trail 200 ft downstream from camping area in Hawn State Park.

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

REMARKS.--Ambient water-quality monitoring network station beginning November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00301)	COLIFORM, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 01...	1300	0.4	9.5	55	5.1	10.5	92	--	300	14
JAN 11...	1150	5.5	2.0	51	7.1	13.6	99	<10	K15	10
MAR 20...	1440	1.1	17.5	47	7.1	8.5	88	--	K9	14
APR 26...	1800	1.6	16.5	44	7.0	9.2	94	--	31	7
JUN 08...	0830	2.7	20.0	44	7.0	8.2	89	<10	K410	11
AUG 07...	1630	0.5	26.5	54	7.3	7.7	95	--	K12	34

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 01...	17	0	<0.020	<0.010	<0.010	0.26	<0.020	<0.010	--	--
JAN 11...	11	0	0.040	<0.010	<0.010	<0.20	0.020	<0.010	16	3.3
MAR 20...	16	0	<0.020	<0.010	0.010	0.23	<0.020	0.010	--	--
APR 26...	8	0	<0.020	<0.010	0.020	0.21	<0.020	0.010	--	--
JUN 08...	12	0	0.030	<0.010	0.020	0.20	<0.020	0.010	15	3.1
AUG 07...	41	0	<0.020	0.010	0.010	0.20	0.020	<0.010	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (MG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (MG/L AS AL) (01106)
JAN 11...	1.9	2.4	1.2	9.7	2.9	<0.10	40	4	80	50
JUN 08...	1.7	2.1	1.3	7.1	1.8	<0.10	42	10	110	50

DATE	CADMIUM TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 11...	<1	<1.0	<1	260	1	<1	20	<0.10	4	<4
JUN 08...	<1	<1.0	<1	390	1	<1	11	0.10	<4	<4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07020500 MISSISSIPPI RIVER AT CHESTER, IL

LOCATION.--Lat 37°54'10", long 89°51'10", in SW 1/4 sec.24, T.7 S., R.7 W., third principal meridian, Randolph County, Hydrologic Unit 07140105, on downstream side of left pier of main truss of highway bridge at Chester, 8.1 mi downstream from Kaskaskia River and at mile 109.9 above Ohio River.

DRAINAGE AREA.--708,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: October 1927 to current year in reports of U.S. Geological Survey. Monthly discharge only for some periods, published in WSP 1311. Since August 1873, results of discharge measurements in reports of Mississippi River Commission.

GAGE HEIGHT: July 1942 to current year in reports of U.S. Geological Survey. Since May 1891, in reports of Mississippi River Commission and National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 341.05 ft above sea level. Prior to Feb. 1, 1962, nonrecording gage 0.4 mi downstream at present datum.

REMARKS.--Estimated daily discharges: Sept. 9 and 10. Water-discharge records good, except for estimated daily discharges, which are fair. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 30, 1844, reached a gage height of 39.8 ft, discharge, 1,350,000 ft³/s, computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162000	142000	180000	129000	219000	142000	246000	386000	783000	398000	223000	184000
2	166000	139000	184000	125000	212000	156000	254000	425000	779000	392000	224000	174000
3	164000	141000	182000	119000	211000	165000	251000	448000	771000	381000	232000	167000
4	162000	147000	180000	107000	230000	164000	246000	462000	759000	368000	239000	163000
5	156000	156000	181000	96000	252000	154000	241000	461000	743000	350000	258000	164000
6	143000	167000	179000	89300	246000	148000	238000	452000	725000	339000	277000	166000
7	134000	171000	173000	92200	217000	155000	234000	445000	707000	355000	294000	165000
8	130000	179000	174000	94700	194000	204000	230000	438000	689000	381000	317000	170000
9	136000	187000	193000	97200	180000	217000	226000	450000	670000	400000	296000	178000
10	139000	200000	195000	92600	176000	209000	220000	474000	653000	409000	262000	183000
11	133000	207000	194000	95000	179000	208000	227000	503000	640000	401000	240000	181000
12	127000	203000	189000	99400	175000	193000	244000	527000	628000	387000	241000	175000
13	128000	190000	170000	107000	154000	172000	272000	549000	616000	369000	241000	168000
14	133000	183000	157000	136000	137000	161000	311000	568000	602000	342000	229000	162000
15	131000	177000	153600	205000	128000	164000	338000	578000	589000	317000	217000	152000
16	129000	162000	143000	258000	127000	169000	347000	583000	575000	294000	199000	144000
17	130000	153000	130000	256000	125000	178000	340000	609000	560000	277000	197000	141000
18	126000	153000	130000	243000	126000	191000	331000	707000	541000	267000	223000	137000
19	127000	151000	139000	237000	128000	208000	333000	766000	519000	259000	239000	132000
20	129000	147000	143000	235000	128000	223000	353000	803000	494000	253000	236000	130000
21	125000	150000	133000	217000	125000	227000	378000	832000	467000	251000	229000	129000
22	125000	175000	137000	195000	119000	220000	391000	865000	442000	247000	223000	128000
23	130000	213000	150000	193000	119000	215000	390000	856000	420000	248000	218000	127000
24	135000	225000	148000	188000	123000	218000	383000	831000	405000	247000	216000	126000
25	137000	215000	151000	177000	124000	221000	371000	810000	390000	246000	213000	125000
26	137000	196000	152000	176000	126000	224000	362000	792000	381000	249000	211000	122000
27	136000	187000	150000	179000	129000	231000	359000	787000	374000	248000	209000	124000
28	137000	190000	149000	181000	136000	234000	356000	789000	375000	242000	206000	138000
29	138000	185000	145000	198000	---	235000	352000	787000	396000	237000	204000	140000
30	139000	177000	138000	220000	---	238000	356000	789000	401000	228000	201000	131000
31	141000	---	134000	228000	---	238000	---	787000	---	225000	194000	---
MEAN	137600	175600	159900	163400	162300	196200	306000	630900	569800	309900	232500	150900
MAX	166000	225000	195000	258000	252000	238000	391000	865000	783000	409000	317000	184000
MIN	125000	139000	130000	89300	119000	142000	220000	386000	374000	225000	194000	122000
IN.	.22	.28	.26	.27	.24	.32	.48	1.03	.90	.50	.38	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1995, BY WATER YEAR (WY)

	MEAN	150700	155200	140400	132000	157100	250100	336800	316400	277500	240300	159500	148900
MAX	588300	380400	500100	323200	331000	528400	719100	630900	597200	795300	769500	551000	
(WY)	1987	1986	1983	1973	1974	1973	1973	1995	1947	1993	1993	1993	
MIN	59490	59320	51070	47810	52860	84200	137800	127200	81040	69050	69580	66030	
(WY)	1957	1957	1964	1964	1964	1964	1977	1989	1988	1988	1988	1976	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1942 - 1995

ANNUAL MEAN	212500	266700	205400
HIGHEST ANNUAL MEAN			441700
LOWEST ANNUAL MEAN			96770
HIGHEST DAILY MEAN	696000	Apr 16	865000
LOWEST DAILY MEAN	107000	Sep 16, 18	89300
ANNUAL SEVEN-DAY MINIMUM	109000	Sep 13	93900
INSTANTANEOUS PEAK FLOW	---		876000
INSTANTANEOUS PEAK STAGE	---		44.03
INSTANTANEOUS LOW FLOW	---		87400
ANNUAL RUNOFF (INCHES)	4.07		5.11
10 PERCENT EXCEEDS	351000		544000
50 PERCENT EXCEEDS	180000		206000
90 PERCENT EXCEEDS	126000		129000
			76600

07020500 MISSISSIPPI RIVER AT CHESTER, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT: August 1980 to current year.

REMARKS.--Sediment records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,380 mg/L, Apr. 13, 1987; minimum daily mean, 13 mg/L, Mar. 18, 1981.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 3,170,000 tons, June 6, 1982; minimum daily, 3,580 tons, Mar. 18, 1981.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,170 mg/L, Apr. 16; minimum daily mean, 75 mg/L, Oct. 17.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 1,580,000 tons, May 22; minimum daily, 22,900 tons, Jan. 9.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	162000	96	42100	142000	121	46200	180000	131	63700
2	166000	97	43500	139000	122	45900	184000	134	66800
3	164000	97	43200	141000	122	46400	182000	130	64200
4	162000	94	41000	147000	121	48100	180000	126	61300
5	156000	100	42000	156000	121	50900	181000	124	60600
6	143000	92	35700	167000	120	54500	179000	137	66000
7	134000	88	31800	171000	121	56000	173000	153	71400
8	130000	81	28200	179000	133	64400	174000	147	69200
9	136000	76	28000	187000	146	74000	193000	139	72700
10	139000	90	33500	200000	158	85100	195000	239	126000
11	133000	98	35100	207000	152	85000	194000	233	122000
12	127000	94	32300	203000	142	77600	189000	220	112000
13	128000	93	32000	190000	132	67500	170000	208	95200
14	133000	88	31700	183000	122	60400	157000	196	83400
15	131000	82	29000	177000	113	54000	153000	183	75600
16	129000	76	26400	162000	106	46300	143000	152	58500
17	130000	75	26300	153000	109	45000	130000	171	60100
18	126000	77	26300	153000	107	44100	130000	185	65100
19	127000	81	27800	151000	106	43100	139000	187	70200
20	129000	85	29700	147000	106	41900	143000	163	62900
21	125000	82	27600	150000	117	47500	133000	151	54000
22	125000	81	27600	175000	152	72400	137000	143	52900
23	130000	81	28300	213000	227	132000	150000	128	52000
24	135000	79	29000	225000	336	204000	148000	182	72800
25	137000	78	28900	215000	317	184000	151000	178	72600
26	137000	87	32400	196000	281	149000	152000	164	67500
27	136000	119	43700	187000	193	97700	150000	173	69900
28	137000	114	42100	190000	172	88200	149000	190	76300
29	138000	100	37000	185000	156	78200	145000	204	79800
30	139000	108	40600	177000	119	57200	138000	203	75800
31	141000	115	43800	---	---	---	134000	195	70500

MISSISSIPPI RIVER MAIN STEM

07020500 MISSISSIPPI RIVER AT CHESTER, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	129000	186	64700	219000	430	254000	142000	198	76200
2	125000	175	58800	212000	380	218000	156000	213	89900
3	119000	144	46100	211000	381	218000	165000	223	99200
4	107000	129	37200	230000	463	288000	164000	231	102000
5	96000	118	30600	252000	519	353000	154000	224	93200
6	89300	109	26200	246000	340	226000	148000	213	84800
7	92200	100	24800	217000	247	144000	155000	254	109000
8	94700	91	23400	194000	199	105000	204000	597	332000
9	97200	87	22900	180000	170	82400	217000	627	367000
10	92600	125	31300	176000	177	84000	209000	510	288000
11	95000	199	51200	179000	192	92500	208000	407	229000
12	99400	219	58900	175000	188	88600	193000	328	171000
13	107000	257	75000	154000	179	74300	172000	279	130000
14	136000	419	157000	137000	171	62800	161000	251	109000
15	205000	644	362000	128000	163	56200	164000	230	102000
16	258000	629	439000	127000	159	54400	169000	204	93100
17	256000	832	574000	125000	180	60900	178000	218	105000
18	243000	755	496000	126000	192	65600	191000	251	130000
19	237000	597	382000	128000	202	69700	208000	312	176000
20	235000	472	300000	128000	219	75600	223000	351	212000
21	217000	373	219000	125000	195	65600	227000	394	241000
22	195000	295	156000	119000	193	61900	220000	398	237000
23	193000	234	121000	119000	194	62500	215000	390	227000
24	188000	193	98000	123000	197	65800	218000	381	224000
25	177000	251	120000	124000	200	66800	221000	358	213000
26	176000	340	162000	126000	180	61200	224000	349	211000
27	179000	297	143000	129000	178	62200	231000	346	215000
28	181000	312	153000	136000	170	62500	234000	341	216000
29	198000	362	194000	---	---	---	235000	327	207000
30	220000	413	246000	---	---	---	238000	311	200000
31	228000	406	250000	---	---	---	238000	308	198000
APRIL			MAY			JUNE			
1	246000	376	250000	386000	745	781000	783000	360	761000
2	254000	411	283000	425000	876	1010000	779000	344	724000
3	251000	428	291000	448000	1110	1350000	771000	312	650000
4	246000	448	297000	462000	1020	1270000	759000	308	631000
5	241000	479	311000	461000	862	1070000	743000	306	615000
6	238000	381	244000	452000	799	975000	725000	310	608000
7	234000	323	204000	445000	766	920000	707000	318	607000
8	230000	292	181000	438000	734	868000	689000	313	581000
9	226000	266	162000	450000	707	860000	670000	303	548000
10	220000	240	142000	474000	792	1020000	653000	308	544000
11	227000	267	164000	503000	895	1220000	640000	319	551000
12	244000	326	215000	527000	817	1160000	628000	332	563000
13	272000	528	391000	549000	715	1060000	616000	372	648000
14	311000	835	704000	568000	614	942000	602000	407	662000
15	338000	980	897000	578000	536	837000	589000	387	615000
16	347000	1170	1100000	583000	491	773000	575000	366	567000
17	340000	956	877000	609000	491	810000	560000	357	540000
18	331000	831	744000	707000	496	949000	541000	351	512000
19	333000	758	682000	766000	427	883000	519000	348	487000
20	353000	784	750000	803000	428	929000	494000	407	543000
21	378000	841	860000	832000	449	1010000	467000	446	562000
22	391000	860	907000	865000	675	1580000	442000	451	538000
23	390000	679	714000	856000	628	1440000	420000	450	510000
24	383000	524	541000	831000	510	1140000	405000	450	491000
25	371000	514	514000	810000	436	953000	390000	457	481000
26	362000	553	541000	792000	343	734000	381000	478	491000
27	359000	612	593000	787000	350	744000	374000	471	475000
28	356000	538	517000	789000	390	830000	375000	465	471000
29	352000	511	485000	787000	395	840000	396000	462	494000
30	356000	530	511000	789000	416	885000	401000	476	515000
31	---	---	---	787000	394	837000	---	---	---

07020500 MISSISSIPPI RIVER AT CHESTER, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	398000	496	532000	223000	179	107000	184000	150	74500
2	392000	528	558000	224000	195	118000	174000	139	65300
3	381000	504	518000	232000	221	139000	167000	136	61500
4	368000	474	470000	239000	249	161000	163000	148	65200
5	350000	446	421000	258000	288	201000	164000	162	71700
6	339000	440	402000	277000	395	296000	166000	157	70300
7	355000	463	445000	294000	560	447000	165000	146	65200
8	381000	508	524000	317000	735	629000	170000	145	66600
9	400000	753	815000	296000	584	467000	178000	142	68200
10	409000	830	916000	262000	440	312000	183000	139	68700
11	401000	857	928000	240000	338	219000	181000	135	66000
12	387000	749	782000	241000	226	148000	175000	126	59400
13	369000	628	626000	241000	211	137000	168000	111	50600
14	342000	539	498000	229000	213	132000	162000	109	47700
15	317000	393	337000	217000	224	131000	152000	110	45100
16	294000	377	298000	199000	186	100000	144000	110	42900
17	277000	340	254000	197000	181	96700	141000	111	42100
18	267000	302	218000	223000	186	112000	137000	111	41100
19	259000	266	185000	239000	229	147000	132000	111	39600
20	253000	236	161000	236000	254	162000	130000	111	39000
21	251000	242	164000	229000	279	173000	129000	103	36000
22	247000	238	158000	223000	313	185000	128000	103	35500
23	248000	228	153000	218000	297	175000	127000	127	44200
24	247000	200	133000	216000	296	173000	126000	113	38500
25	246000	188	125000	213000	285	164000	125000	95	32200
26	249000	205	138000	211000	269	153000	122000	101	33300
27	248000	224	150000	209000	248	140000	124000	122	40800
28	242000	245	160000	206000	211	117000	138000	147	54800
29	237000	255	163000	204000	182	100000	140000	125	47200
30	228000	231	142000	201000	158	85600	131000	104	36800
31	225000	202	122000	194000	158	82900	---	---	---

07022000 MISSISSIPPI RIVER AT THEBES, IL

LOCATION.--Lat 37°13'00", long 89°27'50", in NW 1/4 sec.17, T.15 S., R.3 W., Alexander County, Hydrologic Unit 07140105, near center span on downstream side of railroad bridge at Thebes, 5.0 mi downstream from Headwater Diversion Channel and at mile 43.7 above Ohio River.

DRAINAGE AREA.--713,200 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: Oct. 1932 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to April 1941, published as "at Cape Girardeau, Mo".

GAGE HEIGHT: March 1933 to February 1938 and October 1939 to current year in reports of U.S. Geological Survey. Prior to April 1941, published as "at Cape Girardeau, Mo". Since November 1878, under name of "at Grays Point" in files of St. Louis District office of U.S. Army Corps of Engineers; January 1879 to May of 1896, published as "at Grays Point"; since May 1896, published as "at Cape Girardeau" in reports of Mississippi River Commission February 1891 to February 1894; and since 1904, published as "at Cape Girardeau" in reports of National Weather Service.

REVISED RECORDS.--WSP 1341: 1844(M). WDR MO-76-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 300.00 ft above sea level. Mar. 17, 1933, to Dec. 21 1934, nonrecording gage; Dec. 22, 1934, to Apr. 4, 1941, water-stage recorder, at site 8.2 mi upstream at datum 4.65 ft higher; Apr. 5, 1941, to Sept. 30, 1941, nonrecording gage at present site and datum; Oct. 1, 1941, to Oct. 11, 1943, at datum 0.07 ft higher. Prior to Apr. 5, 1941, various auxiliary gages used. Since Oct. 1, 1943, former gage at Cape Girardeau used as auxiliary gage.

REMARKS.--No estimated daily discharges. Water-discharge records good. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin. U.S. Army Corps of Engineers satellite telemeter and telemark at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 4, 1844, reached an elevation of 345.14 ft, present datum, at Grays Point, from floodmarks, discharge, 1,375,000 ft³/s, computed by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159000	143000	181000	135000	227000	150000	244000	379000	801000	403000	224000	189000
2	163000	144000	184000	129000	217000	156000	254000	417000	799000	401000	222000	179000
3	165000	143000	186000	126000	212000	167000	259000	440000	789000	394000	226000	171000
4	163000	150000	183000	119000	219000	172000	254000	460000	773000	385000	235000	164000
5	162000	182000	181000	108000	242000	169000	248000	470000	756000	372000	249000	160000
6	154000	196000	180000	97500	257000	160000	243000	472000	743000	356000	272000	162000
7	144000	195000	177000	91900	238000	168000	240000	467000	724000	354000	290000	163000
8	135000	193000	172000	93500	210000	206000	236000	460000	705000	371000	315000	163000
9	133000	201000	182000	96100	191000	237000	233000	464000	686000	388000	321000	170000
10	138000	210000	207000	96800	179000	238000	228000	475000	667000	401000	295000	179000
11	139000	219000	205000	93100	177000	232000	225000	492000	651000	404000	264000	182000
12	133000	220000	203000	95800	178000	226000	236000	514000	635000	392000	250000	179000
13	128000	211000	190000	101000	169000	206000	259000	536000	621000	379000	250000	172000
14	129000	197000	173000	114000	151000	186000	296000	564000	606000	361000	244000	167000
15	133000	189000	164000	154000	142000	180000	329000	582000	591000	336000	230000	161000
16	130000	178000	158000	231000	140000	182000	346000	594000	579000	313000	212000	152000
17	129000	164000	147000	269000	138000	188000	347000	609000	567000	294000	197000	146000
18	129000	157000	136000	264000	138000	200000	340000	672000	555000	278000	203000	143000
19	127000	155000	135000	262000	139000	213000	335000	754000	536000	267000	230000	139000
20	127000	152000	141000	260000	141000	230000	343000	803000	513000	258000	239000	134000
21	126000	151000	142000	248000	140000	238000	364000	844000	489000	254000	233000	133000
22	123000	157000	136000	223000	137000	234000	383000	855000	462000	250000	226000	132000
23	123000	186000	145000	211000	132000	224000	392000	856000	438000	247000	219000	131000
24	127000	220000	152000	207000	134000	219000	392000	848000	419000	248000	216000	131000
25	131000	224000	151000	197000	137000	221000	388000	831000	404000	250000	213000	132000
26	134000	210000	153000	185000	137000	224000	380000	813000	392000	248000	209000	129000
27	135000	196000	152000	184000	140000	228000	374000	805000	385000	251000	208000	127000
28	135000	200000	150000	184000	146000	236000	371000	806000	380000	246000	205000	131000
29	136000	196000	148000	190000	---	238000	368000	802000	392000	241000	203000	143000
30	138000	186000	144000	208000	---	240000	365000	799000	404000	234000	201000	144000
31	141000	---	139000	227000	---	242000	---	798000	---	227000	197000	---
MEAN	137700	184200	164400	167800	171700	206800	309100	634900	582100	316200	235400	153600
MAX	165000	224000	207000	269000	257000	242000	392000	856000	801000	404000	321000	189000
MIN	123000	143000	135000	91900	132000	150000	225000	379000	380000	227000	197000	127000
IN.	.22	.29	.27	.27	.25	.33	.48	1.03	.91	.51	.38	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1995, BY WATER YEAR (WY)

	MEAN	149400	155300	142600	135000	159500	249900	329900	314900	279300	235500	154600	144000
MAX	589600	389000	531700	333300	350400	542000	731000	655800	584100	765500	768000	539300	
(WY)	1987	1986	1983	1973	1974	1985	1973	1973	1947	1993	1993	1993	
MIN	45500	50080	53850	33650	46920	80260	115600	88170	72350	73290	45000	59890	
(WY)	1940	1940	1956	1940	1940	1934	1934	1934	1934	1936	1936	1937	

07022000 MISSISSIPPI RIVER AT THEBES, IL--Continued

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1933 - 1995	
ANNUAL MEAN	220700		272400		204600	
HIGHEST ANNUAL MEAN					446000	
LOWEST ANNUAL MEAN					71730	
HIGHEST DAILY MEAN	660000	Apr 17	856000	May 23	978000	Aug 7 1993
LOWEST DAILY MEAN	108000	Sep 19	91900	Jan 7	24700	Jan 21 1940
ANNUAL SEVEN-DAY MINIMUM	111000	Sep 14	95000	Jan 6	26700	Jan 20 1940
INSTANTANEOUS PEAK FLOW	---		875000	May 23	996000	Aug 7 1993
INSTANTANEOUS PEAK STAGE	---		45.91	May 23	45.91	May 23 1995
INSTANTANEOUS LOW FLOW	---		91900	Jan 7	23400	Dec 13 1937
ANNUAL RUNOFF (INCHES)	4.20		5.19		3.90	
10 PERCENT EXCEEDS	385000		544000		396000	
50 PERCENT EXCEEDS	187000		211000		164000	
90 PERCENT EXCEEDS	128000		133000		73700	

07022000 MISSISSIPPI RIVER AT THEBES, IL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURE: October 1974 to September 1981.

SUSPENDED-SEDIMENT: October 1980 to current year.

REMARKS.--Discontinued as national stream-quality accounting network station, September 1986. Samples are analyzed by the Illinois Environmental Protection Agency. Sediment records good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 705 microsiemens, Aug. 5-7, 1980; minimum daily, 272 microsiemens, Apr. 6, 1979.

WATER TEMPERATURE: Maximum daily, 31.5° C, July 10 and 11, 1975, and July 17, 1977; minimum daily, 0.0° C, on several days during winter periods.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 3,890 mg/L, Dec. 22, 1985; minimum daily mean, 13 mg/L, Jan. 28, 1981.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 6,280,000 tons, Mar. 1, 1985; minimum daily, 2,530 tons, Jan. 28, 1981.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 966 mg/L, May 13; minimum daily mean, 76 mg/L, Jan. 10.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 1,690,000 tons, May 20; minimum daily, 19,800 tons, Jan. 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00300)	OXYGEN, DIS- SOLVED CENT SATUR- ATION (00301)	COLI- FORM, FECAL, (PER- 0.7 µM-MF (COLS./ 100 ML) (31625)
NOV 02...	0700	1028	17002	145000.	546	7.75	11.0	9.7	9.8	89	--
JAN 12...	0900	1028	17002	95200	628	8.12	4.0	4.7	13.8	104	290
MAR 21...	0900	1028	17002	234000.	536	7.97	12.0	13	10.5	95	220
MAY 23...	1030	1028	17002	855000.	309	7.58	19.0	49	6.3	67	1200
JUL 27...	0900	1028	17002	251000.	513	7.76	26.5	27	5.5	69	1000
SEP 06...	0900	1028	17002	165000.	586	8.01	26.5	4.2	6.4	80	250

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)	HARD- NESS NONCARB TOT FLD (MG/L AS CaCO ₃) (00902)	CALCIUM TOTAL RECOV- ERABLE (MG/L AS CA) (00916)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, TOTAL RECOV- ERABLE (MG/L AS MG) (00927)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, TOTAL RECOV- ERABLE (MG/L AS NA) (00929)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, TOTAL RECOV- ERABLE (MG/L AS K) (00937)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
NOV 02...	64	230	75	58	56	22	21	31	32	4.3	4.3
JAN 12...	300	260	83	68	65	24	23	34	33	4.1	4.1
MAR 21...	K51	240	94	62	58	25	24	26	27	4.2	4.1
MAY 23...	2100	140	62	42	38	14	11	9.0	8.5	5.6	4.0
JUL 27...	280	240	93	65	61	22	20	30	30	6.4	5.3
SEP 06...	K64	230	83	61	58	22	21	39	39	5.8	5.4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07022000 MISSISSIPPI RIVER AT THEBES, IL--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ALKA- LINITY WAT WH TOT IT FIELD (MG/L AS CaCO ₃) (00419)	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, TOTAL (MG/L AS F) (00951)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	RESIDUE VOLA- TILE, SUS- PENDE (MG/L) (00535)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	AMMONIA UN- IONIZED (MG/L AS N) (00619)
NOV 02...	161	196	0	86	22	0.3	83	9	1.66	0.060	<0.001
JAN 12...	186	227	0	68	28	0.2	47	7	1.87	0.190	0.003
MAR 21...	164	200	0	77	30	0.2	138	16	--	0.150	0.003
MAY 23...	101	123	0	28	9.7	0.2	250	22	1.80	0.090	0.001
JUL 27...	160	195	0	84	20	0.3	306	30	3.50	<0.010	<0.001
SEP 06...	161	196	0	110	24	0.3	172	16	4.60	0.110	0.007

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)	ARSENIC TOTAL (MG/L AS AS) (01002)	BARIUM, TOTAL RECOV- ERABLE (MG/L AS BA) (01007)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	BERYL- LIUM, TOTAL RECOV- ERABLE (MG/L AS BE) (01012)	BERYL- LIUM, DIS- SOLVED (MG/L AS BE) (01010)
NOV 02...	0.75	0.180	0.110	1400	<100	2	92	70	<1.0	<1
JAN 12...	0.94	0.150	0.060	680	<100	<1	89	74	<1.0	<1
MAR 21...	1.50	--	0.050	1800	<100	2	92	65	<1.0	<1
MAY 23...	0.95	0.340	0.080	7900	110	3	200	70	<1.0	<1
JUL 27...	0.85	0.300	0.110	4900	<100	3	200	110	<1.0	<1
SEP 06...	0.95	0.270	0.140	2200	110	4	100	99	<1.0	<1

DATE	BORON, TOTAL RECOV- ERABLE (MG/L AS B) (01022)	BORON, DIS- SOLVED (MG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (MG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR) (01030)	COBALT, TOTAL RECOV- ERABLE (MG/L AS CO) (01037)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (MG/L AS CU) (01042)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)
NOV 02...	70	--	<3	<3.0	<5	<5	<10	<10	<5	<5
JAN 12...	80	70	<3	<3.0	<5	<5	<10	<10	<5	<5
MAR 21...	70	60	<3	<3.0	<5	<5	<10	<10	7	<5
MAY 23...	40	30	<3	<3.0	11	<5	<10	<10	15	<10
JUL 27...	70	60	<3	<3.0	6	<5	<10	<10	15	<10
SEP 06...	100	100	<3	<3.0	<5	<5	<10	<10	18	14

MISSISSIPPI RIVER MAIN STEM

07022000 MISSISSIPPI RIVER AT THEBES, IL--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	IRON, TOTAL RECOV- ERABLE (µG/L AS FE) (01045)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	NICKEL, TOTAL RECOV- ERABLE (µG/L AS NI) (01067)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SILVER, TOTAL RECOV- ERABLE (µG/L AS AG) (01077)
NOV 02...	1900	<50	<5	<5	150	<15	<0.05	<15	<15	<3
JAN 12...	1200	<50	46	<5	90	19	<0.05	<15	<15	<3
MAR 2...	3100	<50	10	<5	200	<15	<0.05	<15	<15	<3
MAY 23...	11000	160	<5	<5	360	<15	--	18	<15	3
JUL 27...	5900	<50	57	<5	320	<15	--	<25	<25	<3
SEP 06...	3400	66	16	<5	280	<15	--	<25	<25	<3

DATE	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, TOTAL RECOV- ERABLE (µG/L AS SR) (01082)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, TOTAL (µG/L AS V) (01087)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (µG/L) (32730)
NOV 02...	3.0	260	250	7	<5	140	<100	5.9	<0.010	<10
JAN 12...	<3.0	290	280	<5	<5	<100	<100	4.1	<0.010	<10
MAR 21...	<3.0	210	200	6	<5	<100	<100	4.8	<0.010	<10
MAY 23...	<3.0	140	120	21	<5	<100	<100	26	<0.010	<10
JUL 27...	<3.0	310	290	13	<5	<100	<100	4.3	0.010	<10
SEP 06...	3.0	320	310	8	<5	180	130	5.4	<0.010	<10

07022000 MISSISSIPPI RIVER AT THEBES, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	159000	110	47100	143000	116	44600	181000	146	71100
2	163000	108	47600	144000	107	41600	184000	146	72300
3	165000	93	41500	143000	104	40200	186000	149	74500
4	163000	97	42900	150000	127	51700	183000	156	77000
5	162000	94	41100	182000	206	102000	181000	155	75600
6	154000	88	36600	196000	295	156000	180000	117	57000
7	144000	85	33100	195000	247	130000	177000	124	59300
8	135000	92	33400	193000	172	89900	172000	122	56600
9	133000	107	38700	201000	173	93800	182000	142	70100
10	138000	110	40900	210000	131	74300	207000	157	87600
11	139000	123	46300	219000	123	72900	205000	167	92300
12	133000	114	41000	220000	209	124000	203000	192	105000
13	128000	98	34000	211000	249	142000	190000	212	109000
14	129000	108	37600	197000	190	101000	173000	232	108000
15	133000	139	49900	189000	168	85800	164000	192	84700
16	130000	160	56300	178000	183	88300	158000	151	64400
17	129000	155	53700	164000	160	70700	147000	135	53300
18	129000	154	53500	157000	121	51300	136000	120	44000
19	127000	136	46700	155000	139	58000	135000	118	43100
20	127000	86	29500	152000	140	57300	141000	128	49100
21	126000	91	31000	151000	124	50700	142000	141	53900
22	123000	100	33300	157000	148	63000	136000	149	55000
23	123000	102	33800	186000	196	99400	145000	143	56200
24	127000	107	36900	220000	249	148000	152000	124	50800
25	131000	164	58300	224000	291	176000	151000	104	42400
26	134000	116	41800	210000	325	183000	153000	110	45400
27	135000	128	46800	196000	332	176000	152000	145	59600
28	135000	139	50400	200000	270	146000	150000	136	54800
29	136000	121	44700	196000	210	111000	148000	114	45700
30	138000	116	43000	186000	151	75800	144000	106	41100
31	141000	117	44300	---	---	---	139000	115	43000
JANUARY			FEBRUARY			MARCH			
1	135000	154	56100	227000	227	139000	150000	178	72500
2	129000	126	44200	217000	233	136000	156000	234	99000
3	126000	118	40000	212000	223	128000	167000	231	104000
4	119000	120	38600	219000	215	127000	172000	301	140000
5	108000	95	27600	242000	214	140000	169000	224	102000
6	97500	93	24500	257000	239	166000	160000	207	89400
7	91900	90	22300	238000	216	138000	168000	232	106000
8	93500	94	23700	210000	185	105000	206000	428	241000
9	96100	91	23600	191000	162	83400	237000	510	326000
10	96800	76	19800	179000	161	77800	238000	548	352000
11	93100	82	20500	177000	166	79000	232000	407	255000
12	95800	81	21000	178000	170	81700	226000	324	198000
13	101000	101	27600	169000	175	79800	206000	256	142000
14	114000	151	47400	151000	180	73300	186000	258	129000
15	154000	286	122000	142000	184	70200	180000	293	142000
16	231000	407	256000	140000	179	67500	182000	269	132000
17	269000	402	292000	138000	164	61000	188000	267	135000
18	264000	316	225000	138000	149	55400	200000	204	110000
19	262000	280	198000	139000	134	50500	213000	213	123000
20	260000	259	182000	141000	128	48700	230000	230	143000
21	248000	219	146000	140000	139	52400	238000	254	163000
22	223000	220	132000	137000	119	44000	234000	279	176000
23	211000	204	116000	132000	116	41100	224000	330	199000
24	207000	183	102000	134000	120	43700	219000	368	218000
25	197000	154	82000	137000	135	49900	221000	342	204000
26	185000	151	75600	137000	170	62900	224000	317	192000
27	184000	154	76600	140000	173	65500	228000	312	192000
28	184000	168	83500	146000	199	78800	236000	382	244000
29	190000	185	95100	---	---	---	238000	384	247000
30	208000	214	121000	---	---	---	240000	320	207000
31	227000	214	131000	---	---	---	242000	271	177000

07022000 MISSISSIPPI RIVER AT THEBES, IL--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	244000	289	191000	379000	438	450000	801000	371	803000
2	254000	391	269000	417000	583	659000	799000	359	776000
3	259000	489	342000	440000	768	915000	789000	356	758000
4	254000	454	311000	460000	819	1020000	773000	346	722000
5	248000	401	269000	470000	735	933000	756000	357	728000
6	243000	360	236000	472000	638	813000	743000	322	646000
7	240000	318	206000	467000	546	689000	724000	313	611000
8	236000	329	209000	460000	528	656000	705000	334	636000
9	233000	305	192000	464000	429	538000	686000	312	578000
10	228000	261	161000	475000	474	609000	667000	332	596000
11	225000	284	172000	492000	555	738000	651000	357	627000
12	236000	298	191000	514000	720	1000000	635000	330	565000
13	259000	382	268000	536000	966	1400000	621000	346	579000
14	296000	469	378000	564000	949	1440000	606000	380	622000
15	329000	688	612000	582000	841	1320000	591000	393	626000
16	346000	829	774000	594000	683	1100000	579000	439	686000
17	347000	896	840000	609000	788	1300000	567000	321	491000
18	340000	814	747000	672000	758	1380000	555000	379	568000
19	335000	648	586000	754000	777	1580000	536000	394	570000
20	343000	633	586000	803000	778	1690000	513000	381	527000
21	364000	722	710000	844000	718	1640000	489000	435	574000
22	383000	677	700000	855000	687	1590000	462000	427	532000
23	392000	653	691000	856000	518	1200000	438000	402	476000
24	392000	539	570000	848000	504	1150000	419000	396	448000
25	388000	464	486000	831000	436	977000	404000	421	459000
26	380000	449	460000	813000	387	848000	392000	383	406000
27	374000	414	418000	805000	429	934000	385000	404	420000
28	371000	442	443000	806000	433	941000	380000	420	431000
29	368000	452	449000	802000	421	911000	392000	412	436000
30	365000	428	422000	799000	525	1130000	404000	448	489000
31	---	---	---	798000	423	912000	---	---	---
JULY			AUGUST			SEPTEMBER			
1	403000	470	512000	224000	192	116000	189000	136	69200
2	401000	454	491000	222000	192	115000	179000	141	68200
3	394000	459	489000	226000	213	130000	171000	138	63900
4	385000	487	506000	235000	210	133000	164000	155	68800
5	372000	466	467000	249000	216	145000	160000	168	72900
6	356000	454	436000	272000	219	161000	162000	180	78600
7	354000	459	438000	290000	286	225000	163000	169	74600
8	371000	515	517000	315000	410	351000	163000	159	70400
9	388000	588	617000	321000	504	437000	170000	182	83600
10	401000	671	727000	295000	409	326000	179000	177	85500
11	404000	765	834000	264000	335	239000	182000	171	83800
12	392000	810	857000	250000	257	174000	179000	165	79700
13	379000	701	718000	250000	191	129000	172000	159	73900
14	361000	575	561000	244000	165	109000	167000	153	69200
15	336000	497	451000	230000	167	103000	161000	148	64100
16	313000	415	351000	212000	174	99700	152000	143	58700
17	294000	365	289000	197000	177	94500	146000	138	54400
18	278000	314	236000	203000	170	93400	143000	137	52600
19	267000	248	178000	230000	184	115000	139000	148	55500
20	258000	236	164000	239000	194	125000	134000	153	55600
21	254000	213	146000	233000	192	121000	133000	138	49700
22	250000	195	131000	226000	216	131000	132000	157	55900
23	247000	180	120000	219000	251	148000	131000	164	57900
24	248000	196	131000	216000	278	162000	131000	156	55200
25	250000	201	136000	213000	269	155000	132000	176	62700
26	248000	207	138000	209000	239	135000	129000	177	61700
27	251000	298	202000	208000	199	112000	127000	178	61100
28	246000	349	232000	205000	198	110000	131000	190	67500
29	241000	320	209000	203000	204	112000	143000	208	80300
30	234000	266	168000	201000	176	95600	144000	193	75500
31	227000	229	140000	197000	140	74700	---	---	---

07034000 ST. FRANCIS RIVER NEAR ROSELLE, MO

LOCATION.--Lat 37°35'45", long 90°29'50", in NE 1/4 sec.4, T.33 N., R.5 E., Madison County, Hydrologic Unit 08020202, on State Highway 72, 0.25 mi above Stouts Creek and 1.5 mi east of Roselle.

DRAINAGE AREA.--234 mi².

PERIOD OF RECORD.--June 1983 to current year.

GAGE.--Data-collection platform used as primary recorder. Datum of gage is 684.99 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair except for flow above 2,000 ft³/s, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	13	187	135	210	485	154	2440	260	81	49	121
2	5.3	13	165	132	195	343	145	2000	240	59	42	132
3	5.1	14	149	119	199	282	136	722	223	55	173	50
4	4.0	28	136	108	333	260	129	495	199	85	170	27
5	3.7	1300	127	94	281	244	121	411	179	111	83	17
6	3.3	839	118	102	228	233	114	329	167	86	59	12
7	3.3	271	111	120	202	4930	110	279	168	72	47	9.5
8	4.7	173	106	119	175	2730	105	501	224	59	42	7.9
9	8.1	291	489	120	166	802	103	1070	488	53	43	6.8
10	31	500	475	130	161	544	97	1540	802	51	42	6.1
11	24	267	301	257	154	433	89	739	903	51	57	5.6
12	14	194	229	340	136	364	90	486	652	40	80	5.1
13	10	158	191	323	124	312	93	388	419	35	50	4.5
14	8.6	168	168	1870	121	270	83	330	305	29	37	4.1
15	8.3	268	153	863	159	240	78	260	248	25	28	4.0
16	9.9	319	152	482	364	217	74	223	216	22	21	5.8
17	12	237	197	362	286	196	72	1070	186	20	19	6.6
18	12	189	184	333	239	179	79	9830	162	17	17	6.8
19	14	152	160	2530	213	167	94	2010	141	15	17	13
20	28	152	146	1250	193	157	98	716	128	13	16	13
21	36	1080	162	614	178	154	173	470	116	12	12	8.6
22	23	498	1060	416	161	141	174	370	103	11	11	6.7
23	17	298	536	323	154	136	199	302	96	20	9.8	7.6
24	13	227	359	260	141	127	369	257	92	45	8.0	7.6
25	9.8	191	272	238	129	119	356	1240	81	277	7.2	6.5
26	9.0	165	224	221	126	116	272	721	77	331	6.5	5.3
27	8.7	240	192	222	546	330	220	1260	356	354	6.0	4.9
28	6.1	486	173	344	961	333	175	1410	143	186	5.7	4.7
29	8.3	304	156	324	---	237	162	562	114	114	5.2	4.4
30	9.9	224	142	258	---	196	244	377	100	81	4.7	4.1
31	11	---	135	227	---	171	---	297	---	61	4.6	---
MEAN	11.9	309	237	427	233	498	147	1068	253	79.7	37.8	17.3
MAX	36	1300	1060	2530	961	4930	369	9830	903	354	173	132
MIN	3.3	13	106	94	121	116	72	223	77	11	4.6	4.0
IN.	.06	1.47	1.17	2.10	1.04	2.46	.70	5.26	1.21	.39	.19	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	MEAN	99.9	654	465	314	397	492	514	441	233	39.9	57.3	84.4
MAX	550	2017	1233	864	1165	1130	1798	1423	1617	97.1	341	791	
(WY)	1985	1986	1991	1993	1985	1985	1994	1990	1985	1993	1985	1993	
MIN	6.43	11.5	11.9	57.0	178	218	147	28.8	7.70	7.78	1.65	1.54	
(WY)	1993	1990	1990	1986	1992	1992	1995	1987	1988	1983	1983	1983	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1983 - 1995
ANNUAL MEAN	294	278	316
HIGHEST ANNUAL MEAN			710
LOWEST ANNUAL MEAN			124
HIGHEST DAILY MEAN	11000	Apr 12	28000
LOWEST DAILY MEAN	3.3	Oct 6,7	.83
ANNUAL SEVEN-DAY MINIMUM	4.2	Oct 2	1.1
INSTANTANEOUS PEAK FLOW	---	14800	45700
INSTANTANEOUS PEAK STAGE	---	15.35	26.50
INSTANTANEOUS LOW FLOW	---	3.2	.76
ANNUAL RUNOFF (INCHES)	17.03	16.13	18.34
10 PERCENT EXCEEDS	428	499	544
50 PERCENT EXCEEDS	87	152	91
90 PERCENT EXCEEDS	7.3	8.1	6.4

07035000 LITTLE ST. FRANCIS RIVER AT FREDERICKTOWN, MO

LOCATION.--Lat 37°33'33", long 90°18'46", in NW 1/4 sec.7, T.33 N., R.7 E., Madison County, Hydrologic Unit 08020202, on right bank at downstream side of State Highway 72 bridge, 0.5 mi downstream from Village Creek, 1.3 mi below City Lake and 1.0 mi west of courthouse in Fredericktown.

DRAINAGE AREA.--90.5 mi².

PERIOD OF RECORD.--June 1983 to current year.

GAGE.--Data-collection platform used as primary recorder. Datum of gage is 679.23 ft above sea level.

REMARKS.--Estimated daily discharges: Sept. 29 and 30. Records good except for periods Oct. 1 to Nov. 5 and Sept. 15-30, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	7.6	133	59	82	209	49	740	61	20	7.8	4.3
2	2.7	6.3	122	52	75	149	49	529	54	14	7.9	3.9
3	2.6	6.4	114	47	92	125	46	206	48	22	7.2	3.4
4	2.5	99	108	42	134	114	44	147	40	23	7.9	3.5
5	2.4	1660	101	37	109	104	40	114	33	23	13	3.0
6	2.5	373	96	56	90	94	40	85	32	18	8.5	2.5
7	3.1	153	94	59	83	1060	39	72	39	13	7.6	2.2
8	7.0	108	89	52	69	513	39	160	85	12	14	1.9
9	7.3	208	722	59	64	270	37	361	77	14	10	1.8
10	5.2	234	362	62	65	210	35	750	238	11	10	1.7
11	3.8	139	216	135	60	179	36	293	218	9.5	9.1	1.6
12	3.2	101	169	152	50	154	35	190	195	8.7	8.2	1.5
13	5.6	83	137	186	48	136	32	141	109	8.1	6.5	1.6
14	5.2	80	100	683	50	120	30	107	73	7.4	5.9	1.5
15	5.0	95	89	288	106	108	29	77	54	7.1	5.2	2.0
16	5.0	125	94	187	197	99	29	65	43	7.8	4.8	4.5
17	6.2	97	99	177	137	91	30	594	35	8.2	4.5	2.9
18	9.0	82	87	272	113	85	32	7140	29	6.1	4.1	3.1
19	10	67	76	1390	99	81	29	802	25	5.2	3.9	4.0
20	8.0	151	60	492	88	79	39	329	22	4.8	4.0	4.6
21	7.6	546	133	285	76	72	45	213	19	5.0	4.1	4.0
22	8.5	256	757	199	70	67	52	159	18	13	3.7	3.6
23	7.4	180	297	157	66	64	58	123	19	13	2.9	3.5
24	7.4	152	187	127	57	56	94	99	27	24	2.9	3.8
25	8.1	137	141	112	54	51	82	93	28	39	3.3	4.8
26	8.1	124	113	99	53	50	65	88	32	69	3.2	5.4
27	7.7	335	97	107	452	91	55	239	39	33	3.0	5.0
28	6.3	310	84	136	399	86	47	209	23	17	3.0	4.3
29	6.6	192	73	116	---	66	56	119	29	11	3.0	3.8
30	8.1	153	66	96	---	58	73	87	35	9.8	3.1	3.5
31	6.5	---	63	87	---	52	---	70	---	9.0	3.3	---
MEAN	5.86	209	164	194	108	151	45.5	465	59.3	15.7	5.99	3.24
MAX	10	1660	757	1390	452	1060	94	7140	238	69	14	5.4
MIN	2.4	6.3	60	37	48	50	29	65	18	4.8	2.9	1.5
IN.	.07	2.57	2.09	2.47	1.25	1.93	.56	5.92	.73	.20	.08	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	MEAN	43.2	255	193	156	151	181	168	189	76.8	14.8	35.1	27.2
MAX	273	748	423	450	336	352	386	542	521	29.0	282	165	
(WY)	1985	1994	1991	1993	1989	1985	1994	1990	1985	1993	1985	1993	
MIN	1.97	11.9	6.62	28.7	68.2	89.7	45.5	11.7	3.33	7.78	1.10	1.50	
(WY)	1988	1988	1990	1986	1992	1992	1995	1987	1988	1992	1988	1983	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1983 - 1995
ANNUAL MEAN	115	119	124
HIGHEST ANNUAL MEAN			265
LOWEST ANNUAL MEAN			42.4
HIGHEST DAILY MEAN	3290	7140	13800
LOWEST DAILY MEAN	2.4	1.5	.76
ANNUAL SEVEN-DAY MINIMUM	2.7	1.7	.94
INSTANTANEOUS PEAK FLOW	---	14900	25100
INSTANTANEOUS PEAK STAGE	---	22.71	26.50
INSTANTANEOUS LOW FLOW	---	1.3	.66
ANNUAL RUNOFF (INCHES)	17.20	17.91	18.62
10 PERCENT EXCEEDS	212	211	243
50 PERCENT EXCEEDS	41	54	39
90 PERCENT EXCEEDS	5.0	3.8	3.0

07035800 ST. FRANCIS RIVER NEAR MILL CREEK, MO

LOCATION.--Lat 37°30'09", long 90°27'28", in NE 1/4 sec.35, T.33 N., R.5 E., Madison County, Hydrologic Unit 08020202, on downstream side of Highway E bridge, 8.7 mi southwest of Mill Creek and 2.9 mi downstream from Little St. Francis River.

DRAINAGE AREA.--505 mi².

PERIOD OF RECORD.--February 1987 to current year.

GAGE.--Data-collection platform used as primary recorder. Datum of gage is 556.27 ft above sea level.

REMARKS.--Estimated daily discharge: Aug. 24. Records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	28	498	312	455	1240	271	4810	473	187	89	11
2	13	30	438	296	422	841	268	5090	426	143	72	114
3	12	30	394	271	418	682	256	1660	390	125	64	84
4	12	163	358	243	613	606	242	1070	349	159	229	44
5	10	4030	332	212	585	559	231	839	312	214	144	29
6	9.2	2520	309	234	482	520	217	657	348	177	110	21
7	8.2	758	293	283	430	7790	209	559	317	147	85	17
8	9.5	490	275	271	384	5950	204	868	450	124	100	14
9	22	651	1840	276	350	1830	195	2280	797	109	359	13
10	38	1300	1820	303	339	1170	186	4060	1850	102	145	11
11	50	717	959	526	327	889	181	1940	2060	101	105	10
12	46	507	691	809	295	717	181	1140	1560	90	98	9.4
13	42	410	564	795	268	611	178	853	916	73	97	8.8
14	36	377	466	4110	261	535	168	698	636	63	69	8.1
15	34	489	410	2210	353	473	160	557	508	55	52	7.5
16	31	634	398	1190	837	425	156	476	429	49	42	10
17	29	536	459	909	731	385	155	1490	368	43	35	12
18	32	434	434	948	596	352	158	25600	321	40	31	12
19	45	360	382	6250	524	328	160	5090	280	37	32	14
20	65	347	348	3280	469	313	175	1770	247	31	28	20
21	66	2470	365	1630	422	302	273	1070	223	28	24	22
22	71	1330	2600	1080	378	275	328	794	192	27	21	19
23	59	795	1550	825	350	266	352	628	189	27	17	16
24	49	600	947	651	320	250	626	527	181	52	15	14
25	43	506	701	576	291	234	644	1410	179	320	14	13
26	33	442	569	516	279	225	502	1210	203	661	13	13
27	29	774	485	506	1330	387	415	1650	414	658	11	12
28	27	1400	427	680	2520	550	352	2570	307	349	10	11
29	26	845	383	681	---	399	326	1060	204	207	9.7	10
30	24	607	343	560	---	339	446	673	207	146	9.2	9.3
31	24	---	321	492	---	303	---	537	---	111	9.5	---
MEAN	32.6	819	657	1030	537	960	274	2375	511	150	69.0	20.3
MAX	71	4030	2600	6250	2520	7790	644	25600	2060	661	359	114
MIN	8.2	28	275	212	261	225	155	476	179	27	9.2	7.5
IN.	.07	1.81	1.50	2.35	1.11	2.19	.61	5.42	1.13	.34	.16	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1995, BY WATER YEAR (WY)

	MEAN	114	1036	993	1008	817	892	1071	925	234	82.8	71.6	158
MAX	438	3774	2428	2187	1745	1296	2890	2911	595	150	179	1153	
(WY)	1994	1994	1991	1993	1989	1988	1994	1990	1989	1995	1993	1993	
MIN	16.5	45.9	32.7	414	440	507	274	64.5	16.4	37.7	4.18	11.5	
(WY)	1988	1990	1990	1992	1992	1992	1995	1987	1988	1988	1988	1987	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1987 - 1995

ANNUAL MEAN	639	623	636	
HIGHEST ANNUAL MEAN			932	1994
LOWEST ANNUAL MEAN			429	1992
HIGHEST DAILY MEAN	18000	Apr 30	72000	Nov 14 1993
LOWEST DAILY MEAN	8.2	Oct 7	1.8	Aug 18 1988
ANNUAL SEVEN-DAY MINIMUM	11	Oct 2	2.2	Aug 16 1988
INSTANTANEOUS PEAK FLOW	---		130000	Nov 14 1993
INSTANTANEOUS PEAK STAGE	---	19.67	33.10	Nov 14 1993
INSTANTANEOUS LOW FLOW	---	7.1	1.7	Aug 18 1988
ANNUAL RUNOFF (INCHES)	17.18	16.74	17.10	
10 PERCENT EXCEEDS	1110	1260	1180	
50 PERCENT EXCEEDS	220	320	212	
90 PERCENT EXCEEDS	20	16	16	

07036100 ST. FRANCIS RIVER NEAR SACO, MO

LOCATION.--Lat 37°23'06", long 90°28'27", in NE 1/4 SE 1/4 NE 1/4 sec.10, T.31 N., R.5 E., Madison County, Hydrologic Unit 08020202, on right bank at downstream side of State Highway C bridge, 1.3 mi downstream from Twelvemile Creek and 3.5 mi northwest of Saco.

DRAINAGE AREA.--664 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year.

