06813500 MISSOURI RIVER AT RULO, NE

LOCATION.--Lat 40°03'13", long 95°25'19", in NW¼ NW¼ 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 mi^2, approximately. The 3,959 mi^2 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 recorder. Datum of gage is 837.23 ft above National Geodetic Vertical Datum of 1929. 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.--Records good, except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers satellite data collection platform at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 358,000 ft^3/s Apr. 22, 1952, gage height, 25.60 ft; minimum daily discharge, 4,420 ft^3/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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,900	37,000	24,700	20,500	20,600	16,900	32,500	38,700	38,600	46,200	31,700	27,800
2	36,200	36,500	24,000	20,600	19,600	18,200	32,500	48,800	38,100	45,100	31,800	27,400
3	37,900	36,100	22,700	20,500	19,400	20,900	32,600	44,600	38,300	44,000	31,600	27,200
4	38,300	35,700	21,500	20,400	20,200	22,100	32,300	43,100	37,700	43,100	31,300	27,400
5	40,900	35,000	21,500	20,700	20,600	22,100	32,400	45,000	37,500	42,100	31,100	28,600
6	41,200	34,500	21,400	21,300	20,700	22,100	32,900	60,200	37,600	41,300	30,900	30,300
7	39,000	34,400	19,900	21,300	20,700	21,500	33,400	60,700	37,500	44,500	30,900	31,500
8	37,800	34,300	18,900	21,200	20,600	19,600	33,900	51,700	37,400	51,700	31,200	31,900
9	37,400	34,400	19,900	20,700	22,200	17,900	34,200	58,300	38,200	48,300	31,100	32,100
10	37,700	34,100	20,600	20,700	22,700	19,700	33,600	53,200	42,800	44,400	30,500	32,400
11	37,300	33,900	20,500	21,100	21,700	21,400	33,400	49,100	42,300	46,300	30,400	32,800
12	37,000	33,900	20,300	20,800	21,400	20,000	33,700	48,100	52,200	54,500	30,600	34,500
13	37,100	33,900	20,800	19,000	20,000	18,900	34,000	47,100	62,800	53,000	30,400	37,600
14	36,500	33,500	21,000	16,900	19,200	22,500	34,500	47,200	47,700	46,200	30,100	38,500
15	36,200	33,400	20,900	16,700	19,900	26,500	35,000	47,400	42,100	43,400	29,200	37,700
16	36,400	33,500	20,700	18,300	21,100	29,700	35,100	47,400	40,000	41,700	27,900	36,400
17	36,400	33,500	20,700	18,000	22,900	31,700	34,600	46,800	38,500	39,800	26,500	35,000
18	36,400	32,800	21,000	16,600	23,400	27,700	34,200	45,800	37,800	38,500	25,900	34,200
19	36,100	32,500	21,200	16,000	22,300	24,800	35,000	45,000	38,300	36,800	26,600	34,000
20	36,600	33,000	21,000	16,000	22,600	26,400	35,000	47,100	38,300	35,900	29,700	33,300
21	36,800	33,000	21,100	16,400	23,100	29,900	34,800	45,900	37,300	35,100	29,200	33,200
22	36,500	33,000	21,500	17,700	24,900	32,200	35,000	44,900	36,100	34,400	29,200	33,500
23	36,900	33,300	21,300	19,000	32,800	32,000	e35,200	43,100	38,900	34,000	28,800	32,600
24	36,800	33,400	20,000	19,400	35,200	31,300	35,300	42,000	43,300	33,300	28,300	31,800
25	36,700	33,700	19,000	18,900	28,000	30,600	35,100	41,900	41,400	33,000	27,900	31,500
26	36,900	33,900	19,000	18,800	22,800	31,100	34,700	41,200	41,800	32,800	27,600	31,300
27	36,800	33,100	19,000	18,700	18,900	30,700	34,700	40,500	47,900	32,000	27,700	31,000
28	36,600	31,100	18,500	18,900	17,200	30,300	34,800	40,000	50,400	32,000	27,700	30,800
29	36,600	29,100	18,500	19,800	---	31,000	35,300	39,400	50,900	32,300	27,700	31,000
30	37,300	26,500	19,600	20,200	---	32,400	36,000	39,400	48,400	32,000	27,700	30,800
31	37,900	---	20,300	20,400	---	32,900	---	38,900	---	31,700	27,800	---
MEAN	37,200	33,530	20,680	19,210	22,310	25,650	34,190	46,210	42,000	40,300	29,320	32,270
MAX	41,200	37,000	24,700	21,300	35,200	32,900	36,000	60,700	62,800	54,500	31,800	38,500
MIN	34,900	26,500	18,500	16,000	17,200	16,900	32,300	38,700	36,100	31,700	25,900	27,200
IN.	0.10	0.09	0.06	0.05	0.06	0.07	0.09	0.13	0.11	0.11	0.08	0.09

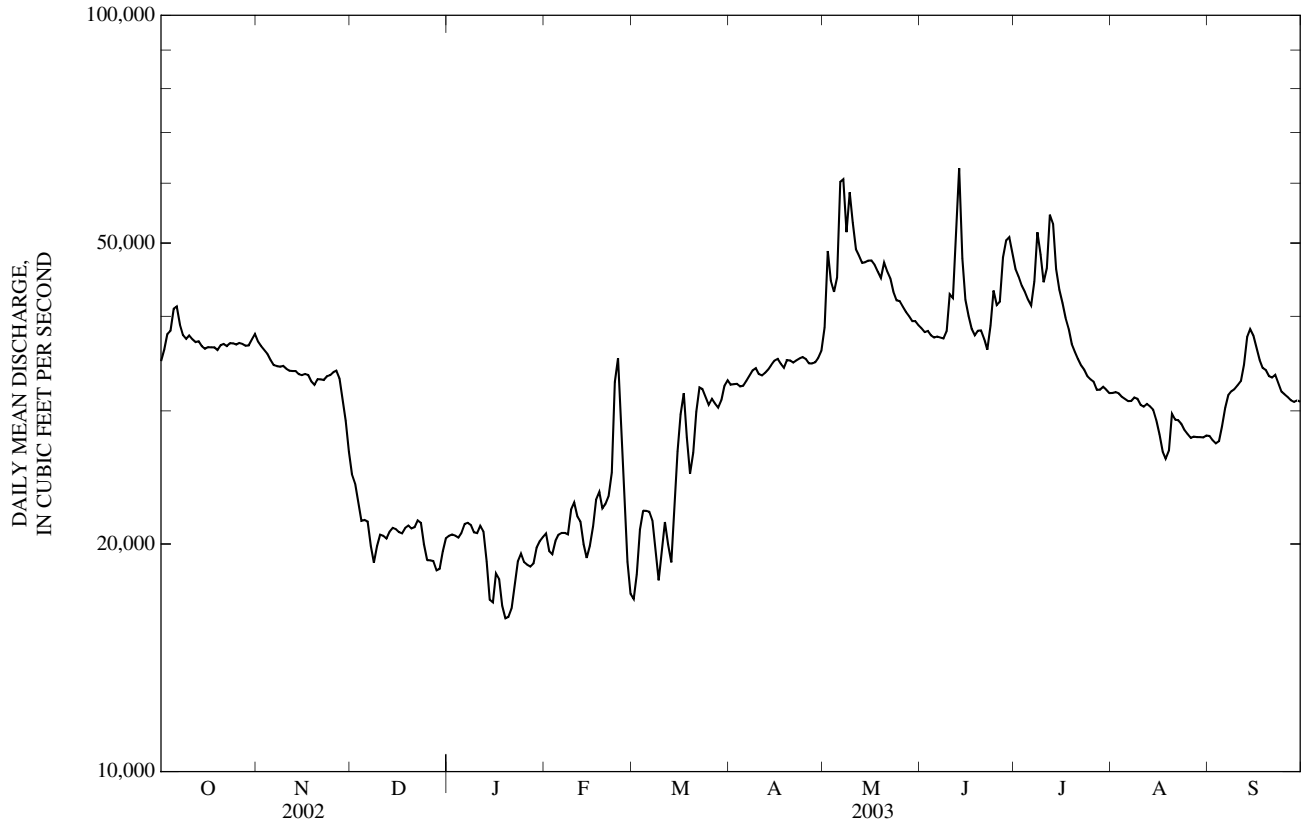
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2003[a], BY WATER YEAR (WY)

MEAN	44,640	40,950	27,220	22,800	28,470	40,890	51,040	51,790	56,420	50,520	44,590	44,810
MAX	80,050	83,880	57,380	42,280	53,140	79,590	106,100	97,280	130,600	164,800	78,730	76,410
(WY)	(1998)	(1998)	(1998)	(1973)	(1997)	(1979)	(1997)	(1997)	(1984)	(1993)	(1996)	(1997)
MIN	25,580	17,000	9,953	10,800	13,220	15,380	21,820	33,790	33,710	29,650	29,320	32,270
(WY)	(1962)	(1962)	(1956)	(1957)	(1957)	(1957)	(1957)	(1956)	(1956)	(2002)	(2003)	(2003)

06813500 MISSOURI RIVER AT RULO, NE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1953 - 2003[a]	
ANNUAL MEAN	30,950		31,950		42,040	
HIGHEST ANNUAL MEAN					71,880	1997
LOWEST ANNUAL MEAN					26,340	1957
HIGHEST DAILY MEAN	51,500	Aug 24	62,800	Jun 13	289,000	Jul 24, 1993
LOWEST DAILY MEAN	18,500	Dec 28	16,000	Jan 19,20	4,420	Jan 13, 1957
ANNUAL SEVEN-DAY MINIMUM	19,100	Dec 24	16,900	Jan 15	5,560	Nov 30, 1955
MAXIMUM PEAK FLOW	---		77,700	Jun 13	307,000	Jul 24, 1993
MAXIMUM PEAK STAGE	---		16.57	Jun 13	25.37	Jul 24, 1993
INSTANTANEOUS LOW FLOW	---		15,800	Jan 20	---	
ANNUAL RUNOFF (INCHES)	1.01		1.05		1.38	
10 PERCENT EXCEEDS	37,100		44,400		66,500	
50 PERCENT EXCEEDS	33,100		32,800		38,500	
90 PERCENT EXCEEDS	21,400		19,900		19,000	

e Estimated.
[a] Post-regulation period



06815575 SQUAW CREEK NEAR MOUND CITY, MO

LOCATION.--Lat 40°09'21" long 95°15'52", in SE ¼ SW ¼ NE ¼ sec.26, T.62 N., R.39 W., Holt County, Hydrologic Unit 10240005, on right bank of downstream side of State Highway 59 bridge, 2.4 mi northwest of Mound City.

DRAINAGE AREA.--62.7 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is unknown.

REMARKS.--Records fair except for September and estimated daily discharges, which are poor. U.S.G.S. satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3.7	7.8	8.1	e15	e3.8	2.7	4.2	2.3	6.5	3.0	2.6
2	2.5	3.4	3.4	5.7	e15	e4.0	2.9	4.0	5.5	6.4	2.8	1.4
3	3.7	3.8	4.5	8.3	e15	e4.5	2.9	3.7	5.5	5.6	2.6	0.97
4	6.7	3.6	5.0	4.7	e14	e5.0	4.3	3.8	3.9	5.3	2.1	0.81
5	3.2	3.7	6.5	3.4	e12	e4.5	3.5	3.5	3.5	4.9	2.2	0.71
6	2.0	3.9	7.9	3.3	e10	e4.0	3.5	3.7	8.3	4.5	1.9	0.68
7	1.7	3.8	5.4	7.1	e9.0	e4.0	4.8	4.0	4.9	4.3	1.8	0.60
8	1.9	3.6	6.1	4.0	e8.2	e4.0	3.9	17	4.1	4.1	1.7	e0.47
9	1.9	3.5	7.7	3.3	e8.2	e4.0	3.2	16	3.7	14	1.6	e0.47
10	1.8	3.3	5.7	7.7	e9.0	e4.0	3.1	41	48	82	1.6	e0.49
11	1.8	3.0	3.9	5.9	e11	e4.4	3.0	11	9.2	6.2	3.7	e2.5
12	2.2	3.4	3.9	5.1	e13	4.3	2.9	5.7	230	5.1	2.4	4.0
13	1.5	3.4	3.6	5.9	e14	4.3	2.8	5.2	129	4.8	1.7	2.4
14	2.5	3.7	4.4	6.1	e17	4.0	3.1	4.8	14	4.4	1.5	2.0
15	1.9	4.1	3.9	6.3	17	4.3	2.8	4.3	36	4.0	1.5	e1.8
16	2.1	3.8	3.4	e6.0	16	4.5	3.0	4.0	26	3.7	1.5	e2.1
17	3.9	3.7	3.4	e5.8	15	4.3	3.3	3.7	8.3	3.6	1.4	1.6
18	2.7	3.8	3.4	e5.5	13	3.8	3.1	3.9	7.7	3.4	1.0	1.0
19	2.3	3.5	3.1	e6.0	7.8	5.0	6.8	4.5	7.7	3.4	0.85	1.5
20	2.2	3.6	3.4	e8.0	5.9	8.6	10	8.9	6.6	3.4	0.75	e1.5
21	2.3	4.8	6.1	e8.0	4.2	4.9	5.8	5.0	6.1	3.2	0.70	1.4
22	2.1	3.6	5.4	e7.2	4.4	3.8	4.3	5.4	6.1	3.1	0.60	2.3
23	2.9	3.9	5.8	e6.2	e4.0	3.5	4.0	4.2	8.6	2.9	0.73	e1.5
24	5.2	3.6	5.6	e6.2	e3.6	3.2	7.1	4.4	7.0	2.8	0.64	e1.2
25	6.7	4.5	5.8	e6.2	e3.5	2.9	6.0	4.3	41	2.5	0.64	e0.75
26	3.9	3.7	6.0	e7.0	e3.5	2.9	5.0	4.0	38	2.3	0.62	e1.0
27	3.5	4.9	7.1	e8.0	e3.6	3.0	4.5	3.4	8.1	2.2	0.74	e0.75
28	3.7	6.4	7.6	e10	e3.8	2.7	4.3	3.3	7.3	2.6	0.75	e0.50
29	3.8	3.9	7.2	e12	---	2.6	4.8	3.2	39	2.4	1.4	e0.40
30	7.4	4.6	4.5	e13	---	2.6	5.2	3.0	7.8	2.3	0.89	e0.50
31	5.4	---	7.6	e15	---	2.6	---	2.6	---	2.4	2.0	---
MEAN	3.11	3.87	5.33	6.94	9.85	4.00	4.22	6.44	24.4	6.72	1.53	1.33
MAX	7.4	6.4	7.9	15	17	8.6	10	41	230	82	3.7	4.0
MIN	1.1	3.0	3.1	3.3	3.5	2.6	2.7	2.6	2.3	2.2	0.60	0.40
IN.	0.06	0.07	0.10	0.13	0.16	0.07	0.08	0.12	0.44	0.12	0.03	0.02

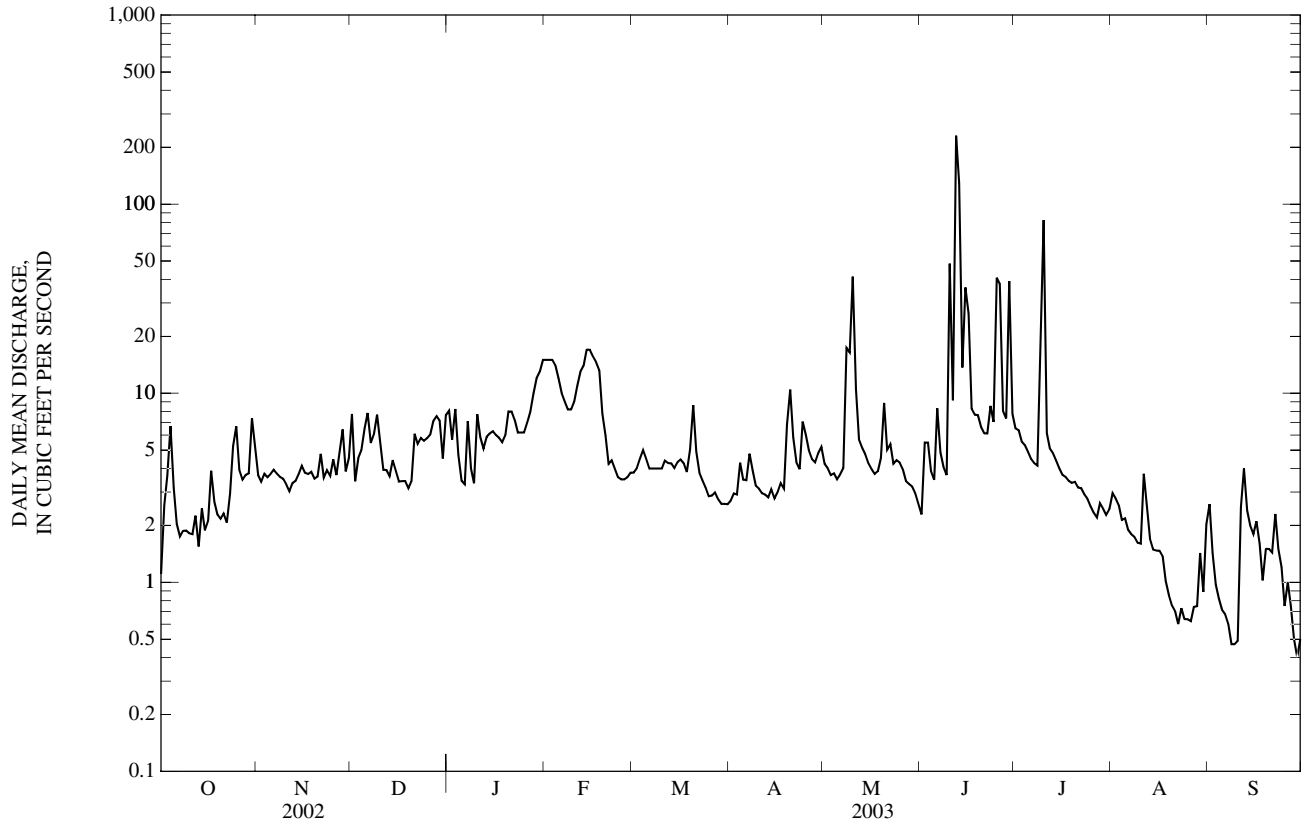
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	8.70	8.31	6.67	8.15	34.5	25.0	18.4	27.1	52.5	18.7	7.04	8.70
MAX	20.0	15.1	12.0	9.46	81.4	62.0	37.7	37.8	119	40.5	15.5	23.1
(WY)	(2002)	(2002)	(2002)	(2002)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)
MIN	3.02	3.87	2.68	6.94	9.85	4.00	4.22	6.44	13.6	6.72	1.53	1.33
(WY)	(2001)	(2003)	(2001)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2003)

06815575 SQUAW CREEK NEAR MOUND CITY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL MEAN	10.1		6.43		18.5	
HIGHEST ANNUAL MEAN					36.0	2001
LOWEST ANNUAL MEAN					6.43	2003
HIGHEST DAILY MEAN	201	May 12	230	Jun 12	781	Feb 24, 2001
LOWEST DAILY MEAN	1.1	Oct 1	0.40	Sep 29	0.40	Sep 29, 2003
ANNUAL SEVEN-DAY MINIMUM	1.4	Sep 6	0.60	Sep 4	0.60	Sep 4, 2003
MAXIMUM PEAK FLOW	---		990	Jun 12	2,630	Jun 14, 2001
MAXIMUM PEAK STAGE	---		15.89	Jun 12	20.06	Jun 14, 2001
INSTANTANEOUS LOW FLOW	---		0.40[a]	Sep 7-11	0.40[a]	Sep 7-11, 2003
ANNUAL RUNOFF (INCHES)	2.19		1.39		4.00	
10 PERCENT EXCEEDS	18		9.0		39	
50 PERCENT EXCEEDS	8.1		3.9		8.6	
90 PERCENT EXCEEDS	2.1		1.5		2.2	

e Estimated
[a] Minimum recorded, may have been less during period of estimated record.



06817700 NODAWAY RIVER NEAR GRAHAM, MO

LOCATION.--Lat 40°12'08", long 95°04'07", in NE ¼ NE ¼ NE ¼ 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 mi^2, approximately.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR MO-94-1: 1993 peak, September monthly and yearly mean discharge.

GAGE.--Water-stage recorder. Datum of gage is 852.09 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND , WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	88	47	41	63	e100	e80	207	299	250	79	e32
2	59	86	51	37	62	e110	e80	e2,000	294	221	80	e35
3	93	76	39	39	66	e90	e80	e1,200	287	203	77	32
4	180	70	36	49	73	e90	e80	e800	293	192	72	29
5	247	69	39	54	e55	e60	e70	e1,000	291	180	66	27
6	403	64	38	46	e58	e55	e70	3,850	311	171	61	26
7	200	59	52	44	e40	e65	e70	1,610	299	228	e55	25
8	148	58	49	42	e32	e60	e95	1,320	289	259	e55	25
9	105	e55	48	38	e37	e55	123	9,300	275	257	e52	26
10	84	e48	49	36	e38	e55	119	14,300	286	222	e50	26
11	66	e47	49	32	e35	e85	114	e5,000	276	335	e48	29
12	61	e45	47	41	e45	115	110	e2,000	688	356	e48	40
13	56	e51	49	38	e52	123	107	e1,500	655	249	e48	46
14	55	51	44	39	e60	203	115	e1,200	508	190	e55	51
15	49	51	42	38	62	226	103	e1,100	408	163	e52	54
16	47	56	42	e35	e62	219	95	e1,400	468	145	e47	47
17	45	52	44	e30	e80	319	106	988	410	134	e47	36
18	46	49	43	e25	e82	270	108	821	443	128	e42	31
19	47	49	41	e22	e78	215	119	736	358	121	e38	31
20	45	52	46	e35	e80	191	150	810	408	117	e38	34
21	42	52	49	e40	78	184	201	703	422	112	e37	40
22	45	48	41	e35	711	160	195	602	321	106	e37	39
23	44	48	43	e30	722	131	194	545	296	98	e32	39
24	47	47	35	e27	e500	115	188	512	285	94	e30	39
25	54	42	34	e28	e200	109	186	536	305	91	e30	36
26	75	40	34	e30	e160	e100	173	491	400	84	e28	37
27	97	38	38	e35	e130	e90	153	442	403	83	26	35
28	89	42	40	e40	e120	e90	145	402	500	91	27	34
29	81	43	40	e50	---	e90	134	362	350	141	27	e30
30	79	38	43	e45	---	e85	146	342	288	96	26	e30
31	78	---	38	e52	---	e85	---	341	---	82	e30	---
MEAN	90.9	53.8	42.9	37.8	135	127	124	1,820	371	168	46.5	34.7
MAX	403	88	52	54	722	319	201	14,300	688	356	80	54
MIN	42	38	34	22	32	55	70	207	275	82	26	25
IN.	0.08	0.04	0.04	0.03	0.10	0.11	0.10	1.52	0.30	0.14	0.04	0.03

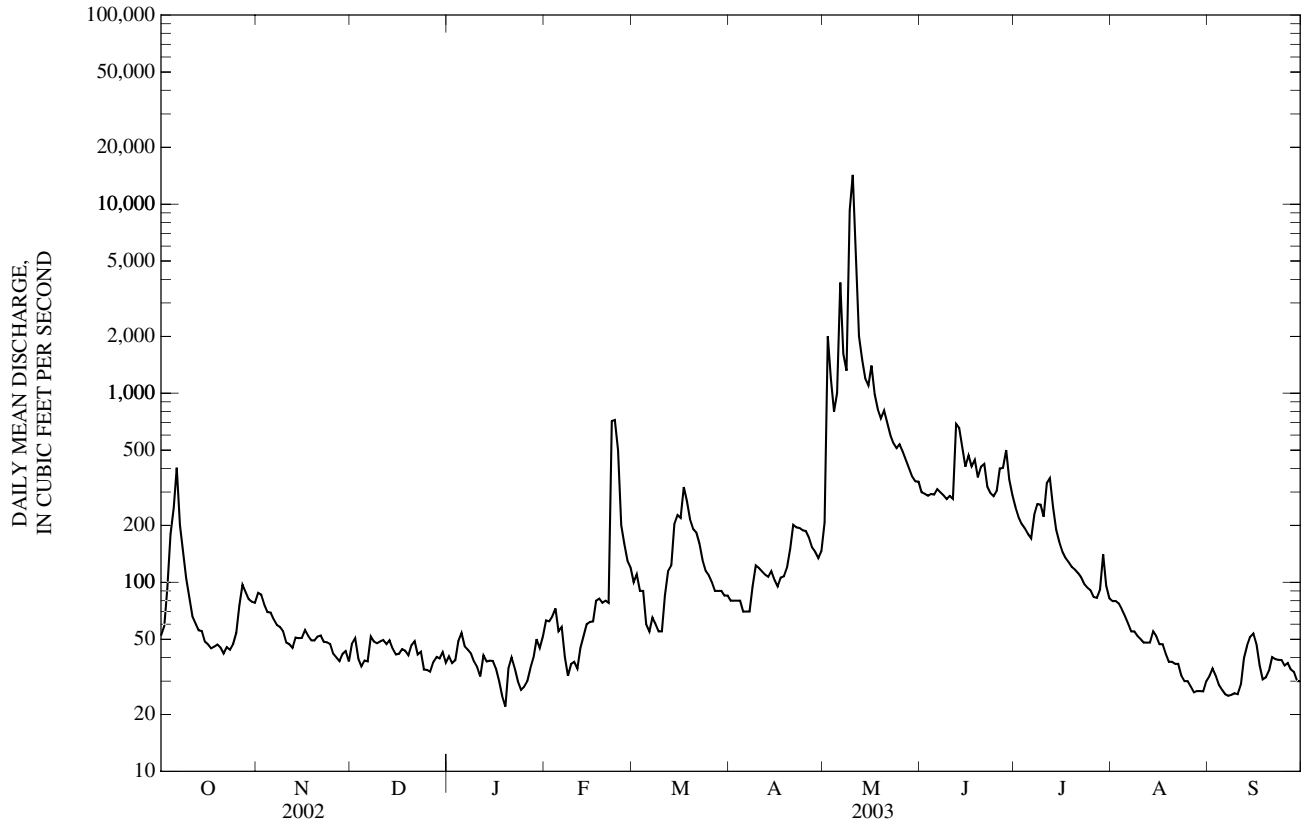
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2003, BY WATER YEAR (WY)

MEAN	379	452	470	328	723	1,023	1,405	1,936	1,678	1,460	514	618
MAX	2,313	1,735	2,026	1,199	1,839	3,155	3,614	4,606	4,936	12,460	2,758	3,364
(WY)	(1987)	(1993)	(1993)	(1983)	(1983)	(1998)	(1984)	(1995)	(1984)	(1993)	(1987)	(1993)
MIN	46.2	53.8	42.9	37.8	82.2	127	58.8	48.6	68.5	75.1	46.2	34.7
(WY)	(2001)	(2003)	(2003)	(2003)	(1989)	(2003)	(1989)	(1989)	(1988)	(1988)	(1988)	(2003)

06817700 NODAWAY RIVER NEAR GRAHAM, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL MEAN	181		256		898	
HIGHEST ANNUAL MEAN					2,870	1993
LOWEST ANNUAL MEAN					186	2000
HIGHEST DAILY MEAN	4,640	May 12	14,300	May 10	52,000	Jul 23, 1993
LOWEST DAILY MEAN	23	Sep 6,7	22	Jan 19	22	Jan 19, 2003
ANNUAL SEVEN-DAY MINIMUM	27	Sep 5	26	Sep 4	26	Sep 4, 2003
MAXIMUM PEAK FLOW	---		19,300	May 9	78,300	Jul 23, 1993
MAXIMUM PEAK STAGE	---		15.68	May 9	26.16	Jul 23, 1993
INSTANTANEOUS LOW FLOW	---		20	Jan 2	20	Sep 7, 2002 Jan 2, 2003
ANNUAL RUNOFF (INCHES)	1.78		2.52		8.84	
10 PERCENT EXCEEDS	354		415		2,120	
50 PERCENT EXCEEDS	100		69		326	
90 PERCENT EXCEEDS	42		35		63	

e Estimated



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 Nodaway River near Oregon (06817800).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
13...	1155	Environmental	51	14.6	124	8.6	416	7.0	190	53.1	14.9	3.73
MAR												
04...	1130	Environmental	e90	12.1	87	8.2	356	0.5	--	--	--	--
APR												
08...	1300	Environmental	96	13.8	110	8.6	382	5.0	--	--	--	--
MAY												
29...	1135	Environmental	360	13.7	164	9.2	384	22.5	200	55.4	14.2	2.78
JUN												
18...	1145	Environmental	501	7.2	93	8.4	381	26.5	--	--	--	--
JUL												
24...	1045	Environmental	94	9.9	122	9.2	281	24.5	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
13...	11.9	170	171	197	5	12.7	0.3	35.6	242	10	0.35	<0.04	0.09
MAR													
04...	--	131	129	158	<1	--	--	--	--	27	2.0	0.61	1.71
APR													
08...	--	154	154	176	6	--	--	--	--	17	0.68	<0.04	<0.06
MAY													
29...	9.58	145	143	126	24	10.7	0.3	25.3	247	124	1.5	<0.04	5.42
JUN													
18...	--	137	135	155	5	--	--	--	--	290	2.0	<0.04	6.86
JUL													
24...	--	99	99	94	13	--	--	--	--	94	0.82	<0.04	<0.30

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
13...	<0.008	0.04	0.04	0.10	7k	7k	33k	<2	136	1.6	E.03	<0.2	<6
MAR													
04...	0.037	0.17	0.23	0.33	10k	52	73	--	--	--	--	--	--
APR													
08...	<0.008	0.04	0.05	0.14	5k	14k	47k	--	--	--	--	--	--
MAY													
29...	0.031	0.10	0.09	0.31	100k	120k	120k	4	667	3.6	<0.04	<0.2	<7
JUN													
18...	0.027	0.18	0.21	0.74	<4b	1,800	310	--	--	--	--	--	--
JUL													
24...	<0.008	0.04	0.02	0.24	3k	190	70k	--	--	--	--	--	--

06817700 NODAWAY RIVER NEAR GRAHAM, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Selenium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
NOV								
13...	13	<0.08	<1	135	<0.02	0.9	7	3
MAR								
04...	--	--	--	--	--	--	--	--
APR								
08...	--	--	--	--	--	--	--	--
MAY								
29...	<8	<0.08	1	0.5	<0.02	2.0	<1	4
JUN								
18...	--	--	--	--	--	--	--	--
JUL								
24...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
e -- Estimated discharge
E -- Estimated value

Value qualifier codes used in this table:
b -- Value was extrapolated below
k -- Counts outside acceptable range

06818000 MISSOURI RIVER AT ST. JOSEPH, MO

LOCATION.--Lat 39°45'12", long 94°51'28", in NW ¼ SW ¼ 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.--420,100 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 788.19 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1931 nonrecording gage and from Oct. 21, 1931, to Dec. 31, 1933, water-stage recorder, both at same site at datum 5.50 ft higher.

REMARKS.--No estimated daily discharges. 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 FOR PERIOD OF RECORD.--Maximum discharge, 397,000 ft^3/s, Apr. 22, 1952; maximum gage-height, 32.07 ft; July 26, 1993; minimum discharge, 2,300 ft^3/s, Jan. 9, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 29, 1881, reached a stage of 27.2 ft, present datum, discharge, about 370,000 ft^3/s, computed by the U.S. Army Corps of Engineers. Flood of June 1844 reached a stage of 24.5 ft, discharge, about 350,000 ft^3/s, computed by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35,800	38,300	25,800	20,300	20,700	17,900	33,400	37,400	40,300	49,400	33,800	28,400
2	37,500	37,100	24,500	20,400	20,600	18,000	32,900	47,000	40,100	47,900	33,900	28,000
3	39,400	36,700	23,800	20,400	20,000	19,600	33,000	51,100	39,700	46,700	34,100	27,600
4	40,400	36,300	22,400	20,300	20,100	21,700	33,100	46,300	39,700	45,400	33,800	27,400
5	41,600	35,600	21,600	20,500	20,800	22,600	32,800	44,200	39,300	44,200	33,700	27,800
6	44,300	34,900	21,900	20,900	21,000	22,300	33,000	58,600	39,400	42,900	33,300	29,300
7	42,000	34,600	21,400	21,300	21,100	22,300	33,600	68,900	39,800	43,400	33,200	31,000
8	39,700	34,700	20,100	21,300	20,900	21,700	34,200	58,300	39,200	50,900	33,300	31,900
9	38,700	34,700	19,800	21,200	21,200	19,900	35,000	63,000	39,700	54,100	33,600	32,200
10	38,700	34,900	20,700	20,900	22,700	19,000	34,500	67,000	45,600	49,100	33,200	32,500
11	38,700	34,700	21,100	20,900	22,600	20,900	33,900	58,300	48,300	46,600	32,900	33,100
12	38,000	34,600	21,000	21,300	21,800	21,800	33,800	53,700	47,800	54,200	32,800	34,000
13	38,100	34,700	21,000	20,700	21,200	20,500	34,100	51,700	72,300	59,100	33,000	36,700
14	37,800	34,700	21,500	19,200	20,100	20,600	34,300	50,100	56,500	51,800	32,600	39,400
15	37,400	34,400	21,600	17,700	19,800	24,500	34,900	50,200	48,800	46,400	31,900	39,200
16	37,500	34,600	21,500	18,100	20,500	28,700	35,300	50,500	45,100	44,200	30,500	37,900
17	37,700	34,400	21,300	19,100	21,500	32,200	35,500	50,000	43,400	42,200	28,800	36,200
18	37,800	34,300	21,400	18,500	23,100	32,200	34,500	48,700	41,800	40,800	27,300	35,000
19	37,600	33,600	21,700	17,600	23,000	27,500	35,400	47,500	41,600	39,300	26,800	34,400
20	37,400	34,000	21,800	17,100	22,200	26,500	36,400	49,300	42,100	37,900	28,100	33,800
21	37,900	34,500	21,400	17,200	22,500	29,200	36,300	49,900	41,700	37,200	30,700	33,500
22	37,600	34,100	21,600	17,900	23,200	32,800	36,500	48,600	40,100	36,500	29,700	33,700
23	37,700	33,900	21,900	18,900	26,900	34,200	36,500	45,400	39,900	36,000	29,400	34,000
24	38,100	34,100	21,400	19,700	36,200	33,300	36,700	44,000	48,600	35,700	29,000	32,800
25	38,200	33,800	20,100	19,800	32,800	32,500	37,200	43,300	45,600	35,100	28,600	32,400
26	38,100	34,400	19,400	19,400	25,900	32,100	36,500	43,100	43,600	35,100	28,300	32,000
27	38,000	34,000	19,500	19,300	21,200	32,300	35,700	42,100	47,000	34,600	28,100	31,700
28	37,600	32,300	19,200	19,100	18,800	31,800	36,300	41,700	52,000	34,000	28,200	31,400
29	37,200	30,400	18,900	19,500	---	31,700	36,200	41,000	53,800	34,300	28,200	31,300
30	37,600	28,100	19,200	20,200	---	32,600	36,500	41,000	52,200	34,400	28,100	31,300
31	38,300	---	20,000	20,400	---	33,600	---	40,800	---	33,900	28,900	---
MEAN	38,460	34,380	21,240	19,650	22,590	26,340	34,930	49,440	45,170	42,690	30,900	32,660
MAX	44,300	38,300	25,800	21,300	36,200	34,200	37,200	68,900	72,300	59,100	34,100	39,400
MIN	35,800	28,100	18,900	17,100	18,800	17,900	32,800	37,400	39,200	33,900	26,800	27,400
IN.	0.11	0.09	0.06	0.05	0.06	0.07	0.09	0.14	0.12	0.12	0.08	0.09

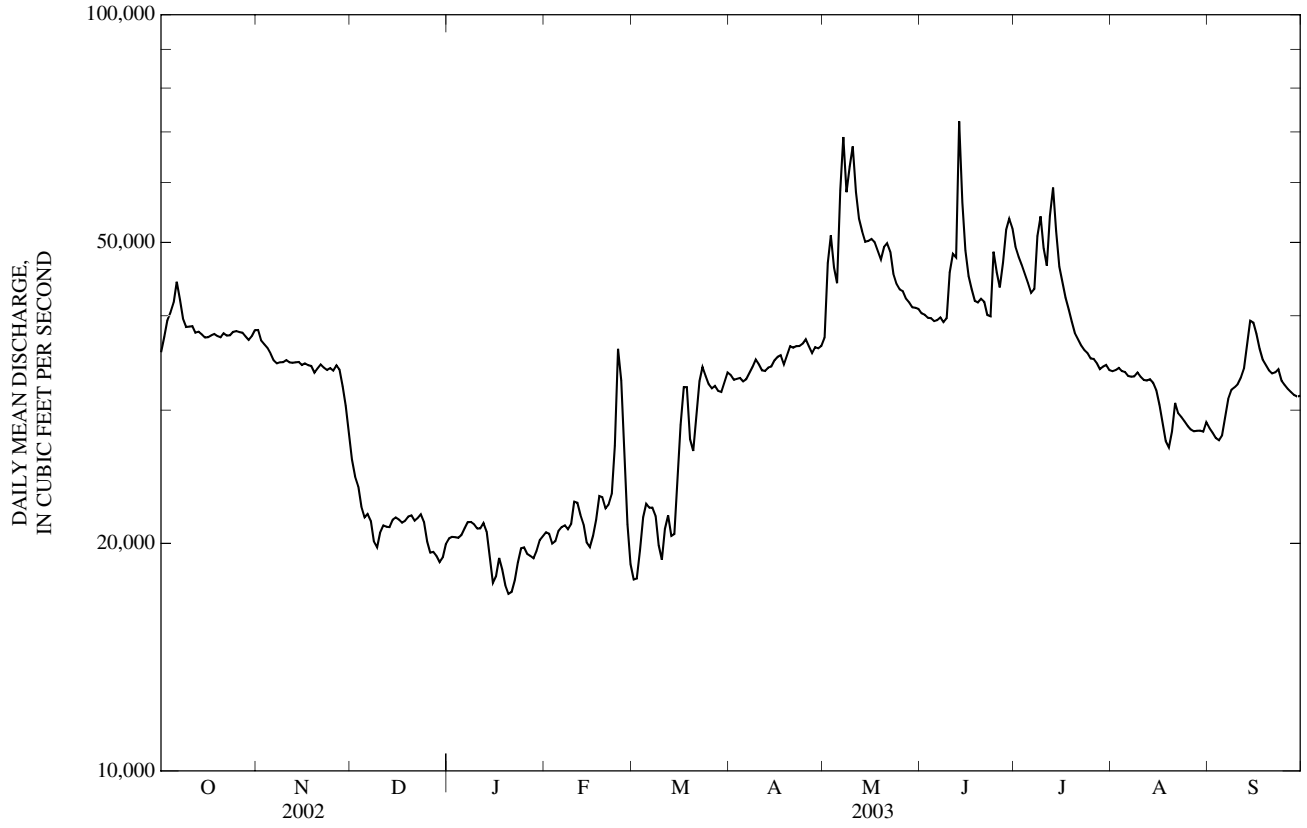
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003[a], BY WATER YEAR (WY)

MEAN	48,090	45,100	30,770	25,530	32,020	45,520	56,490	58,280	61,690	56,430	48,210	48,780
MAX	87,650	85,040	61,820	45,740	60,570	96,800	113,600	106,600	144,700	195,400	83,050	79,160
(WY)	(1987)	(1998)	(1987)	(1973)	(1983)	(1979)	(1984)	(1997)	(1984)	(1993)	(1996)	(1997)
MIN	30,290	18,510	11,560	12,210	15,790	19,490	32,920	36,390	35,620	31,450	30,900	32,660
(WY)	(1962)	(1991)	(1964)	(1959)	(1964)	(1964)	(1990)	(1958)	(1958)	(2002)	(2003)	(2003)

06818000 MISSOURI RIVER AT ST. JOSEPH, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003[a]	
ANNUAL MEAN	31,780		33,250		46,450	
HIGHEST ANNUAL MEAN					76,050	1997
LOWEST ANNUAL MEAN					30,960	1963
HIGHEST DAILY MEAN	56,500	Jun 14	72,300	Jun 13	328,000	Jul 26, 1993
LOWEST DAILY MEAN	18,900	Dec 29	17,100	Jan 20	4,000	Jan 17, 1963
ANNUAL SEVEN-DAY MINIMUM	19,500	Dec 25	17,900	Jan 15	5,030	Dec 15, 1963
MAXIMUM PEAK FLOW	---		80,000	Jun 13	335,000	Jul 26, 1993
MAXIMUM PEAK STAGE	---		16.06	Jun 13	32.07	Jul 26, 1993
INSTANTANEOUS LOW FLOW	---		17,100	Jan 20,21	4,000	Jan 17, 1963
ANNUAL RUNOFF (INCHES)	1.03		1.07		1.50	
10 PERCENT EXCEEDS	38,600		47,000		72,500	
50 PERCENT EXCEEDS	33,600		33,900		41,700	
90 PERCENT EXCEEDS	21,600		20,300		22,000	

[a] Post-regulation period.



06818000 MISSOURI RIVER AT ST. JOSEPH, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1984 to December 1984, July 1985 to September 1985, April 1986 to September 1986.
DISSOLVED OXYGEN: May 1984 to November 1984, July 1985 to 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.--National Stream-Quality Accounting Network station October 1974 to September 1986. Ambient Water-Quality Monitoring Network station October 1969 to July 1992, November 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
23...	1050	Environmental	37,600	9.7	92	8.6	759	12.0	--	--	--	--
NOV												
12...	1115	Environmental	34,700	11.3	98	8.4	745	8.0	240	58.3	22.7	5.10
DEC												
11...	1045	Environmental	21,100	12.6	98	8.4	796	3.5	--	--	--	--
JAN												
08...	1050	Environmental	21,400	13.2	103	8.3	737	3.5	260	68.0	22.6	5.58
FEB												
13...	1030	Environmental	21,300	13.5	99	8.4	799	1.5	--	--	--	--
13...	1031	Replicate	--	--	--	--	--	--	--	--	--	--
MAR												
06...	1130	Environmental	22,200	12.9	94	8.4	739	1.0	--	--	--	--
APR												
09...	1100	Environmental	35,100	10.8	91	8.5	753	7.0	--	--	--	--
MAY												
28...	1045	Environmental	41,600	8.5	97	8.4	730	20.5	280	72.5	25.1	6.26
JUN												
17...	1130	Environmental	43,500	6.7	84	8.1	687	25.0	--	--	--	--
JUL												
22...	1100	Environmental	36,600	6.2	83	8.3	778	28.5	--	--	--	--
AUG												
20...	1035	Environmental	27,300	7.6	99	8.5	795	29.0	260	64.3	25.0	6.20
SEP												
24...	1110	Environmental	32,700	8.7	97	8.5	719	19.0	--	--	--	--

06818000 MISSOURI RIVER AT ST. JOSEPH, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicar-bonate, wat unf incrm. titr., field, mg/L (00450)	Carbon-ate, wat unf incrm. titr., field, mg/L (00447)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
23...	--	179	180	206	6	--	--	--	--	55	0.64	<0.04	0.46
NOV													
12...	69.2	193	194	223	7	19.0	0.5	178	491	32	0.47	<0.04	0.80
DEC													
11...	--	215	213	256	2	--	--	--	--	38	0.60	0.12	0.92
JAN													
08...	63.5	205	206	251	<1	25.0	0.41	150	488	52	0.56	E.03	1.10
FEB													
13...	--	211	209	250	2	--	--	--	--	26	0.53	0.06	0.99
13...	--	--	--	--	--	--	--	--	--	27	0.52	0.05	0.97
MAR													
06...	--	194	193	231	2	--	--	--	--	52	0.85	0.13	1.15
APR													
09...	--	181	180	214	3	--	--	--	--	75	0.81	<0.04	0.80
MAY													
28...	55.3	197	196	233	3	18.5	0.4	149	438	172	1.3	<0.04	1.94
JUN													
17...	--	185	186	226	<1	--	--	--	--	360	1.3	<0.04	1.89
JUL													
22...	--	194	195	228	5	--	--	--	--	140	0.91	<0.04	1.98
AUG													
20...	69.2	180	180	212	4	22.5	0.6	191	521	61	1.1	<0.04	0.17
SEP													
24...	--	167	166	200	1	--	--	--	--	129	1.1	<0.04	0.24

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
23...	0.013	0.03	E.02	0.14	38ki	440	45k	--	--	--	--	--	--
NOV													
12...	E.007	0.05	0.05	0.15	150k	200	38k	<2	468	2.7	E.02	<0.2	<6
DEC													
11...	0.008	0.06	0.05	0.14	410	440k	83	--	--	--	--	--	--
JAN													
08...	0.008	0.07	0.07	0.15	50ki	700k	150	<2	694	2.9	E.02	<0.2	<6
FEB													
13...	0.010	0.07	0.07	0.14	38k	18k	40k	--	--	--	--	--	--
13...	0.009	0.07	0.07	0.15	--	--	--	--	--	--	--	--	--
MAR													
06...	0.015	0.10	0.12	0.20	40k	150	140	--	--	--	--	--	--
APR													
09...	0.011	0.07	0.08	0.20	3ki	830ki	110	--	--	--	--	--	--
MAY													
28...	0.008	0.08	0.10	0.32	43k	88k	71k	3	1,840	3.6	E.03	<0.2	<7
JUN													
17...	0.022	0.08	0.11	0.45	20ki	640	500	--	--	--	--	--	--
JUL													
22...	0.011	0.11	0.08	0.31	3k	23k	15k	--	--	--	--	--	--
AUG													
20...	E.006n	0.03	0.04	0.16	20k	53k	50	6	732	3.2	E.03n	0.10	8.6
SEP													
24...	<0.008	0.05	0.06	0.27	2ki	220	78	--	--	--	--	--	--

06818000 MISSOURI RIVER AT ST. JOSEPH, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Selen- ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
OCT								
23...	--	--	--	--	--	--	--	--
NOV								
12...	<10	<0.08	1	E2.0b	<0.02	2.5	M	5
DEC								
11...	--	--	--	--	--	--	--	--
JAN								
08...	<10	E.04	1	3.6	<0.02	2.8	1	5
FEB								
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
MAR								
06...	--	--	--	--	--	--	--	--
APR								
09...	--	--	--	--	--	--	--	--
MAY								
28...	<8	<0.08	3	E.4	<0.02	3.1	1	13
JUN								
17...	--	--	--	--	--	--	--	--
JUL								
22...	--	--	--	--	--	--	--	--
AUG								
20...	E7n	E.05n	2	1.4	<0.02	2.1	1	8
SEP								
24...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Value qualifier codes used in this table:
b -- Value was extrapolated below
k -- Counts outside acceptable range
i -- Result may be affected by interference
n -- Below the LRL and above the LT-MDL

06819500 ONE HUNDRED AND TWO RIVER AT MARYVILLE, MO

LOCATION.--Lat 40°20'45", long 94°49'56", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.64 N., R.35 W., Nodaway County, Hydrologic Unit 10240013, on right bank 150 ft upstream from bridge on U.S. Highway 136, 0.3 mi downstream from Thill Branch, 1 mi east of Maryville, and at mile 64.0.