GAGE.--Data-collection platform used as primary recorder. Datum of gage is 472.00 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	44	782	495	686	2230	402	5960	612	206	136	20
2	29	43	685	465	644	1490	378	8020	540	177	115	20
3	28	44	617	428	611	1150	359	2880	477	160	101	66
4	25	711	559	388	743	996	339	1760	425	161	107	87
5	22	7540	513	334	834	904	320	1340	372	187	200	60
6	22	5100	471	363	704	832	304	1010	359	211	143	45
7	20	1490	442	431	629	6900	288	835	363	175	120	35
8	23	898	411	439	572	8990	279	918	409	166	103	29
9	34	1180	2530	443	514	3100	271	2800	672	166	232	25
10	36	2240	3140	492	499	1970	258	5500	1720	151	259	23
11	49	1330	1670	692	483	1490	244	2980	2680	133	173	21
12	61	897	1150	1280	444	1170	242	1780	2150	126	129	19
13	70	718	913	1200	399	972	236	1290	1300	114	115	18
14	67	628	768	5570	378	837	228	1020	830	102	110	17
15	60	695	665	3700	468	741	214	799	631	91	89	16
16	54	879	633	2020	1170	664	204	649	514	77	74	26
17	54	842	695	1490	1270	600	200	694	434	74	64	29
18	57	697	696	1540	995	544	200	27900	370	69	56	26
19	76	593	625	7660	869	502	195	8750	325	63	61	25
20	83	543	571	5630	774	474	213	2910	289	59	106	27
21	95	3270	596	2730	696	451	265	1720	258	56	64	29
22	90	2300	3850	1840	623	416	448	1240	233	75	49	35
23	91	1330	2670	1370	572	389	504	945	204	82	43	35
24	80	968	1630	1080	524	361	833	765	205	70	36	30
25	69	803	1180	911	476	333	973	1130	191	123	29	29
26	63	695	943	811	445	316	762	1890	220	581	29	28
27	58	920	800	764	2030	359	623	1470	268	663	26	27
28	50	2020	704	899	4390	742	523	3650	394	423	23	26
29	47	1350	631	997	---	578	464	1620	254	276	21	24
30	45	957	567	845	---	490	589	960	211	205	19	22
31	44	---	521	744	---	438	---	724	---	163	17	---
MEAN	52.7	1391	1053	1550	837	1336	379	3094	597	174	91.9	30.6
MAX	95	7540	3850	7660	4390	8990	973	27900	2680	663	259	87
MIN	20	43	411	334	378	316	195	649	191	56	17	16
IN.	.09	2.34	1.83	2.69	1.31	2.32	.64	5.37	1.00	.30	.16	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	MEAN	351	1983	1506	1218	1260	1516	1490	1356	642	104	162	177
MAX	2404	5304	3451	3231	2846	2858	3595	4125	4250	174	1215	1338	
(WY)	1985	1994	1991	1993	1985	1985	1994	1990	1985	1995	1985	1993	
MIN	27.1	65.2	44.1	179	601	705	379	94.7	29.1	39.7	10.7	6.53	
(WY)	1988	1990	1990	1986	1993	1992	1995	1987	1988	1983	1988	1983	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1983 - 1995
ANNUAL MEAN	901	886	980
HIGHEST ANNUAL MEAN			2084
LOWEST ANNUAL MEAN			356
HIGHEST DAILY MEAN	23000	27900	70100
LOWEST DAILY MEAN	17	16	4.7
ANNUAL SEVEN-DAY MINIMUM	24	20	5.1
INSTANTANEOUS PEAK FLOW	---	32900	161000
INSTANTANEOUS PEAK STAGE	---	22.13	36.10
INSTANTANEOUS LOW FLOW	---	16	4.0
ANNUAL RUNOFF (INCHES)	18.42	18.11	20.05
10 PERCENT EXCEEDS	1680	1860	2000
50 PERCENT EXCEEDS	308	444	283
90 PERCENT EXCEEDS	32	30	30

07036100 ST. FRANCIS RIVER NEAR SACO, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SEDIMENT RECORDS: November 1988 to current year.

REMARKS.--Sediment records are poor.

EXTREMES FOR PERIOD OF RECORD.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 918 mg/L, Jan. 28, 1994; minimum daily mean, 1 mg/L, several days.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 33,000 tons, Jan. 28, 1994; minimum daily, 0.01 tons, Sept. 5, 1991.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 281 mg/L, May 18; minimum daily mean, 2 mg/L, Apr. 5, 6, 8, 9, June 19, 24, and 26.

SUSPENDED-SEDIMENT LOADS: Maximum daily, 23,900 tons, May 18; minimum daily, 0.17 tons, Oct. 7.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	32	10	.88	44	4	.48	782	7	16
2	29	9	.69	43	4	.47	685	7	13
3	28	7	.53	44	4	.48	617	6	10
4	25	6	.39	711	19	47	559	6	8.7
5	22	5	.28	7540	107	2690	513	5	7.4
6	22	4	.22	5100	48	747	471	5	6.2
7	20	3	.17	1490	20	86	442	5	5.4
8	23	4	.23	898	10	25	411	4	4.6
9	34	5	.45	1180	10	35	2530	27	279
10	36	3	.32	2240	16	97	3140	23	207
11	49	4	.58	1330	14	51	1670	11	50
12	61	6	.98	897	12	28	1150	8	24
13	70	8	1.4	718	9	18	913	7	18
14	67	8	1.4	628	8	13	768	7	14
15	60	7	1.2	695	8	14	665	6	11
16	54	7	.97	879	9	21	633	6	9.9
17	54	6	.93	842	8	19	695	5	10
18	57	6	.94	697	7	14	696	5	9.4
19	76	7	1.4	593	7	11	625	5	7.8
20	83	7	1.6	543	7	9.8	571	4	6.7
21	95	8	2.0	3270	30	310	596	6	10
22	90	7	1.7	2300	19	119	3850	35	388
23	91	6	1.4	1330	10	35	2670	26	190
24	80	5	1.1	968	8	20	1630	16	69
25	69	4	.82	803	7	15	1180	12	37
26	63	4	.72	695	6	11	943	9	23
27	58	4	.66	920	7	22	800	9	18
28	50	4	.57	2020	17	92	704	8	15
29	47	4	.53	1350	12	46	631	8	13
30	45	4	.50	957	8	22	567	7	11
31	44	4	.49	---	---	---	521	7	9.7

07036100 ST. FRANCIS RIVER NEAR SACO, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	495	7	8.7	686	6	10	2230	36	221
2	465	6	7.7	644	5	8.7	1490	22	89
3	428	6	6.8	611	5	8.2	1150	18	55
4	388	6	5.8	743	5	9.6	996	14	39
5	334	5	4.7	834	4	9.1	904	12	29
6	363	5	5.3	704	3	6.5	832	9	21
7	431	7	8.0	629	4	6.2	6900	92	3560
8	439	7	8.3	572	4	5.9	8990	161	4320
9	443	7	8.4	514	4	5.1	3100	37	323
10	492	7	8.7	499	4	4.8	1970	22	119
11	692	7	13	483	3	4.5	1490	17	67
12	1280	11	38	444	3	3.9	1170	12	39
13	1200	10	34	399	3	3.4	972	9	24
14	5570	41	642	378	3	3.1	837	7	16
15	3700	30	300	468	5	6.3	741	7	14
16	2020	18	100	1170	12	39	664	7	12
17	1490	11	45	1270	12	41	600	6	10
18	1540	8	36	995	9	25	544	6	8.8
19	7660	78	1830	869	8	19	502	6	7.5
20	5630	38	616	774	7	15	474	5	6.5
21	2730	19	136	696	7	13	451	5	5.7
22	1840	16	80	623	6	10	416	4	4.9
23	1370	14	52	572	6	8.6	389	4	4.2
24	1080	12	35	524	5	7.2	361	4	3.6
25	911	11	26	476	5	5.9	333	3	3.1
26	811	9	20	445	4	5.0	316	3	2.7
27	764	8	17	2030	22	222	359	4	3.8
28	899	9	21	4390	65	784	742	6	11
29	997	8	23	---	---	---	578	5	8.2
30	845	7	17	---	---	---	490	5	6.2
31	744	6	13	---	---	---	438	4	4.9
APRIL			MAY			JUNE			
1	402	4	4.0	5960	59	1780	612	7	11
2	378	3	3.3	8020	95	2060	540	6	8.9
3	359	4	3.4	2880	39	309	477	6	7.2
4	339	4	3.5	1760	20	95	425	5	5.8
5	320	2	1.8	1340	15	54	372	5	4.7
6	304	2	1.8	1010	11	31	359	4	4.2
7	288	3	2.2	835	9	19	363	4	3.9
8	279	2	1.8	918	9	23	409	4	4.5
9	271	2	1.6	2800	23	178	672	5	10
10	258	3	2.2	5500	44	691	1720	12	76
11	244	4	2.5	2980	27	238	2680	16	116
12	242	4	2.9	1780	20	96	2150	11	67
13	236	5	3.0	1290	15	53	1300	6	21
14	228	4	2.6	1020	12	32	830	4	8.4
15	214	4	2.6	799	9	19	631	3	5.1
16	204	3	1.7	649	7	12	514	3	4.8
17	200	3	1.7	694	6	16	434	5	5.4
18	200	3	1.8	27900	281	23900	370	3	3.4
19	195	4	1.9	8750	81	2260	325	2	2.0
20	213	4	2.2	2910	30	242	289	3	2.3
21	265	4	2.6	1720	15	73	258	3	2.1
22	448	3	4.3	1240	10	32	233	3	1.9
23	504	5	7.4	945	6	16	204	3	1.5
24	833	8	19	765	6	11	205	2	1.3
25	973	8	22	1130	9	44	191	3	1.4
26	762	6	13	1890	18	95	220	2	1.2
27	623	6	9.5	1470	16	80	268	4	3.8
28	523	7	9.4	3650	36	362	394	9	9.3
29	464	5	6.0	1620	17	76	254	8	5.4
30	589	7	11	960	9	23	211	8	4.5
31	---	---	---	724	7	14	---	---	---

07036100 ST. FRANCIS RIVER NEAR SACO, MO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	206	8	4.3	136	12	4.5	20	10	.55
2	177	8	3.7	115	12	3.6	20	10	.55
3	160	8	3.3	101	11	2.9	66	17	3.8
4	161	8	3.3	107	11	3.3	87	21	4.9
5	187	8	3.8	200	13	7.1	60	17	2.7
6	211	7	4.2	143	12	4.6	45	14	1.7
7	175	7	3.5	120	11	3.7	35	14	1.3
8	166	7	3.3	103	11	2.9	29	14	1.1
9	166	7	3.2	232	18	14	25	13	.91
10	151	7	2.9	259	22	16	23	13	.82
11	133	7	2.5	173	16	7.5	21	12	.68
12	126	7	2.4	129	14	4.9	19	10	.53
13	114	8	2.3	115	14	4.2	18	15	.76
14	102	9	2.4	110	13	3.8	17	17	.79
15	91	8	1.9	89	12	2.9	16	16	.69
16	77	7	1.4	74	12	2.3	26	15	1.1
17	74	6	1.2	64	11	1.9	29	17	1.3
18	69	5	.94	56	11	1.6	26	17	1.1
19	63	4	.75	61	12	2.1	25	17	1.2
20	59	4	.64	106	26	7.5	27	16	1.1
21	56	4	.63	64	27	4.6	29	15	1.2
22	75	8	1.7	49	24	3.2	35	12	1.1
23	82	9	2.0	43	22	2.5	35	12	1.1
24	70	8	1.6	36	19	1.9	30	12	1.0
25	123	10	3.6	29	17	1.4	29	14	1.1
26	581	22	36	29	13	1.1	28	16	1.2
27	663	21	37	26	11	.77	27	18	1.3
28	423	18	21	23	11	.69	26	19	1.4
29	276	15	11	21	11	.60	24	21	1.4
30	205	14	7.7	19	11	.53	22	22	1.3
31	163	13	5.8	17	10	.49	---	---	---

07037000 BIG CREEK AT DES ARC, MO

LOCATION.--Lat 37°17'35", long 90°37'45", in SE 1/4 sec.8, T.30 N., R.4 E., Iron County, Hydrologic Unit 08020202, at bridge on State Highway 143 at north edge of Des Arc, 420 ft above Black Creek and 6.0 mi above Pond Creek.

DRAINAGE AREA.--99.6 mi².

PERIOD OF RECORD.--July 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.89 ft above sea level.

REMARKS.--Estimated daily discharges: Aug. 24 and Sept. 30. Records fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	25	121	43	101	431	73	2040	115	41	30	13
2	18	24	106	39	94	298	71	1200	110	38	28	13
3	17	24	95	37	92	229	70	470	98	52	24	13
4	17	156	85	33	88	188	67	332	80	67	22	15
5	17	1900	78	31	83	164	64	259	64	62	25	16
6	17	921	72	38	80	148	62	222	65	54	26	17
7	17	353	67	42	76	1590	59	189	72	51	24	18
8	20	218	64	40	71	1110	58	254	76	48	20	16
9	27	250	382	43	68	510	56	362	83	76	19	15
10	26	441	484	47	65	341	55	875	132	98	25	14
11	23	282	250	54	63	254	60	403	203	76	20	14
12	21	200	166	97	59	212	60	281	190	65	19	14
13	22	154	124	122	57	183	57	228	151	58	18	14
14	23	138	99	665	58	161	57	199	121	50	17	13
15	23	148	83	508	71	145	56	172	102	45	16	13
16	23	161	82	332	109	131	55	151	82	41	16	18
17	23	147	82	261	140	119	55	183	71	40	15	19
18	25	125	77	241	131	109	56	2520	62	38	15	16
19	33	107	70	949	120	101	53	721	55	36	14	15
20	36	113	64	697	112	96	59	362	50	35	14	17
21	33	485	63	424	103	88	68	257	45	34	13	19
22	30	365	73	306	96	83	78	200	41	33	13	17
23	29	237	87	238	90	79	93	164	38	36	13	16
24	27	178	84	191	85	75	152	143	37	38	13	16
25	26	145	76	163	79	72	165	127	62	45	13	16
26	25	124	69	141	78	71	143	115	96	51	12	15
27	25	150	63	134	677	75	124	208	67	67	12	15
28	24	218	59	133	836	95	110	309	56	50	12	14
29	24	176	54	128	---	90	112	209	50	41	12	14
30	24	142	49	118	---	83	153	156	46	37	12	13
31	25	---	46	108	---	77	---	132	---	34	12	---
MEAN	23.8	270	109	207	135	239	80.0	434	84.0	49.6	17.5	15.3
MAX	36	1900	484	949	836	1590	165	2520	203	98	30	19
MIN	17	24	46	31	57	71	53	115	37	33	12	13
IN.	.28	3.03	1.26	2.39	1.41	2.77	.90	5.02	.94	.57	.20	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1995, BY WATER YEAR (WY)

	MEAN	79.5	281	229	194	165	224	263	195	118	35.1	27.5	32.5
MAX	396	610	632	465	400	357	579	494	587	95.7	102	128	
(WY)	1985	1986	1988	1993	1989	1985	1994	1990	1985	1987	1985	1993	
MIN	21.7	32.5	25.5	37.0	57.0	92.7	80.0	28.9	15.0	11.9	7.67	6.50	
(WY)	1988	1990	1990	1984	1993	1992	1995	1987	1988	1991	1983	1983	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1983 - 1995
ANNUAL MEAN	147	139	154
HIGHEST ANNUAL MEAN			267
LOWEST ANNUAL MEAN			71.8
HIGHEST DAILY MEAN	4820	2520	7500
LOWEST DAILY MEAN	14	12	4.9
ANNUAL SEVEN-DAY MINIMUM	15	12	5.1
INSTANTANEOUS PEAK FLOW	---	4890	25700
INSTANTANEOUS PEAK STAGE	---	7.31	16.85
INSTANTANEOUS LOW FLOW	---	11	4.9
ANNUAL RUNOFF (INCHES)	20.10	18.94	20.96
10 PERCENT EXCEEDS	250	269	309
50 PERCENT EXCEEDS	50	70	58
90 PERCENT EXCEEDS	18	16	16

07037300 BIG CREEK AT SAM A. BAKER STATE PARK

(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°15'40", long 90°30'23", in NE 1/4 SW 1/4 sec.21, T.30 N., R.5 E., Wayne County, Hydrologic Unit 08020202, at bridge 435 on County Highway NN.

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

REMARKS.--Ambient water-quality monitoring network station since November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH SATURATION) (MG/L) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FEED, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, TOCOCCHI, KF AGAR PER (COLS./100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO3) (00410)
NOV 07...	1500	514	14.0	210	6.36	10.0	93	--	K2	42	68
JAN 23...	1200	374	4.5	177	7.31	13.0	99	<10	K1	K2	71
MAR 14...	1330	277	23.0	189	7.29	11.8	133	--	K1	K2	95
APR 18...	1330	90	20.0	341	8.05	10.6	114	--	K12	K28	115
JUN 19...	1630	108	25.0	235	8.03	8.8	104	<10	M	55	112
JUL 11...	1330	140	26.5	270	7.75	9.2	110	--	43	21	123
AUG 07...	1510	27	28.0	308	7.90	8.5	109	--	37	120	128

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO_3) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO_3) (00447)	NITROGEN, NO_2+NO_3 TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO_3) (00900)	CALCIUM DIS-SOLVED AS CA (00915)
NOV 07...	83	0	0.290	<0.010	<0.020	<0.20	0.020	<0.010	--	--
JAN 23...	88	0	0.140	<0.010	0.010	<0.20	<0.020	<0.010	81	16
MAR 14...	122	0	0.100	<0.010	0.010	<0.20	<0.020	0.010	--	--
APR 18...	139	0	0.020	<0.010	0.010	<0.20	<0.020	<0.010	--	--
JUN 19...	135	0	0.030	<0.010	0.010	<0.20	<0.020	<0.010	120	26
JUL 11...	149	0	0.040	<0.010	0.010	<0.20	<0.020	0.010	--	--
AUG 07...	155	0	0.040	<0.010	0.010	0.20	0.020	<0.010	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO_4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µG/L AS AL) (01106)
JAN 23...	10	2.2	0.80	9.7	4.4	<0.10	110	4	20	<20
JUN 19...	14	3.9	1.3	11	5.6	<0.10	132	2	40	30

DATE	CADMIUM TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM, DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 23...	<1	<1.0	<1	11	<1	<1	2	0.10	<4	<4
JUN 19...	<1	<1.0	<1	53	1	1	5	<0.10	<4	<4

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

07037500 ST. FRANCIS RIVER NEAR PATTERSON, MO

LOCATION.--Lat 37°11'40", long 90°30'12", in NE 1/4 sec.16, T.29 N., R.5 E., Wayne County, Hydrologic Unit 08020202, near left bank on downstream side of bridge pier on State Highway 34, 1 mi upstream from Clark Creek, and 3 mi east of Patterson.

DRAINAGE AREA.--956 mi².

PERIOD OF RECORD.--October 1920 to current year. Prior to June 1921, monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 732: 1922-23.

GAGE.--Water-stage recorder. Datum of gage is 370.45 ft above sea level. Prior to Oct. 1, 1938, nonrecording gage at site 50 ft upstream at datum 2.00 ft higher; Oct. 1, 1938, to Apr. 12, 1939, nonrecording gage and Apr. 13, 1939, to Sept. 5, 1956, water-stage recorder at site 50 ft upstream at present datum; Sept. 6, 1956, to Sept. 26, 1958, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 23, Dec. 12-14, Jan. 21-22, May 2, Aug. 24, and Sept. 30. Records good except for periods of estimated daily discharges, which are poor. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineer satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1915 reached a stage of 33.8 ft, present datum, from floodmarks, discharge, 100,000 ft³/s, from rating curve extended above 55,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	100	1350	709	972	3600	522	4250	1110	354	236	49
2	70	100	1120	659	902	2370	497	15000	973	331	202	47
3	66	97	985	615	830	1820	472	4970	874	354	179	44
4	63	1560	862	540	810	1510	450	2850	786	406	156	50
5	61	12300	784	494	995	1340	423	2120	708	366	150	89
6	59	10000	713	473	929	1210	405	1670	653	358	208	98
7	55	3400	653	548	813	3390	379	1350	635	355	189	84
8	59	2050	594	576	731	15400	355	1240	719	322	168	73
9	84	1730	1150	587	659	5060	343	2340	900	518	150	66
10	89	2810	4540	621	618	3040	329	4580	1350	453	211	62
11	91	2770	2870	719	584	2300	316	4670	3010	382	283	58
12	91	1870	2150	1240	543	1880	310	2670	2860	329	219	54
13	92	1480	1650	1640	504	1570	301	1940	2150	295	168	54
14	105	1190	1400	4080	463	1350	291	1530	1460	267	143	53
15	107	1090	1130	5690	565	1180	282	1220	1100	237	133	50
16	105	1220	1030	3120	914	1040	269	983	906	208	119	80
17	105	1350	1020	2420	1690	929	261	838	774	186	106	86
18	107	1220	1050	2210	1470	835	261	18500	682	172	94	75
19	151	1040	985	6330	1260	760	252	21100	603	157	88	69
20	167	905	880	9200	1120	706	259	4850	542	143	85	72
21	164	2220	887	5200	982	658	276	2870	485	133	102	73
22	156	3830	2460	2800	872	615	328	2110	438	130	99	73
23	153	2350	4100	2250	781	567	509	1660	393	155	80	72
24	143	1800	2540	1830	697	526	689	1400	380	176	72	75
25	137	1430	1930	1530	631	493	1140	1310	523	179	64	76
26	130	1210	1570	1300	585	468	1060	2250	457	204	61	75
27	121	1190	1290	1250	1440	472	852	2100	426	626	55	72
28	118	2060	1110	1170	5270	598	700	3570	448	667	51	70
29	112	2300	974	1340	---	784	617	2830	504	486	49	66
30	105	1700	853	1250	---	641	661	1750	420	366	49	62
31	102	---	774	1080	---	567	---	1320	---	289	49	---
MEAN	105	2279	1465	2047	1022	1861	460	3930	909	310	130	67.6
MAX	167	12300	4540	9200	5270	15400	1140	21100	3010	667	283	98
MIN	55	97	594	473	463	468	252	838	380	130	49	44
IN.	.13	2.66	1.77	2.47	1.11	2.24	.54	4.74	1.06	.37	.16	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1995, BY WATER YEAR (WY)

	MEAN	370	1047	1339	1488	1547	2151	2322	1742	919	328	217	252
MAX	3391	6214	12380	6725	4577	6981	9221	7145	8724	2513	1478	2103	1965
(WY)	1985	1994	1983	1950	1951	1945	1927	1943	1928	1957	1985	1965	
MIN	29.0	48.1	60.9	64.9	125	178	287	139	33.6	21.3	11.2	14.8	
(WY)	1954	1954	1954	1956	1963	1941	1981	1930	1936	1936	1936	1955	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1921 - 1995

ANNUAL MEAN	1380		1220		1141		
HIGHEST ANNUAL MEAN					2731		1985
LOWEST ANNUAL MEAN					343		1941
HIGHEST DAILY MEAN	25700	May 1	21100	May 19	107000	Dec 4	1982
LOWEST DAILY MEAN	54	Sep 22	44	Sep 3	8.0	Aug 28	1936
ANNUAL SEVEN-DAY MINIMUM	61	Sep 18	48	Aug 29	8.4	Aug 26	1936
INSTANTANEOUS PEAK FLOW	---		36000	May 18	155000	Dec 3	1982
INSTANTANEOUS PEAK STAGE	---		22.23	May 18	35.77	Dec 3	1982
INSTANTANEOUS LOW FLOW	---		42	Sep 3	8.0	Aug 28	1936
ANNUAL RUNOFF (INCHES)	19.60		17.33		16.21		
10 PERCENT EXCEEDS	2550		2710		2320		
50 PERCENT EXCEEDS	512		618		340		
90 PERCENT EXCEEDS	82		74		53		

07039000 WAPPAPELLO LAKE AT WAPPAPELLO, MO

LOCATION.--Lat 36°55'42", long 90°17'04", in NW 1/4 SE 1/4 sec.3, T.26 N., R.7 E., Wayne County, Hydrologic Unit 08020202, at intake tower at dam on St. Francis River, 0.8 mi southwest of Wappapello and at mile 309.

DRAINAGE AREA.--1,310 mi², approximately.

PERIOD OF RECORD.--April 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to June 19, 1941, nonrecording gage at same site and datum.

REMARKS.--Lake is formed by earthfill type dam. Closure of channel at dam began July 10, 1940; river began to flow through outlet structure July 24, 1940. Stop logs placed in outlet structure and storage began Apr. 1, 1941; conservation pool level reached Apr. 20, 1941. Capacity at bottom of outlet tunnels (gage height, -9.0 ft), 2,600 ac-ft; at conservation pool level (gage height, 7.0 ft), 30,900 ac-ft; at spillway crest (gage height, 47.0 ft), 613,000 ac-ft; at maximum pool level (gage height, 62.4 ft), uncontrollable above spillway crest, 1,022,000 ac-ft. Lake is used for flood control, power and recreational purposes. U.S. Army Corps of Engineers satellite telemeter at station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 729,800 ac-ft, Apr. 16, 1945, gage height, 51.35 ft; minimum, since initial filling to conservation pool level, 23,340 ac-ft, Mar. 1-3, 1970; minimum gage height, 4.20 ft, Sept. 26-27, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 180,000 ac-ft, May 21, elevation, 370.81 ft; minimum, 30,300 ac-ft, Feb. 9, elevation, 354.54 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359.88	359.75	363.81	356.69	355.33	356.07	355.60	359.19	368.91	359.96	359.80	359.94
2	359.88	359.72	363.41	356.20	355.09	356.10	355.68	361.66	368.55	359.87	359.78	359.94
3	359.89	359.73	362.98	355.82	354.91	355.83	355.79	364.92	368.18	359.75	359.80	359.94
4	359.89	359.95	362.54	355.50	354.81	355.41	355.94	365.07	367.74	359.86	359.79	359.93
5	359.86	362.24	362.06	355.16	354.73	354.87	356.07	365.20	367.27	360.03	359.90	359.90
6	359.87	366.90	361.63	354.99	354.70	354.77	356.26	365.13	366.78	360.06	359.88	359.89
7	359.86	368.39	361.32	354.98	354.67	354.81	356.46	364.99	366.32	360.09	359.88	359.88
8	359.88	368.55	360.90	354.96	354.64	356.37	356.62	364.82	365.82	360.11	359.90	359.90
9	360.02	368.48	360.75	354.93	354.54	359.58	356.78	364.82	365.48	360.14	359.89	359.90
10	360.00	368.56	360.92	354.81	354.55	359.81	356.87	364.93	365.05	360.26	359.90	359.91
11	359.98	368.54	361.52	354.75	354.64	359.51	356.80	365.43	364.85	360.26	359.92	359.91
12	359.95	368.37	361.62	354.64	354.72	359.05	356.85	365.69	364.99	360.26	359.94	359.92
13	359.95	368.09	361.40	354.63	354.75	358.49	356.84	365.59	364.93	360.23	359.95	359.93
14	359.96	367.77	361.06	354.82	354.79	358.02	356.80	356.38	364.70	360.21	359.94	359.95
15	359.95	367.44	360.64	355.40	354.99	357.72	356.83	365.08	364.33	360.15	359.93	359.95
16	359.95	367.12	360.16	356.22	355.18	357.36	356.88	364.72	363.92	360.12	359.92	360.06
17	359.96	366.74	359.83	356.36	355.10	356.97	356.92	364.45	363.45	360.07	359.91	360.07
18	359.97	366.38	359.38	356.21	355.05	356.64	356.89	364.46	362.97	360.07	359.90	360.04
19	360.09	365.97	358.89	356.36	354.99	356.34	356.92	367.89	362.49	360.02	359.89	360.01
20	360.08	365.57	358.50	358.11	354.99	356.00	356.88	370.66	362.05	359.94	359.90	360.02
21	360.08	365.30	358.15	359.71	355.09	355.70	356.94	370.81	361.63	359.91	359.88	359.99
22	359.95	356.25	358.11	359.78	355.09	355.44	357.04	370.74	361.24	359.97	359.85	359.97
23	359.88	365.34	358.47	359.49	355.07	355.31	357.13	370.52	360.89	359.95	359.81	359.92
24	359.77	365.16	359.01	358.98	355.03	355.11	357.36	370.24	360.58	360.14	359.77	359.90
25	359.75	364.87	359.09	358.43	354.90	354.95	357.57	369.95	360.39	360.20	359.77	359.87
26	359.72	364.54	359.01	357.89	354.78	354.87	357.87	369.62	360.28	360.11	359.78	359.89
27	359.72	364.17	358.81	357.28	354.74	355.12	358.21	369.57	360.16	360.06	359.80	359.90
28	359.72	364.53	358.51	356.75	355.12	355.25	358.36	369.51	360.02	360.03	359.81	359.92
29	359.72	364.38	358.18	356.27	---	355.32	358.54	369.62	360.05	359.99	359.81	359.93
30	359.72	364.15	357.71	355.90	---	355.42	358.82	369.50	360.07	359.92	359.82	359.92
31	359.73	---	357.19	355.53	---	355.53	---	369.24	---	359.88	359.81	---
MAX	360.09	368.56	363.81	359.78	355.33	359.81	358.82	370.81	368.91	360.26	359.95	360.07
MIN	359.72	356.25	357.19	354.63	354.54	354.77	355.60	356.38	360.02	359.75	359.77	359.87

07039000 WAPPAPELLO LAKE AT WAPPAPELLO, MO--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 08:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64100	63100	100000	41600	33900	38100	35300	60900	156000	64500	63400	64600
2	64100	62800	96400	38700	32500	37900	35800	85400	151000	63900	63300	64500
3	64200	62900	92200	36500	31700	36300	36500	107000	147000	63600	63300	64500
4	64200	64700	88100	34800	31300	33700	37500	114000	141000	63900	63200	64400
5	63900	85200	83500	33000	31100	31700	38000	114000	136000	65500	64300	64300
6	64000	133000	79500	32100	30900	31100	39200	113000	131000	63900	63900	64200
7	64000	150000	76700	32100	30700	32000	40300	112000	125000	65900	64200	64100
8	64100	152000	72900	32000	30500	43600	41200	110000	120000	66100	64200	64300
9	65300	151000	71600	31900	30300	62600	42300	110000	117000	66400	64200	64300
10	65100	152000	73100	31400	30400	63100	42400	112000	112000	67300	64300	64300
11	64900	152000	78500	31100	30500	60500	42500	118000	111000	67200	64400	64300
12	64700	150000	79400	30700	30800	56600	42800	120000	112000	67200	64600	64300
13	64700	146000	77400	30700	30900	52700	42500	118000	111000	67000	64500	64600
14	64700	143000	74300	31600	31100	49900	42100	116000	109000	66700	64600	64600
15	64700	139000	70600	35000	32000	47800	42400	112000	105000	66300	64500	64700
16	64700	135000	66500	39600	32900	45400	42700	109000	100000	66000	64400	65600
17	64700	131000	63700	39600	32600	42800	43000	106000	96000	65600	64300	65600
18	64800	127000	60100	38600	32400	40900	42900	108000	91400	65600	64200	65200
19	65800	123000	56400	40300	32100	39200	42800	152000	86800	65000	64100	65100
20	65800	118000	53700	52100	32100	37500	42800	179000	82600	64300	64200	65200
21	65800	115000	51200	63200	32600	35600	43100	180000	79000	64300	64100	65000
22	64700	115000	50900	63200	32600	34300	43800	179000	75300	64700	63700	64900
23	64100	116000	53400	60700	32500	33600	44900	175000	72300	64500	63400	64300
24	63200	114000	57200	56600	32300	32600	45900	172000	69700	66400	63200	64200
25	63100	111000	57800	52900	31700	31800	47500	169000	68200	66800	63200	64000
26	62800	108000	57200	49000	31200	31500	49400	164000	67300	65900	63400	64100
27	62800	104000	55800	44900	31100	32900	51700	164000	66300	65300	63600	64300
28	62800	108000	53700	41800	33800	33500	53000	164000	65100	65300	63500	64300
29	62800	106000	51400	38900	---	33900	54400	165000	65100	64900	63500	64300
30	62800	104000	48200	36600	---	34500	56100	163000	65600	64300	63500	64300
31	62900	---	44700	34900	---	35000	---	160000	---	64000	63600	---
MAX	65800	152000	100000	63200	33900	63100	56100	180000	156000	67300	64600	65600
MIN	62800	62800	44700	30700	30300	31100	35300	60900	65100	63600	63200	64000

07039500 ST. FRANCIS RIVER AT WAPPAPELLO, MO

LOCATION.--Lat 36°55'41", long 90°15'55", in NW 1/4 SE 1/4 sec.2, T.26 N., R.7 E., Wayne County, Hydrologic Unit 08020202, on right bank at downstream side of highway bridge, 0.5 mi southeast of Wappapello and 1.25 mi downstream from Wappapello Dam.

DRAINAGE AREA.--1,311 mi².

PERIOD OF RECORD.--October 1940 to current year. Since January 1939 in reports of Mississippi River Commission. Gage-height records collected in this vicinity since April 1920 are contained in reports of the U.S. Army Corps of Engineers.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--water-stage recorder. Datum of gage is 315.15 ft (revised) above sea level. Prior to Oct. 1, 1984, at datum 10.00 ft higher at present site. Prior to Oct. 14, 1940, nonrecording gage at same site.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Wappapello Lake (station 07039000) 1.25 mi upstream. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1920, 30.7 ft (datum then in use), May 15, 1933, discharge 82,500 ft³/s, determined by U.S. Army Corps of Engineers. Maximum discharge, as determined by U.S. Army Corps of Engineers, 85,000 ft³/s, Aug. 1915 (stage unknown).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	154	3410	2690	2230	3040	645	265	3370	955	544	71
2	178	147	3360	2360	2090	3560	540	458	3350	757	357	70
3	185	56	3310	2020	1880	3590	356	1070	3330	680	257	107
4	186	166	3280	1720	1670	3500	263	1600	3470	541	251	203
5	145	1070	3180	1500	1480	3170	204	2550	3540	518	256	207
6	44	987	2820	1200	1470	2390	54	2710	3510	507	254	207
7	47	2000	2490	1000	1500	2270	43	2730	3480	495	253	169
8	172	2390	2320	975	1380	3430	41	2650	3450	492	253	76
9	193	2390	2090	1020	1220	4540	64	2370	3420	493	252	69
10	189	2300	2130	1140	1030	5010	397	2870	3400	490	252	67
11	187	3210	2430	1160	812	5030	572	3280	3380	487	251	65
12	187	3380	2540	1290	781	4890	586	3380	3390	487	251	66
13	190	3390	3080	1480	781	4630	587	3400	3370	485	251	66
14	190	3380	3180	1890	784	4020	518	3390	3350	484	251	66
15	189	3360	3170	3050	983	3140	341	3360	3320	483	251	66
16	188	3340	3140	3510	1810	2890	326	3210	3290	480	246	116
17	188	3360	3120	3590	2440	2750	340	2830	3240	481	247	215
18	190	3500	3070	3530	2480	2360	525	2600	3170	483	246	219
19	259	3460	2930	3770	2160	2140	550	2980	3020	478	246	219
20	428	3250	2670	4350	1720	2090	538	3400	2720	451	246	221
21	470	3250	2540	4940	1390	1990	306	3490	2570	371	244	221
22	549	3200	2450	5130	1360	1710	177	3500	2230	364	241	220
23	555	3180	2370	5060	1350	1310	171	3490	1940	365	235	219
24	482	3160	2370	4830	1340	1230	171	3480	1640	402	162	218
25	320	3150	2380	4540	1340	1130	170	3470	1250	546	76	184
26	282	3120	2370	4250	1330	913	169	3440	1100	706	71	62
27	163	3160	2380	4020	1330	899	128	3390	1080	754	71	57
28	152	3290	2580	3780	1630	896	59	3040	1050	821	70	57
29	152	3460	2630	3450	---	895	221	3350	986	825	70	71
30	151	3460	2820	3190	---	835	236	3400	1130	772	70	182
31	151	---	2810	2690	---	671	---	3390	---	612	70	---
MEAN	227	2591	2755	2875	1492	2610	310	2856	2718	557	219	135
MAX	555	3500	3410	5130	2480	5030	645	3500	3540	955	544	221
MIN	44	56	2090	975	781	671	41	265	986	364	70	57
IN.	.20	2.21	2.42	2.53	1.19	2.30	.26	2.51	2.31	.49	.19	.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1995^a, BY WATER YEAR (WY)

	MEAN	428	978	2036	2400	2331	2745	2905	2522	1405	728	392	404
MAX	3239	4959	8897	8867	7796	7072	11920	9243	5860	4866	3385	2239	
(WY)	1950	1952	1983	1950	1949	1979	1945	1983	1957	1945	1945	1982	
MIN	33.9	43.8	167	188	286	474	63.5	62.3	6.00	87.1	40.0	34.0	
(WY)	1949	1954	1990	1981	1963	1981	1981	1987	1978	1980	1965	1955	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1942 - 1995 ^a
ANNUAL MEAN	1794	1615	1603
HIGHEST ANNUAL MEAN			3534
LOWEST ANNUAL MEAN			579
HIGHEST DAILY MEAN	6030	Feb 5	21800
LOWEST DAILY MEAN	39	Sep 19-22	.00
ANNUAL SEVEN-DAY MINIMUM	39	Sep 16	.00
INSTANTANEOUS PEAK FLOW	---	5150	22300
INSTANTANEOUS PEAK STAGE	---	22.99	31.34
INSTANTANEOUS LOW FLOW	---	39	.00
ANNUAL RUNOFF (INCHES)	18.58	16.73	16.61
10 PERCENT EXCEEDS	3530	3450	4080
50 PERCENT EXCEEDS	1750	1130	695
90 PERCENT EXCEEDS	151	151	40

^aPost-regulation period.

07046250 LITTLE RIVER DITCHES NEAR RIVES, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 36°05'25", long 90°04'47", in NE 1/4 NE 1/4 sec. 28, T.17 N., R.9 E., Dunklin County, Hydrologic Unit 08020204. Samples are taken during high flow from the three western most ditches.

PERIOD OF RECORD.--November 1969 to June 1970, August 1972 to September 1973, July 1977 to June 1989, November 1992 to current year.

REMARKS.--Analyses represent a composite of water from five ditches. Bacteria is usually taken from Ditch 66. Previously published as "Little River Ditches near Kennett". Ambient water-quality monitoring network station since November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT 04...	1930	164	22.5	418	7.9	7.9	88	--	80	K26	159
NOV 08...	1300	8390	15.5	116	3.9	6.2	60	<10	K4	250	--
DEC 19...	1400	433	7.0	196	7.3	11.5	91	--	770	850	71
JAN 24...	1250	2110	4.0	187	7.5	11.6	88	<10	K520	1700	69
FEB 14...	0930	778	2.5	412	8.0	13.1	95	--	K20	K8	167
MAR 15...	0630	272	13.5	320	7.4	8.3	86	--	K69	210	143
APR 19...	0800	672	18.5	422	7.4	7.7	79	--	K24	72	184
MAY 22...	1700	726	24.5	263	7.5	7.3	85	--	K320	440	96
JUN 20...	0730	139	24.5	390	8.1	6.6	77	<10	M	210	162
JUL 12...	1030	1260	29.0	232	7.5	5.7	73	--	160	230	84
26...	1130	2670	27.5	218	7.5	4.8	61	--	170	400	58
AUG 08...	1000	774	28.0	282	7.8	6.6	84	<10	240	160	97
SEP 05...	1500	308	25.0	419	8.3	9.8	118	--	190	90	179

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
04...	194	0	0.020	0.010	0.020	0.29	0.150	0.100	--	--
NOV										
08...	--	--	0.240	0.040	<0.080	1.3	0.440	0.360	51	14
DEC										
19...	86	0	0.340	0.030	0.140	1.2	0.440	0.240	--	--
JAN										
24...	81	0	0.250	0.030	0.090	0.71	0.310	0.230	79	22
FEB										
14...	197	0	0.090	<0.010	0.020	<0.20	0.050	0.060	--	--
MAR										
11...	177	0	0.230	0.020	0.050	0.47	0.200	0.120	--	--
APR										
19...	226	0	0.050	<0.010	0.020	0.37	0.160	0.100	--	--
MAY										
22...	118	0	0.960	0.060	0.080	0.88	0.280	0.120	--	--
JUN										
20...	202	0	0.060	0.010	0.010	0.48	0.230	0.090	190	52
JUL										
12...	107	0	0.360	0.030	0.060	0.83	0.150	0.150	--	--
26...	70	0	0.610	0.050	0.100	0.94	0.350	0.220	--	--
AUG										
08...	120	0	0.310	0.020	0.050	0.77	0.160	0.120	120	33
SEP										
05...	220	0	0.020	0.010	0.010	0.38	0.150	0.120	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

07046250 LITTLE RIVER DITCHES NEAR RIVES, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
NOV 08...	3.9	2.9	6.4	7.8	8.5	0.20	40	150	3600	100
JAN 24...	5.8	5.1	3.4	12	7.2	0.10	120	70	1900	40
JUN 20...	14	13	2.7	23	16	0.20	240	64	1200	30
AUG 08...	9.0	8.0	3.5	15	10	0.20	166	56	1100	40
DATE	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)
NOV 08...	<1	<1.0	4	120	14	<1	24	0.30	40	<4
JAN 24...	<1	<1.0	1	48	10	<1	48	0.10	20	<4
JUN 20...	<1	<1.0	<1	32	4	1	26	0.10	9	<4
AUG 08...	1	1.0	2	57	1	1	20	0.10	8	4

WHITE RIVER BASIN

07050150 ROARING RIVER SPRING NEAR CASSVILLE, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 36°35'30", long 93°50'00", in SE 1/4 NE 1/4 sec. 27, T.22 N., R.27 W., Barry County, Hydrologic Unit 11010001. Sample at outlet of spring in Roaring River State Park.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Previously sampled downstream from spring as "Roaring River at Roaring River State Park" from November 1991 until October 1993. Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, KF AGAR (COLS./100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 22...	1200	81	14.0	333	7.28	8.3	80	--	K1	100	149
JAN 11...	1430	28	12.5	331	7.14	8.3	78	10	K6	K1	138
MAR 08...	0800	149	12.5	304	7.30	9.7	92	--	220	350	77
APR 11...	1230	99	13.5	311	6.82	7.7	75	--	20	27	120
JUN 28...	0830	103	14.0	305	7.23	8.2	79	<10	150	410	131
AUG 23...	1400	35	14.5	327	7.10	7.5	75	--	41	K14	139

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₃ +NO ₂ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 22...	182	0	2.40	<0.010	<0.010	<0.20	<0.020	0.020	--	--
JAN 11...	168	0	2.60	<0.010	0.010	<0.20	0.030	0.040	160	59
MAR 08...	94	0	2.00	<0.010	0.010	<0.20	0.080	0.020	--	--
APR 11...	146	0	2.40	<0.010	0.010	<0.20	<0.020	0.020	--	--
JUN 28...	159	0	2.40	<0.010	0.010	<0.20	<0.020	0.020	150	55
AUG 23...	170	0	2.60	0.010	0.010	0.20	0.180	0.020	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS Cl) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS Al) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS Al) (01106)
JAN 11...	2.5	3.7	1.2	5.0	16	<0.10	206	<1	40	<20
JUN 28...	2.1	3.0	1.5	3.1	5.8	<0.10	184	6	150	40

DATE	CADMIUM TOTAL RECOVERABLE (µg/L AS Cd) (01027)	CADMIUM DIS-SOLVED (µg/L AS Cd) (01025)	COPPER, DIS-SOLVED (µg/L AS Cu) (01040)	IRON, DIS-SOLVED (µg/L AS Fe) (01046)	LEAD, TOTAL RECOVERABLE (µg/L AS Pb) (01051)	LEAD, DIS-SOLVED (µg/L AS Pb) (01049)	MANGANESE, DIS-SOLVED (µg/L AS Mn) (01056)	MERCURY TOTAL RECOVERABLE (µg/L AS Hg) (71900)	ZINC, TOTAL RECOVERABLE (µg/L AS Zn) (01092)	ZINC, DIS-SOLVED (µg/L AS Zn) (01090)
JAN 11...	<1	<1.0	<1	<3	<1	<1	1	0.20	6	<4
JUN 28...	1	1.0	2	17	1	1	3	0.10	8	6

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07050700 JAMES RIVER NEAR SPRINGFIELD, MO

LOCATION.--Lat 37°09'00", long 93°12'12", in SW 1/4 SE 1/4 SW 1/4 sec.2, T.28 N., R.21 W., Greene County, Hydrologic Unit 11010002, on right bank on county road at Kinser Bridge, 1.1 mi downstream from Pearson Creek and 2.5 mi southeast of Springfield.

DRAINAGE AREA.--246 mi².

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,143.27 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Dec. 19, 1955, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Flows are affected by the pumping of Blackman Water Treatment Plant, 1.0 mi upstream. Several observations of water temperature and specific conductance were made during the year. Springfield City Utilities gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1909 reached a stage of about 22 ft, from information by local resident, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	82	66	701	323	142	6380	452	160	31	11
2	12	20	77	68	584	276	127	2610	457	141	28	10
3	12	23	72	66	509	251	114	1380	376	121	29	9.9
4	12	99	71	65	446	216	112	1480	330	115	31	9.4
5	12	2380	65	62	399	202	105	1180	286	108	34	8.6
6	12	1940	55	61	323	189	98	851	264	99	28	8.4
7	12	766	55	60	314	1560	87	802	250	79	23	7.8
8	62	515	54	58	279	1210	84	1250	233	71	31	8.9
9	110	470	51	57	243	725	80	1240	250	66	29	9.7
10	97	484	46	56	214	550	90	851	4840	53	28	9.9
11	69	386	50	56	200	463	2490	678	2140	78	33	9.5
12	50	312	44	58	178	380	1460	561	1280	66	32	9.2
13	38	256	44	4500	182	323	717	491	822	64	28	9.1
14	32	214	51	5810	174	254	488	547	596	64	25	9.1
15	34	176	64	1470	166	255	361	464	468	57	28	8.5
16	33	151	79	994	187	189	293	388	396	123	25	10
17	31	129	98	697	204	170	238	349	344	103	22	11
18	26	112	117	580	193	146	265	396	304	59	20	9.8
19	32	106	126	576	184	142	223	382	268	50	20	10
20	24	111	115	538	170	127	4650	318	235	63	18	16
21	25	277	104	502	148	120	1510	295	240	63	17	13
22	32	372	101	484	135	124	957	333	223	54	16	13
23	31	304	84	432	129	120	1190	301	187	54	15	12
24	29	247	76	422	117	110	1380	320	230	60	14	12
25	27	209	73	402	105	102	994	498	207	54	14	11
26	25	182	70	418	107	198	717	524	196	52	13	12
27	22	159	66	973	191	517	620	590	470	50	12	11
28	21	125	65	3380	389	302	513	1800	260	49	11	11
29	23	96	61	2320	---	209	5140	1050	241	44	11	10
30	25	83	57	1220	---	168	2730	666	200	41	10	9.3
31	22	---	55	874	---	154	---	538	---	37	9.9	---
MEAN	32.4	357	71.9	881	256	325	932	952	568	74.1	22.1	10.3
MAX	110	2380	126	5810	701	1560	5140	6380	4840	160	34	16
MIN	12	20	44	56	105	102	80	295	187	37	9.9	7.8
IN.	.15	1.62	.34	4.13	1.08	1.52	4.23	4.46	2.58	.35	.10	.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1995, BY WATER YEAR (WY)

MEAN	107	265	310	229	265	421	446	409	211	114	39.8	122
MAX	587	1327	1370	881	972	1041	1396	1672	873	1148	262	1566
(WY)	1971	1973	1983	1995	1985	1978	1994	1961	1985	1958	1958	1993
MIN	2.74	9.39	8.26	5.56	8.35	16.4	16.3	38.3	28.1	12.2	3.22	1.05
(WY)	1957	1964	1956	1981	1981	1981	1981	1977	1972	1962	1962	1956

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1956 - 1995

ANNUAL MEAN	310	374	244
HIGHEST ANNUAL MEAN			465
LOWEST ANNUAL MEAN			52.8
HIGHEST DAILY MEAN	8360	May 7	6380
LOWEST DAILY MEAN	12	Oct 2-7	7.8
ANNUAL SEVEN-DAY MINIMUM	12	Oct 1	9.0
INSTANTANEOUS PEAK FLOW	---		14400
INSTANTANEOUS PEAK STAGE	---		15.87
INSTANTANEOUS LOW FLOW	---		7.6
ANNUAL RUNOFF (INCHES)	17.10		20.62
10 PERCENT EXCEEDS	590		851
50 PERCENT EXCEEDS	84		117
90 PERCENT EXCEEDS	18		12

WHITE RIVER BASIN

07052152 WILSON CREEK NEAR BROOKLINE, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°09'07", long 93°22'18", in NE 1/4 SW 1/4 SE 1/4 sec. 7, T.28 N., R.22 W., Greene County, Hydrologic Unit 11010002.

DRAINAGE AREA.--44.6 mi².

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00301)	COLI-FORM, FECAL, µM-MF (COLS./100 ML) (31625)	STREP-TOCOCICI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY WAT WH TOT FET FIELD (MG/L AS CACO ₃) (00410)
NOV 28...	1215	29	17.5	994	7.45	17.8	--	K2	K9	202
JAN 11...	1030	41	15.5	1140	7.46	15.5	22	130	K9	137
MAR 08...	1530	87	10.5	811	7.65	17.2	--	K4	K3	128
APR 11...	1630	219	14.0	382	7.36	12.0	--	K3300	1900	91
JUN 28...	1430	39	23.0	1030	7.56	14.6	13	K3	K10	189
AUG 23...	0740	20	26.0	1350	7.45	11.6	--	K0	K2	139

DATE	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO-GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD-NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 28...	247	0	10.0	<0.010	<0.020	0.76	2.30	2.30	--	--
JAN 11...	169	0	16.0	<0.010	0.040	1.2	5.10	4.70	160	52
MAR 08...	158	0	5.70	<0.010	0.020	0.67	1.60	1.50	--	--
APR 11...	111	0	2.20	0.010	0.060	0.64	0.690	0.660	--	--
JUN 28...	235	0	7.00	<0.010	0.020	0.90	3.20	3.00	210	74
AUG 23...	173	0	13.0	0.010	0.020	0.91	4.40	4.60	--	--

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUM-INUM, TOTAL RECOV-ERABLE (MG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (MG/L AS AL) (01106)
JAN 11...	7.0	170	14	110	140	1.0	734	<1	40	<20
JUN 28...	5.6	130	9.8	100	96	0.80	652	4	70	50

DATE	CADMIUM TOTAL RECOV-ERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 11...	<1	1.1	9	50	2	2	6	0.40	80	80
JUN 28...	1	1.0	7	24	2	1	13	0.10	30	35

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07052250 JAMES RIVER NEAR BOAZ, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°00'25", long 93°21'50, in NW 1/4 NE 1/4 sec.32, T.27 N., R.22 W., Christian County, Hydrologic Unit 11010002, at Frazier Bridge, 0.2 mi upstream from Turkey Hollow, and 2.0 mi southeast of Boaz.

DRAINAGE AREA.--462 mi².

PERIOD OF RECORD.--August 1967 to September 1982, November 1983 to June 1987, November 1992 to current year.

REMARKS.--Reestablished ambient water-quality monitoring network station November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 28...	1430	324	11.5	502	7.70	13.3	122	<10	K2	K26	181
MAR 08...	1100	2100	6.5	277	7.90	12.0	99	--	K9800	K9300	76
APR 12...	1400	2080	14.0	247	7.60	10.2	100	--	K13700	8900	90
25...	0700	--	--	--	--	--	--	--	--	--	--
MAY 17...	0830	718	20.5	401	7.72	8.10	91	--	420	95	154
JUN 28...	1200	516	23.0	430	7.86	9.10	106	<10	30	124	167
AUG 23...	1015	76	23.5	817	7.81	6.00	73	<10	60	K3740	159

DATE	BICAR-BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR-BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO-GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD-NESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) (00925)
NOV 28...	221	0	2.80	0.010	<0.010	<0.20	0.280	0.290	200	72	6.1
MAR 08...	95	0	1.40	0.020	0.090	0.82	0.220	0.160	--	--	--
APR 12...	110	0	1.10	0.010	0.070	0.65	0.140	0.120	--	--	--
MAY 17...	190	0	1.80	0.010	0.020	0.24	0.180	0.200	--	--	--
JUN 28...	201	0	1.80	0.010	0.030	0.28	0.250	0.260	190	65	5.7
AUG 23...	195	0	6.70	0.020	0.030	0.60	2.10	2.00	200	70	6.3

DATE	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUM-INUM, TOTAL RECOV-ERABLE (µG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (µG/L AS AL) (01106)	CADMIUM TOTAL RECOV-ERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)
NOV 28...	20	2.6	22	22	0.20	292	16	60	<20	<1	<1.0
JUN 28...	17	2.9	15	18	0.10	244	16	240	50	1	1.0
AUG 23...	92	7.1	64	78	0.60	508	30	190	<20	<1	<1.0

K--Results based on colony count outside the acceptable range (non-ideal colony count).

WHITE RIVER BASIN

07052250 JAMES RIVER NEAR BOAZ, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)
NOV 28...	1	5	1	<1	6	0.10	5	<4	<0.02	<0.008	<0.008
MAR 08...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
APR 25...	--	--	--	--	--	--	--	--	<0.02	E0.007	<0.008
MAY 17...	--	--	--	--	--	--	--	--	<0.02	<0.008	<0.008
JUN 28...	4	35	3	1	8	0.50	10	8	<0.007	<0.002	<0.005
AUG 23...	5	8	2	<1	11	0.10	20	17	<0.007	<0.002	<0.005

DATE	PRO- METON, WATER, DISS, REC (µG/L) (04037)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	FONOFOS WATER DISS REC (µG/L) (04095)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	P,P' DDE DISSOLV (µG/L) (34653)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	LINDANE DIS- SOLVED (µG/L) (39341)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)
NOV 28...	0.01	E0.007	<0.01	<0.008	<0.007	<0.01	<0.009	<0.01	<0.008	<0.02	<0.01
MAR 08...	0.01	E0.006	<0.01	<0.008	<0.007	E0.001	<0.009	<0.01	<0.008	<0.02	<0.01
APR 25...	0.06	E0.007	<0.01	<0.008	<0.007	<0.01	E0.005	<0.01	<0.008	E0.01	<0.01
MAY 17...	0.03	E0.004	<0.01	<0.008	<0.007	<0.01	<0.009	<0.01	<0.008	E0.01	<0.01
JUN 28...	0.06	E0.007	<0.004	<0.003	<0.002	<0.006	0.009	<0.004	<0.001	0.03	<0.004
AUG 23...	0.15	<0.002	<0.004	<0.003	<0.002	<0.006	<0.002	<0.004	<0.001	<0.001	<0.004

DATE	FONOFOS WATER DISS REC (µG/L) (04095)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	MALA- THION, DIS- SOLVED (µG/L) (39532)	PARA- THION, DIS- SOLVED (µG/L) (39542)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)
NOV 28...	<0.008	<0.005	<0.01	<0.02	<0.005	<0.008	<0.009	<0.006	<0.01	<0.01	<0.03
MAR 08...	<0.008	<0.005	<0.01	<0.02	E0.006	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
APR 25...	<0.008	<0.10	<0.01	<0.02	0.01	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
MAY 17...	<0.008	<0.005	<0.01	<0.02	<0.008	<0.009	<0.009	<0.006	<0.01	<0.01	<0.03
JUN 28...	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	<0.003	<0.004	<0.002	<0.007
AUG 23...	<0.003	<0.004	<0.005	<0.004	<0.002	<0.002	<0.002	<0.003	<0.004	<0.002	<0.007

E--Laboratory estimated value.

07052250 JAMES RIVER NEAR BOAZ, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	EPIC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)
NOV 28...	<0.04	<0.03	<0.005	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.006
MAR 08...	<0.04	<0.03	<0.005	<0.009	0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
APR 25...	<0.04	<0.03	<0.005	0.09	0.03	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
MAY 17...	<0.04	<0.03	<0.005	<0.009	0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.009
JUN 28...	<0.002	<0.006	<0.002	<0.004	0.03	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003
AUG 23...	<0.002	<0.006	<0.002	<0.004	<0.01	<0.004	<0.003	<0.002	<0.003	<0.01	<0.003

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)
NOV 28...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAR 08...	<0.06	<0.008	<0.02	<0.05	<0.008	0.001	<0.02	<0.01	<0.006	<0.04	<0.02
APR 25...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
MAY 17...	<0.06	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02
JUN 28...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005
AUG 23...	<0.02	<0.001	<0.004	<0.003	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005

E--Laboratory estimated value.

07052500 JAMES RIVER AT GALENA, MO

LOCATION.--Lat 36°48'19", long 93°27'41", in SW 1/4 SE 1/4 SW 1/4 sec.6, T.24 N., R.23 W., Stone County, Hydrologic Unit 11010002, on downstream side of right pier of first arch span from left end of bridge on old State Highways 13 and 248 in Galena, 0.7 mi upstream from Railey Creek and 42.3 mi above mouth.

DRAINAGE AREA.--987 mi².

PERIOD OF RECORD.--October 1921 to current year (October 1921, monthly discharge only published in WSP 1311).

REVISED RECORDS.--WSP 977: 1935(M), 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 921.37 ft above sea level. Prior to Dec. 11, 1927, nonrecording gage at site 500 ft downstream at datum 1.48 ft higher. Dec. 11, 1927, to July 22, 1939, nonrecording gage, and July 23, 1939, to Sept. 30, 1953, water-stage recorder at present site and at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Mar. 24-28, Aug. 24 and Sept. 30. Records good. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	158	531	399	3320	1440	644	10700	2290	1110	296	173
2	146	161	483	383	2750	1260	603	15000	2000	979	297	174
3	140	167	458	383	2320	1100	568	7140	1850	895	305	167
4	138	279	437	372	2020	986	547	5710	1680	837	306	166
5	138	4440	412	370	1770	902	522	5100	1780	784	317	157
6	139	8810	394	373	1580	831	504	4280	2860	761	319	151
7	139	4640	381	371	1430	1760	481	3890	3620	703	298	153
8	189	2980	382	357	1300	4860	454	5270	2550	661	279	156
9	561	2550	402	344	1190	3340	441	6730	2980	623	271	157
10	407	2630	399	336	1100	2600	524	5170	14500	588	260	154
11	318	2210	381	335	1020	2140	3440	4000	16900	554	253	151
12	271	1830	365	325	931	1860	6180	3340	8160	524	249	150
13	240	1540	355	1050	849	1630	3500	2900	5580	514	243	151
14	219	1320	343	17300	816	1460	2360	2720	4140	492	251	146
15	203	1130	338	7750	818	1310	1820	2470	3320	470	242	145
16	195	962	359	4480	798	1190	1480	2180	2760	464	236	163
17	188	829	460	3280	786	1090	1320	2000	2350	439	235	160
18	186	730	462	2610	788	997	1430	1990	2070	457	228	155
19	186	665	471	2380	767	926	1420	1970	1850	419	229	150
20	212	698	487	2200	741	871	12300	1780	1670	396	222	157
21	195	1250	489	2090	704	812	10300	1630	1530	384	214	185
22	184	1530	502	2000	669	758	4960	1600	1420	387	210	171
23	249	1570	537	1880	635	729	4580	1520	1340	369	205	165
24	223	1370	522	1740	601	700	6340	1460	2040	386	195	158
25	202	1180	511	1650	568	660	4980	1930	1700	469	189	154
26	196	1020	496	1630	544	620	3710	2140	1450	418	187	148
27	181	882	480	1830	753	900	3030	2200	1290	375	178	148
28	172	765	469	4500	1260	1700	2540	3500	1330	348	178	149
29	167	665	447	10600	---	900	3770	4880	1180	327	173	146
30	163	581	426	6060	---	770	12500	3150	1150	313	171	142
31	159	---	413	4180	---	688	---	2560	---	305	169	---
MEAN	208	1651	438	2695	1172	1348	3242	3900	3311	540	239	157
MAX	561	8810	537	17300	3320	4860	12500	15000	16900	1110	319	185
MIN	138	158	338	325	544	620	441	1460	1150	305	169	142
IN.	.24	1.87	.51	3.15	1.24	1.58	3.67	4.56	3.74	.63	.28	.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

	MEAN	509	880	977	918	1102	1511	1814	1641	1219	597	402	435
MAX	2494	4407	5435	3443	3485	5372	8376	9549	6383	4010	5159	5684	
(WY)	1942	1973	1983	1937	1966	1945	1927	1943	1935	1951	1927	1993	
MIN	58.0	65.3	79.2	68.8	87.4	129	145	179	87.6	46.0	22.6	45.8	
(WY)	1954	1954	1956	1956	1954	1954	1954	1936	1936	1954	1954	1953	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1922 - 1995
ANNUAL MEAN	1387	1573	999
HIGHEST ANNUAL MEAN			2499
LOWEST ANNUAL MEAN			119
HIGHEST DAILY MEAN	21800	17300	57000
LOWEST DAILY MEAN	138	138	11
ANNUAL SEVEN-DAY MINIMUM	141	141	12
INSTANTANEOUS PEAK FLOW	---	29100	73200
INSTANTANEOUS PEAK STAGE	---	18.73	33.46
INSTANTANEOUS LOW FLOW	---	138	10
ANNUAL RUNOFF (INCHES)	19.08	21.64	13.75
10 PERCENT EXCEEDS	3090	3820	2160
50 PERCENT EXCEEDS	526	669	438
90 PERCENT EXCEEDS	178	167	120

07053400 TABLE ROCK LAKE NEAR BRANSON, MO

LOCATION.--Lat 36°35'46", long 93°18'35", in NW 1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010001, at dam on White River, 3.0 mi upstream from Fall Creek and 6.1 mi southwest of Branson.

DRAINAGE AREA.--4,020 mi².

PERIOD OF RECORD.--September 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to July 18, 1958, nonrecording gage at same site and datum.

REMARKS.--Lake is formed by combination concrete-gravity and embankment type dam. Storage began on Sept. 9, 1956. Storage for purpose of filling to power pool level at elevation 881.0 ft and capacity 1,520,500 ac-ft began Nov. 24, 1958, and was reached Dec. 19, 1959. Capacity is 3,567,500 ac-ft at top of spillway gates, elevation 933.0 ft. Capacity is 3,462,000 ac-ft at top of flood control pool, elevation 931.0 ft. Capacity between elevations 915.0 ft and 931.0 ft is reserved for flood control, 760,000 ac-ft. The capacity at the lowest outlet, elevation 721.96 ft., is 3,530 ac-ft. Lake is used for flood control, power and recreational purposes.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 3,542,000 ac-ft, May 10, 1961, elevation, 932.52 ft; minimum, since initial filling to bottom of power pool level, 1,536,000 ac-ft, Feb. 8, 1965, elevation, 881.54 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,080,000 ac-ft, June 12, elevation, 923.26 ft; minimum, 2,300,000 ac-ft, Nov. 1, elevation, 905.08 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 24:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	905.94	905.08	911.58	909.96	915.99	911.86	909.74	917.55	917.17	917.54	913.20	910.22
2	905.94	905.09	911.50	909.91	915.86	911.65	909.77	918.23	917.05	917.32	913.32	910.27
3	905.79	905.16	911.43	909.80	915.68	911.41	909.43	918.33	917.10	917.25	913.26	910.25
4	905.73	905.86	911.50	909.45	915.47	911.12	909.10	918.30	917.14	917.15	913.15	910.19
5	905.66	907.63	911.30	909.26	915.24	911.10	908.91	918.15	917.28	917.16	913.03	910.04
6	905.55	908.66	911.15	909.05	915.07	911.09	908.75	917.97	917.57	917.07	913.01	909.91
7	905.53	909.04	910.91	908.81	914.96	911.61	908.74	917.86	917.75	916.93	912.94	909.91
8	905.64	909.23	911.01	908.83	914.83	912.11	908.59	918.73	917.73	916.92	912.82	909.87
9	905.64	909.67	911.33	908.68	914.81	912.49	908.58	919.29	917.81	916.97	912.81	909.85
10	905.63	910.14	911.41	908.50	914.77	912.51	908.83	919.26	920.96	916.82	912.87	909.81
11	905.56	910.32	911.17	908.47	914.67	912.56	909.70	919.10	922.74	916.62	912.81	909.67
12	905.53	910.42	911.29	908.62	914.45	912.84	910.59	918.80	923.26	916.37	912.78	909.55
13	905.54	910.57	911.25	909.84	914.20	912.80	911.02	918.51	923.26	916.24	912.72	909.42
14	905.52	910.68	911.35	911.95	913.80	912.75	911.47	918.47	922.91	916.07	912.63	909.25
15	905.55	910.74	911.29	913.03	913.82	912.64	911.89	918.44	922.46	915.92	912.48	909.16
16	905.54	911.08	911.06	913.43	913.60	912.52	912.24	918.35	921.98	915.76	912.36	909.27
17	905.47	911.29	910.92	913.75	913.40	912.32	912.30	918.13	921.43	915.63	912.18	909.29
18	905.44	911.35	910.75	914.06	913.42	912.06	912.32	917.78	920.80	915.48	911.95	909.15
19	905.38	911.49	910.37	914.19	913.50	911.96	912.41	917.33	920.22	915.32	911.80	909.10
20	905.33	911.70	910.26	914.29	913.29	911.84	914.13	917.04	919.72	915.26	911.78	908.95
21	905.33	911.79	910.39	914.29	912.99	911.66	914.86	916.75	919.23	915.04	911.74	908.76
22	905.36	911.74	910.33	914.30	912.65	911.50	914.97	916.44	918.76	914.89	911.71	908.63
23	905.36	911.82	910.15	914.24	912.61	911.30	915.26	916.27	918.27	914.79	911.66	908.52
24	905.31	911.86	910.03	914.13	912.41	911.01	915.53	916.48	917.97	914.71	911.59	908.51
25	905.32	911.92	910.10	914.27	912.41	910.76	915.63	916.72	917.91	914.57	911.39	908.35
26	905.25	911.95	910.11	914.40	912.36	910.55	915.52	916.90	917.79	914.33	911.12	908.23
27	905.17	912.14	909.98	914.62	912.19	910.42	915.34	917.00	917.76	914.05	910.96	908.08
28	905.10	912.13	909.85	915.02	912.00	910.32	915.38	917.16	917.78	913.78	910.68	907.91
29	905.10	912.01	909.78	915.76	---	910.17	916.16	917.32	917.75	913.59	910.45	907.73
30	905.12	911.78	909.81	916.03	---	909.97	916.98	917.34	917.80	913.31	910.25	907.54
31	905.12	---	909.96	916.08	---	909.75	---	917.24	---	913.16	910.22	---
MEAN	905.47	910.14	910.75	912.16	913.94	911.57	912.14	917.78	919.25	915.68	912.12	909.18
MAX	905.94	912.14	911.58	916.08	915.99	912.84	916.98	919.29	923.26	917.54	913.32	910.27
MIN	905.10	905.08	909.78	908.47	912.00	909.75	908.58	916.27	917.05	913.16	910.22	907.54
(-)	2300000	2570000	2490000	2750000	2580000	2480000	2790000	2800000	2820000	2620000	2500000	2400000
(=)	-30000	+270000	-80000	+260000	-170000	-100000	+310000	+10000	+20000	-200000	-120000	-100000

CAL YR 1994...-200000

WTR YR 1995...+ 70000

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

07053450 WHITE RIVER BELOW TABLE ROCK DAM NEAR BRANSON, MO

WATER-QUALITY RECORDS

LOCATION.--Lat 36°35'42", long 93°18'32", sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010003, on left bank in southwest corner of U.S. Army Corps of Engineers' carpentry building, 600 ft below Table Rock Dam.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1987 to current year. (See remarks).
DISSOLVED OXYGEN: June 1987 to current year. (See remarks).

INSTRUMENTATION.--Water-quality monitor since June 1987.

REMARKS.--The number of missing days of water temperature and dissolved oxygen record exceeds 20 percent of the year. The monitor was not operated from Jan. 11 to June 22.

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	13.3	12.2	12.7	13.8	12.9	13.4	10.3	9.6	9.9
2	---	---	---	13.3	12.0	12.6	13.8	12.8	13.4	10.2	9.4	9.8
3	---	---	---	13.0	12.6	12.8	13.6	13.1	13.3	9.8	9.5	9.6
4	---	---	---	13.0	12.4	12.6	13.9	12.7	13.1	9.7	9.2	9.4
5	---	---	---	12.9	12.2	12.5	13.4	12.7	13.1	9.5	8.8	9.1
6	---	---	---	12.9	11.9	12.4	13.6	13.1	13.3	9.2	8.6	8.8
7	12.8	12.0	12.3	12.6	11.8	12.4	13.5	12.8	13.3	8.8	8.5	8.6
8	12.6	12.0	12.2	13.0	12.6	12.8	13.7	11.3	13.3	8.7	8.2	8.4
9	13.1	11.7	12.3	13.7	12.6	13.0	14.1	13.2	13.7	8.5	8.0	8.2
10	12.9	11.5	12.3	13.3	12.6	13.1	13.7	13.0	13.4	8.5	7.8	8.0
11	13.1	11.5	12.3	13.4	12.7	13.2	13.5	12.5	12.9	8.5	7.5	8.0
12	12.5	11.8	12.2	13.5	12.9	13.3	13.2	12.1	12.5	---	---	---
13	12.7	12.0	12.3	13.7	13.0	13.3	13.3	12.1	12.6	---	---	---
14	12.9	12.0	12.3	13.8	13.3	13.6	12.6	11.8	12.3	---	---	---
15	12.5	12.0	12.2	13.8	13.2	13.6	12.4	11.9	12.2	---	---	---
16	12.6	11.9	12.2	13.8	13.1	13.6	12.9	12.0	12.4	---	---	---
17	12.7	11.9	12.3	13.8	12.9	13.4	13.2	12.2	12.6	---	---	---
18	12.9	12.1	12.5	13.9	13.0	13.5	13.0	12.1	12.5	---	---	---
19	---	---	---	13.7	13.0	13.5	12.9	12.1	12.5	---	---	---
20	---	---	---	13.7	13.0	13.4	12.9	11.8	12.0	---	---	---
21	---	---	---	13.8	12.8	13.4	12.3	11.6	11.9	---	---	---
22	---	---	---	13.5	12.7	13.1	12.8	11.7	11.9	---	---	---
23	---	---	---	13.5	12.7	13.1	12.2	11.5	11.8	---	---	---
24	---	---	---	13.7	12.3	13.2	12.1	11.3	11.6	---	---	---
25	---	---	---	13.6	13.0	13.3	11.8	10.8	11.3	---	---	---
26	13.4	12.3	12.9	13.4	12.7	13.0	11.5	10.6	11.0	---	---	---
27	13.3	12.3	12.9	13.5	12.6	13.0	11.2	10.6	10.8	---	---	---
28	13.3	12.4	12.9	14.2	12.6	13.6	11.0	10.5	10.7	---	---	---
29	13.4	12.3	12.7	13.7	12.6	13.2	11.0	10.4	10.6	---	---	---
30	13.4	12.4	12.8	13.5	12.4	13.0	11.1	10.2	10.5	---	---	---
31	12.9	12.4	12.6	---	---	---	10.7	9.8	10.3	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	12.6	11.8	12.3	13.5	12.9	13.1	14.8	13.7	13.9
2	---	---	---	12.6	11.9	12.2	13.5	13.0	13.2	14.9	13.6	13.9
3	---	---	---	12.5	12.0	12.3	13.5	13.0	13.2	14.8	13.5	13.9
4	---	---	---	12.6	11.9	12.3	13.4	13.1	13.3	14.2	13.6	13.9
5	---	---	---	12.7	11.8	12.3	13.5	13.1	13.4	14.3	13.7	14.0
6	---	---	---	12.8	12.2	12.5	13.6	13.1	13.4	14.4	13.7	14.0
7	---	---	---	12.7	11.9	12.3	14.0	13.0	13.4	14.8	13.8	14.1
8	---	---	---	12.9	11.9	12.4	13.7	13.1	13.4	14.2	13.7	14.0
9	---	---	---	12.9	12.1	12.4	13.8	13.1	13.5	14.7	13.6	14.0
10	---	---	---	12.6	12.0	12.1	13.8	13.1	13.4	14.7	13.6	14.0
11	---	---	---	12.6	11.9	12.4	13.6	13.1	13.4	14.6	13.6	13.9
12	---	---	---	12.7	12.0	12.6	13.7	13.2	13.5	14.1	13.7	14.0
13	---	---	---	12.8	12.2	12.6	13.7	13.2	13.5	14.5	13.7	14.1
14	---	---	---	12.9	12.1	12.6	13.9	13.2	13.6	14.5	13.8	14.0
15	---	---	---	12.8	12.2	12.6	13.9	13.2	13.6	14.2	13.7	14.1
16	---	---	---	12.9	12.2	12.6	13.9	13.2	13.6	14.5	13.8	14.0
17	---	---	---	13.3	12.2	12.7	14.1	13.3	13.7	14.8	13.8	14.2
18	---	---	---	13.0	12.1	12.6	14.2	13.3	13.7	14.7	13.7	14.0
19	---	---	---	13.0	12.3	12.6	14.1	13.3	13.7	14.3	13.7	14.0
20	---	---	---	13.0	12.3	12.7	14.1	13.4	13.7	14.3	13.8	14.1
21	---	---	---	13.3	12.4	12.8	13.9	13.3	13.7	14.5	14.0	14.2
22	---	---	---	13.6	12.4	12.9	14.2	13.3	13.6	14.8	13.6	14.1
23	---	---	---	13.4	12.4	12.9	13.9	13.3	13.6	14.7	13.5	14.1
24	---	---	---	13.1	12.4	12.8	13.8	13.3	13.5	13.8	13.6	13.6
25	---	---	---	13.2	12.5	12.8	14.2	13.7	13.9	14.3	13.8	14.1
26	---	---	---	13.3	12.5	12.9	14.0	13.4	13.8	14.4	13.8	14.2
27	12.6	11.8	12.3	13.3	12.7	13.0	14.1	13.4	13.8	14.4	13.8	14.2
28	12.4	11.9	12.2	13.5	12.7	13.4	14.3	13.4	13.9	14.3	13.8	14.2
29	12.4	11.8	12.2	13.6	12.7	13.1	14.3	13.4	13.9	14.4	13.9	14.2
30	12.5	11.8	12.2	13.6	12.7	13.1	14.3	13.5	13.9	14.4	13.8	14.2
31	---	---	---	13.5	12.8	13.2	15.2	13.6	14.0	---	---	---

07053450 WHITE RIVER BELOW TABLE ROCK DAM NEAR BRANSON, MO--Continued

OXYGEN DISSOLVED (mg/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	8.4	4.7	6.4	11.2	4.9	7.8	9.8	2.0	6.4	---	---	---
2	10.5	4.3	6.9	11.2	4.6	7.6	8.9	2.9	6.9	---	---	---
3	7.8	4.0	4.7	9.6	5.4	7.3	---	---	---	---	---	---
4	9.8	4.0	5.8	9.6	4.6	6.7	---	---	---	---	---	---
5	8.7	4.1	5.3	7.5	2.1	4.8	---	---	---	---	---	---
6	7.7	3.8	5.1	8.8	3.7	6.4	---	---	---	---	---	---
7	8.3	3.6	5.0	6.2	5.6	5.7	---	---	---	---	---	---
8	9.6	4.6	6.8	9.5	4.5	6.1	---	---	---	---	---	---
9	10.5	4.4	7.1	8.5	3.1	5.3	10.1	3.8	7.0	---	---	---
10	10.5	3.8	7.0	7.8	2.8	5.1	10.0	6.1	8.2	---	---	---
11	9.9	2.6	6.3	8.5	3.7	5.1	9.0	6.1	7.3	---	---	---
12	9.5	3.7	6.2	8.5	4.7	5.7	9.7	6.4	7.5	---	---	---
13	8.8	3.6	5.8	9.1	3.5	5.9	9.5	6.6	7.1	---	---	---
14	10.3	3.7	6.6	7.1	4.0	4.6	9.1	5.8	7.6	---	---	---
15	7.6	4.5	5.9	9.5	4.0	6.1	9.0	5.2	7.3	---	---	---
16	8.5	3.7	5.7	9.1	4.9	6.0	9.1	6.7	7.5	---	---	---
17	8.2	3.6	5.4	9.2	4.7	6.0	10.3	7.8	8.8	---	---	---
18	8.1	3.5	5.3	9.2	4.9	5.9	11.0	7.4	9.3	---	---	---
19	8.4	3.9	5.5	---	---	---	11.5	7.7	9.1	---	---	---
20	7.3	3.5	5.1	---	---	---	11.5	7.8	9.0	---	---	---
21	---	---	---	---	---	---	10.6	7.1	8.4	---	---	---
22	---	---	---	---	---	---	11.4	8.2	9.2	---	---	---
23	---	---	---	8.9	3.6	5.9	12.0	8.5	9.5	---	---	---
24	---	---	---	9.5	4.6	6.5	12.0	8.7	9.9	---	---	---
25	---	---	---	9.0	4.1	6.9	11.9	8.5	9.2	---	---	---
26	10.8	5.0	7.3	---	---	---	11.0	8.7	9.4	---	---	---
27	10.4	3.6	6.9	---	---	---	11.8	8.9	10.0	---	---	---
28	10.4	4.8	7.2	---	---	---	12.3	8.7	10.2	---	---	---
29	11.4	5.8	8.1	---	---	---	12.8	8.6	10.6	---	---	---
30	11.6	4.9	7.8	7.2	1.9	5.2	11.6	9.1	10.1	---	---	---
31	9.8	5.4	7.6	---	---	---	10.5	8.8	9.5	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	9.1	4.9	6.6	7.7	4.1	5.6	8.8	4.3	5.5
2	---	---	---	9.8	4.9	6.8	8.6	4.1	6.4	8.7	3.9	5.8
3	---	---	---	9.6	4.9	7.2	8.7	4.1	6.3	7.7	4.2	5.5
4	---	---	---	9.1	5.4	7.3	8.5	3.9	5.2	8.5	4.1	5.4
5	---	---	---	9.6	5.5	7.3	7.7	3.8	5.5	7.8	4.3	5.4
6	---	---	---	9.8	5.5	7.3	8.1	3.8	6.1	8.3	4.2	5.8
7	---	---	---	8.6	4.7	6.7	8.4	2.8	5.3	10.3	4.2	6.7
8	---	---	---	9.4	5.4	7.5	7.8	3.1	4.5	9.8	4.4	6.8
9	---	---	---	10.1	5.7	7.5	8.1	3.9	5.7	9.6	4.4	6.6
10	---	---	---	8.5	5.2	6.7	9.0	4.4	6.2	9.8	4.6	7.0
11	---	---	---	8.2	4.6	6.4	7.9	4.1	5.9	9.1	4.2	5.7
12	---	---	---	9.4	4.6	6.5	8.1	3.9	5.8	8.9	4.2	5.5
13	---	---	---	9.2	5.1	6.7	8.6	3.8	5.7	9.5	4.1	5.7
14	---	---	---	9.1	4.6	7.0	9.0	2.6	5.3	8.0	4.1	5.4
15	---	---	---	9.1	5.1	6.7	8.4	3.4	5.0	10.0	3.6	6.1
16	---	---	---	9.1	5.1	6.7	7.3	3.2	4.6	9.0	4.4	6.0
17	---	---	---	9.0	5.5	7.1	8.0	3.3	4.8	8.8	3.9	6.3
18	---	---	---	9.0	5.2	6.8	6.9	3.1	4.4	8.1	3.3	5.3
19	---	---	---	9.8	4.6	6.8	8.5	3.1	5.1	9.1	3.2	5.8
20	---	---	---	9.8	4.5	7.0	8.5	4.0	5.5	8.5	4.0	5.5
21	---	---	---	9.1	4.4	6.3	8.4	4.5	6.1	9.0	3.8	5.6
22	---	---	---	9.6	4.9	6.6	8.6	4.6	5.9	9.3	4.1	6.4
23	---	---	---	9.5	4.9	6.7	6.7	4.8	5.2	10.3	4.1	6.8
24	---	---	---	8.7	4.8	6.6	6.4	4.3	5.0	7.9	6.6	6.8
25	---	---	---	8.7	4.5	6.2	8.6	3.3	5.0	9.4	3.4	4.9
26	---	---	---	8.5	3.8	6.0	9.0	3.6	4.8	9.1	3.3	5.6
27	---	---	---	8.4	3.7	5.3	9.0	3.5	5.2	8.6	3.3	5.2
28	8.7	5.0	7.0	7.5	3.5	5.3	8.3	3.6	4.6	7.9	3.8	4.7
29	9.1	5.5	7.0	8.8	4.2	5.9	7.8	3.2	4.7	7.6	2.9	4.2
30	8.8	4.9	6.8	8.9	3.3	5.0	7.6	2.7	4.6	6.8	3.1	4.7
31	---	---	---	8.1	4.2	6.3	7.6	3.1	5.0	---	---	---

WHITE RIVER BASIN

07053500 WHITE RIVER NEAR BRANSON, MO

LOCATION.--Lat 36°35'51", long 93°17'42", in SE 1/4 NE 1/4 sec.22, T.22 N., R.22 W., Taney County, Hydrologic Unit 11010003, on left bank 0.9 mi downstream from Table Rock Dam, 2.1 mi upstream from Fall Creek, 5.0 mi southwest of Branson, 7.4 mi upstream from Missouri Pacific bridge and at mile 527.8.

DRAINAGE AREA.--4,022 mi².

PERIOD OF RECORD.--July 1909 to December 1910 gage heights and discharge measurements only, October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 696.00 ft above sea level (levels by U.S. Army Corps of Engineers). July 19, 1909, to Dec. 31, 1910, nonrecording gage at site 7.4 mi downstream at different datum; Oct. 1, 1951, to Mar. 6, 1952, nonrecording gage at same site and datum.

REMARKS.--Flow regulated by Table Rock Lake (station 07053400) since Sept. 9, 1956.

COOPERATION.--Records furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,100 ft³/s, May 16, 1956; gage height, 36.9 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	253	5210	1440	10600	6750	1760	11900	6920	6330	2640	771
2	193	171	2720	1940	9950	7760	1140	13700	9070	6340	3350	637
3	4070	717	2320	5090	9520	8530	8010	14400	5050	3820	3780	807
4	2830	382	40	8380	9060	7160	8190	14400	4560	3610	7710	2210
5	1440	164	5220	5730	9190	2690	5410	14300	5430	3170	6410	3190
6	2750	202	3800	4710	10200	5490	5060	14300	5650	3490	4790	2650
7	2060	1230	6850	5650	9640	7380	1920	14300	6570	4400	6030	493
8	143	1520	6110	1310	8690	6890	4450	12200	6450	2210	7260	504
9	165	2040	7700	4540	8110	5790	747	14200	6220	1860	4790	292
10	1030	3440	10300	4340	4990	8350	3660	14400	6560	5110	3810	231
11	1410	3810	12300	982	4770	4420	1640	14300	19600	6270	4800	3340
12	884	2480	5510	261	8720	40	2080	14300	19400	6510	5420	2830
13	767	1130	7680	1170	9620	6740	3040	14200	19500	5400	4920	3480
14	619	3250	3830	3520	11100	6390	846	14200	19500	5000	6350	3990
15	154	2180	4980	3790	3870	7740	419	14300	19200	5050	7180	3330
16	461	3450	11100	7220	7280	9600	40	14400	19200	4600	7180	155
17	1240	3820	8430	4850	6790	9680	5550	14500	19400	3790	7440	147
18	1380	3510	8360	7960	2640	8040	5320	14500	19400	4200	7710	3160
19	1430	4550	10200	9860	949	4670	8680	14000	17900	5360	4530	2320
20	1130	4060	5150	7300	6650	7520	7970	10700	14400	3690	3350	2470
21	1030	3270	589	8000	8640	8300	8640	10900	14200	5720	2580	3810
22	40	6860	4140	6940	9420	8850	9860	10600	14200	4350	2760	2100
23	172	3660	6150	8670	2700	7180	8310	6610	14300	3540	3050	2120
24	1430	2880	4420	10200	5930	9930	10400	3430	13500	4070	4410	223
25	550	2230	44	7780	1860	8320	9480	5300	9370	5270	5080	4090
26	1450	1960	1590	9370	2210	7190	11600	4190	8770	5610	6680	2510
27	1400	529	4010	9830	8110	5410	11500	6390	6500	7680	4570	2630
28	796	2570	3780	9110	8550	4900	11100	4120	5750	7480	7720	4250
29	154	4290	3620	6080	---	6720	3410	3170	5700	4820	6380	4730
30	287	6190	1190	8190	---	6350	9560	5330	5970	7210	5800	4390
31	166	---	40	10500	---	5520	---	6950	---	3790	2140	---
MEAN	1032	2560	5077	5958	7134	6784	5660	11110	11610	4831	5181	2262
MAX	4070	6860	12300	10500	11100	9930	11600	14500	19600	7680	7720	4730
MIN	40	164	40	261	949	40	40	3170	4560	1860	2140	147
IN.	.30	.71	1.46	1.71	1.85	1.95	1.57	3.19	3.22	1.39	1.49	.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995^a, BY WATER YEAR (WY)

	1957	3017	4551	4202	4264	5525	6292	5915	4075	3480	2848	2155
MEAN	1957	3017	4551	4202	4264	5525	6292	5915	4075	3480	2848	2155
MAX	6660	13110	15210	16070	11970	14800	14800	22650	11610	11470	6526	4421
(WY)	1994	1975	1986	1985	1969	1985	1985	1961	1995	1976	1979	1979
MIN	429	888	449	201	420	419	341	415	782	1158	1015	708
(WY)	1982	1991	1990	1990	1964	1964	1981	1981	1981	1981	1977	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1960 - 1995 ^a
ANNUAL MEAN	5271	5758	4023
HIGHEST ANNUAL MEAN			7161
LOWEST ANNUAL MEAN			852
HIGHEST DAILY MEAN	16400	Apr 14	33000
LOWEST DAILY MEAN	40	Many Days	35
ANNUAL SEVEN-DAY MINIMUM	294	Oct 31	40
ANNUAL RUNOFF (INCHES)	17.80		13.59
10 PERCENT EXCEEDS	11100		9830
50 PERCENT EXCEEDS	4830		2670
90 PERCENT EXCEEDS	346		140

^aPost-regulation period.

07053600 LAKE TANEYCOMO AT COLLEGE OF THE OZARKS

WATER-QUALITY RECORDS

LOCATION.--Lat 36°36'33", long 93°14'04", in sec.4, T.22 N., R.21 W., Taney County, Hydrologic Unit 11010003, on the right bank in the College of the Ozarks water intake pump house and 4.75 mi below Table Rock Dam.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1984 to current year. (See remarks).

DISSOLVED OXYGEN: May 1984 to current year. (See remarks).

INSTRUMENTATION.--Water-quality monitor since May 1984.

REMARKS.--The number of missing days of water temperature and dissolved oxygen record exceeds 20 percent of the year. The monitor was not operated from Jan. 12 to June 22.

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	14.4	12.9	13.5	---	---	---	12.8	11.6	12.3	9.32	8.01	8.88
2	16.2	14.4	14.9	---	---	---	12.8	11.6	12.3	9.49	7.85	8.87
3	15.3	12.9	14.1	---	---	---	12.5	12.1	12.3	9.03	8.37	8.79
4	13.8	12.9	13.1	---	---	---	13.6	12.1	12.5	8.98	8.06	8.66
5	13.9	12.9	13.3	---	---	---	12.4	12.1	12.3	8.76	7.83	8.47
6	14.2	12.3	13.3	---	---	---	12.5	12.1	12.3	8.45	7.92	8.29
7	13.0	12.3	12.4	---	---	---	12.5	11.9	12.2	8.47	7.35	8.09
8	12.8	12.4	12.6	12.9	11.7	12.4	12.0	11.6	11.9	8.02	7.24	7.67
9	14.4	12.1	13.0	13.0	12.0	12.5	12.0	11.0	11.8	8.40	7.41	7.87
10	14.0	11.8	13.0	12.1	11.6	11.9	12.1	11.7	11.8	8.30	7.41	7.87
11	13.6	11.3	12.8	11.9	11.5	11.8	11.8	11.5	11.6	8.72	7.79	8.11
12	13.6	12.3	12.8	12.2	11.4	11.7	11.7	10.6	11.3	---	---	---
13	13.0	12.5	12.7	12.2	11.3	11.6	11.5	11.2	11.3	---	---	---
14	14.5	12.5	13.1	11.6	11.3	11.5	11.3	10.6	11.1	---	---	---
15	13.4	12.6	12.9	11.4	11.2	11.3	11.6	11.0	11.2	---	---	---
16	14.1	12.8	13.3	11.9	10.6	11.3	11.2	10.9	11.1	---	---	---
17	13.6	12.6	13.1	11.9	10.7	11.4	11.3	10.8	11.0	---	---	---
18	13.1	12.5	12.7	12.1	11.3	11.6	11.3	10.8	10.9	---	---	---
19	14.0	12.5	13.2	11.9	11.5	11.7	11.1	10.7	10.8	---	---	---
20	---	---	---	12.0	11.6	11.8	10.8	10.5	10.7	---	---	---
21	---	---	---	12.8	11.2	12.1	10.7	10.1	10.4	---	---	---
22	---	---	---	12.1	10.4	11.8	10.6	10.0	10.4	---	---	---
23	---	---	---	12.4	11.0	11.9	10.6	10.0	10.4	---	---	---
24	---	---	---	12.4	10.7	11.9	10.4	9.84	10.1	---	---	---
25	---	---	---	12.3	11.9	12.2	10.3	9.51	9.89	---	---	---
26	---	---	---	12.4	12.0	12.2	10.4	8.80	9.69	---	---	---
27	---	---	---	12.8	12.2	12.5	10.3	8.74	9.77	---	---	---
28	---	---	---	12.9	11.5	12.3	10.0	9.27	9.71	---	---	---
29	---	---	---	12.9	11.6	12.4	9.83	9.42	9.69	---	---	---
30	---	---	---	12.7	11.6	12.2	9.63	8.79	9.35	---	---	---
31	---	---	---	---	---	---	9.71	9.26	9.43	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	---	---	---	13.1	12.4	12.6	14.6	13.5	13.8	15.7	14.5	14.8
2	---	---	---	12.7	12.4	12.5	15.8	13.4	13.9	16.5	14.8	15.4
3	---	---	---	14.1	12.4	12.8	15.3	13.5	13.9	16.4	14.8	15.3
4	---	---	---	14.0	12.5	12.9	14.2	13.4	13.6	16.8	14.1	15.1
5	---	---	---	14.2	12.7	13.1	14.0	13.4	13.7	15.4	14.0	14.4
6	---	---	---	13.9	12.6	13.0	15.0	13.4	13.7	16.2	14.1	14.6
7	---	---	---	13.2	12.6	12.8	14.4	13.5	13.8	15.0	14.2	14.5
8	---	---	---	15.1	12.6	13.2	14.3	13.6	13.8	15.9	15.0	15.3
9	---	---	---	16.0	12.8	13.5	14.6	13.6	13.9	16.8	14.9	15.5
10	---	---	---	14.3	12.6	12.7	14.6	13.6	13.9	17.9	15.7	16.5
11	---	---	---	13.6	12.5	12.9	14.5	13.6	13.9	16.8	14.1	15.5
12	---	---	---	13.3	12.6	12.9	14.6	13.7	14.0	15.1	14.1	14.4
13	---	---	---	13.7	12.7	13.0	14.8	13.7	14.0	15.4	14.1	14.5
14	---	---	---	13.5	12.7	13.0	14.4	13.7	13.9	14.9	14.2	14.4
15	---	---	---	13.7	12.8	13.1	14.4	13.8	14.0	14.7	14.2	14.3
16	---	---	---	14.5	12.8	13.2	14.4	13.8	14.0	15.7	14.2	14.6
17	---	---	---	13.8	12.8	13.2	14.5	13.9	14.0	18.0	15.0	16.3
18	---	---	---	14.1	12.8	13.2	14.5	13.9	14.1	17.3	14.4	15.8
19	---	---	---	13.8	12.8	13.1	14.5	13.9	14.1	14.7	14.2	14.4
20	---	---	---	14.2	12.9	13.2	15.5	13.9	14.3	14.7	14.3	14.4
21	---	---	---	13.6	12.9	13.2	15.2	13.9	14.3	14.3	14.1	14.3
22	12.6	12.0	12.2	14.6	13.0	13.4	14.9	14.0	14.2	15.1	13.5	14.4
23	12.6	12.1	12.3	14.8	13.1	13.5	14.0	13.9	14.0	15.4	13.6	14.7
24	12.9	12.1	12.5	14.4	13.0	13.5	14.0	13.9	14.0	15.5	14.7	15.0
25	12.8	12.3	12.5	13.8	13.0	13.3	14.8	13.9	14.1	14.6	14.1	14.2
26	12.8	12.3	12.5	14.0	13.1	13.4	14.6	14.0	14.2	15.1	14.0	14.4
27	13.1	12.4	12.6	14.0	13.1	13.4	15.5	14.0	14.3	15.4	14.0	14.5
28	13.1	12.4	12.6	14.0	13.2	13.5	14.6	14.0	14.2	15.1	14.1	14.4
29	12.9	12.4	12.6	14.2	13.2	13.6	14.9	14.0	14.3	15.1	14.2	14.5
30	13.1	12.4	12.7	13.9	13.2	13.5	14.8	14.1	14.3	15.2	14.3	14.7
31	---	---	---	14.2	13.3	13.7	15.8	14.2	14.5	---	---	---

07053600 LAKE TANEYCOMO AT COLLEGE OF THE OZARKS--Continued

OXYGEN DISSOLVED (mg/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1	14.0	10.3	11.9	---	---	---	6.54	4.68	5.29	10.3	9.03	9.54
2	17.4	11.9	14.4	---	---	---	7.55	5.20	6.30	10.8	9.00	9.79
3	17.1	11.0	12.6	---	---	---	6.22	4.78	5.43	10.2	9.29	9.73
4	15.1	9.86	11.9	---	---	---	6.07	4.69	5.25	10.3	9.37	9.77
5	15.3	9.65	12.0	---	---	---	6.02	4.52	4.90	10.9	9.64	10.1
6	13.8	2.92	9.11	---	---	---	5.60	3.88	4.42	10.9	9.55	10.4
7	5.37	2.10	3.54	---	---	---	5.88	3.55	4.69	11.4	9.55	10.5
8	4.59	2.05	3.12	---	---	---	5.96	4.26	4.86	12.2	10.6	11.7
9	7.42	3.15	4.63	---	---	---	7.47	4.53	5.89	12.0	10.4	11.0
10	6.78	3.58	5.38	---	---	---	8.07	5.69	6.55	11.8	10.2	11.1
11	6.84	4.18	5.43	---	---	---	6.41	5.19	6.05	11.2	10.1	10.6
12	5.58	3.72	4.66	---	---	---	7.96	4.99	6.33	---	---	---
13	5.65	2.99	4.19	---	---	---	6.63	5.64	6.18	---	---	---
14	7.50	3.65	5.10	---	---	---	7.39	5.57	6.21	---	---	---
15	6.99	2.95	4.44	---	---	---	7.48	5.83	6.88	---	---	---
16	6.58	2.61	4.34	---	---	---	7.30	6.30	6.75	---	---	---
17	6.04	4.00	4.90	---	---	---	8.29	6.16	7.29	---	---	---
18	5.29	3.18	4.45	---	---	---	9.39	6.91	8.18	---	---	---
19	6.62	5.09	5.59	---	---	---	8.79	7.00	7.72	---	---	---
20	---	---	---	---	---	---	8.76	7.38	7.93	---	---	---
21	---	---	---	---	---	---	8.50	7.28	7.61	---	---	---
22	---	---	---	---	---	---	8.85	7.26	8.03	---	---	---
23	---	---	---	---	---	---	9.90	7.86	8.38	---	---	---
24	---	---	---	---	---	---	9.83	8.13	8.88	---	---	---
25	---	---	---	---	---	---	9.13	8.48	8.73	---	---	---
26	---	---	---	---	---	---	9.61	8.61	9.09	---	---	---
27	---	---	---	---	---	---	10.5	8.76	9.74	---	---	---
28	---	---	---	---	---	---	10.3	8.63	9.14	---	---	---
29	---	---	---	---	---	---	11.3	8.57	9.61	---	---	---
30	---	---	---	5.69	2.57	4.50	10.9	9.70	10.4	---	---	---
31	---	---	---	---	---	---	10.0	9.03	9.63	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	7.44	3.07	5.47	8.44	4.37	6.40	7.47	1.91	4.13
2	---	---	---	6.92	2.92	5.68	9.72	3.68	5.55	7.93	3.56	6.15
3	---	---	---	9.06	3.65	5.91	8.46	3.38	5.31	9.74	4.54	6.51
4	---	---	---	8.39	4.85	6.14	6.94	4.05	5.19	10.2	4.69	6.32
5	---	---	---	10.0	3.12	6.74	7.02	3.94	4.89	8.72	3.27	5.26
6	---	---	---	8.08	4.14	6.07	8.79	4.82	6.05	10.3	4.57	5.67
7	---	---	---	7.93	2.81	5.80	7.28	3.79	5.24	6.59	3.98	5.14
8	---	---	---	10.3	3.80	7.02	5.49	2.48	4.31	9.93	5.52	8.08
9	---	---	---	11.1	4.67	7.23	7.18	3.42	5.25	10.0	5.47	7.36
10	---	---	---	8.52	4.83	6.27	7.73	3.77	5.71	11.0	6.64	9.06
11	---	---	---	8.65	4.97	6.17	7.98	4.61	5.98	9.64	4.48	6.89
12	---	---	---	7.44	5.23	6.18	8.12	3.72	5.37	7.04	3.58	4.81
13	---	---	---	8.84	5.37	6.82	7.81	3.15	5.30	8.16	3.65	4.87
14	---	---	---	8.06	5.24	6.42	7.97	3.20	5.06	7.64	3.06	4.91
15	---	---	---	8.44	5.02	6.55	5.24	2.16	3.95	8.55	3.64	5.10
16	---	---	---	8.79	3.31	5.52	6.03	2.99	4.28	7.61	3.76	5.66
17	---	---	---	8.30	3.54	6.17	6.57	2.14	4.36	10.3	4.96	8.04
18	---	---	---	8.13	4.49	6.36	5.73	2.27	4.04	9.89	3.15	6.50
19	---	---	---	8.05	4.29	5.99	6.51	2.78	4.66	7.35	2.00	4.59
20	---	---	---	9.00	5.03	6.26	12.4	3.29	5.92	7.89	3.46	5.30
21	---	---	---	6.91	4.21	5.17	9.28	3.55	6.21	6.36	1.79	4.82
22	5.41	4.83	5.06	7.91	4.99	6.04	8.93	3.46	6.26	6.39	4.37	5.58
23	5.40	4.82	5.09	8.61	4.88	5.88	6.96	3.43	5.97	8.00	4.92	6.27
24	5.89	4.72	5.10	8.43	3.74	5.84	7.11	3.57	5.02	10.5	7.65	8.84
25	5.89	3.17	5.14	7.21	4.15	5.59	7.95	3.83	4.82	10.2	5.17	5.84
26	6.18	3.71	5.20	8.38	4.31	5.59	5.85	3.03	4.20	8.84	4.01	5.78
27	7.36	4.04	5.56	7.00	4.16	5.34	7.93	3.24	4.61	7.54	3.71	5.34
28	7.94	4.69	6.36	6.46	3.66	5.05	6.43	2.59	4.04	6.80	2.88	4.93
29	7.07	3.80	5.70	7.25	3.49	4.94	7.68	2.49	4.21	6.40	2.89	4.90
30	7.33	4.54	6.21	6.44	3.67	5.18	7.34	2.70	3.86	7.20	3.10	5.20
31	---	---	---	7.54	3.04	5.14	8.18	2.38	3.65	---	---	---

07053810 BULL CREEK NEAR WALNUT SHADE, MO

LOCATION.--Lat 36°43'05", long 93°12'24", in NW 1/4 SE 1/4 SE 1/4, sec.4, T.23 N., R.21 W., Taney County, Hydrologic Unit 11010003, 1.3 miles southwest of Walnut Shade and 3.9 miles upstream from Lake Taneycomo.

DRAINAGE AREA.--191 mi².

PERIOD OF RECORD.--October 1994 to current year. Stage only station July 1991 to September 1994.

GAGE.--Water-stage recorder. Datum of gage is 712.45 ft above sea level.

REMARKS.--Estimated daily discharges: Aug. 24 and Sept. 30. Records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	12	85	81	468	488	103	2880	337	274	11	5.3
2	9.6	11	79	74	385	372	99	1920	379	175	10	4.8
3	9.4	16	75	68	325	317	96	1030	421	141	10	4.8
4	9.4	330	73	64	278	281	95	972	292	123	9.3	4.5
5	9.6	4040	68	62	247	264	89	742	244	110	9.8	4.4
6	9.6	1720	67	61	219	249	87	597	382	105	10	4.1
7	8.8	548	63	60	201	2000	86	640	412	89	9.5	3.9
8	12	282	117	60	181	1220	83	1500	309	80	8.3	4.2
9	12	680	599	59	164	681	82	1530	239	71	7.4	4.6
10	11	667	371	56	159	506	95	857	5930	63	7.3	4.6
11	9.9	365	244	57	153	407	2990	600	2730	56	6.9	4.5
12	9.9	255	188	58	141	349	1720	472	1290	51	6.5	4.4
13	10	200	152	6280	131	295	731	397	748	45	6.1	4.4
14	10	180	128	4600	129	257	480	366	486	40	5.9	4.3
15	11	191	112	1180	142	244	373	322	360	37	5.9	4.2
16	12	179	108	679	205	227	307	271	282	38	6.1	7.2
17	12	154	129	493	199	206	278	240	228	39	5.7	9.4
18	12	137	124	413	180	189	306	319	187	34	5.5	5.6
19	12	123	110	731	168	175	297	277	155	28	5.5	4.3
20	12	132	103	640	158	164	4320	229	132	26	6.9	4.6
21	13	329	103	571	148	154	1690	201	114	32	5.8	4.6
22	14	303	165	477	142	147	804	182	101	27	5.1	4.7
23	12	240	203	404	134	138	1260	165	96	24	4.8	4.5
24	12	196	182	347	127	126	1710	155	454	20	4.7	4.3
25	13	168	161	335	117	117	938	219	320	18	4.5	4.3
26	12	146	142	363	115	118	638	268	251	18	4.2	4.5
27	12	132	128	438	1140	121	512	345	196	18	4.2	4.4
28	12	117	115	662	767	118	407	915	155	15	4.2	4.4
29	12	105	104	1580	---	112	1410	504	130	13	4.1	4.5
30	12	94	95	810	---	108	2170	346	445	12	3.9	4.9
31	12	---	88	573	---	106	---	306	---	11	4.6	---
MEAN	11.2	402	145	721	247	331	809	638	593	59.1	6.57	4.77
MAX	14	4040	599	6280	1140	2000	4320	2880	5930	274	11	9.4
MIN	8.8	11	63	56	115	106	82	155	96	11	3.9	3.9

SUMMARY STATISTICS

FOR 1995 WATER YEAR

ANNUAL MEAN	330	
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	6280	Jan 13
LOWEST DAILY MEAN	3.9	Aug 30
ANNUAL SEVEN-DAY MINIMUM	4.2	Aug 25
INSTANTANEOUS PEAK FLOW	16700	Jan 13
INSTANTANEOUS PEAK STAGE	11.25	Jan 13
INSTANTANEOUS LOW FLOW	3.8	Aug 29-31, Sep 7
10 PERCENT EXCEEDS	701	
50 PERCENT EXCEEDS	128	
90 PERCENT EXCEEDS	5.2	

07054080 BEAVER CREEK AT BRADLEYVILLE, MO

LOCATION.--Lat 36°46'47", long 92°54'25" in NE 1/4 SW 1/4 NW 1/4 sec.11, T.24 N., R.18 W., Taney County, Hydrologic Unit 11010003, on downstream side of right bridge pier on State Highway 76, 0.5 mile east of Bradleyville.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 804.00 ft. above sea level.