DRAINAGE AREA.--515 mi^2.

PERIOD OF RECORD.--October 1932 to September 1990, March 22, 2001 to current year. April to June 1934 monthly discharge only published in WSP 1310. June 1934 to September 1971 published as "near Maryville".

GAGE.--Water-stage recorder. Datum of gage is 954.65 ft above National Geodetic Vertical Datum of 1929. Nonrecording gage prior to Sept. 15, 1958. Prior to June 20, 1934, at site 20 ft upstream and datum 10 ft higher. June 20, 1934 to July 19, 1971, at site 3 mi upstream at datum 15.68 ft higher. July 20, 1971 to September 1990, at site 20 ft upstream and datum 10 ft higher.

REMARKS.--Records good except for estimated daily discharges which are fair, and the month of September, which is poor. Some regulation at low flow by City Waterworks. U.S.G.S. satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 16, 1926 reached a stage of 25 ft, present datum from floodmark; discharge, 14,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND , WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	18	6.3	5.8	5.5	19	12	81	48	30	7.1	6.2
2	10	18	9.5	6.4	6.9	16	11	65	51	26	6.9	4.4
3	15	16	7.1	5.5	8.3	17	10	54	54	24	5.8	3.5
4	30	14	7.2	8.2	6.9	13	16	345	56	22	4.9	2.2
5	32	15	6.1	9.7	6.6	12	11	1,110	53	19	4.6	3.9
6	28	12	6.1	7.5	6.1	e13	13	395	93	18	4.5	5.5
7	15	11	7.2	5.7	4.7	e12	15	230	73	17	5.0	7.0
8	10	11	6.0	8.8	4.3	e12	16	304	66	21	4.8	6.7
9	8.5	10	5.6	8.9	4.4	12	22	1,670	54	40	4.4	6.3
10	6.6	10	7.1	4.4	4.4	12	24	819	57	57	4.9	5.1
11	5.2	8.9	9.8	4.1	4.5	15	24	422	68	18	6.4	6.9
12	5.2	8.5	9.0	5.1	4.6	19	23	250	80	15	4.9	10
13	4.4	8.1	8.4	5.6	5.1	21	20	190	137	12	5.9	9.8
14	4.0	9.4	6.6	5.8	7.1	21	17	182	84	11	6.4	8.9
15	4.1	9.2	8.0	5.0	7.7	26	15	232	54	9.4	5.5	9.5
16	4.4	8.5	9.3	4.3	5.8	28	19	251	91	8.1	4.7	9.9
17	6.2	8.4	8.9	3.5	6.1	34	16	174	74	7.7	3.7	9.3
18	5.5	8.7	9.4	3.3	7.0	29	16	142	53	7.6	3.1	11
19	5.4	7.2	8.3	3.3	26	30	30	132	46	6.7	2.6	14
20	4.8	7.7	7.2	3.7	50	27	41	146	41	6.6	2.4	12
21	5.1	7.9	5.7	3.9	154	31	133	132	36	6.4	2.4	12
22	4.9	7.2	5.3	3.8	115	40	90	110	32	5.6	2.2	13
23	5.4	7.8	5.4	e3.6	e57	32	62	98	35	5.3	2.6	15
24	11	7.6	6.2	3.6	e40	25	59	101	37	5.0	3.3	12
25	13	6.0	5.0	3.7	e33	19	67	99	43	5.9	3.3	8.5
26	13	8.3	4.5	3.6	e27	16	69	87	76	6.6	4.6	8.7
27	19	6.2	5.4	3.4	23	15	59	74	80	7.1	5.5	9.7
28	19	7.0	6.1	3.3	20	15	49	66	56	32	5.8	9.1
29	14	9.3	7.0	3.4	---	14	44	61	44	33	4.8	9.1
30	17	7.2	9.4	3.5	---	13	58	64	36	12	3.0	10
31	15	---	5.8	4.8	---	13	---	56	---	8.3	4.8	---
MEAN	11.1	9.80	7.06	5.01	23.2	20.0	35.4	263	60.3	16.2	4.54	8.64
MAX	32	18	9.8	9.7	154	40	133	1,670	137	57	7.1	15
MIN	3.3	6.0	4.5	3.3	4.3	12	10	54	32	5.0	2.2	2.2
IN.	0.02	0.02	0.02	0.01	0.05	0.04	0.08	0.59	0.13	0.04	0.01	0.02

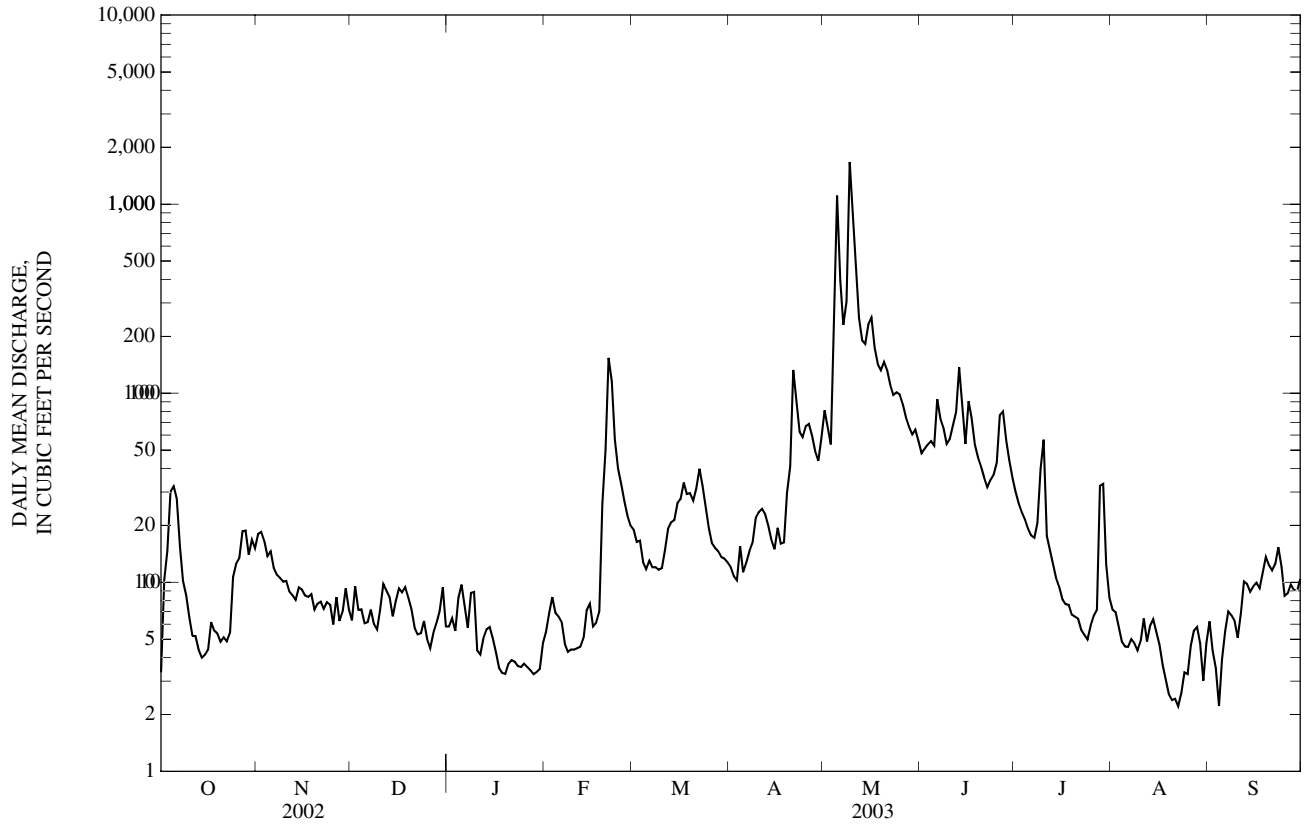
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	144	114	79.8	99.1	227	406	330	413	472	212	128	161
MAX	1,897	945	818	1,186	1,240	1,874	1,655	2,242	3,187	1,452	992	1,312
(WY)	(1974)	(1942)	(1983)	(1960)	(1973)	(1979)	(1984)	(1982)	(1947)	(1986)	(1982)	(1977)
MIN	0.05	0.59	1.12	0.11	2.09	3.42	0.74	0.11	5.18	0.50	0.18	0.03
(WY)	(1989)	(1989)	(1989)	(1977)	(1989)	(1954)	(1956)	(1989)	(1988)	(1989)	(1988)	(1988)

06819500 ONE HUNDRED AND TWO RIVER AT MARYVILLE, MO--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	47.4		38.9		231	
HIGHEST ANNUAL MEAN					658	1982
LOWEST ANNUAL MEAN					18.6	1934
HIGHEST DAILY MEAN	2,250	May 12	1,670	May 9	25,500	Oct 12, 1973
LOWEST DAILY MEAN	2.6	Sep 9	2.2	Aug 22,Sep 4	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	2.7	Sep 6	2.7	Aug 18	0.00	1977,1988
MAXIMUM PEAK FLOW	---		2,100	May 9	28,000	Oct 12, 1973
MAXIMUM PEAK STAGE	---		9.40	May 9	19.25[a]	Oct 12, 1973
INSTANTANEOUS LOW FLOW	---		1.2	Sep 5	0.00	Several Years
ANNUAL RUNOFF (INCHES)	1.25		1.03		6.10	
10 PERCENT EXCEEDS	81		74		460	
50 PERCENT EXCEEDS	14		10		29	
90 PERCENT EXCEEDS	4.9		4.4		2.6	

e Estimated
[a] Former Datum.



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 mi^2.

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 National Geodetic Vertical Datum of 1929. 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.--Records fair except for estimated daily discharges and the period July through September, which are poor. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND , WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	86	33	32	e40	e85	42	266	160	279	48	119
2	30	82	40	30	40	e78	40	186	180	209	e51	87
3	38	76	30	30	40	e72	40	195	177	177	e45	64
4	48	68	36	29	41	e68	52	187	176	148	e40	42
5	54	73	33	31	e40	59	43	192	161	123	34	32
6	70	69	36	29	e37	e55	53	787	314	105	30	23
7	101	65	37	31	e36	e58	63	1,040	473	96	25	17
8	91	61	33	33	e36	e59	52	615	304	e90	23	15
9	86	57	37	29	e37	e58	46	1,190	231	e96	21	14
10	69	54	37	28	36	e58	45	2,520	744	1,520	22	11
11	60	49	38	29	e38	60	45	1,510	454	1,100	47	26
12	52	47	35	34	e38	60	48	1,150	696	342	40	47
13	47	46	40	30	e39	70	56	691	1,380	183	33	106
14	43	45	36	26	45	61	58	525	476	133	29	102
15	41	47	37	27	46	61	55	439	379	119	28	77
16	39	43	37	e24	55	62	55	423	293	104	24	59
17	44	42	37	e21	48	62	56	485	242	95	21	44
18	41	41	37	e21	42	69	47	429	250	80	17	51
19	38	40	34	e21	45	87	162	366	269	71	15	66
20	38	39	33	e20	41	119	407	358	218	65	14	54
21	38	37	32	e20	42	105	231	358	182	59	12	e45
22	38	37	33	e19	51	94	162	326	175	55	10	e39
23	39	37	34	e19	209	82	265	291	177	53	8.0	e35
24	57	37	30	e16	194	81	428	287	167	47	e6.8	29
25	88	34	32	e17	e170	86	306	282	165	44	e6.5	e23
26	66	36	35	e17	e190	73	216	269	958	42	e5.8	e16
27	65	32	28	e20	e150	62	174	241	545	38	e6.8	e17
28	70	34	30	e22	e110	55	474	217	683	e34	e6.8	e16
29	67	39	32	e30	---	50	261	194	492	e31	e7.6	16
30	94	31	36	e35	---	47	200	177	486	e30	e10	e21
31	99	---	33	e38	---	45	---	162	---	e34	175	---
MEAN	57.3	49.5	34.5	26.1	69.1	69.1	139	528	387	181	27.8	43.8
MAX	101	86	40	38	209	119	474	2,520	1,380	1,520	175	119
MIN	25	31	28	16	36	45	40	162	160	30	5.8	11
IN.	0.04	0.03	0.02	0.02	0.04	0.05	0.09	0.35	0.25	0.12	0.02	0.03

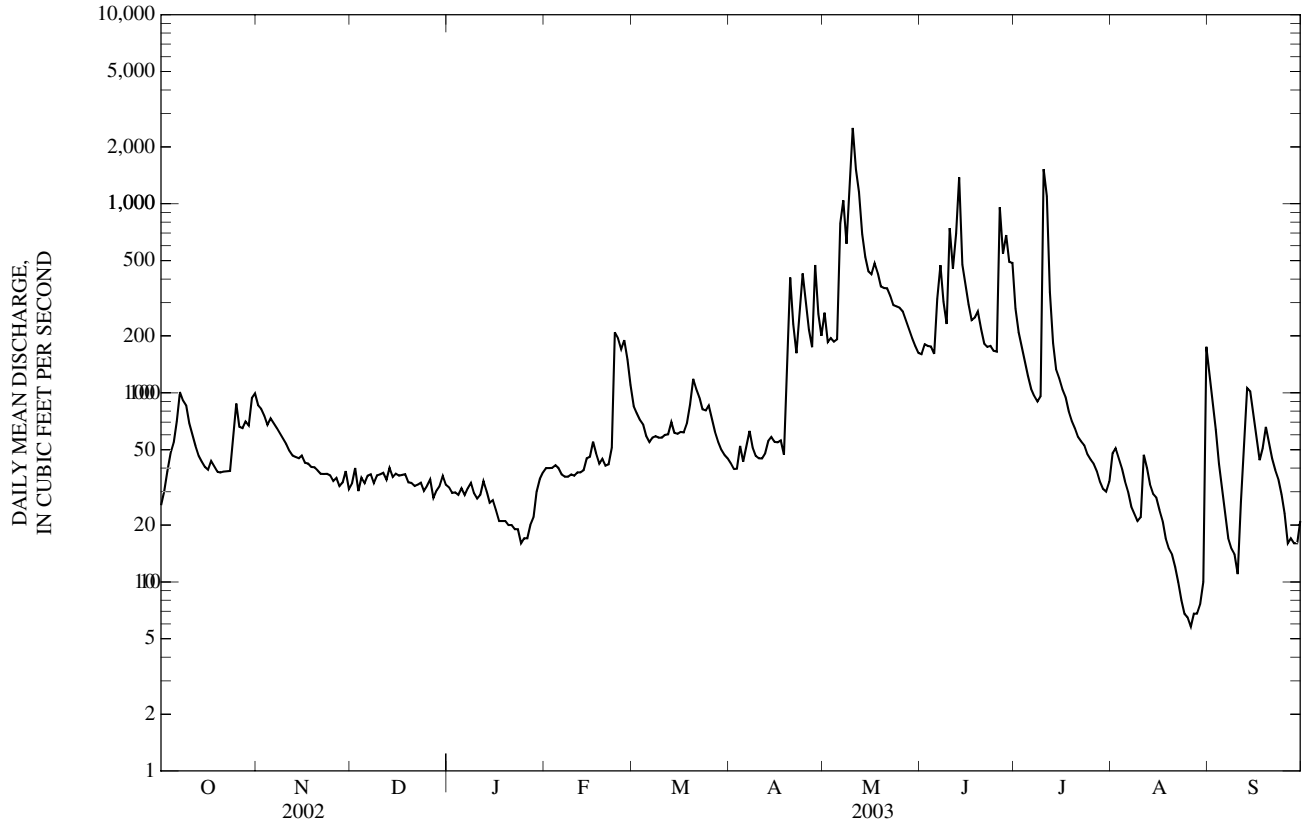
STATISTICS OF MONTHLY MEAN DATAFOR PERIOD OF RECORD , BY WATER YEAR (WY)

MEAN	637	549	370	371	832	1,343	1,491	1,652	1,994	1,167	441	867
MAX	8,584	4,620	3,248	3,714	4,912	6,345	6,835	10,020	13,640	21,280	2,935	7,853
(WY)	(1974)	(1962)	(1983)	(1974)	(1973)	(1979)	(1973)	(1995)	(1947)	(1993)	(1987)	(1926)
MIN	0.02	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)

06820500 PLATTE RIVER NEAR AGENCY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	272		135		976	
HIGHEST ANNUAL MEAN					4,108	1993
LOWEST ANNUAL MEAN					67.4	1934
HIGHEST DAILY MEAN	12,300	May 12	2,520	May 10	57,500	Jul 25, 1993
LOWEST DAILY MEAN	17	Sep 12,13	5.8	Aug 26	0.00	At Times
ANNUAL SEVEN-DAY MINIMUM	18	Sep 9	6.9	Aug 23	0.00	At Times
MAXIMUM PEAK FLOW	---		3,130	Jul 10	60,800	Jul 25, 1993
MAXIMUM PEAK STAGE	---		13.38	Jul 10	36.07	Jul 25, 1993
INSTANTANEOUS LOW FLOW	---		5.5	Aug 26,27	0.00	At Times
ANNUAL RUNOFF (INCHES)	2.09		1.04		7.53	
10 PERCENT EXCEEDS	465		309		2,100	
50 PERCENT EXCEEDS	110		48		194	
90 PERCENT EXCEEDS	32		22		24	

e Estimated



06821080 LITTLE PLATTE RIVER NEAR PLATTSBURG, MO

LOCATION.--Lat 39°34'04", long 94°24'24", in SE ¼ NW ¼ sec.20, T.55 N., R.31 W., Clinton County, Hydrologic Unit 10240012, on U.S. Highway 116 bridge, 0.4 mi east of the junction with U.S. Highway 33, and 2.5 mi east of Plattsburg.

DRAINAGE AREA.--65.4 mi^2.

PERIOD OF RECORD.--Oct. 1, 1999 to Sept. 30, 2000, Oct. 1, 2001 to current year.

GAGE.--Water-stage recorder. Datum of gage unknown.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.05	0.05	0.46	e0.00	0.19	11	0.20	0.05	0.00	1.4
2	0.00	0.00	0.05	0.02	0.58	e0.00	0.15	14	0.77	0.00	0.00	0.11
3	0.00	0.00	0.01	0.02	0.51	0.04	0.13	4.5	1.2	0.00	0.00	0.00
4	0.00	0.00	0.01	0.05	0.43	0.09	0.30	2.5	0.91	0.00	0.00	0.00
5	0.00	0.00	0.00	0.05	0.21	0.12	0.26	39	0.93	0.00	0.00	0.00
6	0.00	0.00	0.00	0.05	0.16	0.10	0.36	7.2	8.3	0.00	0.00	0.00
7	0.00	0.00	0.00	0.05	0.10	0.11	0.40	2.9	7.6	0.00	0.00	0.00
8	0.00	0.00	0.00	0.06	0.03	0.18	0.41	1.6	3.3	0.00	0.00	0.00
9	0.00	0.00	0.00	0.06	0.01	0.16	0.53	1.5	1.9	0.00	0.00	0.00
10	0.00	0.00	0.00	0.05	0.05	0.10	0.45	44	40	0.00	0.00	0.00
11	0.00	0.00	0.00	0.03	0.02	0.07	0.39	14	16	0.00	0.00	0.00
12	0.00	0.00	0.01	0.01	0.03	0.11	0.24	4.1	15	0.00	0.00	0.00
13	0.00	0.00	0.03	0.01	0.00	0.35	0.14	2.3	251	0.00	0.00	3.9
14	0.00	0.00	0.02	0.00	0.08	0.38	0.11	1.6	17	0.00	0.00	28
15	0.00	0.00	0.05	0.00	0.22	0.24	0.09	1.5	4.9	0.00	0.00	4.1
16	0.00	0.00	0.05	0.00	0.18	0.24	1.2	1.4	2.2	0.00	0.00	1.2
17	0.00	0.00	0.05	0.00	e0.00	0.29	1.5	1.4	1.2	0.00	0.00	1.0
18	0.00	0.00	0.07	0.00	e0.00	0.31	1.4	1.2	0.74	0.00	0.00	1.4
19	0.00	0.00	0.08	0.00	e0.00	0.57	5.4	1.2	0.48	0.00	0.00	12
20	0.00	0.00	0.11	0.00	0.13	1.4	14	2.1	0.41	0.00	0.00	3.9
21	0.00	0.00	0.10	0.00	0.18	1.3	5.2	1.9	0.19	0.00	0.00	19
22	0.00	0.39	0.05	0.00	0.23	1.4	2.3	1.4	0.17	0.00	0.00	20
23	0.00	0.96	0.02	0.00	e0.00	1.2	1.4	1.2	0.48	0.00	0.00	3.2
24	0.00	0.67	0.00	0.00	e0.00	1.1	11	1.6	0.46	0.00	0.00	1.5
25	0.00	0.46	0.00	0.00	e0.00	0.87	11	1.9	1.8	0.00	0.00	1.1
26	0.00	0.35	0.00	0.00	e0.00	0.75	5.7	3.0	2.9	0.00	0.00	0.60
27	0.00	0.20	0.00	0.00	e0.00	0.53	3.0	3.3	1.2	0.00	0.00	0.33
28	0.00	0.14	0.00	0.00	e0.00	0.41	37	1.8	0.66	0.00	0.00	0.17
29	0.00	0.12	0.01	0.00	---	0.21	38	1.1	0.34	0.00	0.00	0.07
30	0.00	0.09	0.04	0.00	---	0.15	7.2	0.64	0.16	0.00	0.00	0.08
31	0.00	---	0.05	0.12	---	0.20	---	0.33	---	0.00	0.48	---
MEAN	0.00	0.11	0.03	0.02	0.13	0.42	4.98	5.72	12.7	0.00	0.02	3.44
MAX	0.00	0.96	0.11	0.12	0.58	1.4	38	44	251	0.05	0.48	28
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.33	0.16	0.00	0.00	0.00
IN.	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.10	0.22	0.00	0.00	0.06

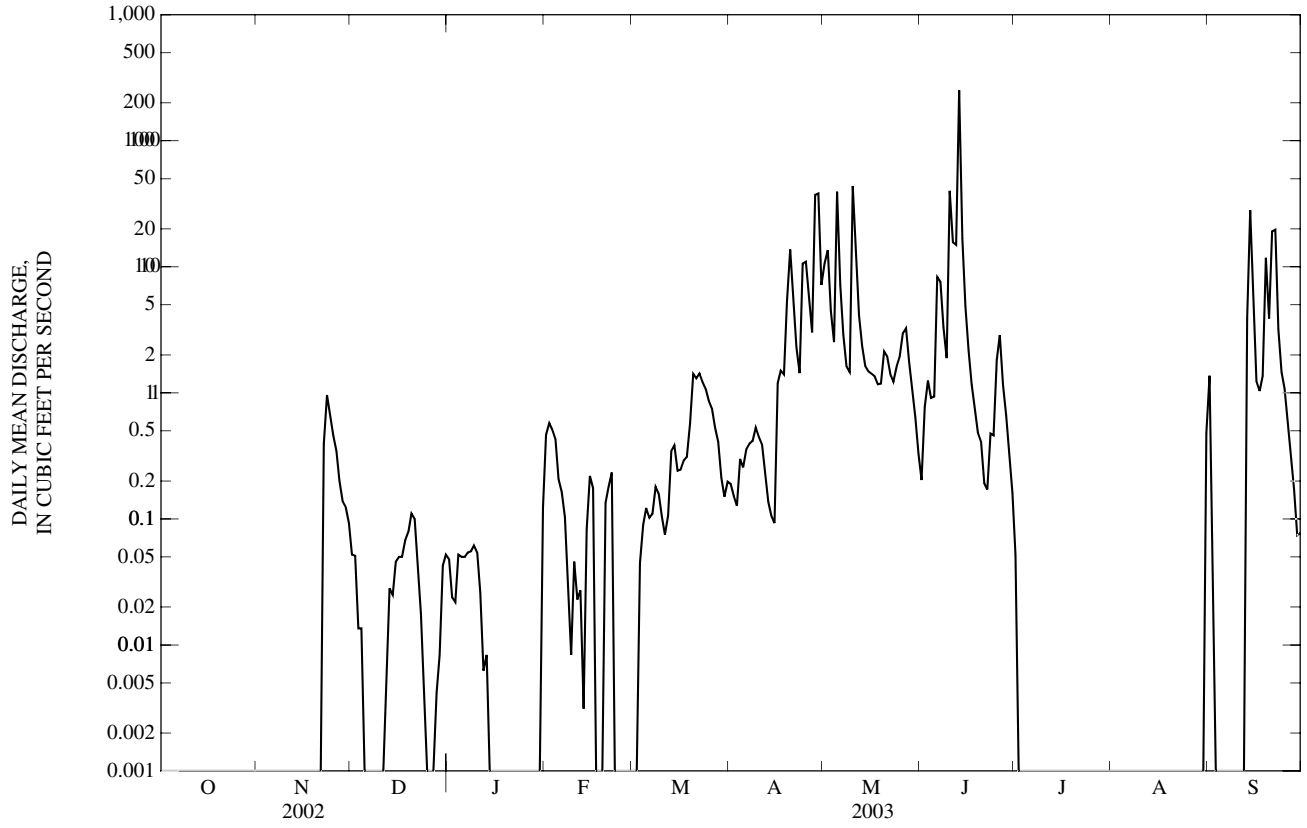
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	6.33	2.35	2.71	1.04	2.76	5.96	13.2	45.6	51.0	3.31	4.78	15.4
MAX	18.1	4.71	4.65	1.64	4.84	10.6	30.2	117	137	9.55	14.2	42.8
(WY)	(2002)	(2002)	(2000)	(2000)	(2002)	(2000)	(2002)	(2002)	(2000)	(2000)	(2000)	(2000)
MIN	0.00	0.11	0.03	0.02	0.13	0.42	4.56	5.72	3.37	0.00	0.02	0.00
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2000)	(2003)	(2002)	(2003)	(2003)	(2002)

06821080 LITTLE PLATTE RIVER NEAR PLATTSBURG, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	13.8		2.29		12.9	
HIGHEST ANNUAL MEAN					20.2	2000
LOWEST ANNUAL MEAN					2.29	2003
HIGHEST DAILY MEAN	1,160	May 6	251	Jun 13	2,180	Jun 24, 2000
LOWEST DAILY MEAN	0.00	Many Days	0.00	Many Days	0.00	Many Days 2002-2003
ANNUAL SEVEN-DAY MINIMUM	0.00	Many Days	0.00	Many Days	0.00	Many Days 2002-2003
MAXIMUM PEAK FLOW	---		595	Jun 13	2,520	May 6, 2002
MAXIMUM PEAK STAGE	---		11.23	Jun 13	15.30	May 6, 2002
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Many Days 2002-2003
ANNUAL RUNOFF (INCHES)	2.88		0.47		2.67	
10 PERCENT EXCEEDS	11		3.0		11	
50 PERCENT EXCEEDS	0.46		0.05		1.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated



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 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

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. U.S. Army Corps of Engineers satellite telemeter at station.

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, 138,000 ac-ft, June 14, elevation, 863.69 ft; minimum, 129,000 ac-ft, Aug. 29, elevation, 862.35 ft.

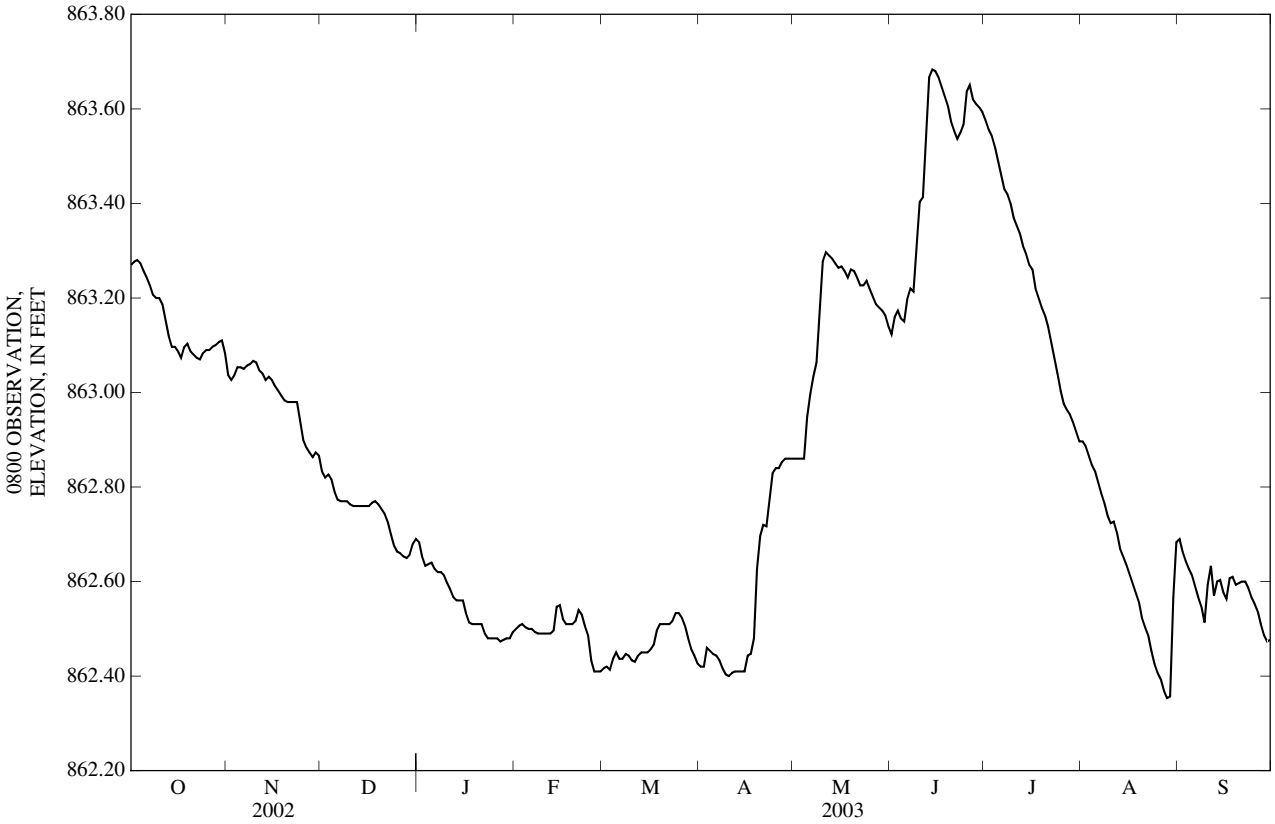
ELEVATION, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
OBSERVATION AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863.27	863.07	862.86	862.69	862.50	862.41	862.42	862.86	863.13	863.59	862.89	862.69
2	863.27	863.02	862.82	862.68	862.50	862.42	862.42	862.86	863.12	863.57	862.90	862.69
3	863.28	863.03	862.82	862.64	862.51	862.42	862.42	862.86	863.18	863.55	862.88	862.65
4	863.28	863.04	862.83	862.63	862.51	862.41	862.48	862.86	863.17	863.54	862.86	862.64
5	863.27	863.06	862.81	862.64	862.50	862.45	862.44	862.86	863.15	863.51	862.84	862.62
6	863.25	863.05	862.78	862.64	862.50	862.45	862.45	862.99	863.15	863.48	862.83	862.61
7	863.24	863.05	862.77	862.62	862.50	862.43	862.44	863.00	863.22	863.45	862.80	862.58
8	863.22	863.06	862.77	862.62	862.49	862.44	862.43	863.05	863.22	863.42	862.78	862.56
9	863.20	863.06	862.77	862.62	862.49	862.45	862.41	863.07	863.21	863.42	862.76	862.54
10	863.20	863.07	862.77	862.61	862.49	862.44	862.40	863.21	863.37	863.39	862.73	862.50
11	863.20	863.06	862.76	862.59	862.49	862.43	862.40	863.31	863.42	863.36	862.72	862.64
12	863.18	863.04	862.76	862.58	862.49	862.43	862.41	863.29	863.41	863.35	862.73	862.63
13	863.14	863.04	862.76	862.56	862.49	862.45	862.41	863.29	863.62	863.33	862.69	862.54
14	863.11	863.02	862.76	862.56	862.50	862.45	862.41	863.28	863.69	863.30	862.66	862.63
15	863.09	863.04	862.76	862.56	862.57	862.45	862.41	863.27	863.68	863.29	862.65	862.59
16	863.10	863.02	862.76	862.56	862.54	862.45	862.41	863.26	863.68	863.26	862.63	862.57
17	863.08	863.01	862.76	862.52	862.51	862.46	862.46	863.27	863.66	863.26	862.61	862.56
18	863.07	863.00	862.77	862.51	862.51	862.47	862.44	863.25	863.64	863.20	862.59	862.63
19	863.11	862.99	862.77	862.51	862.51	862.51	862.50	863.24	863.62	863.20	862.57	862.60
20	863.10	862.98	862.76	862.51	862.51	862.51	862.69	863.27	863.60	863.17	862.55	862.59
21	863.08	862.98	862.75	862.51	862.52	862.51	862.70	863.25	863.56	863.16	862.51	862.60
22	863.08	862.98	862.74	862.51	862.55	862.51	862.73	863.24	863.55	863.13	862.50	862.60
23	863.07	862.98	862.72	862.48	862.52	862.51	862.71	863.22	863.53	863.09	862.48	862.60
24	863.07	862.98	862.69	862.48	862.50	862.52	862.81	863.23	863.56	863.06	862.44	862.58
25	863.09	862.92	862.67	862.48	862.48	862.54	862.84	863.24	863.57	863.03	862.42	862.56
26	863.09	862.89	862.66	862.48	862.41	862.53	862.84	863.21	863.67	862.99	862.40	862.55
27	863.09	862.88	862.66	862.48	862.41	862.52	862.84	863.20	863.64	862.97	862.39	862.53
28	863.10	862.87	862.65	862.47	862.41	862.50	862.86	863.18	863.61	862.96	862.36	862.50
29	863.10	862.86	862.65	862.48	---	862.47	862.86	863.18	863.61	862.95	862.35	862.48
30	863.11	862.88	862.66	862.48	---	862.45	862.86	863.17	863.60	862.93	862.36	862.47
31	863.11	---	862.69	862.48	---	862.44	---	863.16	---	862.91	862.67	---
MAX	863.28	863.07	862.86	862.69	862.57	862.54	862.86	863.31	863.69	863.59	862.90	862.69
MIN	863.07	862.86	862.65	862.47	862.41	862.41	862.40	862.86	863.12	862.91	862.35	862.47
(-)	134,000	132,000	131,000	130,000	129,000	130,000	132,000	134,000	138,000	133,000	131,000	130,000
(=)	-1,000	-2,000	-1,000	-1,000	-1,000	+1,000	+2,000	+2,000	+4,000	-5,000	-2,000	-1,000

CAL YR 2002....-11,000
WTR YR 2003.... -5,000

(-) Contents, in acre-feet, at the end of the month.
(=) Change in contents, in acre-feet.

06821140 SMITHVILLE RESERVOIR NEAR SMITHVILLE, MO—Continued



06821150 LITTLE PLATTE RIVER AT SMITHVILLE, MO

LOCATION.--Lat 39°23'17", long 94°34'44", in NW ¼ SW ¼ 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 mi^2.

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

REVISED RECORDS.--WRD MO 1970: Drainage area. WDR MO-02-1: 2001 date of peak.

GAGE.--Water-stage recorder. Datum of gage is 778.18 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to Mar. 23, 1966, nonrecording gage at site 1,500 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Construction of dam for Smithville Lake (06821140) began in June 1974 and partial regulation began Aug. 6, 1977. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1947 reached a stage of 37.4 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	8.0	6.5	6.9	7.7	6.3	6.1	12	7.8	9.8	9.1	33
2	7.2	8.7	6.7	7.1	7.6	6.2	6.0	11	14	9.8	9.2	10
3	7.0	7.2	6.4	6.7	7.6	6.4	6.1	10	13	9.8	8.7	7.3
4	7.3	5.9	6.3	6.3	7.5	7.1	5.5	11	9.6	9.2	8.0	9.2
5	6.6	5.7	6.6	6.6	7.0	e9.8	4.9	28	8.3	9.4	7.9	9.1
6	7.9	5.6	6.7	6.6	e6.7	e7.0	5.1	13	30	9.1	7.8	9.3
7	7.2	5.8	6.4	6.7	e6.4	6.7	6.1	11	14	9.0	7.5	9.1
8	6.2	5.9	6.1	6.6	e6.7	6.7	5.8	11	10	8.9	6.9	8.9
9	6.0	6.0	6.3	6.7	6.8	6.5	5.6	11	9.0	8.7	7.8	9.0
10	6.1	4.7	6.3	6.7	6.9	6.3	5.3	66	20	8.6	7.3	8.5
11	6.6	5.5	6.5	6.9	6.9	6.5	5.0	21	12	8.6	7.5	8.7
12	7.2	5.8	8.5	6.7	6.8	6.7	4.9	13	9.6	8.7	7.5	7.8
13	7.4	6.6	7.1	7.3	6.6	12	4.9	11	11	8.4	7.4	12
14	7.6	6.8	7.2	6.7	7.9	10	5.1	11	10	8.7	6.8	19
15	7.4	6.1	7.2	6.5	10	7.1	5.7	9.9	9.2	8.5	6.8	8.9
16	6.1	6.1	7.3	e6.4	9.0	6.4	8.0	9.5	8.6	8.7	6.8	7.7
17	6.2	6.1	6.5	e6.7	8.5	6.3	7.4	9.5	8.2	9.3	6.7	7.8
18	7.0	5.9	6.9	e6.4	7.0	6.1	6.5	9.3	8.3	9.3	5.4	14
19	9.5	6.1	6.8	e6.4	6.4	6.4	173	9.9	8.2	9.1	4.4	17
20	8.2	6.0	7.2	e6.7	6.2	13	163	11	8.1	9.0	4.3	9.1
21	7.9	6.1	6.5	e7.2	6.3	13	18	10	8.1	8.8	5.4	9.5
22	7.8	6.6	7.1	e6.8	6.6	7.8	11	8.8	8.2	9.2	5.5	9.6
23	8.5	6.4	6.6	e6.2	6.7	6.6	14	9.1	12	8.8	5.3	8.2
24	11	6.3	7.0	e6.0	e7.5	6.2	63	8.8	9.9	8.6	5.5	7.9
25	13	6.4	6.7	e6.0	7.1	5.9	23	8.9	27	8.5	4.7	7.3
26	9.9	6.3	6.4	e6.4	6.9	5.8	16	8.1	17	8.6	6.6	5.9
27	8.9	6.5	6.6	e6.2	6.2	5.8	13	7.5	9.5	8.9	7.7	6.7
28	8.9	6.2	6.6	e6.0	6.3	5.8	33	7.5	8.2	9.1	8.3	7.1
29	8.2	6.1	6.6	e6.4	---	5.8	18	7.3	8.9	9.3	8.9	7.0
30	6.5	6.2	7.3	e7.2	---	5.7	13	7.5	9.6	8.8	10	7.8
31	6.8	---	7.3	e7.8	---	6.1	---	7.5	---	8.5	169	---
MEAN	7.67	6.25	6.78	6.64	7.14	7.23	22.1	12.6	11.6	8.96	12.3	10.1
MAX	13	8.7	8.5	7.8	10	13	173	66	30	9.8	169	33
MIN	5.6	4.7	6.1	6.0	6.2	5.7	4.9	7.3	7.8	8.4	4.3	5.9
IN.	0.04	0.03	0.03	0.03	0.03	0.04	0.11	0.06	0.06	0.04	0.06	0.05

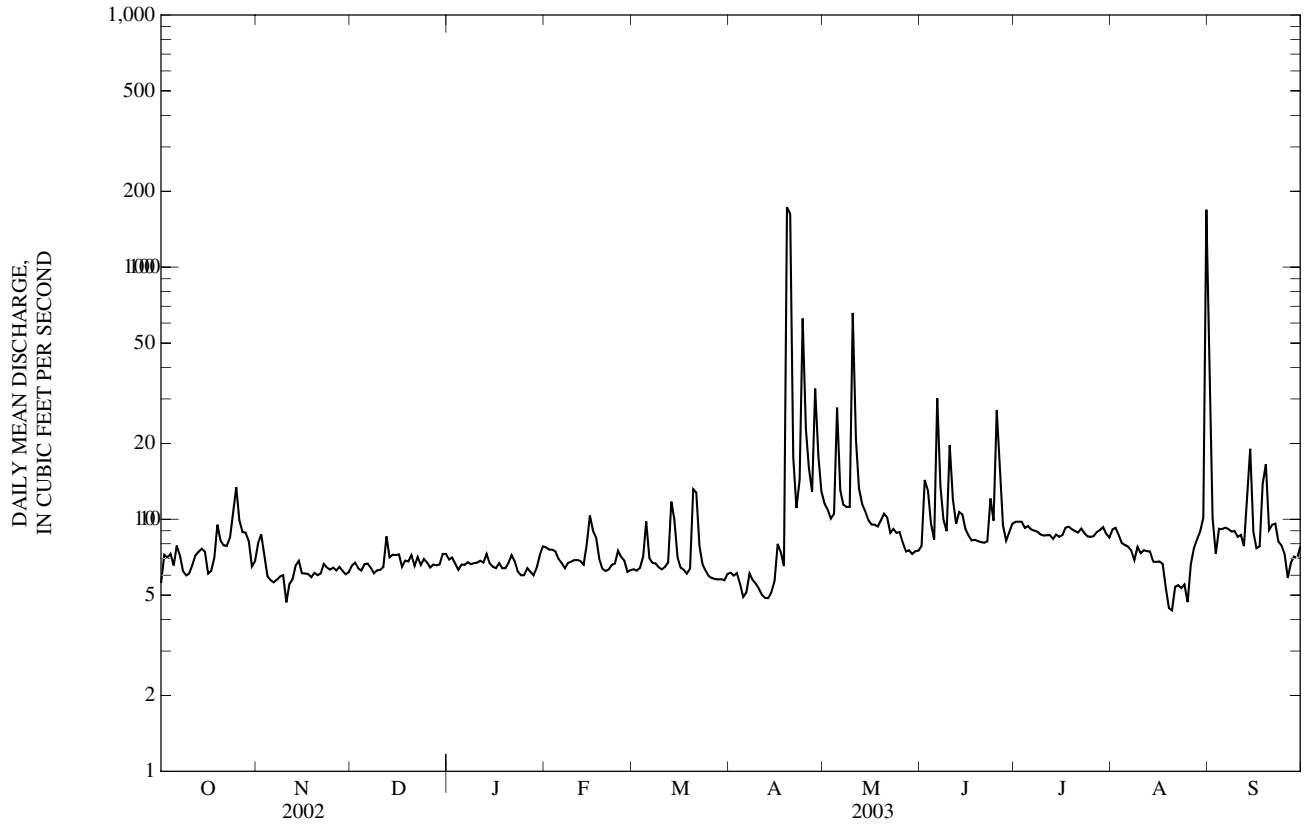
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2003[a], BY WATER YEAR (WY)

MEAN	173	173	96.0	87.7	86.8	164	189	257	243	244	168	138
MAX	960	1,358	466	563	341	825	640	850	809	879	1,206	1,006
(WY)	(1986)	(1999)	(1993)	(1993)	(2001)	(2001)	(1978)	(1993)	(1995)	(2001)	(1993)	(1977)
MIN	1.01	2.06	0.05	0.07	7.14	4.73	9.85	11.1	11.6	8.76	7.65	5.84
(WY)	(1977)	(1977)	(1977)	(1977)	(2003)	(1981)	(1981)	(2000)	(2003)	(2002)	(1980)	(2002)

06821150 LITTLE PLATTE RIVER AT SMITHVILLE, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1977 - 2003[a]	
ANNUAL MEAN	74.4		9.93		169	
HIGHEST ANNUAL MEAN					476	1993
LOWEST ANNUAL MEAN					9.93	2003
HIGHEST DAILY MEAN	786	Apr 21	173	Apr 19	7,810	Jul 27, 1981
LOWEST DAILY MEAN	4.7	Nov 10	4.3	Aug 20	0.05	Dec 1-25, 1976
ANNUAL SEVEN-DAY MINIMUM	5.4	Sep 5	5.0	Aug 19	0.05	Dec 1, 1976
MAXIMUM PEAK FLOW	---		527	Apr 20	21,000	Aug 13, 1982
MAXIMUM PEAK STAGE	---		16.56	Apr 20	36.44	Aug 13, 1982
INSTANTANEOUS LOW FLOW	---		3.0	Aug 18	0.00	Many Years
ANNUAL RUNOFF (INCHES)	4.32		0.58		9.79	
10 PERCENT EXCEEDS	315		11		515	
50 PERCENT EXCEEDS	10		7.3		19	
90 PERCENT EXCEEDS	6.1		6.0		8.0	

e Estimated
[a] Post-regulation period.



06821190 PLATTE RIVER AT SHARPS STATION, MO

LOCATION.--Lat 39°24'03", long 94°43'36", in NW ¼ SE ¼ SW ¼ 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 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 754.23 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers).

REMARKS.--Water-discharge records fair except for the period of backwater Oct. 1 to April 4, and estimated daily discharges, which are 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	97	42	51	42	e210	58	377	139	609	32	549
2	31	86	39	47	45	e200	56	461	158	317	58	195
3	40	77	39	38	52	181	e56	373	221	218	63	74
4	43	75	45	41	45	157	e57	339	185	169	51	44
5	52	70	40	42	e42	86	57	522	161	140	42	34
6	51	66	30	45	e40	72	70	471	322	119	37	28
7	69	68	37	47	38	e72	66	1,380	534	103	34	25
8	76	67	39	44	e38	e70	83	1,490	709	93	31	22
9	88	63	38	46	e39	e70	81	1,060	416	86	29	22
10	80	59	37	49	e41	82	67	2,330	690	101	28	21
11	72	56	42	32	e42	74	60	3,290	1,550	1,920	29	21
12	60	52	47	34	44	90	57	2,080	794	1,350	30	32
13	52	49	47	34	42	99	56	1,530	1,870	476	37	29
14	46	47	44	36	52	122	61	953	1,880	231	31	178
15	42	48	48	35	82	122	69	676	746	153	e28	156
16	38	48	47	33	74	102	73	545	531	116	e28	67
17	38	49	47	22	60	99	77	523	383	93	e26	47
18	39	46	47	e23	59	99	80	621	277	79	e24	e43
19	42	46	46	e23	62	98	320	540	249	69	e22	e88
20	43	45	47	e22	64	159	922	472	294	64	19	70
21	38	44	44	e21	63	344	866	444	217	59	19	59
22	36	43	42	e20	59	293	442	429	172	55	19	49
23	38	43	35	e19	58	211	297	385	187	51	18	45
24	46	42	37	18	e100	171	677	340	208	47	17	40
25	66	42	33	17	e140	135	905	322	251	44	17	33
26	79	42	31	18	e180	142	580	326	686	41	15	29
27	83	41	37	17	e240	131	385	305	1,320	39	16	26
28	70	41	38	20	e230	102	352	269	779	37	17	25
29	68	38	39	24	---	85	1,070	224	929	36	17	25
30	71	38	43	26	---	70	607	190	678	34	18	26
31	73	---	49	34	---	62	---	162	---	32	329	---
MEAN	54.9	54.3	41.2	31.5	74.0	129	287	756	585	225	38.1	70.1
MAX	88	97	49	51	240	344	1,070	3,290	1,880	1,920	329	549
MIN	31	38	30	17	38	62	56	162	139	32	15	21
IN.	0.03	0.03	0.02	0.02	0.03	0.06	0.13	0.37	0.27	0.11	0.02	0.03

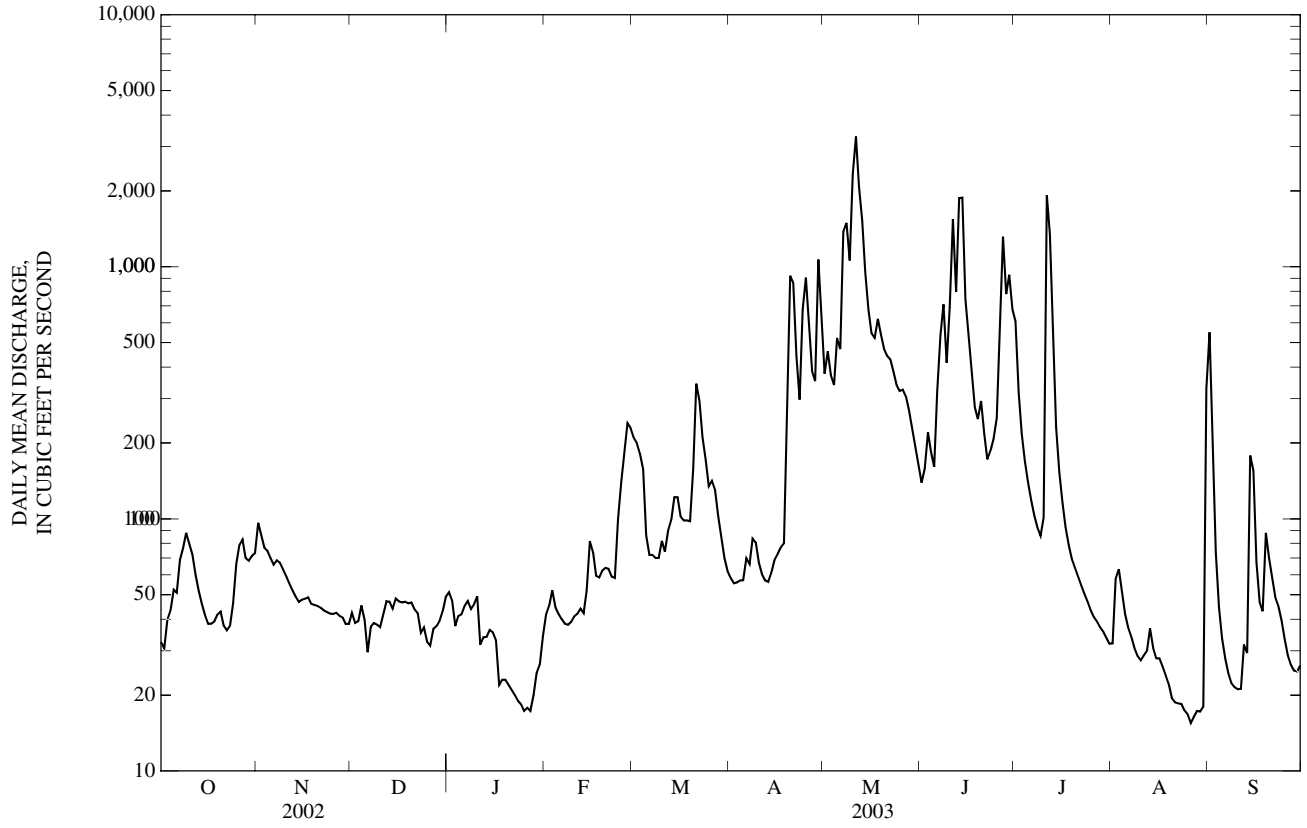
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003, BY WATER YEAR (WY)

MEAN	1,162	962	1,011	576	1,320	2,036	2,534	3,334	2,960	2,748	965	1,260
MAX	6,847	4,932	5,005	2,153	3,980	8,745	6,946	12,710	10,790	21,600	3,535	7,206
(WY)	(1986)	(1999)	(1993)	(1983)	(1982)	(1979)	(1993)	(1995)	(1984)	(1993)	(1987)	(1993)
MIN	25.1	54.3	41.2	31.5	37.6	110	93.0	157	75.2	52.5	38.1	37.7
(WY)	(1989)	(2003)	(2003)	(2003)	(1989)	(1989)	(1989)	(1989)	(1988)	(1988)	(2003)	(2002)

06821190 PLATTE RIVER AT SHARPS STATION, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979 - 2003	
ANNUAL MEAN	471		196		1,738	
HIGHEST ANNUAL MEAN					5,697	1993
LOWEST ANNUAL MEAN					196	2003
HIGHEST DAILY MEAN	11,200	May 13	3,290	May 11	37,300	Jul 26, 1993
LOWEST DAILY MEAN	21	Sep 13	15	Aug 26	12	Aug 7,8,13,14 1989
ANNUAL SEVEN-DAY MINIMUM	24	Sep 9	17	Aug 23	14	Aug 7, 1989
MAXIMUM PEAK FLOW	---		3,580	May 11	37,800	Jul 26, 1993
MAXIMUM PEAK STAGE	---		15.23	May 11	36.43	Jul 26, 1993
INSTANTANEOUS LOW FLOW	---		15	Aug 26	12	Aug 7,8,13,14 1989
ANNUAL RUNOFF (INCHES)	2.69		1.12		9.92	
10 PERCENT EXCEEDS	1,050		532		4,170	
50 PERCENT EXCEEDS	170		59		580	
90 PERCENT EXCEEDS	39		26		63	

e Estimated



06821190 PLATTE RIVER AT SHARPS STATION, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1979 to September 1995, November 1999 to current year. Station was temporarily out of service due to bridge construction October 2002 to June 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUL 08...	1130	Environmental	93	5.5	75	8.4	319	30.0	110	31.8	8.12	4.66
AUG 19...	1050	Environmental	23	5.6	74	8.1	488	28.5	--	--	--	--
SEP 25...	1205	Environmental	34	8.4	92	8.0	451	18.5	170	48.2	11.4	4.92

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
JUL 08...	15.1	106	106	122	4	15.8	0.4	22.9	185	170	E2.1	<0.04	E1.41
AUG 19...	--	173	173	211	<1	--	--	--	--	54	0.97	<0.04	0.80
SEP 25...	20.4	158	159	194	<1	22.2	0.3	33.5	266	42	0.87	<0.04	0.79

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
JUL 08...	E.081	E.12	E.14	E.48	4k	4,300k	69k	7	1,990	6.2	0.04	E.1	E4
AUG 19...	0.033	0.10	0.14	0.27	13k	40	140	--	--	--	--	--	--
SEP 25...	0.029	0.07	0.09	0.21	77	71	54	3	517	2.3	E.03n	0.05	1.5

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recoverable, µg/L (01051)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recoverable, µg/L (71900)	Selenium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recoverable, µg/L (01092)
JUL 08...	<8	<0.08	3	6.2	<0.02	1.5	2	11
AUG 19...	--	--	--	--	--	--	--	--
SEP 25...	E5n	<0.08	M	62.2	<0.02	E.4n	Mn	4

Remark codes used in this table:
< -- Less than
E -- Estimated value
M--Presence verified, not quantified
Value qualifier codes used in this table:
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

06892350 KANSAS RIVER AT DESOTO, KS

LOCATION.--Lat 38°59'00", long 94°57'52", in SE ¼ NE ¼ NE ¼ sec.27, T.12 S., R.22 E., Leavenworth County, Hydrologic Unit 10270104, on left bank at downstream side of bridge on county highway, north edge of DeSoto, 0.4 mi upstream from Kill Creek, and at mile 31.0.

DRAINAGE AREA.--59,756 mi^2, of which a large area is noncontributing.

PERIOD OF RECORD.--July 1917 to current year. Monthly discharge only for some periods published in WSP 1310. Prior to October 1973, published as "at Bonner Springs."

REVISED RECORDS.--WSP 806: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 753.87 ft above National Geodetic Vertical Datum of 1929. July 9, 1917, to Apr. 23, 1934, nonrecording gage; Apr. 24, 1934, to Nov. 25, 1960, water-stage recorder at site 9.7 mi downstream at datum 11.81 ft lower; Nov. 26, 1960, to Feb. 9, 1961, nonrecording gage; Feb. 10, 1961, to Sept. 30, 1971, water-stage recorder at site 10.2 mi downstream at datum 17.81 ft lower; and Oct. 1, 1971, to Sept. 30, 1973, at site 10.2 mi downstream at datum 22.81 ft lower. Lowered gage datum 5.0 ft Sept. 30, 1996, to 753.87 ft.

REMARKS.--Records fair except for estimated daily dishcarges, which are poor. Natural flow affected by lakes and reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Diurnal fluctuations caused by hydroelectric plant 20.8 mi upstream; since storage capacity is small, daily flows are not affected appreciably. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1844, that of July 13, 1951.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	965	e1,690	1,150	1,030	1,200	814	1,080	4,090	2,030	3,490	2,390	5,890
2	1,180	1,750	896	1,020	1,250	894	1,040	3,370	2,240	3,020	2,410	2,660
3	1,210	1,490	665	1,020	1,220	1,150	1,020	2,470	2,840	2,770	2,420	2,350
4	1,660	1,240	668	1,030	1,160	832	992	2,280	2,990	3,010	2,370	1,870
5	2,050	1,140	762	809	1,140	e740	938	2,030	2,910	3,110	2,410	1,850
6	1,800	1,110	1,070	891	888	e700	1,010	1,520	3,060	3,080	2,450	1,530
7	1,250	1,180	695	950	975	712	1,070	1,770	2,790	2,880	2,410	1,110
8	1,680	1,520	680	897	491	669	1,070	1,540	2,380	2,730	2,440	1,140
9	1,030	1,740	1,130	1,070	838	668	1,070	1,470	2,320	2,650	2,480	1,120
10	1,020	1,760	1,070	1,010	1,010	1,120	1,080	1,630	2,200	2,660	2,400	851
11	670	1,910	1,050	678	1,180	1,120	1,060	3,970	2,190	2,820	2,400	1,030
12	870	1,810	1,050	762	1,150	948	1,050	2,610	2,310	3,520	2,410	1,100
13	e1,220	1,590	1,020	787	1,100	1,100	1,070	2,640	3,680	2,350	2,420	1,560
14	e1,400	1,910	587	858	734	1,270	1,050	2,600	2,490	1,900	2,340	1,940
15	e1,130	1,920	1,060	880	1,360	1,030	992	2,510	2,090	2,530	2,000	1,650
16	e1,230	1,990	1,090	e860	1,460	1,000	981	2,470	2,010	2,710	1,500	1,030
17	e1,130	2,010	1,140	e860	1,110	951	1,020	2,490	1,720	2,550	1,280	1,320
18	e1,100	1,840	1,070	e860	761	878	1,090	2,530	1,700	2,620	1,190	1,320
19	e1,130	2,080	1,040	e1,140	1,190	646	1,320	2,410	1,690	2,580	1,120	4,950
20	e1,380	1,930	1,000	e2,190	1,190	1,160	3,790	2,360	1,860	2,580	e1,040	5,790
21	e1,440	1,970	727	e691	1,020	1,290	7,000	2,440	2,650	2,550	e1,030	4,300
22	e1,410	1,790	995	e960	933	995	5,680	2,750	2,510	2,460	e1,030	3,220
23	e1,300	1,740	1,010	e890	1,100	1,530	3,510	2,740	5,210	2,510	1,100	2,470
24	e1,490	1,780	831	e840	637	1,280	3,240	2,600	6,330	2,520	1,100	2,190
25	e1,550	1,790	1,070	e921	563	834	7,720	2,570	5,050	2,500	1,170	2,000
26	e2,060	1,760	472	e1,020	675	1,760	10,600	2,510	3,500	2,440	1,270	1,940
27	e1,960	1,730	743	1,290	457	2,190	6,550	2,430	3,530	2,460	1,150	1,720
28	e1,870	1,360	1,190	1,620	711	1,930	4,480	e2,370	4,010	2,490	1,090	1,710
29	e1,420	1,180	1,040	1,790	---	1,200	3,930	e2,280	2,690	2,460	1,270	1,820
30	e1,180	1,160	1,070	1,440	---	1,120	4,350	e2,180	3,100	2,420	1,640	1,860
31	e1,550	---	751	1,440	---	1,220	---	2,060	---	2,360	6,760	---
MEAN	1,366	1,662	929	1,049	982	1,089	2,695	2,442	2,869	2,669	1,951	2,176
MAX	2,060	2,080	1,190	2,190	1,460	2,190	10,600	4,090	6,330	3,520	6,760	5,890
MIN	670	1,110	472	678	457	646	938	1,470	1,690	1,900	1,030	851

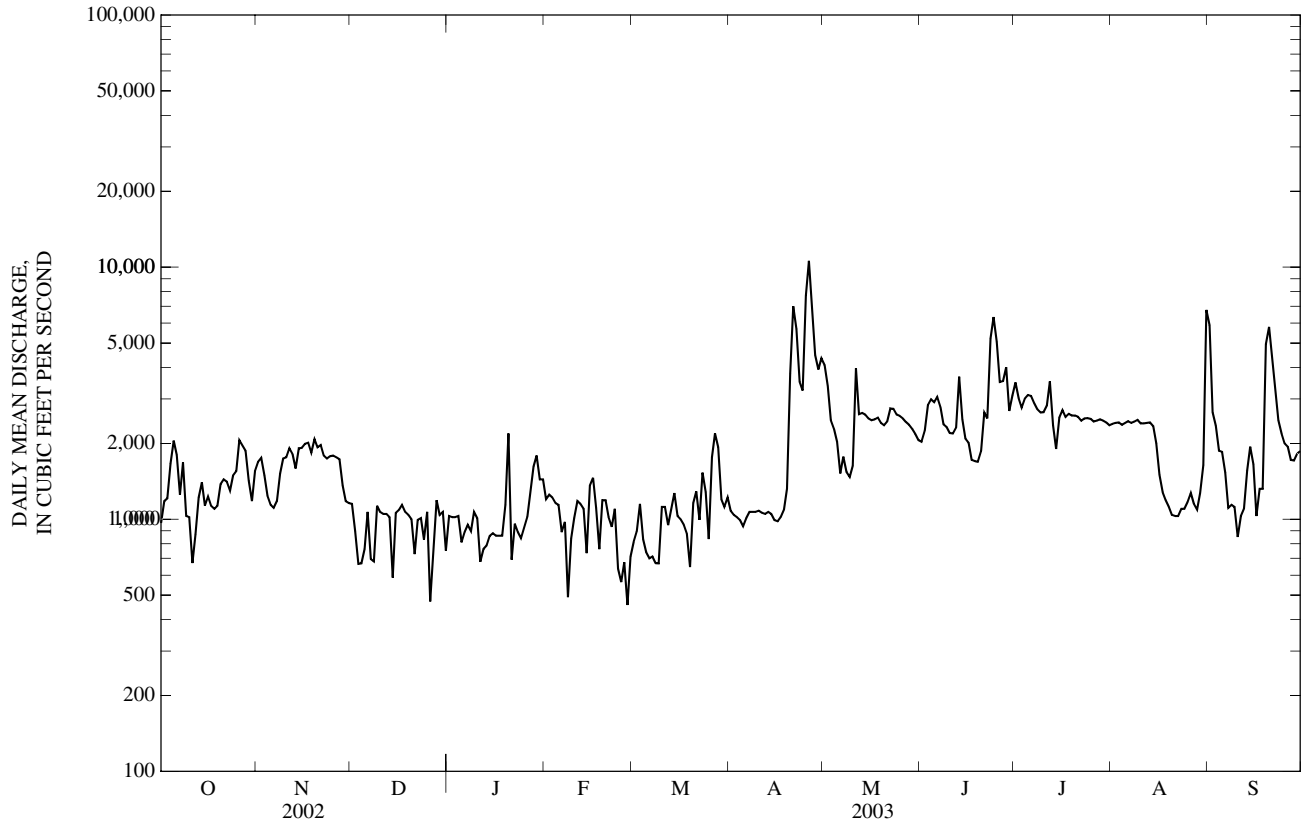
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2003, BY WATER YEAR (WY)

MEAN	5,695	4,595	3,605	2,887	4,484	7,064	9,560	11,040	14,900	11,590	6,893	6,541
MAX	51,630	42,320	21,940	15,990	20,800	36,560	43,570	43,270	78,870	133,200	66,680	44,660
(WY)	(1974)	(1974)	(1974)	(1973)	(1949)	(1973)	(1973)	(1993)	(1951)	(1951)	(1993)	(1951)
MIN	365	504	465	364	635	632	845	953	1,188	1,106	455	525
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1967)	(1956)	(1989)	(1989)	(1936)	(1934)	(1956)

06892350 KANSAS RIVER AT DESOTO, KS—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1918 - 2003	
ANNUAL MEAN	2,600		1,824		7,410	
HIGHEST ANNUAL MEAN					30,570	1993
LOWEST ANNUAL MEAN					1,326	1956
HIGHEST DAILY MEAN	15,800	May 13	10,600	Apr 26	486,000	Jul 14, 1951
LOWEST DAILY MEAN	472	Dec 26	457	Feb 27	160	Oct 11, 1956
ANNUAL SEVEN-DAY MINIMUM	777	Dec 2	679	Feb 24	195	Oct 9, 1956
MAXIMUM PEAK FLOW	---		12,200	Aug 31	510,000	Jul 13, 1951
MAXIMUM PEAK STAGE	---		9.58	Aug 31	37.30	Jul 13, 1951
INSTANTANEOUS LOW FLOW	---		280	Oct 11	160	Oct 11, 1956
10 PERCENT EXCEEDS	5,540		2,940		17,700	
50 PERCENT EXCEEDS	1,910		1,460		3,330	
90 PERCENT EXCEEDS	1,030		847		1,100	

e Estimated



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.--484,100 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

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 the Missouri River Commission; those since 1900 are contained in reports of the 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; Feb. 29, 1948, to Oct. 1, 1989, at datum 10.00 ft higher.

REMARKS.--Records good except for discharges in December and January, which are fair, and estimated daily discharges, which are poor. Some regulation from many upstream reservoirs. 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 ft^3/s, July 14, 1951.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 16, 1844, reached a stage of 48.0 ft, present datum; discharge, about 625,000 ft^3/s, computed by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,100	40,500	29,200	20,800	21,800	21,000	33,800	41,400	42,700	54,700	36,000	46,600
2	35,400	40,100	27,500	21,200	22,000	19,800	33,600	42,000	44,000	51,900	36,000	33,900
3	37,300	39,000	26,300	21,300	22,100	19,200	33,000	51,400	43,500	49,800	36,100	31,700
4	39,800	38,400	25,600	21,300	21,600	20,100	33,400	53,700	42,700	48,400	36,200	30,600
5	41,100	37,700	e24,500	21,200	21,500	21,800	33,300	49,500	42,400	47,200	35,800	29,800
6	43,500	36,700	e23,600	21,300	21,900	22,500	33,400	48,500	43,200	45,900	35,700	30,000
7	45,900	35,900	23,600	21,600	22,000	22,700	33,600	65,300	42,800	44,200	35,300	31,100
8	43,800	35,500	23,300	22,000	22,000	22,900	34,100	70,000	42,400	45,200	34,900	32,200
9	41,000	35,800	22,300	22,100	21,800	22,800	34,700	60,500	41,600	53,500	34,800	33,000
10	39,300	36,000	21,700	22,100	21,900	21,900	35,300	70,600	42,200	56,200	35,000	33,300
11	39,100	36,100	22,100	21,900	22,800	21,200	35,000	68,200	50,900	51,300	34,800	33,800
12	39,000	36,000	22,500	21,700	23,300	22,400	34,100	60,800	52,400	51,600	34,100	34,500
13	38,200	35,700	22,500	21,800	22,800	23,900	33,900	56,900	63,000	59,500	33,800	36,400
14	38,400	35,700	22,300	21,900	23,200	22,800	34,100	54,500	74,500	61,200	33,900	40,600
15	38,200	36,000	e22,300	21,000	22,500	22,300	34,100	52,900	57,800	53,400	33,500	42,400
16	37,900	35,700	e22,400	19,900	21,600	24,600	35,100	53,200	50,400	49,600	32,700	41,400
17	38,200	35,900	e22,200	19,800	22,000	28,400	35,700	53,200	46,600	47,500	31,300	39,000
18	38,400	35,700	22,100	20,400	22,500	31,900	35,700	52,200	44,000	45,300	29,800	37,400
19	38,900	35,400	22,200	20,200	23,400	32,600	36,700	51,000	42,000	43,700	28,400	37,000
20	38,700	35,000	22,400	19,500	23,900	29,000	40,200	50,300	41,800	42,100	27,700	39,800
21	38,900	35,400	22,600	19,400	23,500	27,400	42,400	51,900	42,300	40,700	28,900	38,800
22	39,400	35,800	22,300	e19,000	23,600	29,800	42,800	51,900	42,500	40,000	31,500	37,200
23	39,600	35,400	22,500	e19,000	24,300	32,900	40,400	50,800	42,800	39,200	30,800	36,400
24	40,200	35,300	22,700	e19,500	27,700	35,000	41,800	48,000	46,400	38,700	30,100	36,100
25	40,800	35,300	22,400	19,700	36,000	34,300	42,100	46,900	53,600	38,200	29,700	34,900
26	40,800	35,200	21,700	e19,700	34,000	32,900	47,100	46,600	50,200	37,500	29,500	34,300
27	41,100	35,400	20,700	e20,100	27,500	32,900	44,400	45,900	46,600	37,400	29,300	33,800
28	41,000	35,100	20,500	e20,900	23,200	33,600	41,000	44,900	52,100	36,900	29,300	33,100
29	40,500	33,100	20,600	20,800	---	32,900	41,100	44,300	55,500	36,500	29,700	32,800
30	40,100	31,200	20,300	20,900	---	32,300	41,200	43,400	56,700	36,500	31,200	33,200
31	40,000	---	20,300	21,500	---	32,900	---	43,100	---	36,500	46,700	---
MEAN	39,630	36,000	22,810	20,760	23,800	26,800	37,240	52,380	47,990	45,820	32,980	35,500
MAX	45,900	40,500	29,200	22,100	36,000	35,000	47,100	70,600	74,500	61,200	46,700	46,600
MIN	34,100	31,200	20,300	19,000	21,500	19,200	33,000	41,400	41,600	36,500	27,700	29,800
IN.	0.09	0.08	0.05	0.05	0.05	0.06	0.09	0.12	0.11	0.11	0.08	0.08

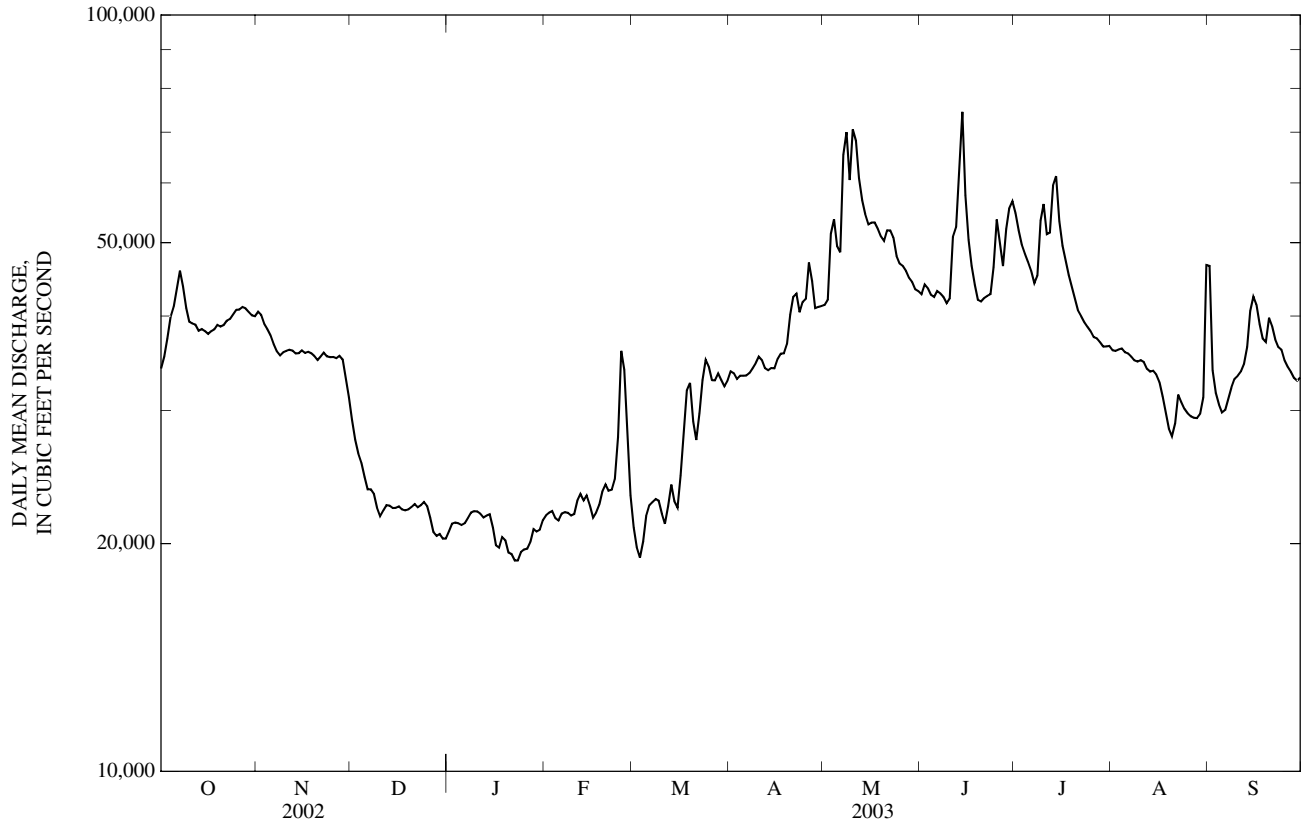
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003[a], BY WATER YEAR (WY)

MEAN	56,230	52,330	36,520	29,340	38,320	55,610	69,990	72,370	77,680	69,770	56,210	57,250
MAX	135,200	103,200	75,370	60,980	77,690	133,700	148,900	145,800	173,800	288,300	144,300	115,600
(WY)	(1974)	(1999)	(1987)	(1973)	(1973)	(1979)	(1984)	(1995)	(1984)	(1993)	(1993)	(1993)
MIN	34,650	20,560	12,970	13,800	16,610	20,190	36,370	37,230	40,410	33,690	32,980	34,510
(WY)	(1992)	(1991)	(1964)	(1963)	(1964)	(1964)	(1990)	(1989)	(1989)	(2002)	(2003)	(1991)

06893000 MISSOURI RIVER AT KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003[a]	
ANNUAL MEAN	34,580		35,190		56,010	
HIGHEST ANNUAL MEAN					102,100	1993
LOWEST ANNUAL MEAN					35,190	2003
HIGHEST DAILY MEAN	72,800	May 13	74,500	Jun 14	529,000	Jul 27, 1993
LOWEST DAILY MEAN	20,300	Dec 30,31	19,000	Jan 22,23	4,730	Dec 18, 1963
ANNUAL SEVEN-DAY MINIMUM	20,900	Dec 25	19,400	Jan 20	5,480	Dec 17, 1963
MAXIMUM PEAK FLOW	---		81,400	Jun 14	541,000	Jul 27, 1993
MAXIMUM PEAK STAGE	---		17.47	Jun 14	48.87	Jul 27, 1993
INSTANTANEOUS LOW FLOW	---		18,800	Jan 23	4,240	Dec 18, 1963
ANNUAL RUNOFF (INCHES)	0.97		0.99		1.57	
10 PERCENT EXCEEDS	45,800		50,600		93,700	
50 PERCENT EXCEEDS	35,400		35,300		48,200	
90 PERCENT EXCEEDS	23,300		21,600		24,700	

[a] Post-regulation period.
e Estimated



06893150 BLUE RIVER AT BLUE RIDGE BLVD. EXT. IN KANSAS CITY, MO

LOCATION.--Lat 38°53'24", long 94°34'52", in NW ¼ NW ¼ NW ¼ sec. 21, T.47 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on the south side of the west bridge pier on the upstream side of Blue Ridge Blvd. Ext.

DRAINAGE AREA.--93.1 mi^2.

PERIOD OF RECORD.--June 1, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft above North American Vertical Datum of 1988

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge for the period June 1 to Sept. 30, 1,720 ft^3/s, June 12, gage height 28.28 ft; minimum Sept. 1, 0.70 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	71	2.4	2.6	0.70
2	---	---	---	---	---	---	---	---	61	2.3	2.6	0.95
3	---	---	---	---	---	---	---	---	54	2.3	1.9	0.84
4	---	---	---	---	---	---	---	---	50	3.0	1.8	0.95
5	---	---	---	---	---	---	---	---	57	3.7	2.2	1.1
6	---	---	---	---	---	---	---	---	50	2.9	2.6	1.2
7	---	---	---	---	---	---	---	---	43	1.9	2.5	0.91
8	---	---	---	---	---	---	---	---	37	2.1	1.4	1.1
9	---	---	---	---	---	---	---	---	47	1.9	1.2	1.3
10	---	---	---	---	---	---	---	---	66	2.2	1.1	1.6
11	---	---	---	---	---	---	---	---	74	4.1	2.8	1.8
12	---	---	---	---	---	---	---	---	687	3.9	3.5	1.7
13	---	---	---	---	---	---	---	---	135	2.7	60	1.5
14	---	---	---	---	---	---	---	---	77	2.0	13	2.3
15	---	---	---	---	---	---	---	---	51	1.5	4.1	12
16	---	---	---	---	---	---	---	---	37	1.6	3.6	2.6
17	---	---	---	---	---	---	---	---	27	1.7	3.8	1.9
18	---	---	---	---	---	---	---	---	20	1.8	5.1	18
19	---	---	---	---	---	---	---	---	13	47	20	55
20	---	---	---	---	---	---	---	---	10	32	7.2	17
21	---	---	---	---	---	---	---	---	7.1	5.7	4.0	5.7
22	---	---	---	---	---	---	---	---	5.0	3.1	2.8	2.5
23	---	---	---	---	---	---	---	---	3.9	2.7	2.4	2.1
24	---	---	---	---	---	---	---	---	4.0	1.9	2.4	1.5
25	---	---	---	---	---	---	---	---	2.9	1.4	2.3	1.3
26	---	---	---	---	---	---	---	---	2.7	1.7	1.6	1.3
27	---	---	---	---	---	---	---	---	9.2	1.7	1.1	1.4
28	---	---	---	---	---	---	---	---	3.5	1.4	1.00	1.5
29	---	---	---	---	---	---	---	---	2.6	31	1.0	1.8
30	---	---	---	---	---	---	---	---	2.3	5.9	0.89	1.7
31	---	---	---	---	---	---	---	---	---	3.3	0.96	---
MEAN	---	---	---	---	---	---	---	---	57.0	5.90	5.27	4.84
MAX	---	---	---	---	---	---	---	---	687	47	60	55
MIN	---	---	---	---	---	---	---	---	2.3	1.4	0.89	0.70

06893150 BLUE RIVER AT BLUE RIDGE BLVD. EXT. IN KANSAS CITY, MO—Continued

LOCATION.--Lat 38°53'24", long 94°34'52", in NW ¼ NW ¼ NW ¼ sec. 21, T.47 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on the south side of the west bridge pier on the upstream side of Blue Ridge Blvd. Ext.

DRAINAGE AREA.--93.1 mi^2.

PERIOD OF RECORD.--June 1, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft above North American Vertical Datum of 1988.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	10	4.5	6.7	5.3	2.8	1.8	46	4.7	40	3.4	567
2	5.2	6.5	4.9	6.3	4.8	2.8	1.9	44	132	22	5.8	169
3	13	6.2	4.6	6.7	5.6	2.4	2.2	34	89	13	4.4	94
4	31	7.0	5.4	6.8	4.5	2.7	2.3	61	46	8.8	3.5	58
5	10	12	5.5	6.4	4.1	3.0	2.0	63	28	6.1	2.9	38
6	4.5	9.3	6.4	6.7	5.0	3.4	2.1	42	63	3.9	5.9	29
7	3.5	5.2	6.3	7.6	4.0	3.5	3.0	39	55	3.5	1.9	25
8	3.0	4.4	7.3	6.8	3.5	2.7	3.7	41	34	3.1	1.7	17
9	2.3	5.1	8.4	5.7	4.0	2.4	3.2	51	22	5.0	1.5	12
10	1.8	5.6	8.2	4.5	4.7	2.2	2.2	288	90	27	1.9	11
11	2.0	5.4	8.7	3.6	3.7	2.1	1.5	124	170	6.7	3.8	44
12	2.1	4.4	9.5	3.9	3.4	6.3	1.1	67	75	4.0	3.4	39
13	2.4	4.3	9.8	5.1	3.2	44	1.1	49	59	3.0	2.1	113
14	2.3	4.5	8.3	5.3	80	24	1.2	39	35	2.7	1.8	107
15	1.9	5.5	7.0	4.5	136	12	1.4	31	22	2.3	2.2	51
16	2.1	4.8	7.9	4.9	39	6.5	4.4	41	15	1.8	2.1	32
17	6.9	4.9	7.3	5.3	18	4.8	7.9	46	8.3	1.8	1.8	22
18	4.2	5.6	6.4	6.0	10	3.9	3.5	37	6.9	1.7	2.4	17
19	3.5	5.3	5.2	5.7	6.6	15	69	32	10	1.9	1.4	18
20	2.9	4.7	5.4	5.0	4.3	58	238	26	23	2.1	1.9	11
21	2.5	4.2	5.2	4.6	3.6	41	76	21	21	2.3	1.7	14
22	2.2	4.7	5.6	4.0	3.4	19	42	15	14	1.9	1.5	15
23	4.2	3.8	5.3	e3.8	3.2	11	30	12	46	1.4	2.6	8.7
24	17	3.8	4.9	e3.4	3.7	6.5	139	11	44	1.6	2.2	7.3
25	8.5	3.9	4.9	e3.1	3.2	4.7	206	11	39	2.9	4.1	4.4
26	5.7	4.6	5.0	e3.4	2.7	3.7	95	8.8	34	2.9	3.9	3.8
27	8.3	5.1	5.0	e3.8	2.5	3.1	57	7.5	22	3.2	4.5	7.4
28	14	5.5	4.6	4.3	2.6	3.2	44	4.3	12	4.8	11	4.6
29	27	5.0	4.2	4.7	---	2.6	39	4.3	44	4.3	32	4.5
30	20	4.1	7.9	4.4	---	2.3	31	3.2	91	3.6	147	25
31	16	---	5.3	5.5	---	2.0	---	2.8	---	3.2	2,880	---
MEAN	7.49	5.51	6.29	5.11	13.4	9.79	37.1	42.0	45.2	6.21	101	52.3
MAX	31	12	9.8	7.6	136	58	238	288	170	40	2,880	567
MIN	1.8	3.8	4.2	3.1	2.5	2.0	1.1	2.8	4.7	1.4	1.4	3.8

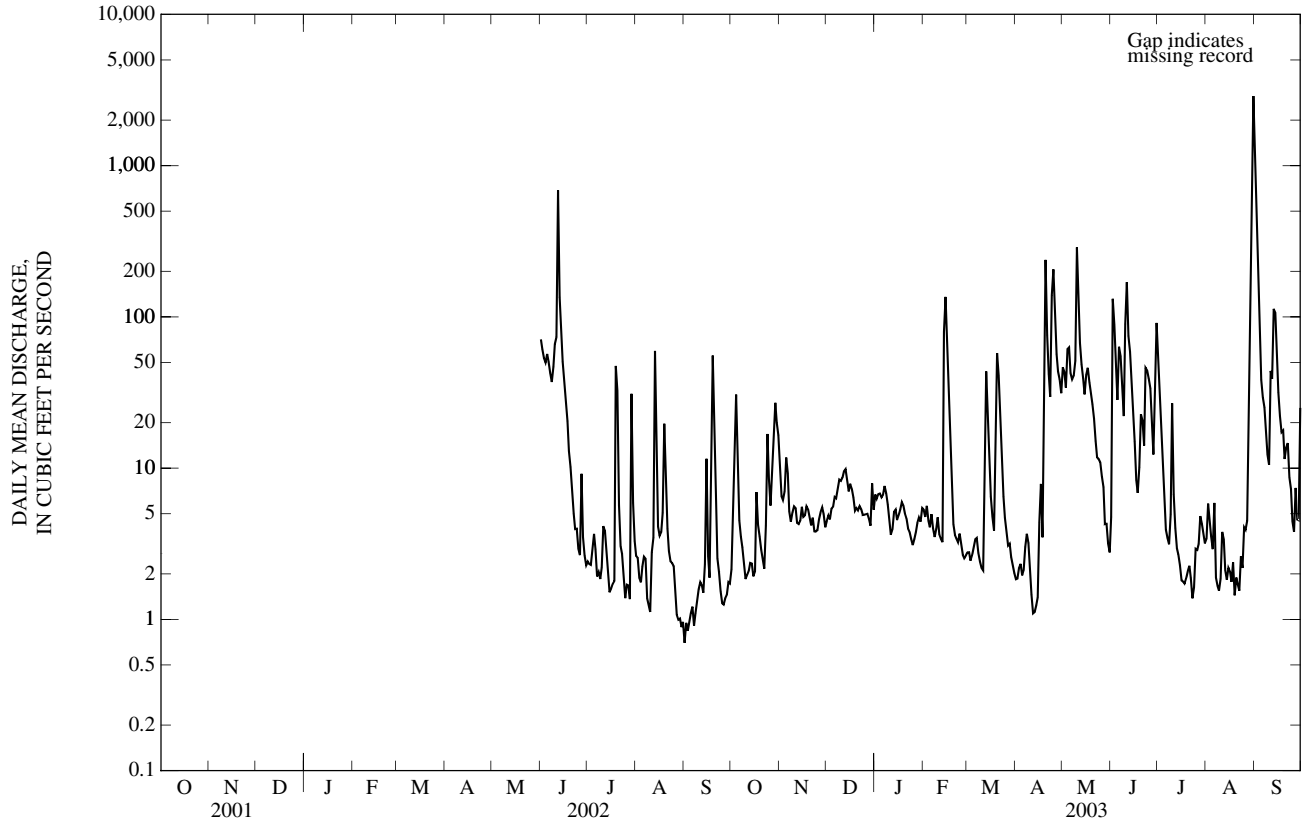
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	7.49	5.51	6.29	5.11	13.4	9.79	37.1	42.0	51.1	6.05	53.4	28.6
MAX	7.49	5.51	6.29	5.11	13.4	9.79	37.1	42.0	57.0	6.21	101	52.3
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2003)
MIN	7.49	5.51	6.29	5.11	13.4	9.79	37.1	42.0	45.2	5.90	5.27	4.84
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)

06893150 BLUE RIVER AT BLUE RIDGE BLVD. EXT. IN KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	27.7		27.7	
HIGHEST ANNUAL MEAN			27.7	2003
LOWEST ANNUAL MEAN			27.7	2003
HIGHEST DAILY MEAN	2,880	Aug 31	2,880	Aug 31, 2003
LOWEST DAILY MEAN	1.1	Apr 12	0.70	Sep 1, 2002
ANNUAL SEVEN-DAY MINIMUM	1.7	Apr 9	0.90	Aug 29, 2002
MAXIMUM PEAK FLOW	5,630	Aug 31	5,630	Aug 31, 2003
MAXIMUM PEAK STAGE	32.30	Aug 31	32.30	Aug 31, 2003
INSTANTANEOUS LOW FLOW	0.60	Apr 12	0.60	Sep 1, 2002
10 PERCENT EXCEEDS	46		46	
50 PERCENT EXCEEDS	5.3		5.3	
90 PERCENT EXCEEDS	2.1		2.1	

e Estimated



06893400 INDIAN CREEK AT 103RD STREET IN KANSAS CITY, MO

LOCATION.--Lat 38°56'31", long 94°36'16", in NW ¼ NW ¼ SW ¼ sec. 31, T.47 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on left bank at upstream side of 103rd Street Bridge, east of State Line Road.

DRAINAGE AREA.--65.0 mi^2.

PERIOD OF RECORD.--April 15, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 722.57 ft North American Vertical Datum of 1988.