REMARKS.--Estimated daily discharges: Oct. 1, 2, 30, Nov. 2-4, 11-14, 18-20, Nov. 26 to Dec. 4, Dec. 9, Apr. 11 to May 1, May 5-7, July 1, Aug. 24, and Sept. 30. Records fair except for period April 11 to May 7, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	44	180	143	786	800	184	3000	385	450	75	57
2	45	44	170	134	670	655	176	2080	337	356	75	56
3	45	50	160	128	583	571	170	1680	405	329	566	52
4	46	175	150	120	509	506	161	1240	322	303	273	50
5	45	3420	142	115	451	466	146	950	291	295	197	50
6	45	1960	137	127	408	431	142	800	291	263	166	48
7	42	715	129	125	373	2600	138	1500	306	234	204	48
8	50	525	140	117	338	1250	132	2060	306	215	188	50
9	55	775	750	112	312	919	129	1270	491	199	144	49
10	49	986	566	111	277	763	142	984	3910	184	1140	47
11	45	860	458	113	279	656	3500	913	2220	171	323	46
12	45	760	388	114	253	575	1700	803	1110	158	221	46
13	47	680	340	5900	235	511	1150	714	779	148	173	46
14	47	630	297	4530	221	456	850	673	640	140	138	44
15	46	598	273	1550	266	416	650	576	522	131	123	43
16	47	540	252	978	334	377	510	517	452	125	111	61
17	46	500	249	783	336	344	420	487	396	118	103	57
18	47	480	244	659	309	317	450	518	354	113	94	48
19	52	460	228	859	290	296	430	466	320	108	87	48
20	50	500	221	763	272	282	4500	412	292	108	85	54
21	49	675	219	705	253	259	1500	382	269	111	84	49
22	52	582	240	640	238	245	1000	364	247	106	79	47
23	50	513	256	578	227	228	1500	334	313	100	75	45
24	49	415	239	521	211	208	2000	325	379	95	71	43
25	48	360	226	485	198	193	1350	901	530	112	67	45
26	45	320	221	481	220	197	1000	627	297	106	64	45
27	44	290	201	515	1590	334	770	826	256	95	62	44
28	44	250	185	1380	1110	258	600	1100	220	88	59	43
29	43	210	170	3490	---	236	1000	703	436	82	57	42
30	43	190	159	1260	---	209	1650	529	725	77	56	42
31	44	---	152	942	---	195	---	442	---	76	56	---
MEAN	46.8	617	250	919	412	508	935	909	593	168	168	48.2
MAX	55	3420	750	5900	1590	2600	4500	3000	3910	450	1140	61
MIN	42	44	129	111	198	193	129	325	220	76	56	42

SUMMARY STATISTICS

FOR 1995 WATER YEAR

ANNUAL MEAN	464	
HIGHEST ANNUAL MEAN		
LOWEST ANNUAL MEAN		
HIGHEST DAILY MEAN	5900	Jan 13
LOWEST DAILY MEAN	42	Oct 7, Sep 29-30
ANNUAL SEVEN-DAY MINIMUM	43	Sep 24
INSTANTANEOUS PEAK FLOW	13000	Jan 13
INSTANTANEOUS PEAK STAGE	12.93	Jan 13
INSTANTANEOUS LOW FLOW	40	Oct 7
10 PERCENT EXCEEDS	992	
50 PERCENT EXCEEDS	253	
90 PERCENT EXCEEDS	47	

07057475 DOUBLE SPRING NEAR DORA, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 36°43'17", long 92°11'13", in NE 1/4 NW 1/4 sec.32, T.24 N., R.11 W., Ozark County, Hydrologic Unit 11010006. Take Highway 181 south through Dora, turn east on gravel road before Highway H. Travel to end of the road and turn right, follow to end.

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CACO ₃) (00410)
NOV 09...	1100	270	13.0	405	7.20	7.20	67	--	K1	275	204
JAN 25...	1230	210	13.0	294	7.30	11.5	109	<10	52	285	134
MAR 16...	0700	321	11.0	283	7.30	9.80	87	--	100	190	160
APR 20...	0800	292	13.0	308	7.30	8.80	82	--	K570	325	148
JUN 21...	0930	273	13.5	233	7.25	7.80	74	<10	M	130	146
JUL 13...	0700	125	14.0	360	7.37	6.70	65	--	K74	36	186
AUG 09...	0700	109	14.0	400	7.32	8.00	79	--	300	215	240

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 09...	249	0	0.89	<0.010	<0.010	<0.20	<0.020	0.010	--	--
JAN 25...	164	0	1.50	<0.010	0.010	<0.20	0.030	0.020	140	30
MAR 16...	197	0	1.30	<0.010	0.010	<0.20	0.040	0.030	--	--
APR 20...	183	0	1.00	<0.010	0.010	<0.20	<0.020	0.020	--	--
JUN 21...	188	0	1.00	<0.010	0.010	<0.20	<0.020	0.020	170	35
JUL 13...	225	0	1.10	<0.010	0.010	<0.20	<0.020	0.020	--	--
AUG 09...	292	0	1.20	<0.010	0.010	0.20	0.020	0.020	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)
JAN 25...	17	2.3	1.7	4.9	5.8	<0.10	164	<1	80	20
JUN 21...	19	2.0	1.9	3.7	4.3	<0.10	160	14	110	30

DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD) (01027)	CADMIUM DIS- SOLVED (µG/L AS CU) (01025)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
JAN 25...	<1	<1.0	<1	14	1	<1	<1	0.10	4	<4
JUN 21...	<1	<1.0	<1	11	1	1	2	<0.10	5	4

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

07057500 NORTH FORK RIVER NEAR TECUMSEH, MO

LOCATION.--Lat 36°37'22", long 92°14'53", in NE 1/4 SE 1/4 sec.35, T.23 N., R.12 W., Ozark County, Hydrologic Unit 11010006, on right bank 3.2 mi downstream from Spring Creek and 3.5 mi northeast of Tecumseh.

DRAINAGE AREA.--561 mi².

PERIOD OF RECORD.--October 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 584.67 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 12, 1945, nonrecording gage at same site and datum 0.22 ft lower.

REMARKS.--Estimated daily discharge: Feb. 19 to Mar. 6, Aug. 24, and Sept. 30. Records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	368	349	574	636	1250	800	779	3300	985	723	483	415
2	368	349	554	603	1170	790	761	4630	938	700	482	410
3	366	363	542	588	1080	780	743	2840	919	714	483	404
4	364	571	529	575	987	770	724	2300	883	737	482	402
5	364	4390	516	555	921	765	702	1940	852	762	474	397
6	362	3330	499	594	871	760	694	1710	859	744	477	393
7	360	1600	488	592	837	832	686	1610	878	703	476	394
8	373	1140	500	570	797	1750	678	2720	860	675	466	398
9	381	1240	1030	563	768	2400	675	3260	1050	655	460	400
10	374	1810	1420	557	766	1960	694	2540	1590	640	2120	398
11	365	1410	1170	572	746	1710	2720	2070	3440	630	1080	392
12	364	1110	995	566	709	1540	2610	1820	2460	616	669	390
13	365	940	891	783	684	1410	1840	1660	1940	604	556	389
14	365	922	815	3720	693	1300	1500	1530	1570	592	509	386
15	362	1070	764	2550	772	1210	1320	1360	1320	588	485	388
16	360	1070	788	1860	838	1130	1190	1270	1160	578	470	443
17	360	967	841	1540	861	1060	1090	1220	1050	571	460	418
18	362	875	835	1340	843	1000	1040	1210	973	560	455	400
19	395	790	799	1380	815	967	967	1160	921	558	454	394
20	410	758	811	1460	795	947	1150	1080	883	553	453	396
21	389	1080	841	1370	765	907	1860	1040	853	559	449	394
22	379	1220	867	1290	740	880	1510	999	820	555	444	386
23	368	994	853	1210	720	855	1420	954	801	550	440	383
24	365	873	819	1120	700	818	1770	918	996	551	435	383
25	356	811	791	1050	680	765	1690	996	928	545	431	383
26	349	760	756	988	675	758	1500	1060	881	540	426	383
27	349	733	729	984	680	892	1360	1200	842	528	426	380
28	349	696	709	1100	730	946	1210	1380	804	520	423	374
29	349	646	688	1560	---	880	1280	1270	774	506	417	371
30	349	604	670	1460	---	833	2200	1100	753	495	412	370
31	350	---	653	1330	---	800	---	1030	---	490	414	---
MEAN	366	1116	766	1131	818	1071	1279	1715	1133	605	539	394
MAX	410	4390	1420	3720	1250	2400	2720	4630	3440	762	2120	443
MIN	349	349	488	555	675	758	675	918	753	490	412	370
IN.	.75	2.22	1.57	2.33	1.52	2.20	2.54	3.53	2.25	1.24	1.11	.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1995, BY WATER YEAR (WY)

	MEAN	413	673	728	745	857	1065	1269	1145	783	552	418	428
MAX	1040	2751	2842	2322	2872	2473	3623	2775	2515	1632	889	2093	
(WY)	1985	1986	1983	1950	1985	1945	1945	1957	1945	1951	1958	1993	
MIN	214	224	223	201	261	290	370	352	276	239	204	193	
(WY)	1957	1955	1956	1956	1964	1981	1963	1977	1954	1954	1954	1954	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1945 - 1995

ANNUAL MEAN	988	911	755	
HIGHEST ANNUAL MEAN			1555	1985
LOWEST ANNUAL MEAN			299	1954
HIGHEST DAILY MEAN	8120	Apr 30	4630	May 2
LOWEST DAILY MEAN	349	Oct 26-30, Nov 1-2	349	Oct 26-30, Nov 1-2
ANNUAL SEVEN-DAY MINIMUM	349	Oct 26	349	Oct 26
INSTANTANEOUS PEAK FLOW	---		7010	May 1
INSTANTANEOUS PEAK STAGE	---		7.76	May 1
INSTANTANEOUS LOW FLOW	---		349	Oct 26-Nov 3
ANNUAL RUNOFF (INCHES)	23.91		22.05	
10 PERCENT EXCEEDS	1810		1580	
50 PERCENT EXCEEDS	722		765	
90 PERCENT EXCEEDS	383		383	

07057750 BRYANT CREEK BELOW EVANS, MO
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 36°52'16", long 92°28'18", in NW 1/4 NW 1/4 sec.10, T.25 N., R.14 W., Douglas County, Hydrologic Unit 11010006. Sampling site is located off Highway 14, 12 mi west of Highway 95 intersection and 13 mi south of Ava.

DRAINAGE AREA.--214 mi².

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CACO ₃) (00410)
NOV											
09...	1300	285	13.5	329	7.90	9.60	91	--	K2	2000	176
JAN											
26...	1030	185	6.0	349	8.10	16.8	137	<10	K11	K9	163
MAR											
16...	0900	227	8.5	315	8.10	11.1	93	--	42	37	208
APR											
20...	1000	514	13.0	232	7.82	10.8	102	--	4600	13800	112
JUN											
21...	1130	197	19.5	341	8.03	10.3	110	<10	--	45	181
JUL											
13...	0900	111	22.0	381	7.91	7.10	82	--	100	120	196
AUG											
09...	0930	71	22.5	407	7.98	7.0	83	--	130	180	204
SEP											
01...	1200	47	23.0	405	8.13	8.20	97	<10	K79	81	223

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV										
09...	215	0	0.690	<0.010	<0.010	<0.20	<0.020	0.010	--	--
JAN										
26...	199	0	0.660	<0.010	0.010	<0.20	<0.020	0.010	180	38
MAR										
16...	256	0	0.510	<0.010	0.030	<0.20	<0.020	0.010	--	--
APR										
20...	136	0	--	--	--	--	--	--	--	--
JUN										
21...	222	0	0.320	<0.010	0.010	<0.20	<0.020	<0.010	200	44
JUL										
13...	241	0	0.410	0.010	0.030	<0.20	<0.020	0.010	--	--
AUG										
09...	252	0	0.390	0.010	0.010	0.20	0.030	0.010	--	--
SEP										
01...	275	0	0.350	0.010	0.010	<0.20	0.050	<0.010	220	47

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated media.

WHITE RIVER BASIN

07057750 BRYANT CREEK BELOW EVANS, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDEED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
JAN 26...	21	1.8	1.1	5.1	4.0	<0.10	200	<1	<20	<20
JUN 21...	23	1.6	1.3	3.5	3.0	<0.10	196	16	50	30
SEP 01...	26	2.2	1.3	3.5	3.5	<0.10	222	8	40	<20

DATE	CADMIUM TOTAL RECOV- ERABLE (MG/L AS CD) (01027)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (MG/L AS PB) (01051)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (MG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (MG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (MG/L AS ZN) (01092)	ZINC, DIS- SOLVED (MG/L AS ZN) (01090)
JAN 26...	<1	<1.0	<1	<3	<1	<1	4	0.10	4	<4
JUN 21...	<1	<1.0	<1	5	1	1	8	<0.10	4	4
SEP 01...	<1	<1.0	1	13	4	<1	10	<0.10	9	<4

07058000 BRYANT CREEK NEAR TECUMSEH, MO

LOCATION.--Lat 36°37'33", long 92°18'16", E 1/2 sec.32, T.23 N., R.12 W., Ozark County, Hydrologic Unit 11010006, on left bank 0.8 mi downstream from Pine Creek, 3 mi northwest of Tecumseh, and 5 mi upstream from mouth.

DRAINAGE AREA.--570 mi².

PERIOD OF RECORD.--October 1944 to September 1985, October 1994 to current year.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1441: 1945, 1946-47(M), 1950. WSP 1731: 1945-47, 1950.

GAGE.--Water-stage recorder. Datum of gage 573.15 ft. above sea level (levels by Corps of Engineers). Prior to July 30, 1945, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 29 to Nov. 1, June 15, 17, 18, Aug. 9-17, 19-24, Sept. 2-4, and Sept. 20-30. Records fair except for estimated daily discharges and discharges above 1,000 ft³/s, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	209	395	367	1290	1430	613	4110	848	665	267	180
2	205	202	379	350	1140	1160	657	4820	803	540	272	178
3	203	239	368	338	983	1010	646	2850	770	520	274	176
4	202	533	357	328	846	894	624	2250	751	503	267	174
5	201	5080	346	321	750	828	599	1850	724	499	255	173
6	202	2820	334	343	676	772	585	1590	789	467	262	173
7	199	1290	326	341	632	4760	577	1540	783	434	272	172
8	215	864	343	322	580	3590	567	2780	724	415	263	172
9	232	1150	1250	315	541	2090	556	2780	1470	401	258	178
10	220	1890	1190	311	532	1630	578	2190	2710	390	500	184
11	207	1180	884	310	514	1390	3040	1790	4470	377	430	175
12	205	891	732	310	470	1220	2640	1560	2560	365	335	176
13	209	728	637	1230	445	1100	1730	1420	1810	358	300	175
14	209	741	571	4380	461	985	1360	1290	1400	350	270	188
15	194	834	521	2220	531	888	1180	1150	1200	342	245	197
16	189	782	576	1530	592	821	1040	1040	1000	334	234	243
17	195	696	605	1220	571	759	931	980	900	329	220	232
18	197	629	558	1050	546	701	879	996	800	323	213	212
19	261	557	519	1240	528	672	813	915	720	309	209	197
20	288	568	529	1230	506	650	1730	830	668	311	205	220
21	269	924	557	1110	491	617	2110	793	638	318	201	215
22	259	879	539	955	468	591	1500	770	612	313	197	210
23	259	733	512	836	459	561	1500	726	598	308	194	205
24	252	647	492	755	442	522	1870	694	579	308	190	200
25	243	599	470	691	427	503	1610	1160	586	302	186	195
26	237	557	447	673	444	485	1390	1060	588	295	184	189
27	233	530	431	672	1860	676	1260	1150	550	295	182	187
28	230	491	418	963	2110	798	1100	1610	512	287	179	184
29	222	452	404	3750	---	763	1280	1310	516	282	177	182
30	217	422	390	2000	---	707	2500	1030	802	275	175	180
31	213	---	380	1530	---	643	---	914	---	271	177	---
MEAN	222	937	531	1032	708	1104	1249	1611	1063	371	245	191
MAX	288	5080	1250	4380	2110	4760	3040	4820	4470	665	500	243
MIN	189	202	326	310	427	485	556	694	512	271	175	172
IN.	.45	1.84	1.07	2.09	1.29	2.23	2.45	3.26	2.08	.75	.50	.37

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	241	433	541	523	633	847	975	886	539	362	234	226
MAX	893	1664	4280	2350	2129	2483	3497	3049	1990	1748	910	559	
(WY)	1971	1952	1983	1950	1985	1945	1945	1957	1945	1951	1950	1975	
MIN	112	127	119	112	141	138	178	175	118	110	105	103	
(WY)	1957	1955	1956	1956	1981	1981	1981	1954	1954	1954	1954	1954	

SUMMARY STATISTICS

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	771	536	
HIGHEST ANNUAL MEAN		1229	1985
LOWEST ANNUAL MEAN		149	1954
HIGHEST DAILY MEAN	5080	Nov 5	
LOWEST DAILY MEAN	172	Sep 7, 8	
ANNUAL SEVEN-DAY MINIMUM	174	Sep 2	
INSTANTANEOUS PEAK FLOW	9400	Mar 7	
INSTANTANEOUS PEAK STAGE	12.13	Mar 7	
INSTANTANEOUS LOW FLOW	172	Sep 7, 8	
ANNUAL RUNOFF (INCHES)	18.38		
10 PERCENT EXCEEDS	1570		
50 PERCENT EXCEEDS	541		
90 PERCENT EXCEEDS	198		

07061500 BLACK RIVER NEAR ANNAPOLIS, MO

LOCATION.--Lat 37°20'10", long 90°47'19", in SW 1/4 NW 1/4 sec.25, T.31 N., R.2 E., Reynolds County, Hydrologic Unit 11010007, on right bank 0.4 mi downstream from Mayberry Branch, 7 mi southwest of Annapolis, 11 mi downstream from East Fork and at mile 278.5.

DRAINAGE AREA.--484 mi².

PERIOD OF RECORD.--April 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 569.72 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Aug. 21, 1942, at site 415 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Several observations of water temperature and specific conductance were made during the year. Occasional slight regulation from upstream reservoir since Feb. 1963. U.S. Army Corps of Engineers gage-height and satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	198	591	347	530	1320	483	3410	688	550	251	162
2	166	200	446	334	511	1010	456	7610	599	479	252	170
3	163	203	411	322	495	908	477	2780	547	497	252	179
4	164	294	389	306	475	738	407	1750	503	1080	253	199
5	167	2750	387	276	452	651	384	1300	469	804	239	206
6	166	4670	404	277	433	608	365	987	682	649	318	198
7	164	1790	392	281	418	3780	352	853	597	575	313	189
8	176	1040	380	268	401	6550	342	1860	533	560	279	185
9	188	859	663	262	387	3090	335	3860	1350	914	260	187
10	191	1200	757	283	377	1690	328	3800	1560	877	250	187
11	188	966	654	308	369	1230	357	2340	2790	565	242	184
12	185	774	687	338	361	995	421	1470	1670	470	239	182
13	190	664	777	393	350	867	432	1160	1140	437	230	181
14	191	820	519	1150	347	752	416	940	866	414	221	176
15	190	1040	467	1880	367	683	469	788	637	389	210	174
16	188	1030	457	1440	407	612	429	691	633	371	202	189
17	188	652	481	1230	445	569	389	636	535	357	199	192
18	189	593	497	1160	445	530	383	5180	469	344	193	191
19	241	539	505	1560	442	496	364	3810	434	322	189	188
20	278	510	600	2300	435	469	390	1700	408	302	187	199
21	258	1140	532	1550	425	465	564	1180	391	293	182	200
22	238	1790	480	1220	413	416	539	915	385	297	177	201
23	225	1060	474	1000	402	397	534	766	370	294	173	198
24	220	698	461	746	391	412	853	662	359	293	169	192
25	215	764	445	658	378	363	827	714	524	327	165	188
26	209	591	428	599	372	354	746	1070	586	328	162	188
27	203	541	481	566	671	530	607	1200	621	306	159	184
28	198	569	549	587	1810	907	658	1880	576	287	156	180
29	196	610	524	624	---	716	544	1400	569	273	153	177
30	194	719	405	590	---	602	724	978	670	265	151	174
31	195	---	357	556	---	525	---	789	---	256	151	---
MEAN	197	976	503	755	475	1072	486	1886	739	457	212	187
MAX	278	4670	777	2300	1810	6550	853	7610	2790	1080	318	206
MIN	163	198	357	262	347	354	328	636	359	256	151	162
IN.	.47	2.25	1.20	1.80	1.02	2.55	1.12	4.49	1.70	1.09	.51	.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939-1995, BY WATER YEAR (WY)

	MEAN	268	673	698	614	726	992	1155	880	518	275	208	229
MAX	1151	3619	3913	2509	2091	2903	3467	2928	4263	1800	1289	1061	
(WY)	1942	1986	1983	1950	1985	1945	1957	1957	1945	1951	1982	1993	
MIN	84.8	111	119	108	147	161	372	232	140	88.5	76.7	72.4	
(WY)	1957	1965	1956	1956	1963	1941	1956	1988	1972	1954	1965	1955	

SUMMARY STATISTICS

	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1939-1995
ANNUAL MEAN	743	664	603
HIGHEST ANNUAL MEAN			1420
LOWEST ANNUAL MEAN			244
HIGHEST DAILY MEAN	21800	Apr 12	7610 May 2
LOWEST DAILY MEAN	160	Sep 20	151 Aug 30-31
ANNUAL SEVEN-DAY MINIMUM	165	Oct 1	156 Aug 26
INSTANTANEOUS PEAK FLOW	---		11700 May 2
INSTANTANEOUS PEAK STAGE	---		11.08 May 2
INSTANTANEOUS LOW FLOW	---		150 Aug 30-31
ANNUAL RUNOFF (INCHES)	20.84		18.64
10 PERCENT EXCEEDS	1110		1220
50 PERCENT EXCEEDS	390		442
90 PERCENT EXCEEDS	188		188

07061600 BLACK RIVER BELOW ANNAPOLIS, MO
(National water-quality assessment station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°19'30", long 90°45'50", in SE 1/4 NW 1/4 sec.31, T.31 N., R.3 E., Reynolds County, Hydrologic Unit 11010007, at bridge on County Highway K, 4.5 mi southwest of Annapolis, 3.0 mi downstream from gaging station.

DRAINAGE AREA.--493 mi².

PERIOD OF RECORD.--May 1993 to September 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	COLI- FORM, FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	E. COLI WATER TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CAO ₃) (39086)
OCT											
19...	1130	241	16.0	311	8.1	9.8	98	29	31	22	139
NOV											
30...	1200	719	7.0	214	7.9	12.1	98	K3	K1	K7	92
DEC											
14...	1630	496	7.0	231	8.1	12.7	103	K2	K1	K1	96
JAN											
31...	1200	556	3.5	232	8.0	13.3	99	K1	<1	K2	106
FEB											
24...	1030	391	6.0	249	8.1	11.5	90	K1	K5	K4	104
MAR											
22...	1200	416	11.0	222	8.1	9.8	89	K1	K9	K1	96
APR											
13...	1100	432	10.5	253	8.2	10.3	91	K5	K4	K11	113
MAY											
12...	1100	1530	13.0	174	8.0	10.2	95	K14	K8	K19	78
JUN											
15...	1100	637	17.5	219	8.1	9.3	95	K9	62	K29	101
JUL											
11...	1100	565	21.5	229	8.1	8.2	91	K12	K9	K7	111
AUG											
10...	1345	248	23.5	274	8.2	7.9	92	22	41	K4	129
SEP											
15...	0720	174	21.5	295	8.0	9.3	106	K4	K10	77	131

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CAO ₃) (00900)
OCT											
19...	170	0	0.060	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	160
NOV											
30...	113	0	0.110	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	110
DEC											
14...	117	0	0.060	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	120
JAN											
31...	130	0	0.170	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	120
FEB											
24...	127	0	0.100	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	120
MAR											
22...	118	0	0.150	0.020	<0.015	<0.20	<0.20	0.020	<0.010	<0.010	110
APR											
13...	138	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	130
MAY											
12...	95	0	0.090	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	86
JUN											
15...	123	0	0.080	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	110
JUL											
11...	136	0	0.110	<0.010	0.030	<0.20	<0.20	0.020	<0.010	<0.010	110
AUG											
10...	157	0	0.110	<0.010	<0.015	<0.20	<0.20	0.010	<0.010	<0.010	140
SEP											
15...	160	0	0.060	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	150

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07061600 BLACK RIVER BELOW ANNAPOLIS, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)
OCT 19...	31	19	3.2	1.2	22	4.4	<0.10	6.7	172	2
NOV 30...	21	13	2.2	1.2	14	2.5	<0.10	6.9	114	10
DEC 14...	24	14	2.5	0.80	14	3.3	<0.10	6.4	118	2
JAN 31...	23	14	2.4	0.80	15	2.6	<0.10	6.1	128	1
FEB 24...	25	15	2.6	0.90	15	3.3	<0.10	5.6	128	1
MAR 22...	22	13	2.1	0.90	13	2.8	<0.10	5.8	121	1
APR 13...	26	15	2.3	0.90	13	3.5	<0.10	5.5	148	18
MAY 12...	18	10	1.6	0.90	8.9	1.5	<0.10	7.7	96	2
JUN 15...	22	13	2.1	1.0	11	2.0	<0.10	7.5	120	16
JUL 11...	23	13	2.2	1.0	11	2.5	<0.10	7.9	120	25
AUG 10...	28	16	2.7	1.2	13	3.3	<0.10	8.4	149	19
SEP 15...	30	18	2.7	1.2	14	3.6	<0.10	7.3	152	25

DATE	ARSENIC DIS- SOLVED (MG/L AS AS) (01000)	BARIUM, DIS- SOLVED (MG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (MG/L AS BE) (01010)	CADMIUM DIS- SOLVED (MG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (MG/L AS CR) (01030)	COBALT, DIS- SOLVED (MG/L AS CO) (01035)	COPPER, DIS- SOLVED (MG/L AS CU) (01040)	IRON, DIS- SOLVED (MG/L AS FE) (01046)	LEAD, DIS- SOLVED (MG/L AS PB) (01049)
OCT 19...	--	--	--	--	--	--	--	<3	--
NOV 30...	<1	30	<1	<1	<1	<1	<1	12	<1
DEC 14...	<1	31	<1	<1	2	<1	<1	<3	<1
JAN 31...	<1	28	<1	<1	1	<1	<1	4	<1
FEB 24...	<1	29	<1	<1	<1	<1	<1	<3	<1
MAR 22...	--	--	--	--	--	--	--	<3	--
APR 13...	1	32	<1	<1	4	<1	<1	3	<1
MAY 12...	<1	27	<1	<1	1	<1	<1	15	<1
JUN 15...	<1	34	<1	<1	<1	<1	<1	10	<1
JUL 11...	--	--	--	--	--	--	--	4	--
AUG 10...	<1	39	<1	<1	2	<1	<1	4	<1
SEP 15...	<1	39	<1	<1	2	<1	1	<3	<1

07061600 BLACK RIVER BELOW ANNAPOLIS, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT 19...	2	--	--	--	--	--	0.4	0.1
NOV 30...	1	<1	<1	<1	<1	3	0.8	0.1
DEC 14...	2	<1	1	<1	<1	1	0.7	0.1
JAN 31...	1	<1	2	<1	<1	6	0.6	0.1
FEB 24...	2	<1	<1	<1	<1	<1	0.5	0.1
MAR 22...	2	--	--	--	--	--	0.7	0.1
APR 13...	3	<1	<1	<1	<1	2	0.6	0.2
MAY 12...	4	<1	1	<1	<1	5	1.1	0.1
JUN 15...	2	<1	2	<1	<1	2	0.8	0.1
JUL 11...	2	--	--	--	--	--	0.9	0.1
AUG 10...	3	<1	2	<1	<1	3	0.5	0.1
SEP 15...	3	<1	<1	<1	<1	2	0.4	0.1

07061600 BLACK RIVER BELOW ANNAPOLIS, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)
APR 13...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
MAY 12...	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
JUN 15...	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
	P,P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)
APR 13...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
MAY 12...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
JUN 15...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U GF, REC (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
APR 13...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
MAY 12...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02
JUN 15...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02
	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)	
APR 13...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
MAY 12...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	<0.002
JUN 15...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	<0.002

07062000 CLEARWATER LAKE NEAR PIEDMONT, MO

LOCATION.--Lat 37°08'00", long 90°46'31", NW 1/4 sec.6, T.28 N., R.3 E., Wayne County, Hydrologic Unit 11010007, in intake tower at dam on Black River, 2.3 mi upstream from Brewer Bay, 4.5 mi west of Piedmont and at mile 257.4.

DRAINAGE AREA.--898 mi².

PERIOD OF RECORD.--June 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by earthfill type dam. Storage began June 3, 1948; conservation pool level reached July 4, 1948. Capacity at crest of spillway 413,700 ac-ft at elevation 567.0 ft, of which 391,800 ac-ft is available for flood-control storage, and 21,920 ac-ft is permanent storage which under normal operating conditions will be maintained for purposes of conservation and recreation at elevation 494.0 ft. Lake used for flood control and recreational purposes.

COOPERATION.--Records were provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 399,400 ac-ft, May 28, 1957, elevation, 565.59 ft; minimum, since initial filling to conservation pool level, 15,800 ac-ft, Jan. 20, 23, 1972, elevation, 490.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 85,400 ac-ft, May 21, elevation, 518.38 ft; minimum contents, 22,900 ac-ft, Apr. 2, elevation, 494.01 ft.

ELEVATION, IN FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
OBSERVATION AT 24:00

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495.68	494.16	503.48	494.03	494.06	495.85	494.06	500.69	517.04	506.07	498.18	498.20
2	495.59	494.08	501.58	494.20	494.03	494.97	494.01	508.33	516.53	505.05	498.16	498.21
3	495.40	494.22	499.53	494.35	494.15	494.69	494.10	510.56	515.93	504.10	498.14	498.29
4	495.06	495.32	497.34	494.32	494.22	494.96	494.16	510.96	515.27	503.48	498.12	498.44
5	494.68	499.70	495.32	494.31	494.26	495.07	494.18	510.76	514.56	502.90	498.11	498.38
6	494.51	505.46	494.39	494.81	494.26	495.02	494.17	510.28	513.96	502.11	498.08	498.18
7	494.56	507.38	494.27	495.18	494.24	498.20	494.17	509.63	513.54	501.18	498.16	498.11
8	494.75	508.31	494.24	495.52	494.18	505.68	494.19	509.73	513.83	500.21	498.29	498.08
9	494.86	509.18	494.63	495.59	494.13	507.24	494.21	511.72	514.28	499.81	498.33	498.08
10	494.94	509.83	495.43	495.45	494.21	507.03	494.23	513.17	514.97	499.43	498.31	498.07
11	494.49	509.99	495.99	495.23	494.36	506.36	494.31	513.68	516.38	498.73	498.18	498.06
12	494.30	509.98	496.00	494.69	494.50	505.45	494.32	513.60	517.04	498.26	498.14	498.07
13	494.32	509.86	495.75	494.26	494.41	504.18	494.32	513.52	517.23	498.23	498.11	498.12
14	494.27	509.78	494.73	494.81	494.27	502.50	494.31	513.29	517.19	498.18	498.10	498.16
15	494.22	509.91	494.30	496.67	494.17	500.58	494.32	512.92	516.89	498.22	498.08	498.20
16	494.17	509.78	494.51	498.03	494.16	498.04	494.36	512.46	516.43	498.22	498.08	498.24
17	494.12	509.36	494.56	498.57	494.24	496.15	494.35	512.09	515.88	498.19	498.12	497.98
18	494.13	508.83	494.60	498.35	494.35	495.66	494.32	515.17	515.27	498.14	498.15	497.70
19	494.22	508.19	494.56	498.45	494.46	495.07	494.25	517.59	514.60	498.13	498.18	497.44
20	494.28	507.78	494.56	498.75	494.57	494.52	494.24	518.16	513.90	498.16	498.18	497.19
21	494.32	507.99	494.59	498.19	494.56	494.10	494.28	518.38	513.16	498.19	498.15	496.94
22	494.32	508.20	494.51	497.15	494.47	494.11	494.48	518.32	512.34	498.23	498.12	496.72
23	494.27	508.09	494.39	495.65	494.40	494.21	494.69	518.00	511.47	498.34	498.09	496.57
24	494.22	507.59	494.35	494.56	494.29	494.30	495.04	517.64	510.59	498.33	498.09	496.42
25	494.15	507.00	494.24	494.46	494.22	494.31	495.27	517.32	509.89	498.31	498.11	496.27
26	494.12	506.46	494.11	494.19	494.23	494.34	495.37	517.18	509.29	498.22	498.13	496.07
27	494.13	505.98	494.04	494.08	494.72	494.27	495.33	517.38	508.64	498.10	498.15	495.83
28	494.13	505.68	494.09	494.25	496.11	494.52	495.48	517.83	507.93	498.12	498.15	495.66
29	494.14	505.10	494.20	494.42	---	494.36	496.33	517.99	507.46	498.16	498.16	495.53
30	494.15	504.50	494.24	494.45	---	494.13	497.15	517.82	506.98	498.18	498.16	495.41
31	494.16	---	494.14	494.24	---	494.05	---	517.48	---	498.19	498.18	---
MAX	495.68	509.99	503.48	498.75	496.11	507.24	497.15	518.38	517.23	506.07	498.33	498.44
MIN	494.12	494.08	494.04	494.03	494.03	494.05	494.01	500.69	506.98	498.10	498.08	495.41
(-)	22200	42700	22100	22300	25500	22000	27300	82000	48800	29200	29200	24300
(=)	-2700	+20500	-20600	+200	+3200	-3500	+5300	+54700	-33200	-19600	0	-4900

CAL YR 1994...-106900

WTR YR 1995.....-600

(-) Contents, in acre-feet, at end of month.

(=) Change in contents, in acre-feet.

07063000 BLACK RIVER AT POPLAR BLUFF, MO

LOCATION.--Lat 36°45'34", long 90°23'17", in SW 1/4 NW 1/4 sec.2, T.24 N., R.6 E., Butler County, Hydrologic Unit 11010007, on right bank at City Light and Water Plant in Poplar Bluff, 1,500 ft upstream from bridge on Business Route 60, 4.8 mi downstream from Indian Creek and at mile 211.2.

DRAINAGE AREA.--1,245 mi².

PERIOD OF RECORD.--October 1936 to September 1937, October 1939 to current year. Gage-height records collected at site 1,800 ft downstream September 1923 to July 1935 and since July 1935 at site 1,500 ft downstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 317.48 ft above sea level. Prior to Oct. 1, 1940, nonrecording gage at site 1,500 ft downstream at datum 2.00 ft higher; Oct. 1, 1940, to June 7, 1955, at site 1,500 ft downstream at present datum. Prior to July 12, 1985, at datum 0.10 ft lower.

REMARKS.--Estimated daily discharges: Nov. 5-8, 28, July 8-9, Aug. 18-28, and Sept. 30. Records good, except for periods of estimated discharges, which are fair. Several observations of water temperature and specific conductance were made during the year. Considerable regulation by Clearwater Lake (station 07062000) 46 mi upstream since June 3, 1948. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1904 reached a maximum discharge of 100,000 ft³/s, and flood of March 12, 1935, reached a stage of 21.1 ft, present datum (affected by levees constructed since 1904).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	648	522	2230	1160	1540	1550	1340	1650	2170	1940	764	496
2	584	513	2400	1120	1500	2290	1210	3150	2170	2200	755	495
3	563	533	3000	978	1370	2510	1170	2130	2180	2270	750	490
4	581	904	3070	855	1240	2120	1100	2160	2190	2320	742	502
5	678	6000	3010	911	1190	1620	1030	2440	2180	2350	769	498
6	746	3500	2770	953	1160	1530	1010	2660	2200	2260	745	538
7	709	2500	2060	856	1140	2190	992	2700	2230	2200	727	685
8	536	2200	1450	762	1120	3140	965	2700	2110	2100	707	652
9	515	1900	1750	723	1100	2370	926	2490	1410	2150	671	588
10	457	1670	1930	796	1080	2790	915	2440	1290	2240	700	552
11	442	1410	1650	1010	1010	3240	916	2650	1710	2090	751	538
12	561	1780	1420	1100	912	3260	914	2740	1850	2020	808	533
13	798	1800	1530	1310	885	3210	924	2690	1880	1760	762	525
14	565	1780	1840	1510	968	3270	957	2350	1890	1320	708	498
15	557	1810	2080	1360	1650	3450	958	2260	1930	1190	671	488
16	552	1950	1820	1290	2050	3530	956	2220	2010	1060	656	537
17	548	2090	1500	1270	1760	3590	953	2210	2110	1010	643	590
18	568	2080	1390	1790	1460	3170	960	2420	2160	998	600	731
19	1140	2080	1330	3760	1340	2080	950	1920	2150	961	580	763
20	753	2120	1330	4070	1270	1860	963	1430	2150	915	560	779
21	609	2330	1410	3670	1220	1780	965	1830	2150	845	540	779
22	594	1760	1920	3540	1210	1640	947	1870	2110	826	530	776
23	606	2160	1620	3380	1240	1350	973	1980	2130	863	520	751
24	603	2210	1490	3320	1220	1170	1000	2110	2160	927	510	700
25	601	2210	1370	2850	1180	1120	1010	2160	2150	956	505	680
26	598	2190	1340	2010	1130	1090	1120	2120	2160	1000	500	677
27	586	2400	1320	1870	1180	1420	1190	2210	2140	1020	485	693
28	541	2300	1260	1820	1270	1420	1230	2040	2100	998	488	729
29	529	2200	1210	1580	---	1410	1170	1910	2160	885	487	709
30	526	2170	1190	1460	---	1540	876	2050	1950	822	484	650
31	521	---	1180	1470	---	1500	---	2120	---	783	482	---
MEAN	607	2036	1770	1760	1264	2200	1020	2252	2039	1461	632	621
MAX	1140	6000	3070	4070	2050	3590	1340	3150	2230	2350	808	779
MIN	442	513	1180	723	885	1090	876	1430	1290	783	482	488
IN.	.56	1.82	1.64	1.63	1.06	2.04	.91	2.09	1.83	1.35	.59	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1995^a, BY WATER YEAR (WY)

	MEAN	645	995	1562	1705	1747	2129	2188	1932	1269	860	677	639
MAX	1913	2962	5501	3890	4938	4485	4873	4125	3196	3153	3232	2071	
(WY)	1983	1973	1983	1950	1949	1975	1973	1979	1957	1957	1957	1985	
MIN	259	315	335	309	376	564	710	556	460	321	288	268	
(WY)	1957	1954	1954	1956	1963	1981	1956	1987	1987	1954	1954	1954	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1949 - 1995 ^a	
ANNUAL MEAN	1834		1474		1360	
HIGHEST ANNUAL MEAN					2858	
LOWEST ANNUAL MEAN					564	
HIGHEST DAILY MEAN	7540	Jan 28	6000	Nov 5	41200	Dec 4 1982
LOWEST DAILY MEAN	438	Aug 23	442	Oct 11	186	Sep 25 1966
ANNUAL SEVEN-DAY MINIMUM	463	Aug 18	488	Aug 27	245	Sep 21 1966
INSTANTANEOUS PEAK FLOW	---		6490	Nov 5	65600	Dec 4 1982
INSTANTANEOUS PEAK STAGE	---		15.17 ^b	Nov 5	21.68 ^c	Dec 4 1982
INSTANTANEOUS LOW FLOW	---		441	Oct 11-12	180	Sep 25-26 1966
ANNUAL RUNOFF (INCHES)	20.01		16.08		14.85	
10 PERCENT EXCEEDS	3270		2410		3280	
50 PERCENT EXCEEDS	1880		1290		826	
90 PERCENT EXCEEDS	544		552		381	

^aPost-regulation period.

^bRecorded peak. Actual peak higher.

^cFormer datum.

07065495 JACKS FORK AT ALLEY SPRING, MO

LOCATION.--Lat 37°08'53", long 91°26'35", in SW 1/4 SW 1/4 SE 1/4 sec.25, T.29 N., R.5 W., Shannon County, Hydrologic Unit 11010008, on downstream end of pier on foot bridge, just downstream of Highway 106 bridge, 0.5 mi upstream from Alley Spring Branch, and 5.5 mi west of Eminence.

DRAINAGE AREA.--298 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1993 to current year.

GAGE.--Water stage recorder. Datum of gage is 652.74 ft above sea level.

REMARKS.--No estimated daily discharges. Water-discharge records good.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	71	154	143	263	795	207	3310	249	167	95	90
2	70	71	148	138	246	544	202	2980	243	159	94	88
3	70	74	145	132	230	433	196	1060	263	181	96	99
4	69	111	142	127	213	371	190	730	255	251	99	100
5	70	2740	139	125	198	337	183	568	227	237	97	94
6	70	1930	134	129	188	310	180	467	223	210	98	91
7	69	571	132	133	182	2090	178	420	294	191	105	90
8	72	341	130	128	177	1720	177	1490	295	173	137	92
9	76	288	245	125	170	834	176	1580	302	158	124	92
10	79	511	619	127	168	601	177	1030	1100	149	177	90
11	75	376	365	131	167	490	821	740	1800	140	242	89
12	73	287	280	136	161	420	810	572	1010	135	159	89
13	74	240	236	150	155	373	492	468	677	130	133	89
14	73	223	207	2080	155	338	375	410	496	125	122	89
15	73	338	189	951	163	310	321	358	404	121	116	88
16	72	338	183	561	181	289	285	327	346	118	111	105
17	72	279	194	409	229	272	258	319	305	114	108	102
18	73	241	202	335	214	258	245	407	277	111	106	96
19	81	212	189	358	205	249	231	391	256	108	105	93
20	87	201	182	454	196	246	350	336	240	105	107	95
21	84	512	200	381	188	236	651	308	227	104	101	94
22	81	453	242	338	179	225	431	295	214	104	98	92
23	78	303	226	305	175	220	368	279	203	105	96	90
24	76	248	208	273	169	208	551	262	223	113	95	90
25	74	220	193	249	162	199	485	253	291	122	94	90
26	73	202	180	238	163	195	394	248	230	118	94	90
27	72	191	170	244	2400	212	341	337	209	110	93	90
28	71	188	163	345	1810	290	295	407	192	106	92	88
29	71	175	158	393	---	251	291	352	188	102	90	86
30	71	163	151	330	---	229	864	293	179	99	90	88
31	71	---	147	287	---	215	---	264	---	96	91	---
MEAN	73.9	403	202	331	325	444	357	686	381	137	112	92.0
MAX	87	2740	619	2080	2400	2090	864	3310	1800	251	242	105
MIN	69	71	130	125	155	195	176	248	179	96	90	86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	1993	1994	1995	1994	1995	1995	1995	1995	1995	1995	1995	1995
MEAN	167	915	286	306	362	464	676	558	243	122	98.7	404
MAX	260	1426	369	331	399	484	1121	755	381	137	112	1007
(WY)	1994	1994	1994	1995	1994	1994	1994	1994	1995	1995	1995	1993
MIN	73.9	403	202	281	325	444	357	233	133	103	78.0	92.0
(WY)	1995	1995	1995	1994	1995	1995	1995	1993	1993	1993	1993	1995

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1993 - 1995

ANNUAL MEAN	355	295	382
HIGHEST ANNUAL MEAN			469
LOWEST ANNUAL MEAN			295
HIGHEST DAILY MEAN	6500	Apr 12	3310
LOWEST DAILY MEAN	69	Oct 4, 7	69
ANNUAL SEVEN-DAY MINIMUM	70	Oct 1	70
INSTANTANEOUS PEAK FLOW	---		10100
INSTANTANEOUS PEAK STAGE	---		14.84
INSTANTANEOUS LOW FLOW	---		69
10 PERCENT EXCEEDS	644		502
50 PERCENT EXCEEDS	175		191
90 PERCENT EXCEEDS	77		88

07065495 JACKS FORK AT ALLEY SPRING, MO--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CACO ₃) (39086)
OCT 20...	1130	88	16.0	349	8.1	9.7	97	22	K13	25	194
NOV 29...	1230	175	8.0	296	8.2	10.3	86	K2	K1	K6	162
DEC 15...	1030	191	8.0	286	8.1	10.7	89	K9	K9	K16	148
JAN 25...	1300	249	5.5	275	8.2	12.7	99	K3	<1	K2	152
FEB 22...	1630	179	9.0	311	8.4	12.6	125	<1	<1	K1	171
MAR 21...	1200	236	13.0	283	8.2	10.9	103	K3	K5	K3	153
APR 11...	1700	1860	15.5	300	8.2	8.8	88	1500	810	1000	156
MAY 22...	1330	295	18.5	280	8.3	9.9	104	K4	K2	190	142
JUN 13...	1130	665	16.5	256	8.0	9.5	96	110	96	340	126
JUL 06...	1200	210	21.5	317	8.3	8.8	99	K20	K11	42	169
AUG 09...	1330	124	25.5	306	8.2	8.1	98	42	37	K17	160

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)
OCT											
20...	236	0	0.120	<0.010	<0.015	<0.20	<0.20	0.010	0.010	<0.010	180
NOV											
29...	198	0	0.180	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	160
DEC											
15...	181	0	0.110	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	150
JAN											
25...	186	0	0.260	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	0.010	150
FEB											
22...	208	0	0.110	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	170
MAR											
21...	187	0	0.150	0.010	0.050	<0.20	<0.20	<0.010	<0.010	<0.010	150
APR											
11...	190	0	0.150	<0.010	<0.015	0.50	<0.20	0.050	<0.010	<0.010	150
MAY											
22...	173	0	0.130	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	150
JUN											
13...	153	0	0.150	<0.010	0.020	0.30	<0.20	0.040	<0.010	<0.010	140
JUL											
06...	206	0	0.230	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	170
AUG											
09...	195	0	0.170	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	<0.010	160

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07065495 JACKS FORK AT ALLEY SPRING, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDEd (MG/L) (80154)
OCT 20...	36	23	1.3	1.3	2.4	1.8	<0.10	7.7	183	12
NOV 29...	31	19	1.2	1.1	3.2	1.9	<0.10	6.1	160	41
DEC 15...	30	19	1.2	1.0	3.2	2.4	<0.10	6.3	147	1
JAN 25...	30	18	1.1	0.90	3.0	1.8	<0.10	6.3	146	1
FEB 22...	34	20	1.3	0.90	3.5	2.2	0.10	5.1	158	2
MAR 21...	30	18	1.2	1.1	2.8	2.5	<0.10	4.9	144	1
APR 11...	32	18	1.1	1.4	2.3	2.6	<0.10	6.2	174	110
MAY 22...	31	17	1.1	1.1	2.2	1.7	<0.10	6.4	145	13
JUN 13...	28	16	1.1	1.2	2.8	1.5	<0.10	8.2	138	23
JUL 06...	34	20	1.2	1.2	2.0	1.6	<0.10	8.3	167	32
AUG 09...	32	20	1.3	1.7	2.4	2.0	<0.10	9.4	166	21

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)
OCT 20...	<1	26	<1	<1	4	<1	<1	4	<1
NOV 29...	<1	26	<1	<1	1	<1	<1	3	<1
DEC 15...	<1	27	<1	<1	3	<1	<1	6	<1
JAN 25...	<1	25	<1	<1	1	<1	<1	6	<1
FEB 22...	<1	26	<1	<1	<1	<1	<1	<3	<1
MAR 21...	<1	27	<1	<1	1	<1	<1	<3	<1
APR 11...	<1	30	<1	<1	5	<1	<1	43	<1
MAY 22...	--	--	--	--	--	--	--	<3	--
JUN 13...	<1	29	<1	<1	<1	<1	<1	18	<1
JUL 06...	--	--	--	--	--	--	--	5	--
AUG 09...	<1	35	<1	<1	1	<1	<1	<3	<1

07065495 JACKS FORK AT ALLEY SPRING, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
OCT 20...	<1	<1	2	<1	<1	<1	0.6	0.1
NOV 29...	<1	<1	2	<1	<1	<1	0.7	0.1
DEC 15...	<1	<1	2	<1	<1	<1	1.0	0.1
JAN 25...	<1	<1	2	<1	<1	1	0.8	0.1
FEB 22...	1	<1	<1	<1	<1	1	0.6	0.1
MAR 21...	1	<1	1	<1	<1	<1	0.8	>0.1
APR 11...	4	<1	<1	<1	<1	2	2.6	0.5
MAY 22...	3	--	--	--	--	--	0.7	0.1
JUN 13...	3	<1	3	<1	<1	1	1.7	0.2
JUL 06...	2	--	--	--	--	--	1.0	0.1
AUG 09...	2	<1	2	<1	<1	1	1.0	0.1

07065495 JACKS FORK AT ALLEY SPRING, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER FLTRD GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD GF, REC (µG/L) (82682)	
	APR 11...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
	MAY 22...	<0.01	<0.01	<0.01	<0.02	E0.004	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
JUN 13...	<0.002	<0.002	<0.002	E0.003	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	
DATE	P, P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THON, DIS- SOLVED (µG/L) (39532)	
	APR 11...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
	MAY 22...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
JUN 13...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005	
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	
	APR 11...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01	
	MAY 22...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.01	<0.01	
JUN 13...	<0.001	<0.01	E0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02	
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)		
	APR 11...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	
	MAY 22...	<0.01	<0.02	<0.02	<0.01	<0.01	E0.01	<0.03	<0.01	<0.01	<0.01	<0.01	
JUN 13...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002		

E--Laboratory estimated value.

07066000 JACKS FORK AT EMINENCE, MO

LOCATION.--Lat 37°9'18", long 91°21'31", in SW 1/4 NW 1/4 sec.26, T.29 N., R.4 W., Shannon County, Hydrologic Unit 11010008, on left bank 50 ft upstream from bridge on State Highway 19, at Eminence, 1.5 mi downstream from Mahans Creek and 8.0 mi upstream from mouth.

DRAINAGE AREA.--398 mi².

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1311.

REVISED RECORDS.--WSP 787: 1928(M), 1934. WSP 877: 1938. WSP 927: Drainage area. WSP 1281: 1929. WDR MO-85-1(M).

GAGE.--Water-stage recorder. Datum of gage is 617.87 ft above sea level. Prior to Jan. 27, 1934, nonrecording gage at site 1,350 ft upstream at datum 2.11 ft higher. Jan. 27, 1934, to Jan. 10, 1935, nonrecording gage at site 75 ft downstream at datum 0.04 ft lower. Jan. 11, 1935, to July 9, 1964, nonrecording gage at site 50 ft downstream at present datum.