REMARKS.--Records good except for estimated daily discharges, which are fair. U.S.G.S. satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge for period April 15 to Sept. 30, 7,370 ft^3/s, May 25, gage height 89.37 ft; minimum 8.9 ft^3/s, Aug. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	47	34	20	19	18
2	---	---	---	---	---	---	---	43	29	20	20	17
3	---	---	---	---	---	---	---	38	27	23	24	17
4	---	---	---	---	---	---	---	34	104	52	24	17
5	---	---	---	---	---	---	---	33	83	30	24	16
6	---	---	---	---	---	---	---	168	33	22	23	17
7	---	---	---	---	---	---	---	231	29	36	24	18
8	---	---	---	---	---	---	---	451	27	69	21	17
9	---	---	---	---	---	---	---	362	120	e21	19	18
10	---	---	---	---	---	---	---	88	65	e20	19	17
11	---	---	---	---	---	---	---	448	193	e27	21	17
12	---	---	---	---	---	---	---	1,270	471	38	22	17
13	---	---	---	---	---	---	---	184	53	40	642	17
14	---	---	---	---	---	---	---	101	38	21	46	124
15	---	---	---	---	---	---	e23	71	32	19	31	72
16	---	---	---	---	---	---	28	183	28	17	27	26
17	---	---	---	---	---	---	28	124	25	15	53	21
18	---	---	---	---	---	---	23	55	23	15	40	51
19	---	---	---	---	---	---	206	42	22	395	142	222
20	---	---	---	---	---	---	508	38	21	86	33	42
21	---	---	---	---	---	---	1,310	35	19	27	24	27
22	---	---	---	---	---	---	122	33	19	22	22	22
23	---	---	---	---	---	---	80	64	18	20	22	22
24	---	---	---	---	---	---	56	226	18	19	19	21
25	---	---	---	---	---	---	42	1,870	18	15	20	20
26	---	---	---	---	---	---	55	125	148	16	20	19
27	---	---	---	---	---	---	881	170	116	16	18	20
28	---	---	---	---	---	---	149	67	26	35	18	19
29	---	---	---	---	---	---	79	52	22	242	16	20
30	---	---	---	---	---	---	59	44	20	28	17	20
31	---	---	---	---	---	---	---	39	---	22	18	---
MEAN	---	---	---	---	---	---	---	217	62.7	46.7	48.0	33.0
MAX	---	---	---	---	---	---	---	1,870	471	395	642	222
MIN	---	---	---	---	---	---	---	33	18	15	16	16

e Estimated

06893400 INDIAN CREEK AT 103RD STREET IN KANSAS CITY, MO—Continued

LOCATION.--Lat 38°56'31", long 94°36'16", in NW ¼ NW ¼ SW ¼ sec. 31, T.47 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on left bank at upstream side of 103rd Street Bridge, east of State Line Road.

DRAINAGE AREA.-- 65.0 mi^2.

PERIOD OF RECORD.--February 22, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 722.57 ft North American Vertical Datum of 1988.

REMARKS.--Records good except for estimated daily discharges, which are fair. U.S.G.S. satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	36	e24	19	27	22	20	105	21	32	18	336
2	70	32	e24	19	21	23	21	38	750	28	34	117
3	83	32	e23	19	21	21	23	31	65	24	23	70
4	227	31	e23	19	20	23	24	130	44	22	18	48
5	40	62	e23	19	19	25	24	60	36	20	33	38
6	75	33	22	18	20	26	71	95	264	20	89	32
7	33	29	24	20	19	30	44	52	49	19	21	30
8	27	27	22	21	19	e23	27	136	37	18	18	27
9	24	27	21	20	19	e19	24	100	33	75	18	28
10	24	27	21	21	19	e19	23	525	88	192	18	28
11	23	27	22	20	19	18	23	78	121	29	81	130
12	30	26	21	19	18	62	21	50	65	25	24	52
13	30	25	19	18	17	129	20	40	61	21	16	436
14	24	28	20	18	318	32	19	37	35	20	24	166
15	22	37	20	18	216	26	17	32	30	20	18	60
16	37	30	21	21	39	23	62	146	24	18	19	43
17	83	27	21	20	30	21	53	53	22	18	17	34
18	33	26	21	19	26	22	25	35	20	18	16	61
19	46	25	19	19	24	97	1,190	32	39	17	16	55
20	28	25	16	21	23	173	635	38	44	17	15	31
21	25	25	18	22	22	48	75	29	22	15	15	61
22	22	27	19	20	22	33	46	28	820	17	16	34
23	137	27	20	19	21	29	124	26	472	17	18	28
24	88	26	19	19	22	25	437	28	76	16	17	27
25	79	26	16	19	21	22	187	25	138	16	17	24
26	38	26	19	19	20	22	74	24	61	17	19	24
27	162	25	19	19	23	22	50	23	33	17	16	28
28	60	22	19	20	21	22	38	22	30	17	140	22
29	147	20	19	21	---	22	33	23	94	19	217	20
30	93	e23	19	20	---	21	32	20	111	16	1,860	170
31	48	---	19	59	---	21	---	20	---	17	4,730	---
MEAN	60.5	28.6	20.4	20.8	39.5	36.2	115	67.1	124	27.0	245	75.3
MAX	227	62	24	59	318	173	1,190	525	820	192	4,730	436
MIN	19	20	16	18	17	18	17	20	20	15	15	20

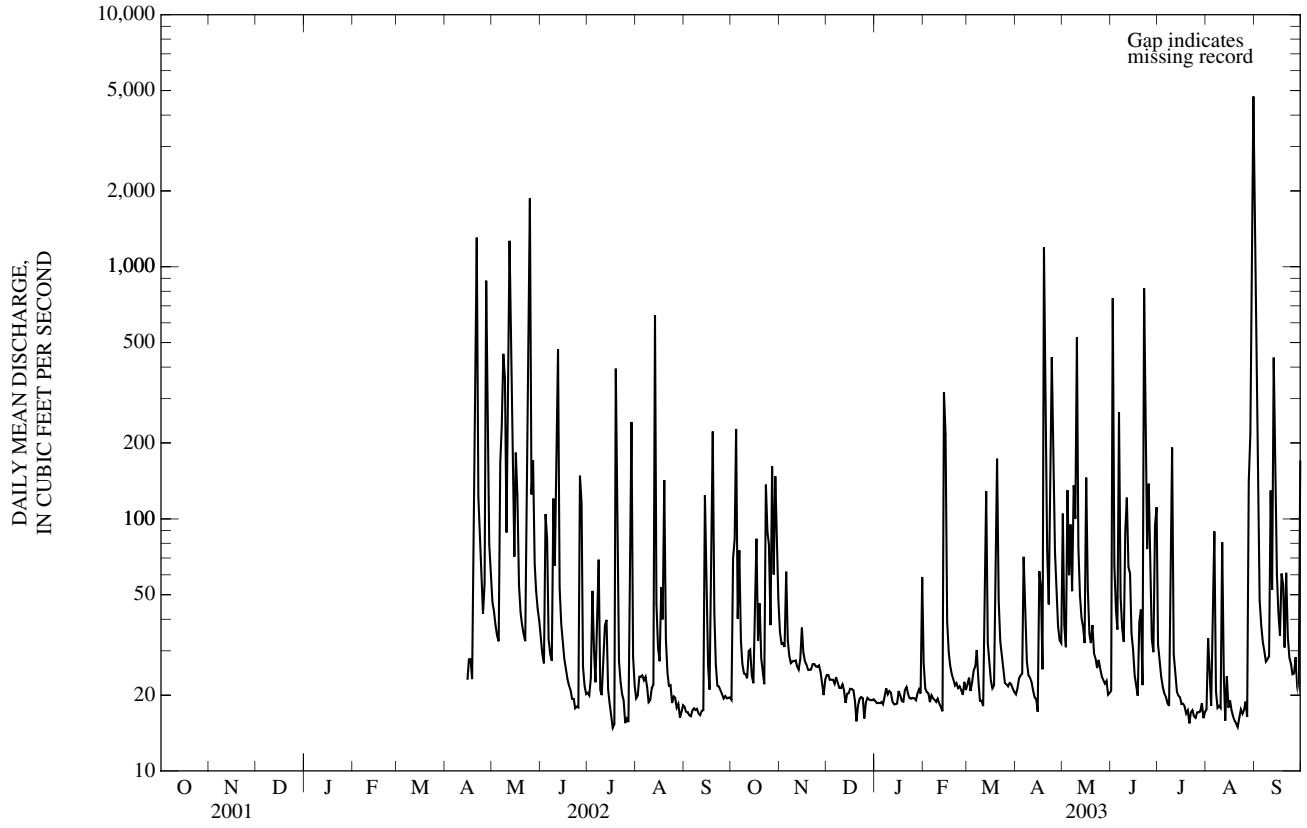
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	60.5	28.6	20.4	20.8	39.5	36.2	115	142	93.1	36.9	147	54.2
MAX	60.5	28.6	20.4	20.8	39.5	36.2	115	217	124	46.7	245	75.3
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)
MIN	60.5	28.6	20.4	20.8	39.5	36.2	115	67.1	62.7	27.0	48.0	33.0
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2002)

06893400 INDIAN CREEK AT 103RD STREET IN KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	71.7		71.7	
HIGHEST ANNUAL MEAN			71.7	2003
LOWEST ANNUAL MEAN			71.7	2003
HIGHEST DAILY MEAN	4,730	Aug 31	4,730	Aug 31, 2003
LOWEST DAILY MEAN	15	Jul 21,Aug 20,,21	15	Jul 17,18,25, 2002, Jul 21,Aug 20,21, 2003
ANNUAL SEVEN-DAY MINIMUM	16	Aug 17	16	Aug 17, 2003
MAXIMUM PEAK FLOW	10,100	Aug 31	10,100	Aug 31, 2003
MAXIMUM PEAK STAGE	90.56	Aug 31	90.56	Aug 31, 2003
INSTANTANEOUS LOW FLOW	11	Apr 16,Jul 21,Aug 13	8.9	Aug 29, 2002
10 PERCENT EXCEEDS	02		102	
50 PERCENT EXCEEDS	24		24	
90 PERCENT EXCEEDS	18		18	

e Estimated



06893500 BLUE RIVER AT KANSAS CITY, MO

LOCATION.--Lat 38°57'26", long 94°33'31", in SE ¼ NE ¼ 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 mi^2.

WATER-DISCHARGE RECORDS

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 National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to July 1, 1939, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Low flow regulated by commercial plants above station. National Weather Service gage- height and U.S. Army Corps of Engineers satellite telemeters at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

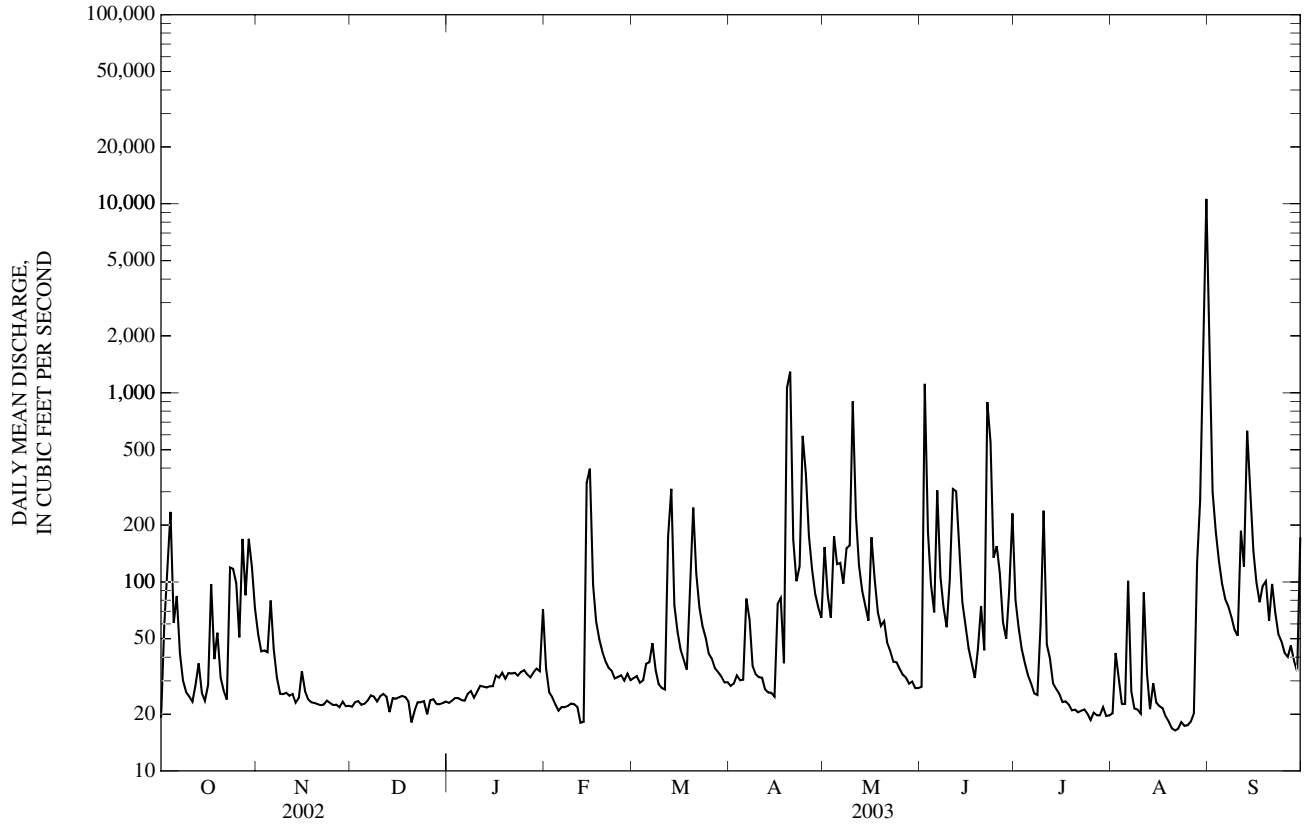
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	53	22	23	35	31	28	153	28	80	20	1,980
2	59	43	23	24	26	32	29	84	1,110	57	42	300
3	105	43	23	24	25	29	32	65	184	44	31	184
4	235	42	22	24	22	30	30	175	97	37	23	128
5	61	80	23	24	21	37	30	124	69	32	23	98
6	84	44	24	24	22	38	82	126	305	29	101	81
7	42	31	25	26	22	47	63	98	107	26	26	75
8	30	26	25	26	22	34	36	150	74	25	21	65
9	26	25	23	24	23	29	32	156	58	60	21	56
10	25	26	25	26	23	27	31	899	102	238	20	52
11	23	25	26	28	22	27	31	223	310	47	88	186
12	28	26	25	28	18	174	27	122	302	40	33	120
13	37	23	20	28	18	311	26	90	168	29	21	630
14	26	24	24	28	335	75	26	75	78	27	29	316
15	24	34	24	28	397	54	25	62	59	26	23	146
16	29	26	25	32	97	44	77	172	45	23	22	99
17	97	24	25	31	62	39	82	103	37	23	21	78
18	39	23	25	33	50	34	37	69	31	22	19	95
19	54	23	23	31	43	109	1,060	59	44	21	18	101
20	31	23	18	33	38	247	1,290	62	75	21	17	62
21	27	22	21	33	35	110	167	48	43	20	16	98
22	24	22	23	33	34	73	101	43	895	21	17	68
23	119	24	23	32	31	58	121	38	551	21	18	53
24	117	23	23	33	31	51	592	38	134	20	17	48
25	98	22	20	34	32	42	373	35	155	19	17	42
26	51	22	24	32	30	39	175	32	112	20	18	40
27	169	22	24	31	33	35	116	31	61	20	20	46
28	85	23	23	33	30	33	87	29	50	20	125	38
29	169	22	23	35	---	32	73	30	91	22	269	34
30	119	22	23	34	---	29	65	27	230	20	2,530	172
31	72	---	23	72	---	29	---	27	---	20	10,600	---
MEAN	68.5	29.6	23.2	30.5	56.3	63.8	165	111	187	36.5	460	183
MAX	235	80	26	72	397	311	1,290	899	1,110	238	10,600	1,980
MIN	19	22	18	23	18	27	25	27	28	19	16	34
IN.	0.42	0.18	0.14	0.19	0.31	0.39	0.98	0.68	1.11	0.22	2.82	1.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

MEAN	131	110	94.7	93.4	130	186	271	265	292	166	89.3	168
MAX	790	926	726	445	740	1,407	1,279	1,457	1,285	1,616	460	1,395
(WY)	(1987)	(1999)	(1993)	(1941)	(1985)	(1973)	(1944)	(1990)	(1967)	(1951)	(2003)	(1986)
MIN	0.00	0.00	0.00	0.00	2.66	4.36	6.41	17.8	7.44	1.72	0.94	0.05
(WY)	(1940)	(1940)	(1940)	(1940)	(1940)	(1957)	(1954)	(1956)	(1953)	(1946)	(1947)	(1939)

06893500 BLUE RIVER AT KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL MEAN	147		118		167	
HIGHEST ANNUAL MEAN					437	1993
LOWEST ANNUAL MEAN					12.8	1956
HIGHEST DAILY MEAN	7,970	May 12	10,600	Aug 31	20,000	Sep 13, 1961
LOWEST DAILY MEAN	15	Jul 17,18	16	Aug 21	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	20	Aug 29	17	Aug 19	0.00	At Times
MAXIMUM PEAK FLOW	---		14,600	Aug 31	41,000	Sep 13, 1961
MAXIMUM PEAK STAGE	---		29.87	Aug 31	44.46	Sep 13, 1961
INSTANTANEOUS LOW FLOW	---		14	Dec 20,Feb 12	0.00	Several Years
ANNUAL RUNOFF (INCHES)	10.61		8.53		12.07	
10 PERCENT EXCEEDS	235		168		278	
50 PERCENT EXCEEDS	41		33		46	
90 PERCENT EXCEEDS	22		22		7.0	



06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE.--August 1998 to current year.
pH.--August 1998 to current year.
SPECIFIC CONDUCTANCE.--August 1998 to current year.
DISSOLVED OXYGEN.--August 1998 to current year.
TURBIDITY.--August 1998 to current year.

INSTRUMENTATION.--Multi-parameter water-quality monitor deployed seasonally since August 1998. Electronic data logger with 15 minute recording interval and four hour satellite transmission interval

REMARKS.--Interruptions in the record are generally due to malfunction or fouling of the sensors. Where possible missing record has been estimated. Daily value estimations were based on partial data, inspection of contiguous data, hydrograph comparison and the best judgment of the hydrographer. Detailed records of the procedures employed for estimating data and/or data shifts for specific periods of record have been included with the station analysis and are kept on file. The manufacturers' specified range for turbidity sensors used is 0 to 1000 NTU. All numbers beyond this limit may be considered as >1000 NTU. Values >1000 NTU are maintained for continuity of the record. Specific Conductance records were rated either good or excellent except for the following periods: July 10-17 and September 19-25 rated fair. pH records were rated either good or excellent except for the following period: May 13 to June 5 rated fair to good. Water temperature records were rated excellent. Dissolved oxygen records were rated either good or excellent except for the following periods: April 19-23 rated poor; April 24-26, May 10-13, June 23-25 and September 3-9 rated estimated. Turbidity records were rated mostly excellent except for the following periods: May 10-13 and August 13 to September 9, 2003 rated fair; April 23-26, 2003 rated poor; June 2-5, 21-25 and July 8-9, 2003 rated estimated.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 32.9 °C, July 27, 29, 1999; minimum, 1.8 °C, November 21, 2000.
pH: Maximum, 8.9 standard units, July 12-13, 2000; minimum, 7.0 standard units on May 1, 9 2000.
SPECIFIC CONDUCTANCE: Maximum, 1,146 microsiemens, April 14, 2003; minimum, 109 microsiemens, June 28, 1999.
DISSOLVED OXYGEN: Maximum, 16.1 mg/L, October 9, 1998; minimum, 0.1 mg/L, May 10, June 22-23, August 28-31, 2003.
TURBIDITY: Maximum, 2,700 NTU, May 11-12, 2002; minimum, 0.0 NTU on numerous days August-November, 1998, July-November, 1999, April-September 2000.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 32.1 °C, July 5; minimum, 1.9 °C, December 6.
pH: Maximum, 8.4 standard units, July 18, September 10-11; minimum, 7.2 standard units, April 19.
SPECIFIC CONDUCTANCE: Maximum, 1,146 microsiemens, April 14; minimum, 243 microsiemens, August 31.
DISSOLVED OXYGEN: Maximum, 14.5 mg/L, December 5; minimum, 0.1 mg/L, May 10, June 22-23, August 28-31.
TURBIDITY: Maximum, 2,300 NTU, September 11,13; minimum, 2.0 NTU, October 20-21, November 11-13.

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	24.3	22.5	23.2	8.4	7.4	7.8	5.0	3.6	4.3	---	---	---
2	23.5	22.4	23.1	7.5	7.2	7.4	5.9	4.2	4.9	---	---	---
3	22.4	21.1	21.8	8.2	7.4	7.8	5.1	4.0	4.5	---	---	---
4	22.1	19.3	20.7	8.4	7.2	7.9	4.0	2.8	3.5	---	---	---
5	19.3	17.2	18.3	9.8	8.3	9.1	3.5	2.4	2.8	---	---	---
6	19.0	17.4	18.1	9.4	8.0	8.8	3.3	1.9	2.5	---	---	---
7	17.6	15.4	16.4	10.2	8.2	9.3	4.4	2.7	3.5	---	---	---
8	17.2	15.4	16.3	11.6	9.8	10.6	4.8	3.7	4.1	---	---	---
9	17.9	16.0	16.8	12.9	11.1	11.9	4.2	3.2	3.7	---	---	---
10	18.1	16.0	17.0	13.4	12.1	12.7	4.5	3.0	3.7	---	---	---
11	18.4	16.5	17.5	12.1	9.7	10.8	---	---	---	---	---	---
12	18.0	16.8	17.7	9.9	8.3	9.2	---	---	---	---	---	---
13	16.8	14.3	15.2	10.0	8.2	9.1	---	---	---	---	---	---
14	14.6	12.8	13.8	10.3	9.8	10.0	---	---	---	---	---	---
15	14.0	12.4	13.2	10.2	9.3	9.7	---	---	---	---	---	---
16	13.0	11.1	11.8	9.6	8.6	9.1	---	---	---	---	---	---
17	12.2	10.4	11.3	8.9	7.6	8.3	---	---	---	---	---	---
18	13.2	10.9	11.9	9.9	8.4	9.0	---	---	---	---	---	---
19	13.9	13.0	13.4	9.4	8.1	8.8	---	---	---	---	---	---
20	13.3	11.7	12.5	10.1	8.5	9.1	---	---	---	---	---	---
21	13.4	11.3	12.3	9.5	8.8	9.1	---	---	---	---	---	---
22	12.8	11.8	12.4	8.9	7.8	8.3	---	---	---	---	---	---
23	12.3	10.4	11.4	8.9	7.5	8.1	---	---	---	---	---	---
24	10.8	9.7	10	8.1	6.5	7.7	---	---	---	---	---	---
25	10.8	9.9	10.3	6.5	5.2	5.7	---	---	---	---	---	---
26	10.8	10.4	10.5	5.6	5.0	5.2	---	---	---	---	---	---
27	10.4	9.5	10.0	5.0	4.1	4.7	---	---	---	---	---	---
28	9.8	9.2	9.5	5.0	3.4	4.1	---	---	---	---	---	---
29	10.9	9.8	10.5	6.3	4.5	5.4	---	---	---	---	---	---
30	10.4	9.8	10.1	6.2	4.6	5.5	---	---	---	---	---	---
31	9.8	8.4	9.3	---	---	---	---	---	---	---	---	---
MONTH	24.3	8.4	14.4	13.4	3.4	8.3	5.9	1.9	3.8	---	---	---

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

WATER TEMPERATURE (DEGREES C),—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	22.6	19.4	20.6
2	---	---	---	---	---	---	---	---	---	20.4	17.6	19.1
3	---	---	---	---	---	---	---	---	---	20.6	17.8	19.2
4	---	---	---	---	---	---	---	---	---	19.8	17.6	18.7
5	---	---	---	---	---	---	---	---	---	21.4	17.1	19.2
6	---	---	---	---	---	---	---	---	---	20.6	19.1	19.9
7	---	---	---	---	---	---	---	---	---	21.5	17.8	19.7
8	---	---	---	---	---	---	---	---	---	20.8	18.5	19.3
9	---	---	---	---	---	---	11.0	6.2	8.4	22.2	18.5	20.1
10	---	---	---	---	---	---	14.0	9.0	11.3	21.8	18.7	20.5
11	---	---	---	---	---	---	16.7	12.0	14.1	20.1	17.7	18.8
12	---	---	---	---	---	---	19.0	14.8	16.7	20.3	16.9	18.7
13	---	---	---	---	---	---	20.5	16.8	18.5	19.8	18.2	19.0
14	---	---	---	---	---	---	22.2	18.4	20.1	22.8	18.8	20.6
15	---	---	---	---	---	---	22.4	19.5	20.8	22.8	19.7	21.4
16	---	---	---	---	---	---	21.1	17.3	18.9	21.9	17.8	19.5
17	---	---	---	---	---	---	17.3	15.2	15.8	19.5	17.2	18.2
18	---	---	---	---	---	---	17.1	14.4	15.6	21.8	17.9	19.8
19	---	---	---	---	---	---	16.9	14.8	16.2	21.5	20.1	20.8
20	---	---	---	---	---	---	14.9	13.8	14.4	21.1	18.0	19.6
21	---	---	---	---	---	---	17.2	13.5	15.2	20.6	17.7	19.1
22	---	---	---	---	---	---	18.6	14.5	16.5	21.6	17.5	19.6
23	---	---	---	---	---	---	17.6	15.5	16.6	21.6	19.4	20.6
24	---	---	---	---	---	---	15.6	14.1	14.5	21.4	19.8	20.6
25	---	---	---	---	---	---	14.4	13.8	14.2	22.4	18.9	20.6
26	---	---	---	---	---	---	17.1	12.9	14.9	22.8	19.4	21.1
27	---	---	---	---	---	---	19.3	15.3	17.3	23.6	19.9	21.6
28	---	---	---	---	---	---	19.9	18.2	18.9	24.1	21.2	22.6
29	---	---	---	---	---	---	21.6	18.3	19.9	25.1	21.6	23.3
30	---	---	---	---	---	---	23.3	19.8	21.5	26.9	22.9	24.7
31	---	---	---	---	---	---	---	---	---	25.3	22.4	23.4
MONTH	---	---	---	---	---	---	23.3	6.2	16.4	26.9	16.9	20.3

	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.9	20.6	21.8	27.9	24.1	25.8	27.7	25.8	26.3	20.8	20.3	20.5
2	21.9	16.8	18.5	29.5	25.3	27.4	27.8	24.3	26.0	21.8	20.3	20.9
3	17.5	16.5	17.0	30.9	26.6	28.7	28.8	25.4	27.1	23.3	20.4	21.9
4	19.9	16.1	17.9	31.8	28.1	29.9	28.7	25.9	27.4	23.6	21.5	22.7
5	21.6	18.7	20.1	32.1	28.7	30.3	29.9	26.7	28.1	23.6	21.2	22.4
6	22.4	19.7	21.1	31.5	28.8	30.2	28.9	26.0	27.6	23.9	21.1	22.5
7	21.4	19.8	20.6	31.5	28.3	29.8	29.3	26.4	27.8	23.8	20.9	22.4
8	22.1	18.6	20.4	31.7	28.7	30.1	29.0	26.1	27.5	24.0	20.9	22.5
9	24.1	19.8	21.9	31.1	26.7	29.7	29.1	26.5	27.7	24.6	21.9	23.3
10	24.5	22.2	23.4	28.5	25.2	26.9	28.1	26.2	27.1	25.2	22.7	24.0
11	23.5	22.0	22.5	28.7	25.4	27.0	26.8	24.6	25.9	24.6	23.6	24.0
12	24.2	21.0	22.5	29.6	25.9	27.8	27.1	24.0	25.5	23.7	22.3	22.8
13	25.1	21.3	23.3	30.1	26.1	28.1	27.0	24.5	25.7	22.3	20.1	21.5
14	26.9	23.1	24.9	31.1	27.3	29.1	27.1	25.2	26.0	21.3	19.3	20.3
15	27.6	24.1	25.8	31.8	29.0	30.2	28.9	25.3	27.0	21.2	18.9	20.2
16	27.5	24.5	26.1	31.0	27.4	29.3	30.2	26.7	28.3	21.0	19.3	20.2
17	27.5	24.2	25.9	31.0	28.8	29.8	30.6	27.6	29.1	21.9	20.0	20.9
18	28.2	24.9	26.4	31.3	28.6	29.8	30.8	28.0	29.3	21.6	19.1	20.7
19	28.0	25.9	26.9	31.1	28.3	29.7	31.3	28.3	29.7	19.2	17.1	18.3
20	26.9	23.4	25.4	31.9	28.3	30.1	31.2	28.2	29.7	19.0	16.6	17.9
21	25.6	23.4	24.6	31.4	28.9	30.2	31.7	28.3	29.9	19.2	18.0	18.7
22	24.8	18.9	23.5	29.7	27.2	28.2	31.2	28.4	29.9	20.1	17.9	19.0
23	24.1	19.8	21.7	28.4	25.3	26.7	30.4	27.6	29.0	20.3	17.6	19.1
24	28.0	23.7	25.7	27.9	24.6	26.3	30.1	26.7	28.5	21.8	19.5	20.5
25	28.0	25.2	26.8	28.9	25.2	26.9	30.7	27.5	29.1	20.6	18.2	19.5
26	26.1	23.4	24.9	29.8	26.1	27.8	30.9	27.8	29.2	21.2	18.5	19.8
27	26.3	22.7	24.6	31.0	27.9	29.4	29.4	27.9	28.5	20.1	18.1	19.1
28	27.4	23.8	25.5	30.2	28.5	29.1	28.2	25.9	27.4	18.4	16.2	17.2
29	27.6	24.5	25.9	29.5	26.9	28.2	26.6	25.2	25.8	16.5	14.7	15.7
30	25.1	23.1	24.2	29.7	26.3	27.9	25.9	22.3	23.9	15.9	13.3	15.0
31	---	---	---	28.7	26.4	27.7	22.5	20.2	20.8	---	---	---
MONTH	28.2	16.1	23.3	32.1	24.1	28.6	31.7	20.2	27.4	25.2	13.3	20.4

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

pH, WATER, UNFILTERED, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.8	7.6	7.7	7.8	7.8	7.8	7.7	7.5	7.6	---	---	---
2	7.7	7.5	7.6	7.8	7.8	7.8	7.7	7.5	7.6	---	---	---
3	7.6	7.5	7.6	7.8	7.7	7.7	7.7	7.5	7.6	---	---	---
4	7.7	7.5	7.6	7.8	7.7	7.7	7.7	7.5	7.6	---	---	---
5	7.7	7.6	7.6	7.8	7.7	7.7	7.7	7.5	7.6	---	---	---
6	7.8	7.6	7.6	7.8	7.6	7.7	7.6	7.4	7.5	---	---	---
7	7.7	7.6	7.7	7.7	7.6	7.7	7.7	7.4	7.5	---	---	---
8	7.8	7.6	7.7	7.7	7.6	7.6	7.7	7.4	7.5	---	---	---
9	7.8	7.7	7.7	7.6	7.5	7.6	7.7	7.4	7.5	---	---	---
10	7.8	7.7	7.7	7.6	7.5	7.5	7.7	7.4	7.5	---	---	---
11	7.7	7.6	7.7	7.6	7.4	7.5	---	---	---	---	---	---
12	7.7	7.6	7.6	7.6	7.5	7.5	---	---	---	---	---	---
13	7.7	7.6	7.6	7.6	7.5	7.5	---	---	---	---	---	---
14	7.7	7.6	7.7	7.5	7.4	7.5	---	---	---	---	---	---
15	7.7	7.6	7.6	7.5	7.4	7.4	---	---	---	---	---	---
16	7.7	7.6	7.7	7.6	7.4	7.5	---	---	---	---	---	---
17	7.8	7.6	7.7	7.6	7.4	7.5	---	---	---	---	---	---
18	7.8	7.7	7.8	7.6	7.4	7.5	---	---	---	---	---	---
19	7.8	7.6	7.7	7.6	7.4	7.5	---	---	---	---	---	---
20	7.8	7.7	7.7	7.6	7.4	7.5	---	---	---	---	---	---
21	7.8	7.7	7.7	7.6	7.4	7.5	---	---	---	---	---	---
22	7.9	7.7	7.8	7.7	7.4	7.5	---	---	---	---	---	---
23	7.8	7.6	7.7	7.8	7.6	7.7	---	---	---	---	---	---
24	7.8	7.7	7.7	7.7	7.6	7.6	---	---	---	---	---	---
25	7.8	7.7	7.7	7.9	7.6	7.7	---	---	---	---	---	---
26	7.8	7.8	7.8	7.9	7.6	7.7	---	---	---	---	---	---
27	7.8	7.7	7.8	7.7	7.5	7.6	---	---	---	---	---	---
28	7.8	7.7	7.7	7.7	7.5	7.6	---	---	---	---	---	---
29	7.8	7.7	7.8	7.8	7.5	7.7	---	---	---	---	---	---
30	7.8	7.8	7.8	7.8	7.5	7.6	---	---	---	---	---	---
31	7.8	7.8	7.8	---	---	---	---	---	---	---	---	---
MONTH	7.9	7.5	7.7	7.9	7.4	7.6	7.7	7.4	7.5	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	8.1	7.8	7.9
2	---	---	---	---	---	---	---	---	---	8.0	7.8	7.9
3	---	---	---	---	---	---	---	---	---	8.0	7.8	7.9
4	---	---	---	---	---	---	---	---	---	8.0	7.7	7.9
5	---	---	---	---	---	---	---	---	---	8.0	7.8	7.9
6	---	---	---	---	---	---	---	---	---	7.9	7.7	7.8
7	---	---	---	---	---	---	---	---	---	8.0	7.7	7.8
8	---	---	---	---	---	---	---	---	---	7.9	7.8	7.8
9	---	---	---	---	---	---	7.9	7.5	7.7	7.9	7.7	7.8
10	---	---	---	---	---	---	8.0	7.6	7.7	8.0	7.7	7.8
11	---	---	---	---	---	---	7.9	7.5	7.7	8.0	7.9	8.0
12	---	---	---	---	---	---	7.9	7.5	7.6	8.2	7.9	8.1
13	---	---	---	---	---	---	7.9	7.4	7.6	8.1	7.8	8.0
14	---	---	---	---	---	---	7.8	7.4	7.6	7.9	7.8	7.8
15	---	---	---	---	---	---	7.7	7.4	7.5	7.9	7.8	7.9
16	---	---	---	---	---	---	7.5	7.3	7.4	7.9	7.6	7.7
17	---	---	---	---	---	---	7.4	7.3	7.4	7.8	7.6	7.7
18	---	---	---	---	---	---	7.6	7.4	7.5	7.8	7.7	7.8
19	---	---	---	---	---	---	7.6	7.2	7.4	7.8	7.7	7.7
20	---	---	---	---	---	---	7.6	7.4	7.5	7.8	7.6	7.7
21	---	---	---	---	---	---	7.6	7.5	7.5	7.9	7.8	7.8
22	---	---	---	---	---	---	7.6	7.5	7.5	8.1	7.8	7.9
23	---	---	---	---	---	---	7.7	7.5	7.6	8.0	7.8	7.9
24	---	---	---	---	---	---	7.7	7.6	7.6	7.9	7.7	7.8
25	---	---	---	---	---	---	7.7	7.6	7.7	7.9	7.7	7.8
26	---	---	---	---	---	---	7.9	7.7	7.8	7.8	7.7	7.8
27	---	---	---	---	---	---	8.0	7.8	7.9	7.9	7.7	7.8
28	---	---	---	---	---	---	7.9	7.9	7.9	8.0	7.7	7.9
29	---	---	---	---	---	---	8.0	7.8	7.9	8.1	7.8	7.9
30	---	---	---	---	---	---	8.1	7.9	8.0	8.1	7.6	7.9
31	---	---	---	---	---	---	---	---	---	8.0	7.6	7.8
MONTH	---	---	---	---	---	---	8.1	7.2	7.6	8.2	7.6	7.8

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

pH, WATER, UNFILTERED, FIELD, STANDARD UNITS,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.7	7.5	7.6	7.8	7.6	7.7	7.4	7.3	7.3	7.6	7.4	7.5
2	7.7	7.3	7.5	7.9	7.6	7.8	7.4	7.3	7.3	7.6	7.6	7.6
3	7.6	7.4	7.5	8.0	7.7	7.8	7.3	7.3	7.3	7.7	7.6	7.6
4	7.7	7.5	7.6	8.0	7.7	7.9	7.4	7.3	7.3	7.7	7.7	7.7
5	7.9	7.6	7.7	8.1	7.7	7.9	7.4	7.3	7.4	7.8	7.7	7.7
6	7.9	7.6	7.8	8.0	7.7	7.8	7.7	7.3	7.5	7.9	7.8	7.8
7	7.8	7.7	7.7	8.0	7.7	7.8	7.7	7.5	7.6	7.9	7.8	7.9
8	7.8	7.6	7.7	8.0	7.7	7.8	7.8	7.6	7.7	8.0	7.9	7.9
9	7.9	7.7	7.8	8.0	7.7	7.8	7.8	7.6	7.7	8.3	7.9	8.1
10	7.9	7.7	7.8	7.8	7.5	7.6	7.7	7.5	7.6	8.4	8.0	8.2
11	7.8	7.5	7.7	7.8	7.5	7.6	7.6	7.4	7.5	8.4	7.9	8.1
12	7.8	7.6	7.7	7.8	7.5	7.7	7.5	7.4	7.4	8.0	7.8	7.9
13	7.6	7.4	7.5	7.8	7.6	7.7	7.8	7.4	7.6	7.8	7.7	7.7
14	7.7	7.6	7.6	7.8	7.6	7.7	7.7	7.6	7.7	7.9	7.7	7.8
15	7.8	7.6	7.7	7.9	7.6	7.7	7.8	7.6	7.7	8.0	7.8	7.9
16	7.8	7.6	7.7	8.1	7.6	7.8	7.7	7.6	7.6	8.0	7.9	7.9
17	7.9	7.7	7.8	8.2	7.7	8.0	7.6	7.5	7.6	8.1	7.9	8.0
18	7.9	7.7	7.8	8.4	7.8	8.0	7.7	7.5	7.6	8.0	7.8	7.9
19	7.9	7.7	7.8	8.3	7.8	8.0	7.7	7.5	7.6	7.9	7.7	7.8
20	7.9	7.6	7.7	8.3	7.8	8.0	7.8	7.5	7.6	7.8	7.7	7.8
21	7.9	7.7	7.8	8.2	7.8	7.9	7.7	7.5	7.6	7.8	7.7	7.8
22	7.8	7.4	7.7	8.2	7.8	8.0	7.7	7.5	7.6	7.8	7.6	7.7
23	7.5	7.3	7.4	8.1	7.8	7.9	7.7	7.6	7.6	7.8	7.7	7.8
24	7.7	7.5	7.6	8.1	7.8	8.0	7.7	7.5	7.6	7.8	7.7	7.8
25	7.7	7.6	7.6	8.2	7.8	8.0	7.6	7.5	7.6	7.8	7.7	7.8
26	7.7	7.6	7.7	8.0	7.6	7.8	7.6	7.4	7.5	7.9	7.7	7.8
27	7.8	7.6	7.7	7.8	7.5	7.7	7.5	7.4	7.4	7.9	7.7	7.8
28	7.9	7.7	7.8	7.6	7.4	7.5	7.6	7.3	7.4	8.0	7.7	7.8
29	7.9	7.7	7.8	7.5	7.4	7.4	7.6	7.4	7.5	8.0	7.7	7.8
30	7.8	7.6	7.7	7.5	7.4	7.4	7.8	7.5	7.6	7.8	7.6	7.8
31	---	---	---	7.5	7.4	7.4	7.6	7.3	7.5	---	---	---
MONTH	7.9	7.3	7.7	8.4	7.4	7.8	7.8	7.3	7.5	8.4	7.4	7.8

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, µS/cm @ 25 °C, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	982	963	972	700	631	664	1,030	1,011	1,023	---	---	---
2	977	915	960	755	700	728	1,038	1,013	1,027	---	---	---
3	915	614	658	809	755	784	1,026	1,007	1,016	---	---	---
4	617	397	500	843	809	830	1,032	1,011	1,025	---	---	---
5	496	473	481	862	802	835	1,027	1,011	1,020	---	---	---
6	596	491	535	810	729	767	1,035	1,014	1,027	---	---	---
7	676	569	630	817	800	808	1,036	1,024	1,029	---	---	---
8	669	629	644	864	803	829	1,033	1,022	1,029	---	---	---
9	725	655	685	893	864	881	1,040	1,028	1,033	---	---	---
10	784	725	756	930	893	915	1,041	1,028	1,035	---	---	---
11	812	784	807	946	930	941	---	---	---	---	---	---
12	839	809	821	949	936	940	---	---	---	---	---	---
13	851	769	810	958	937	950	---	---	---	---	---	---
14	805	774	793	958	936	951	---	---	---	---	---	---
15	818	805	814	984	936	968	---	---	---	---	---	---
16	836	797	825	981	932	956	---	---	---	---	---	---
17	840	690	744	947	928	936	---	---	---	---	---	---
18	705	648	671	956	941	948	---	---	---	---	---	---
19	685	628	648	959	947	952	---	---	---	---	---	---
20	772	685	736	979	958	971	---	---	---	---	---	---
21	803	772	794	987	979	983	---	---	---	---	---	---
22	840	764	785	1,001	983	993	---	---	---	---	---	---
23	887	576	816	998	988	994	---	---	---	---	---	---
24	591	505	542	1,013	995	1,006	---	---	---	---	---	---
25	646	523	566	1,027	1,013	1,020	---	---	---	---	---	---
26	666	646	662	1,039	1,016	1,027	---	---	---	---	---	---
27	666	440	598	1,021	1,013	1,018	---	---	---	---	---	---
28	529	470	509	1,024	1,010	1,017	---	---	---	---	---	---
29	579	490	540	1,011	1,001	1,006	---	---	---	---	---	---
30	592	540	563	1,020	1,006	1,012	---	---	---	---	---	---
31	643	592	631	---	---	---	---	---	---	---	---	---
MONTH	982	397	693	1,039	631	921	1,041	1,007	1,026	---	---	---

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	877	677	798
2	---	---	---	---	---	---	---	---	---	740	704	731
3	---	---	---	---	---	---	---	---	---	755	699	725
4	---	---	---	---	---	---	---	---	---	756	603	682
5	---	---	---	---	---	---	---	---	---	632	589	609
6	---	---	---	---	---	---	---	---	---	651	604	622
7	---	---	---	---	---	---	---	---	---	644	571	621
8	---	---	---	---	---	---	---	---	---	661	580	634
9	---	---	---	---	---	---	1,090	1,048	1,071	590	485	542
10	---	---	---	---	---	---	1,055	1,026	1,044	565	390	471
11	---	---	---	---	---	---	1,069	1,021	1,048	604	492	539
12	---	---	---	---	---	---	1,091	1,017	1,064	705	604	665
13	---	---	---	---	---	---	1,106	1,069	1,095	765	704	736
14	---	---	---	---	---	---	1,146	1,091	1,123	801	765	784
15	---	---	---	---	---	---	1,145	1,113	1,134	834	791	814
16	---	---	---	---	---	---	1,138	852	1,028	854	591	753
17	---	---	---	---	---	---	997	871	931	637	586	608
18	---	---	---	---	---	---	973	936	958	638	615	623
19	---	---	---	---	---	---	977	339	672	709	638	672
20	---	---	---	---	---	---	651	350	522	763	705	737
21	---	---	---	---	---	---	753	640	694	779	753	762
22	---	---	---	---	---	---	834	753	797	799	772	782
23	---	---	---	---	---	---	901	657	853	808	789	800
24	---	---	---	---	---	---	690	410	492	841	808	827
25	---	---	---	---	---	---	629	555	585	857	836	849
26	---	---	---	---	---	---	730	629	683	861	835	851
27	---	---	---	---	---	---	767	728	752	859	835	850
28	---	---	---	---	---	---	830	767	806	871	848	863
29	---	---	---	---	---	---	847	824	833	875	860	867
30	---	---	---	---	---	---	872	840	854	874	861	868
31	---	---	---	---	---	---	---	---	---	875	854	869
MONTH	---	---	---	---	---	---	1,146	339	865	877	390	728

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, µS/cm @ 25 °C,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	866	854	861	487	398	448	961	948	954	554	359	466
2	858	530	669	597	487	526	965	920	947	668	554	615
3	530	438	465	685	597	644	933	796	874	729	667	699
4	637	498	571	720	685	696	848	771	799	748	723	736
5	749	637	697	738	718	726	901	848	877	789	746	771
6	749	455	535	766	738	756	917	495	593	811	785	797
7	566	529	555	799	760	787	679	545	612	824	797	810
8	630	552	583	803	784	794	773	679	729	851	821	833
9	706	630	670	826	496	788	851	770	815	862	841	849
10	736	633	718	593	412	448	916	851	885	867	838	854
11	633	437	509	501	432	460	916	731	826	869	515	748
12	532	289	490	605	501	547	759	708	732	606	517	578
13	490	319	447	724	605	667	786	720	758	631	322	535
14	628	467	571	785	724	763	827	785	808	551	330	455
15	657	623	635	833	785	817	864	799	839	660	551	605
16	706	657	686	881	833	864	918	805	895	725	660	702
17	748	699	722	908	880	896	912	863	884	758	698	740
18	774	747	761	912	893	903	906	864	885	788	700	766
19	830	762	791	904	887	895	960	906	937	755	645	696
20	820	698	744	907	883	893	986	956	968	734	686	726
21	741	694	719	911	880	896	993	978	985	734	670	719
22	697	249	581	908	785	875	991	973	981	724	683	697
23	403	303	344	915	882	899	981	965	973	793	706	752
24	628	401	488	935	913	925	985	972	979	833	793	804
25	735	598	678	947	923	932	991	973	983	864	833	851
26	598	465	479	954	915	937	989	974	981	880	864	875
27	568	480	519	959	935	951	1,006	968	993	902	876	888
28	694	568	632	965	953	959	1,001	442	861	885	873	879
29	749	645	719	966	954	959	533	410	488	900	883	889
30	657	396	478	964	952	956	549	281	420	899	511	795
31	---	---	---	960	946	953	359	243	303	---	---	---
MONTH	866	249	611	966	398	792	1,006	243	825	902	322	738

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, mg/L, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.4	6.4	7.2	11.9	10.9	11.4	13.4	10.4	11.6	---	---	---
2	7.2	6.2	6.7	11.5	11.1	11.3	13.1	10.4	11.5	---	---	---
3	7.5	6.6	7.0	11.1	10.6	10.9	13.3	10.2	11.5	---	---	---
4	7.8	6.6	7.3	11.2	10.5	10.8	13.9	11.0	12.2	---	---	---
5	8.7	7.4	8.2	10.7	10.0	10.4	14.5	11.6	12.7	---	---	---
6	8.6	7.9	8.3	11.0	10.2	10.5	14.3	11.8	12.8	---	---	---
7	9.3	8.0	8.6	10.7	9.7	10.2	14.2	11.4	12.6	---	---	---
8	9.6	8.4	8.9	10.2	9.0	9.5	14.0	11.0	12.2	---	---	---
9	9.4	8.2	8.7	9.5	8.0	8.8	13.9	11.2	12.3	---	---	---
10	9.6	8.1	8.7	8.9	7.5	8.1	14.0	11.3	12.4	---	---	---
11	9.5	7.8	8.5	9.7	7.6	8.5	---	---	---	---	---	---
12	8.6	7.5	8.0	10.4	8.7	9.4	---	---	---	---	---	---
13	9.5	7.9	8.6	10.5	8.9	9.5	---	---	---	---	---	---
14	9.4	8.7	9.0	9.3	8.3	8.8	---	---	---	---	---	---
15	10.1	8.8	9.3	10.1	8.4	9.1	---	---	---	---	---	---
16	10.0	8.9	9.5	11.2	8.8	9.8	---	---	---	---	---	---
17	10.6	9.6	10.3	11.5	9.3	10.2	---	---	---	---	---	---
18	10.5	9.7	10.1	11.4	8.9	10.1	---	---	---	---	---	---
19	9.9	8.9	9.5	11.4	8.7	10.0	---	---	---	---	---	---
20	10.4	9.3	9.8	11.3	8.8	9.8	---	---	---	---	---	---
21	10.6	9.4	9.9	11.1	8.5	9.7	---	---	---	---	---	---
22	10.8	9.3	9.9	11.9	8.8	10.1	---	---	---	---	---	---
23	10.8	9.4	9.9	12.1	9.2	10.4	---	---	---	---	---	---
24	10.8	10.5	10.6	11.0	9.1	10.1	---	---	---	---	---	---
25	10.8	10.3	10.5	13.6	9.7	11.3	---	---	---	---	---	---
26	10.7	10.1	10.4	13.4	10.5	11.8	---	---	---	---	---	---
27	11.2	10.2	10.6	13.2	10.4	11.6	---	---	---	---	---	---
28	11.0	10.5	10.8	13.6	11.0	12.0	---	---	---	---	---	---
29	10.7	10.3	10.5	13.7	10.6	11.9	---	---	---	---	---	---
30	10.8	10.3	10.6	13.2	9.9	11.3	---	---	---	---	---	---
31	11.1	10.5	10.8	---	---	---	---	---	---	---	---	---
MONTH	11.2	6.2	9.2	13.7	7.5	10.2	14.5	10.2	12.2	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	7.4	5.7	6.6
2	---	---	---	---	---	---	---	---	---	8.0	6.8	7.3
3	---	---	---	---	---	---	---	---	---	8.2	6.5	7.3
4	---	---	---	---	---	---	---	---	---	7.8	6.6	7.3
5	---	---	---	---	---	---	---	---	---	8.0	7.0	7.5
6	---	---	---	---	---	---	---	---	---	7.2	6.4	6.8
7	---	---	---	---	---	---	---	---	---	7.9	6.2	7.3
8	---	---	---	---	---	---	---	---	---	7.6	6.6	7.0
9	---	---	---	---	---	---	13.1	10.6	11.6	7.5	6.6	7.1
10	---	---	---	---	---	---	12.1	9.5	10.6	7.7	0.1	e6.9
11	---	---	---	---	---	---	11.2	8.1	9.4	7.6	7.6	e7.6
12	---	---	---	---	---	---	10.3	6.7	8.2	7.6	7.6	e7.6
13	---	---	---	---	---	---	9.6	5.9	7.5	8.8	7.6	e8.0
14	---	---	---	---	---	---	9.3	5.1	7.1	8.4	7.3	7.8
15	---	---	---	---	---	---	8.6	5.3	6.8	8.1	6.8	7.4
16	---	---	---	---	---	---	7.2	4.9	6.1	8.3	6.7	7.4
17	---	---	---	---	---	---	7.9	7.0	7.4	8.4	7.8	8.1
18	---	---	---	---	---	---	8.7	7.0	7.7	8.4	7.5	7.9
19	---	---	---	---	---	---	9.1	6.4	7.5	7.6	5.9	7.2
20	---	---	---	---	---	---	9.2	8.2	8.8	8.4	7.0	7.7
21	---	---	---	---	---	---	9.1	8.0	8.6	8.7	7.5	8.0
22	---	---	---	---	---	---	8.3	7.4	7.8	8.9	7.5	8.1
23	---	---	---	---	---	---	9.1	7.3	8.0	8.5	7.2	7.8
24	---	---	---	---	---	---	9.5	6.2	e7.9	8.5	6.9	7.5
25	---	---	---	---	---	---	9.6	8.3	e8.7	9.1	7.0	7.9
26	---	---	---	---	---	---	8.9	7.9	e8.6	9.5	6.6	8.2
27	---	---	---	---	---	---	8.0	7.2	7.7	9.8	7.2	8.4
28	---	---	---	---	---	---	7.2	6.5	6.8	9.9	7.1	8.4
29	---	---	---	---	---	---	7.5	6.2	6.8	11.5	7.1	9.0
30	---	---	---	---	---	---	7.8	6.1	6.9	10.9	7.1	8.7
31	---	---	---	---	---	---	---	---	---	9.9	6.5	8.1
MONTH	---	---	---	---	---	---	13.1	4.9	8.0	11.5	0.1	7.7

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, mg/L,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.1	6.5	8.4	7.4	6.3	6.7	7.0	4.0	5.4	9.5	3.0	6.1
2	8.8	2.6	6.9	7.7	6.1	6.8	7.9	5.2	6.4	9.4	1.8	5.2
3	8.5	6.3	8.3	7.9	5.7	6.6	6.8	5.0	5.9	6.1	4.1	e5.2
4	8.9	8.0	8.5	8.0	5.3	6.5	6.7	4.0	5.4	4.5	3.5	e3.9
5	9.5	7.6	8.1	8.2	5.1	6.4	7.0	4.9	5.8	4.0	3.4	e3.7
6	8.3	7.5	8.0	8.3	5.0	6.4	6.2	4.9	5.6	4.9	4.0	e4.4
7	8.1	7.4	7.7	8.9	4.7	6.6	6.9	5.1	5.8	6.0	4.9	e5.5
8	8.5	7.5	7.9	8.9	5.0	6.6	7.1	5.4	6.1	7.1	6.0	e6.6
9	8.8	7.4	8.0	9.2	4.8	6.7	7.2	5.1	6.2	9.4	7.1	e8.1
10	8.5	6.9	7.6	6.8	5.4	6.3	7.4	5.2	6.3	10.1	6.8	8.3
11	7.8	7.1	7.5	7.4	5.4	6.3	7.1	5.8	6.7	8.1	6.4	7.2
12	8.1	7.3	7.6	6.7	5.6	6.1	7.4	5.9	6.6	7.8	6.5	7.1
13	7.7	6.9	7.3	7.4	5.4	6.4	8.0	5.4	6.7	8.1	6.5	7.2
14	7.8	6.8	7.2	7.5	5.5	6.4	7.6	6.4	6.9	8.3	7.7	8.0
15	8.0	6.3	7.2	7.9	4.8	6.4	7.8	6.1	6.8	9.2	7.7	8.2
16	8.0	6.4	7.1	8.1	5.5	6.6	7.1	6.0	6.6	8.3	7.3	7.8
17	8.3	6.3	7.2	8.2	5.2	6.6	7.1	5.7	6.4	8.6	6.9	7.8
18	8.4	6.1	7.2	8.4	5.4	6.8	7.3	5.5	6.3	7.8	7.1	7.5
19	8.1	6.0	6.9	9.3	5.4	7.0	7.4	5.4	6.3	9.1	7.8	8.4
20	9.0	6.3	7.5	9.8	5.1	7.1	7.7	5.3	6.4	9.3	8.2	8.7
21	8.9	6.5	7.6	8.4	4.2	6.1	7.8	5.6	6.5	8.6	7.9	8.3
22	8.2	0.1	5.6	7.6	4.2	5.8	7.8	5.5	6.5	8.6	7.8	8.1
23	7.9	0.1	e4.4	8.4	5.3	6.6	8.0	5.8	6.7	8.9	7.7	8.2
24	7.9	4.4	e6.5	8.4	5.5	6.8	8.0	5.8	6.8	8.3	7.4	7.9
25	6.8	5.0	e6.2	8.6	5.2	6.7	7.8	5.8	6.6	8.6	7.4	8.0
26	7.3	6.5	6.8	8.6	5.8	6.9	7.8	5.6	6.5	8.7	7.6	8.1
27	7.6	6.4	6.9	8.6	5.0	6.6	7.0	5.5	6.1	9.0	7.4	8.2
28	7.8	6.2	6.9	7.3	3.8	5.6	6.7	0.1	5.6	10.0	8.0	8.8
29	8.0	6.1	6.9	8.5	4.3	6.2	6.6	0.1	3.5	10.7	8.7	9.5
30	7.2	6.6	7.0	7.4	4.9	5.9	7.7	0.1	4.1	10.3	8.6	9.3
31	---	---	---	6.8	3.3	5.0	9.0	0.1	5.6	---	---	---
MONTH	10.1	0.1	7.2	9.8	3.3	6.4	9.0	0.1	6.1	10.7	1.8	7.3

e Estimated

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15	4.0	5.8	12	8.0	10	5.0	3.0	4.0	---	---	---
2	69	4.0	17	10	6.0	7.3	10	4.0	5.3	---	---	---
3	67	12	32	9.0	6.0	6.8	15	5.0	10	---	---	---
4	290	13	110	6.0	4.0	5.0	10	4.0	5.1	---	---	---
5	61	12	29	17	5.0	11	12	4.0	5.0	---	---	---
6	40	12	23	16	5.1	9.1	8.0	4.0	5.2	---	---	---
7	23	5.0	11	9.3	4.2	5.0	14	5.0	7.0	---	---	---
8	11	5.0	6.8	7.5	3.5	5.0	16	5.0	6.8	---	---	---
9	17	7.0	9.7	6.0	3.0	4.8	10	4.0	5.4	---	---	---
10	14	4.0	6.6	6.0	3.0	4.1	7.0	5.0	5.5	---	---	---
11	11	5.0	7.0	7.0	2.0	3.3	---	---	---	---	---	---
12	11	6.0	8.4	4.0	2.0	2.7	---	---	---	---	---	---
13	14	5.0	7.0	5.0	2.0	3.0	---	---	---	---	---	---
14	8.0	3.0	4.2	6.0	3.0	4.2	---	---	---	---	---	---
15	9.0	4.0	6.1	8.0	4.0	5.7	---	---	---	---	---	---
16	19	3.0	5.7	6.0	3.0	4.0	---	---	---	---	---	---
17	1,300	12	77	4.0	3.0	3.2	---	---	---	---	---	---
18	14	8.0	10	5.0	3.0	3.7	---	---	---	---	---	---
19	19	7.0	12	7.0	3.0	3.7	---	---	---	---	---	---
20	10	2.0	4.3	5.0	3.0	3.7	---	---	---	---	---	---
21	7.0	2.0	3.1	5.0	3.0	4.1	---	---	---	---	---	---
22	8.0	4.0	5.8	5.0	3.0	3.9	---	---	---	---	---	---
23	140	6.0	36	4.0	3.0	3.8	---	---	---	---	---	---
24	100	30	51	5.0	3.0	3.8	---	---	---	---	---	---
25	38	13	24	4.0	3.0	3.3	---	---	---	---	---	---
26	14	5.0	8.1	6.0	3.0	3.9	---	---	---	---	---	---
27	120	5.0	50	5.0	3.0	4.0	---	---	---	---	---	---
28	78	26	46	4.0	3.0	3.5	---	---	---	---	---	---
29	81	26	51	6.0	3.0	3.9	---	---	---	---	---	---
30	44	26	34	7.0	3.0	4.2	---	---	---	---	---	---
31	26	11	15	---	---	---	---	---	---	---	---	---
MONTH	1,300	2.0	23	17	2.0	4.8	16	3.0	5.9	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	100	32	54
2	---	---	---	---	---	---	---	---	---	70	26	40
3	---	---	---	---	---	---	---	---	---	37	26	32
4	---	---	---	---	---	---	---	---	---	160	28	85
5	---	---	---	---	---	---	---	---	---	110	52	85
6	---	---	---	---	---	---	---	---	---	220	50	78
7	---	---	---	---	---	---	---	---	---	83	34	53
8	---	---	---	---	---	---	---	---	---	1,500	35	110
9	---	---	---	---	---	---	18	10	12	200	60	110
10	---	---	---	---	---	---	22	12	15	1,600	17	720
11	---	---	---	---	---	---	160	17	37	500	130	240
12	---	---	---	---	---	---	180	31	120	150	64	100
13	---	---	---	---	---	---	440	96	220	85	48	57
14	---	---	---	---	---	---	440	12	160	53	35	45
15	---	---	---	---	---	---	22	12	15	51	35	43
16	---	---	---	---	---	---	120	13	48	220	36	87
17	---	---	---	---	---	---	83	33	53	80	35	55
18	---	---	---	---	---	---	62	22	31	39	32	36
19	---	---	---	---	---	---	1,400	24	700	63	26	35
20	---	---	---	---	---	---	1,400	280	830	41	23	32
21	---	---	---	---	---	---	320	77	180	34	20	28
22	---	---	---	---	---	---	78	40	57	30	19	24
23	---	---	---	---	---	---	340	32	59	32	16	21
24	---	---	---	---	---	---	1,200	170	290	33	16	20
25	---	---	---	---	---	---	1,200	140	310	22	12	17
26	---	---	---	---	---	---	140	70	100	45	14	19
27	---	---	---	---	---	---	74	62	67	72	10	20
28	---	---	---	---	---	---	75	46	57	26	10	15
29	---	---	---	---	---	---	59	37	46	94	11	17
30	---	---	---	---	---	---	50	29	39	87	11	18
31	---	---	---	---	---	---	---	---	---	28	11	17
MONTH	---	---	---	---	---	---	1,400	10	160	1,600	10	75

06893500 BLUE RIVER NEAR KANSAS CITY, MO—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	70	13	22	210	43	86	770	18	77	550	100	240
2	1,500	21	e300	56	22	34	1,600	15	120	100	45	66
3	63	46	e55	31	13	21	1,600	14	100	200	35	65
4	46	34	e40	21	10	15	740	14	83	110	29	42
5	34	20	e26	18	8.0	13	1,600	21	160	33	19	26
6	350	23	110	36	7.0	13	1,600	46	290	28	16	21
7	100	34	43	170	10	23	130	30	62	34	14	19
8	110	18	33	46	10	e20	140	20	43	36	15	23
9	100	14	22	1,500	10	e130	54	16	30	28	11	17
10	1,600	12	75	1,300	93	280	37	15	25	22	8.0	14
11	1,600	120	680	100	25	51	450	19	80	2,300	10	190
12	1,600	87	220	90	22	48	44	16	30	130	50	80
13	1,200	72	160	45	18	26	73	13	31	2,300	45	330
14	150	38	55	49	19	27	57	21	37	630	74	220
15	120	24	37	34	16	22	320	16	78	75	43	56
16	98	23	33	36	18	24	290	40	91	380	32	110
17	75	15	27	56	12	21	56	19	39	110	43	64
18	65	13	19	29	13	20	40	20	30	410	30	92
19	49	12	19	29	10	18	35	17	25	110	32	60
20	49	15	25	25	9.0	17	33	15	23	42	15	22
21	53	14	e25	26	12	18	39	15	23	130	20	47
22	1,600	13	e470	100	19	37	34	15	21	120	30	63
23	1,600	280	e780	120	19	34	540	14	93	100	21	44
24	570	35	e140	36	12	23	34	12	20	88	29	56
25	220	14	e66	37	13	22	40	14	21	84	28	47
26	210	63	110	1,100	14	69	32	12	20	44	16	31
27	63	23	39	270	10	45	43	15	27	44	15	27
28	34	13	22	51	13	22	1,600	19	250	30	10	19
29	300	10	41	40	12	23	1,600	55	320	28	12	17
30	1,500	150	380	67	16	28	1,600	35	590	1,900	20	140
31	---	---	---	500	19	44	1,500	490	800	---	---	---
MONTH	1,600	10	140	1,500	7.0	41	1,600	12	120	2,300	8.0	75

e Estimated

06893557 BRUSH CREEK AT WARD PARKWAY IN KANSAS CITY, MO

LOCATION.--Lat 39°01'59", long 94°36'19", in NW 1/4 NW 1/4 sec.31, T.49 N., R.33 W. in Jackson County, Hydrologic Unit 10300101, on the downstream side of the right wingwall on Ward Parkway at Shawnee Mission Parkway in Kansas City and 5.4 mi upstream from the Blue River.

DRAINAGE AREA.--12.2 mi^2.

PERIOD OF RECORD--July 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft above National Geodetic Vertical Datum of 1929 (from levels by the U.S. Geological Survey).

REMARKS.--No estimated daily discharges. Records fair. U.S.G.S. satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

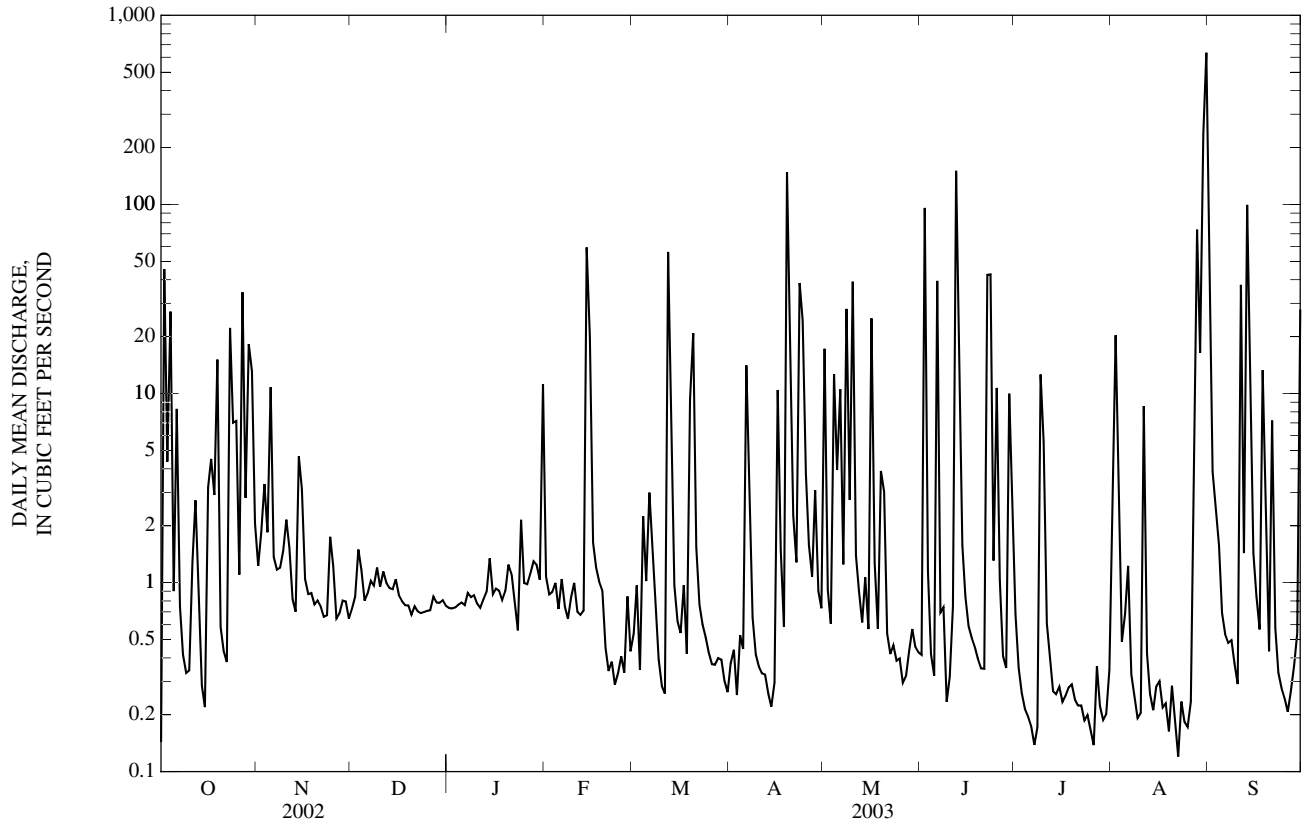
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.14	1.2	0.73	0.73	1.1	0.54	0.37	17	0.41	0.68	2.7	42
2	45	1.8	0.84	0.73	0.87	0.97	0.44	0.92	96	0.35	20	3.9
3	4.4	3.3	1.5	0.74	0.89	0.35	0.25	0.61	1.1	0.26	4.8	2.5
4	27	1.8	1.2	0.77	1.00	2.2	0.53	13	0.42	0.22	0.49	1.6
5	0.90	11	0.80	0.78	0.73	1.0	0.45	3.9	0.32	0.20	0.68	0.69
6	8.3	1.4	0.88	0.76	1.0	3.0	14	11	39	0.17	1.2	0.53
7	0.75	1.2	1.0	0.88	0.74	1.5	2.4	1.2	0.69	0.14	0.33	0.48
8	0.42	1.2	0.96	0.84	0.64	0.82	0.65	28	0.74	0.17	0.25	0.50
9	0.33	1.5	1.2	0.86	0.84	0.39	0.42	2.7	0.23	13	0.19	0.37
10	0.34	2.2	0.95	0.77	1.00	0.28	0.36	39	0.32	5.6	0.20	0.29
11	1.3	1.5	1.1	0.74	0.70	0.26	0.33	1.4	0.74	0.61	8.6	38
12	2.7	0.82	0.99	0.82	0.67	56	0.33	0.90	150	0.41	0.42	1.4
13	0.77	0.70	0.93	0.90	0.71	6.9	0.26	0.62	17	0.27	0.26	99
14	0.28	4.6	0.92	1.3	59	0.97	0.22	1.1	1.6	0.26	0.21	7.2
15	0.22	3.1	1.0	0.87	20	0.62	0.30	0.57	0.84	0.28	0.28	1.4
16	3.2	1.0	0.85	0.93	1.6	0.54	10	25	0.59	0.23	0.30	0.85
17	4.5	0.87	0.80	0.91	1.2	0.97	1.5	1.3	0.51	0.25	0.22	0.57
18	2.9	0.88	0.76	0.81	1.0	0.42	0.58	0.57	0.46	0.28	0.23	13
19	15	0.77	0.76	0.90	0.91	9.3	148	3.9	0.40	0.29	0.16	1.4
20	0.58	0.80	0.68	1.2	0.45	21	16	3.0	0.35	0.24	0.28	0.43
21	0.44	0.75	0.75	1.1	0.34	1.5	2.3	0.54	0.35	0.22	0.19	7.2
22	0.38	0.66	0.70	0.79	0.38	0.76	1.3	0.42	42	0.22	0.12	0.57
23	22	0.67	0.69	0.56	0.29	0.60	38	0.47	43	0.19	0.23	0.33
24	7.0	1.7	0.70	2.1	0.33	0.51	24	0.39	1.3	0.20	0.18	0.28
25	7.2	1.2	0.71	0.99	0.41	0.43	3.8	0.40	11	0.17	0.17	0.24
26	1.1	0.65	0.71	0.98	0.33	0.37	1.6	0.30	1.0	0.14	0.23	0.21
27	34	0.69	0.84	1.1	0.84	0.37	1.1	0.32	0.41	0.36	5.8	0.27
28	2.8	0.80	0.78	1.3	0.43	0.40	3.1	0.43	0.35	0.22	74	0.36
29	18	0.79	0.78	1.2	---	0.39	0.90	0.57	10	0.19	16	0.54
30	13	0.64	0.81	1.0	---	0.30	0.73	0.46	2.3	0.20	236	28
31	2.1	---	0.75	11	---	0.26	---	0.43	---	0.35	634	---
MEAN	7.32	1.67	0.87	1.27	3.51	3.67	9.14	5.17	14.1	0.85	32.5	8.47
MAX	45	11	1.5	11	59	56	148	39	150	13	634	99
MIN	0.14	0.64	0.68	0.56	0.29	0.26	0.22	0.30	0.23	0.14	0.12	0.21
IN.	0.69	0.15	0.08	0.12	0.30	0.35	0.84	0.49	1.29	0.08	3.08	0.77

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

MEAN	24.2	8.17	3.43	3.96	7.37	6.88	19.9	16.1	23.7	5.59	10.6	8.75
MAX	87.6	25.5	8.84	8.00	20.6	14.3	41.8	23.2	55.0	12.8	32.5	15.0
(WY)	(1999)	(1999)	(1999)	(1999)	(2001)	(2001)	(1999)	(1999)	(2001)	(2000)	(2003)	(1999)
MIN	1.64	1.67	0.48	0.41	2.71	2.80	1.15	5.17	4.82	0.85	3.46	1.80
(WY)	(2000)	(2003)	(2001)	(2000)	(2000)	(2002)	(2000)	(2003)	(2002)	(2003)	(1999)	(2002)

06893557 BRUSH CREEK AT WARD PARKWAY IN KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1998 - 2003	
ANNUAL MEAN	6.57		7.41		11.6	
HIGHEST ANNUAL MEAN					21.3	1999
LOWEST ANNUAL MEAN					6.59	2000
HIGHEST DAILY MEAN	240	Apr 21	634	Aug 31	1,520	Oct 4, 1998
LOWEST DAILY MEAN	0.00	Jan 1-8	0.12	Aug 22	0.00	Jul 15, 1998, Jan. 1-8, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.19	Aug 19	0.00	Jul 15, 1998, Jan. 1, 2002
MAXIMUM PEAK FLOW	---		4,300	Jun 12	0.00	Oct 4, 1998
MAXIMUM PEAK STAGE	---		44.04	Jun 12	50.90	Oct 4, 1998
INSTANTANEOUS LOW FLOW	---		0.06	Aug 22,23	0.00	Jan 1-8, 2002
ANNUAL RUNOFF (INCHES)	7.31		8.24		12.94	
10 PERCENT EXCEEDS	14		13		22	
50 PERCENT EXCEEDS	0.87		0.78		1.1	
90 PERCENT EXCEEDS	0.23		0.25		0.34	



06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO

LOCATION.--Lat 39°02'21", long 94°34'43", in NW ¼ SE ¼ sec.29, T.49 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on the left upstream Rockhill Road bridge abutment and 3.7 mi upstream from the Blue River.

DRAINAGE AREA.--17.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 799.70 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Geological Survey).

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. U.S.G.S satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.63	1.3	e1.0	e1.0	0.96	e0.72	0.40	19	1.7	2.0	0.68	15
2	51	1.5	e1.2	e1.0	0.85	e1.5	0.55	2.0	128	1.2	13	0.35
3	5.3	2.7	e2.3	e1.0	0.83	0.35	0.43	1.9	3.5	1.2	4.5	0.11
4	21	1.5	e1.8	e1.1	0.80	2.5	0.69	17	0.94	1.1	0.70	0.09
5	1.3	10	e1.2	e1.1	0.69	1.0	0.62	8.2	1.2	1.0	0.61	0.05
6	8.4	3.1	e1.3	e1.1	0.87	2.4	17	16	48	0.69	0.81	0.05
7	0.94	1.7	e1.5	e1.3	0.54	1.5	4.0	4.1	2.1	0.09	0.26	0.05
8	0.91	3.0	e1.4	e1.2	0.53	0.76	0.78	39	1.9	0.11	0.21	0.04
9	0.64	4.8	e1.8	e1.2	0.71	0.68	0.88	7.4	0.84	7.6	0.25	0.03
10	0.73	7.2	e1.4	1.4	0.87	6.9	0.88	60	1.6	7.2	0.25	0.03
11	1.5	7.3	e1.7	1.6	0.64	2.6	1.3	2.2	2.6	1.3	6.9	43
12	3.2	5.7	e1.5	2.0	0.74	65	2.6	1.9	198	0.89	0.27	0.08
13	1.3	6.2	e1.4	2.3	1.0	9.6	1.8	1.1	21	0.47	0.20	92
14	0.81	10	e1.4	2.7	57	1.1	1.1	2.5	3.3	0.33	0.18	1.7
15	0.75	4.7	e1.6	2.8	20	0.82	0.58	1.8	1.9	0.24	0.18	0.09
16	2.5	1.8	e1.2	2.5	1.3	0.70	15	29	0.91	0.18	0.42	0.08
17	5.9	1.9	e1.2	1.9	1.0	1.3	2.0	2.7	0.87	0.50	0.32	0.06
18	5.3	1.9	e1.1	1.7	e1.2	0.80	1.2	1.4	1.1	0.63	0.43	4.2
19	15	e1.1	e1.1	2.0	e1.3	10	228	6.4	0.98	0.53	0.50	0.11
20	6.7	e1.2	e0.94	2.9	e0.57	24	19	4.1	0.68	0.38	0.72	0.05
21	4.1	e1.1	e1.1	2.6	e0.38	1.4	2.0	1.0	0.79	0.20	0.28	3.1
22	4.6	e0.92	e0.99	1.9	e0.45	1.2	1.1	0.88	50	0.42	0.19	0.05
23	21	e0.93	e0.97	2.2	e0.30	1.1	49	1.2	55	0.31	0.26	0.03
24	7.1	e2.7	e0.98	2.8	e0.37	0.65	31	1.5	2.3	0.72	0.67	0.03
25	7.7	e1.8	e1.0	1.3	e0.50	0.69	4.9	0.76	9.0	0.28	0.82	0.04
26	1.8	e0.89	e1.0	1.3	e0.37	0.49	2.2	0.60	2.1	0.19	1.4	0.02
27	32	e0.96	e1.2	1.3	e1.2	0.42	1.8	0.20	0.58	0.38	6.2	0.01
28	2.6	e1.2	e1.1	2.0	e0.53	0.28	5.1	1.4	1.1	0.18	67	0.01
29	15	e1.1	e1.1	1.8	---	0.26	1.4	0.91	7.5	0.16	8.9	0.01
30	11	e0.89	e1.2	1.4	---	0.30	1.00	1.0	4.5	0.18	321	16
31	2.2	---	e1.1	8.9	---	0.32	---	1.6	---	0.12	925	---
MEAN	7.84	3.04	1.28	1.98	3.45	4.56	13.3	7.70	18.5	0.99	44.0	5.88
MAX	51	10	2.3	8.9	57	65	228	60	198	7.6	925	92
MIN	0.63	0.89	0.94	1.0	0.30	0.26	0.40	0.20	0.58	0.09	0.18	0.01
IN.	0.53	0.20	0.09	0.13	0.21	0.31	0.87	0.52	1.21	0.07	2.98	0.39

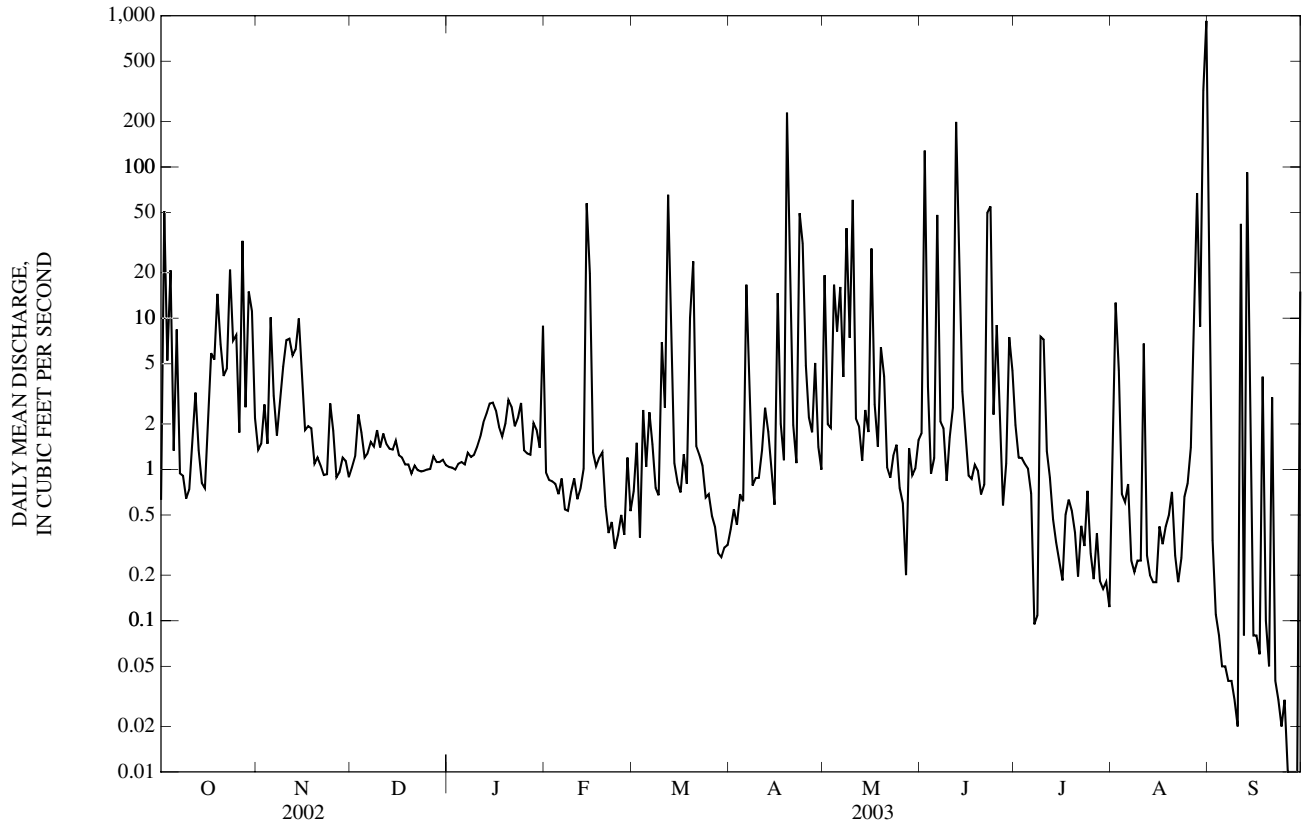
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

MEAN	38.0	12.1	4.78	5.59	8.44	8.76	28.7	19.2	32.8	7.15	14.6	14.5
MAX	145	41.4	10.9	11.4	18.0	18.0	69.1	30.7	73.8	17.1	44.0	39.8
(WY)	(1999)	(1999)	(1999)	(1999)	(2001)	(1999)	(1999)	(2002)	(2001)	(2000)	(2003)	(1998)
MIN	3.45	3.04	0.76	1.98	3.45	3.77	2.65	7.70	6.51	0.99	5.34	1.88
(WY)	(2000)	(2003)	(2001)	(2003)	(2003)	(2002)	(2000)	(2003)	(2002)	(2003)	(2002)	(2002)

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1998 - 2003	
ANNUAL MEAN	8.65		9.41		15.9	
HIGHEST ANNUAL MEAN					32.9	1999
LOWEST ANNUAL MEAN					9.41	2003
HIGHEST DAILY MEAN	320	Apr 21	925	Aug 31	2,540	Oct 4, 1998
LOWEST DAILY MEAN	0.00	Jan 1-13	0.01	Sep 27-29	0.00	Mar 7, 2001, Jan 1-13, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.02	Sep 23	0.00	Jan 1, 2002
MAXIMUM PEAK FLOW	---		4,360	Jun 12	21,700[a]	Oct 4, 1998
MAXIMUM PEAK STAGE	---		10.50	Jun 12	21.71[b]	Oct 4, 1998
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Many Years
ANNUAL RUNOFF (INCHES)	6.91		7.52		12.69	
10 PERCENT EXCEEDS	15		12		25	
50 PERCENT EXCEEDS	1.7		1.2		2.8	
90 PERCENT EXCEEDS	0.64		0.21		0.69	

[a] Discharge determined by indirect measurement of peak flow.
[b] From floodmark,
e Estimated



06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE FROM PRESSURE TRANSDUCER (PT).--July 1998 to May 14, 2002.(discontinued)
WATER TEMPERATURE.--July 1998 to current year.
pH.-- July 1998 to current year.
SPECIFIC CONDUCTANCE.--August 1998 to current year.
DISSOLVED OXYGEN.--July 1998 to current year.
TURBIDITY.--July 1998 to current year.

INSTRUMENTATION.--Multi-parameter water-quality monitor deployed seasonally since August 1998. Pressure transducer with temperature sensor deployed October 1999 to May 2002. Electronic data logger with 15 minute recording interval and four hour satellite transmission interval.

REMARKS.-- Interruptions in the record are generally due to malfunction or fouling of the sensors. Daily values were designated as estimated where data corrections for dissolved oxygen exceeded the rating of poor and where turbidity unit values were clearly the result of fouling or wiper malfunction. Estimations and corrections were based on partial data, inspection of contiguous data, hydrograph comparison and the best judgment of the hydrographer. Detailed records of the procedures employed for specific periods of record have been included with the station analysis and are kept on file. The manufacturers' specified range for turbidity sensors used is 0 to 1000 NTU. All values beyond this limit may be considered as >1000 NTU. Values >1000 NTU are maintained for continuity of the record. Specific Conductance records were rated either good or excellent. pH records were rated either good or excellent. Water temperature records were rated excellent. Dissolved oxygen records were rated excellent except for the following periods: May 1-2 and September 21-24 rated good; October 2-4 and August 2-6 rated poor. November 15-December 10 and June 24-July 9 rated poor-estimated; June 2-9, June 23 and September 6-10 rated estimated. Turbidity records were rated excellent except for the following periods: May 8 and July 6 rated estimated.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE FROM PRESSURE TRANSDUCER: Maximum 31.5 °C, August 3, 2001; minimum -1.9 °C, March 14, 1999.
WATER TEMPERATURE: Maximum 36.5 °C, August 31, 2000; minimum 2.0 °C, December 5, 2002.
pH: Maximum 9.8 standard units, August 28, 2001; minimum 5.5 standard units, November 6, 2000.
SPECIFIC CONDUCTANCE: Maximum, 1,410 microsiemens, July 6-7, 1999; minimum 84 microsiemens, August 25, 2001.
DISSOLVED OXYGEN: Maximum 23.3 mg/L, June 26, 2001; minimum 0.0 mg/L, on several days May-August, 1999, July 23, 2002.
TURBIDITY: Maximum 2,300 NTU, September 13, 1998; minimum 0.0 NTU on numerous days August, 1998, May-November, 1999, June-September, 2000, September-November, 2001, July-September, 2002.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 33.9 °C, July 20; minimum, 1.6 °C, December 5.
pH: Maximum, 9.3 standard units, May 23, June 12; minimum, 6.7 standard units, June 16, 18.
SPECIFIC CONDUCTANCE: Maximum, 934 microsiemens, September 7; minimum, 108 microsiemens, August 30.
DISSOLVED OXYGEN: Maximum, 22.8 mg/L, May 23; minimum, 0.0 mg/L, June 14-15, August 28.
TURBIDITY: Maximum, 1,500 NTU, August 30, September 2-5; minimum, 0.0 NTU on several days December and May, June 7-8, July 11.