REMARKS.--Estimated daily discharges: May 7-9. Records good. Several observations of water temperature and specific conductance were made during the year. National Weather Service gage-height telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of 1895 and March 1904 reached a stage of about 25 ft, present site and datum, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	214	339	325	529	1600	384	3600	458	330	238	200
2	211	213	321	310	502	1130	373	4610	490	316	235	199
3	211	218	307	294	471	880	358	2200	477	443	235	227
4	213	371	298	282	440	749	342	1650	463	493	240	269
5	214	2920	288	275	411	689	328	1270	428	479	238	217
6	216	3470	279	294	390	646	319	1020	419	422	248	197
7	215	1240	272	302	373	2700	314	930	479	386	267	196
8	220	794	270	290	357	3100	310	2400	523	359	305	196
9	227	686	514	280	338	1720	309	2700	615	330	295	196
10	234	949	1200	281	335	1260	307	1800	1660	313	311	196
11	228	814	853	291	333	1000	1090	1360	3160	299	460	195
12	223	640	664	307	318	846	1410	1100	2080	288	326	193
13	223	573	563	371	302	750	864	943	1490	280	280	193
14	222	549	502	2630	303	686	665	803	1070	341	259	193
15	220	709	458	1760	326	630	576	675	840	315	246	190
16	220	758	445	1150	360	590	522	598	687	297	235	223
17	217	645	463	864	451	559	481	604	587	291	227	215
18	222	565	483	710	437	532	459	900	531	283	221	200
19	250	502	455	775	418	517	431	843	491	276	219	194
20	254	478	439	916	401	510	547	687	465	273	223	193
21	251	925	466	784	385	492	1120	600	443	268	214	193
22	242	973	552	694	366	470	766	556	421	262	207	193
23	235	691	533	617	354	452	669	524	403	264	202	193
24	229	570	499	558	338	424	932	490	403	294	202	192
25	224	511	467	516	320	398	875	469	539	304	202	190
26	220	467	438	493	320	388	728	497	447	293	201	190
27	216	444	415	500	2360	419	637	618	415	278	199	190
28	215	433	392	617	3180	527	557	748	378	263	199	190
29	214	401	373	718	---	483	582	650	375	254	199	190
30	214	368	354	632	---	438	1420	538	354	244	199	190
31	214	---	339	563	---	405	---	485	---	241	200	---
MEAN	223	770	459	626	551	838	622	1189	720	315	243	200
MAX	254	3470	1200	2630	3180	3100	1420	4610	3160	493	460	269
MIN	211	213	270	275	302	388	307	469	354	241	199	190
IN.	.65	2.16	1.33	1.81	1.44	2.43	1.75	3.45	2.02	.91	.70	.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922-1995, BY WATER YEAR (WY)

	225	423	460	480	552	706	848	740	472	259	207	207
MEAN	225	423	460	480	552	706	848	740	472	259	207	207
MAX	1092	2057	2462	2065	1906	1944	2920	2168	2745	1682	984	1439
(WY)	1985	1994	1983	1949	1985	1945	1927	1950	1928	1951	1927	1993
MIN	76.5	98.1	96.9	89.8	120	139	203	129	109	84.8	82.6	73.1
(WY)	1957	1955	1956	1956	1934	1956	1954	1936	1936	1934	1954	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1922-1995
ANNUAL MEAN	676	563	463
HIGHEST ANNUAL MEAN			1072
LOWEST ANNUAL MEAN			154
HIGHEST DAILY MEAN	8720	4610	31800
LOWEST DAILY MEAN	208	190	67
ANNUAL SEVEN-DAY MINIMUM	212	190	70
INSTANTANEOUS PEAK FLOW	---	9350	58500
INSTANTANEOUS PEAK STAGE	---	8.88	17.82
INSTANTANEOUS LOW FLOW	---	187	64
ANNUAL RUNOFF (INCHES)	23.05	19.21	15.82
10 PERCENT EXCEEDS	1210	984	900
50 PERCENT EXCEEDS	432	403	246
90 PERCENT EXCEEDS	223	211	123

07066110 JACKS FORK ABOVE TWO RIVER
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°10'22", long 91°18'00", in NE 1/4 NW 1/4 sec.20, T.29 N., R.3 W., Shannon County, Hydrologic Unit 11010008, at Shawnee Campground 4.5 mi downstream from the Eminence sewage disposal pond.

DRAINAGE AREA.--425 mi².

PERIOD OF RECORD.--April 1973 to current year.

REMARKS.--Ozark National Scenic Riverways station since April 1973 and ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (000010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (000400)	OXYGEN, DIS- SOLVED (MG/L) (000300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (000301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (000340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO ₃) (000410)
NOV 07...	1100	718	13.5	264	6.87	10.2	96	--	K4	400	176
JAN 23...	1630	700	5.0	377	7.08	13.2	101	<10	K13	K8	91
MAR 14...	0945	280	12.0	257	7.04	10.8	97	--	K74	40	170
APR 18...	0930	521	16.0	479	7.32	10.2	102	--	56	110	177
JUN 19...	1200	554	19.5	263	7.98	10.1	108	<10	M	51	140
JUL 11...	0945	350	21.5	330	7.73	8.4	93	--	48	44	193
AUG 07...	1040	262	21.0	335	7.71	8.2	93	--	1500	800	155

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (000450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (000447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (000630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (000615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (000610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS P) (000625)	PHOS- PHORUS TOTAL (MG/L AS P) (000665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CACO ₃) (000900)	CALCIUM DIS- SOLVED (MG/L AS CA) (000915)
NOV 07...	215	0	0.430	<0.010	<0.010	<0.20	<0.020	0.010	--	--
JAN 23...	106	0	0.360	<0.010	<0.010	<0.20	<0.020	<0.010	140	29
MAR 14...	215	0	0.370	<0.010	0.020	<0.20	<0.020	0.010	--	--
APR 18...	208	0	0.280	<0.010	0.020	<0.20	<0.020	<0.010	--	--
JUN 19...	172	0	0.220	<0.010	0.010	<0.20	<0.020	<0.010	150	31
JUL 11...	238	0	0.340	0.010	0.010	<0.20	<0.020	0.010	--	--
AUG 07...	191	0	0.380	<0.010	0.020	0.20	0.120	0.010	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (000925)	SODIUM, DIS- SOLVED (MG/L AS NA) (000930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (000935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (000945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (000940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (000950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (000530)	ALUM- INUM, TOTAL RECOV- ERABLE (MG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (MG/L AS AL) (01106)
JAN 23...	17	1.4	1.0	3.9	38	<0.10	176	<1	30	<20
JUN 19...	18	1.5	1.1	3.0	2.2	<0.10	150	8	60	30

DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CU) (01027)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	COPPER, DIS- SOLVED (µG/L AS FE) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
JAN 23...	<1	<1.0	1	8	<1	<1	2	0.20	<4	<4
JUN 19...	<1	<1.0	<1	14	2	1	6	0.30	4	<4

K--Results are based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

07067000 CURRENT RIVER AT VAN BUREN, MO

LOCATION.--Lat 36°59'29", long 91°00'53", in NE 1/4 NW 1/4 sec.25, T.27 N., R.1 W., Carter County, Hydrologic Unit 11010008, near right bank on downstream side of bridge pier on U.S. Highway 60 in Van Buren, 0.4 mi downstream from Pike Creek, 4.7 mi upstream from Big Creek and at mile 90.4.

DRAINAGE AREA.--1,667 mi².

PERIOD OF RECORD.--October 1912 to current year. Prior to July 1921 monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 877: 1938. WSP 897: 1939. WSP 927: Drainage area. WSP 1281: 1929.

GAGE.--Water-stage recorder. Datum of gage is 442.78 ft above sea level. Prior to Sept. 1, 1926, nonrecording gage at site 100 ft downstream at different datum; Sept. 1, 1926, to Oct. 19, 1934, nonrecording gage and Oct. 20, 1934, to Sept. 30, 1939, water-stage recorder, at present site and datum 3.00 ft higher, set to read same as gage 100 ft downstream.

REMARKS.--Estimated daily discharges: Aug. 24 and Sept. 30. Records fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 26, 1904, reached a stage of 29.0 ft, present datum, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	1250	2030	1760	2550	5500	2160	6160	3270	2300	1340	1070
2	1260	1250	1940	1710	2470	4270	2120	15400	3090	2160	1340	1010
3	1260	1260	1900	1660	2380	3670	2080	8510	3060	2250	1380	1080
4	1260	2210	1840	1620	2290	3320	2030	6260	2870	3550	1380	1560
5	1250	8810	1800	1580	2180	3070	1980	5280	2750	3160	1340	1790
6	1250	11000	1760	1670	2100	2900	1940	4570	2970	2750	1310	1350
7	1250	5140	1720	1720	2040	6140	1920	4100	2720	2560	1340	1180
8	1290	3620	1680	1690	1980	15200	1900	5160	2790	2680	1370	1120
9	1330	3180	2280	1670	1940	7710	1890	8840	3600	3280	1380	1090
10	1300	3310	3240	1660	1910	5860	1880	6870	4600	2800	1350	1060
11	1280	3400	3080	1690	1890	4980	2260	5780	8710	2450	1400	1040
12	1270	2980	2680	1730	1850	4410	3740	4910	6930	2230	1420	1030
13	1280	2670	2440	1790	1790	4010	3470	4350	5410	2080	1280	1030
14	1280	2530	2270	3640	1790	3690	3020	3950	4410	1970	1210	1010
15	1270	2660	2130	5920	1910	3430	2760	3570	3800	1980	1170	995
16	1260	2980	2110	3640	2040	3190	2590	3260	3380	1840	1150	1170
17	1250	2800	2170	3720	2140	3000	2470	3130	3060	1780	1120	1160
18	1270	2600	2160	3310	2180	2840	2390	4840	2840	1720	1110	1080
19	1400	2410	2110	3780	2130	2730	2290	4700	2660	1650	1100	1030
20	1410	2340	2090	4190	2100	2680	2340	3900	2540	1600	1100	1070
21	1360	2990	2160	3870	2040	2590	3040	3450	2450	1610	1090	1050
22	1330	3690	2320	3510	1990	2510	3310	3190	2360	1600	1060	1020
23	1310	3250	2380	3230	1950	2440	3040	2980	2260	1600	1040	987
24	1280	2850	2290	3000	1900	2350	3120	2820	2200	1640	1030	975
25	1260	2610	2200	2800	1850	2260	3380	2810	2710	1750	1020	969
26	1250	2450	2110	2630	1820	2210	3180	3250	2980	1660	1010	969
27	1240	2410	2030	2560	3650	2300	2960	3760	3170	1570	1010	964
28	1250	2390	1970	2620	7780	2480	2760	4220	2770	1510	996	951
29	1250	2270	1900	2860	---	2420	2710	4930	2770	1450	986	942
30	1250	2140	1840	2830	---	2300	3490	4010	2470	1400	979	940
31	1250	---	1800	2660	---	2220	---	3530	---	1370	981	---
MEAN	1281	3182	2143	2668	2309	3828	2607	4919	3387	2063	1187	1090
MAX	1410	11000	3240	5920	7780	15200	3740	15400	8710	3550	1420	1790
MIN	1240	1250	1680	1580	1790	2210	1880	2810	2200	1370	979	940
IN.	.89	2.13	1.48	1.85	1.44	2.65	1.75	3.40	2.27	1.43	.82	.73

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	1091	1750	1944	2030	2230	2799	3434	3072	2138	1330	1096	1032
MAX	4087	7171	10740	7357	6764	7148	11730	8256	9761	6465	3581	3860	
(WY)	1985	1994	1983	1950	1985	1945	1927	1957	1928	1951	1927	1993	
MIN	492	573	535	538	658	778	805	679	628	575	532	495	
(WY)	1957	1955	1956	1956	1934	1941	1956	1936	1936	1936	1954	1956	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

ANNUAL MEAN	2840		2557		1992		
HIGHEST ANNUAL MEAN					4811		1985
LOWEST ANNUAL MEAN					799		1954
HIGHEST DAILY MEAN	32600	Apr 12	15400	May 2	72000	Nov 15	1993
LOWEST DAILY MEAN	1240	Oct 27	940	Sep 30	476	Oct 8	1956
ANNUAL SEVEN-DAY MINIMUM	1250	Oct 26	959	Sep 24	479	Oct 6	1956
INSTANTANEOUS PEAK FLOW	---		18600	Mar 8	125000	Aug 21	1915
INSTANTANEOUS PEAK STAGE	---		11.81	Mar 8	27.39	Nov 15	1993
INSTANTANEOUS LOW FLOW	---		940	Sep 29, 30 ^a	473	Oct 7	1956
ANNUAL RUNOFF (INCHES)	23.13		20.83		16.23		
10 PERCENT EXCEEDS	4440		4050		3730		
50 PERCENT EXCEEDS	2160		2200		1250		
90 PERCENT EXCEEDS	1310		1110		695		

^aSept. 30 estimated.

07067000 CURRENT RIVER AT VAN BUREN, MO--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1995 to September 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)
JAN 30...	1400	2860	6.5	278	8.3	12.9	102	K2	<1	<1	148
FEB 23...	1400	1950	10.0	307	8.2	12.2	107	K2	K1	K4	157
MAR 21...	1530	2580	14.0	254	8.3	10.9	105	K4	<1	K1	133
APR 12...	1400	4140	12.5	298	8.2	10.2	94	100	42	120	141
MAY 02...	1530	18500	11.0	172	7.8	11.4	101	1600	2000	4500	138
18...	1430	5360	18.0	241	8.2	8.7	92	210	K190	480	122
JUN 14...	1400	4450	17.5	259	8.2	9.7	99	92	42	K33	132
JUL 10...	1400	2840	21.5	266	8.2	9.2	102	34	21	K14	138
AUG 14...	1400	1210	24.0	321	8.4	9.4	110	K9	K7	K3	164
SEP 27...	1330	969	14.5	335	8.3	10.7	103	K14	K16	K3	177

K--Results based on colony count outside the acceptable range (non-ideal colony count).

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHATE DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)
JAN 30...	180	0	0.330	<0.010	0.020	<0.20	<0.20	<0.010	0.010	0.020	140
FEB 23...	191	0	0.230	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	160
MAR 21...	162	0	0.320	0.010	0.030	<0.20	<0.20	<0.010	<0.010	<0.010	130
APR 12...	172	0	0.210	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	150
MAY 02...	168	0	0.140	<0.010	<0.015	0.50	0.40	0.090	<0.010	0.020	85
18...	149	0	0.170	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	130
JUN 14...	161	0	0.210	<0.010	0.020	0.20	<0.20	0.020	<0.010	<0.010	140
JUL 10...	168	0	0.230	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	140
AUG 14...	201	0	0.280	<0.010	<0.015	<0.20	<0.20	0.020	0.030	<0.010	170
SEP 27...	216	0	0.310	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	180

07067000 CURRENT RIVER AT VAN BUREN, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)
JAN 30...	30	17	1.5	0.80	3.3	2.0	<0.10	6.9	151	2
FEB 23...	33	20	1.8	0.80	3.3	2.4	<0.10	6.0	156	2
MAR 21...	27	15	1.4	0.90	3.6	2.5	<0.10	6.2	128	2
APR 12...	32	18	1.4	0.90	2.9	2.9	<0.10	6.2	176	33
MAY 02...	18	9.6	0.80	1.1	3.5	1.1	<0.10	7.2	100	180
18...	27	15	1.2	0.90	2.8	1.8	<0.10	7.2	132	26
JUN 14...	28	16	1.3	1.0	3.6	2.1	<0.10	7.9	142	34
JUL 10...	29	16	1.6	0.90	3.8	2.1	<0.10	7.9	140	30
AUG 14...	34	20	1.9	1.0	3.0	2.6	<0.10	9.1	170	32
SEP 27...	36	22	1.9	0.90	2.8	2.5	<0.10	7.9	170	24

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)
JAN 30...	<1	28	<1	<1	2	<1	<1	10	<1
FEB 23...	<1	30	<1	<1	<1	<1	<1	3	<1
MAR 21...	--	--	--	--	--	--	--	13	--
APR 12...	<1	31	<1	<1	5	<1	<1	14	<1
MAY 02...	<1	22	<1	<1	2	<1	2	110	<1
18...	--	--	--	--	--	--	--	38	--
JUN 14...	<1	30	<1	<1	<1	<1	<1	14	<1
JUL 10...	--	--	--	--	--	--	--	10	--
AUG 14...	<1	35	<1	<1	1	<1	<1	4	<1
SEP 27...	<1	33	<1	<1	1	<1	<1	<3	<1

07067000 CURRENT RIVER AT VAN BUREN, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
JAN 30...	3	<1	3	<1	<1	2	0.8	0.2
FEB 23...	3	<1	1	<1	<1	2	0.6	0.1
MAR 21...	4	--	--	--	--	--	0.9	0.1
APR 12...	3	<1	<1	<1	<1	2	1.2	2.9
MAY 02...	9	<1	1	<1	<1	14	3.9	3.6
18...	5	--	--	--	--	--	1.2	0.2
JUN 14...	6	<1	3	<1	<1	<1	1.2	0.2
JUL 10...	4	--	--	--	--	--	1.1	0.2
AUG 14...	3	<1	1	<1	<1	<1	0.6	0.2
SEP 27...	2	<1	<1	<1	<1	<1	0.4	0.2

07067000 CURRENT RIVER AT VAN BUREN, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER, FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (mG/L) (82682)	
	APR 12...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
	MAY 02...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
18...	<0.01	<0.01	<0.01	E0.003	E0.004	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004	
JUN 14...	<0.002	<0.002	<0.002	0.01	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002	
DATE	P,P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THON, DIS- SOLVED (µG/L) (39532)	
APR 12...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	
MAY 02...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	
18...	E0.001	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01	
JUN 14...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005	
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THON WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THON, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	
APR 12...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	
MAY 02...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01	
18...	<0.04	<0.03	E0.003	<0.01	0.01	<0.01	<0.02	<0.01	<0.02	E0.001	<0.01	<0.01	
JUN 14...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	<0.02	
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)		
APR 12...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01		
MAY 02...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01		
18...	<0.01	<0.02	E0.005	<0.01	<0.01	E0.01	<0.03	<0.01	E0.003	<0.01	<0.01		
JUN 14...	<0.003	<0.01	<0.004	<0.01	<0.005	E0.005	<0.01	<0.01	<0.002	<0.001	<0.002		

E--Laboratory estimated value.

07067500 BIG SPRING NEAR VAN BUREN, MO

LOCATION.--Lat. 36°57'05", long 90°59'36", in SW 1/4 NE 1/4 sec.6, T. 26 N., R. 1 E., Carter County, Hydrologic Unit 11010008, on right bank 400 feet downstream from spring outlet, 0.4 mile upstream from Current River, and 3.5 miles southeast of Van Buren.

WATER-DISCHARGE RECORDS

PERIOD OF RECORDED.--October 1921 to current year. Prior to Oct. 1, 1923, published as "near Chicopee". Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1311: 1922-23, 1928(M), 1929.

GAGE.--Nonrecording gage. Datum of gage is 429.08 ft above sea level. Prior to Feb. 19, 1971, nonrecording gage; prior to Oct. 1, 1934 at datum 1.0 ft. higher. Water-stage recorder Feb. 19, 1971 to Mar. 15, 1978, at present datum.

REMARKS.--Estimated daily discharges: Oct. 1-8, Nov. 12 to Dec. 22, Jan. 24 to Feb. 9, Feb. 21 to Mar. 1, Mar. 11-16, 26-31, Apr. 6 to May 18, and May 29 to June 1. Water-discharge records 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	700	393	680	472	660	610	554	840	605	604	562	479
2	650	391	680	468	645	609	541	810	597	596	560	482
3	620	387	695	464	630	607	534	790	582	588	557	490
4	600	385	700	461	620	597	528	775	590	580	557	497
5	580	385	695	457	605	584	542	770	584	573	552	494
6	555	380	680	456	595	578	555	780	598	568	549	488
7	540	379	668	456	590	561	560	800	606	564	549	483
8	520	378	650	451	585	564	560	810	610	572	545	477
9	505	369	640	446	580	586	565	800	604	575	539	472
10	491	366	630	443	571	598	680	790	593	572	537	466
11	482	361	620	439	552	620	780	780	592	574	533	458
12	464	400	610	441	541	640	900	760	591	572	530	456
13	454	540	620	439	533	640	920	740	588	571	529	453
14	447	780	635	430	525	635	906	720	581	571	525	452
15	440	870	640	425	512	620	890	710	577	572	519	450
16	440	890	630	424	503	615	870	700	572	572	518	444
17	426	885	610	421	498	606	860	690	571	578	514	446
18	421	880	600	417	492	593	845	680	569	579	508	438
19	423	870	580	414	486	580	835	673	567	574	509	435
20	427	860	565	410	504	575	820	655	562	571	509	432
21	427	840	560	407	580	566	805	636	559	568	506	436
22	416	830	550	406	635	556	790	621	553	564	503	431
23	408	810	543	410	642	557	780	612	550	563	497	429
24	406	780	534	473	640	553	770	608	560	560	497	425
25	401	760	522	590	635	553	760	594	559	557	492	420
26	399	750	515	660	625	580	750	589	579	570	485	417
27	401	740	510	680	620	585	740	593	579	581	481	414
28	400	730	505	700	615	585	745	586	624	574	479	410
29	399	715	497	690	---	580	780	600	626	565	481	407
30	399	700	484	685	---	565	860	610	614	563	477	403
31	398	---	476	680	---	555	---	620	---	561	478	---
MEAN	472	627	598	491	579	589	734	701	585	573	519	449
MAX	700	890	700	700	660	640	920	840	626	604	562	497
MIN	398	361	476	406	486	553	528	586	550	557	477	403
IN.	5.45	7.00	6.89	5.66	6.03	6.79	8.19	8.09	6.53	6.60	5.98	5.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1994, BY WATER YEAR (WY)

MEAN	345	388	416	442	464	522	579	561	485	415	377	351
MAX	599	769	1070	828	823	836	902	944	950	772	702	525
(WY)	1950	1986	1983	1937	1949	1945	1973	1957	1927	1928	1927	1927
MIN	243	248	252	247	279	279	279	261	253	249	252	250
(WY)	1957	1957	1956	1956	1977	1936	1936	1936	1936	1936	1936	1956

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR	FOR 1994 WATER YEAR	WATER YEARS 1922 - 1994
ANNUAL MEAN	524	576	445
HIGHEST ANNUAL MEAN			648
LOWEST ANNUAL MEAN			289
HIGHEST DAILY MEAN	950 ^a	Jan 5	2000 ^a
LOWEST DAILY MEAN	355	Sep 23	236
ANNUAL SEVEN-DAY MINIMUM	358	Sep 17	238
10 PERCENT EXCEEDS	700		690
50 PERCENT EXCEEDS	500		394
90 PERCENT EXCEEDS	393		290

^aEstimated due to backwater from Current River.

07067500 BIG SPRING NEAR VAN BUREN, MO

LOCATION.--Lat 36°57'05", long 90°59'36", in SW 1/4 NE 1/4 sec.6, T. 26 N., R. 1 E., Carter County, Hydrologic Unit 11010008, on right bank 400 feet downstream from spring outlet, 0.4 mile upstream from Current River and 3.5 miles southeast of Van Buren.

WATER-DISCHARGE RECORDS

PERIOD OF RECORDED.--October 1921 to current year. Prior to Oct. 1, 1923, published as "near Chicopee". Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1311: 1922-23, 1928(M), 1929.

GAGE.--Nonrecording gage. Datum of gage is 429.08 ft. above sea level. Prior to Feb. 19, 1971, nonrecording gage; prior to Oct. 1, 1934 at datum 1.0 ft. higher. Water-stage recorder Feb. 19, 1971 to Mar. 15, 1978, at present datum.

REMARKS.--Estimated daily discharges: Nov. 4-12, 20-23, Jan. 14-24, Feb. 27 to Mar. 3, Mar. 7-15, Apr. 12-14, May 1-8, 10-22, May 27 to June 1, June 10-14, and 16. Water-discharge records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	403	370	561	477	571	780	508	800	590	545	465	419
2	395	371	553	472	557	720	509	900	562	538	464	417
3	394	424	545	465	543	680	509	880	541	586	461	419
4	389	600	538	460	535	644	505	800	529	627	460	428
5	391	800	533	457	526	612	503	740	522	614	460	428
6	389	850	520	457	509	571	499	700	543	572	456	425
7	387	830	505	459	510	680	493	650	514	555	452	425
8	383	810	493	463	508	780	488	670	534	570	446	421
9	381	790	488	470	505	850	486	690	623	606	442	418
10	382	770	496	477	503	820	515	750	680	578	438	413
11	382	760	509	476	498	770	555	720	760	545	422	410
12	381	750	525	473	492	720	600	700	740	533	415	409
13	379	740	542	497	490	700	620	680	700	529	411	407
14	380	723	545	600	493	660	610	660	680	528	424	407
15	380	702	546	675	523	640	599	630	670	521	421	406
16	379	697	548	700	560	614	599	611	660	521	420	406
17	376	693	548	700	574	597	596	618	643	521	420	405
18	375	693	548	690	575	578	592	680	631	513	420	403
19	375	695	544	700	564	566	584	700	619	510	417	402
20	375	700	546	750	563	555	589	660	604	509	420	397
21	378	710	545	730	560	546	620	620	593	510	422	396
22	379	700	541	710	553	538	648	590	585	513	421	393
23	381	680	534	680	549	530	636	565	578	505	420	392
24	381	663	529	660	544	523	651	559	569	502	417	388
25	382	624	520	637	534	518	674	564	575	498	417	386
26	384	613	510	611	522	513	664	570	591	495	429	384
27	385	604	502	595	600	510	648	600	582	494	419	380
28	384	596	496	599	700	509	638	660	575	488	414	378
29	380	583	483	611	---	506	628	700	566	482	417	377
30	377	568	482	602	---	505	689	660	554	477	417	376
31	373	---	482	587	---	503	---	620	---	469	417	---
MEAN	383	670	524	579	541	621	582	676	604	531	430	404
MAX	403	850	561	750	700	850	689	900	760	627	465	428
MIN	373	370	482	457	490	503	486	559	514	469	411	376
IN.	4.41	7.48	6.05	6.67	5.64	7.16	6.49	7.79	6.74	6.12	4.96	4.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1995, BY WATER YEAR (WY)

	MEAN	346	391	417	443	465	523	579	562	486	416	377	352
MAX	599	769	1070	828	823	836	902	944	950	772	702	525	
(WY)	1950	1986	1983	1937	1949	1945	1973	1957	1927	1928	1927	1927	
MIN	243	248	252	247	279	279	279	261	253	249	252	250	
(WY)	1957	1957	1956	1956	1977	1936	1936	1936	1936	1936	1936	1956	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1922 - 1995

ANNUAL MEAN	566	545	446	
HIGHEST ANNUAL MEAN			648	1950
LOWEST ANNUAL MEAN			289	1936
HIGHEST DAILY MEAN	920 ^a	Apr 13	900 ^a	May 2
LOWEST DAILY MEAN	370	Nov 1	370	Nov 1
ANNUAL SEVEN-DAY MINIMUM	377	Oct 16	377	Oct 16
10 PERCENT EXCEEDS	754		700	
50 PERCENT EXCEEDS	562		538	
90 PERCENT EXCEEDS	407		390	

^a Estimated due to backwater from Current River

07067500 BIG SPRING NEAR VAN BUREN, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION.--Lat 36°57'05", long 90°59'36", in SW 1/4 NE 1/4 sec.6, T.26 N., R.1 E., Carter County, Hydrologic Unit 11010008, 0.4 mi upstream from Current River and 3.5 mi southeast of Van Buren.

PERIOD OF RECORD.--April 1973 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993, Ozark Scenic Riverways station since April 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (MG/L) (00300)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR (COLS./100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	
NOV 07...	1315	830	13.5	257	6.90	9.5	88	--	K2	150	148
JAN 23...	1430	680	14.0	288	7.08	9.2	87	<10	K8	32	141
MAR 14...	1130	660	12.5	255	7.28	10.1	92	--	K67	90	160
APR 18...	1200	592	15.5	320	7.28	9.6	94	--	K4	52	163
JUN 19...	1430	619	14.0	239	7.17	9.1	86	<10	M	170	128
JUL 11...	1145	545	15.0	314	7.23	9.4	90	--	K8	30	158
AUG 07...	1300	452	15.0	336	7.47	8.8	88	--	K3	18	176

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (00665)	PHOSPHORUS, TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 07...	181	0	0.280	<0.010	<0.010	<0.20	<0.020	0.020	--	--
JAN 23...	166	0	0.390	<0.010	0.010	<0.20	<0.020	0.010	150	30
MAR 14...	200	0	0.430	<0.010	0.010	<0.20	<0.020	0.010	--	--
APR 18...	201	0	0.400	<0.010	0.010	<0.20	<0.020	0.010	--	--
JUN 19...	156	0	0.430	<0.010	0.010	<0.20	<0.020	0.010	130	27
JUL 11...	192	0	0.410	<0.010	0.010	<0.20	<0.020	0.030	--	--
AUG 07...	214	0	0.420	<0.010	0.010	0.20	0.020	0.010	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µg/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µg/L AS AL) (01106)
JAN 23...	18	1.3	0.70	2.4	1.9	<0.10	162	<1	70	<20
JUN 19...	16	1.4	0.90	2.5	3.0	<0.10	136	8	140	30

DATE	CADMIUM TOTAL RECOVERABLE (µg/L AS CD) (01027)	CADMIUM DIS-SOLVED (µg/L AS CU) (01025)	COPPER, DIS-SOLVED (µg/L AS CU) (01040)	IRON, DIS-SOLVED (µg/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (µg/L AS PB) (01051)	LEAD, DIS-SOLVED (µg/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µg/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (µg/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (µg/L AS ZN) (01092)	ZINC, DIS-SOLVED (µg/L AS ZN) (01090)
JAN 23...	<1	<1.0	<1	8	<1	<1	<1	0.10	<4	<4
JUN 19...	<1	<1.0	<1	15	1	1	1	<0.10	4	<4

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

07068000 CURRENT RIVER AT DONIPHAN, MO

LOCATION.--Lat 36°37'19", long 90°50'51", in NW 1/4 NW 1/4 sec.27, T.23 N., R.2 E., Ripley County, Hydrologic Unit 11010008, on right bank 0.5 mi upstream from U.S. Highway 160, 1.0 mi west of Doniphan, 2.5 mi upstream from Briar Creek and at mile 51.3.

DRAINAGE AREA.--2,038 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1918 to current year. Prior to July 1921 monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 877: 1937-38(M). WSP 927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 321.21 ft above sea level. July 1936 to Sept. 30, 1971, datum was 1.00 ft higher. Prior to July 3, 1936, nonrecording gages at several sites 0.5 mi downstream at various datum.

REMARKS.--Estimated daily discharges: Mar. 24-27, Aug. 24, and Sept. 30. Water-discharge records good. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1904 reached a stage of 25.9 ft, from floodmarks, present site and datum, discharge, 130,000 ft³/s, from rating curve extended above 60,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	1650	2930	2300	3370	8140	2870	6610	4240	3170	2100	1710
2	1690	1650	2770	2230	3240	5980	2790	12400	4000	2980	2080	1740
3	1680	1670	2660	2160	3120	5050	2720	15700	3880	2990	2080	1740
4	1670	2430	2570	2100	2990	4410	2650	9170	3680	3710	2130	1910
5	1660	13800	2490	2060	2850	4010	2570	7470	3490	4290	2140	2410
6	1660	16600	2410	2120	2720	3750	2510	6550	3700	3540	2080	2270
7	1660	10700	2340	2200	2620	4540	2470	5880	3580	3480	2110	1980
8	1700	6440	2280	2190	2540	11900	2430	5700	3370	3950	2090	1870
9	1740	5340	2740	2150	2470	15200	2410	8600	3840	4080	2100	1820
10	1720	5070	3990	2150	2410	8540	2390	9220	4590	4140	2320	1790
11	1690	5070	4540	2190	2360	7060	2510	7680	7550	3540	2120	1750
12	1680	4650	3950	2230	2320	6230	3480	6650	9240	3220	2230	1730
13	1690	4070	3510	2290	2260	5670	4590	5920	7180	3000	2130	1720
14	1690	3710	3200	2600	2270	5190	3940	5380	5990	2850	2040	1710
15	1680	3710	2970	6480	2520	4750	3530	4870	5090	2760	1990	1690
16	1670	4070	2930	6210	3010	4360	3290	4450	4490	2700	1960	1840
17	1670	4110	2940	5180	3090	4040	3110	4170	4060	2610	1930	1890
18	1680	3790	2930	4580	3100	3790	2980	4860	3740	2540	1910	1830
19	1950	3480	2870	5160	3030	3600	2850	6430	3510	2460	1890	1750
20	1870	3260	2800	6030	2930	3490	2810	5440	3340	2410	1870	1750
21	1820	3700	2830	5850	2820	3380	3010	4740	3290	2360	1860	1760
22	1780	4690	2930	5250	2720	3250	4010	4310	3160	2370	1840	1730
23	1740	4800	3080	4740	2640	3150	3850	4000	3050	2380	1810	1690
24	1720	4100	3020	4310	2560	3100	3690	3760	2950	2440	1790	1670
25	1690	3670	2900	3960	2480	3050	3960	3630	3030	2500	1770	1660
26	1670	3390	2780	3690	2440	3050	4000	3780	3610	2450	1760	1660
27	1660	4390	2670	3520	2700	3200	3730	4460	3850	2370	1750	1650
28	1650	3950	2580	3470	6960	3350	3470	4770	3730	2300	1730	1650
29	1650	3470	2490	3560	---	3330	3390	5820	3620	2230	1710	1630
30	1650	3170	2420	3740	---	3150	3770	5400	3490	2170	1700	1630
31	1650	---	2360	3550	---	2990	---	4670	---	2130	1690	---
MEAN	1704	4820	2899	3556	2876	4990	3193	6209	4211	2907	1958	1788
MAX	1950	16600	4540	6480	6960	15200	4590	15700	9240	4290	2320	2410
MIN	1650	1650	2280	2060	2260	2990	2390	3630	2950	2130	1690	1630
IN.	.96	2.64	1.64	2.01	1.47	2.82	1.75	3.51	2.31	1.64	1.11	.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1995, BY WATER YEAR (WY)

MEAN	1644	2430	2739	2910	3097	3831	4638	4163	2997	1987	1684	1585
MAX	4596	8514	16210	9054	7971	9260	16140	10430	12610	7676	5001	4547
(WY)	1985	1994	1983	1949	1985	1935	1927	1957	1928	1951	1927	1993
MIN	872	927	950	917	1122	1218	1476	1183	1075	959	951	903
(WY)	1957	1955	1956	1956	1934	1941	1956	1936	1936	1934	1936	1954

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1921 - 1995

ANNUAL MEAN	3798	3430	2804
HIGHEST ANNUAL MEAN			5856
LOWEST ANNUAL MEAN			1326
HIGHEST DAILY MEAN	37500	Apr 13	90000
LOWEST DAILY MEAN	1650	Oct 28-Nov 2	852
ANNUAL SEVEN-DAY MINIMUM	1650	Oct 27	852
INSTANTANEOUS PEAK FLOW	---		122000
INSTANTANEOUS PEAK STAGE	---		25.49
INSTANTANEOUS LOW FLOW	---		852
ANNUAL RUNOFF (INCHES)	25.30	22.85	18.70
10 PERCENT EXCEEDS	5970	5530	5000
50 PERCENT EXCEEDS	2890	2940	1930
90 PERCENT EXCEEDS	1740	1700	1170

^aSept. 30 estimated.

07068000 CURRENT RIVER AT DONIPHAN, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1969 to July 1975, October 1979 to September 1980, October 1981 to September 1982, October 1983 to June 1989, November 1992 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1992.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
OCT											
03...	2000	1680	20.5	338	8.43	9.1	98	--	52	K18	172
NOV											
10...	1100	5110	12.0	277	7.15	8.8	79	<10	K2	170	152
DEC											
20...	0800	2800	8.5	290	7.98	11.2	93	--	31	K3	151
JAN											
24...	1540	4260	7.5	268	8.16	12.5	104	<10	K3	K5	130
FEB											
13...	1430	2250	7.5	292	7.59	13.0	105	--	K1	K2	148
MAR											
15...	1130	4760	16.0	247	7.79	10.5	103	--	40	K16	139
APR											
18...	1600	2970	19.5	301	8.18	8.4	90	--	K6	62	149
MAY											
22...	1200	4310	21.0	257	7.78	10.4	114	--	K13	K12	123
JUN											
20...	1045	3330	21.0	244	8.03	8.3	90	<10	M	22	135
JUL											
11...	1630	3460	28.5	285	7.98	9.4	116	--	20	27	142
25...	1335	2560	24.5	306	8.06	7.8	94	--	K16	K18	145
AUG											
07...	1715	2100	23.5	328	8.17	8.7	103	<10	170	46	161
SEP											
05...	1200	2540	21.0	325	8.07	8.0	89	--	170	53	165

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
OCT										
03...	196	7	0.240	<0.010	0.050	0.24	<0.020	0.010	--	--
NOV										
10...	185	0	0.330	0.010	<0.020	<0.20	<0.020	<0.010	160	36
DEC										
20...	185	0	0.210	<0.010	0.010	<0.20	<0.020	<0.010	--	--
JAN										
24...	159	0	0.310	<0.010	<0.010	<0.20	<0.020	<0.010	140	28
FEB										
13...	177	0	0.240	<0.010	0.010	<0.20	<0.020	<0.010	--	--
MAR										
15...	169	0	0.350	<0.010	0.010	<0.20	<0.020	0.010	--	--
APR										
18...	184	0	0.240	<0.010	0.030	0.22	<0.020	<0.010	--	--
MAY										
22...	148	0	0.190	<0.010	0.030	<0.20	<0.020	<0.010	--	--
JUN										
20...	163	0	0.160	<0.010	0.010	<0.20	<0.020	<0.010	140	30
JUL										
11...	175	0	0.180	0.010	0.010	<0.20	<0.020	0.010	--	--
25...	179	0	0.280	0.010	0.010	<0.20	<0.020	0.010	--	--
AUG										
07...	194	0	0.260	<0.010	0.010	0.20	0.020	<0.010	180	36
SEP										
05...	205	0	0.310	0.010	0.010	0.94	0.020	0.010	--	--

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

WHITE RIVER BASIN

07068000 CURRENT RIVER AT DONIPHAN, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MAGNE- SIUM, DIS- SOLVED (µg/L AS MG) (00925)	SODIUM, DIS- SOLVED (µg/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (µg/L AS K) (00935)	SULFATE DIS- SOLVED (µg/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (µg/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (µg/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)
NOV 10...	18	1.5	1.0	3.8	3.4	<0.10	90	18	140	<20
JAN 24...	16	1.4	0.80	4.0	5.8	<0.10	142	4	50	<20
JUN 20...	17	1.6	1.0	3.5	2.5	<0.10	148	8	90	30
AUG 07...	21	1.7	0.80	3.2	2.4	0.10	160	12	100	20
DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS Cd) (01027)	CADMIUM DIS- SOLVED (µG/L AS Cd) (01025)	COPPER, DIS- SOLVED (µG/L AS Cu) (01040)	IRON, DIS- SOLVED (µG/L AS Fe) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS Pb) (01051)	LEAD, DIS- SOLVED (µG/L AS Pb) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS Mn) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS Hg) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS Zn) (01092)	ZINC, DIS- SOLVED (µG/L AS Zn) (01090)
NOV 10...	<1	<1.0	<1	11	4	<1	7	0.10	20	<4
JAN 24...	<1	<1.0	<1	14	3	<1	5	0.10	5	<4
JUN 20...	<1	<1.0	2	13	1	1	4	0.50	5	<4
AUG 07...	1	1.0	1	6	2	1	5	0.20	4	4

07069200 MAMMOTH SPRING AT MAMMOTH SPRING, AR
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

LOCATION: Lat 36°29'43", long 91°32'05", in NE 1/4 NW 1/4 sec.8, T.21 N., R.5 W., Clinton County, Hydrologic Unit 11010010. Spring is located in park.

PERIOD OF RECORD: November 1993 to present.

REMARKS: Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, KF AGAR (COLS. PER) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)
NOV 08...	1600	481	15.0	383	7.27	7.4	72	--	K2	1000	200
JAN 25...	1000	435	14.0	351	7.41	7.5	73	<10	150	170	169
MAR 15...	1630	485	16.5	366	7.37	8.0	80	--	K350	450	221
APR 19...	1545	439	14.5	392	7.22	7.4	71	--	K560	220	203
JUN 20...	1600	412	15.5	378	7.42	6.5	64	<10	M	500	192
JUL 12...	1545	357	15.0	399	7.36	6.3	63	--	170	170	207
AUG 08...	1515	318	15.5	436	7.49	7.4	75	--	300	330	221

DATE	BICARBONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CARBONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)
NOV 08...	244	0	0.830	<0.010	<0.010	<0.20	0.070	0.050	--	--
JAN 25...	204	0	1.30	<0.010	<0.010	<0.20	0.050	0.030	190	38
MAR 15...	274	0	1.20	<0.010	0.010	<0.20	0.030	0.040	--	--
APR 19...	246	0	1.10	<0.010	0.020	<0.20	<0.020	0.020	--	--
JUN 20...	233	0	1.00	<0.010	0.010	<0.20	0.030	0.020	220	45
JUL 12...	255	0	0.920	<0.010	0.010	<0.20	<0.020	0.020	--	--
AUG 08...	269	0	0.930	<0.010	0.010	0.20	0.020	0.020	--	--

DATE	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (MG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (MG/L AS AL) (01106)
JAN 25...	22	2.0	1.7	3.6	5.0	<0.10	188	4	120	30
JUN 20...	26	2.0	0.70	3.3	4.0	<0.10	206	18	120	30

DATE	CADMIUM TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	IRON, DIS-SOLVED (µG/L AS FE) (01046)	LEAD, RECOVERABLE (µG/L AS PB) (01051)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	MANGANESE, DIS-SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOVERABLE (µG/L AS ZN) (01092)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)
JAN 25...	<1	<1.0	<1	21	3	<1	<1	0.10	7	<4
JUN 20...	<1	<1.0	<1	26	3	1	3	0.20	6	6

K--Results based on colony count outside the acceptable range (non-ideal colony count).
M--Result compromised due to contaminated bacteria media.

WHITE RIVER BASIN

07071000 GREER SPRING AT GREER, MO

LOCATION.--Lat 36°47'11", long 91°20'53", in SE 1/4 SW 1/4 sec.36, T.25 N., R.4 W., Oregon County, Hydrologic Unit 11010011, on right bank 300 ft downstream from lower outlet of spring, 1 mi north of Greer and 1 mi upstream from Eleven Point River.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August to December 1904 (gage heights and discharge measurements only), October 1921 to current year. October to December 1921 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 564.00 ft above sea level. Aug. 10 to Dec. 31, 1904, nonrecording gage at site 250 ft downstream at different datum. Nov. 17, 1921, to June 25, 1934, nonrecording gage at site 250 ft downstream at datum 0.74 ft lower than present datum.

REMARKS.--No estimated daily discharges. Water-discharge records fair. Several observations of water temperature and specific conductance were made during the year. Occasional runoff from drainage area of 2.97 mi² included in record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	316	478	442	463	459	464	585	515	484	418	360
2	350	316	473	438	462	475	462	620	510	483	414	359
3	350	317	468	433	458	477	458	611	504	479	414	362
4	347	405	463	428	453	473	454	601	499	478	409	363
5	348	714	458	423	448	469	452	593	495	477	409	367
6	354	640	454	423	443	468	448	583	493	473	406	368
7	354	607	452	423	438	535	444	577	489	469	404	368
8	350	590	449	423	434	587	443	614	492	467	404	366
9	346	589	470	419	433	582	443	629	538	464	404	352
10	345	592	494	419	432	577	443	612	554	462	414	350
11	342	583	494	419	428	575	462	601	582	459	426	353
12	341	576	493	423	423	570	478	594	587	458	420	355
13	341	565	489	430	419	560	478	588	587	458	414	354
14	338	555	483	501	419	554	478	582	583	457	406	351
15	337	548	478	515	422	547	477	577	577	454	400	350
16	337	542	474	514	436	537	473	571	571	452	395	350
17	337	537	474	510	437	530	469	566	565	449	390	350
18	337	530	477	506	434	521	467	564	559	448	382	350
19	337	521	473	513	433	514	460	559	554	447	377	350
20	336	517	469	510	433	506	459	553	548	444	376	346
21	333	524	469	504	432	504	462	543	542	443	373	346
22	332	520	472	499	428	499	462	537	537	439	372	345
23	326	515	472	494	423	497	460	531	531	434	368	342
24	324	509	469	489	419	489	472	525	526	433	368	341
25	321	500	467	479	414	483	477	516	520	432	368	341
26	321	495	463	473	415	482	474	511	515	429	368	341
27	321	494	459	469	432	501	472	516	506	427	367	341
28	321	493	457	468	452	501	469	526	499	424	364	341
29	320	489	453	467	---	480	471	530	494	423	363	341
30	317	483	448	464	---	474	493	526	489	419	363	338
31	316	---	444	463	---	468	---	520	---	419	363	---
MEAN	336	519	469	464	434	513	464	566	532	451	391	351
MAX	354	714	494	515	463	587	493	629	587	484	426	368
MIN	316	316	444	419	414	459	443	511	489	419	363	338

STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

	MEAN	259	287	309	332	348	394	446	447	404	337	297	269
MAX	448	586	750	648	652	674	724	776	861	611	563	503	
(WY)	1985	1985	1928	1928	1949	1975	1927	1927	1927	1945	1927	1928	
MIN	111	111	113	108	144	152	180	143	140	127	122	120	
(WY)	1957	1955	1956	1956	1981	1981	1936	1936	1936	1936	1936	1955	

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

FOR PERIOD OF RECORD

	479	458	344
ANNUAL MEAN			
HIGHEST ANNUAL MEAN			566
LOWEST ANNUAL MEAN			174
HIGHEST DAILY MEAN	747	Apr 13	1010
LOWEST DAILY MEAN	316	Oct 31-Nov 2	104
ANNUAL SEVEN-DAY MINIMUM	318	Oct 28	105
INSTANTANEOUS PEAK FLOW	---	949	Nov 5
INSTANTANEOUS PEAK STAGE	---	1.90	Nov 5
INSTANTANEOUS LOW FLOW	---	316	Oct 30-Nov 3
10 PERCENT EXCEEDS	595	565	549
50 PERCENT EXCEEDS	473	462	325
90 PERCENT EXCEEDS	355	346	170

07071000 GREER SPRING AT GREER, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1993 to present.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	SPECIFIC CONDUCTANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DEMAND, SOLVED (PER-CENT SATURATION) (MG/L) (00301)	OXYGEN, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECA, 0.7 µM-MF (COLS./100 ML) (31625)	STREPTOCOCCI, FECA, KF AGAR (COLS. PER 100 ML) (31673)	ALKALINITY, WAT WH TOT FET FIELD (MG/L AS CaCO ₃) (00410)	BICARBONATE, WH IT FIELD (MG/L AS HCO ₃) (00450)
NOV 09...	0700	589	13.0	291	6.84	9.2	87	<10	K2	400	146	185
FEB 13...	1100	419	14.0	301	7.51	8.8	83	<10	K2	K17	158	194
APR 19...	1400	458	12.5	313	7.65	10.9	101	<10	31	25	161	200
JUL 25...	1045	419	14.0	334	7.47	8.2	81	<10	K8	K5	174	214

DATE	CARBONATE, WH IT FIELD (MG/L AS CO ₃) (00447)	NITROGEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO TOTAL (MG/L AS P) (70507)	HARDNESS, TOTAL (MG/L AS CaCO ₃) (00900)	CALCIUM, DIS-SOLVED (MG/L AS Ca) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg) (00925)	SODIUM, DIS-SOLVED (MG/L AS Na) (00930)
NOV 09...	0	0.660	0.010	<0.010	<0.20	<0.020	0.020	170	38	19	1.3
FEB 13...	0	0.950	<0.010	0.010	<0.20	0.080	0.020	150	32	18	1.6
APR 19...	0	0.880	<0.010	0.010	<0.20	0.020	0.010	150	32	18	1.5
JUL 25...	0	0.880	<0.010	0.010	<0.20	0.030	0.010	160	35	18	1.5

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE, DIS-SOLVED (MG/L AS SO ₄) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	ALUMINUM, TOTAL RECOVERABLE (µG/L AS AL) (01105)	ALUMINUM, DIS-SOLVED (µG/L AS AL) (01106)	CADMIUM, TOTAL RECOVERABLE (µG/L AS CD) (01027)	CADMIUM, DIS-SOLVED (µG/L AS CD) (01025)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)
NOV 09...	1.2	2.6	5.9	<0.10	90	20	240	<20	<1	<1.0	<1
FEB 13...	1.2	2.6	3.2	<0.10	156	6	40	<20	<1	<1.0	<1
APR 19...	1.0	2.3	2.5	<0.10	170	<1	70	<20	<1	<1.0	<1
JUL 25...	1.3	2.1	8.1	<0.10	174	2	70	20	1	1.0	2

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07071500 ELEVEN POINT RIVER NEAR BARDLEY, MO

LOCATION.--Lat 36°38'55", long 91°12'03", in NE 1/4 SE 1/4 sec.17, T.23 N., R.2 W., Oregon County, Hydrologic Unit 11010011, on downstream side of right pier of main truss of bridge on U.S. Highway 160, 7.0 mi southwest of Bardley, 7.5 mi upstream from Fredericks Fork and at mile 53.7.

DRAINAGE AREA.--793 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to current year. October 1921 monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 827: 1927-28, 1935. WSP 927: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 410.84 ft above sea level. Prior to June 26, 1934, nonrecording gage at site 100 ft upstream at datum 0.06 ft higher. June 26, 1934, to Oct. 19, 1939, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharge: Sept. 30. Water-discharge records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 19.7 ft, August 1915, from floodmarks, discharge, 44,000 ft³/s, from rating curve extended above 25,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	552	487	1050	842	989	1050	959	2840	1060	891	664	527
2	551	483	1020	815	978	1000	940	3660	1040	869	658	524
3	551	497	993	797	957	981	919	2440	1020	925	650	555
4	545	2070	966	776	926	961	898	2030	988	953	650	603
5	541	10900	938	759	898	959	874	1790	969	918	651	553
6	539	9260	910	806	874	949	864	1630	993	883	644	532
7	538	3420	890	819	863	1860	860	1550	967	857	669	528
8	562	2300	865	798	844	2880	851	1940	947	844	667	524
9	547	2080	1030	804	828	2000	847	2450	1100	832	647	519
10	534	2280	1380	821	828	1730	838	2110	1260	819	691	515
11	527	1970	1300	842	816	1590	1010	1850	1390	803	683	509
12	530	1740	1210	857	793	1490	1180	1700	1460	790	667	507
13	535	1580	1140	869	776	1410	1130	1610	1400	781	651	506
14	528	1490	1090	1420	792	1340	1060	1530	1320	768	641	503
15	522	1440	1040	1520	886	1290	1030	1430	1250	760	633	502
16	518	1490	1040	1360	1110	1230	1000	1370	1190	750	622	545
17	514	1440	1100	1280	1140	1190	968	1350	1150	746	613	526
18	523	1370	1100	1220	1080	1140	954	1670	1120	741	605	505
19	597	1280	1060	1420	1050	1120	923	1440	1090	726	599	499
20	567	1240	1050	1520	1010	1110	930	1330	1070	719	594	498
21	546	1510	1060	1430	979	1070	931	1280	1050	714	584	492
22	514	1460	1060	1360	944	1040	917	1230	1030	717	575	485
23	530	1330	1040	1300	928	1020	942	1180	1020	731	568	480
24	518	1250	1020	1220	889	987	1060	1150	1000	904	562	477
25	510	1200	991	1170	862	960	1100	1130	1010	819	558	479
26	503	1160	961	1120	863	954	1050	1110	980	754	555	477
27	499	1210	938	1100	898	1120	1020	1130	952	730	548	473
28	495	1240	916	1110	987	1110	975	1140	926	712	543	470
29	494	1160	896	1060	---	1060	992	1120	944	695	538	468
30	491	1100	872	1020	---	1110	1220	1100	920	682	536	464
31	490	---	861	996	---	981	---	1080	---	672	532	---
MEAN	529	2048	1025	1072	921	1248	975	1625	1087	790	613	508
MAX	597	10900	1380	1520	1140	2880	1220	3660	1460	953	691	603
MIN	490	483	861	759	776	949	838	1080	920	672	532	464
IN.	.77	2.88	1.49	1.56	1.21	1.82	1.37	2.36	1.53	1.15	.89	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922-1995, BY WATER YEAR (WY)

	MEAN	425	606	728	812	848	1067	1327	1170	902	616	491	435
MAX	1291	2082	4048	3007	2223	3556	5037	2952	3107	1559	1354	1183	
(WY)	1985	1994	1983	1985	1949	1945	1927	1973	1928	1951	1927	1975	
MIN	168	176	170	159	224	264	340	266	245	213	199	181	
(WY)	1957	1957	1956	1956	1963	1981	1981	1936	1936	1936	1936	1956	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1922-1995
ANNUAL MEAN	1254	1036	785
HIGHEST ANNUAL MEAN			1782
LOWEST ANNUAL MEAN			310
HIGHEST DAILY MEAN	10900	Nov 5	26800
LOWEST DAILY MEAN	483	Nov 2	155
ANNUAL SEVEN-DAY MINIMUM	491	Oct 28	157
INSTANTANEOUS PEAK FLOW	---	16500	Nov 5
INSTANTANEOUS PEAK STAGE	---	13.67	Nov 5
INSTANTANEOUS LOW FLOW	---	464	Sep 29, 30 ^a
ANNUAL RUNOFF (INCHES)	21.47	17.75	13.45
10 PERCENT EXCEEDS	1920	1470	1440
50 PERCENT EXCEEDS	1040	947	562
90 PERCENT EXCEEDS	569	524	265

^aSept. 30 estimated.