WATER TEMPERATURE (DEGREES C), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24.7	22.7	23.6	8.7	7.1	7.7	4.5	3.1	3.8	---	---	---
2	24.1	22.5	23.3	7.5	7.0	7.2	4.6	3.1	4.0	---	---	---
3	23.0	21.7	22.3	7.1	6.7	7.0	4.1	3.0	3.5	---	---	---
4	22.3	20.4	21.4	8.2	6.1	7.1	3.0	2.1	2.5	---	---	---
5	20.8	19.1	19.8	8.0	7.2	7.6	2.3	1.6	2.0	---	---	---
6	20.2	18.8	19.3	8.6	6.8	7.7	3.8	1.9	2.8	---	---	---
7	19.3	17.5	18.2	10.0	7.4	8.7	4.6	2.9	3.6	---	---	---
8	19.2	17.1	18.0	10.6	8.7	9.7	4.5	2.9	3.6	---	---	---
9	19.5	17.4	18.2	12.0	10.1	11.0	4.4	3.0	3.7	---	---	---
10	19.1	17.5	18.2	11.8	10.8	11.2	5.3	3.0	4.0	---	---	---
11	20.3	17.9	18.9	10.8	9.3	10.0	---	---	---	---	---	---
12	19.1	17.2	18.3	10.1	8.8	9.4	---	---	---	---	---	---
13	17.9	15.8	16.7	10.2	8.8	9.6	---	---	---	---	---	---
14	16.9	14.9	15.8	9.9	9.7	9.8	---	---	---	---	---	---
15	15.8	14.5	15.2	9.9	8.7	9.3	---	---	---	---	---	---
16	14.9	12.6	13.8	9.7	8.4	8.8	---	---	---	---	---	---
17	13.0	11.6	12.2	8.8	7.8	8.3	---	---	---	---	---	---
18	14.2	11.6	12.6	9.2	8.2	8.6	---	---	---	---	---	---
19	15.3	12.3	13.5	9.0	8.0	8.5	---	---	---	---	---	---
20	14.2	12.2	13.0	9.3	8.3	8.8	---	---	---	---	---	---
21	15.3	12.0	13.4	9.1	8.6	8.9	---	---	---	---	---	---
22	13.7	12.6	13.1	8.9	7.8	8.3	---	---	---	---	---	---
23	12.7	10.6	11.7	9.0	7.6	8.2	---	---	---	---	---	---
24	10.6	9.6	9.9	8.3	6.6	7.7	---	---	---	---	---	---
25	9.6	9.0	9.3	6.6	5.5	5.8	---	---	---	---	---	---
26	9.4	9.1	9.2	5.6	4.6	5.0	---	---	---	---	---	---
27	9.2	8.3	8.8	4.6	3.6	4.2	---	---	---	---	---	---
28	8.8	8.2	8.5	4.6	3.2	3.9	---	---	---	---	---	---
29	9.4	8.6	8.8	5.0	4.0	4.5	---	---	---	---	---	---
30	9.1	8.6	8.9	4.9	3.5	4.1	---	---	---	---	---	---
31	8.7	7.7	8.3	---	---	---	---	---	---	---	---	---
MONTH	24.7	7.7	14.9	12.0	3.2	7.9	5.3	1.6	3.4	---	---	---

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

WATER TEMPERATURE (DEGREES C),—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	22.2	18.7	20.8
2	---	---	---	---	---	---	---	---	---	21.2	18.7	19.8
3	---	---	---	---	---	---	---	---	---	20.2	18.5	19.4
4	---	---	---	---	---	---	---	---	---	19.6	17.2	18.8
5	---	---	---	---	---	---	---	---	---	21.6	17.5	19.6
6	---	---	---	---	---	---	---	---	---	21.0	19.4	20.2
7	---	---	---	---	---	---	---	---	---	24.6	18.3	20.7
8	---	---	---	---	---	---	---	---	---	21.5	18.3	19.4
9	---	---	---	---	---	---	11.6	6.7	8.6	25.5	18.0	21.4
10	---	---	---	---	---	---	12.3	8.4	10.4	22.6	18.3	20.3
11	---	---	---	---	---	---	16.7	10.8	13.7	19.4	17.3	18.3
12	---	---	---	---	---	---	19.3	13.5	16.3	22.8	17.3	19.8
13	---	---	---	---	---	---	20.1	15.4	17.6	21.4	19.0	20.2
14	---	---	---	---	---	---	21.3	16.4	18.6	26.1	19.6	22.3
15	---	---	---	---	---	---	21.5	18.0	19.5	24.8	20.4	22.6
16	---	---	---	---	---	---	20.0	17.0	18.1	21.7	17.7	19.6
17	---	---	---	---	---	---	17.1	15.5	16.1	20.2	17.2	18.4
18	---	---	---	---	---	---	16.3	14.7	15.5	22.2	18.7	20.5
19	---	---	---	---	---	---	16.3	14.2	15.7	22.3	20.0	21.4
20	---	---	---	---	---	---	14.3	13.1	13.9	22.4	18.2	20.1
21	---	---	---	---	---	---	16.4	13.2	14.7	22.1	18.8	19.9
22	---	---	---	---	---	---	20.0	14.9	16.7	22.6	18.6	20.4
23	---	---	---	---	---	---	16.9	14.9	15.8	23.5	19.6	21.5
24	---	---	---	---	---	---	15.0	13.8	14.1	22.1	20.0	20.7
25	---	---	---	---	---	---	14.1	13.4	13.7	21.9	19.1	20.5
26	---	---	---	---	---	---	16.8	12.9	14.8	23.9	20.1	21.9
27	---	---	---	---	---	---	19.6	15.4	17.3	25.8	20.8	23.3
28	---	---	---	---	---	---	20.2	17.9	19.0	25.6	22.1	23.9
29	---	---	---	---	---	---	20.7	18.1	19.4	28.0	22.8	24.9
30	---	---	---	---	---	---	23.8	19.6	21.6	28.8	22.4	25.3
31	---	---	---	---	---	---	---	---	---	26.5	22.7	23.9
MONTH	---	---	---	---	---	---	23.8	6.7	16.0	28.8	17.2	21.0

	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.9	21.4	22.1	28.5	25.4	27.0	28.5	27.0	27.6	21.4	20.6	20.9
2	21.7	16.1	18.1	31.7	26.3	28.7	30.1	25.6	27.6	22.5	20.4	21.3
3	17.5	15.8	16.4	32.3	27.1	29.7	30.6	25.8	28.1	26.8	21.6	23.6
4	20.8	16.0	18.1	33.2	28.9	30.7	30.0	26.3	27.9	24.8	22.4	23.6
5	21.0	18.6	19.8	32.7	29.5	31.1	31.0	26.3	28.2	26.4	22.6	24.0
6	22.9	19.4	21.1	32.2	29.8	31.0	30.7	27.5	29.1	25.7	22.8	24.2
7	22.2	20.5	21.2	32.0	29.2	30.6	31.7	27.4	29.0	25.8	22.9	24.2
8	21.6	19.0	20.5	32.1	29.5	30.8	30.4	27.5	29.0	25.5	23.0	24.2
9	26.0	20.5	22.9	32.1	28.3	30.7	30.1	27.5	28.7	26.0	23.1	24.2
10	25.1	22.1	23.6	30.7	28.0	29.3	29.0	27.2	28.2	24.9	23.0	24.0
11	25.3	22.9	23.9	31.2	28.2	29.2	28.2	26.2	27.5	24.6	23.6	24.0
12	26.8	20.4	24.0	30.8	27.4	28.9	28.2	26.3	27.2	23.8	23.0	23.4
13	26.2	20.1	22.8	30.0	27.4	28.7	27.5	25.8	26.7	23.1	19.4	21.8
14	28.1	22.5	25.2	31.4	27.5	29.2	29.4	26.1	27.5	21.9	18.8	20.3
15	27.5	24.8	26.3	31.2	28.8	29.9	30.9	26.8	28.8	22.3	19.6	21.0
16	27.6	25.4	26.7	31.8	28.5	30.0	32.2	27.7	29.7	21.9	20.5	21.1
17	27.7	25.1	26.5	32.2	28.9	30.3	31.7	28.5	30.1	22.9	20.6	21.5
18	30.0	25.4	27.5	32.1	29.0	30.4	32.8	29.0	30.9	22.1	19.6	21.2
19	27.8	25.9	26.7	31.0	28.2	29.5	32.9	29.5	31.1	21.4	18.2	19.8
20	26.0	23.8	25.2	33.9	28.8	31.2	31.8	29.5	30.7	20.5	18.8	19.6
21	25.4	24.0	24.8	32.5	29.5	30.9	32.3	29.4	30.8	19.7	18.7	19.2
22	25.1	24.0	24.6	30.7	28.6	29.6	31.5	29.1	30.3	20.9	18.5	19.7
23	24.9	22.1	24.0	29.3	27.2	28.2	30.3	28.1	29.1	22.9	19.2	20.5
24	29.0	24.2	26.4	29.2	26.6	27.9	32.0	27.8	29.5	22.1	20.1	21.0
25	30.4	26.3	27.5	30.4	26.5	28.2	32.3	28.2	30.1	21.8	19.7	20.6
26	27.1	24.4	26.0	31.5	26.7	29.0	32.4	28.9	30.4	21.8	19.4	20.5
27	27.9	24.6	26.2	32.8	28.2	29.7	30.2	27.6	29.1	20.9	19.4	20.1
28	28.4	25.4	26.9	29.8	28.1	29.0	29.2	24.7	27.7	19.4	18.2	18.7
29	28.7	25.6	27.0	29.4	27.5	28.5	27.2	24.2	25.1	18.8	17.1	18.0
30	27.0	24.9	25.8	31.3	27.4	29.2	24.8	21.9	23.4	17.8	13.8	16.2
31	---	---	---	30.6	27.8	29.0	21.9	19.1	20.4	---	---	---
MONTH	30.4	15.8	23.9	33.9	25.4	29.6	32.9	19.1	28.4	26.8	13.8	21.4

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

pH, WATER, UNFILTERED, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.5	7.6	8.1	7.4	7.3	7.3	8.0	7.8	7.9	---	---	---
2	8.2	7.2	7.6	7.3	7.2	7.3	8.0	7.8	7.9	---	---	---
3	7.3	7.0	7.1	7.3	7.1	7.2	8.0	7.9	8.0	---	---	---
4	7.6	7.1	7.3	7.3	7.2	7.2	8.1	8.0	8.0	---	---	---
5	7.4	7.2	7.2	7.5	7.2	7.4	8.1	7.9	8.0	---	---	---
6	7.4	7.0	7.2	7.6	7.4	7.5	8.4	7.9	8.1	---	---	---
7	7.3	7.0	7.1	7.6	7.3	7.5	8.3	8.0	8.1	---	---	---
8	7.3	7.0	7.2	7.6	7.4	7.5	8.4	8.0	8.2	---	---	---
9	7.5	7.1	7.3	7.6	7.3	7.4	8.5	8.2	8.3	---	---	---
10	7.7	7.2	7.3	7.5	7.4	7.4	8.3	8.2	8.3	---	---	---
11	8.1	7.2	7.5	7.5	7.3	7.4	---	---	---	---	---	---
12	7.7	7.3	7.5	7.5	7.3	7.3	---	---	---	---	---	---
13	8.2	7.4	7.6	7.5	7.3	7.4	---	---	---	---	---	---
14	8.4	7.6	7.9	7.4	7.3	7.3	---	---	---	---	---	---
15	8.7	7.6	8.1	7.6	7.3	7.4	---	---	---	---	---	---
16	8.2	7.8	8.1	7.6	7.4	7.5	---	---	---	---	---	---
17	8.1	7.5	7.7	7.5	7.4	7.5	---	---	---	---	---	---
18	8.4	7.5	7.9	7.5	7.4	7.5	---	---	---	---	---	---
19	8.1	7.6	7.8	7.6	7.4	7.5	---	---	---	---	---	---
20	8.0	7.3	7.7	7.6	7.4	7.5	---	---	---	---	---	---
21	7.8	7.5	7.6	7.6	7.5	7.6	---	---	---	---	---	---
22	7.9	7.3	7.6	7.7	7.5	7.6	---	---	---	---	---	---
23	7.7	7.5	7.6	7.7	7.5	7.6	---	---	---	---	---	---
24	7.6	7.4	7.5	7.6	7.5	7.6	---	---	---	---	---	---
25	7.6	7.4	7.5	7.7	7.5	7.6	---	---	---	---	---	---
26	7.4	7.3	7.4	7.7	7.6	7.6	---	---	---	---	---	---
27	7.6	7.3	7.5	7.7	7.6	7.6	---	---	---	---	---	---
28	7.5	7.3	7.4	7.8	7.5	7.7	---	---	---	---	---	---
29	7.5	7.2	7.4	7.8	7.7	7.8	---	---	---	---	---	---
30	7.5	7.2	7.4	7.9	7.8	7.8	---	---	---	---	---	---
31	7.4	7.3	7.4	---	---	---	---	---	---	---	---	---
MONTH	8.7	7.0	7.5	7.9	7.1	7.5	8.5	7.8	8.1	---	---	---

		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	---	---	---	8.5	7.4	8.1
2	---	---	---	---	---	---	---	---	---	8.2	7.4	7.7
3	---	---	---	---	---	---	---	---	---	7.7	7.3	7.5
4	---	---	---	---	---	---	---	---	---	7.7	7.2	7.4
5	---	---	---	---	---	---	---	---	---	7.9	7.2	7.5
6	---	---	---	---	---	---	---	---	---	7.4	7.1	7.2
7	---	---	---	---	---	---	---	---	---	7.2	7.0	7.1
8	---	---	---	---	---	---	---	---	---	7.4	7.0	7.2
9	---	---	---	---	---	---	7.6	7.4	7.5	7.4	7.1	7.2
10	---	---	---	---	---	---	7.6	7.4	7.5	7.5	7.0	7.3
11	---	---	---	---	---	---	7.7	7.4	7.6	7.1	6.9	7.0
12	---	---	---	---	---	---	8.2	7.5	7.8	7.1	7.0	7.1
13	---	---	---	---	---	---	8.8	7.7	8.2	7.1	7.1	7.1
14	---	---	---	---	---	---	9.0	8.2	8.6	7.5	7.1	7.2
15	---	---	---	---	---	---	8.9	8.5	8.7	8.2	7.0	7.4
16	---	---	---	---	---	---	8.6	7.4	8.0	7.7	7.0	7.3
17	---	---	---	---	---	---	7.8	7.3	7.6	7.3	7.1	7.2
18	---	---	---	---	---	---	7.6	7.3	7.4	7.3	7.1	7.2
19	---	---	---	---	---	---	8.0	7.0	7.6	7.8	7.1	7.3
20	---	---	---	---	---	---	7.7	7.1	7.4	7.6	6.9	7.1
21	---	---	---	---	---	---	7.2	7.1	7.1	7.7	6.9	7.2
22	---	---	---	---	---	---	7.3	7.0	7.1	8.8	7.0	7.6
23	---	---	---	---	---	---	7.7	7.1	7.2	9.3	7.4	8.2
24	---	---	---	---	---	---	7.7	7.0	7.3	8.8	7.3	7.7
25	---	---	---	---	---	---	7.0	6.9	7.0	7.9	7.0	7.4
26	---	---	---	---	---	---	7.2	6.9	7.0	7.9	7.1	7.4
27	---	---	---	---	---	---	7.3	7.1	7.2	8.2	7.2	7.5
28	---	---	---	---	---	---	7.4	7.2	7.3	8.4	7.1	7.5
29	---	---	---	---	---	---	7.5	7.2	7.4	8.5	7.2	7.5
30	---	---	---	---	---	---	9.1	7.4	8.1	8.6	7.2	7.7
31	---	---	---	---	---	---	---	---	---	8.3	7.3	7.6
MONTH	---	---	---	---	---	---	9.1	6.9	7.6	9.3	6.9	7.4

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

pH, WATER, UNFILTERED, FIELD, STANDARD UNITS,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	7.2	7.3	8.7	7.4	8.0	7.9	7.4	7.6	7.5	7.2	7.3
2	7.6	7.0	7.3	9.2	7.3	8.4	8.4	7.3	7.8	7.6	7.3	7.4
3	7.2	6.9	7.0	9.2	8.3	8.8	8.5	7.4	7.8	7.7	7.3	7.5
4	7.0	6.9	7.0	9.0	8.2	8.7	9.2	7.4	8.2	7.6	7.3	7.5
5	7.1	7.0	7.0	8.7	8.2	8.4	9.1	7.8	8.4	7.8	7.5	7.7
6	7.6	7.0	7.4	8.3	7.6	7.9	9.1	8.6	8.8	8.5	7.6	8.0
7	7.2	7.1	7.1	8.7	7.4	7.9	8.7	7.8	8.3	8.7	7.8	8.2
8	7.3	7.0	7.1	9.2	7.5	8.4	8.6	7.6	8.2	8.7	7.8	8.2
9	8.9	7.2	7.6	8.9	7.2	8.4	8.7	7.8	8.2	8.7	7.7	8.2
10	9.1	7.2	8.1	8.6	7.4	7.9	8.8	7.9	8.4	8.8	7.6	8.3
11	9.2	7.2	8.2	8.3	7.4	7.8	8.6	7.3	8.0	8.6	7.5	8.0
12	9.3	7.0	8.2	8.6	7.3	7.9	8.8	7.7	8.3	7.5	7.1	7.3
13	7.2	6.9	7.1	8.2	7.4	7.9	8.8	7.7	8.3	7.7	7.0	7.2
14	7.1	6.9	7.0	8.3	7.3	7.8	8.8	8.0	8.4	7.6	7.2	7.4
15	7.1	6.9	7.0	8.4	7.5	8.0	8.3	7.8	8.2	7.2	7.0	7.1
16	7.2	6.7	7.0	8.4	7.4	8.0	8.6	7.5	8.0	7.2	7.0	7.1
17	7.0	6.8	6.9	8.5	7.5	8.0	8.8	7.6	8.3	7.4	7.1	7.2
18	7.0	6.7	6.8	8.6	7.4	8.0	8.8	7.7	8.4	7.8	7.2	7.4
19	8.3	6.9	7.1	8.5	7.6	8.1	8.9	8.0	8.6	8.4	7.5	8.0
20	7.4	7.1	7.2	8.6	7.6	8.2	8.8	7.9	8.5	8.7	7.6	8.2
21	7.8	7.2	7.2	8.6	7.8	8.3	8.9	8.1	8.5	8.5	7.7	8.0
22	7.9	7.2	7.4	8.3	7.6	7.9	8.9	8.2	8.6	8.5	7.4	7.9
23	7.9	7.0	7.4	8.4	7.4	7.8	8.8	8.4	8.6	9.0	7.7	8.3
24	7.5	7.0	7.3	8.3	7.4	7.9	8.8	8.2	8.5	8.9	8.0	8.5
25	7.8	7.0	7.2	8.4	7.4	7.9	8.8	8.4	8.6	9.0	8.0	8.4
26	7.6	6.9	7.1	8.3	7.5	7.9	8.8	8.3	8.6	8.8	7.9	8.4
27	8.6	6.9	7.6	8.4	7.7	8.1	8.6	7.2	8.0	8.6	7.9	8.3
28	9.0	7.2	8.2	8.4	7.5	8.0	7.9	7.2	7.4	8.7	8.0	8.3
29	8.8	7.2	8.1	8.4	7.6	8.0	7.9	7.1	7.3	8.6	8.0	8.4
30	8.1	7.1	7.5	8.4	7.5	8.0	7.8	7.0	7.3	8.4	7.6	7.9
31	---	---	---	8.3	7.5	7.9	7.6	7.1	7.4	---	---	---
MONTH	9.3	6.7	7.3	9.2	7.2	8.1	9.2	7.0	8.2	9.0	7.0	7.9

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, µS/cm @ 25°C, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	402	382	390	367	358	363	687	674	680	---	---	---
2	410	249	363	378	367	373	687	680	682	---	---	---
3	270	250	260	379	375	377	690	683	687	---	---	---
4	298	231	265	382	372	376	696	689	693	---	---	---
5	333	298	320	390	332	369	713	694	703	---	---	---
6	336	272	299	431	390	402	707	690	701	---	---	---
7	289	274	279	441	409	424	710	701	707	---	---	---
8	300	288	292	456	438	446	717	705	712	---	---	---
9	322	298	311	471	452	458	724	716	719	---	---	---
10	337	320	326	495	462	479	736	717	726	---	---	---
11	346	333	336	506	494	501	---	---	---	---	---	---
12	367	346	356	525	506	517	---	---	---	---	---	---
13	371	366	368	546	525	533	---	---	---	---	---	---
14	378	370	373	581	534	551	---	---	---	---	---	---
15	384	375	380	598	581	594	---	---	---	---	---	---
16	395	384	387	601	595	598	---	---	---	---	---	---
17	416	395	408	606	600	603	---	---	---	---	---	---
18	445	395	426	613	604	608	---	---	---	---	---	---
19	509	320	483	617	612	614	---	---	---	---	---	---
20	507	494	501	626	616	619	---	---	---	---	---	---
21	502	495	498	635	621	628	---	---	---	---	---	---
22	504	497	501	636	627	632	---	---	---	---	---	---
23	508	389	473	637	633	635	---	---	---	---	---	---
24	409	395	404	650	636	642	---	---	---	---	---	---
25	408	335	359	653	648	651	---	---	---	---	---	---
26	338	334	336	660	652	657	---	---	---	---	---	---
27	343	213	322	663	659	660	---	---	---	---	---	---
28	327	306	320	667	659	664	---	---	---	---	---	---
29	306	179	208	672	665	668	---	---	---	---	---	---
30	340	212	280	679	671	676	---	---	---	---	---	---
31	359	340	353	---	---	---	---	---	---	---	---	---
MONTH	509	179	361	679	332	544	736	674	701	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	704	499	651
2	---	---	---	---	---	---	---	---	---	713	698	703
3	---	---	---	---	---	---	---	---	---	713	700	707
4	---	---	---	---	---	---	---	---	---	714	327	639
5	---	---	---	---	---	---	---	---	---	482	391	470
6	---	---	---	---	---	---	---	---	---	509	357	457
7	---	---	---	---	---	---	---	---	---	441	429	434
8	---	---	---	---	---	---	---	---	---	476	222	423
9	---	---	---	---	---	---	906	889	899	342	287	316
10	---	---	---	---	---	---	900	883	892	317	149	239
11	---	---	---	---	---	---	898	845	876	234	210	223
12	---	---	---	---	---	---	864	834	851	244	232	241
13	---	---	---	---	---	---	842	814	832	259	242	250
14	---	---	---	---	---	---	830	679	797	281	256	268
15	---	---	---	---	---	---	834	821	827	314	281	292
16	---	---	---	---	---	---	841	510	747	592	264	410
17	---	---	---	---	---	---	741	719	735	593	550	583
18	---	---	---	---	---	---	747	737	744	556	504	541
19	---	---	---	---	---	---	744	145	435	518	398	494
20	---	---	---	---	---	---	336	203	276	398	350	374
21	---	---	---	---	---	---	403	334	362	370	358	365
22	---	---	---	---	---	---	467	396	414	388	368	376
23	---	---	---	---	---	---	539	307	473	404	378	392
24	---	---	---	---	---	---	443	190	208	427	379	408
25	---	---	---	---	---	---	259	211	237	446	427	437
26	---	---	---	---	---	---	354	259	303	456	440	449
27	---	---	---	---	---	---	414	343	370	470	451	461
28	---	---	---	---	---	---	495	401	435	486	466	475
29	---	---	---	---	---	---	541	492	516	504	478	492
30	---	---	---	---	---	---	578	538	552	524	504	514
31	---	---	---	---	---	---	---	---	---	538	521	527
MONTH	---	---	---	---	---	---	906	145	581	714	149	439

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, µS/cm @ 25°C,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	550	535	541	465	430	452	651	643	646	708	433	600
2	549	126	309	483	416	457	669	613	634	778	707	754
3	192	159	179	458	422	445	670	596	627	829	766	793
4	222	190	202	458	438	447	617	596	607	868	815	832
5	248	212	231	475	456	466	616	589	606	901	857	878
6	337	167	270	493	472	481	613	601	605	925	893	905
7	273	256	263	502	488	494	622	579	614	934	830	889
8	293	273	282	502	492	498	619	588	609	907	783	836
9	302	285	296	516	430	505	614	577	608	839	773	801
10	311	301	307	544	499	534	612	567	602	812	762	785
11	336	310	323	554	543	548	635	460	556	789	308	643
12	345	116	317	562	543	553	541	531	537	408	367	389
13	366	218	312	554	542	549	542	532	537	390	136	301
14	415	360	383	561	543	556	548	539	542	261	161	231
15	436	409	421	564	552	561	556	541	548	321	259	288
16	441	400	429	571	563	568	564	551	556	360	316	334
17	453	415	437	574	565	571	569	552	559	388	359	374
18	452	256	433	577	564	573	570	555	563	462	353	400
19	477	427	447	583	562	577	570	558	562	515	442	496
20	481	414	461	590	562	576	583	544	560	544	448	519
21	500	452	483	592	574	585	585	549	568	583	338	506
22	502	270	444	601	590	595	600	581	590	595	447	548
23	276	152	221	604	597	600	606	573	601	577	503	556
24	180	167	172	609	602	605	614	603	609	555	525	544
25	230	175	193	614	606	609	624	609	614	564	532	552
26	272	228	252	623	609	616	623	600	615	567	546	559
27	294	270	282	625	616	620	628	437	582	571	562	567
28	306	289	294	631	620	626	581	110	494	579	568	573
29	392	297	329	638	625	631	153	110	137	583	571	577
30	449	392	426	640	633	636	224	108	163	594	341	563
31	---	---	---	648	634	640	444	143	260	---	---	---
MONTH	550	116	331	648	416	554	670	108	546	934	136	586

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, mg/L, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.2	4.9	7.8	8.2	6.3	7.2	13.3	10.0	e12.0	---	---	---
2	6.9	3.0	4.9	6.6	5.3	6.0	13.2	11.2	e12.3	---	---	---
3	3.8	0.5	1.4	5.5	4.3	5.0	13.5	11.4	e12.6	---	---	---
4	7.0	0.6	4.5	5.9	4.5	5.1	14.1	12.5	e13.2	---	---	---
5	5.5	3.6	4.3	9.5	4.9	7.8	14.6	12.5	e13.5	---	---	---
6	6.6	1.4	4.0	9.6	7.8	8.7	17.4	12.7	e14.8	---	---	---
7	5.6	2.0	3.9	9.2	7.0	8.0	16.7	13.4	e15.0	---	---	---
8	5.3	2.1	3.6	8.3	6.3	7.4	17.3	13.7	e15.7	---	---	---
9	6.4	3.3	4.6	8.1	4.8	6.4	18.5	16.0	e16.9	---	---	---
10	8.1	2.7	4.6	7.1	5.3	6.1	18.2	15.3	e16.3	---	---	---
11	9.6	3.2	6.3	8.0	4.7	6.0	---	---	---	---	---	---
12	7.6	3.6	6.0	6.7	3.6	5.2	---	---	---	---	---	---
13	10.3	5.8	7.5	6.5	3.6	5.1	---	---	---	---	---	---
14	11.9	7.2	9.2	5.1	2.1	4.1	---	---	---	---	---	---
15	14.6	7.2	10.7	8.4	4.0	e6.5	---	---	---	---	---	---
16	11.6	9.8	10.8	8.8	6.4	e7.3	---	---	---	---	---	---
17	11.6	8.3	9.6	7.9	6.6	e7.0	---	---	---	---	---	---
18	12.3	8.5	10.1	7.8	6.2	e6.9	---	---	---	---	---	---
19	10.1	2.4	8.8	8.3	6.4	e7.0	---	---	---	---	---	---
20	10.6	7.1	8.1	8.2	6.1	e6.9	---	---	---	---	---	---
21	9.1	6.3	7.7	7.8	6.2	e7.1	---	---	---	---	---	---
22	9.5	5.9	7.9	8.7	6.7	e7.5	---	---	---	---	---	---
23	9.8	7.2	8.3	9.0	6.7	e7.4	---	---	---	---	---	---
24	9.7	8.0	9.0	7.7	6.6	e7.3	---	---	---	---	---	---
25	9.6	7.9	8.9	10.0	6.8	e7.9	---	---	---	---	---	---
26	8.5	3.2	7.5	10.1	7.6	e8.7	---	---	---	---	---	---
27	10.8	6.6	9.1	9.9	8.2	e8.9	---	---	---	---	---	---
28	10.1	6.0	8.6	10.6	4.9	e9.4	---	---	---	---	---	---
29	10.3	5.4	9.3	11.4	8.2	e10.6	---	---	---	---	---	---
30	9.6	7.8	8.8	12.2	10.9	e11.5	---	---	---	---	---	---
31	8.8	7.1	8.1	---	---	---	---	---	---	---	---	---
MONTH	14.6	0.5	7.2	12.2	2.1	7.2	18.5	10.0	14.2	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	13.6	6.1	10.1
2	---	---	---	---	---	---	---	---	---	12.7	4.3	7.7
3	---	---	---	---	---	---	---	---	---	9.4	5.4	7.5
4	---	---	---	---	---	---	---	---	---	9.0	4.1	6.3
5	---	---	---	---	---	---	---	---	---	9.9	4.1	6.7
6	---	---	---	---	---	---	---	---	---	6.0	3.0	4.2
7	---	---	---	---	---	---	---	---	---	4.6	1.4	2.7
8	---	---	---	---	---	---	---	---	---	6.9	0.4	2.3
9	---	---	---	---	---	---	8.1	6.8	7.5	5.8	0.6	2.4
10	---	---	---	---	---	---	9.2	7.4	8.3	8.0	0.6	4.5
11	---	---	---	---	---	---	10.0	7.4	8.6	3.3	0.1	1.7
12	---	---	---	---	---	---	12.3	7.7	9.7	1.2	0.1	0.4
13	---	---	---	---	---	---	16.3	9.8	12.6	1.7	0.1	0.7
14	---	---	---	---	---	---	17.3	11.5	14.5	6.3	0.1	2.3
15	---	---	---	---	---	---	16.4	12.5	14.4	10.9	0.4	4.5
16	---	---	---	---	---	---	13.1	5.9	9.0	7.6	0.8	3.8
17	---	---	---	---	---	---	7.2	3.5	5.9	5.0	1.3	2.7
18	---	---	---	---	---	---	7.0	3.4	5.0	4.5	0.8	2.4
19	---	---	---	---	---	---	9.9	3.7	7.2	9.2	1.4	4.0
20	---	---	---	---	---	---	9.8	5.7	8.0	8.5	0.5	3.5
21	---	---	---	---	---	---	6.4	3.5	5.4	11.7	1.2	5.1
22	---	---	---	---	---	---	5.3	2.2	3.3	16.2	3.7	9.1
23	---	---	---	---	---	---	9.4	2.7	4.0	22.8	6.8	11.8
24	---	---	---	---	---	---	9.8	5.4	7.2	16.1	4.7	9.1
25	---	---	---	---	---	---	5.5	1.9	4.4	10.9	0.3	5.4
26	---	---	---	---	---	---	5.8	1.5	3.9	9.6	0.6	4.4
27	---	---	---	---	---	---	6.6	2.3	5.4	9.4	0.6	5.2
28	---	---	---	---	---	---	6.3	2.8	5.2	12.0	1.6	5.4
29	---	---	---	---	---	---	7.4	2.1	5.8	11.6	0.1	3.0
30	---	---	---	---	---	---	21.1	5.9	11.9	10.5	0.8	4.7
31	---	---	---	---	---	---	---	---	---	9.4	1.4	4.7
MONTH	---	---	---	---	---	---	21.1	1.5	7.6	22.8	0.1	4.8

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, mg/L,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.2	0.2	2.6	15.8	4.3	e9.5	6.7	0.8	3.0	8.0	3.8	6.6
2	8.8	0.4	3.9	19.6	4.6	e12.5	10.4	1.3	5.9	6.7	4.8	5.8
3	4.9	0.9	e1.9	18.2	13.6	e16.2	11.8	1.3	6.1	6.7	4.5	5.8
4	4.5	1.4	e2.3	16.0	13.3	e14.8	20.6	2.6	9.4	6.5	4.4	5.3
5	5.3	2.5	e3.8	13.3	10.5	e11.9	18.7	6.0	11.4	8.2	5.2	6.5
6	10.1	4.2	e7.3	11.7	8.5	e9.9	15.5	10.4	11.9	7.6	2.6	e4.4
7	6.6	4.1	e5.1	14.8	5.6	e9.9	10.5	5.2	8.1	8.8	4.5	e6.6
8	9.1	4.8	e6.3	17.7	6.2	e11.6	10.3	4.1	7.5	12.6	8.4	e10.3
9	14.5	5.6	e8.1	13.8	5.8	e10.6	11.6	4.2	7.7	17.8	12.6	e15.7
10	15.3	5.2	10.4	11.3	2.2	6.1	12.4	4.8	8.6	20.7	17.7	e18.9
11	16.1	6.1	10.9	9.2	1.8	5.1	10.9	2.2	7.1	18.3	5.0	12.4
12	17.7	0.1	10.6	11.3	0.6	5.9	13.2	5.2	9.3	5.1	0.3	2.7
13	0.1	0.1	0.1	9.3	2.3	6.1	12.8	5.3	8.8	8.5	0.1	3.0
14	0.2	0.0	0.1	9.5	1.0	5.3	12.3	6.7	9.1	7.7	4.3	6.6
15	3.2	0.0	0.4	11.2	2.6	6.6	9.0	5.0	7.2	4.6	2.3	3.8
16	3.9	0.1	0.3	10.4	1.6	6.2	11.5	3.1	6.5	3.6	1.1	2.1
17	1.2	0.2	0.6	10.8	2.2	6.5	13.7	3.0	8.7	6.0	2.4	4.0
18	1.9	0.4	1.0	12.1	1.9	7.2	11.6	3.1	7.9	7.8	3.0	5.5
19	14.4	0.1	3.0	10.6	4.1	7.4	12.0	4.8	9.1	11.6	6.2	8.6
20	10.1	0.1	3.6	11.1	2.6	6.7	13.1	4.2	9.4	16.1	6.3	10.9
21	10.0	0.2	3.9	10.1	4.2	7.4	14.1	5.8	9.9	14.1	5.8	9.2
22	8.1	0.1	3.0	8.4	2.4	5.4	14.8	6.2	10	12.6	3.1	8.4
23	7.5	0.1	e3.6	10.1	1.8	5.2	13.1	7.0	10.0	20.6	7.3	12.7
24	6.0	1.2	4.3	9.9	2.0	5.7	12.4	5.7	9.0	17.8	10.4	14.9
25	7.9	2.7	5.0	9.6	2.4	6.3	11.6	6.5	9.1	20.3	12.2	15.1
26	8.3	1.9	e4.7	9.2	2.5	5.8	12.6	6.2	9.2	15.6	11.2	13.2
27	13.9	3.0	7.6	9.2	3.4	6.4	9.4	0.1	4.8	13.8	9.4	11.4
28	17.4	4.8	11.8	11.6	1.7	6.2	6.8	0.0	1.8	13.9	8.8	11.2
29	15.4	5.2	10.3	11.1	2.0	6.0	6.8	1.4	3.8	12.9	8.9	11.1
30	11.6	3.4	e7.0	11.0	2.0	6.7	9.2	1.2	5.8	11.0	6.9	8.5
31	---	---	---	10.2	2.9	7.6	10.2	6.8	9.3	---	---	---
MONTH	17.7	0.0	4.8	19.6	0.6	7.9	20.6	0.0	7.9	20.7	0.1	8.7

e Estimated

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	41	2.0	5.9	16	8.0	11	4.0	1.0	1.3	---	---	---
2	160	1.0	40	12	8.0	10	4.0	1.0	1.4	---	---	---
3	130	41	69	14	7.0	8.6	5.0	1.0	1.3	---	---	---
4	55	8.0	20	15	5.0	7.3	3.0	1.0	1.3	---	---	---
5	12	4.0	6.6	25	6.0	12	2.0	0.0	1.0	---	---	---
6	16	4.0	8.7	12	6.0	8.6	3.0	0.0	1.1	---	---	---
7	28	5.0	8.0	12	6.0	7.7	3.0	0.0	1.2	---	---	---
8	19	5.0	6.5	13	8.0	10	3.0	0.0	0.9	---	---	---
9	9.0	4.0	5.9	9.0	4.0	6.7	4.0	0.0	1.3	---	---	---
10	20	4.0	6.2	11	5.0	6.0	6.0	0.0	0.8	---	---	---
11	8.0	3.0	5.2	8.0	4.0	5.3	---	---	---	---	---	---
12	9.0	4.0	5.7	7.0	4.0	5.2	---	---	---	---	---	---
13	9.0	2.0	5.0	7.0	5.0	5.7	---	---	---	---	---	---
14	7.0	3.0	4.6	22	4.0	7.2	---	---	---	---	---	---
15	9.0	4.0	5.1	12	4.0	7.8	---	---	---	---	---	---
16	10	3.0	5.5	9.0	4.0	5.4	---	---	---	---	---	---
17	9.0	3.0	6.1	6.0	3.0	4.2	---	---	---	---	---	---
18	12	1.0	5.1	5.0	2.0	3.2	---	---	---	---	---	---
19	50	4.0	14	3.0	2.0	2.4	---	---	---	---	---	---
20	15	4.0	7.3	4.0	2.0	2.2	---	---	---	---	---	---
21	8.0	1.0	4.4	7.0	1.0	2.2	---	---	---	---	---	---
22	6.0	2.0	2.9	10	1.0	1.6	---	---	---	---	---	---
23	16	2.0	5.7	3.0	1.0	1.3	---	---	---	---	---	---
24	11	7.0	9.5	3.0	1.0	1.3	---	---	---	---	---	---
25	23	11	19	3.0	1.0	1.1	---	---	---	---	---	---
26	20	10	15	3.0	1.0	1.2	---	---	---	---	---	---
27	43	8.0	21	3.0	1.0	1.1	---	---	---	---	---	---
28	41	16	23	2.0	1.0	1.2	---	---	---	---	---	---
29	41	14	21	4.0	1.0	1.2	---	---	---	---	---	---
30	21	11	14	5.0	1.0	1.7	---	---	---	---	---	---
31	17	10	12	---	---	---	---	---	---	---	---	---
MONTH	160	1.0	13	25	1.0	5.0	6.0	0.0	1.2	---	---	---

	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	52	10	15
2	---	---	---	---	---	---	---	---	---	16	5.0	9.1
3	---	---	---	---	---	---	---	---	---	50	5.0	7.2
4	---	---	---	---	---	---	---	---	---	220	6.0	21
5	---	---	---	---	---	---	---	---	---	48	7.0	13
6	---	---	---	---	---	---	---	---	---	330	5.0	22
7	---	---	---	---	---	---	---	---	---	25	6.0	8.2
8	---	---	---	---	---	---	---	---	---	260	5.0	e31
9	---	---	---	---	---	---	10	5.0	7.8	600	25	66
10	---	---	---	---	---	---	14	5.0	7.0	400	33	130
11	---	---	---	---	---	---	44	3.0	6.0	100	32	60
12	---	---	---	---	---	---	22	2.0	4.5	76	18	29
13	---	---	---	---	---	---	27	3.0	5.6	98	13	29
14	---	---	---	---	---	---	38	5.0	8.3	41	8.0	15
15	---	---	---	---	---	---	23	8.0	12	35	6.0	13
16	---	---	---	---	---	---	73	11	27	480	8.0	38
17	---	---	---	---	---	---	55	9.0	16	58	14	32
18	---	---	---	---	---	---	25	5.0	9.1	36	3.0	8.7
19	---	---	---	---	---	---	840	7.0	140	27	1.0	6.1
20	---	---	---	---	---	---	140	37	65	24	1.0	7.9
21	---	---	---	---	---	---	48	31	39	31	0.0	3.7
22	---	---	---	---	---	---	80	27	39	8.0	0.0	2.9
23	---	---	---	---	---	---	150	23	41	54	0.0	4.5
24	---	---	---	---	---	---	150	28	48	49	1.0	5.2
25	---	---	---	---	---	---	39	18	26	65	1.0	6.2
26	---	---	---	---	---	---	38	16	22	10	0.0	2.3
27	---	---	---	---	---	---	30	9.0	15	37	0.0	2.2
28	---	---	---	---	---	---	20	9.0	12	25	1.0	7.4
29	---	---	---	---	---	---	29	8.0	10	21	0.0	6.1
30	---	---	---	---	---	---	27	8.0	12	84	3.0	11
31	---	---	---	---	---	---	---	---	---	58	6.0	17
MONTH	---	---	---	---	---	---	840	2.0	26	600	0.0	20

06893562 BRUSH CREEK AT ROCKHILL ROAD IN KANSAS CITY, MO—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS,—CONTINUEDWATER YEAR OCTOBER 2002 TO SEPTEMBER

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	43	12	26	130	5.0	16	19	3.0	9.0	1,400	9.0	51
2	160	13	40	140	3.0	13	18	2.0	4.8	1,500	8.0	71
3	34	6.0	11	71	6.0	10	20	2.0	6.1	1,500	110	220
4	12	2.0	4.7	69	5.0	8.9	8.0	1.0	3.4	1,500	100	220
5	66	1.0	3.0	69	3.0	11	11	1.0	3.4	1,500	82	280
6	630	1.0	24	31	3.0	e5.9	9.0	2.0	3.9	310	48	110
7	43	0.0	2.9	53	3.0	8.5	11	2.0	4.8	84	16	31
8	16	0.0	2.0	87	3.0	11	13	2.0	4.6	42	14	22
9	32	1.0	4.2	67	3.0	12	7.0	2.0	4.5	70	10	19
10	15	5.0	6.8	18	2.0	4.9	9.0	3.0	5.2	19	9.0	11
11	38	5.0	7.8	8.0	0.0	1.7	46	4.0	9.9	260	8.0	39
12	840	4.0	46	8.0	1.0	2.7	34	5.0	8.4	70	20	47
13	110	28	48	11	1.0	3.2	14	6.0	8.8	160	9.0	43
14	110	27	48	10	1.0	3.0	18	3.0	7.5	56	26	38
15	100	19	36	8.0	1.0	2.4	17	3.0	5.4	30	11	21
16	100	10	25	6.0	1.0	2.5	27	2.0	5.0	28	2.0	5.2
17	24	2.0	5.9	10	1.0	1.7	23	1.0	4.3	12	2.0	3.1
18	43	2.0	4.9	14	1.0	2.6	30	2.0	5.3	72	3.0	10
19	34	1.0	4.3	8.0	1.0	3.8	10	1.0	3.6	13	6.0	9.1
20	95	2.0	10	11	1.0	2.4	23	3.0	5.1	18	5.0	6.7
21	120	2.0	6.5	12	1.0	2.1	10	3.0	5.3	58	4.0	17
22	110	2.0	11	5.0	1.0	2.5	12	3.0	6.2	16	3.6	7.3
23	---	---	---	10	2.0	3.1	11	5.0	7.1	30	4.0	7.6
24	---	---	---	6.0	2.0	3.4	12	3.0	6.1	29	5.8	9.0
25	100	9.0	26	12	3.0	4.6	21	1.0	4.5	32	5.0	9.0
26	45	4.0	8.3	11	2.0	5.2	31	2.0	7.6	22	6.0	9.5
27	75	3.0	7.5	10	2.0	4.1	73	3.0	21	18	5.0	8.0
28	33	4.0	8.1	9.0	2.0	4.0	420	9.0	51	26	4.0	7.2
29	420	6.0	18	10	1.0	4.1	440	35	110	13	2.0	5.6
30	64	5.0	11	16	1.0	5.3	1,500	31	230	150	4.0	17
31	---	---	---	33	2.0	5.8	1,400	38	220	---	---	---
MONTH	840	0.0	16	140	0.0	5.5	1,500	1.0	25	1,500	2.0	45

e Estimated

06893578 BLUE RIVER AT STADIUM DRIVE IN KANSAS CITY, MO

LOCATION.--Lat 39°03'30", long 94°30'42", in SE $^1/_4$ NW $^1/_4$ NW $^1/_4$ sec.24 , T.49 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on right bank on the downstream side of Stadium Blvd. bridge.

DRAINAGE AREA.--256 mi^2.

PERIOD OF RECORD.--July 1, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 718.29 ft above National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR CURRENT YEAR.-- Maximum discharge for the period July 1 to Sept. 30, 2,490 ft^3/s, Aug. 13, gage height 12.37 ft; minimum 21 ft^3/s, July 26 and Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e30	33	30
2	---	---	---	---	---	---	---	---	---	29	27	28
3	---	---	---	---	---	---	---	---	---	29	29	27
4	---	---	---	---	---	---	---	---	---	e74	32	26
5	---	---	---	---	---	---	---	---	---	e93	29	29
6	---	---	---	---	---	---	---	---	---	42	29	30
7	---	---	---	---	---	---	---	---	---	35	29	30
8	---	---	---	---	---	---	---	---	---	e93	28	31
9	---	---	---	---	---	---	---	---	---	e40	26	34
10	---	---	---	---	---	---	---	---	---	e45	23	34
11	---	---	---	---	---	---	---	---	---	55	23	35
12	---	---	---	---	---	---	---	---	---	134	44	33
13	---	---	---	---	---	---	---	---	---	50	1,180	32
14	---	---	---	---	---	---	---	---	---	41	157	91
15	---	---	---	---	---	---	---	---	---	27	74	123
16	---	---	---	---	---	---	---	---	---	24	54	60
17	---	---	---	---	---	---	---	---	---	23	66	41
18	---	---	---	---	---	---	---	---	---	22	97	46
19	---	---	---	---	---	---	---	---	---	e35	214	370
20	---	---	---	---	---	---	---	---	---	e620	145	131
21	---	---	---	---	---	---	---	---	---	e190	59	63
22	---	---	---	---	---	---	---	---	---	e55	47	46
23	---	---	---	---	---	---	---	---	---	30	73	38
24	---	---	---	---	---	---	---	---	---	28	45	37
25	---	---	---	---	---	---	---	---	---	27	36	34
26	---	---	---	---	---	---	---	---	---	22	36	33
27	---	---	---	---	---	---	---	---	---	23	34	33
28	---	---	---	---	---	---	---	---	---	63	31	34
29	---	---	---	---	---	---	---	---	---	384	31	29
30	---	---	---	---	---	---	---	---	---	86	28	28
31	---	---	---	---	---	---	---	---	---	46	29	---
MEAN	---	---	---	---	---	---	---	---	---	80.5	89.9	54.5
MAX	---	---	---	---	---	---	---	---	---	620	1,180	370
MIN	---	---	---	---	---	---	---	---	---	22	23	26

e Estimated

06893578 BLUE RIVER AT STADIUM DRIVE IN KANSAS CITY, MO—Continued

LOCATION.--Lat 39°03'30", long 94°30'42", in SE $^1/_4$ NW $^1/_4$ NW $^1/_4$ sec.24 , T.49 N., R.33 W., Jackson County, Hydrologic Unit 10300101, on right bank on the downstream side of Stadium Blvd. bridge.

DRAINAGE AREA.--256 mi^2.