07071500 ELEVEN POINT RIVER NEAR BARDLEY, MO--Continued
(Ambient water-quality monitoring network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1993 to current year.

REMARKS.--Ambient water-quality monitoring network station since November 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L) (00340)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CACO ₃) (00410)	
NOV 21...	1400	1590	13.5	262	7.7	9.4	89	--	K2	70	130
JAN 25...	0830	1170	9.0	278	7.8	10.6	92	<10	35	120	132
MAR 15...	1300	1280	12.5	248	7.4	11.5	105	--	66	K40	147
APR 19...	1115	922	17.0	315	8.0	10.3	104	--	21	110	161
JUN 20...	1300	1070	21.5	268	8.0	11.4	127	<10	M	20	137
JUL 12...	1345	791	21.0	321	7.8	9.2	103	--	41	K18	164
AUG 08...	1330	622	20.0	348	8.0	10.1	112	--	23	22	176

DATE	BICAR- BONATE WATER WH IT FIELD (MG/L AS HCO ₃) (00450)	CAR- BONATE WATER WH IT FIELD (MG/L AS CO ₃) (00447)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS TOTAL (MG/L AS P) (70507)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)
NOV 21...	158	0	0.560	<0.010	<0.010	<0.20	<0.020	0.010	--	--
JAN 25...	166	0	0.630	<0.010	0.020	<0.20	<0.020	0.010	140	30
MAR 15...	181	0	0.550	<0.010	0.010	<0.20	<0.020	0.010	--	--
APR 19...	201	0	0.510	<0.010	0.020	0.24	<0.020	<0.010	--	--
JUN 20...	166	0	0.460	<0.010	0.040	0.28	<0.020	<0.010	150	31
JUL 12...	202	0	0.500	0.010	0.010	<0.20	<0.020	0.010	--	--
AUG 08...	218	0	0.610	0.010	0.010	0.20	0.040	0.010	--	--

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	ALUM- INUM, TOTAL RECOV- ERABLE (µG/L AS AL) (01105)	ALUM- INUM, DIS- SOLVED (µG/L AS AL) (01106)
JAN 25...	17	1.4	1.1	2.7	2.9	<0.10	148	6	70	<20
JUN 20...	17	1.6	1.3	2.4	4.8	<0.10	146	12	130	30

DATE	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD) (01027)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (µG/L AS HG) (71900)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
JAN 25...	<1	<1.0	<1	7	2	<1	3	0.10	5	<4
JUN 20...	1	<1.0	4	24	5	1	7	<0.10	20	8

K--Results based on colony count outside the acceptable range (non-ideal colony count).

M--Result compromised due to contaminated bacteria media.

07186000 SPRING RIVER NEAR WACO, MO

LOCATION.--Lat 37°14'44", long 94°33'58", on line between SE 1/2 sec.7 and NE 1/2 sec.18, T.29 N., R.33 W., Jasper County, Hydrologic Unit 11070207, on downstream side of left pier of county highway bridge, 0.8 mi downstream from Blackberry Creek, 1.5 mi east of Waco and 47.6 mi upstream from mouth.

DRAINAGE AREA.--1,164 mi².

PERIOD OF RECORD.--April 1924 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 833.23 ft above sea level. Prior to Feb. 23, 1935, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	257	894	406	1510	551	358	10400	4830	6040	310	176
2	101	259	832	399	1290	510	353	10500	5490	3680	767	193
3	99	260	776	387	1140	456	347	6470	2820	1430	752	187
4	99	4770	739	374	1020	438	342	4020	2290	1210	3380	177
5	100	14700	706	356	927	437	335	3100	2280	1060	2490	166
6	95	18000	676	358	867	440	327	2740	1870	939	1260	160
7	105	11800	680	359	808	995	322	6200	2640	836	1040	158
8	365	4100	684	352	749	1680	317	19400	2450	760	655	157
9	1110	3060	688	344	707	1280	311	20300	6460	715	480	156
10	627	8180	664	342	686	902	316	14900	27000	671	420	150
11	388	4210	622	347	659	802	572	5980	30300	638	375	139
12	303	1960	592	359	622	718	1430	2300	25200	605	343	138
13	263	1570	567	587	586	659	1090	1840	11200	566	317	137
14	234	1350	544	8020	572	618	680	1630	3000	539	295	133
15	214	1200	530	6600	580	592	548	1450	2020	508	291	128
16	199	1120	550	4330	583	572	485	1320	1720	485	285	131
17	189	1070	632	1910	562	545	542	4160	1540	462	273	130
18	187	959	613	1370	537	521	4040	16100	1400	443	261	128
19	618	1720	591	1220	515	500	3390	10200	1280	419	252	124
20	753	17400	552	1210	497	483	2990	6680	1190	428	238	132
21	639	20700	521	1250	482	476	2450	2300	1110	420	229	135
22	690	15200	509	1170	465	465	1460	4850	1050	405	224	132
23	516	7790	504	1040	451	452	1940	3370	987	386	217	127
24	433	2350	496	934	440	431	4030	6130	1480	396	205	122
25	390	1510	493	1010	427	413	2560	7700	1790	402	196	119
26	328	1320	477	1300	418	405	1480	9950	3270	597	186	118
27	296	1330	463	2150	445	397	1220	17000	4140	438	180	117
28	265	1440	450	4220	577	389	1050	15400	2580	375	180	115
29	242	1210	437	5480	---	382	6540	10900	1910	348	176	113
30	227	1000	428	3710	---	373	9840	4990	6860	325	173	110
31	238	---	413	2020	---	365	---	2450	---	307	169	---
MEAN	336	5060	591	1739	683	589	1722	7572	5405	866	536	140
MAX	1110	20700	894	8020	1510	1680	9840	20300	30300	6040	3380	193
MIN	95	257	413	342	418	365	311	1320	987	307	169	110
IN.	.33	4.85	.59	1.72	.61	.58	1.65	7.50	5.18	.86	.53	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1995, BY WATER YEAR (WY)

	MEAN	650	966	728	717	912	1204	1488	1572	1438	706	454	590
MAX	6997	6726	4704	3222	6372	5809	7542	11640	5521	4323	7812	10260	
(WY)	1942	1986	1993	1973	1985	1973	1927	1943	1928	1976	1927	1993	
MIN	21.0	30.5	33.3	29.7	31.0	33.6	38.2	120	73.4	15.2	7.71	22.0	
(WY)	1957	1954	1964	1964	1964	1954	1956	1932	1954	1954	1954	1956	

SUMMARY STATISTICS FOR 1994 CALENDAR YEAR FOR 1995 WATER YEAR WATER YEARS 1924 - 1995

ANNUAL MEAN	1548	2104	945	
HIGHEST ANNUAL MEAN			3093	1993
LOWEST ANNUAL MEAN			61.4	1954
HIGHEST DAILY MEAN	48500	30300	108000	Sep 25 1993
LOWEST DAILY MEAN	92	95	4.5	Aug 28 1954
ANNUAL SEVEN-DAY MINIMUM	100	100	5.0	Sep 2 1954
INSTANTANEOUS PEAK FLOW	---	31800	151000 ^a	Sep 26 1993
INSTANTANEOUS PEAK STAGE	---	23.71	34.06	Sep 26 1993
INSTANTANEOUS LOW FLOW	---	90	4.2	Jul 28 1954
ANNUAL RUNOFF (INCHES)	18.06	24.55	11.03	
10 PERCENT EXCEEDS	2240	5690	1850	
50 PERCENT EXCEEDS	493	592	300	
90 PERCENT EXCEEDS	129	176	65	

^aFrom rating curve extended above 85,000 ft³/s.

07186475 CENTER CREEK BELOW CARL JUNCTION, MO

LOCATION.--Lat 37°09'39", long 94°34'51", in NE 1/4 SE 1/4 sec.12, T.28 N., R.33 W., Jasper County, Hydrologic Unit 11070207, on the downstream end of left bridge pier on State Highway JJ, 2.4 mi upstream from Spring River and 1 mi southwest of Carl Junction.

DRAINAGE AREA.--299 mi².

PERIOD OF RECORD.--April 1993 to current year.

GAGE.--Water stage recorder. Datum of gage is 829.52 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	172	411	166	547	182	160	2490	707	389	138	84
2	57	159	387	159	511	179	159	2140	622	348	181	101
3	57	160	368	154	471	176	158	1120	569	349	220	86
4	57	1220	349	150	434	173	156	1050	641	338	501	81
5	56	3570	331	146	404	173	154	865	969	316	260	77
6	55	5520	317	148	383	172	152	867	701	301	212	76
7	77	1450	310	147	363	271	150	1230	855	295	207	77
8	227	978	298	141	371	377	148	5010	661	282	186	77
9	364	2490	292	138	355	326	145	3730	1970	272	165	78
10	257	4550	278	136	320	319	150	1320	8130	259	153	77
11	207	1150	264	136	304	304	267	1020	10400	248	143	73
12	183	921	255	135	287	290	303	857	2830	235	135	73
13	177	797	246	220	275	280	283	754	1470	228	129	71
14	160	709	238	1730	269	270	261	663	1010	219	122	70
15	145	635	230	1020	270	262	242	591	845	210	115	70
16	133	574	247	739	259	249	224	540	732	206	115	72
17	123	535	252	633	246	239	215	562	653	199	112	73
18	121	501	235	551	238	229	418	648	585	191	109	70
19	369	504	226	523	230	222	387	503	534	185	105	69
20	331	3440	220	484	223	218	545	447	496	189	101	76
21	299	4250	213	451	217	214	545	421	459	185	99	77
22	312	1260	210	417	213	209	466	396	425	177	97	74
23	284	913	202	393	207	202	707	374	435	173	95	70
24	257	768	196	374	199	195	1090	501	688	186	92	67
25	233	682	191	375	193	189	743	573	548	176	89	67
26	211	614	187	383	190	186	628	820	607	195	87	66
27	195	592	183	429	197	183	557	2140	523	170	85	66
28	183	538	179	560	190	175	495	2140	444	159	84	65
29	179	481	174	633	---	170	1310	1140	403	149	82	64
30	174	440	169	604	---	168	1500	830	420	143	81	63
31	177	---	166	572	---	164	---	752	---	138	80	---
MEAN	184	1352	252	414	299	225	424	1177	1344	229	141	73.7
MAX	369	5520	411	1730	547	377	1500	5010	10400	389	501	101
MIN	55	159	166	135	190	164	145	374	403	138	80	63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

	MEAN	265	828	242	288	288	301	838	797	908	404	172	591
MAX	345	1352	252	414	299	376	1252	1177	1344	876	315	1630	
(WY)	1994	1995	1995	1995	1995	1994	1994	1995	1995	1995	1993	1993	1993
MIN	184	304	232	161	278	225	424	560	201	107	57.8	69.8	
(WY)	1995	1994	1994	1994	1994	1995	1995	1994	1994	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1993 - 1995
ANNUAL MEAN	402	508	418
HIGHEST ANNUAL MEAN			508
LOWEST ANNUAL MEAN			328
HIGHEST DAILY MEAN	10800	Apr 12	18900
LOWEST DAILY MEAN	45	Aug 29-30	45
ANNUAL SEVEN-DAY MINIMUM	47	Aug 24	47
INSTANTANEOUS PEAK FLOW	---	13300	36200
INSTANTANEOUS PEAK STAGE	---	13.71	17.84
INSTANTANEOUS LOW FLOW	---	54	42
10 PERCENT EXCEEDS	687	916	843
50 PERCENT EXCEEDS	209	248	259
90 PERCENT EXCEEDS	60	82	77

07186480 CENTER CREEK NEAR SMITHFIELD, MO
(National water-quality assessment station)

WATER-QUALITY RECORDS

LOCATION.--Lat 37°09'20", long 94°36'10", NE 1/4 SW 1/4 NE 1/4 sec.14, T.28 N., R.34 W., Jasper County, Hydrologic Unit 11070207, at bridge on county road, 1 mi south of Smithfield, and 1 mi above mouth.

DRAINAGE AREA.--303 mi².

PERIOD OR RECORD.--October 1968 to July 1975; July 1977 to June 1989; April 1993 to August 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	E. COLI WATER TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LINITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)
OCT											
05...	1530	55	20.0	425	8.3	10.4	114	45	K30	K17	141
NOV											
02...	1500	158	12.5	399	8.1	12.1	115	54	48	78	136
DEC											
08...	0930	295	8.0	365	7.9	11.2	94	380	140	190	134
JAN											
11...	1600	137	5.5	384	8.2	15.0	121	42	67	28	128
FEB											
07...	1500	360	6.0	341	8.1	13.6	109	K9	K9	K6	127
MAR											
02...	1030	179	3.5	379	8.2	13.0	96	190	160	21	135
APR											
04...	1600	156	14.0	349	8.6	14.1	135	K1	<1	K7	128
MAY											
22...	1500	393	18.5	344	8.5	8.5	92	87	78	100	135
JUN											
22...	1100	428	18.5	325	8.0	9.4	100	K480	500	110	130
JUL											
14...	1000	220	23.5	337	8.1	7.5	88	130	110	68	133
AUG											
18...	1000	108	24.5	384	8.1	7.1	85	100	97	130	140

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOS- PHOS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
OCT											
05...	172	0	4.60	<0.010	<0.015	<0.20	<0.20	0.100	0.090	0.110	190
NOV											
02...	166	0	4.70	0.020	<0.015	<0.20	<0.20	0.060	0.050	0.050	180
DEC											
08...	164	0	3.80	0.020	0.020	<0.20	<0.20	0.050	0.030	0.030	170
JAN											
11...	157	0	3.90	0.010	<0.015	<0.20	<0.20	0.020	0.020	0.020	170
FEB											
07...	155	0	2.80	0.030	<0.015	<0.20	<0.20	<0.010	0.030	0.020	160
MAR											
02...	165	0	3.60	0.020	<0.015	<0.20	<0.20	<0.010	<0.010	0.020	180
APR											
04...	156	0	2.40	0.030	0.020	<0.20	<0.20	0.020	0.020	0.010	160
MAY											
22...	165	0	2.10	<0.010	<0.015	<0.20	<0.20	0.040	0.030	0.040	160
JUN											
22...	159	0	2.40	0.020	0.040	<0.20	<0.20	0.050	0.040	0.030	150
JUL											
14...	162	0	2.80	0.020	0.020	<0.20	<0.20	0.050	0.030	0.020	160
AUG											
18...	171	0	4.30	0.020	<0.015	<0.20	<0.20	0.060	0.060	0.060	170

K--Results based on colony count outside the acceptable range (non-ideal colony count).

ARKANSAS RIVER BASIN

07186480 CENTER CREEK NEAR SMITHFIELD, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDEd (MG/L) (80154)
OCT 05...	69	3.6	13	1.6	42	12	0.20	9.0	264	12
NOV 02...	65	3.3	10	2.1	35	9.7	0.20	9.6	242	5
DEC 08...	62	2.9	7.4	1.6	27	7.1	<0.10	10	220	68
JAN 11...	62	3.1	9.6	1.4	35	9.3	0.10	4.7	223	2
FEB 07...	58	2.7	6.3	1.4	24	7.6	0.10	7.3	200	5
MAR 02...	66	3.0	8.4	1.4	30	9.3	0.10	7.1	227	2
APR 04...	59	2.9	7.2	1.4	23	8.3	0.10	5.8	211	23
MAY 22...	60	2.6	4.8	1.5	25	6.5	0.20	9.9	211	34
JUN 22...	57	2.5	5.0	1.6	19	6.2	0.10	10	196	39
JUL 14...	59	2.8	6.1	1.6	18	7.7	0.10	8.8	196	37
AUG 18...	64	3.1	9.6	1.9	25	9.3	0.20	11	227	42

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)
OCT 05...	--	--	--	--	--	--	--	8	--
NOV 02...	--	--	--	--	--	--	--	14	--
DEC 08...	<1	69	<1	<1	3	<1	<1	9	<1
JAN 11...	--	--	--	--	--	--	--	15	--
FEB 07...	<1	60	<1	<1	2	<1	<1	12	<1
MAR 02...	--	--	--	--	--	--	--	11	--
APR 04...	<1	63	<1	<1	2	<1	1	12	<1
MAY 22...	<1	69	<1	1	2	<1	1	10	<1
JUN 22...	<1	73	<1	<1	<1	<1	<1	10	<1
JUL 14...	--	--	--	--	--	--	--	9	--
AUG 18...	<1	74	<1	<1	1	<1	<1	<3	<1

07186480 CENTER CREEK NEAR SMITHFIELD, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT 05...	23	--	--	--	--	--	1.3	0.3
NOV 02...	32	--	--	--	--	--	1.5	0.2
DEC 08...	25	<1	6	<1	<1	260	0.8	0.2
JAN 11...	30	--	--	--	--	--	1.2	0.2
FEB 07...	17	<1	4	<1	<1	210	1.0	--
MAR 02...	27	--	--	--	--	--	1.0	0.3
APR 04...	20	<1	4	<1	<1	130	1.1	0.2
MAY 22...	23	<1	7	<1	<1	200	1.1	<0.1
JUN 22...	15	<1	6	<1	<1	150	1.0	0.2
JUL 14...	16	--	--	--	--	--	1.0	0.3
AUG 18...	18	<1	4	<1	<1	110	1.3	0.4

07186480 CENTER CREEK NEAR SMITHFIELD, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)
APR 04...	<0.01	<0.01	<0.01	E0.01	E0.01	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
MAY 22...	<0.01	<0.01	<0.01	0.03	E0.01	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
JUN 22...	<0.002	<0.002	<0.002	0.05	E0.02	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
DATE	P,P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)
APR 04...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
MAY 22...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
JUN 22...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DISS, REC (µG/L) (04037)
APR 04...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	0.02
MAY 22...	<0.04	<0.03	E0.004	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	0.01
JUN 22...	<0.001	<0.01	0.004	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	E0.01
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)	
APR 04...	<0.01	<0.02	<0.02	<0.01	<0.01	E0.01	<0.03	<0.01	<0.01	<0.01	<0.01	
MAY 22...	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01	
JUN 22...	<0.003	<0.01	<0.004	<0.01	E0.005	E0.01	<0.01	<0.01	<0.002	<0.001	<0.002	

E--Laboratory estimated value.

07187000 SHOAL CREEK ABOVE JOPLIN, MO

LOCATION.--Lat 37°01'23", long 94°30'58", in SE 1/4 NE 1/4 NE 1/4 sec.34, T.27 N., R.33 W., Newton County, Hydrologic Unit 11070207, on right bank 250 ft upstream from mouth of Spring Creek, 1,400 ft downstream from bridge on State Highway 86, 0.5 mi south of city limits of Joplin and 13.2 mi above mouth.

DRAINAGE AREA.--427 mi².

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 886.87 ft above sea level. Prior to July 21, 1966, water-stage recorder at site 1.8 mi upstream, at datum 15.5 ft higher. From Apr. 21, 1924, to Nov. 6, 1941, records were collected at site about 3 mi downstream, datum unknown.

REMARKS.--Estimated daily discharges: Dec. 9-21 and Sept. 24-26. Records fair. Several observations of water temperature and specific conductance were made during the year. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	212	664	290	880	329	307	2570	1030	933	331	194
2	126	202	639	279	845	321	301	2400	960	850	352	211
3	124	203	601	273	805	318	293	1880	932	834	359	190
4	124	812	558	265	753	310	291	1740	1010	793	373	176
5	127	2520	526	260	707	306	284	1530	2040	736	339	169
6	122	3750	503	263	671	321	277	1460	1620	695	324	164
7	150	1810	490	264	643	480	275	1500	1380	655	342	175
8	610	1390	467	255	604	734	269	4110	1190	631	313	185
9	562	4300	450	251	572	709	263	4270	2420	605	298	187
10	369	2450	440	248	557	675	284	2490	13800	578	288	185
11	298	1670	420	246	536	640	554	1990	16200	555	278	177
12	257	1400	410	243	501	614	788	1710	5040	535	267	176
13	231	1250	400	377	478	584	720	1530	3030	512	259	174
14	212	1100	390	1640	471	567	644	1380	2380	497	253	171
15	199	992	380	1630	476	547	586	1260	2000	482	247	172
16	191	912	390	1330	453	515	543	1160	1730	465	241	189
17	184	854	440	1150	428	491	692	1120	1530	448	238	193
18	276	793	420	1020	412	472	931	1090	1390	436	233	176
19	537	734	390	975	403	453	1030	1000	1280	421	231	180
20	388	2550	364	894	388	449	1140	934	1190	421	228	199
21	385	2190	360	824	377	427	1320	893	1110	418	224	183
22	400	1520	350	779	368	410	1160	854	1040	402	220	175
23	362	1270	339	741	362	400	1540	818	997	390	218	168
24	336	1120	328	707	350	379	1980	900	1510	394	214	167
25	308	990	319	683	339	365	1640	922	1250	416	206	168
26	285	903	314	689	337	360	1430	1050	1720	390	203	170
27	266	851	307	750	354	357	1280	1500	1190	372	197	178
28	252	788	304	912	348	344	1130	1830	997	359	191	173
29	241	741	299	951	---	329	1360	1400	956	353	185	166
30	226	697	294	929	---	321	1610	1200	1170	341	180	161
31	220	---	290	907	---	313	---	1100	---	333	174	---
MEAN	274	1366	414	678	515	446	831	1600	2470	524	258	178
MAX	610	4300	664	1640	880	734	1980	4270	16200	933	373	211
MIN	122	202	290	243	337	306	263	818	932	333	174	161
IN.	.74	3.57	1.12	1.83	1.26	1.21	2.17	4.32	6.45	1.42	.70	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1995, BY WATER YEAR (WY)

	MEAN	295	417	365	329	384	561	678	723	589	354	221	257
MAX	1709	2034	1993	1145	1233	1961	3281	4691	2470	2049	2337	1872	
(WY)	1960	1986	1993	1973	1968	1973	1945	1943	1995	1993	1950	1993	
MIN	48.3	55.4	57.3	54.9	61.7	57.9	56.0	121	81.4	47.0	37.1	47.0	
(WY)	1957	1964	1964	1964	1964	1954	1954	1963	1954	1954	1954	1953	

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR	FOR 1995 WATER YEAR	WATER YEARS 1942 - 1995
ANNUAL MEAN	664	794	431
HIGHEST ANNUAL MEAN			1221
LOWEST ANNUAL MEAN			77.8
HIGHEST DAILY MEAN	9450	Apr 12	16200 Jun 11
LOWEST DAILY MEAN	122	Oct 6	122 Oct 6
ANNUAL SEVEN-DAY MINIMUM	126	Sep 30	129 Oct 1
INSTANTANEOUS PEAK FLOW	---		21900 Jun 11
INSTANTANEOUS PEAK STAGE	---		17.24 Jun 11
INSTANTANEOUS LOW FLOW	---		116 Oct 6-7
ANNUAL RUNOFF (INCHES)	21.13		25.25
10 PERCENT EXCEEDS	1310		1530
50 PERCENT EXCEEDS	386		450
90 PERCENT EXCEEDS	159		190
			86

^aFormer site and datum.

07189000 ELK RIVER NEAR TIFF CITY, MO

LOCATION.--Lat 36°37'53", long 94°35'12", in NE 1/4 NE 1/4 sec.22, T.22 N., R.34 W., McDonald County, Hydrologic Unit 11070208, near right abutment of bridge on State Highway 43, 0.8 mi downstream from Blackfoot Branch, 2.8 mi upstream from Buffalo Creek, 3.0 mi southeast of Tiff City and at mile 15.8.

DRAINAGE AREA.--872 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 927: 1940. WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.61 ft above sea level (levels by U.S. Army Corps of Engineers). Sept. 6, 1960, to Aug. 25, 1961, at site 100 ft downstream.

REMARKS.--Estimated daily discharges: Oct. 16-19, Jan. 5-7, July 22 to Aug. 14, and Sept. 6-7. Water-discharge records good. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	153	584	379	1380	608	512	3130	1450	1000	260	128
2	81	150	547	368	1280	615	500	3200	1310	905	370	119
3	79	168	519	355	1180	618	486	2860	1250	903	400	128
4	82	264	494	348	1080	620	471	2930	1340	919	700	127
5	86	3370	469	335	996	619	457	2840	1640	851	550	120
6	87	6360	449	328	917	623	441	2560	1800	802	390	115
7	116	3290	424	322	853	1770	434	2770	1840	740	305	110
8	283	2110	409	316	787	4760	425	9830	1740	687	295	102
9	590	3890	496	306	736	3200	416	15300	3120	648	290	98
10	474	4790	927	296	695	2320	447	6240	23500	604	285	95
11	366	2830	936	285	669	1820	2760	4060	35300	567	240	90
12	298	1970	799	278	636	1500	5800	3040	9590	536	200	86
13	252	1540	696	442	588	1280	3370	2650	6020	502	190	83
14	223	1290	627	5880	571	1140	2270	2820	4450	475	180	82
15	204	1090	577	5880	581	1020	1700	2650	3630	449	168	81
16	195	959	602	3560	576	947	1350	2220	3090	439	160	136
17	190	828	687	2490	554	870	1390	1960	2730	416	156	177
18	185	728	695	1910	535	817	2330	1870	2430	401	152	214
19	185	686	655	1780	522	764	2430	1690	2180	382	151	182
20	195	793	647	1710	509	723	7050	1490	1970	384	156	165
21	220	1440	617	1650	499	680	8240	1370	1820	394	165	157
22	234	1660	582	1610	502	641	4010	1270	1670	370	167	148
23	266	1460	548	1520	473	607	5110	1170	1500	350	169	143
24	242	1250	513	1380	453	583	6020	1190	2140	325	176	135
25	218	1090	490	1310	446	562	4200	1350	2150	310	168	132
26	196	970	466	1310	445	553	3100	1510	2140	305	170	131
27	182	877	449	1520	485	597	2470	1960	1680	370	185	133
28	172	787	435	1860	558	558	2110	2230	1430	305	155	140
29	164	701	422	1870	---	544	2070	2210	1280	295	137	139
30	160	633	400	1660	---	546	3000	1860	1150	280	134	136
31	157	---	387	1510	---	522	---	1630	---	270	155	---
MEAN	209	1604	566	1444	697	1065	2512	3028	4245	522	238	128
MAX	590	6360	936	5880	1380	4760	8240	15300	35300	1000	700	214
MIN	79	150	387	278	445	522	416	1170	1150	270	134	81
IN	.28	2.05	.75	1.91	.83	1.41	3.22	4.00	5.43	.69	.31	.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1995, BY WATER YEAR (WY)

MEAN	432	740	783	691	865	1337	1680	1566	995	484	270	301
MAX	2938	4094	3651	2509	2971	5020	6119	8964	4245	2565	2418	2164
(WY)	1942	1975	1993	1985	1951	1945	1945	1943	1995	1976	1950	1993
MIN	25.7	49.8	58.5	55.9	70.7	75.7	145	227	78.6	14.3	12.0	30.9
(WY)	1957	1964	1964	1964	1954	1956	1956	1964	1954	1954	1954	1953

SUMMARY STATISTICS

FOR 1994 CALENDAR YEAR

FOR 1995 WATER YEAR

WATER YEARS 1940 - 1995

ANNUAL MEAN	1094	1352	844
HIGHEST ANNUAL MEAN			1881
LOWEST ANNUAL MEAN			135
HIGHEST DAILY MEAN	23100	Apr 12	35300
LOWEST DAILY MEAN	79	Oct 3	79
ANNUAL SEVEN-DAY MINIMUM	84	Sep 30	88
INSTANTANEOUS PEAK FLOW			69900
INSTANTANEOUS PEAK STAGE			24.45
ANNUAL RUNOFF (AC-FT)	792000		978700
ANNUAL RUNOFF (CFSM)	1.25		1.55
ANNUAL RUNOFF (INCHES)	17.03		21.05
10 PERCENT EXCEEDS	2570		2890
50 PERCENT EXCEEDS	463		597
90 PERCENT EXCEEDS	124		152
			85

^aFrom rating curve extended above 60,000 ft³/s on basis of slope-area measurement of peak flow.

^bFrom flood mark.

07189000 ELK RIVER NEAR TIFF CITY, MO--Continued
(National water-quality assessment station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1962 to June 1963, November 1965 to July 1975, October 1980 to September 1981, October 1982 to June 1990, November 1992 to current year.

REMARKS.--Discontinued ambient water-quality monitoring network station October 1993; national water-quality assessment program station since April 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (000010)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (000095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 μ M-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CACO ₃) (39086)
OCT											
05...	1130	86	20.0	283	8.0	8.5	93	K160	K130	330	134
NOV											
02...	1130	151	12.5	293	8.2	12.2	115	52	50	470	136
DEC											
07...	1400	434	10.0	290	8.2	13.2	116	45	33	K7	132
JAN											
11...	1100	291	5.5	290	8.1	12.0	96	300	280	K15	125
FEB											
07...	1100	882	5.5	275	8.2	12.8	100	25	K24	35	128
MAR											
01...	1500	626	6.0	280	8.3	14.2	112	22	K16	22	130
APR											
04...	1230	485	12.0	273	8.2	11.7	107	K3	K2	86	121
MAY											
17...	1400	2120	18.0	270	8.0	8.4	93	54	52	270	117
JUN											
21...	1400	1770	19.5	272	8.1	9.4	102	40	21	49	129
JUL											
13...	1130	373	24.5	282	8.0	6.3	75	47	46	25	134
AUG											
17...	1200	177	26.0	289	8.0	5.0	62	K15	K13	K15	127

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOS, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CACO ₃) (00900)
OCT											
05...	163	0	0.600	<0.010	<0.015	0.20	<0.20	0.050	0.050	0.060	130
NOV											
02...	166	0	0.990	<0.010	<0.015	<0.20	<0.20	0.060	0.060	0.060	140
DEC											
07...	162	0	1.70	<0.010	<0.015	<0.20	<0.20	0.050	0.040	0.040	140
JAN											
11...	153	0	1.50	<0.010	0.020	<0.20	<0.20	0.030	0.070	0.020	130
FEB											
07...	157	0	2.00	0.030	<0.015	<0.20	<0.20	<0.010	0.020	0.030	130
MAR											
01...	158	0	1.80	0.010	0.020	<0.20	<0.20	<0.010	0.010	0.020	140
APR											
04...	147	0	1.30	0.030	0.020	<0.20	<0.20	0.040	0.040	0.030	130
MAY											
17...	143	0	1.60	<0.010	0.030	<0.20	<0.20	0.030	0.040	0.030	130
JUN											
21...	157	0	1.60	<0.010	0.030	<0.20	<0.20	0.030	0.040	0.030	130
JUL											
13...	163	0	1.60	0.020	0.030	<0.20	<0.20	0.090	0.040	0.040	140
AUG											
17...	155	0	1.80	0.020	<0.015	<0.20	<0.20	0.110	0.120	0.120	140

K--Results based on colony count outside the acceptable range (non-ideal colony count).

07189000 ELK RIVER NEAR TIFF CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C) (00689)
OCT 05...	3	--	--	--	--	--	0.8	0.2
NOV 02...	2	--	--	--	--	--	0.7	0.1
DEC 07...	<1	<1	4	<1	<1	<1	0.6	0.2
JAN 11...	1	--	--	--	--	--	0.7	0.2
FEB 07...	2	<1	2	<1	<1	17	0.6	0.2
MAR 01...	2	--	--	--	--	--	0.8	0.4
APR 04...	2	<1	3	<1	<1	1	0.8	0.3
MAY 17...	5	--	--	--	--	--	0.9	0.2
JUN 21...	3	<1	4	<1	<1	5	0.9	0.1
JUL 13...	2	--	--	--	--	--	0.8	0.1
AUG 17...	4	<1	2	<1	<1	5	0.9	0.2

07189000 ELK RIVER NEAR TIFF CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)
APR 04...	<0.01	<0.01	<0.01	E0.002	E0.005	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
MAY 17...	<0.002	<0.002	<0.002	0.01	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
JUN 21...	<0.002	<0.002	<0.002	0.01	E0.01	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
DATE	P,P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)	MALA- THON, DIS- SOLVED (µG/L) (39532)
APR 04...	<0.01	<0.01	<0.01	<0.01	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04	<0.01
MAY 17...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
JUN 21...	<0.01	<0.002	<0.001	<0.003	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002	<0.005
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THON WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U GF, REC (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THON, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)	PRO- METON, WATER, DIS- SOLVED (µG/L) (04037)
APR 04...	<0.04	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01	<0.01
MAY 17...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	E0.004
JUN 21...	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002	E0.003
DATE	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)	
APR 04...	<0.01	<0.02	<0.02	<0.01	<0.01	E0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01
MAY 17...	<0.003	<0.01	<0.004	<0.01	E0.004	E0.01	<0.01	<0.01	<0.002	<0.001	<0.002	<0.002
JUN 21...	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002	<0.002

E--Laboratory estimated value.

DISCHARGE AT 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. 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.

Maximum discharge at crest-stage partial-record stations

Station No.	Station Name	Location	Period of Record	Water Year 1994 Maximum			Period of record maximum		
				Date	Gage height (feet)	Discharge (ft ³ /s)	Date	Gage height (feet)	Discharge (ft ³ /s)
06901100	Locust Creek at Reger, Mo.	Grand River basin Lat 40°08'31", long 93°11'07", in NE 1/4 SW 1/4 SE 1/4 sec. 30, T. 62 N., R. 20 W., Hydrologic Unit 10280201, Sullivan County, on downstream side of State Highway 6 and 0.3 mi east of Reger. Datum of gage is 774.67 ft above sea level. Drainage area 232 mi ² .	1987-95	07-07-93 10-09-93 05-26-95	21.88 9.53 18.13	19,700 2,710 7,820	07-07-93	21.88	19,700
06910500	Moreau River near Jefferson City, Mo.	Moreau River basin Lat 38°31'44", long 92°11'31", in SE 1/4 NW 1/4 SE 1/4 sec. 25, T. 44 N., R. 12 W., Hydrologic Unit 10300102, Cole County, on downstream side of bridge on Tanner Bridge Road, 3 mi south of Jefferson City. Drainage area 561 mi ² .	1947-74 ¹ 1975-95	05-19-95	41.36	+	05-19-95	41.36	+
06927000	Maries River at Westphalia, Mo.	Osage River basin Lat 38°25'55", long 91°59'23", in NE 1/4 sec. 35, T. 43 N., R. 10 W., Hydrologic Unit 10290111, Osage County, at bridge on U.S. Highway 63, 0.8 mi southeast of Westphalia, 1.2 mi downstream from Little Maries Creek and at mile 9.9. Datum of gage is 567.83 ft. above sea level. Drainage area 257 mi ² .	1947-70 ¹ 1971-95	05-19-95	20.75	26,000	12-03-82	21.31	27,300

¹Operated as continuous-record gaging station.

+Not determined.

Water-quality partial-record stations are sites where chemical-quality, biological, and/or sediment data are collected systematically over a period of years for use in hydrologic analysis. The data are collected usually less than quarterly.

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, µM-MF (COLS./100 ML) (31625)	STREP-TOCOCCHI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALKA-LINITY WAT WH TOT IT FIELD MG/L AS CACO ₃ (00419)	BICAR-BONATE WATER WH IT FIELD MG/L AS HCO ₃ (00450)
07064400 MONTAUK SPRINGS AT MONTAUK, MO											
OCT 19...	1030	78	308	7.4	14.0	7.7	75	20	28	152	185
MAY 22...	1115	129	210	7.2	13.5	8.4	80	27	48	129	157
07064440 CURRENT RIVER BELOW MONTAUK STATE PARK											
OCT 19...	1300	91	304	7.9	15.5	10.8	108	57	36	150	184
MAY 22...	1300	164	217	7.7	15.5	11.4	114	30	27	99	121
07064530 WELCH SPRING NEAR AKERS, MO											
OCT 19...	1500	169	337	7.9	14.0	8.7	84	K3	K1	179	219
MAY 24...	0800	350	244	7.4	13.0	9.5	90	K1200	540	74	91
07064555 PULLTITE SPRING NEAR ROUND SPRING, MO											
OCT 21...	1100	49	315	8.1	14.0	9.6	93	K3	K16	163	199
MAY 22...	1500	141	205	7.4	13.0	9.7	92	K18	K28	114	140
07065000 ROUND SPRING AT ROUND SPRING, MO											
OCT 21...	0930	27	342	7.7	14.0	9.2	88	K12	23	194	237
MAY 23...	1745	82	206	7.7	13.0	9.5	90	44	160	111	135
07065500 ALLEY SPRING AT ALLEY, MO											
OCT 21...	0815	102	317	7.5	13.5	9.7	93	K1	K9	154	187
MAY 23...	1600	204	194	7.6	13.5	9.9	94	K970	440	111	136
07066110 JACKS FORK ABOVE TWO RIVERS											
OCT 20...	1700	251	376	8.7	18.5	10.4	109	K17	K10	176	206
MAY 22...	1700	680	364	8.2	20.0	9.4	103	K17	22	143	174
07066510 CURRENT RIVER ABOVE POWDER MILL											
OCT 20...	1130	1000	299	8.3	18.0	10.6	110	22	K9	176	215
MAY 23...	1430	2400	246	8.4	19.5	10.3	110	470	K7	137	157
07066550 BLUE SPRING NEAR EMINENCE, MO											
OCT 20...	1400	98	303	7.8	14.5	9.9	95	K8	K4	151	184
MAY 23...	1200	242	138	7.4	14.0	9.9	94	200	370	62	75
07067500 BIG SPRING NEAR VAN BUREN, MO											
OCT 20...	1015	468	338	7.7	15.0	8.9	86	K2	K2	178	218
MAY 23...	0945	793	249	7.4	14.0	9.4	89	K18	50	128	156
07067800 CURRENT RIVER BELOW HAWES CAMPGROUND											
OCT 20...	0815	1570	324	8.0	16.0	8.8	87	22	21	167	204
MAY 23...	0800	4340	253	7.6	17.5	9.0	92	K28	44	144	175

K--Results based on colony count outside the acceptable range (non-ideal colony count).

DATE	CAR- BONATE WATER WH IT FIELD MG/L AS CO ₃ (00447)	NITRO- GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	CADMIUM TOTAL RECOV- ERABLE (µG/L AS CD) (01027)	LEAD, TOTAL RECOV- ERABLE (µG/L AS PB) (01051)	SILVER, TOTAL RECOV- ERABLE (µG/L AS AG) (01077)	ZINC, TOTAL RECOV- ERABLE (µG/L AS ZN) (01092)
07064400 MONTAUK SPRINGS AT MONTAUK, MO										
OCT 19...	0	<0.010	0.930	<0.010	<0.20	0.040	<1	<1	4	<10
MAY 22...	0	<0.010	0.580	0.020	<0.20	<0.020	<1	<1	<1	<10
07064440 CURRENT RIVER BELOW MONTAUK STATE PARK										
OCT 19...	0	0.010	0.870	0.020	<0.20	0.020	<1	<1	<1	<10
MAY 22...	0	<0.010	0.500	0.050	<0.20	0.030	<1	<1	<1	10
07064530 WELCH SPRING NEAR AKERS, MO										
OCT 19...	0	<0.010	0.710	<0.010	<0.20	0.180	<1	<1	<1	<10
MAY 24...	0	<0.010	0.630	0.020	<0.20	<0.020	<1	<1	<1	<10
07064555 PULLTITE SPRING NEAR ROUND SPRING, MO										
OCT 21...	0	<0.010	0.670	0.010	<0.20	<0.020	<1	<1	<1	<10
MAY 22...	0	<0.010	0.440	0.020	<0.20	<0.020	<1	<1	<1	<10
07065000 ROUND SPRING AT ROUND SPRING, MO										
OCT 21...	0	<0.010	0.300	0.010	<0.20	<0.020	<1	<1	2	<10
MAY 23...	0	<0.010	0.310	0.020	<0.20	0.020	<1	<1	<1	<10
07065500 ALLEY SPRING AT ALLEY, MO										
OCT 21...	0	<0.010	0.720	0.010	<0.20	<0.020	<1	<1	<1	<10
MAY 23...	0	<0.010	0.520	0.020	<0.20	<0.020	<1	<1	<1	<10
07066110 JACKS FORK ABOVE TWO RIVERS										
OCT 20...	4	<0.010	0.320	<0.010	<0.20	0.060	<1	<1	<1	<10
MAY 22...	0	<0.010	0.200	0.030	<0.20	0.020	<1	<1	<1	<10
07066510 CURRENT RIVER ABOVE POWDER MILL										
OCT 20...	0	<0.010	0.360	<0.010	<0.20	<0.020	<1	<1	<1	<10
MAY 23...	5	<0.010	0.220	0.020	<0.20	0.050	<1	<1	<1	<10
07066550 BLUE SPRING NEAR EMINENCE, MO										
OCT 20...	0	<0.010	0.390	<0.010	<0.20	0.020	<1	<1	<1	<10
MAY 23...	0	<0.010	0.340	0.020	<0.20	0.030	<1	<1	<1	<10
07067500 BIG SPRING NEAR VAN BUREN, MO										
OCT 20...	0	<0.010	0.370	<0.010	<0.20	0.060	<1	<1	<1	<10
MAY 23...	0	<0.010	0.380	0.020	<0.20	<0.020	<1	<1	<1	<10
07067800 CURRENT RIVER BELOW HAWES CAMPGROUND										
OCT 20...	0	<0.010	0.310	<0.010	<0.20	0.030	<1	<1	<1	<10
MAY 23...	0	0.010	0.210	0.030	<0.20	<0.020	<1	<1	<1	<10

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (µS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 µM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR PER (COLS. 100 ML) (31673)	ALKA- LITY WAT DIS TOT IT FIELD (MG/L AS CaCO ₃) (39086)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)											
MAY 1994											
24...	1000	1510	18.0	389	8.2	8.6	93	220	270	130	184
SEP											
20...	1030	44	18.5	445	7.9	7.6	84	56	78	170	200
MAY 1995											
23...	1030	380	16.0	410	7.7	8.5	88	410	540	190	197
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)											
MAY 1994											
25...	1100	13	21.0	373	8.1	7.2	83	180	650	110	174
SEP											
21...	1800	0.39	20.5	374	8.0	4.8	54	32	K8	240	175
MAY 1995											
23...	1400	62	20.0	312	8.2	10.6	119	270	340	130	148
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)											
MAY 1994											
25...	1600	129	24.0	384	8.2	8.5	104	130	130	200	184
SEP											
21...	0720	9.1	20.0	351	7.8	6.4	72	26	42	170	162
MAY 1995											
24...	1630	3650	19.0	214	7.8	7.6	83	K17000	K19000	K23000	97
06926250 LITTLE TAVERN CREEK NEAR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)											
MAY 1994											
19...	1530	38	20.0	307	8.0	8.6	93	200	66	110	149
AUG											
31...	1100	14	22.5	343	8.1	8.3	94	230	260	760	170
MAY 1995											
30...	1400	82	17.0	270	8.0	9.2	94	140	150	120	132
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)											
MAY 1994											
19...	1045	112	17.5	296	7.9	9.8	101	190	130	52	131
AUG											
30...	1030	15	22.5	354	8.0	7.5	86	K86	K51	190	175
JUN 1995											
01...	1100	152	17.0	287	7.8	9.6	99	230	150	82	125
06927590 WOODS FORK NEAR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)											
MAY 1994											
24...	1245	11	21.5	346	8.6	12.8	150	77	46	K16	183
SEP											
07...	0745	2.8	19.0	397	7.8	5.5	60	K180	170	97	199
MAY 1995											
23...	1600	61	21.0	320	8.8	12.8	150	290	290	26	162
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)											
MAY 1994											
17...	1330	715	16.5	243	7.7	9.2	94	K730	370	100	115
SEP											
14...	1130	90	21.0	352	8.0	8.3	93	110	130	31	178
MAY 1995											
10...	1200	812	14.0	244	7.9	9.2	90	520	280	330	192
06930000 BIG PINEY RIVER NEAR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)											
MAY 1994											
20...	1200	800	16.0	247	8.0	10.9	110	32	K14	K20	119
SEP											
13...	1045	244	20.0	316	8.3	8.2	89	48	56	28	162
MAY 1995											
16...	1130	740	17.0	253	8.1	8.9	93	230	170	520	108
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)											
MAY 1994											
24...	1115	434	18.0	317	8.1	9.8	103	26	K10	K15	155
AUG											
23...	1045	152	20.5	388	8.2	10.2	111	61	30	100	194

K--Results based on colony count outside the acceptable range (non-ideal colony count).

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

287

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)											
MAY 1994											
24...	225	0	1.80	0.010	0.020	<0.20	<0.20	0.040	<0.010	<0.010	200
SEP											
20...	244	0	1.20	<0.010	<0.010	<0.20	<0.20	0.050	0.050	0.050	210
MAY 1995											
23...	240	0	1.20	<0.010	<0.015	<0.20	<0.20	0.020	<0.010	0.020	210
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)											
MAY 1994											
25...	212	0	<0.050	<0.010	0.010	0.20	<0.20	<0.010	<0.010	<0.010	190
SEP											
21...	213	0	<0.050	<0.010	<0.010	<0.20	<0.20	0.020	<0.010	<0.010	180
MAY 1995											
23...	181	0	0.100	<0.010	<0.015	<0.20	<0.20	0.010	0.020	0.010	150
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)											
MAY 1994											
25...	225	0	0.080	<0.010	0.020	0.30	<0.20	0.020	<0.010	<0.010	200
SEP											
21...	197	0	0.065	<0.010	0.010	<0.20	0.20	0.040	0.040	0.030	170
MAY 1995											
24...	118	0	0.200	0.020	0.060	1.5	0.70	0.330	0.160	0.170	100
06926250 LITTLE TAVERN CREEK NEAR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)											
MAY 1994											
19...	182	0	0.250	0.020	0.020	0.70	<0.20	0.030	<0.010	0.010	160
AUG											
31...	207	0	0.120	<0.010	0.030	<0.20	<0.20	0.030	0.020	0.010	180
MAY 1995											
30...	161	0	0.200	<0.010	0.020	<0.20	<0.20	0.010	<0.010	0.020	140
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)											
MAY 1994											
19...	160	0	0.200	0.020	0.030	<0.20	<0.20	0.030	0.020	0.030	150
AUG											
30...	214	0	<0.050	<0.010	0.020	<0.20	<0.20	0.020	0.010	<0.010	180
JUN 1995											
01...	152	0	0.470	<0.010	0.020	<0.20	<0.20	0.020	0.010	0.020	140
06927590 WOODS FORK NEAR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)											
MAY 1994											
24...	133	44	0.120	<0.010	0.030	0.20	<0.20	0.020	<0.010	<0.010	180
SEP											
07...	243	0	0.140	<0.010	0.020	<0.20	<0.20	0.030	0.020	<0.010	210
MAY 1995											
23...	159	19	0.250	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	170
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)											
MAY 1994											
17...	141	0	0.740	<0.010	0.010	<0.20	<0.20	0.040	0.020	0.030	120
SEP											
14...	217	0	0.320	<0.010	0.020	<0.20	<0.20	0.030	0.030	0.020	180
MAY 1995											
10...	234	0	0.620	<0.010	<0.015	0.20	<0.20	0.050	0.040	0.030	120
06930000 BIG PINEY RIVER NEAR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)											
MAY 1994											
20...	145	0	0.210	0.020	0.010	0.30	<0.20	0.010	<0.010	<0.010	130
SEP											
13...	198	0	0.330	<0.010	0.020	<0.20	<0.20	0.010	<0.010	0.010	160
MAY 1995											
16...	132	0	0.230	<0.010	0.020	<0.20	0.20	<0.010	<0.010	<0.010	130
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)											
MAY 1994											
24...	189	0	0.070	<0.010	0.030	<0.20	<0.20	0.020	<0.010	<0.010	170
AUG											
23...	237	0	0.061	<0.010	0.010	<0.20	<0.20	<0.010	<0.010	<0.010	210

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDE D (MG/L) (80154)
06916440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)										
MAY 1994										
24...	71	5.2	3.4	1.3	6.8	7.9	<0.10	6.0	216	96
SEP										
20...	73	7.1	4.8	1.8	7.4	11	<0.10	9.9	243	34
MAY 1995										
23...	74	5.4	3.4	1.4	6.0	7.0	<0.10	8.7	233	107
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)										
MAY 1994										
25...	42	20	4.0	1.9	11	6.2	<0.10	1.9	188	15
SEP										
21...	37	22	5.3	2.4	6.5	8.3	<0.10	8.8	206	3
MAY 1995										
23...	37	15	3.4	1.9	7.2	4.9	<0.10	7.4	177	21
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)										
MAY 1994										
25...	43	23	4.4	2.3	8.6	9.1	<0.10	1.1	204	45
SEP										
21...	33	21	4.2	3.6	7.4	9.5	<0.10	5.4	191	11
MAY 1995										
24...	24	10	2.7	4.4	4.5	5.4	<0.10	7.9	139	--
06926250 LITTLE TAVERN CREEK NEAR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)										
MAY 1994										
19...	32	20	2.7	1.7	7.6	3.4	<0.10	7.6	163	4
AUG										
31...	35	22	2.7	2.1	7.5	4.0	<0.10	10	193	5
MAY 1995										
30...	28	17	2.3	1.6	5.5	2.5	<0.10	9.8	145	18
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)										
MAY 1994										
19...	29	19	4.0	1.9	16	4.8	<0.10	4.6	163	3
AUG										
30...	33	23	4.2	2.4	12	6.5	<0.10	9.1	209	3
JUN 1995										
01...	28	18	3.6	1.9	10	4.0	<0.10	7.8	157	21
06927590 WOODS FORK NEAR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)										
MAY 1994										
24...	36	22	2.8	1.8	4.3	6.3	<0.10	3.1	184	3
SEP										
07...	40	26	2.9	1.8	4.7	5.8	<0.10	12	210	4
MAY 1995										
23...	34	20	2.7	1.8	4.0	5.4	<0.10	6.9	174	16
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)										
MAY 1994										
17...	24	14	2.3	2.0	5.0	4.2	<0.10	8.1	132	20
SEP										
14...	36	21	2.4	2.0	4.2	4.8	<0.10	8.9	195	10
MAY 1995										
10...	26	14	2.4	2.1	4.7	5.2	<0.10	8.3	135	32
06930000 BIG PINEY RIVER NEAR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)										
MAY 1994										
20...	26	15	1.9	1.3	5.1	2.9	<0.10	5.9	135	6
SEP										
13...	34	19	2.3	1.7	4.2	3.8	<0.10	8.8	168	2
MAY 1995										
16...	27	15	1.9	1.4	3.7	3.4	0.10	6.0	135	20
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)										
MAY 1994										
24...	35	19	1.8	1.0	8.0	1.9	<0.10	6.2	166	1
AUG										
23...	43	24	2.7	1.2	9.5	2.6	<0.10	9.4	201	4

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)										
MAY 1994										
24...	--	--	--	--	--	--	--	11	--	--
SEP										
20...	--	--	--	--	--	--	--	5	--	--
MAY 1995										
23...	--	--	--	--	--	--	--	74	--	--
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)										
MAY 1994										
25...	<1	75	<0.5	<1	<5	<3	<10	33	<10	<4
SEP										
21...	1	74	<0.5	<1	<5	<3	<10	50	<10	<4
MAY 1995										
23...	<1	65	<1	<1	2	<1	<1	38	<1	--
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)										
MAY 1994										
25...	<1	74	<0.5	1	<5	<3	<10	27	<10	<4
SEP										
21...	1	90	<0.5	<1	<5	<3	<10	12	<10	<4
MAY 1995										
24...	<1	52	<1	<1	2	<1	2	180	<1	--
06926250 LITTLE TAVERN CREEK NEAR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)										
MAY 1994										
19...	--	--	--	--	--	--	--	5	--	--
AUG										
31...	--	--	--	--	--	--	--	4	--	--
MAY 1995										
30...	<1	82	<1	<1	2	<1	<1	9	<1	--
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)										
MAY 1994										
19...	--	--	--	--	--	--	--	7	--	--
AUG										
30...	--	--	--	--	--	--	--	4	--	--
JUN 1995										
01...	<1	69	<1	<1	3	<1	<1	4	<1	--
06927590 WOODS FORK NEAR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)										
MAY 1994										
24...	--	--	--	--	--	--	--	6	--	--
SEP										
07...	--	--	--	--	--	--	--	5	--	--
MAY 1995										
23...	8	43	<1	<1	3	<1	<1	9	<1	--
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)										
MAY 1994										
17...	--	--	--	--	--	--	--	28	--	--
SEP										
14...	--	--	--	--	--	--	--	13	--	--
MAY 1995										
10...	--	--	--	--	--	--	--	27	--	--
06930000 BIG PINEY RIVER NEAR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)										
MAY 1994										
20...	--	--	--	--	--	--	--	31	--	--
SEP										
13...	--	--	--	--	--	--	--	12	--	--
MAY 1995										
16...	--	--	--	--	--	--	--	26	--	--
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)										
MAY 1994										
24...	<1	97	<0.5	<1	<5	<3	<10	9	<10	<4
AUG										
23...	<1	130	<0.5	<1	<5	<3	<10	7	<10	<4

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)										
MAY 1994										
24...	17	--	--	--	--	--	--	--	1.0	0.3
SEP										
20...	25	--	--	--	--	--	--	--	1.2	0.3
MAY 1995										
23...	14	--	--	--	--	--	--	--	2.9	0.3
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)										
MAY 1994										
25...	10	<10	<10	<1	<1	54	<6	<3	2.0	--
SEP										
21...	33	<10	<10	<1	<1	52	<6	<3	3.0	0.2
MAY 1995										
23...	15	<1	3	<1	<1	--	--	1	2.8	0.2
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)										
MAY 1994										
25...	24	<10	<10	<1	<1	47	<6	<3	2.2	0.2
SEP										
21...	23	<10	<10	<1	<1	45	<6	<3	3.1	0.2
MAY 1995										
24...	8	<1	3	<1	<1	--	--	2	9.4	4.1
06926250 LITTLE TAVERN CREEK NEAR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)										
MAY 1994										
19...	7	--	--	--	--	--	--	--	1.7	0.1
AUG										
31...	5	--	--	--	--	--	--	--	1.2	0.2
MAY 1995										
30...	5	<1	1	<1	<1	--	--	2	2.2	0.1
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)										
MAY 1994										
19...	7	--	--	--	--	--	--	--	2.4	0.1
AUG										
30...	9	--	--	--	--	--	--	--	1.7	0.3
JUN 1995										
01...	3	<1	2	<1	<1	--	--	6	2.3	0.1
06927590 WOODS FORK NEAR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)										
MAY 1994										
24...	6	--	--	--	--	--	--	--	3.8	0.2
SEP										
07...	11	--	--	--	--	--	--	--	1.1	0.1
MAY 1995										
23...	6	<1	3	<1	<1	--	--	<1	1.9	0.2
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)										
MAY 1994										
17...	12	--	--	--	--	--	--	--	2.0	0.1
SEP										
14...	33	--	--	--	--	--	--	--	1.1	0.3
MAY 1995										
10...	9	--	--	--	--	--	--	--	2.1	0.2
06930000 BIG PINEY RIVER NEAR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)										
MAY 1994										
20...	10	--	--	--	--	--	--	--	1.6	0.2
SEP										
13...	9	--	--	--	--	--	--	--	1.2	0.1
MAY 1995										
16...	9	--	--	--	--	--	--	--	1.2	0.2
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)										
MAY 1994										
24...	10	<10	<10	<1	<1	35	<6	3	0.8	0.1
AUG										
23...	8	<10	<10	<1	<1	43	<6	23	0.8	0.1

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

291

DATE	ACETO- CHLOR, WATER FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER FLTRD GF, REC (µG/L) (82680)	CARBO- FURAN WATER FLTRD GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (µG/L) (82682)
------	--	--	---	---	--	---	---	---	---	--	--	---

06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)

MAY 1994	24...	--	<0.01	<0.01	0.02	0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	23...	<0.01	<0.01	<0.01	0.02	E0.01	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004

06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)

MAY 1994	25...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	23...	<0.002	<0.002	<0.002	0.005	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002

06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)

MAY 1994	25...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	24...	<0.01	<0.01	<0.01	0.09	E0.01	<0.01	<0.01	E0.01	<0.01	0.01	<0.01	<0.004

06926250 LITTLE TAVERN CR. NR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)

MAY 1994	19...	--	<0.01	<0.01	0.01	<0.005	<0.01	0.02	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	30...	<0.002	<0.002	<0.002	E0.003	E0.003	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002

06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)

MAY 1994	19...	--	<0.01	<0.01	0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
JUN 1995	01...	<0.002	<0.002	<0.002	0.01	E0.004	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002

06927590 WOODS FORK NR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)

MAY 1994	24...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	23...	<0.01	<0.01	<0.01	E0.004	<0.003	E0.01	<0.01	<0.05	<0.01	0.01	E0.005	E0.001

06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)

MAY 1994	17...	--	<0.01	<0.01	0.05	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	10...	<0.01	<0.01	<0.01	0.02	E0.01	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004

06930000 BIG PINEY RIVER NR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)

MAY 1994	20...	--	<0.01	<0.01	0.01	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995	16...	<0.002	<0.002	<0.002	0.01	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002

07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)

MAY 1994	24...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
----------	-------	----	-------	-------	-------	--------	-------	-------	-------	-------	-------	-------	--------

E--Laboratory estimated value.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	P, P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U (µG/L) (82660)	DIMETH- OATE WATER FLTRD 0.7 U (µG/L) (82662)	DISUL- FOTON WATER FLTRD 0.7 U (µG/L) (82677)	EPTC WATER FLTRD 0.7 U (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U (µG/L) (82672)	PONOFOS WATER RECC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (µG/L) (82666)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)												
MAY 1994 24...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 23...	<0.01	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)												
MAY 1994 25...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 23...	<0.01	<0.002	<0.001	<0.003	--	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)												
MAY 1994 25...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 24...	<0.01	0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
06926250 LITTLE TAVERN CR. NR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)												
MAY 1994 19...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 30...	<0.01	<0.002	<0.001	<0.003	--	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)												
MAY 1994 19...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
JUN 1995 01...	<0.01	<0.002	<0.001	<0.003	--	<0.02	E0.003	<0.004	<0.003	<0.003	<0.004	<0.002
06927590 WOODS FORK NR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)												
MAY 1994 24...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 23...	E0.003	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)												
MAY 1994 17...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 10...	<0.01	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
06930000 BIG PINEY RIVER NR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)												
MAY 1994 20...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995 16...	<0.01	<0.002	<0.001	<0.003	--	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)												
MAY 1994 24...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

293

DATE	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)												
MAY 1994 24...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.01	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)												
MAY 1994 25...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.005	<0.001	<0.01	E0.003	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)												
MAY 1994 25...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 24...	<0.01	<0.04	<0.04	0.05	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
06926250 LITTLE TAVERN CR. NR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)												
MAY 1994 19...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 30...	<0.005	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
0692690 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)												
MAY 1994 19...	<0.01	<0.05	<0.04	0.004	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
JUN 1995 01...	<0.005	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
06927590 WOODS FORK NR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)												
MAY 1994 24...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.01	<0.04	<0.04	E0.002	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	E0.001	<0.01
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)												
MAY 1994 17...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 10...	<0.01	<0.04	<0.04	E0.004	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
06930000 BIG PINEY RIVER NR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)												
MAY 1994 20...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 16...	<0.005	<0.001	<0.01	E0.003	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)												
MAY 1994 24...	<0.01	<0.05	<0.03	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	PRO- METON, WATER, DISS, REC (µG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)
06918440 SAC RIVER NEAR DADEVILLE, MO (LAT 37 26 35N LONG 093 41 05W)												
MAY 1994												
24...	<0.01	<0.01	<0.02	<0.02	<0.01	0.002	0.01	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
23...	0.01	<0.01	<0.02	<0.02	<0.01	<0.01	E0.005	<0.03	<0.01	<0.01	<0.01	<0.01
06919925 BRUSH CREEK ABOVE COLLINS, MO (LAT 37 50 05N LONG 093 40 22W)												
MAY 1994												
25...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
23...	<0.02	<0.003	<0.01	<0.004	<0.01	<0.005	E0.01	<0.01	<0.01	<0.002	<0.001	<0.002
06921070 POMME DE TERRE RIVER NEAR POLK, MO (LAT 37 40 56N LONG 093 22 12W)												
MAY 1994												
25...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
24...	0.02	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
06926250 LITTLE TAVERN CR. NR ST. ELIZABETH, MO (LAT 38 16 08N LONG 092 12 50W)												
MAY 1994												
19...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	0.005	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
30...	<0.02	<0.003	<0.01	<0.004	<0.01	<0.005	0.03	<0.01	<0.01	<0.002	<0.001	<0.002
06926900 MARIES RIVER NEAR FREEBURG, MO (LAT 38 20 01N LONG 091 59 34W)												
MAY 1994												
19...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
JUN 1995												
01...	E0.005	<0.003	<0.01	<0.004	<0.01	E0.004	0.02	<0.01	<0.01	<0.002	<0.001	<0.002
06927590 WOODS FORK NR HARTVILLE, MO (LAT 37 14 43N LONG 092 34 04W)												
MAY 1994												
24...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
23...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	E0.01	<0.03	<0.01	<0.01	<0.01	E0.01
06927780 OSAGE FORK NEAR RUSS, MO (LAT 37 35 18N LONG 092 30 54W)												
MAY 1994												
17...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
10...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	E0.01	<0.03	<0.01	<0.01	<0.01	<0.01
06930000 BIG PINEY RIVER NR BIG PINEY, MO (LAT 37 39 58N LONG 092 03 02W)												
MAY 1994												
20...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995												
16...	<0.02	<0.003	<0.01	<0.004	<0.01	<0.005	E0.01	<0.01	<0.01	<0.002	<0.001	<0.002
07014300 HUZZAH CREEK NEAR SCOTIA, MO (LAT 38 01 44N LONG 091 12 48W)												
MAY 1994												
24...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01

E--Laboratory estimated value.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

295

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (μS/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	COLI- FORM, FECAL, 0.7 μM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML) (31673)	ALKA- LITY TOT IT FIELD (MG/L AS CaCO ₃) (39086)
07018100 BIG RIVER NEAR RICHWOODS, MO (LAT 38 09 34N LONG 090 42 22W)											
MAY 1994											
24...	1615	671	21.0	443	8.2	9.6	107	K18	K14	23	204
AUG											
24...	1030	126	22.0	519	8.4	8.2	92	K33	K20	K31	224
MAY 1995											
11...	1200	1490	15.0	308	8.1	8.7	86	340	150	210	142
07052250 JAMES RIVER NEAR BOAZ, MO (LAT 37 00 25N LONG 093 21 50W)											
MAY 1994											
24...	1600	335	22.0	414	8.7	12.9	152	50	120	140	164
SEP											
08...	0930	158	19.5	642	8.0	8.2	89	320	620	250	188
MAY 1995											
24...	0930	460	19.5	408	7.7	7.1	79	450	580	270	158
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)											
MAY 1994											
24...	0715	12	16.0	270	8.0	8.5	88	K15	K16	88	138
SEP											
07...	1600	4.9	21.0	306	8.2	7.4	85	24	K13	46	158
MAY 1995											
23...	1215	16	18.0	252	8.3	9.0	98	28	K16	31	136
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)											
MAY 1994											
23...	1500	242	20.0	297	8.1	10.8	121	K8	K6	K9	152
SEP											
08...	1115	122	20.0	351	8.2	8.2	91	43	--	40	182
MAY 1995											
23...	0845	343	17.5	303	8.1	8.6	91	35	36	49	169
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)											
MAY 1994											
27...	1330	564	15.0	262	7.8	12.6	124	K4	K4	K11	132
SEP											
19...	1115	268	14.5	326	8.2	11.4	110	K14	K15	K13	170
MAY 1995											
23...	1345	565	15.5	253	7.9	12.0	119	31	--	73	123
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)											
MAY 1994											
25...	1130	26	20.0	278	7.9	9.1	100	32	20	57	148
SEP											
22...	1000	9.5	18.5	325	8.1	7.0	75	23	K16	45	172
MAY 1995											
23...	1030	67	16.5	221	8.1	10.3	105	30	--	34	108
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)											
MAY 1994											
26...	1545	8.0	18.0	286	8.0	10.4	109	80	100	27	147
SEP											
21...	1030	4.2	17.0	342	8.2	9.5	97	K16	K22	K23	184
MAY 1995											
19...	1100	41	14.0	191	8.0	10.3	100	180	130	110	100
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)											
MAY 1994											
19...	0930	56	15.0	220	8.0	10.0	102	K11	K7	21	98
AUG											
30...	0930	2.2	--	267	7.8	5.8	--	K27	51	110	126
MAY 1995											
18...	1000	76	14.5	214	7.8	8.6	87	44	40	170	105
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)											
MAY 1994											
23...	1230	40	16.5	301	7.8	10.5	111	390	340	80	122
AUG											
31...	0900	12	18.5	307	7.0	6.8	74	630	1100	1400	142
MAY 1995											
18...	1430	79	14.5	277	7.3	9.2	93	200	240	400	118

K--Results based on colony count outside the acceptable range (non-ideal colony count).

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	BICAR- BONATE WATER DIS IT FIELD (MG/L AS HCO ₃) (00453)	CAR- BONATE WATER DIS IT FIELD (MG/L AS CO ₃) (00452)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	HARD- NESS TOTAL (MG/L AS CaCO ₃) (00900)
07018100 BIG RIVER NEAR RICHWOODS, MO (LAT 38 09 34N LONG 090 42 22W)											
MAY 1994											
24...	249	0	<0.050	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	230
AUG											
24...	273	0	<0.050	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	270
MAY 1995											
11...	174	0	0.160	<0.010	0.020	0.30	<0.20	0.040	0.020	0.020	160
07052250 JAMES RIVER NEAR BOAZ, MO (LAT 37 00 25N LONG 093 21 50W)											
MAY 1994											
24...	180	10	1.80	0.010	0.020	0.30	<0.20	0.240	0.210	0.210	180
SEP											
08...	230	0	3.40	<0.010	0.030	0.30	0.30	0.780	0.800	0.790	--
MAY 1995											
24...	193	0	2.00	0.030	0.060	0.20	<0.20	0.230	0.220	0.250	170
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)											
MAY 1994											
24...	169	0	0.110	<0.010	0.020	<0.20	<0.20	0.030	0.010	<0.010	140
SEP											
07...	192	0	0.088	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	160
MAY 1995											
23...	166	0	0.090	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	140
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)											
MAY 1994											
23...	186	0	0.310	<0.010	0.010	<0.20	<0.20	0.020	0.010	<0.010	150
SEP											
08...	222	0	0.260	<0.010	0.020	<0.20	<0.20	0.010	<0.010	<0.010	190
MAY 1995											
23...	206	0	0.330	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	160
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)											
MAY 1994											
27...	161	0	0.450	<0.010	<0.010	<0.20	<0.20	0.010	<0.010	<0.010	140
SEP											
19...	207	0	0.500	<0.010	<0.010	<0.20	<0.20	<0.010	<0.010	<0.010	160
MAY 1995											
23...	150	0	0.430	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	130
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)											
MAY 1994											
25...	181	0	<0.050	<0.010	<0.010	<0.20	<0.20	<0.010	<0.010	<0.010	150
SEP											
22...	209	0	<0.050	<0.010	<0.010	<0.20	<0.20	<0.010	<0.010	<0.010	170
MAY 1995											
23...	132	0	0.080	<0.010	0.030	<0.20	<0.20	<0.010	<0.010	<0.010	110
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)											
MAY 1994											
26...	179	0	<0.050	<0.010	<0.010	<0.20	<0.20	<0.010	<0.010	0.010	150
SEP											
21...	225	0	0.087	<0.010	<0.010	<0.20	<0.20	0.020	0.010	<0.010	180
MAY 1995											
19...	122	0	<0.050	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	100
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)											
MAY 1994											
19...	119	0	0.430	<0.010	0.010	<0.20	<0.20	<0.010	0.020	<0.010	100
AUG											
30...	154	0	0.550	<0.010	0.020	<0.20	<0.20	<0.010	<0.010	<0.010	130
MAY 1995											
18...	128	0	0.520	<0.010	<0.015	<0.20	<0.20	<0.010	<0.010	<0.010	100
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)											
MAY 1994											
23...	148	0	3.90	<0.010	0.010	<0.20	<0.20	<0.010	0.020	0.020	140
AUG											
31...	173	0	3.70	<0.010	0.030	<0.20	<0.20	0.040	0.030	0.040	150
MAY 1995											
18...	144	0	3.80	<0.010	0.020	<0.20	<0.20	0.020	0.020	0.020	130

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

297

DATE	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO ₄) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SiO ₂) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDE (MG/L) (80154)
07018100 BIG RIVER NEAR RICHWOODS, MO (LAT 38 09 34N LONG 090 42 22W)										
MAY 1994										
24...	49	27	4.0	1.4	29	5.0	<0.10	3.2	247	9
AUG										
24...	54	33	6.2	1.9	47	8.0	0.10	6.4	301	38
MAY 1995										
11...	34	18	2.9	1.5	17	3.3	<0.10	8.2	172	42
07052250 JAMES RIVER NEAR BOAZ, MO (LAT 37 00 25N LONG 093 21 50W)										
MAY 1994										
24...	64	5.1	16	2.5	18	18	0.10	5.2	242	6
SEP										
08...	--	--	--	--	--	--	--	--	--	18
MAY 1995										
24...	60	5.4	13	2.4	13	17	0.20	7.0	232	30
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)										
MAY 1994										
24...	29	17	1.2	1.2	2.6	1.7	<0.10	6.6	139	3
SEP										
07...	32	19	1.3	1.2	2.0	2.0	<0.10	9.7	161	3
MAY 1995										
23...	28	16	1.1	1.0	2.4	1.6	<0.10	7.9	131	12
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)										
MAY 1994										
23...	32	18	1.2	1.3	3.0	2.3	<0.10	6.4	154	2
SEP										
08...	38	23	1.4	1.2	2.7	2.2	<0.10	8.5	186	3
MAY 1995										
23...	33	19	1.3	1.2	2.8	2.6	<0.10	6.8	156	10
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)										
MAY 1994										
27...	28	16	1.4	0.90	3.8	2.3	<0.10	6.5	141	4
SEP										
19...	34	19	1.9	0.80	2.7	2.8	<0.10	7.5	173	1
MAY 1995										
23...	27	15	1.5	0.90	2.8	2.2	<0.10	7.5	143	19
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)										
MAY 1994										
25...	31	17	1.1	0.90	3.6	1.2	<0.10	6.0	144	0
SEP										
22...	34	20	1.2	0.90	2.5	1.5	<0.10	8.0	166	2
MAY 1995										
23...	24	13	1.0	0.80	2.8	1.6	<0.10	7.1	120	12
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)										
MAY 1994										
26...	32	18	0.90	0.80	3.5	0.90	<0.10	7.2	144	0
SEP										
21...	37	22	1.0	0.90	2.8	1.0	<0.10	8.7	181	0
MAY 1995										
19...	21	12	0.80	0.80	2.5	0.90	<0.10	8.5	105	6
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)										
MAY 1994										
19...	39	1.8	1.8	1.1	4.1	2.5	<0.10	8.0	122	18
AUG										
30...	49	2.6	2.2	1.6	3.8	4.2	<0.10	12	160	12
MAY 1995										
18...	39	1.8	1.9	1.2	3.4	2.6	<0.10	9.4	125	9
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)										
MAY 1994										
23...	52	1.9	4.3	1.7	4.5	6.2	<0.10	8.4	168	6
AUG										
31...	57	2.1	5.1	1.8	4.1	6.4	<0.10	11	200	24
MAY 1995										
18...	48	1.9	4.0	1.8	4.3	6.0	<0.10	9.8	166	12

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	ARSENIC DIS- SOLVED (µG/L AS AS) (01000)	BARIUM, DIS- SOLVED (µG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (µG/L AS BE) (01010)	CADMIUM DIS- SOLVED (µG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (µG/L AS CR) (01030)	COBALT, DIS- SOLVED (µG/L AS CO) (01035)	COPPER, DIS- SOLVED (µG/L AS CU) (01040)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	LEAD, DIS- SOLVED (µG/L AS PB) (01049)	LITHIUM DIS- SOLVED (µG/L AS LI) (01130)
07018100 BIG RIVER NEAR RICHWOODS, MO (LAT 38 09 34N LONG 090 42 22W)										
MAY 1994										
24...	<1	300	<0.5	<1	<5	<3	<10	9	<10	<4
AUG										
24...	<1	410	<0.5	<1	<5	<3	<10	7	<10	<4
MAY 1995										
11...	<1	190	<1	<1	2	<1	2	39	7	--
07052250 JAMES RIVER NEAR BOAZ, MO (LAT 37 00 25N LONG 093 21 50W)										
MAY 1994										
24...	--	--	--	--	--	--	--	8	--	--
SEP										
08...	--	--	--	--	--	--	--	--	--	--
MAY 1995										
24...	--	--	--	--	--	--	--	9	--	--
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)										
MAY 1994										
24...	--	--	--	--	--	--	--	9	--	--
SEP										
07...	--	--	--	--	--	--	--	13	--	--
MAY 1995										
23...	<1	31	<1	<1	8	<1	<1	8	<1	--
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)										
MAY 1994										
23...	--	--	--	--	--	--	--	7	--	--
SEP										
08...	--	--	--	--	--	--	--	7	--	--
MAY 1995										
23...	3	33	<1	<1	2	<1	<1	6	<1	--
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)										
MAY 1994										
27...	--	--	--	--	--	--	--	10	--	--
SEP										
19...	--	--	--	--	--	--	--	4	--	--
MAY 1995										
23...	--	--	--	--	--	--	--	11	--	--
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)										
MAY 1994										
25...	<1	31	<0.5	2	<5	<3	<10	6	<10	<4
SEP										
22...	<1	37	<0.5	<1	<5	<3	<10	5	<10	<4
MAY 1995										
23...	--	--	--	--	--	--	--	17	--	--
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)										
MAY 1994										
26...	--	--	--	--	--	--	--	<3	--	--
SEP										
21...	<1	35	<0.5	<1	<5	<3	<10	5	<10	<4
MAY 1995										
19...	--	--	--	--	--	--	--	20	--	--
07188660 MIKES CREEK AT POWELL,										

DATE	MANGANESE, DIS- SOLVED (µG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (µG/L AS MO) (01060)	NICKEL, DIS- SOLVED (µG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (µG/L AS SE) (01145)	SILVER, DIS- SOLVED (µG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (µG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (µG/L AS V) (01085)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C) (00689)
07018100 BIG RIVER NEAR RICHWOODS, MO (LAT 38 09 34N LONG 090 42 22W)										
MAY 1994										
24...	19	<10	<10	<1	<1	53	<6	19	1.4	0.2
AUG										
24...	26	<10	<10	<1	<1	60	<6	8	1.1	0.3
MAY 1995										
11...	17	<1	4	<1	<1	--	--	13	2.8	0.5
07052250 JAMES RIVER NEAR BOAZ, MO (LAT 37 00 25N LONG 093 21 50W)										
MAY 1994										
24...	4	--	--	--	--	--	--	--	1.4	0.3
SEP										
08...	--	--	--	--	--	--	--	--	2.0	0.2
MAY 1995										
24...	8	--	--	--	--	--	--	--	1.4	0.2
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)										
MAY 1994										
24...	4	--	--	--	--	--	--	--	2.2	0.1
SEP										
07...	5	--	--	--	--	--	--	--	1.0	0.1
MAY 1995										
23...	<1	<1	2	<1	<1	--	--	<1	1.1	0.1
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)										
MAY 1994										
23...	5	--	--	--	--	--	--	--	1.0	0.1
SEP										
08...	7	--	--	--	--	--	--	--	0.9	0.2
MAY 1995										
23...	4	<1	3	<1	<1	--	--	1	0.9	0.1
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)										
MAY 1994										
27...	3	--	--	--	--	--	--	--	0.8	--
SEP										
19...	4	--	--	--	--	--	--	--	0.4	0.1
MAY 1995										
23...	5	--	--	--	--	--	--	--	0.6	0.2
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)										
MAY 1994										
25...	4	<10	<10	<1	<1	28	<6	17	1.1	0.1
SEP										
22...	2	<10	<10	<1	<1	33	<6	<3	0.5	0.1
MAY 1995										
23...	3	--	--	--	--	--	--	--	0.9	0.1
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)										
MAY 1994										
26...	2	--	--	--	--	--	--	--	--	0.1
SEP										
21...	5	10	<10	<1	<1	29	<6	14	0.5	0.1
MAY 1995										
19...	1	--	--	--	--	--	--	--	0.9	0.1
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)										
MAY 1994										
19...	<1	--	--	--	--	--	--	--	0.6	0.1
AUG										
30...	2	--	--	--	--	--	--	--	0.6	0.1
MAY 1995										
18...	<1	--	--	--	--	--	--	--	1.6	0.1
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)										
MAY 1994										
23...	4	--	--	--	--	--	--	--	0.5	0.1
AUG										
31...	15	--	--	--	--	--	--	--	0.6	0.2
MAY 1995										
18...	5	--	--	--	--	--	--	--	0.8	0.2

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (µG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (µG/L) (04028)	CAR- BARYL WATER, FLTRD 0.7 U GF, REC (µG/L) (82680)	CARBO- FURAN WATER, FLTRD 0.7 U GF, REC (µG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER, FLTRD 0.7 U GF, REC (µG/L) (82682)
07018100 BIG RIVER NEAR RICHWOODS MO (LAT 38 09 34N LONG 090 42 22W)												
MAY 1994 24...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 11...	<0.01	<0.01	<0.01	E0.01	E0.01	<0.01	<0.01	<0.05	<0.01	<0.03	0.02	<0.004
07052250 JAMES RIVER NEAR BOAZ, MO. (LAT 37 00 25N LONG 093 21 50W)												
MAY 1994 24...	--	<0.01	<0.01	0.03	0.003	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 24...	<0.01	<0.01	<0.01	E0.02	E0.005	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)												
MAY 1994 24...	--	<0.01	<0.01	0.003	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 23...	<0.01	<0.01	<0.01	<0.02	<0.003	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)												
MAY 1994 23...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 23...	<0.002	<0.002	<0.002	0.02	E0.004	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)												
MAY 1994 27...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 23...	<0.01	<0.01	<0.01	<0.02	E0.004	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)												
MAY 1994 25...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 23...	<0.01	<0.01	<0.01	<0.02	E0.004	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)												
MAY 1994 26...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 19...	<0.002	<0.002	<0.002	E0.002	E0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)												
MAY 1994 19...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 18...	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	<0.002	<0.003	<0.003	<0.004	<0.004	<0.002
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)												
MAY 1994 23...	--	<0.01	<0.01	<0.02	<0.005	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.004
MAY 1995 18...	<0.01	<0.01	<0.01	0.02	E0.01	<0.01	<0.01	<0.05	<0.01	<0.005	<0.01	<0.004

E--Laboratory estimated value.

DATE	P, P' DDE DISSOLV (µG/L) (34653)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	DI- ELDRIN DIS- SOLVED (µG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (µG/L) (82660)	DIMETH- OATE WATER FLTRD 0.7 U GG, REC (µG/L) (82662)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (µG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (µG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (µG/L) (82672)	FONOFOS WATER DISS REC (µG/L) (04095)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (µG/L) (82666)
07018100 BIG RIVER NEAR RICHWOODS MO (LAT 38 09 34N LONG 090 42 22W)												
MAY 1994												
24...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
11...	<0.01	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
07052250 JAMES RIVER NEAR BOAZ, MO. (LAT 37 00 25N LONG 093 21 50W)												
MAY 1994												
24...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
24...	<0.01	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)												
MAY 1994												
24...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
23...	E0.003	<0.01	E0.003	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)												
MAY 1994												
23...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
23...	E0.002	<0.002	<0.001	<0.003	--	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)												
MAY 1994												
27...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
23...	E0.001	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)												
MAY 1994												
25...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
23...	E0.001	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)												
MAY 1994												
26...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
19...	<0.01	<0.002	<0.001	<0.003	--	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)												
MAY 1994												
19...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
18...	E0.001	<0.002	<0.001	<0.003	--	<0.02	<0.002	<0.004	<0.003	<0.003	<0.004	<0.002
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)												
MAY 1994												
23...	<0.01	<0.01	<0.01	<0.01	<0.02	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04
MAY 1995												
18...	<0.01	<0.01	<0.01	<0.01	--	<0.06	<0.005	<0.01	<0.01	<0.01	<0.01	<0.04

E--Laboratory estimated value.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

DATE	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (µG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (µG/L) (82667)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN WATER DISSOLV (µG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (µG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82684)	PARA- THION, DIS- SOLVED (µG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (µG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (µG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (µG/L) (82664)
07018100 BIG RIVER NEAR RICHWOODS MO (LAT 38 09 34N LONG 090 42 22W)												
MAY 1994 24...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 11...	<0.01	<0.04	<0.04	E0.003	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
07052250 JAMES RIVER NEAR BOAZ, MO. (LAT 37 00 25N LONG 093 21 50W)												
MAY 1994 24...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 24...	<0.01	<0.04	<0.04	E0.003	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)												
MAY 1994 24...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.01	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	E0.001	<0.01
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)												
MAY 1994 23...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.005	<0.001	<0.01	0.005	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)												
MAY 1994 27...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.01	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	E0.001	<0.01
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)												
MAY 1994 25...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 23...	<0.01	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)												
MAY 1994 26...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 19...	<0.005	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)												
MAY 1994 19...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 18...	<0.005	<0.001	<0.01	<0.002	<0.004	<0.004	<0.003	<0.004	<0.004	<0.004	<0.005	<0.002
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)												
MAY 1994 23...	<0.01	<0.05	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01
MAY 1995 18...	<0.01	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.02	<0.02	<0.01

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS
(National water-quality assessment stations)

303

DATE	PRO- METON, WATER, DISS, REC (µG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (µG/L) (82676)	PROP- CHLOR, WATER, DISS, REC (µG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (µG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (µG/L) (82685)	SI- MAZINE, WATER, DISS, REC (µG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (µG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (µG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (µG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (µG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (µG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (µG/L) (82661)
07018100 BIG RIVER NEAR RICHWOODS MO (LAT 38 09 34N LONG 090 42 22W)												
MAY 1994 24...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 11...	E0.01	<0.01	<0.02	<0.02	<0.01	<0.01	0.02	<0.03	<0.01	<0.01	<0.01	<0.01
07052250 JAMES RIVER NEAR BOAZ, MO. (LAT 37 00 25N LONG 093 21 50W)												
MAY 1994 24...	0.29	<0.01	<0.02	<0.02	<0.01	0.03	0.04	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 24...	0.05	<0.01	<0.02	<0.02	<0.01	<0.01	0.03	<0.03	<0.01	<0.01	<0.01	<0.01
07057420 NOBLETT CREEK NEAR WILLOW SPRINGS, MO (LAT 36 55 16N LONG 092 05 44W)												
MAY 1994 24...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 23...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
07057470 NORTH FORK WHITE RIVER NEAR DORA, MO (LAT 36 45 35N LONG 092 09 12W)												
MAY 1994 23...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 23...	<0.02	<0.003	<0.01	<0.004	<0.01	<0.005	E0.005	<0.01	<0.01	<0.002	<0.001	<0.002
07064535 CURRENT RIVER BELOW AKERS, MO (LAT 37 22 35N LONG 091 32 51W)												
MAY 1994 27...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 23...	<0.01	<0.01	<0.02	E0.01	<0.01	<0.01	0.03	<0.03	<0.01	<0.01	<0.01	<0.01
07065040 BIG CREEK AT MAUSER MILL, MO (LAT 37 18 47N LONG 091 19 00W)												
MAY 1994 25...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 23...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
07066650 ROGERS CREEK NEAR VAN BUREN, MO (LAT 37 02 57N LONG 091 04 18W)												
MAY 1994 26...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 19...	<0.02	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002
07188660 MIKES CREEK AT POWELL, MO (LAT 36 37 35N LONG 094 10 52W)												
MAY 1994 19...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 18...	<0.02	<0.003	<0.01	<0.004	<0.01	<0.005	<0.01	<0.01	<0.01	<0.002	<0.001	<0.002
07188855 NORTH INDIAN CREEK NEAR WANDA, MO (LAT 36 48 40N LONG 094 12 36W)												
MAY 1994 23...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01
MAY 1995 18...	<0.01	<0.01	<0.02	<0.02	<0.01	<0.01	<0.02	<0.03	<0.01	<0.01	<0.01	<0.01

E--Laboratory estimated value.

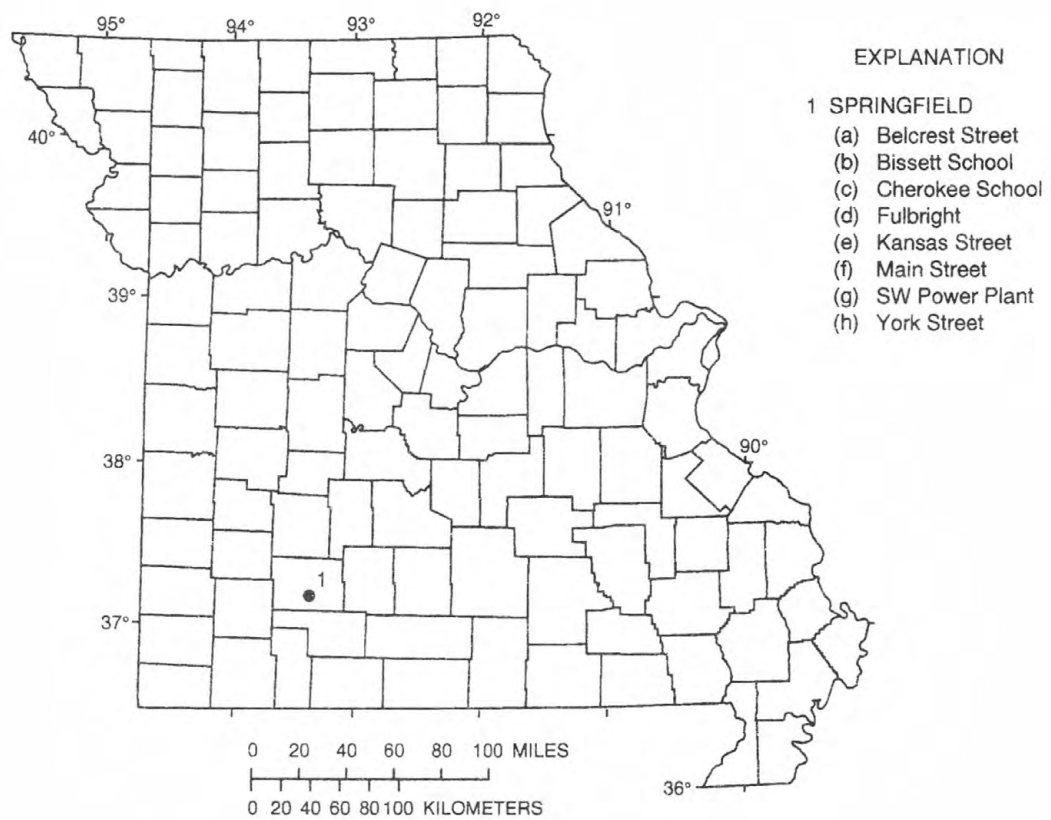


Figure 8. Ground-water monitoring wells.

1a-Belcrest Street

COUNTY--Greene

WELL IDENTIFICATION NUMBER--371250093140101

LOCATION--Lat 37°12'50", long 93°14'01", T.29 N., R.21 W., 16dccc, from 65 Bypass and Chestnut Expressway in Springfield, go west approximately 0.25 mi to Belcrest Street, go north 0.10 mi, well is on east side of Belcrest Street in City Utilities fenced property.

FORMATIONS OPEN TO THE WELL--Keokuk Limestone, Burlington Limestone, and Reeds Spring Formation.

WELL CHARACTERISTICS--Total depth 209 ft, 50 ft of casing.

INSTRUMENTATION--Digital recorder.

DATUM--1,360 ft above sea level.

Measuring point: Recorder shelf, 3.5 ft above land surface.

REMARKS--Several weeks missing when recorder did not operate.

PERIOD OF RECORD--October 20, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83.32	84.22	84.18	84.43	---	---	---	83.53	83.60	83.64	83.85	84.02
2	84.03	84.20	84.21	84.45	---	---	---	83.50	83.60	83.66	83.85	84.03
3	84.03	84.19	84.21	84.47	---	---	---	83.50	83.60	83.66	83.86	84.03
4	84.06	84.16	84.21	84.54	---	---	84.00	83.50	83.61	83.62	83.86	84.03
5	84.10	84.02	84.21	84.58	---	---	84.01	83.53	83.62	83.60	83.86	84.06
6	84.11	83.92	84.21	84.52	---	---	84.01	83.56	83.60	83.62	83.84	84.08
7	84.12	83.96	84.21	84.46	---	---	83.99	83.56	83.57	83.66	83.83	84.08
8	84.12	83.97	84.25	84.46	---	---	83.95	83.53	83.57	83.68	83.83	84.08
9	84.11	83.97	84.26	84.47	---	---	83.90	83.44	83.57	83.69	83.83	84.09
10	84.13	83.97	84.29	84.47	---	---	83.88	83.39	83.58	83.70	83.83	84.10
11	84.16	83.98	84.31	84.43	---	---	83.87	83.39	83.58	83.71	83.84	84.12
12	84.16	84.00	84.32	84.36	---	---	83.87	83.39	83.58	83.71	83.86	84.12
13	84.16	84.00	84.33	---	---	---	83.90	83.37	83.58	83.72	83.87	84.12
14	84.17	84.00	84.35	---	---	---	83.92	83.35	83.58	83.75	83.87	84.12
15	84.17	84.03	84.36	---	---	---	83.92	83.40	83.58	83.76	83.87	84.13
16	84.17	84.08	84.37	---	---	---	83.91	83.42	83.58	83.77	83.87	84.13
17	84.17	84.09	84.38	---	---	---	83.91	83.42	83.62	83.77	83.89	84.13
18	84.18	84.06	84.38	---	---	---	83.85	83.39	83.66	83.78	83.90	84.14
19	84.16	84.09	84.41	---	---	---	83.85	83.40	83.67	83.80	83.92	84.14
20	84.16	84.09	84.40	---	---	---	83.77	83.47	83.67	83.81	83.94	84.13
21	84.16	84.03	84.38	---	---	---	83.70	83.54	83.67	83.81	83.97	84.13
22	84.12	84.07	84.38	---	---	---	83.71	83.56	83.67	83.81	83.99	84.15
23	84.11	84.17	84.39	---	---	---	83.72	83.57	83.67	83.79	84.00	84.15
24	84.12	84.23	84.42	---	---	---	83.72	83.57	83.65	83.79	84.01	84.15
25	84.17	84.24	84.43	---	---	---	83.72	83.57	83.62	83.79	84.01	84.15
26	84.21	84.22	84.43	---	---	---	83.72	83.41	83.58	83.79	84.01	84.15
27	84.23	84.11	84.43	---	---	---	83.72	83.51	83.58	83.79	84.00	84.16
28	84.23	84.06	84.43	---	---	---	83.75	83.59	83.58	83.79	84.00	84.16
29	84.23	84.07	84.43	---	---	---	83.71	83.58	83.58	83.79	84.00	84.16
30	84.23	84.13	84.43	---	---	---	83.60	83.59	83.59	83.83	84.02	84.16
31	84.23	---	84.43	---	---	---	---	83.60	---	83.84	84.02	---
MEAN	84.12	84.08	84.34	---	---	---	---	83.49	83.61	83.74	83.91	84.11
MAX	84.23	84.24	84.43	---	---	---	---	83.60	83.67	83.84	84.02	84.16
MIN	83.32	83.92	84.18	---	---	---	---	83.35	83.57	83.60	83.83	84.02

1b-Bissett School

COUNTY--Greene

WELL IDENTIFICATION NUMBER--371321093201401

LOCATION--Lat 37°13'21", long 93°20'14", T.29 N., R.22 W., 16acb, from Highway 13 in Springfield, take Calhoun Street west for 1.4 mi, Bissett School is on south side of road, 3014 West Calhoun.

FORMATIONS OPEN TO THE WELL--Cotter Dolomite, Jefferson City Dolomite, and Roubidoux Formation.

WELL CHARACTERISTICS--Drilled January 1950, total depth 825 ft, 21 ft of 12-in casing and 400 ft of 6-in casing.

INSTRUMENTATION--Digital recorder.

DATUM--1,286 ft above sea level.

Measuring point: Top of casing, 4.0 ft above land surface.

REMARKS--Several days missing when recorder did not operate.

PERIOD OF RECORD--June 28, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343.55	351.26	343.36	342.01	336.59	333.87	333.94	332.27	321.82	---	330.89	339.89
2	348.71	351.18	343.02	342.00	336.28	333.86	334.09	331.93	321.64	---	331.43	340.31
3	349.08	351.32	342.83	342.07	336.12	333.79	334.21	331.41	321.46	---	331.82	340.77
4	349.38	351.34	342.65	342.18	335.88	333.71	334.47	331.01	321.19	---	332.07	341.20
5	349.54	351.21	342.60	341.96	335.67	333.62	334.48	330.72	319.64	---	332.22	341.62
6	349.56	351.44	342.41	341.57	335.31	333.57	334.53	330.16	317.89	---	332.51	342.08
7	349.76	351.16	342.46	341.93	335.19	333.75	334.64	329.60	---	---	332.84	342.51
8	349.94	350.64	342.37	341.97	335.11	334.09	334.69	329.00	---	---	333.16	342.98
9	350.17	350.30	342.34	342.06	334.61	334.04	334.72	328.50	---	---	333.43	343.29
10	350.25	350.10	342.29	341.90	334.39	333.88	334.98	328.24	---	---	333.62	343.60
11	350.22	349.64	342.26	341.72	334.51	333.75	335.16	327.94	---	---	333.80	343.93
12	350.16	349.16	342.10	341.73	334.49	333.62	335.40	327.43	---	---	334.00	344.24
13	350.23	348.57	342.09	341.70	334.34	333.52	335.52	326.91	---	---	333.92	344.65
14	350.29	348.28	342.00	341.76	333.95	333.52	335.31	326.88	---	---	333.80	345.03
15	350.27	348.02	342.00	341.62	333.89	333.46	335.22	326.69	---	---	333.82	345.37
16	350.37	347.54	341.86	341.25	334.07	333.39	335.22	326.20	---	---	333.98	345.74
17	350.39	346.94	341.94	340.96	334.07	333.40	335.16	325.70	---	---	334.03	346.07
18	350.37	346.80	341.99	340.65	333.88	333.33	335.05	325.41	---	---	334.24	346.39
19	350.51	346.53	341.84	340.21	333.82	333.09	335.24	325.34	---	322.95	334.29	346.61
20	350.65	345.84	341.79	340.04	333.73	328.63	335.01	325.09	---	323.49	334.61	346.83
21	350.59	345.80	341.85	339.74	333.74	333.02	335.11	324.91	---	324.26	335.11	347.18
22	350.66	345.92	341.98	339.40	333.52	332.86	335.18	324.73	---	324.87	335.55	347.62
23	350.92	345.68	341.97	339.15	333.70	333.10	334.82	324.46	---	325.52	335.95	347.99
24	351.00	345.15	341.95	338.90	333.81	333.23	334.64	324.16	---	326.12	336.36	348.24
25	351.14	344.81	341.96	338.68	333.57	333.26	334.42	323.95	---	326.67	336.80	348.61
26	351.23	344.33	341.95	338.37	333.48	333.25	333.99	323.67	---	327.24	337.23	348.90
27	351.21	343.77	341.89	337.89	333.55	333.48	333.90	323.16	---	327.73	337.70	349.10
28	351.16	343.80	341.87	337.83	333.76	333.68	333.56	322.89	---	328.35	338.12	349.35
29	351.23	343.79	341.89	337.84	---	333.79	333.06	322.75	---	329.03	338.58	349.71
30	351.27	343.67	341.87	337.51	---	333.88	332.74	322.47	---	329.64	339.10	350.08
31	351.20	---	341.82	337.00	---	333.95	---	322.11	---	330.23	339.51	---
MEAN	350.16	347.80	342.17	340.44	334.47	333.40	334.62	326.64	---	---	334.66	345.33
MAX	351.27	351.44	343.36	342.18	336.59	334.09	335.52	332.27	---	---	339.51	350.08
MIN	343.55	343.67	341.79	337.00	333.48	328.63	332.74	322.11	---	---	330.89	339.89

1c-Cherokee School

COUNTY--Greene

WELL IDENTIFICATION NUMBER--370702093173001

LOCATION--Lat 37°07'02", long 93°17'30", T.28 N., R.22 W., 13bdc, at Cherokee Junior High School, 0.25 mi east of Campbell Avenue (Route 160) in Springfield, north side of Plainview Road.

FORMATIONS OPEN TO THE WELL--Unknown.

WELL CHARACTERISTICS--Drilled June 1960, 21 ft of 10-in casing, smaller casing unknown.

INSTRUMENTATION--Digital recorder installed June 21, 1989.

DATUM--1,290 ft above sea level.

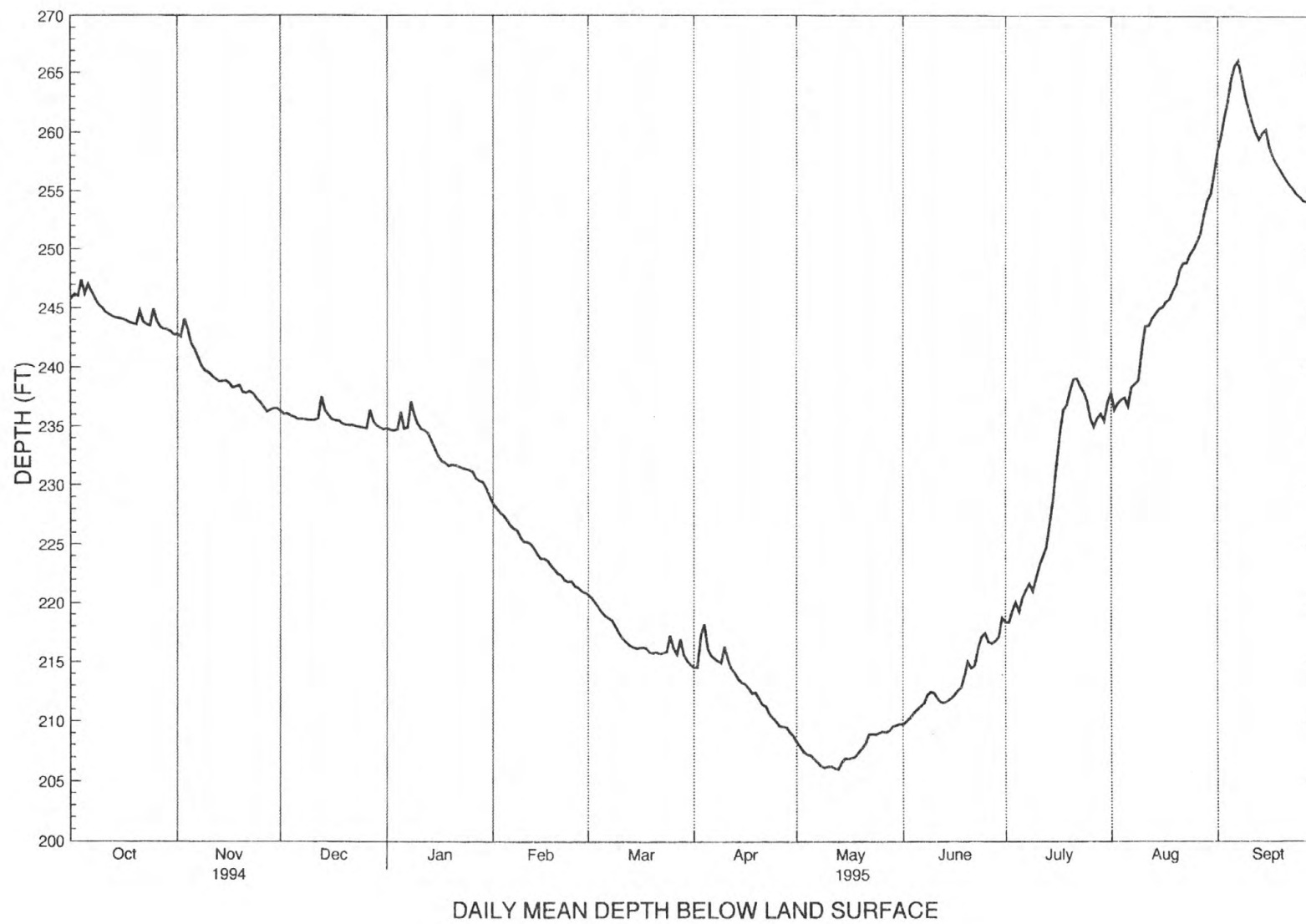
Measuring point: Base of recorder platform, 4.0 ft above land surface.