PERIOD OF RECORD.--July 1, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 718.29 ft above National Geodetic Vertical Datum of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	69	32	30	70	36	33	154	e31	98	23	5,560
2	110	57	32	29	41	38	32	106	e1,600	66	56	501
3	159	54	32	30	37	35	34	72	398	51	53	233
4	273	53	32	30	35	36	35	144	114	44	35	149
5	115	90	32	31	33	43	35	166	79	37	28	105
6	97	78	33	30	33	39	85	117	366	33	90	86
7	80	50	35	31	38	54	98	145	130	31	39	76
8	47	42	34	34	40	43	49	140	87	28	28	69
9	41	37	33	35	31	35	39	220	66	36	25	60
10	36	38	35	31	32	32	37	1,080	55	313	25	59
11	35	36	34	30	32	41	36	324	328	67	87	233
12	36	37	34	29	28	95	33	135	479	48	55	219
13	50	36	31	28	30	568	30	99	995	39	31	633
14	44	36	29	28	446	89	29	83	104	37	29	819
15	35	52	30	28	605	61	29	71	74	32	31	181
16	34	44	31	e26	136	48	117	173	59	30	28	121
17	107	37	32	e26	80	40	134	158	46	e27	27	96
18	62	36	33	e27	67	40	54	77	40	e26	26	95
19	100	34	32	e29	56	72	1,010	70	38	24	22	138
20	62	33	30	e28	46	331	1,940	75	76	23	23	80
21	41	33	25	e28	e42	138	210	56	52	24	22	101
22	37	31	29	e27	e41	82	112	47	291	23	20	94
23	68	33	31	e26	e39	63	125	44	1,290	24	22	70
24	217	32	31	e29	e39	58	807	43	213	24	22	61
25	124	31	33	e34	e37	46	457	43	105	22	22	55
26	79	32	27	e32	e36	44	199	39	180	23	25	44
27	196	33	29	35	36	39	124	36	71	23	87	e37
28	150	32	30	36	37	e37	105	36	57	23	95	e39
29	193	31	29	36	---	e35	80	35	63	24	503	e38
30	149	31	29	35	---	e34	69	35	275	24	2,390	89
31	107	---	29	80	---	34	---	e34	---	22	14,300	---
MEAN	93.9	42.3	31.2	31.9	79.4	77.0	206	131	259	43.4	589	338
MAX	273	90	35	80	605	568	1,940	1,080	1,600	313	14,300	5,560
MIN	27	31	25	26	28	32	29	34	31	22	20	37

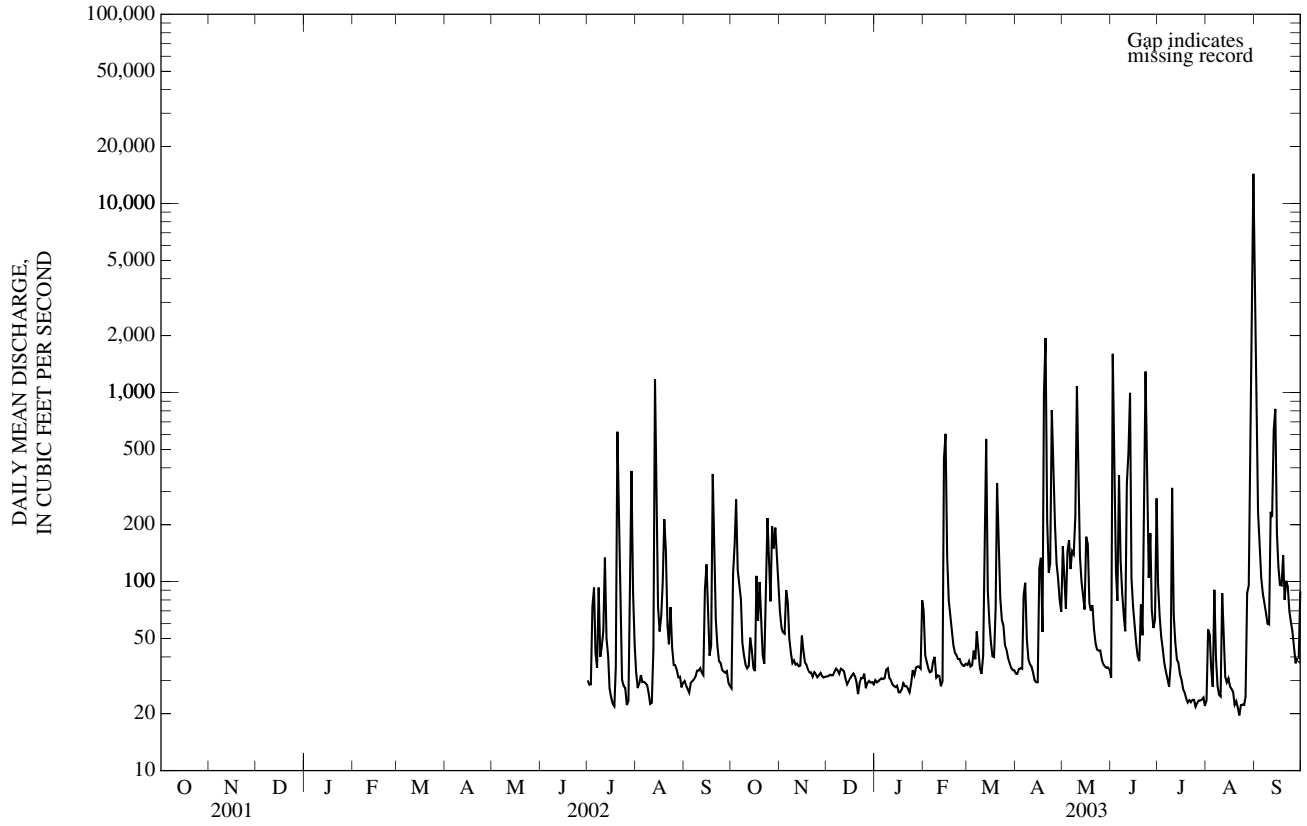
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	93.9	42.3	31.2	31.9	79.4	77.0	206	131	259	62.0	340	196
MAX	93.9	42.3	31.2	31.9	79.4	77.0	206	131	259	80.5	589	338
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)
MIN	93.9	42.3	31.2	31.9	79.4	77.0	206	131	259	43.4	89.9	54.5
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)

06893578 BLUE RIVER AT STADIUM DRIVE IN KANSAS CITY, MO—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	60		160	
HIGHEST ANNUAL MEAN			160	2003
LOWEST ANNUAL MEAN			160	2003
HIGHEST DAILY MEAN	14,300	Aug 31	14,300	Aug 31, 2003
LOWEST DAILY MEAN	20	Aug 22	20	Aug 22, 2003
ANNUAL SEVEN-DAY MINIMUM	22	Aug 19	22	Aug 19, 2003
MAXIMUM PEAK FLOW	19,000	Aug 31	19,000	Aug 31, 2003
MAXIMUM PEAK STAGE	26.34	Aug 31	26.34	Aug 31, 2003
INSTANTANEOUS LOW FLOW	15	Aug 19,22	15	Aug 19,22 2003
10 PERCENT EXCEEDS	97		197	
50 PERCENT EXCEEDS	39		39	
90 PERCENT EXCEEDS	28		28	

e Estimated



06893791 LONGVIEW RESERVOIR AT KANSAS CITY, MO

LOCATION.--Lat 38°55'29", long 94°27'35", in SE ¼ NE ¼ NW ¼ 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 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by the 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. U.S. Army Corps of Engineers satellite telemeter at station.

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, 24,000 ac-ft, Sept. 1, elevation, 892.90 ft; minimum, 21,200 ac-ft, Aug. 28, elevation, 889.97 ft.

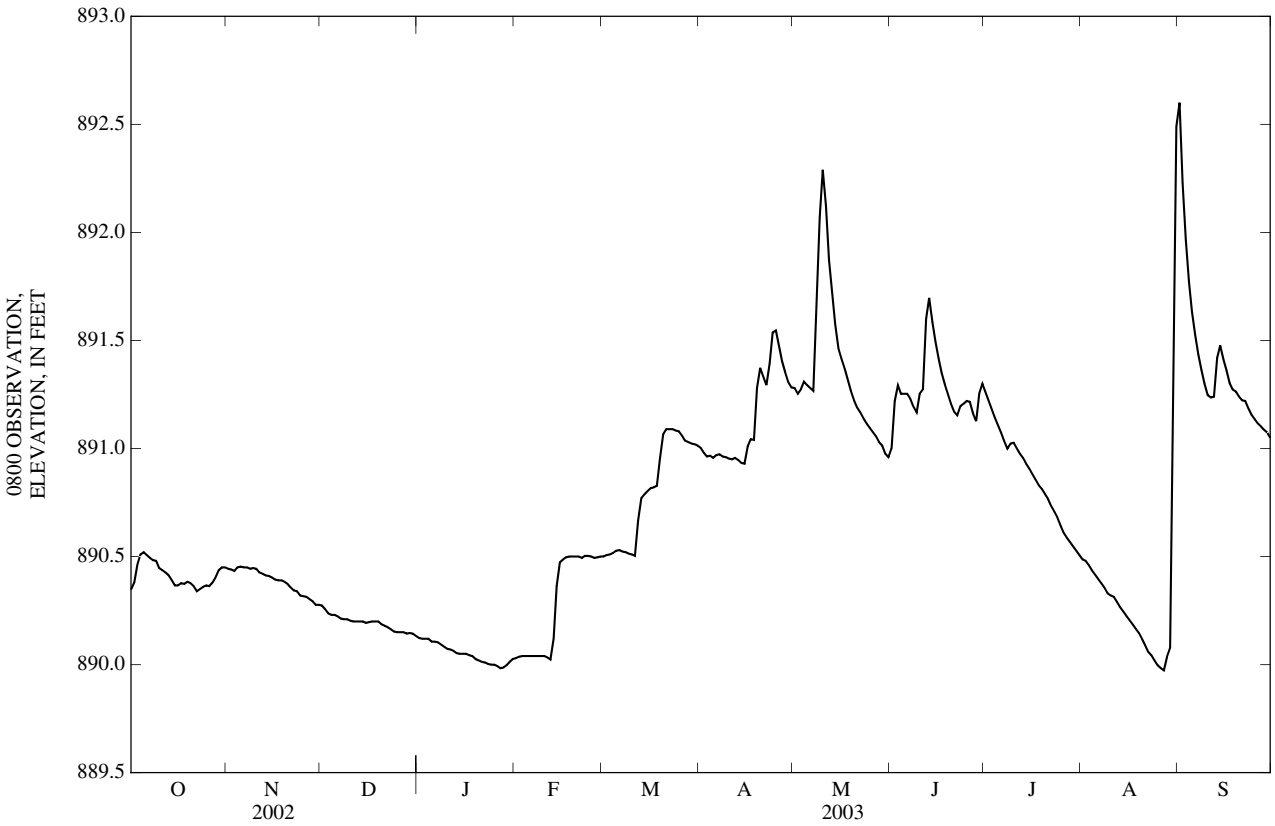
ELEVATION, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
OBSERVATION AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890.36	890.45	890.28	890.13	890.03	890.50	891.01	891.28	890.96	891.29	890.50	892.90
2	890.34	890.44	890.27	890.12	890.03	890.50	891.00	891.28	891.02	891.25	890.48	892.45
3	890.40	890.44	890.25	890.12	890.04	890.51	890.97	891.24	891.32	891.21	890.48	892.12
4	890.49	890.43	890.23	890.12	890.04	890.51	890.96	891.29	891.28	891.17	890.45	891.89
5	890.52	890.46	890.23	890.12	890.04	890.52	890.97	891.32	891.24	891.13	890.43	891.71
6	890.52	890.45	890.23	890.10	890.04	890.53	890.95	891.28	891.26	891.10	890.41	891.59
7	890.50	890.45	890.22	890.11	890.04	890.53	890.98	891.28	891.25	891.06	890.39	891.49
8	890.49	890.45	890.21	890.10	890.04	890.52	890.97	891.26	891.22	891.02	890.37	891.41
9	890.48	890.44	890.21	890.09	890.04	890.52	890.96	891.79	891.18	890.99	890.35	891.34
10	890.48	890.45	890.21	890.08	890.04	890.51	890.96	892.21	891.16	891.04	890.32	891.28
11	890.43	890.44	890.20	890.07	890.04	890.51	890.95	892.33	891.30	891.02	890.32	891.23
12	890.44	890.42	890.20	890.07	890.03	890.50	890.95	892.02	891.26	890.99	890.31	891.24
13	890.42	890.42	890.20	890.06	890.02	890.75	890.96	891.80	891.77	890.97	890.28	891.24
14	890.41	890.41	890.20	890.05	890.17	890.78	890.94	891.66	891.66	890.95	890.26	891.51
15	890.38	890.41	890.20	890.05	890.46	890.79	890.93	891.53	891.55	890.92	890.24	891.46
16	890.36	890.40	890.19	890.05	890.48	890.81	890.93	891.43	891.47	890.90	890.22	891.39
17	890.37	890.39	890.20	890.05	890.49	890.82	891.05	891.41	891.39	890.87	890.20	891.35
18	890.38	890.39	890.20	890.04	890.50	890.82	891.04	891.35	891.33	890.85	890.18	891.28
19	890.37	890.39	890.20	890.04	890.50	890.83	891.04	891.30	891.28	890.82	890.16	891.27
20	890.39	890.38	890.20	890.02	890.50	891.02	891.40	891.25	891.24	890.81	890.14	891.26
21	890.37	890.37	890.18	890.02	890.50	891.09	891.36	891.21	891.19	890.78	890.11	891.23
22	890.36	890.35	890.18	890.01	890.50	891.09	891.32	891.18	891.16	890.76	890.08	891.22
23	890.33	890.34	890.17	890.01	890.49	891.09	891.28	891.16	891.15	890.72	890.05	891.22
24	890.36	890.34	890.16	890.00	890.51	891.09	891.45	891.13	891.22	890.70	890.04	891.17
25	890.36	890.31	890.15	890.00	890.50	891.08	891.58	891.11	891.20	890.67	890.01	891.15
26	890.37	890.32	890.15	890.00	890.50	891.08	891.53	891.09	891.23	890.63	889.99	891.13
27	890.36	890.31	890.15	889.99	890.49	891.05	891.45	891.07	891.21	890.60	889.98	891.11
28	890.39	890.30	890.15	889.98	890.50	891.03	891.38	891.05	891.14	890.58	889.97	891.10
29	890.41	890.29	890.14	889.99	---	891.03	891.34	891.02	891.12	890.56	890.07	891.08
30	890.45	890.27	890.15	890.00	---	891.02	891.29	891.01	891.32	890.54	890.08	891.07
31	890.45	---	890.14	890.02	---	891.02	---	890.96	---	890.52	891.67	---
MAX	890.52	890.46	890.28	890.13	890.51	891.09	891.58	892.33	891.77	891.29	891.67	892.90
MIN	890.33	890.27	890.14	889.98	890.02	890.50	890.93	890.96	890.96	890.52	889.97	891.07
(-)	21,700	21,500	21,400	21,300	21,700	22,200	22,400	22,100	22,400	21,700	22,800	22,200
(=)	+100	-200	-100	-100	+400	+500	+200	-300	+300	-700	+1,100	-600

CAL YR 2002.... -600
WTR YR 2003....+600

(-) Contents, in acre-feet, at the end of the month.
(=) Change in contents, in acre-feet.

06893791 LONGVIEW RESERVOIR AT KANSAS CITY, MO—Continued



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 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by the 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, 15,900 ac-ft (elevation 802.0 to 820.3 ft); and of multipurpose pool, 10,640 ac-ft (elevation 760.0 to 802.0 ft). U.S. Army Corps of Engineers satellite telemeter at station.

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, 12,200 ac-ft, May 11, elevation, 803.86 ft; minimum, 10,100 ac-ft, Jan. 22, 26-30, Feb. 12 and 13, elevation, 800.92 ft.

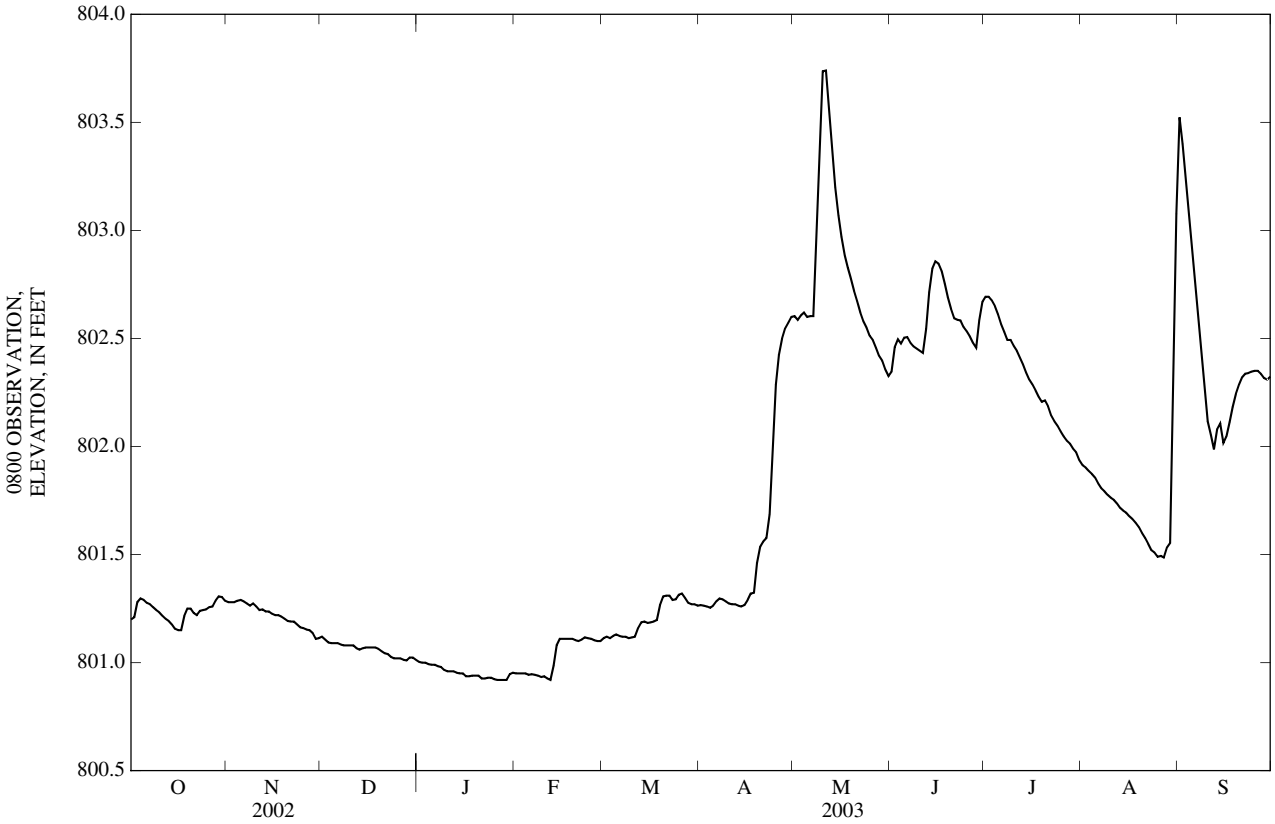
ELEVATION, IN FEET, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
OBSERVATION AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	801.22	801.28	801.12	801.01	800.95	801.10	801.26	802.61	802.32	802.68	801.92	803.45
2	801.19	801.28	801.12	801.00	800.95	801.12	801.27	802.60	802.36	802.70	801.91	803.56
3	801.22	801.28	801.10	801.00	800.95	801.12	801.26	802.58	802.51	802.69	801.90	803.32
4	801.31	801.28	801.09	801.00	800.95	801.11	801.26	802.62	802.49	802.67	801.88	803.06
5	801.29	801.29	801.09	800.99	800.95	801.13	801.25	802.62	802.47	802.64	801.87	802.87
6	801.29	801.29	801.09	800.99	800.94	801.13	801.27	802.59	802.52	802.60	801.85	802.70
7	801.27	801.28	801.09	800.99	800.95	801.12	801.29	802.61	802.50	802.55	801.82	802.55
8	801.27	801.27	801.08	800.98	800.94	801.12	801.30	802.60	802.47	802.52	801.80	802.43
9	801.25	801.26	801.08	800.98	800.94	801.12	801.29	803.12	802.46	802.48	801.79	802.31
10	801.24	801.28	801.08	800.96	800.93	801.11	801.28	803.49	802.45	802.50	801.77	802.19
11	801.23	801.25	801.08	800.96	800.94	801.12	801.27	803.86	802.44	802.45	801.76	802.08
12	801.21	801.24	801.08	800.96	800.93	801.12	801.27	803.68	802.43	802.44	801.75	802.04
13	801.20	801.25	801.06	800.96	800.93	801.18	801.27	803.46	802.60	802.40	801.73	801.96
14	801.19	801.23	801.06	800.95	801.02	801.19	801.26	803.30	802.77	802.37	801.71	802.14
15	801.17	801.24	801.07	800.95	801.11	801.19	801.26	803.15	802.85	802.33	801.70	802.09
16	801.15	801.22	801.07	800.95	801.11	801.18	801.27	803.03	802.86	802.30	801.69	801.98
17	801.15	801.22	801.07	800.93	801.11	801.19	801.30	802.94	802.84	802.28	801.67	802.08
18	801.15	801.22	801.07	800.94	801.11	801.19	801.33	802.86	802.80	802.25	801.66	802.13
19	801.25	801.21	801.07	800.94	801.11	801.20	801.32	802.81	802.73	802.22	801.64	802.21
20	801.25	801.20	801.06	800.94	801.11	801.30	801.53	802.76	802.67	802.20	801.62	802.26
21	801.25	801.19	801.05	800.94	801.10	801.31	801.54	802.70	802.62	802.22	801.59	802.30
22	801.22	801.19	801.04	800.92	801.10	801.31	801.57	802.66	802.58	802.17	801.57	802.33
23	801.22	801.19	801.04	800.93	801.11	801.31	801.58	802.60	802.59	802.13	801.54	802.34
24	801.25	801.17	801.02	800.93	801.12	801.28	801.74	802.57	802.58	802.11	801.51	802.34
25	801.24	801.16	801.02	800.93	801.11	801.30	802.16	802.54	802.54	802.09	801.51	802.35
26	801.25	801.16	801.02	800.92	801.11	801.32	802.35	802.50	802.53	802.06	801.48	802.35
27	801.26	801.15	801.02	800.92	801.10	801.32	802.46	802.49	802.50	802.04	801.50	802.35
28	801.26	801.15	801.01	800.93	801.10	801.29	802.52	802.44	802.47	802.02	801.48	802.33
29	801.30	801.13	801.01	800.93	---	801.27	802.56	802.41	802.45	802.01	801.56	802.31
30	801.31	801.10	801.03	800.92	---	801.27	802.58	802.39	802.65	801.98	801.55	802.31
31	801.30	---	801.02	800.96	---	801.27	---	802.34	---	801.97	802.33	---
MAX	801.31	801.29	801.12	801.01	801.12	801.32	802.58	803.86	802.86	802.70	802.33	803.56
MIN	801.15	801.10	801.01	800.92	800.92	801.10	801.25	802.34	802.32	801.97	801.48	801.96
(-)	10,400	10,200	10,200	10,100	10,200	10,400	11,300	11,100	11,400	10,900	11,100	11,100
(=)	+100	-200	0	-100	+100	+200	+900	-200	+300	-500	+200	0

CAL YR 2002.... +480
WTR YR 2003... +800

(-) Contents, in acre-feet, at the end of the month.
(=) Change in contents, in acre-feet.

06893885 BLUE SPRINGS RESERVOIR NEAR BLUE SPRINGS, MO—Continued



06894000 LITTLE BLUE RIVER NEAR LAKE CITY, MO

LOCATION.--Lat 39°06'02", long 94°18'01", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.35, T.50 N., R.31 W., Jackson County, Hydrologic Unit 10300101, on right bank 50 ft downstream from bridge on west bound lane of State Highway 78, 3.0 mi southwest of Lake City, and 10.5 mi upstream from mouth.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--March 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 719.15 ft above National Geodetic Vertical Datum of 1929. Prior to July 24, 1957, nonrecording gage at site 50 ft downstream at same datum; July 24, 1957, to Apr. 28, 1977, water-stage recorder; Apr. 29, 1977, to May 10, 1979, nonrecording gage; May 11, 1979, to Sept. 12, 1983, water-stage recorder at site 50 ft upstream at present datum.

REMARKS.--Records fair except for the month of October and estimated daily discharges, which are poor. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	6.7	5.4	5.4	11	7.4	5.6	87	16	98	3.2	1,120
2	9.6	5.2	5.4	5.3	7.7	7.7	5.5	81	167	73	3.1	467
3	12	e5.5	5.5	5.3	7.7	7.5	5.9	62	163	62	3.1	346
4	38	5.4	5.5	5.2	6.6	7.4	e7.8	88	72	54	3.2	252
5	19	8.9	5.5	5.4	5.7	7.7	9.1	112	54	48	3.5	189
6	5.8	7.8	5.5	5.5	5.5	7.1	14	87	107	40	3.4	150
7	5.1	6.1	5.4	5.6	5.6	9.5	25	98	71	34	3.2	123
8	4.1	5.2	5.3	5.6	5.1	8.6	15	429	49	29	3.1	104
9	5.0	5.3	5.2	5.4	4.8	7.8	10	344	41	26	3.1	89
10	e3.4	6.5	5.1	5.4	5.1	6.8	8.4	682	38	116	3.1	77
11	e3.3	7.1	5.0	5.2	5.2	6.2	7.7	463	78	35	3.5	98
12	e3.3	7.1	5.1	5.1	5.0	7.1	7.9	323	48	24	5.0	90
13	e3.3	6.5	5.1	5.2	4.8	114	7.9	243	645	20	3.7	254
14	e3.2	6.2	5.4	5.4	79	29	7.9	195	173	17	e2.9	273
15	e3.1	9.3	5.6	5.4	165	13	9.0	156	130	14	e3.2	129
16	3.0	8.6	5.8	5.4	38	10	40	144	111	12	3.1	105
17	4.4	6.9	5.4	5.8	17	8.5	79	136	98	11	2.8	38
18	4.3	6.2	5.8	5.8	13	7.6	24	103	84	9.4	2.5	42
19	35	6.1	5.5	5.5	11	10	112	90	70	7.9	2.5	52
20	7.0	6.0	4.7	5.6	9.3	85	307	92	57	7.3	2.7	26
21	4.9	6.0	5.3	5.6	8.2	48	80	65	48	5.7	2.7	31
22	4.2	6.3	5.2	5.6	8.4	19	49	54	54	5.1	2.5	28
23	4.1	5.6	5.0	e5.5	9.1	14	38	48	92	4.5	2.5	23
24	9.8	5.6	4.9	e5.3	7.9	12	337	43	72	3.9	2.5	22
25	8.6	5.6	4.8	e5.2	7.4	11	336	38	46	3.4	2.5	19
26	7.2	5.5	4.7	e5.2	6.8	9.0	133	32	54	3.3	2.5	17
27	16	5.6	4.9	e5.1	7.1	8.1	100	28	42	3.7	2.7	16
28	12	5.5	5.4	e5.0	7.3	9.1	98	25	34	3.5	3.6	15
29	17	5.4	5.2	5.5	---	8.6	80	22	99	3.5	33	13
30	19	5.3	5.2	5.5	---	6.6	72	23	304	3.4	365	35
31	9.6	---	5.2	12	---	6.0	---	18	---	3.2	2,030	---
MEAN	9.29	6.30	5.26	5.61	16.9	16.8	67.7	142	104	25.2	81.1	141
MAX	38	9.3	5.8	12	165	114	337	682	645	116	2,030	1,120
MIN	3.0	5.2	4.7	5.0	4.8	6.0	5.5	18	16	3.2	2.5	13
IN.	0.06	0.04	0.03	0.04	0.10	0.10	0.41	0.89	0.63	0.16	0.51	0.86

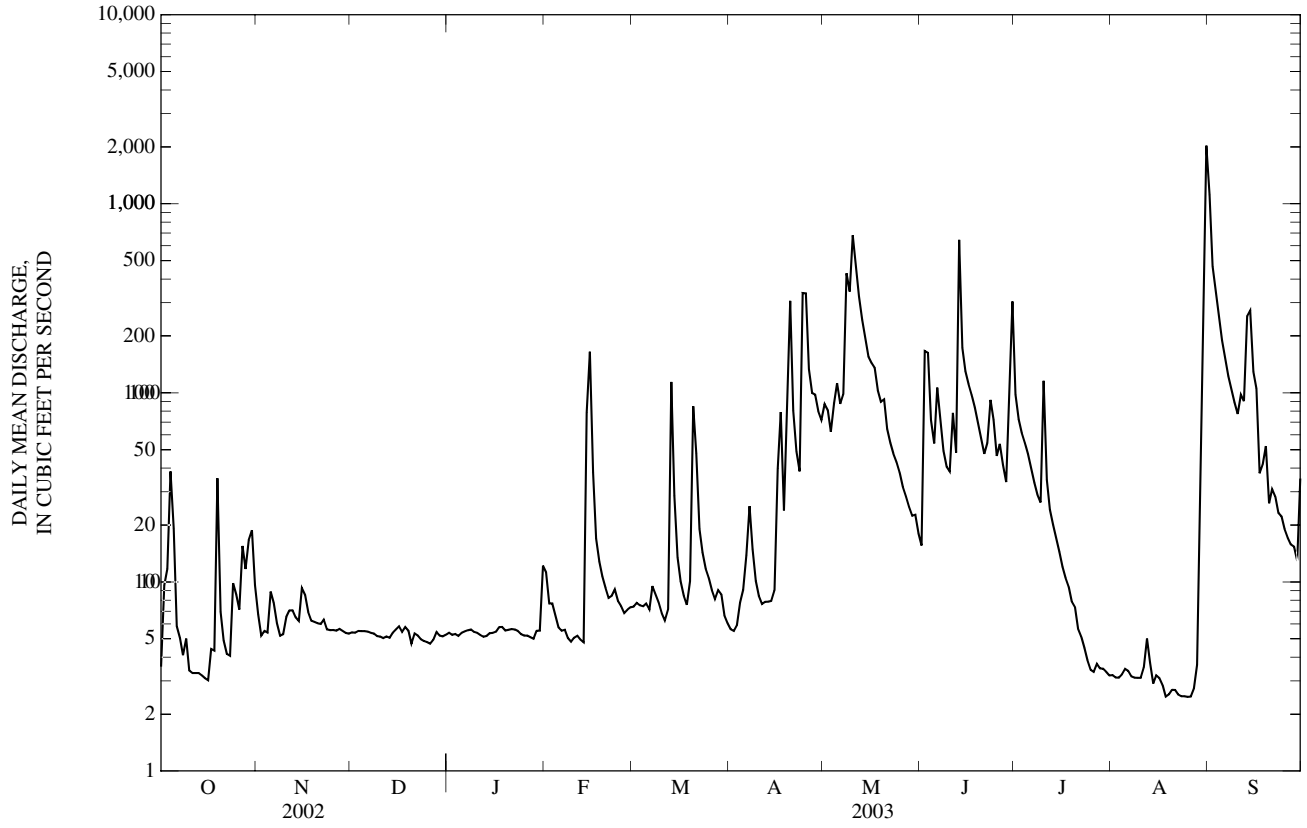
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	132	107	87.5	85.7	130	189	246	278	269	142	91.8	154
MAX	983	854	495	357	576	1,153	1,069	1,534	1,216	1,103	1,455	1,018
(WY)	(1987)	(1962)	(1993)	(1993)	(1985)	(1973)	(1983)	(1995)	(1967)	(1993)	(1982)	(1961)
MIN	0.13	0.49	1.36	1.36	3.09	4.15	11.3	27.9	10.3	0.26	0.016	0.20
(WY)	(1954)	(1957)	(1956)	(1957)	(1957)	(1956)	(1954)	(1988)	(1953)	(1954)	(1953)	(1953)

06894000 LITTLE BLUE RIVER NEAR LAKE CITY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL MEAN	135		51.8		160	
HIGHEST ANNUAL MEAN					440	1993
LOWEST ANNUAL MEAN					11.5	1956
HIGHEST DAILY MEAN	4,320	May 12	2,030	Aug 31	27,700	Aug 13, 1982
LOWEST DAILY MEAN	2.8	Sep 26-28	2.5	Aug 18,19,22-26	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	3.0	Sep 23	2.6	Aug 18	0.00	Several Years
MAXIMUM PEAK FLOW	---		2,590	Aug 31	42,300	Aug 13, 1982
MAXIMUM PEAK STAGE	---		11.42	Aug 31	27.94	Sep 14, 1961
INSTANTANEOUS LOW FLOW	---		2.3	Aug 18	0.00	Several Years
ANNUAL RUNOFF (INCHES)	9.95		3.82		11.79	
10 PERCENT EXCEEDS	276		112		312	
50 PERCENT EXCEEDS	19		7.9		47	
90 PERCENT EXCEEDS	4.4		3.5		7.6	

e Estimated



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 on bridge on State Highway 24 and U.S. Highway 65 at Waverly and at mile 293.5.

DRAINAGE AREA.--485,900 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

PERIOD OF RECORD.--October 1928 to current year. Gage-height records collected at same site 1878-79, 1883-99 are contained in reports of the Missouri River Commission; since 1915 in reports of the 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 National Geodetic Vertical Datum of 1929. 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.--Records good except for estimated daily discharges, which are fair. Some regulation from many upstream reservoirs. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,400	40,400	32,000	21,200	21,500	24,500	33,300	41,000	42,500	56,800	36,300	66,800
2	34,300	41,000	30,000	21,600	22,000	22,100	34,100	41,200	42,600	54,000	35,900	50,000
3	35,900	40,800	28,100	22,100	22,200	20,800	34,000	42,100	46,400	51,200	35,800	36,900
4	38,200	39,800	26,800	22,300	22,300	20,300	33,600	50,800	43,900	49,300	35,700	33,800
5	40,100	39,200	26,000	22,300	21,900	21,000	33,500	52,700	42,600	48,000	35,700	32,200
6	41,400	38,600	25,000	22,200	21,700	22,600	33,500	49,900	42,700	46,900	35,300	31,300
7	43,800	37,500	24,100	22,200	22,100	23,800	33,900	50,600	43,800	45,700	35,100	31,100
8	45,700	36,500	24,000	22,400	22,400	24,200	34,100	70,200	43,100	44,500	34,900	31,800
9	42,700	35,800	23,900	22,900	22,400	24,100	34,500	69,700	42,300	46,000	34,700	32,600
10	40,000	35,900	23,100	22,900	22,300	23,700	35,300	65,500	41,700	54,200	34,600	33,300
11	38,900	36,200	22,400	22,900	22,300	22,600	35,900	77,600	42,900	54,900	35,000	33,700
12	38,900	36,300	22,700	22,700	23,100	21,500	35,800	67,500	51,600	50,700	34,900	34,400
13	38,600	36,300	23,200	22,500	23,900	22,800	34,900	59,500	55,500	52,200	34,500	35,200
14	38,000	36,200	23,400	22,600	23,800	25,400	34,400	56,300	73,000	60,000	34,300	37,500
15	38,300	36,200	23,300	22,500	24,700	23,800	34,500	53,700	69,300	58,900	34,300	41,400
16	38,000	36,300	23,300	21,700	25,000	22,700	34,400	52,600	55,100	51,600	34,000	41,700
17	37,800	36,200	23,600	20,400	22,600	24,300	35,400	52,900	49,200	48,500	33,200	40,700
18	38,200	36,300	23,800	19,700	22,400	28,000	35,800	52,600	46,100	46,400	31,900	38,900
19	38,700	36,300	23,600	20,200	22,800	31,500	35,800	51,600	44,000	44,600	30,600	37,600
20	39,000	35,900	23,500	20,300	23,700	33,100	38,800	50,600	42,400	43,100	29,300	37,500
21	38,800	35,500	23,500	19,600	24,400	31,000	42,600	50,000	42,400	41,700	28,600	39,600
22	38,900	35,800	23,500	19,300	24,100	28,900	42,300	51,600	43,000	40,500	29,400	39,200
23	39,300	36,200	23,400	19,100	23,900	30,100	42,200	51,300	43,700	39,800	31,600	37,600
24	39,600	35,900	23,300	19,200	24,400	32,900	41,200	49,800	44,800	39,100	31,300	36,800
25	40,500	35,700	23,600	20,000	26,900	34,900	43,800	47,300	47,800	38,500	30,600	36,400
26	40,900	35,800	23,400	e20,700	34,000	34,600	44,400	46,300	53,400	38,100	30,200	35,400
27	41,100	35,700	22,700	e21,200	34,000	33,300	46,800	46,000	49,500	37,500	29,800	34,900
28	41,700	36,000	21,800	21,200	28,900	33,200	44,100	45,300	46,900	37,300	29,600	34,300
29	41,500	35,700	21,400	20,800	---	33,600	41,300	44,300	52,800	36,800	29,700	33,700
30	40,800	34,000	21,700	20,800	---	33,100	41,000	43,600	56,300	36,400	30,300	33,500
31	40,400	---	21,400	20,900	---	32,900	---	42,900	---	36,300	36,900	---
MEAN	39,500	36,800	24,050	21,300	24,130	27,140	37,510	52,480	48,040	46,110	33,030	37,330
MAX	45,700	41,000	32,000	22,900	34,000	34,900	46,800	77,600	73,000	60,000	36,900	66,800
MIN	34,300	34,000	21,400	19,100	21,500	20,300	33,300	41,000	41,700	36,300	28,600	31,100
IN.	0.09	0.08	0.06	0.05	0.05	0.06	0.09	0.12	0.11	0.11	0.08	0.09

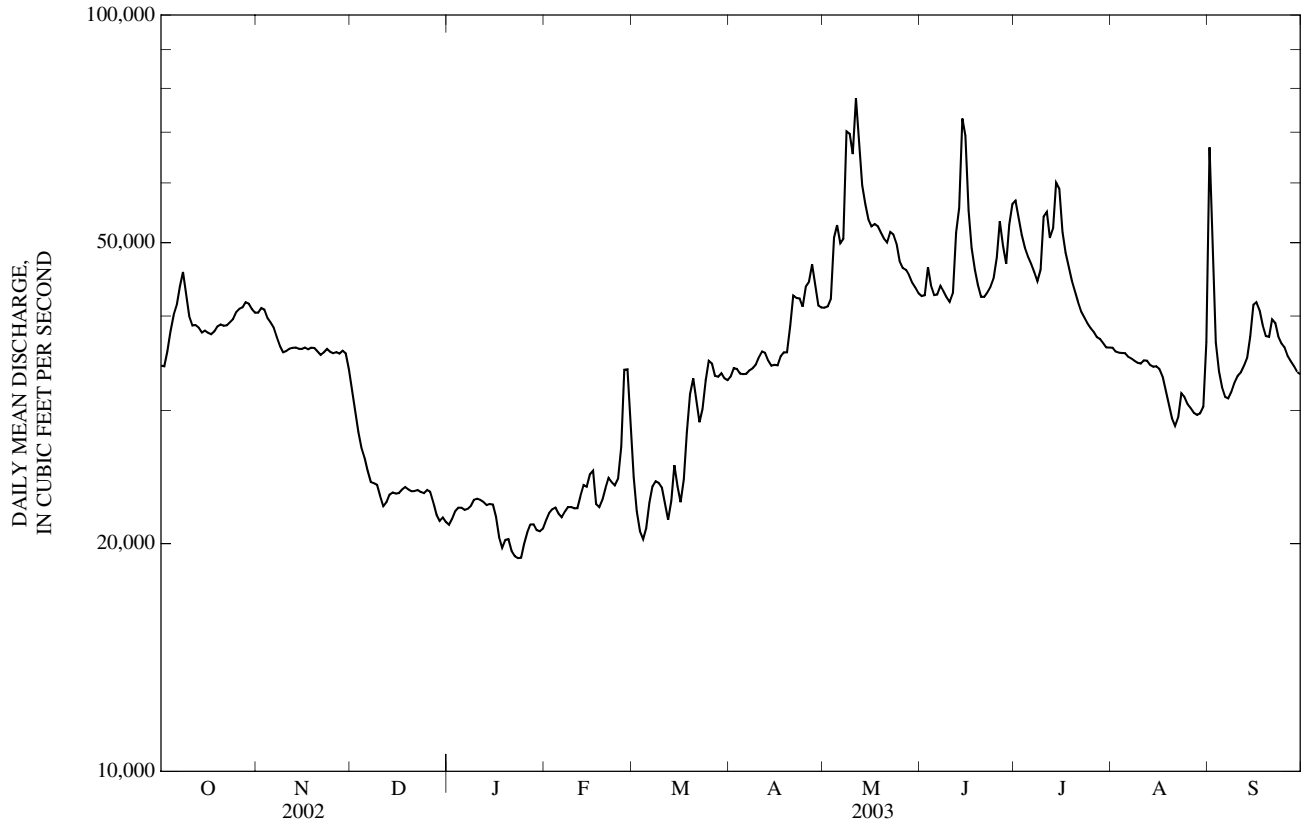
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003[a], BY WATER YEAR (WY)

MEAN	57,300	53,200	38,050	30,450	39,780	55,700	73,100	75,820	81,000	72,770	56,990	57,270
MAX	141,900	116,200	74,470	65,720	79,780	133,500	145,500	168,400	176,600	306,500	155,700	121,700
(WY)	(1974)	(1999)	(1987)	(1973)	(1973)	(1979)	(1984)	(1995)	(1984)	(1993)	(1993)	(1993)
MIN	35,340	21,620	13,010	14,770	16,830	19,250	37,510	39,350	41,340	34,800	33,030	35,380
(WY)	(1992)	(1992)	(1964)	(1963)	(1964)	(1964)	(2003)	(1989)	(1988)	(2002)	(2003)	(1991)

06895500 MISSOURI RIVER AT WAVERLY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003[a]	
ANNUAL MEAN	37,210		35,670		57,740	
HIGHEST ANNUAL MEAN					109,900	1993
LOWEST ANNUAL MEAN					35,670	2003
HIGHEST DAILY MEAN	100,000	May 13	77,600	May 11	611,000	Jul 28, 1993
LOWEST DAILY MEAN	21,400	Dec 29,31	19,100	Jan 23	5,000	Dec 20, 1963
ANNUAL SEVEN-DAY MINIMUM	22,300	Dec 25	19,600	Jan 18	5,540	Dec 17, 1963
MAXIMUM PEAK FLOW	---		81,200	Jun 14	633,000	Jul 27, 1993
MAXIMUM PEAK STAGE	---		16.69	Jun 14	31.15	Jul 27, 1993
INSTANTANEOUS LOW FLOW	---		18,900	Jan 23,24	5,000	Dec 20, 1963
ANNUAL RUNOFF (INCHES)	1.04		1.00		1.61	
10 PERCENT EXCEEDS	51,000		50,600		97,300	
50 PERCENT EXCEEDS	35,900		35,700		49,000	
90 PERCENT EXCEEDS	25,100		22,300		25,400	

[a] Post-regulation period.
e Estimated



06896187 MIDDLE FORK GRAND RIVER NEAR GRANT CITY, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°27'17", long 94°24'12", in NW ¼ SW ¼ NW ¼ sec.9, T.65 N., R.31 W., Worth County, Hydrologic Unit 10280101, on Highway 169 approximately 2.0 mi south of the junction of Highway 169 and State Highway 46 in Grant City.

DRAINAGE AREA.--82.4 mi^2.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
06...	0950	Environmental	0.96	11.6	92	7.9	555	4.5	220	65.1	14.6	4.45
JAN												
15...	0915	Environmental	0.41	12.6	89	8.0	749	0.5	--	--	--	--
MAR												
27...	0910	Environmental	0.46	9.5	91	8.2	560	11.0	--	--	--	--
27...	0911	Replicate	--	--	--	--	--	--	--	--	--	--
MAY												
21...	0955	Environmental	4.2	9.1	92	8.2	577	15.0	200	58.7	13.4	7.39
JUL												
16...	0850	Environmental	0.39	6.6	79	8.0	505	22.5	--	--	--	--
SEP												
03...	1305	Environmental	0.01	9.1	117	8.2	507	28.5	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
06...	26.0	200	203	248	<1	25.1	0.3	55.4	337	<10	0.28	<0.04	<0.06
JAN													
15...	--	288	290	354	<1	--	--	--	--	<10	0.25	<0.04	<0.06
MAR													
27...	--	184	184	225	<1	--	--	--	--	<10	0.40	<0.04	<0.06
27...	--	--	--	--	--	--	--	--	--	12	0.40	<0.04	<0.06
MAY													
21...	32.2	160	159	194	<1	49.6	0.4	50.2	335	22	0.60	E.03	0.46
JUL													
16...	--	180	179	219	<1	--	--	--	--	12	0.66	<0.04	<0.06
SEP													
03...	--	180	180	220	<1	--	--	--	--	28	0.32	<0.04	<0.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
06...	<0.008	0.04	0.04	0.06	140k	300k	310	<2	146	0.9	0.04	<0.2	<6
JAN													
15...	<0.008	<0.02	E.02	E.02	35k	28	9k	--	--	--	--	--	--
MAR													
27...	<0.008	0.02	E.03	0.06	110	83	310	--	--	--	--	--	--
27...	<0.008	0.02	E.03	0.05	--	--	--	--	--	--	--	--	--
MAY													
21...	0.042	0.03	E.03	0.09	1,000	920	660	3	256	1.6	E.02	<0.2	<6
JUL													
16...	<0.008	0.06	0.09	0.15	120	160	220	--	--	--	--	--	--
SEP													
03...	<0.008	<0.18d	0.06	0.08	1,000k	1,100k	1,400k	--	--	--	--	--	--

06896187 MIDDLE FORK GRAND RIVER NEAR GRANT CITY, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Selen- ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
NOV								
06...	E10	<0.08	<1	1,080	<0.02	<0.5	M	E2
JAN								
15...	--	--	--	--	--	--	--	--
MAR								
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
MAY								
21...	<10	<0.08	M	378	<0.02	0.6	M	2
JUL								
16...	--	--	--	--	--	--	--	--
SEP								
03...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range

06896320 EAST FORK GRAND RIVER AT ALLENDALE, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°28'53", long 94°19'06", in SE ¼ NE ¼ NW ¼ sec.32, T.66 N., R.30 W., Worth County, Hydrologic Unit 10280101, in Allendale on Highway 46, approximately 1.6 mi west of the junction of Highway NN and State Highway 46.