PERIOD OF RECORD--June 27, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245.78	242.78	236.28	234.77	228.42	220.75	214.57	208.30	209.78	218.40	237.90	258.52
2	246.20	242.58	236.03	234.64	228.04	220.47	214.57	207.92	210.04	218.39	236.46	259.71
3	246.04	244.06	236.06	234.59	227.70	220.06	217.24	207.48	210.30	219.35	237.00	261.34
4	247.39	243.15	235.86	234.68	227.42	219.62	218.24	207.26	210.71	220.08	237.30	262.62
5	246.23	241.98	235.78	236.21	227.07	219.22	216.16	207.20	210.99	219.30	237.45	264.52
6	247.03	241.51	235.57	234.74	226.62	218.91	215.57	206.89	211.27	220.52	236.75	265.61
7	246.37	240.79	235.60	234.83	226.33	218.71	215.31	206.64	211.54	221.15	238.33	266.06
8	245.79	240.07	235.56	237.05	226.20	218.52	215.11	206.33	212.21	221.71	238.62	264.65
9	245.28	239.68	235.51	235.97	225.63	218.00	214.95	206.19	212.47	221.06	238.93	263.17
10	245.03	239.55	235.49	235.15	225.21	217.43	216.36	206.25	212.42	222.18	241.50	262.12
11	244.67	239.25	235.51	234.72	225.19	217.01	215.22	206.28	211.98	223.20	243.52	261.05
12	244.47	239.00	235.59	234.58	225.04	216.71	214.48	206.13	211.67	224.00	243.56	260.10
13	244.30	238.77	237.48	234.35	224.66	216.45	214.12	206.02	211.60	224.81	244.17	259.50
14	244.18	238.79	236.32	233.67	224.15	216.28	213.58	206.59	211.75	226.80	244.60	260.00
15	244.12	238.83	235.92	233.03	223.76	216.17	213.28	206.92	211.95	228.91	245.01	260.30
16	244.06	238.62	235.55	232.39	223.76	216.18	213.17	206.90	212.21	231.88	245.13	258.86
17	243.95	238.25	235.47	231.99	223.60	216.26	212.78	206.98	212.56	234.37	245.61	258.00
18	243.78	238.34	235.41	231.84	223.19	216.18	212.38	207.08	212.81	236.43	245.83	257.44
19	243.69	238.43	235.18	231.56	222.88	215.83	212.41	207.43	213.80	236.81	246.52	256.95
20	243.62	237.85	235.06	231.68	222.53	215.76	211.91	207.77	215.04	238.00	247.04	256.47
21	244.75	237.78	235.05	231.64	222.37	215.83	211.45	208.15	214.52	239.00	248.28	256.00
22	243.84	237.92	235.05	231.51	221.97	215.71	211.29	208.92	214.72	239.08	248.87	255.59
23	243.62	237.73	234.95	231.40	221.82	215.77	210.68	208.98	216.20	238.43	248.90	255.23
24	243.50	237.29	234.89	231.31	221.87	215.89	210.32	208.93	217.15	237.94	249.61	254.82
25	244.91	237.03	234.81	231.23	221.46	217.27	210.01	209.06	217.44	237.21	250.09	254.56
26	243.87	236.66	234.76	231.07	221.33	216.20	209.61	209.16	216.74	235.70	250.69	254.23
27	243.39	236.21	236.34	230.52	221.05	215.65	209.58	209.09	216.59	234.96	251.37	254.19
28	243.22	236.36	235.35	230.31	220.90	216.94	209.52	209.27	216.81	235.73	252.92	254.11
29	243.19	236.50	235.00	230.21	---	215.65	209.13	209.60	217.16	236.10	254.22	253.94
30	243.03	236.49	234.83	229.71	---	215.16	208.82	209.68	218.77	235.51	254.83	253.82
31	242.74	---	234.69	229.01	---	214.81	---	209.81	---	237.08	256.58	---
MEAN	244.58	239.07	235.51	232.91	224.29	217.08	213.06	207.72	213.44	229.49	245.08	258.78
MAX	247.39	244.06	237.48	237.05	228.42	220.75	218.24	209.81	218.77	239.08	256.58	266.06
MIN	242.74	236.21	234.69	229.01	220.90	214.81	208.82	206.02	209.78	218.39	236.46	253.82

CHEROKEE SCHOOL WELL AT SPRINGFIELD



1d-Fulbright

COUNTY--Greene

WELL IDENTIFICATION NUMBER--371605093184401

LOCATION--Lat 37°16'06", long 93°18'37", T.29 N., R.22 W., 3add, take Old Highway 13 (FR 141) in Springfield, north 0.8 mi from I-44 to Pump Station Road, go north on Pump Station Road for 1,500 ft to Cinder Drive, go northeast on Cinder Drive to Fulbright Pumping Station.

FORMATIONS OPEN TO THE WELL--Burlington Formation, Reeds Spring Formation, and Pierson Formation.

WELL CHARACTERISTICS--Total depth 183 ft, 50 ft of casing.

INSTRUMENTATION--Digital recorder.

DATUM--1,190 ft above sea level.

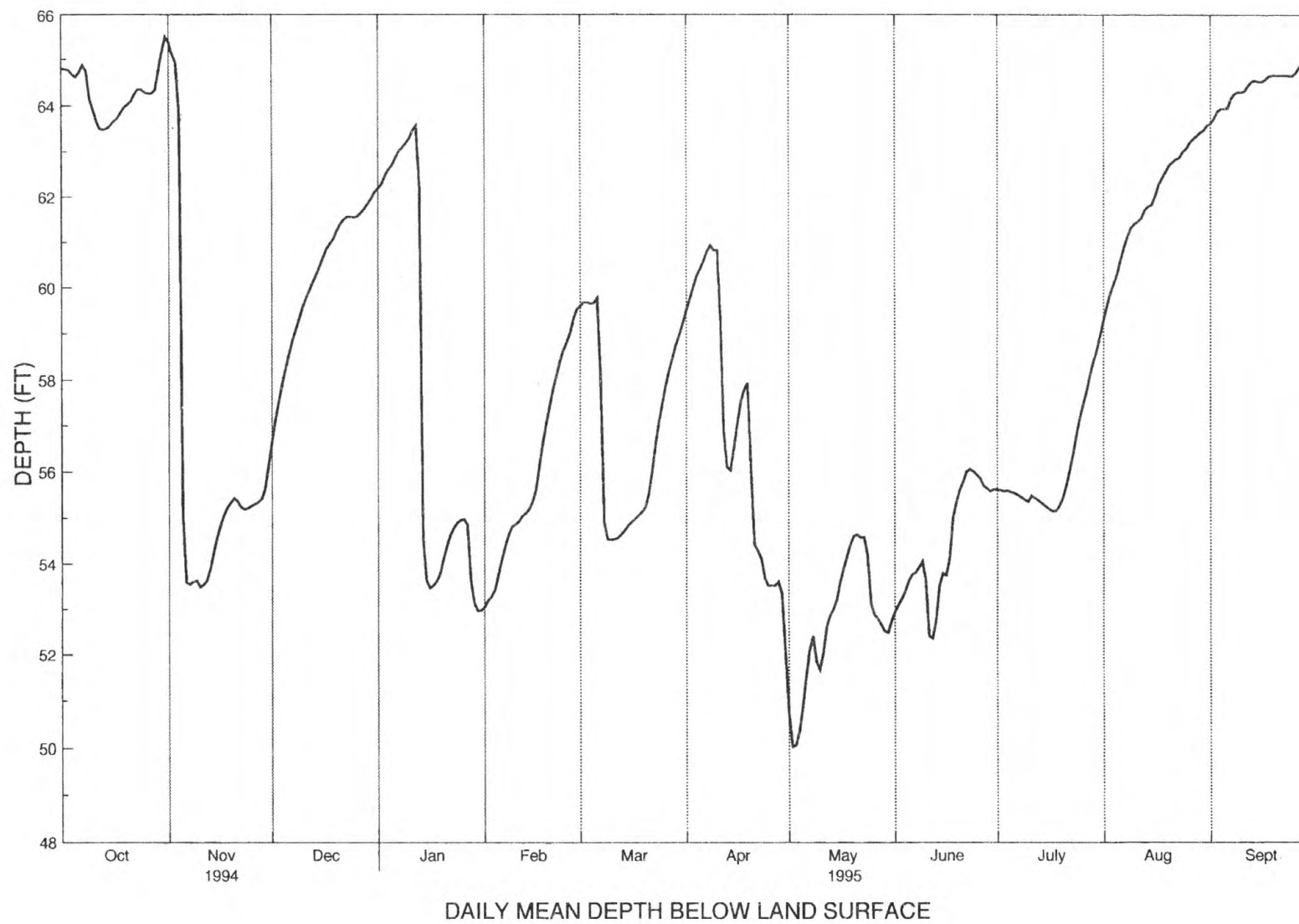
Measuring point: Recorder shelf, 3.1 ft above land surface.

PERIOD OF RECORD--October 18, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64.79	65.41	56.65	62.18	53.05	59.58	59.49	50.69	52.96	55.62	59.29	63.63
2	64.78	65.12	57.11	62.27	53.19	59.66	59.73	50.03	53.11	55.61	59.60	63.72
3	64.76	64.92	57.51	62.46	53.28	59.66	60.00	50.07	53.24	55.59	59.87	63.88
4	64.67	63.83	57.91	62.60	53.44	59.64	60.25	50.37	53.42	55.60	60.09	63.94
5	64.62	55.06	58.24	62.69	53.77	59.65	60.39	50.90	53.64	55.57	60.31	63.94
6	64.71	53.59	58.55	62.86	54.09	59.76	60.56	51.54	53.77	55.55	60.61	63.96
7	64.87	53.55	58.85	63.00	54.39	58.06	60.78	52.10	53.82	55.51	60.88	64.16
8	64.74	53.61	59.08	63.08	54.64	54.90	60.91	52.42	53.93	55.46	61.12	64.26
9	64.15	53.63	59.31	63.17	54.81	54.54	60.81	51.86	54.06	55.41	61.32	64.30
10	63.91	53.49	59.56	63.27	54.86	54.53	60.81	51.68	53.64	55.36	61.41	64.30
11	63.66	53.54	59.77	63.46	54.93	54.54	59.30	52.05	52.42	55.49	61.46	64.32
12	63.50	53.63	59.94	63.56	55.04	54.57	56.91	52.62	52.37	55.44	61.54	64.44
13	63.49	53.90	60.12	62.21	55.10	54.65	56.10	52.86	52.75	55.39	61.72	64.52
14	63.51	54.26	60.29	54.53	55.19	54.74	56.03	53.00	53.53	55.33	61.79	64.55
15	63.57	54.58	60.46	53.64	55.35	54.84	56.50	53.21	53.80	55.27	61.83	64.52
16	63.66	54.84	60.66	53.47	55.60	54.92	57.01	53.59	53.76	55.21	62.02	64.52
17	63.72	55.06	60.84	53.52	56.11	54.99	57.51	53.90	54.14	55.16	62.26	64.57
18	63.84	55.22	60.96	53.62	56.61	55.05	57.77	54.17	55.02	55.16	62.41	64.64
19	63.96	55.33	61.06	53.78	57.02	55.13	57.93	54.43	55.35	55.26	62.55	64.66
20	64.03	55.42	61.24	54.11	57.40	55.23	56.06	54.61	55.61	55.42	62.70	64.66
21	64.09	55.35	61.39	54.39	57.79	55.51	54.42	54.65	55.80	55.67	62.77	64.66
22	64.24	55.23	61.49	54.63	58.07	56.00	54.28	54.58	56.01	56.01	62.84	64.66
23	64.35	55.19	61.55	54.78	58.37	56.57	54.12	54.59	56.06	56.35	62.87	64.66
24	64.35	55.21	61.55	54.89	58.63	57.06	53.69	54.20	56.02	56.76	63.00	64.65
25	64.29	55.26	61.54	54.95	58.80	57.47	53.52	53.13	55.94	57.14	63.07	64.65
26	64.26	55.30	61.56	54.97	59.00	57.86	53.52	52.89	55.87	57.47	63.20	64.73
27	64.26	55.34	61.64	54.86	59.30	58.20	53.52	52.81	55.71	57.75	63.28	64.84
28	64.33	55.41	61.73	53.61	59.51	58.47	53.61	52.67	55.65	58.10	63.35	64.94
29	64.72	55.62	61.84	53.14	---	58.74	53.36	52.53	55.59	58.41	63.43	65.02
30	65.15	56.13	61.95	52.97	---	58.95	52.06	52.50	55.63	58.65	63.47	65.22
31	65.52	---	62.09	52.97	---	59.21	---	52.74	---	58.96	63.58	---
MEAN	64.27	56.07	60.21	57.73	55.98	56.86	57.03	52.69	54.42	56.12	61.92	64.45
MAX	65.52	65.41	62.09	63.56	59.51	59.76	60.91	54.65	56.06	58.96	63.58	65.22
MIN	63.49	53.49	56.65	52.97	53.05	54.53	52.06	50.03	52.37	55.16	59.29	63.63

FULBRIGHT WELL AT SPRINGFIELD



1e-Kansas Street

COUNTY--Greene

WELL IDENTIFICATION NUMBER--370826093184701

LOCATION--Lat 37°08'32", long 93°18'51", T.28 N., R.22 W., 11cbc, from Kansas Expressway and Battlefield in Springfield, go south on Kansas Expressway to Erie Street, east on Erie Street to Kansas Street, south on Kansas Street to water tower on east side of street. Well is next to water tower.

FORMATIONS OPEN TO THE WELL--Keokuk Limestone, Burlington Limestone, and Reeds Spring Formation.

WELL CHARACTERISTICS--Total depth 305 ft, 20 ft of casing.

INSTRUMENTATION--Digital recorder.

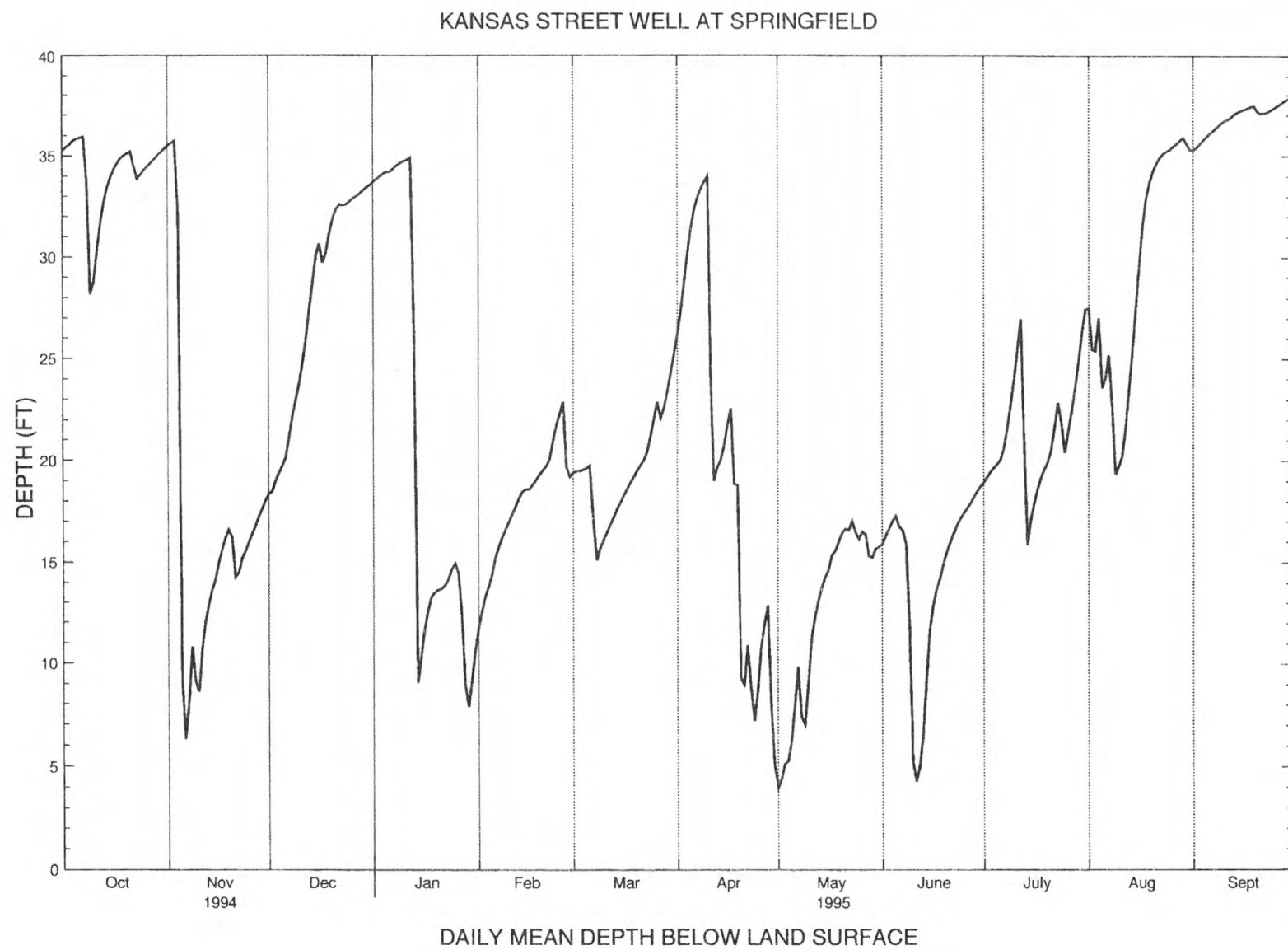
DATUM--1,281 ft above sea level.

Measuring point: Recorder shelf, 3.0 ft above land surface.

PERIOD OF RECORD--October 23, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35.25	35.49	18.33	33.70	11.70	19.36	26.14	3.99	15.86	18.90	27.49	35.29
2	35.42	35.60	18.45	33.83	12.56	19.41	27.27	4.40	16.27	19.15	25.45	35.41
3	35.56	35.72	18.96	33.95	13.26	19.43	28.70	5.12	16.62	19.40	25.38	35.60
4	35.73	32.14	19.36	34.09	13.76	19.50	30.19	5.27	16.99	19.60	27.01	35.78
5	35.83	9.18	19.68	34.18	14.36	19.57	31.40	6.25	17.25	19.79	23.56	35.96
6	35.88	6.30	20.08	34.20	15.19	19.70	32.31	7.95	16.74	20.00	24.04	36.12
7	35.94	8.13	21.10	34.35	15.71	16.95	32.96	9.85	16.54	20.57	25.19	36.25
8	33.79	10.79	22.15	34.49	16.19	15.05	33.37	7.33	15.88	21.57	22.62	36.42
9	28.16	9.10	22.94	34.61	16.54	15.62	33.69	7.00	11.81	22.72	19.32	36.57
10	28.75	8.59	23.72	34.70	16.94	16.02	33.98	9.10	5.22	23.94	19.71	36.70
11	30.27	10.72	24.76	34.76	17.33	16.40	23.94	11.27	4.28	25.37	20.22	36.77
12	31.58	12.00	25.92	34.87	17.70	16.77	18.96	12.30	5.01	26.96	21.68	36.87
13	32.62	12.92	27.33	26.24	18.10	17.14	19.61	13.08	6.44	21.10	23.57	37.04
14	33.38	13.61	28.69	9.03	18.43	17.55	19.98	13.74	9.09	15.83	25.52	37.14
15	33.89	14.15	30.06	10.26	18.54	17.87	20.69	14.24	11.53	17.11	27.61	37.22
16	34.29	14.97	30.65	11.59	18.54	18.22	21.68	14.61	12.80	17.89	29.73	37.29
17	34.60	15.59	29.70	12.52	18.75	18.54	22.54	15.32	13.60	18.57	31.57	37.35
18	34.85	16.14	30.20	13.25	18.99	18.85	18.82	15.52	14.17	19.12	32.88	37.43
19	34.99	16.55	31.13	13.46	19.24	19.11	18.76	15.96	14.86	19.57	33.68	37.47
20	35.10	16.22	31.86	13.59	19.45	19.42	9.27	16.40	15.45	19.92	34.22	37.20
21	35.19	14.22	32.35	13.64	19.67	19.69	8.96	16.61	15.92	20.50	34.57	37.09
22	34.49	14.47	32.57	13.83	19.99	19.93	10.88	16.55	16.37	21.64	34.88	37.11
23	33.88	15.16	32.52	14.11	20.89	20.36	8.87	17.00	16.75	22.83	35.08	37.16
24	34.08	15.50	32.58	14.61	21.68	21.13	7.16	16.45	17.09	21.85	35.20	37.26
25	34.31	15.94	32.72	14.90	22.25	22.00	8.64	16.12	17.37	20.38	35.29	37.37
26	34.47	16.34	32.88	14.39	22.84	22.84	10.72	16.47	17.62	21.45	35.44	37.47
27	34.64	16.75	32.98	12.35	19.64	22.04	11.95	16.35	17.86	22.41	35.59	37.59
28	34.82	17.21	33.12	8.91	19.16	22.53	12.85	15.28	18.17	23.52	35.75	37.71
29	34.99	17.58	33.27	7.85	---	23.32	7.88	15.21	18.45	24.87	35.89	37.81
30	35.16	17.98	33.41	9.17	---	24.22	5.06	15.63	18.69	26.29	35.60	37.89
31	35.32	---	33.53	10.68	---	25.20	---	15.72	---	27.44	35.31	---
MEAN	34.10	16.50	27.65	21.16	17.76	19.48	19.91	12.45	14.36	21.30	29.32	36.88
MAX	35.94	35.72	33.53	34.87	22.84	25.20	33.98	17.00	18.69	27.44	35.89	37.89
MIN	28.16	6.30	18.33	7.85	11.70	15.05	5.06	3.99	4.28	15.83	19.32	35.29



lf-Main Street

COUNTY--Greene

WELL IDENTIFICATION NUMBER--371240093174501

LOCATION--Lat 37°12'40", long 93°17'45", T.29 N., R.22 W., 14ddd, from Chestnut Expressway and Main Street in Springfield, go south on Main Street to the intersection of Wall Street, well is on east side of Main Street, behind City Utilities meter center.

FORMATIONS OPEN TO THE WELL--Burlington Limestone.

WELL CHARACTERISTICS--Total depth 100 ft, 20 ft of casing.

INSTRUMENTATION--Digital recorder.

DATUM--1,268 ft above sea level.

Measuring point: Recorder shelf, 3.3 ft above land surface.

REMARKS--Several weeks missing when recorder did not operate.

PERIOD OF RECORD--October 17, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.38	---	---	---	6.83	8.63	9.35	1.75	7.06	8.09	8.50	8.51
2	9.48	---	---	---	7.06	8.73	9.38	1.90	7.28	8.19	8.43	8.52
3	9.52	---	---	---	7.28	8.79	9.39	3.07	7.54	8.23	8.46	8.53
4	9.55	---	---	---	7.54	8.84	9.42	3.63	7.75	8.31	8.31	8.50
5	9.60	---	---	---	7.77	8.89	9.42	4.60	7.61	8.23	8.21	8.45
6	---	---	---	---	7.92	8.90	9.44	5.30	6.97	8.34	8.21	8.47
7	---	---	---	---	8.08	7.67	9.47	5.58	6.98	8.42	8.18	8.44
8	---	---	---	---	8.24	7.81	9.51	4.42	6.98	8.48	8.41	8.42
9	---	---	---	---	8.32	7.92	9.54	4.20	6.35	8.57	8.46	8.44
10	---	---	---	---	8.42	8.03	9.30	5.04	2.50	8.62	8.47	8.45
11	---	---	---	---	8.58	8.16	7.39	5.66	3.02	8.67	8.49	8.41
12	---	---	---	---	8.69	8.32	7.77	5.98	3.96	8.71	8.52	8.38
13	---	---	---	7.60	8.74	8.41	8.22	6.27	5.12	8.73	8.52	8.43
14	---	---	---	6.00	8.71	8.52	8.45	6.62	5.78	8.77	8.48	8.42
15	---	---	---	7.08	8.44	8.61	8.68	6.91	6.25	8.81	8.42	8.40
16	---	---	---	7.49	8.48	8.68	8.86	7.19	6.67	8.85	8.41	8.18
17	---	---	---	7.81	8.60	8.75	8.82	7.30	7.05	8.87	8.40	8.19
18	---	---	---	8.04	8.67	8.85	8.17	7.09	7.39	8.92	8.39	8.22
19	---	---	---	8.10	8.75	8.89	8.43	7.24	7.63	8.95	8.41	8.07
20	---	---	---	7.86	8.76	8.92	5.55	7.48	7.82	8.83	8.44	7.92
21	---	---	---	7.62	8.79	8.98	6.04	7.38	7.96	8.80	8.41	8.02
22	---	---	---	7.63	8.79	9.02	6.83	7.15	8.11	8.84	8.45	8.04
23	---	---	---	7.71	8.86	9.09	6.13	7.52	8.14	8.75	8.47	8.10
24	---	---	---	7.76	8.93	9.13	5.68	7.10	7.75	8.11	8.45	8.16
25	---	---	---	7.63	8.95	9.19	6.27	6.75	7.55	8.16	8.45	8.15
26	---	---	---	7.46	8.93	9.16	6.83	6.86	7.54	8.25	8.46	8.19
27	---	---	---	6.70	8.24	9.15	7.17	6.74	7.61	8.30	8.49	8.22
28	---	---	---	5.68	8.48	9.20	7.44	5.79	7.83	8.35	8.48	8.26
29	---	---	---	5.76	---	9.23	3.50	6.33	7.98	8.43	8.52	8.30
30	---	---	---	6.29	---	9.27	2.00	6.73	7.97	8.49	8.50	8.35
31	---	---	---	6.60	---	9.29	---	6.87	---	8.51	8.51	---
MEAN	---	---	---	---	8.35	8.74	7.75	5.89	6.87	8.53	8.43	8.30
MAX	---	---	---	---	8.95	9.29	9.54	7.52	8.14	8.95	8.52	8.53
MIN	---	---	---	---	6.83	7.67	2.00	1.75	2.50	8.09	8.18	7.92

1g-Southwest Power Plant

COUNTY--Greene

WELL IDENTIFICATION NUMBER--370912093231101

LOCATION--Lat 37°09'12", long 93°23'11", T.28 N., R.22 W., 7bbb, from State Highway 13, U.S. 60-166 Highway and Haseltine Road in Springfield, go south on Haseltine Road to Walnut Lawn Road, go east on Walnut Lawn Road for 500 ft to City Utilities Substation, on south side of road.

FORMATIONS OPEN TO THE WELL--Keokuk Limestone, Burlington Limestone, and Elsey Formation.

WELL CHARACTERISTICS--Total depth 190 ft, 30 ft of casing.

INSTRUMENTATION--Digital recorder installed March 8, 1990.

DATUM--1,250 ft above sea level.

Measuring point: Base of recorder platform, 3.0 ft above land surface.

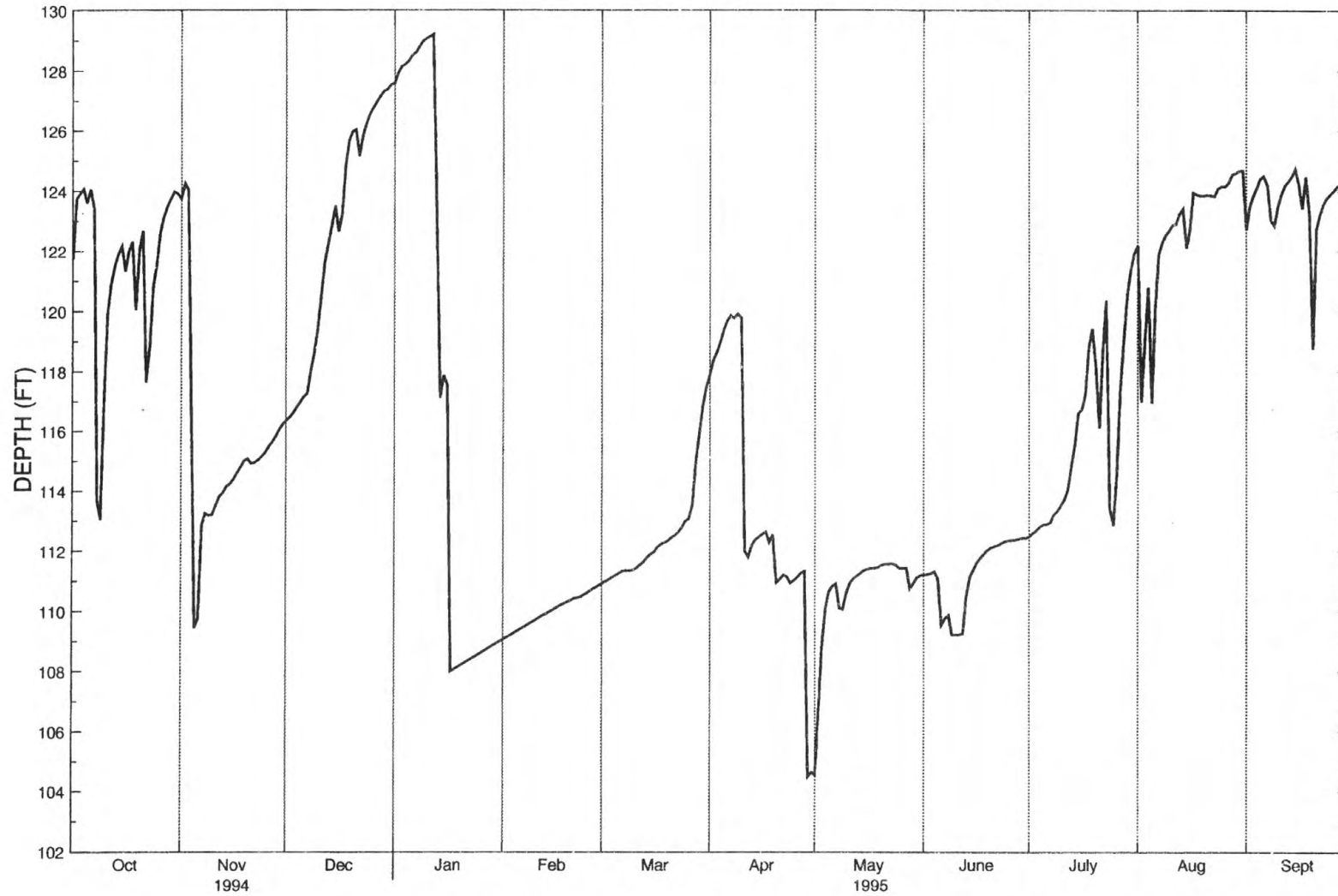
REMARKS--Several days missing when recorder did not operate.

PERIOD OF RECORD--March 8, 1990 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121.75	123.74	116.34	127.58	109.06	110.91	117.87	104.55	111.20	112.47	122.18	122.72
2	123.75	124.25	116.45	127.92	109.13	110.98	118.37	106.58	111.22	112.58	116.97	123.48
3	123.92	124.03	116.60	128.14	109.20	111.05	118.64	108.82	111.25	112.67	118.96	123.83
4	124.07	116.36	116.78	128.22	109.27	111.12	118.97	110.08	111.31	112.80	120.79	124.11
5	123.60	109.45	116.95	128.32	109.34	111.19	119.37	110.64	111.06	112.87	116.94	124.41
6	124.06	109.76	117.14	128.51	109.41	111.26	119.67	110.82	109.55	112.88	120.10	124.50
7	123.44	112.84	117.26	128.61	109.48	111.33	119.85	110.91	109.76	112.93	121.90	124.20
8	113.69	113.24	118.00	128.80	109.55	111.34	119.77	110.10	109.86	113.20	122.29	123.03
9	113.04	113.19	118.59	128.98	109.62	111.34	119.91	110.06	109.21	113.31	122.54	122.85
10	117.19	113.20	119.41	129.07	109.69	111.36	119.77	110.61	109.21	113.50	122.68	123.47
11	119.94	113.51	120.53	129.14	109.77	111.44	111.99	110.92	109.21	113.70	122.88	123.90
12	120.91	113.80	121.61	129.21	109.84	111.53	111.79	111.08	109.25	114.02	122.90	124.18
13	121.50	113.93	122.23	123.06	109.90	111.63	112.17	111.16	110.51	114.79	123.24	124.32
14	121.89	114.15	122.86	117.11	109.97	111.78	112.37	111.26	111.14	115.55	123.41	124.48
15	122.16	114.23	123.50	117.87	110.04	111.88	112.45	111.35	111.37	116.60	122.10	124.74
16	121.33	114.39	122.64	117.54	110.11	111.96	112.55	111.39	111.61	116.73	122.70	124.23
17	122.00	114.59	123.25	108.00	110.18	112.12	112.63	111.42	111.76	117.22	123.95	123.42
18	122.31	114.78	124.87	108.07	110.24	112.22	112.28	111.43	111.90	118.83	123.89	124.49
19	120.04	115.00	125.67	108.14	110.29	112.27	112.53	111.45	112.02	119.42	123.85	123.27
20	122.05	115.07	125.97	108.21	110.35	112.34	110.95	111.52	112.10	118.18	123.85	118.75
21	122.67	114.92	126.03	108.28	110.42	112.44	111.05	111.56	112.15	116.10	123.88	122.72
22	117.63	114.94	125.15	108.35	110.44	112.51	111.20	111.56	112.18	118.70	123.86	123.20
23	118.85	115.03	125.83	108.42	110.48	112.62	111.14	111.58	112.25	120.36	123.83	123.54
24	120.82	115.15	126.25	108.49	110.55	112.78	110.93	111.53	112.30	113.39	124.09	123.77
25	121.52	115.28	126.57	108.56	110.62	112.98	111.02	111.42	112.34	112.85	124.16	123.89
26	122.62	115.48	126.77	108.63	110.70	113.06	111.13	111.42	112.35	114.55	124.16	124.01
27	123.13	115.63	126.98	108.71	110.77	113.53	111.26	111.43	112.36	117.38	124.27	124.16
28	123.47	115.81	127.17	108.78	110.84	114.98	111.32	110.75	112.39	119.06	124.55	124.19
29	123.74	116.03	127.32	108.85	---	115.88	104.49	110.92	112.42	120.55	124.60	124.40
30	123.97	116.22	127.38	108.92	---	116.85	104.63	111.11	112.43	121.36	124.67	124.83
31	123.90	---	127.54	108.99	---	117.46	---	111.19	---	121.92	124.68	---
MEAN	121.45	115.27	122.57	117.60	109.97	112.46	113.74	110.67	111.26	115.82	122.74	123.70
MAX	124.07	124.25	127.54	129.21	110.84	117.46	119.91	111.58	112.43	121.92	124.68	124.83
MIN	113.04	109.45	116.34	108.00	109.06	110.91	104.49	104.55	109.21	112.47	116.94	118.75

SOUTHWEST POWER PLANT WELL AT SPRINGFIELD



DAILY MEAN DEPTH BELOW LAND SURFACE

1h-York Street

COUNTY--Greene

WELL IDENTIFICATION NUMBER--371233093212901

LOCATION--Lat 37°12'33", long 93°21'29", T.29 N., R.22 W., 20abc, from west Chestnut Expressway and west 160 Bypass in Springfield, go west on Chestnut Expressway to Eldon Avenue, south on Eldon Avenue to Dover Street, east on Dover Street to Troy Avenue, south on Troy Avenue to White Pine Street, west on White Pine Street to York Avenue, north on York Avenue, well on east side of York Avenue, south of brick well house between gray and red brick houses.

FORMATIONS OPEN TO THE WELL--Keokuk Limestone, Burlington Limestone, Reeds Spring Formation, and Pierson Formation.

WELL CHARACTERISTICS--Total depth 260 ft, 20 ft of casing.

INSTRUMENTATION--Digital recorder.

DATUM--1,244 ft above sea level.

Measuring point: Recorder shelf, 3.0 ft above land surface.

PERIOD OF RECORD--October 18, 1989 to present.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66.40	52.84	24.38	48.88	21.24	22.60	23.00	14.87	20.46	22.28	58.40	67.65
2	66.60	53.69	25.87	49.48	21.52	22.62	23.21	13.91	20.74	22.38	58.27	67.70
3	66.84	54.89	27.71	50.06	21.76	22.62	24.21	15.07	21.01	22.44	58.17	67.75
4	67.14	37.61	29.94	50.77	21.92	22.63	25.78	16.77	21.27	22.47	58.91	67.84
5	67.32	19.91	32.15	51.09	22.03	22.64	27.04	17.93	21.36	22.48	59.49	67.97
6	67.41	19.42	34.06	50.83	22.09	22.64	28.00	18.42	20.75	22.58	60.06	68.08
7	67.59	20.25	36.00	51.35	22.18	21.40	29.17	18.91	20.64	22.77	60.76	68.16
8	54.65	20.95	37.74	51.80	22.26	21.30	30.16	18.68	20.80	23.24	61.49	68.28
9	33.08	20.81	38.78	52.24	22.28	21.50	31.09	18.25	20.21	25.11	62.11	68.42
10	33.47	20.89	40.02	52.42	22.33	21.69	31.57	18.68	18.53	27.58	62.65	68.56
11	37.17	21.37	41.59	52.50	22.40	21.80	21.25	19.35	16.88	29.80	63.17	68.67
12	41.43	21.71	42.86	53.11	22.47	21.92	21.08	19.90	17.61	31.92	63.68	68.74
13	44.52	21.91	44.48	35.91	22.54	22.01	21.63	20.19	18.35	33.83	64.06	68.84
14	46.96	22.10	45.98	20.13	22.54	22.09	21.83	20.57	19.33	35.25	64.43	69.01
15	49.34	22.22	47.40	20.64	22.45	22.15	21.97	20.93	19.97	36.84	64.81	69.14
16	51.49	22.30	46.22	21.10	22.55	22.21	22.07	21.18	20.34	38.86	65.12	69.20
17	53.36	22.39	43.97	21.54	22.61	22.27	22.13	21.35	20.80	41.15	65.43	69.24
18	54.87	22.53	44.70	21.81	22.63	22.31	21.77	21.36	21.14	43.85	65.69	69.32
19	54.16	22.59	45.50	21.96	22.66	22.34	21.91	21.37	21.42	46.44	65.87	69.36
20	54.47	22.21	46.22	22.04	22.69	22.41	19.64	21.52	21.63	48.62	66.06	69.33
21	55.88	22.02	46.50	22.08	22.73	22.49	20.00	21.51	21.78	50.37	66.24	69.23
22	47.23	22.18	44.06	22.16	22.76	22.54	20.52	21.55	21.88	51.82	66.40	69.15
23	41.58	22.28	43.08	22.22	22.83	22.60	20.17	21.65	21.95	53.12	66.53	69.03
24	41.19	22.35	42.85	22.25	22.94	22.62	19.82	21.24	22.04	51.02	66.59	68.94
25	41.17	22.44	42.87	22.20	22.94	22.64	20.17	20.64	22.01	47.47	66.65	68.89
26	42.72	22.51	43.34	22.14	22.99	22.66	20.48	20.70	21.99	47.62	66.78	68.92
27	44.79	22.55	43.96	21.77	22.46	22.71	20.88	20.79	22.08	49.16	66.92	69.02
28	46.84	22.64	44.71	20.55	22.55	22.76	21.12	19.90	22.18	51.46	67.09	69.17
29	49.07	22.79	45.78	20.33	---	22.81	19.01	19.98	22.24	53.71	67.25	69.29
30	51.22	23.19	46.84	20.62	---	22.88	16.19	20.31	22.18	55.62	67.38	69.38
31	52.48	---	47.78	20.93	---	22.95	---	20.35	---	57.23	67.52	---
MEAN	51.37	25.58	40.88	33.45	22.41	22.35	22.90	19.61	20.79	38.34	64.00	68.74
MAX	67.59	54.89	47.78	53.11	22.99	22.95	31.57	21.65	22.24	57.23	67.52	69.38
MIN	33.08	19.42	24.38	20.13	21.24	21.30	16.19	13.91	16.88	22.28	58.17	67.65

A

Access to WATSTORE data	16
Accuracy of data and computed results	12
Acre-foot, definition of	16
Alley Spring at Alley	284
Ambient water-quality network, definition of	7
Analyses of samples collected at water-quality partial-record stations	284
Analyses of samples collected at water-quality partial-record stations (NAWQA)	286
Annual 7-day minimum, definition of	17
Arkansas River basin, hydrologic records in	271
Arrangement of records	13

B

Bacteria, definition of	16
Bear Creek at Hannibal	34
Bear Creek basin, hydrologic records in	34
Beaver Creek at Bradleyville	234
Bed material, definition of	17
Belcrest Street well	305
Bennett Spring at Bennett Spring	139
Big Buffalo Creek at Big Buffalo Wildlife Area	128
Big Creek at Des Arc	212
at Mauser Mill	295
at Sam A. Baker State Park	213
Big Piney River at Devil's Elbow	160
near Big Piney	156, 286
Big River at Byrnesville	189
at Irondale	185
near Richwoods	187, 295
Big Spring near Van Buren	259, 284
Bissett School well	306
Black River at Poplar Bluff	246
below Annapolis	241
near Annapolis	240
Blackwater River at Blue Lick	97
Blue River basin, hydrologic records in	74
Blue River near Kansas City	74
Blue Spring near Eminence	284
Blue Springs Reservoir near Blue Springs	77
Bourbeuse River above Union	182
at Union	184
near High Gate	181
Brush Creek above Collins	286
Brush Creek near Collins	115
Bryant Creek below Evans	237
Bryant Creek near Tecumseh	239
Bull Creek near Walnut Shade	233

C

Calendar for water year 1995	Front Cover
Cedar Creek near Pleasant View	113
Center Creek below Carl Junction	272
near Smithfield	273
Chariton River at Livonia	88
at Novinger	89
near Prairie Hill	90
Chariton River basin, hydrologic records in	88
Chemical oxygen demand, definition of	17
Cherokee School well	307

Classification of records	12
Clearwater Lake near Piedmont	245
Coakley Hollow Spring Branch at Lake of the Ozarks Spring	143
Contents, definition of	17
Contents, table of	v
Control structure, definition of	17
Control, definition of	17
Coonville Creek at St. Francois State Park	186
Cooperation	1
Courtois Creek at Berryman	177
Crooked Creek near Paris	37
Cubic feet per second per square mile, definition of	17
Cubic foot per second, definition of	17
Cubic foot per second-day, definition of	17
Cuivre River basin, hydrologic records in	52
Cuivre River near Troy	52
Current River above Powder Mill	284
at Doniphan	262
at Van Buren	254
below Akers	295
below Hawes Campground	284
below Montauk State Park	284

D

Data collection and computation	8, 15
Data presentation	9, 14, 15
Data table of daily mean values	10
Definition of terms	16
Diagram showing system for numbering miscellaneous sites (latitude and longitude)	8
Discharge at partial-record stations	283
Discharge, definition of	17
Dissolved trace-element concentrations	15
Dissolved, definition of	17
Double Spring near Dora	235
Dousinbury Creek on Highway JJ near Wall Street	129
Downstream order and station number	7
Drainage area, definition of	17
Drainage basin, definition of	17

E

East Fork Drywood Creek at Prairie State Park	99
East Fork Little Blue River near Blue Springs	78
East Fork Little Chariton River near Huntsville	95
near Macon	94
Eleven Point River near Bardley	269
Elk Fork Salt River near Madison	44
Elk River near Tiff City	278
Escherichia coli, definition of	16
Explanation of the records	7

F

Fabius River basin, hydrologic records in	27
Factors for converting inch-pound units to International System Units (SI)	Back Cover
Fecal coliform, definition of	17
Fecal streptococci, definition of	17
Fox River at Wayland	25
Fox River basin, hydrologic records in	25
Fulbright well	309

	Page		Page
G			
Gage height, definition of	17	Pomme de Terre Lake near Hermitage	120
Gaging station, definition of	17	Smithville Reservoir near Smithville	68
Gasconade River above Jerome	161	Stockton Lake near Stockton	111
at Jerome	164	Table Rock Lake near Branson	227
near Rich Fountain	165	Wappapello Lake at Wappapello	215
Gasconade River basin, hydrologic records in	150	Lamine River at Otterville	96
Grand River basin, hydrologic records in	81	Lamine River basin, hydrologic records in	96
Grand River near Gallatin	81	Lick Creek at Perry	45
near Sumner	83	Lindley Creek near Polk	119
Graphs showing comparison of 1995 water-year		List of discontinued surface-water discharge or stage-only stations	xii
mean discharge to long-term mean discharge	5	List of discontinued surface-water quality stations	xv
Greene County, ground-water wells in	305	List of surface-water stations, in downstream order,	
Greer Spring at Greer	266	for which records are published in this volume	vii
Ground-water levels	6	Little Blue River basin, hydrologic records in	75
Ground-water monitoring wells	305	Little Blue River below Longview Dam at Kansas City	76
H		near Lake City	79
Ha Ha Tonka Spring at Ha Ha Tonka State Park	141	Little Chariton River basin, hydrologic records in	93
Hardness of water, definition of	17	Little Piney Creek at Newburg	163
Harry S. Truman Reservoir at Warsaw	126	Little Platte River at Smithville	69
Headwater Diversion Channel Basin, hydrologic records in	193	Little River Ditches near Rives	218
Huzzah Creek near Scotia	286	Little Sac River at Walnut Grove	109
Huzzah Creek near Steelville	176	near Morrisville	110
Hydrograph showing Cherokee School Well in Springfield	308	Little St. Francis River at Fredericktown	206
Hydrograph showing Fulbright Well at Springfield	310	Little Tavern Creek near St. Elizabeth	286
Hydrograph showing Kansas Street Well at Springfield	312	Locust Creek at Reger	283
Hydrograph showing Southwest Power Plant Well at Springfield ..	315	Long Branch near Santa Fe	39
Hydrologic unit, definition of	17	Long Branch Reservoir near Macon	93
I		Longview Reservoir at Kansas City	75
Identifying estimated daily discharge	12	Lower Mississippi River basin, hydrologic records in	170
Illustrations, list of	vi	M	
Instantaneous discharge, definition of	17	Main Street well	313
Introduction	1	Mammoth Spring at Mammoth Spring, AR	265
J		Map showing location of ground-water monitoring wells	304
Jacks Fork above Two Rivers	253, 284	Map showing location of surface-water quality stations	24
at Alley Spring	247	Map showing location of surface-water stations	23
at Eminence	252	Map showing major drainage basin, physiographic areas,	
James River at Galena	226	and areas of greater-than-average discharge during 1995	4
near Boaz	223, 295	Maramec Spring near St. James	174
near Springfield	221	Maries River at Westphalia	283
K		Maries River near Freeburg	286
Kansas Street well	311	Mark Twain Lake near Center	46
L		Maximum discharge at crest-stage partial-record stations	283
Laboratory measurements	13	Mean concentration, definition of	18
Lake of the Ozarks near Bagnell	145	Mean discharge, definition of	17
Lake Taneycomo at College of the Ozarks	231	Meramec River at Paulina Hills	191
Lakes and Reservoirs:		near Eureka	190
Blue Springs Reservoir near Blue Springs	77	near Steelville	175
Clearwater Lake near Piedmont	245	near Sullivan	178
Harry S. Truman Reservoir at Warsaw	126	Meramec River basin, hydrologic records in	174
Lake of the Ozarks near Bagnell	145	Micrograms per gram, definition of	17
Lake Taneycomo at College of the Ozarks	231	Micrograms per liter, definition of	17
Long Branch Reservoir near Macon	93	Middle Fabius River near Monticello	28
Longview Reservoir at Kansas City	75	Middle Fork Salt River at Paris	40
Mark Twain Lake near Center	46	Mikes Creek at Powell	295
		Milligrams per liter, definition of	18
		Mississippi River at Chester, IL	194
		at Grafton, IL	55
		at St. Louis	170
		at Thebes, IL	198
		below Grafton, IL	56
		Mississippi River main stem, hydrologic records in	55
		Missouri River at Boonville	98
		at Hermann	166

at Kansas City	73
at Rulo, NE	59
at St. Joseph	64
at Waverly	80
Missouri River main stem, hydrologic records in	59
Missouri water-use fact sheet	2
Montauk Springs at Montauk	284
Moreau River basin, hydrologic records in	283
Moreau River near Jefferson City	283

N

National Geodetic Vertical Datum of 1929, definition of	18
National stream-quality accounting network, definition of	7
National water-quality assessment program, definition of	7
Niangua River near Windyville	134
Noblett Creek near Willow Springs	295
Nodaway River basin, hydrologic records in	60
Nodaway River near Graham	60
North Fabius River at Monticello	27
North Fork River near Tecumseh	236
North Fork Salt River at Hagers Grove	35
near Shelbyville	36
North Fork White River near Dora	295
North Indian Creek near Wanda	295
North River at Palmyra	33
North River basin, hydrologic records in	33
Numbering system for wells and miscellaneous sites	8

O

On-site measurements and sample collection	13
Osage Fork near Russ	286
Osage River above Schell City	101
below Harry S. Truman Dam at Warsaw	127
below St. Thomas	148
near Bagnell	146
near St. Thomas	147
Osage River basin, hydrologic records in	99
Other data available	12

P

Paddy Creek above Slabtown Spring	151
Partial-record station, definition of	18
Particle size, definition of	18
Particle-size classification, definition of	18
Physiography	3
Pickle Creek at Hawn State Park	193
Pie chart showing major water-use categories and percentage of ground water used in Missouri during 1990	2
Pie chart showing major water-use categories and percentage of surface water used in Missouri during 1990	2
Platte River at Sharps Station	70
near Agency	67
Platte River basin, hydrologic records in	70
Pomme de Terre Lake near Hermitage	120
Pomme de Terre River near Hermitage	121
near Polk	116, 286
Preface	iii
Publications on Techniques of Water-Resources Investigations	20
Pulltite Spring near Round Spring	284

Q

Quality assurance of water-quality data	14
---	----

R

Radiochemical programs, definition of	7
Records of ground-water levels	15
Records of stage and water discharge	8
Records of surface-water quality	12
Recurrence interval, definition of	18
Remark codes	14
Report documentation page	iv
Roaring River Spring near Cassville	220
Rogers Creek near Van Buren	295
Roubidoux Spring near Waynesville	150
Round Spring at Round Spring	284
Runoff in inches, definition of	18

S

Sac River at Highway J below Stockton	112
near Caplinger Mills	114
near Dadeville	107, 286
Salt River basin, hydrologic records in	35
Salt River near Center	48
near New London	49
Sea level, definition of	18
Sediment	13
Sediment, definition of	18
Shanghai Spring near Waynesville	157
Shoal Creek above Joplin	277
Smithville Reservoir near Smithville	68
Solute, definition of	18
South Fabius River near Taylor	29
South Fork Salt River above Santa Fe	38
South Grand River near Clinton	122
Southwest Power Plant well	314
Special networks and programs	7
Specific conductance, definition of	18
Spencer Creek below Plum Creek near Frankford	51
Spring River near Waco	271
Springs:	
Alley Spring at Alley	284
Bennett Spring at Bennett Spring	139
Big Spring near Van Buren	259, 284
Blue Spring near Eminence	284
Coakley Hollow Spring Branch at Lake of the Ozarks Spring	143
Double Spring near Dora	235
Greer Spring at Greer	266
Ha Ha Tonka Spring at Ha Ha Tonka State Park	141
Mammoth Spring at Mammoth Spring, AR	265
Maramec Spring near St. James	174
Montauk Springs at Montauk	284
Pulltite Spring near Round Spring	284
Roaring River Spring near Cassville	220
Roubidoux Spring at Waynesville	150
Round Spring at Round Spring	284
Shanghai Spring near Waynesville	157
Welch Spring near Akers	284

	Page		Page
St. Francis River at Wappapello	217	Total-sediment discharge, definition of	18
near Mill Creek	207	Tumback Creek above Greenfield	108
near Patterson	214		
near Roselle	205	U	
near Saco	208		
St. Francis River basin, hydrologic records in	205	Upper Mississippi River basin, hydrologic records in	25
Stage-discharge relation, definition of	18		
Station identification numbers	7	W	
Station manuscript	9		
Statistics of monthly mean data	10	Wappapello Lake at Wappapello	215
Stockton Lake near Stockton	111	Water quality--streamflow	6
Streamflow, definition of	19	Water temperature	13
Summary of hydrologic conditions	3	Water use--1990	2
Summary statistics	11	Water year, definition of	19
Surface area, definition of	19	WDR, definition of	19
Surface water--streamflow	3	Weighted average, definition of	19
Surficial bed material, definition of	19	Welch Spring near Akers	284
Suspended sediment, definition of	18	Wells:	
Suspended-sediment concentration, definition of	18	Belcrest Street	305
Suspended-sediment discharge, definition of	18	Bissett School	306
Suspended-sediment load, definition of	18	Cherokee School	307
		Fulbright	309
T		Kansas Street	311
Table giving comparisons of 1995 7-day low flows		Main Street	313
to 7-day, 2-year low flows and minimum flows		Southwest Power Plant	314
for the period of record for selected stations	6	York Street	316
Table giving comparisons of peak discharge for the 1995 water		White River basin, hydrologic records in	220
year with those for period of record for selected stations	3	White River below Table Rock Dam near Branson	228
Table Rock Lake near Branson	227	White River near Branson	230
Tables, list of	vi	Wilson Creek near Brookline	222
Thermograph, definition of	19	Woods Fork near Hartville	286
Thompson River at Trenton	82	WRD, definition of	19
Time-weighted average, definition of	19	WSP, definition of	19
Tons per acre-foot, definition of	19	Wyaconda River above Canton	26
Tons per day, definition of	19	Wyaconda River basin, hydrologic records in	26
Total in bottom material, definition of	19		
Total load, definition of	19	Y	
Total recoverable, definition of	18		
Total, definition of	19	York Street well	316

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
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
<i>Area</i>		
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
<i>Volume</i>		
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
<i>Flow</i>		
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
<i>Mass</i>		
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.

USGS LIBRARY - RESTON



3 1818 00197656 0

U.S. DEPARTMENT OF THE INTERIOR
U.S. Geological Survey
1400 Independence Road, Mail Stop 200
Rolla, MO 65401

USGS Library
National Center
MS 950
12201 Sunrise Valley Drive
Reston, VA 22092 (2)