DRAINAGE AREA.--211 mi^2.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV 06...	1310	Environmental	0.01	10.7	107	8.3	474	14.0	200	58.1	12.8	2.76
MAR 27...	1330	Environmental	1.7	12.0	122	8.5	436	13.5	--	--	--	--
APR 29...	1245	Environmental	5.6	8.4	84	8.2	418	14.0	--	--	--	--
MAY 21...	1345	Environmental	10	11.3	129	8.5	416	20.5	190	54.7	12.4	5.70
JUL 16...	1310	Environmental	0.67	9.9	139	8.5	401	31.5	--	--	--	--
SEP 04...	0840	Environmental	0.34	7.1	74	8.0	377	17.5	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 06...	11.3	233	232	283	<1	6.70	0.3	20.1	279	<10	1.4	<0.04	<0.06
MAR 27...	--	199	200	234	5	--	--	--	--	<10	0.44	<0.04	<0.06
APR 29...	--	172	174	212	<1	--	--	--	--	<10	0.76	<0.04	0.06
MAY 21...	9.74	156	157	188	2	11.1	0.3	33.5	249	11	0.79	<0.04	1.08
JUL 16...	--	175	177	198	9	--	--	--	--	22	0.66	<0.04	E.04
SEP 04...	--	160	159	194	<1	--	--	--	--	<100d	0.41	E.02n	<0.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV 06...	<0.008	0.10	0.11	0.24	97	110	240	<2	15	1.2	0.05	<0.2	<6
MAR 27...	<0.008	E.01	E.02	E.04	13k	4k	8k	--	--	--	--	--	--
APR 29...	<0.008	E.01	E.02	0.07	490	230	950	--	--	--	--	--	--
MAY 21...	0.014	E.01	<0.04	0.08	180k	110k	160	2	146	1.8	E.02	<0.2	<6
JUL 16...	<0.008	0.03	0.05	0.10	300	480	100	--	--	--	--	--	--
SEP 04...	<0.008	<0.18d	<0.04	0.08	130	290	670	--	--	--	--	--	--

06896320 EAST FORK GRAND RIVER AT ALLENDALE, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Selen- ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
NOV								
06...	<10	0.08	<1	4,440	<0.02	<0.5	2	E2
MAR								
27...	--	--	--	--	--	--	--	--
APR								
29...	--	--	--	--	--	--	--	--
MAY								
21...	E7	<0.08	<1	47.7	<0.02	1.2	M	E2
JUL								
16...	--	--	--	--	--	--	--	--
SEP								
04...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

06897000 EAST FORK BIG CREEK NEAR BETHANY, MO

LOCATION.--Lat 40°17'50", long 94°01'36", in SE $^1/_4$ sec.34, T.64 N., R.28 W., Harrison County, Hydrologic Unit 10280101, on right downstream side of bridge on old U.S. Highway 69, 2 mi north of Bethany, and 4 mi upstream from confluence with West Fork.

DRAINAGE AREA.--95 mi^2, approximately.

PERIOD OF RECORD.--April 1934 to September 1972, October 1996 to September 1999, October 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 854.74 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for discharges in December and January, and estimated daily discharges, which are poor. U.S.G.S. satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.18	0.20	0.24	e0.01	e0.45	0.60	248	1.6	0.57	0.00	0.00
2	0.20	0.13	0.09	0.59	e0.02	e0.25	0.39	42	1.9	0.33	0.00	0.00
3	0.02	0.13	0.09	0.94	e0.02	e0.20	0.37	18	2.0	0.19	0.00	0.00
4	0.03	0.09	0.11	1.4	e0.01	e1.0	0.32	9.6	3.0	0.14	0.00	0.00
5	0.01	0.14	0.18	0.53	e0.01	e0.40	0.32	6.7	1.8	0.09	0.00	0.00
6	0.10	0.14	0.12	0.29	e0.01	e0.60	0.41	9.3	5.7	0.07	0.00	0.00
7	0.00	0.15	0.17	0.25	e0.00	e1.0	0.71	16	29	0.04	0.00	0.00
8	0.00	0.24	0.13	0.18	e0.00	e1.5	0.73	14	23	0.45	0.00	0.00
9	0.00	0.26	0.11	0.25	e0.01	e1.0	0.80	53	5.6	1.8	0.00	0.00
10	0.00	0.09	0.26	0.14	e0.00	e0.60	1.3	66	41	0.50	0.00	0.00
11	0.00	0.13	0.16	0.08	e0.00	e2.0	1.2	14	21	0.15	0.00	0.00
12	0.00	0.09	0.21	0.10	e0.00	e3.0	0.98	6.3	22	0.07	0.00	0.00
13	0.00	0.09	0.25	e0.20	e0.01	e3.0	0.80	4.3	6.6	0.06	0.00	0.00
14	0.00	0.11	0.14	e0.10	e0.02	e2.6	0.67	3.5	3.3	0.04	0.00	0.16
15	0.00	0.16	0.08	e0.05	e0.01	2.2	0.66	2.8	2.1	0.03	0.00	0.01
16	0	0.14	0.14	e0.02	e0.00	1.8	0.71	2.9	1.5	0.02	0.00	0.01
17	0.00	0.17	0.13	e0.00	e0.00	1.7	0.78	3.6	1.2	0.03	0.00	0.00
18	0.00	0.14	0.13	e0.00	e0.00	1.7	0.73	3.6	1.1	0.02	0.00	0.00
19	0.00	0.12	0.12	e0.00	e0.01	2.3	5.9	2.8	0.93	0.02	0.00	0.01
20	0.00	0.28	0.13	e0.01	e0.04	4.0	41	14	0.84	0.02	0.00	0.09
21	0.00	0.29	0.18	e0.01	e0.08	3.6	14	9.7	0.70	0.01	0.00	0.08
22	0.00	0.13	0.08	e0.01	e0.40	2.4	12	4.3	0.57	0.01	0.00	0.11
23	0.00	0.35	e0.12	e0.00	e0.60	1.7	7.6	3.5	0.61	0.01	0.00	0.07
24	0.10	0.48	e0.15	e0.00	e0.80	1.0	6.8	2.9	0.57	0.01	0.00	0.21
25	0.09	0.33	e0.14	e0.00	e0.06	0.75	3.9	2.9	21	0.01	0.00	0.02
26	0.06	0.22	e0.10	e0.00	e0.04	0.68	2.6	2.2	53	0.00	0.00	0.01
27	0.05	0.28	e0.08	e0.01	e0.02	0.74	2.0	1.9	5.7	0.00	0.00	0.00
28	0.06	0.27	e0.12	e0.01	e0.20	0.64	2.8	1.7	2.3	0.03	0.00	0.00
29	0.72	0.25	e0.22	e0.01	---	0.37	2.2	1.5	1.4	0.01	0.00	0.00
30	1.1	0.16	0.10	e0.01	---	0.35	18	1.7	0.95	0.01	0.00	0.00
31	0.58	---	0.04	e0.01	---	0.66	---	1.4	---	0.01	0.00	---
MEAN	0.10	0.19	0.14	0.18	0.08	1.43	4.38	18.5	8.73	0.15	0.00	0.03
MAX	1.1	0.48	0.26	1.4	0.80	4.0	41	248	53	1.8	0.00	0.21
MIN	0.00	0.09	0.04	0.00	0.00	0.20	0.32	1.4	0.57	0.00	0.00	0.00
IN.	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.22	0.10	0.00	0.00	0.00

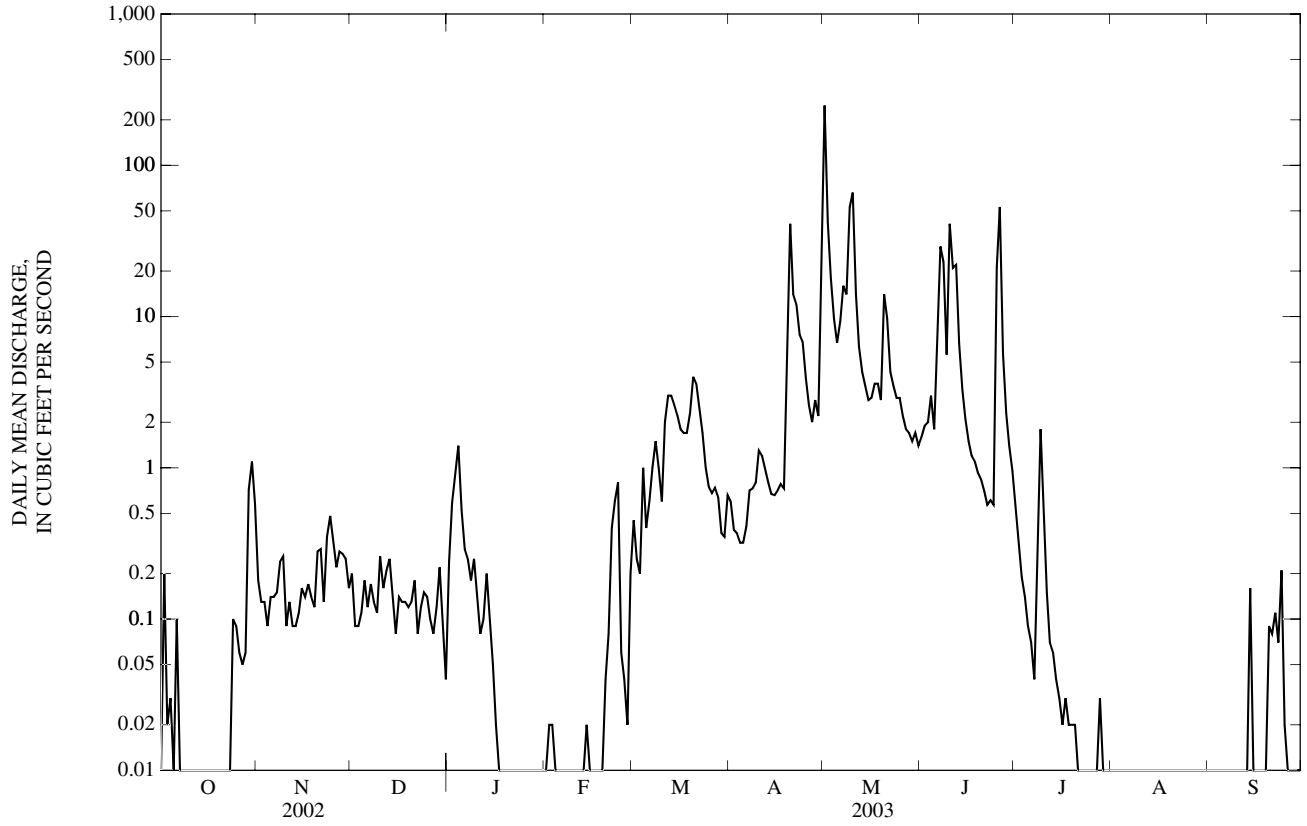
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	26.3	27.2	15.3	24.0	64.8	84.9	80.6	77.4	109	31.9	15.2	32.0
MAX	140	313	78.1	240	349	341	305	332	932	284	94.1	425
(WY)	(1960)	(1962)	(1945)	(1946)	(1937)	(1960)	(1944)	(1945)	(1947)	(1969)	(1959)	(1961)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1938)	(1938)	(1938)	(1939)	(1938)	(1956)	(1956)	(1956)	(1956)	(1936)	(1936)	(1937)

06897000 EAST FORK BIG CREEK NEAR BETHANY, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	26.5		2.84		49.3	
HIGHEST ANNUAL MEAN					111	1947
LOWEST ANNUAL MEAN					2.27	1938
HIGHEST DAILY MEAN	1,310	May 12	248	May 1	6,200	Jun 6, 1947
LOWEST DAILY MEAN	0.00	Many Days	0.00	Many Days	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 4,Oct 7	0.00	Oct 7,Aug 1	0.00	Several Years
MAXIMUM PEAK FLOW	---		543	May 1	8,120	Jun 6, 1947
MAXIMUM PEAK STAGE	---		5.22	May 1	17.65	Jun 6, 1947
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Several Years
ANNUAL RUNOFF (INCHES)	3.79		0.41		7.05	
10 PERCENT EXCEEDS	40		3.7		88	
50 PERCENT EXCEEDS	2.9		0.14		4.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated



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 mi^2.

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

REVISED RECORDS.--WSP 786: 1933-34. WSP 1280: 1922. WDR MO-83-1: 1981. WDR MO-93-1: 1991(M).

GAGE.--Water-stage recorder. Datum of gage is 707.56 ft above National Geodetic Vertical Datum of 1929. This figure supercedes 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.--Records good except for estimated daily discharges, which are poor. 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	41	21	34	e26	e26	27	89	54	154	12	16
2	13	38	22	35	e30	e26	24	712	58	111	14	10
3	15	37	26	30	e30	e28	22	701	59	90	13	8.4
4	16	35	24	36	e28	e30	26	349	52	70	13	7.8
5	17	35	e20	36	e28	e32	25	216	60	61	12	7.5
6	18	32	e17	34	e25	e30	23	185	76	54	11	6.8
7	19	31	e20	34	e23	e28	27	138	72	47	9.8	5.9
8	21	31	e20	40	e21	e26	30	346	135	42	9.2	5.1
9	31	29	e16	40	e24	e28	30	345	183	32	8.5	4.7
10	28	27	e20	34	e25	e32	30	1,260	177	32	7.9	4.5
11	25	26	29	27	e26	e34	29	2,080	140	83	7.5	5.9
12	23	25	27	e25	e28	e40	27	1,090	154	201	7.3	12
13	21	24	27	e25	e30	43	24	855	406	185	6.9	35
14	20	24	31	e30	e30	48	24	434	962	105	6.7	43
15	18	24	32	e26	e30	48	23	267	427	64	6.5	15
16	16	24	32	e28	e26	45	21	191	224	49	6.0	12
17	17	23	32	e24	e26	46	21	164	150	42	5.7	11
18	18	23	32	e23	e27	49	19	151	120	36	6.0	12
19	17	23	32	e22	e30	50	25	148	98	27	5.7	11
20	16	23	32	e25	e32	62	65	127	86	24	5.3	8.5
21	16	23	31	e25	e34	69	116	132	72	22	4.8	130
22	16	23	29	e22	e34	81	154	156	64	20	4.3	114
23	16	23	25	e22	e28	73	139	130	67	18	4.0	91
24	23	22	e22	e20	e26	63	156	112	60	17	3.5	33
25	33	23	e20	e24	e24	55	159	106	59	16	3.3	17
26	37	22	e20	e22	e22	49	157	119	74	14	3.2	13
27	39	21	e24	e20	e23	42	124	121	1,440	14	3.1	10
28	47	21	28	e24	e26	36	92	97	477	13	3.3	8.9
29	45	24	33	e25	---	32	77	71	390	13	3.5	7.7
30	43	24	36	e25	---	28	92	65	238	12	4.4	7.1
31	44	---	35	e26	---	28	---	59	---	11	14	---
MEAN	23.9	26.7	26.3	27.8	27.2	42.2	60.3	355	221	54.2	7.27	22.5
MAX	47	41	36	40	34	81	159	2,080	1,440	201	14	130
MIN	12	21	16	20	21	26	19	59	52	11	3.1	4.5
MED	19	24	27	25	26	40	28	156	109	36	6.5	10
IN.	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.18	0.11	0.03	0.00	0.01

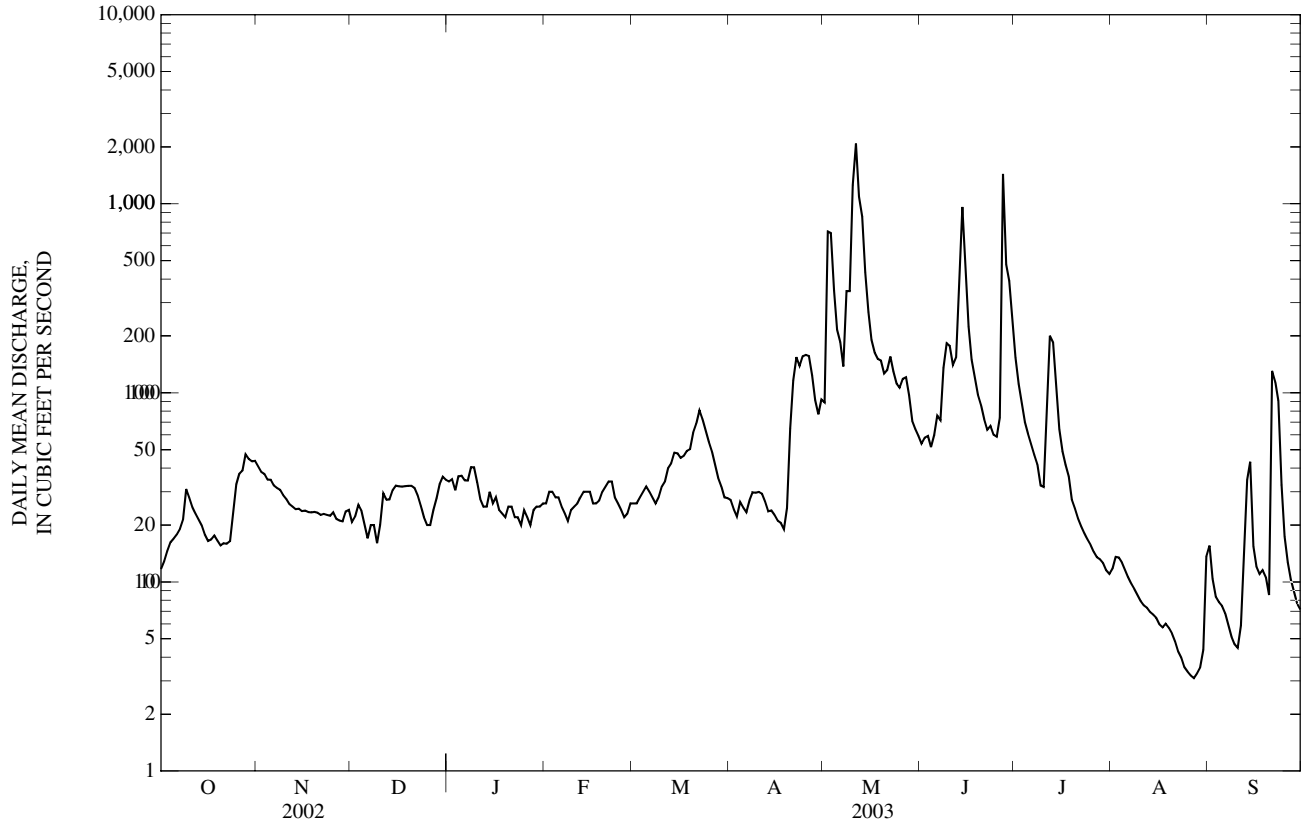
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2003, BY WATER YEAR (WY)

MEAN	811	846	519	477	991	1,715	1,975	2,012	2,329	1,593	515	1,032
MAX	8,965	8,613	5,463	4,212	6,196	8,760	7,906	14,820	22,670	33,930	4,136	11,610
(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)

06897500 GRAND RIVER NEAR GALLATIN, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1921 - 2003	
ANNUAL MEAN	441		74.9		1,233	
HIGHEST ANNUAL MEAN					5,740	1993
LOWEST ANNUAL MEAN					74.9	2003
HIGHEST DAILY MEAN	26,100	May 12	2,080	May 11	85,500	Jul 24, 1993
LOWEST DAILY MEAN	12	Oct 1	3.1	Aug 27	2.0	Aug 30, 1980
ANNUAL SEVEN-DAY MINIMUM	13	Sep 26	3.4	Aug 23	2.6	Oct 23, 1956
MAXIMUM PEAK FLOW	---		2,620	May 11	89,800	Jul 7, 1993
MAXIMUM PEAK STAGE	---		9.23	May 11	41.50	Jul 7, 1993
INSTANTANEOUS LOW FLOW	---		2.9	Aug 26-28	2.0	Aug 30, 1980
ANNUAL RUNOFF (INCHES)	2.66		0.45		7.44	
10 PERCENT EXCEEDS	813		149		2,510	
50 PERCENT EXCEEDS	56		28		212	
90 PERCENT EXCEEDS	18		9.6		27	

e Estimated



06898100 THOMPSON RIVER NEAR MOUNT MORIAH, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°20'11", long 93°46'02", in NW ¼ NE ¼ NE ¼ sec.24, T.64 N., R.26 W., Harrison County, Hydrologic Unit 10280102, on Highway 136 approximately 15 mi east of junction I-35 and Highway 136, 1.5 mi northeast of Mt. Moriah.

DRAINAGE AREA.--891 mi^2, including Panther Creek.

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

REMARKS.--August 29 sample was collected as an alternative sample for 06899580, No Creek near Dunlap, Mo., due to drought conditions at the primary site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
07...	0950	Environmental	18	12.5	101	8.0	444	5.0	210	64.0	12.1	3.11
JAN												
15...	1400	Environmental	15	13.6	96	7.8	564	0.5	--	--	--	--
MAR												
28...	0910	Environmental	50	10.6	92	8.3	397	7.5	--	--	--	--
MAY												
22...	0910	Environmental	196	9.1	95	8.3	432	16.5	200	59.6	13.3	4.20
JUL												
15...	1245	Environmental	76	10.3	143	8.8	387	31.0	--	--	--	--
15...	1246	Replicate	--	--	--	--	--	--	--	--	--	--
AUG												
29...	1300	Environmental	6.1	11.4	150	8.4	426	30.0	--	--	--	--
SEP												
04...	1330	Environmental	10	9.1	117	8.3	448	28.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
07...	12.8	189	188	230	<1	8.62	0.2	42.2	271	<10	0.28	<0.04	<0.06
JAN													
15...	--	248	249	304	<1	--	--	--	--	<10	0.28	0.09	<0.06
MAR													
28...	--	154	154	188	<1	--	--	--	--	11	0.61	<0.04	0.07
MAY													
22...	9.06	154	154	182	3	11.2	0.3	30.9	259	107	0.87	<0.04	4.20
JUL													
15...	--	159	159	169	12	--	--	--	--	66	1.3	<0.04	0.07
15...	--	--	--	--	--	--	--	--	--	125	1.4	<0.04	0.15
AUG													
29...	--	160	160	191	2	--	--	--	--	<10	0.38	<0.04	<0.06
SEP													
04...	--	166	165	201	<1	--	--	--	--	146d	0.80	<0.04	<0.06

06898100 THOMPSON RIVER NEAR MOUNT MORIAH, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
07...	E.004	<0.02	<0.04	0.05	30k	33k	44k	<2	113	0.5	E.03	<0.2	<6
JAN													
15...	<0.008	<0.02	<0.04	E.04	15k	11k	2k	--	--	--	--	--	--
MAR													
28...	<0.008	<0.02	<0.04	0.07	16k	26k	27k	--	--	--	--	--	--
MAY													
22...	0.009	0.06	0.07	0.22	220k	190k	230	4	1,220	1.9	<0.04	<0.2	<6
JUL													
15...	0.011	0.02	0.04	0.28	59k	140k	200	--	--	--	--	--	--
15...	0.008	0.03	0.07	0.28	--	--	--	--	--	--	--	--	--
AUG													
29...	<0.008	E.01n	E.02n	0.08	75k	130k	220k	--	--	--	--	--	--
SEP													
04...	<0.008	<0.18d	E.03n	0.34	80	270	110	--	--	--	--	--	--

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Manga-nese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover-able, µg/L (71900)	Selen-ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
NOV								
07...	26	<0.08	<1	1,250	<0.02	E.3	<1	E1
JAN								
15...	--	--	--	--	--	--	--	--
MAR								
28...	--	--	--	--	--	--	--	--
MAY								
22...	<10	<0.08	2	33.3	<0.02	1.9	M	8
JUL								
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
AUG								
29...	--	--	--	--	--	--	--	--
SEP								
04...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

06898800 WELDON RIVER AT PRINCETON, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°24'03", long 93°36'10", in SW ¼ NW ¼ SE ¼ sec.28, T.65 N., R.24 W., Mercer County, Hydrologic Unit 10280102, approximately 1 mi west of Princeton on US Highway 136.

DRAINAGE AREA.--452 mi^2.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
24...	1200	Environmental	5.0	11.3	95	8.1	449	7.0	--	--	--	--
NOV												
05...	1340	Environmental	6.5	13.8	114	8.2	453	5.5	210	61.9	12.5	2.61
DEC												
10...	1255	Environmental	4.3	14.1	105	8.0	555	2.0	--	--	--	--
JAN												
14...	1310	Environmental	1.9	15.9	115	7.8	563	1.5	--	--	--	--
MAR												
07...	1210	Environmental	8.6	13.8	99	7.8	488	0.5	--	--	--	--
26...	1315	Environmental	7.3	13.1	139	8.3	444	16.5	--	--	--	--
MAY												
20...	1320	Environmental	168	8.4	91	8.0	309	18.5	140	43.5	7.76	4.57
20...	1410	Blank	--	--	--	--	--	--	--	E.01	<0.008	<0.16
JUL												
17...	0920	Environmental	6.1	8.4	104	8.2	461	24.5	--	--	--	--
SEP												
05...	0910	Environmental	0.73	7.3	73	7.7	498	15.5	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
24...	--	189	191	233	<1	--	--	--	--	<10	0.30	<0.04	E.04
NOV													
05...	13.2	191	190	231	<1	7.66	0.2	39.2	270	<10	0.24	<0.04	<0.06
DEC													
10...	--	238	236	288	<1	--	--	--	--	<10	0.26	0.07	E.03
JAN													
14...	--	243	245	298	<1	--	--	--	--	<10	0.22	<0.04	<0.06
MAR													
07...	--	198	196	239	<1	--	--	--	--	<10	0.51	<0.04	0.12
26...	--	168	167	203	<1	--	--	--	--	<10	0.34	<0.04	<0.06
MAY													
20...	6.57	120	119	146	<1	6.87	0.2	25.9	189	264	1.3	<0.04	0.38
20...	<0.09	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
JUL													
17...	--	187	189	230	<1	--	--	--	--	19	0.58	<0.04	<0.06
SEP													
05...	--	200	199	243	<1	--	--	--	--	52	0.26	0.14	<0.06

06898800 WELDON RIVER AT PRINCETON, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
24...	0.011	<0.02	<0.04	E.03	330	210k	740	--	--	--	--	--	--
NOV													
05...	<0.008	<0.02	<0.04	<0.04	33k	25k	80	<2	39	E.2	E.02	<0.2	<6
DEC													
10...	<0.008	<0.02	<0.04	E.02	5k	5k	18k	--	--	--	--	--	--
JAN													
14...	<0.008	<0.02	<0.04	E.02	2k	1k	3k	--	--	--	--	--	--
MAR													
07...	E.004	<0.02	<0.04	E.03	5k	<1b	6k	--	--	--	--	--	--
26...	<0.008	<0.02	<0.04	0.04	5k	10k	4k	--	--	--	--	--	--
MAY													
20...	0.009	0.05	0.07	0.33	2,975	2,500	20,000k	5	3,510	1.1	E.02	E.1	<6
20...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.3	<0.04	<0.2	<6
JUL													
17...	<0.008	E.01	E.02	0.08	55k	90	80	--	--	--	--	--	--
SEP													
05...	<0.008	<0.18d	<0.04	<0.04	190	240	120	--	--	--	--	--	--

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover-able, µg/L (71900)	Selen-ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
OCT								
24...	--	--	--	--	--	--	--	--
NOV								
05...	E6	<0.08	<1	1,810	<0.02	<0.5	M	<2
DEC								
10...	--	--	--	--	--	--	--	--
JAN								
14...	--	--	--	--	--	--	--	--
MAR								
07...	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--
MAY								
20...	21	<0.08	5	27.4	E.02	0.8	M	16
20...	<10	<0.08	<1	<2.0	<0.02	<0.5	<1	<2
JUL								
17...	--	--	--	--	--	--	--	--
SEP								
05...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Value qualifier codes used in this table:
b -- Value was extrapolated below
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range

06899500 THOMPSON RIVER AT TRENTON, MO

LOCATION.--Lat 40°04'10", long 93°38'16" in SW $^1/_4$ NE $^1/_4$ sec.19, T.61 N., R.24 W., Grundy County, Hydrologic Unit 10280102, at downstream side of bridge pier in Trenton, 2.6 mi downstream from Weldon River, and at mile 25.2.

DRAINAGE AREA.--1,720 mi^2.

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 721.87 ft above National Geodetic Vertical Datum of 1929. 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 site 0.8 mi upstream from current site at current datum; Sept. 16, 1930, to May 31 1945, nonrecording gage at site 0.7 mi downstream at datum 3.46 ft lower; June 1, 1945, to Dec. 7, 1959, nonrecording gage at same site and datum; Dec. 8, 1959 to Oct. 27, 1998 at site 0.8 mi upstream, at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. 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 ft^3/s, determined by the U.S. Army Corps of Engineers, occurred before new channel was dredged.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	44	25	37	e35	e40	54	1,030	109	209	33	52
2	26	44	31	27	e35	e40	52	892	120	161	32	33
3	31	45	24	21	e36	e41	50	434	122	133	28	26
4	34	39	22	35	e35	e47	59	510	109	112	27	22
5	33	37	18	46	e34	e46	55	1,350	99	98	29	19
6	32	36	19	41	e34	e46	54	1,860	239	89	27	17
7	34	33	e20	31	e32	e44	59	2,610	308	84	26	16
8	48	31	e22	38	e28	e50	56	1,430	416	200	31	e11
9	45	30	22	36	e28	e44	57	1,320	250	249	31	e9.0
10	40	30	22	29	e32	e42	57	3,510	265	139	27	e9.0
11	38	29	32	e28	e32	e45	62	2,650	1,490	138	25	13
12	36	29	31	e27	e34	e60	64	1,750	1,450	134	20	40
13	34	28	31	e26	e35	85	59	1,010	756	129	18	451
14	32	29	32	e26	e40	82	56	712	617	97	18	411
15	28	31	31	26	e32	88	52	564	408	83	20	119
16	25	34	29	e24	e33	92	58	485	299	71	20	72
17	26	33	28	e26	e34	99	64	440	322	71	18	52
18	26	32	29	e24	e35	167	58	400	243	58	15	46
19	24	29	29	e23	e40	205	66	342	157	55	12	45
20	23	27	30	e26	e42	184	144	634	125	53	e12	40
21	23	29	32	e27	e43	148	181	592	119	48	e10	371
22	23	31	28	28	e48	127	158	334	105	43	e9.7	415
23	24	31	24	e27	e46	113	170	263	108	39	e9.7	117
24	32	30	e24	e24	e48	101	175	236	103	37	e9.2	69
25	47	24	e23	e23	e38	88	153	225	101	36	e9.2	49
26	46	25	27	e25	e38	79	152	198	235	34	e9.7	40
27	42	23	32	e25	e37	71	193	171	208	33	49	39
28	40	23	35	e25	e26	67	214	152	1,300	40	33	37
29	42	34	40	26	---	66	162	140	569	42	20	29
30	44	30	47	30	---	62	126	134	313	40	13	27
31	46	---	43	e32	---	58	---	117	---	36	56	---
MEAN	33.8	31.7	28.5	28.7	36.1	81.5	97.3	855	369	90.0	22.5	89.9
MAX	48	45	47	46	48	205	214	3,510	1,490	249	56	451
MIN	23	23	18	21	26	40	50	117	99	33	9.2	9.0
IN.	0.02	0.02	0.02	0.02	0.02	0.05	0.06	0.57	0.24	0.06	0.02	0.06

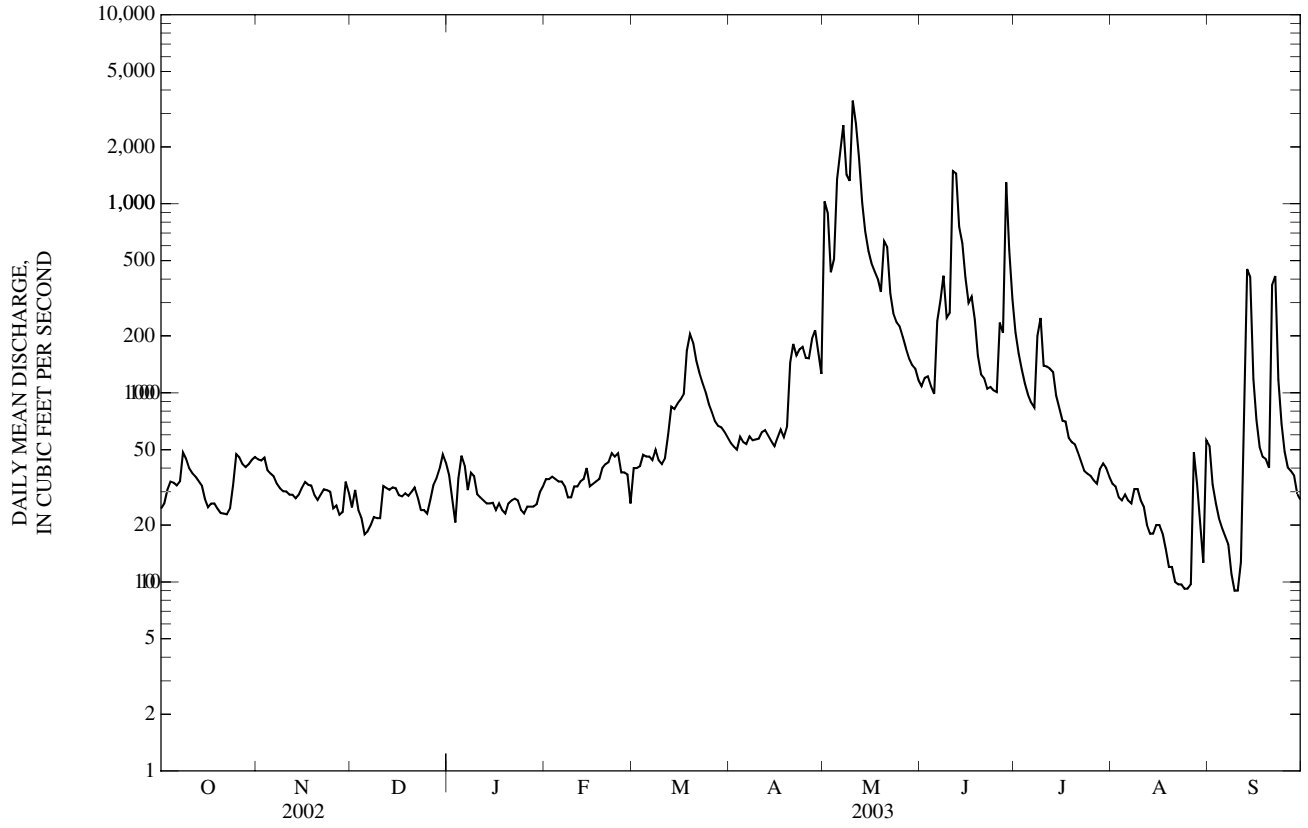
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	574	642	464	450	913	1,574	1,713	1,778	1,797	1,065	503	671
MAX	4,678	6,280	4,209	3,682	4,378	5,765	5,580	8,757	16,460	18,860	3,990	8,443
(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)

06899500 THOMPSON RIVER AT TRENTON, MO—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	395		148		1,011	
HIGHEST ANNUAL MEAN					3,576	1993
LOWEST ANNUAL MEAN					117	1934
HIGHEST DAILY MEAN	19,700	May 12	3,510	May 10	73,800	Jun 6, 1947
LOWEST DAILY MEAN	18	Dec 5	9.0	Sep 9,10	1.0	Jun 17, 1956
ANNUAL SEVEN-DAY MINIMUM	21	Dec 4	9.9	Aug 20	1.7	Aug 4, 1934
MAXIMUM PEAK FLOW	---		4,130	May 10	95,000	Jun 6, 1947
MAXIMUM PEAK STAGE	---		16.32	May 10	25.70	Jun 6, 1947
INSTANTANEOUS LOW FLOW	---		4.2	Dec 6	1.0	Jun 17, 1956
ANNUAL RUNOFF (INCHES)	3.11		1.17		7.98	
10 PERCENT EXCEEDS	664		310		2,320	
50 PERCENT EXCEEDS	72		40		210	
90 PERCENT EXCEEDS	28		23		29	

e Estimated



06899580 NO CREEK NEAR DUNLAP, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°06'19", long 93°29'29", in SE ¼ SE ¼ SW ¼ sec.4, T.61 N., R.23 W., Grundy County, Hydrologic Unit 10280102, on upstream side of bridge on County Road N approximately 0.6 mi west of Dunlap.

DRAINAGE AREA.--34.0 mi^2.

PERIOD OF RECORD.--November 1997 to current year.

REMARKS.--August sample collected at alternative site 06898100, Thompson River at Mount Moriah, Mo., due to drought conditions at primary site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
DEC												
19...	1010	Environmental	0.01	6.2	46	7.9	554	1.5	--	--	--	--
MAR												
13...	1345	Environmental	0.41	11.4	82	8.1	390	1.0	--	--	--	--
20...	1100	Environmental	0.34	9.6	83	8.1	350	7.0	--	--	--	--
APR												
25...	1010	Environmental	2.1	8.1	77	8.1	308	11.5	--	--	--	--
30...	1340	Environmental	0.62	10.7	129	8.4	355	22.5	--	--	--	--
MAY												
06...	1600	Environmental	6.4	6.4	70	7.6	192	18.0	74	21.4	5.01	5.33
JUN												
12...	1405	Environmental	3.0	7.0	82	7.8	247	21.5	--	--	--	--
JUL												
09...	1145	Environmental	0.01	8.4	108	8.0	376	26.5	140	38.2	10.6	11.4
SEP												
19...	1155	Environmental	0.26	10.4	101	8.1	195	14.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
DEC													
19...	--	257	259	316	<1	--	--	--	--	37	2.4	0.57	<0.06
MAR													
13...	--	179	176	215	<1	--	--	--	--	<10	0.68	<0.04	<0.06
20...	--	154	153	187	<1	--	--	--	--	12	0.79	E.03	<0.06
APR													
25...	--	130	128	157	<1	--	--	--	--	82	1.1	<0.04	0.12
30...	--	136	136	161	2	--	--	--	--	12	0.90	<0.04	<0.06
MAY													
06...	5.01	65	63	76	<1	4.95	0.23	14.7	141	164	2.1	0.18	1.43
JUN													
12...	--	68	67	82	<1	--	--	--	--	68	1.9	0.23	6.38
JUL													
09...	14.9	167	167	204	<1	7.11	0.40	<0.2	222	43	4.7	3.03	0.14
SEP													
19...	--	74	74	90	<1	--	--	--	--	144d	0.94	E.03n	0.15

06899580 NO CREEK NEAR DUNLAP, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
DEC													
19...	<0.008	<0.02	E.03	0.16	1,300	1200k	840	--	--	--	--	--	--
MAR													
13...	<0.008	E.01	E.03	0.17	150	35k	470	--	--	--	--	--	--
20...	<0.008	0.02	0.04	0.15	140	170	57k	--	--	--	--	--	--
APR													
25...	E.005	0.04	0.05	0.22	1,900	3,300	2,500	--	--	--	--	--	--
30...	<0.008	0.03	E.03	0.14	680	1,900	260k	--	--	--	--	--	--
MAY													
06...	0.125	0.04	0.06	0.38	4,700k	21,000k	3,300	6	4,880	1.6	<0.04	E.2	E4
JUN													
12...	0.255	0.04	0.07	0.24	1,100	1,000	1,000	--	--	--	--	--	--
JUL													
09...	0.077	0.02	0.06	0.27	1,600k	1,300	720	2	880	4.7	0.04	<0.2	<7
SEP													
19...	0.012	0.06	0.08	0.28	6,200	9,000	4,700	--	--	--	--	--	--

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover-able, µg/L (71900)	Selen-ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
DEC								
19...	--	--	--	--	--	--	--	--
MAR								
13...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
APR								
25...	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--
MAY								
06...	58	E.05	6	204	0.02	0.6	M	19
JUN								
12...	--	--	--	--	--	--	--	--
JUL								
09...	E7	<0.08	2	3,280	<0.02	0.6	<1	6
SEP								
19...	--	--	--	--	--	--	--	--

Remark codes used in this table:
< -- Less than
E -- Estimated value
M -- Presence verified, not quantified

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

06899950 MEDICINE CREEK AT HARRIS, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°18'32", long 93°20'15", in NE ¼ NE ¼ NW ¼ sec.35, T.64 N., R.22 W., Sullivan County, Hydrologic Unit 10280103, on the left bank on upstream side of the bridge on State Highway E, approximately 0.6 mi east of Harris.

DRAINAGE AREA.--192 mi^2.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
17...	1320	Environmental	1.4	11.9	106	8.0	458	9.0	--	--	--	--
NOV												
19...	1415	Environmental	2.0	15.1	134	7.8	454	9.0	200	59.4	12.8	2.23
DEC												
18...	1345	Environmental	2.8	13.7	128	8.1	448	10.0	--	--	--	--
18...	1346	Replicate	--	--	--	--	--	--	--	--	--	--
JAN												
30...	1055	Environmental	0.90	10.0	71	7.5	531	0.5	240	71.2	14.5	1.92
FEB												
20...	1410	Environmental	3.4	14.2	108	8.1	450	3.0	--	--	--	--
MAR												
12...	1345	Environmental	3.9	14.1	120	8.1	479	7.0	--	--	--	--
APR												
23...	1500	Environmental	14	10.5	117	8.4	544	19.0	--	--	--	--
MAY												
08...	1115	Environmental	27	8.0	82	7.8	359	15.0	140	42.0	9.15	6.74
08...	1300	Blank	--	--	--	--	--	--	--	E.01n	<0.008	<0.16
JUN												
11...	1410	Environmental	51	7.3	90	8.0	288	24.0	--	--	--	--
JUL												
10...	1455	Environmental	65	7.4	100	8.1	397	29.0	160	47.6	10.6	6.45
AUG												
25...	1600	Environmental	0.61	7.5	106	8.0	467	33.0	--	--	--	--
SEP												
17...	1330	Environmental	4.5	8.7	103	8.1	364	24.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
17...	--	161	160	196	<1	--	--	--	--	<10	0.20	<0.04	<0.06
NOV													
19...	15.4	154	154	188	<1	11.1	0.20	68.2	295	<10	0.17	<0.04	<0.06
DEC													
18...	--	154	154	187	<1	--	--	--	--	<10	0.29	<0.04	<0.06
18...	--	--	--	--	--	--	--	--	--	<10	0.23	<0.04	<0.06
JAN													
30...	19.6	159	159	194	<1	11.8	0.19	75.8	348	<10	0.19	<0.04	<0.06
FEB													
20...	--	161	159	194	<1	--	--	--	--	<10	0.22	<0.04	<0.06
MAR													
12...	--	165	162	198	<1	--	--	--	--	<10	0.37	<0.04	<0.06
APR													
23...	--	180	178	211	3	--	--	--	--	12	0.94	<0.04	<0.06
MAY													
08...	10.3	109	110	134	<1	10.9	0.23	43.9	238	104	1.6	0.21	1.33
08...	<0.09	--	--	--	--	<0.20	<0.17	<0.2	<10	<10	<0.10	<0.04	<0.06
JUN													
11...	--	93	92	112	<1	--	--	--	--	282	2.3	0.33	3.53
JUL													
10...	14.8	139	139	169	<1	9.35	0.20	40.2	241	161	1.2	<0.04	0.32
AUG													
25...	--	145	148	181	<1	--	--	--	--	<10	0.42	<0.04	<0.06
SEP													
17...	--	119	118	144	<1	--	--	--	--	49	0.96	0.10	0.47

06899950 MEDICINE CREEK AT HARRIS, MO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover -able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
17...	<0.008	<0.02	<0.04	E.03	330	300	430	--	--	--	--	--	--
NOV													
19...	<0.008	<0.02	<0.04	E.03	20k	42k	470	M	29	0.4	0.04	<0.2	<6
DEC													
18...	<0.008	<0.02	<0.04	0.04	62	20k	190	--	--	--	--	--	--
18...	<0.008	<0.02	<0.04	0.06	--	--	--	--	--	--	--	--	--
JAN													
30...	<0.008	<0.02	<0.04	E.03	13k	4k	80	M	16	0.4	0.07	<0.2	<6
FEB													
20...	<0.008	<0.02	<0.04	E.03	73	3k	176	--	--	--	--	--	--
MAR													
12...	<0.008	<0.02	<0.04	0.10	83	31k	120	--	--	--	--	--	--
APR													
23...	<0.008	0.13	0.15	0.25	64k	120	180	--	--	--	--	--	--
MAY													
08...	0.065	0.06	0.08	0.29	20k	1,100	690	3	1,610	1.5	<0.04	E.1	<6
08...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.3	<0.04	<0.2	<6
JUN													
11...	0.108	0.07	0.10	0.47	5,500	6,900k	14,000k	--	--	--	--	--	--
JUL													
10...	0.017	0.07	0.08	0.30	2,200	2,200	1,500	3	1,980	1.7	E.02	<0.2	<7
AUG													
25...	E.004n	<0.02	<0.04	0.06	480k	1,400k	300	--	--	--	--	--	--
SEP													
17...	0.027	0.12	0.16	0.36	550k	910	630	--	--	--	--	--	--

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Selen-ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)
OCT								
17...	--	--	--	--	--	--	--	--
NOV								
19...	30	<0.08	<1	1,910	<0.02	E.3	1	3
DEC								
18...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
JAN								
30...	23	<0.08	<1	5,420	<0.02	<0.5	4	4
FEB								
20...	--	--	--	--	--	--	--	--
MAR								
12...	--	--	--	--	--	--	--	--
APR								
23...	--	--	--	--	--	--	--	--
MAY								
08...	13	<0.08	2	282	<0.02	1.0	1	8
08...	<10	<0.08	<1	<1.6	--	<0.5	<1	<2
JUN								
11...	--	--	--	--	--	--	--	--
JUL								
10...	<8	<0.08	3	30.1	E.01	0.7	M	11
AUG								
25...	--	--	--	--	--	--	--	--
SEP								
17...	--	--	--	--	--	--	--	--

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Value qualifier codes used in this table:
k -- Counts outside acceptable range
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