

07001985 WATKINS CREEK AT BELLEFONTAINE NEIGHBORS, MO

LOCATION.--Lat 38°45'44", long 90°11'49", St. Louis County, Hydrologic Unit 07140101, on left downstream wingwall of Fry Lane bridge, 0.34 mi south of Interstate 270, 2.34 mi east of Highway 367 (Lewis and Clark Blvd.), and 1.76 mi upstream of Mississippi River.

DRAINAGE AREA.--5.19 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 431.94 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except for estimated daily discharges and discharges below 1 ft³/s and above 800 ft³/s, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	10	0.66	0.71	e4.5	1.2	2.8	31	6.2	0.51	1.6	0.08
2	0.48	1.3	0.66	0.86	e33	1.0	2.3	5.4	2.5	8.3	1.1	0.09
3	0.44	0.50	1.0	0.84	e15	2.9	2.1	3.3	2.0	11	2.9	0.10
4	0.42	0.43	1.9	158	2.0	52	1.9	2.1	1.7	1.4	7.4	0.09
5	0.36	3.2	2.2	6.6	e1.8	41	1.8	1.8	1.6	12	2.7	0.07
6	0.35	1.3	1.1	e3.1	e1.6	4.4	1.8	1.4	1.4	14	0.97	0.06
7	0.35	0.74	0.68	2.0	e1.3	3.0	2.2	1.2	1.3	1.2	0.73	0.07
8	0.36	0.49	0.66	2.0	e1.0	2.6	1.7	1.2	1.2	0.75	0.68	0.06
9	31	0.41	3.2	1.8	e9.0	2.4	1.7	1.1	4.2	0.68	0.61	0.05
10	1.9	0.40	6.3	1.6	e10	1.9	1.9	1.3	7.7	0.84	0.73	0.07
11	0.74	0.40	0.80	1.6	e14	1.8	2.5	3.2	2.0	2.2	0.58	0.10
12	0.71	0.41	0.58	1.6	e8.2	1.7	1.7	1.3	1.5	0.63	0.46	0.12
13	0.90	0.44	0.63	1.5	e4.5	1.6	1.6	90	1.1	0.52	0.43	0.10
14	5.8	0.56	1.2	1.5	e4.4	2.3	1.3	77	0.93	0.42	0.33	0.10
15	0.89	1.2	1.2	1.4	e4.2	1.5	1.3	5.7	0.87	0.47	0.28	0.08
16	3.5	0.73	1.5	1.5	e2.7	1.5	1.3	3.6	5.3	0.41	0.24	2.2
17	13	0.90	0.66	29	e2.6	e1.8	1.3	2.8	1.2	0.41	0.21	0.34
18	0.82	116	0.94	7.4	e2.2	1.2	1.2	2.6	4.9	0.41	0.20	e0.23
19	0.60	4.5	0.76	2.3	2.6	1.3	1.0	43	1.4	0.35	0.26	e0.17
20	0.49	1.7	0.64	1.7	2.9	1.3	1.0	4.2	0.75	0.32	3.5	e0.51
21	0.42	1.1	0.63	1.5	1.7	1.3	1.4	2.9	1.0	0.36	0.43	e0.24
22	0.46	0.87	2.9	1.4	1.4	1.2	1.2	2.5	2.8	0.29	0.11	0.05
23	0.47	0.96	26	1.3	1.6	1.6	2.0	2.2	3.0	0.59	3.3	0.03
24	0.48	0.99	1.7	e2.4	1.5	1.7	57	2.1	0.62	0.28	3.2	0.03
25	1.2	0.91	0.97	e3.0	1.3	5.9	8.7	38	0.62	7.5	32	0.04
26	1.5	0.83	0.81	e4.4	1.2	71	2.0	137	0.57	0.84	5.9	0.04
27	0.44	0.79	0.80	e4.1	1.2	7.0	1.6	219	0.54	0.40	0.26	0.03
28	2.4	0.59	1.9	e2.8	1.1	21	1.7	17	0.59	0.34	0.12	0.04
29	0.70	0.60	5.7	e2.5	1.1	7.8	1.6	5.1	0.52	0.31	0.10	0.05
30	0.54	0.64	0.93	e1.4	---	4.4	25	44	0.51	112	0.11	0.08
31	0.56	---	0.77	e2.9	---	3.1	---	8.0	---	2.7	0.09	---
MEAN	2.37	5.13	2.27	8.22	4.81	8.21	4.55	24.5	2.02	5.88	2.31	0.18
MAX	31	116	26	158	33	71	57	219	7.7	112	32	2.2
MIN	0.35	0.40	0.58	0.71	1.0	1.0	1.0	1.1	0.51	0.28	0.09	0.03
IN.	0.53	1.10	0.50	1.83	1.00	1.82	0.98	5.45	0.43	1.31	0.51	0.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

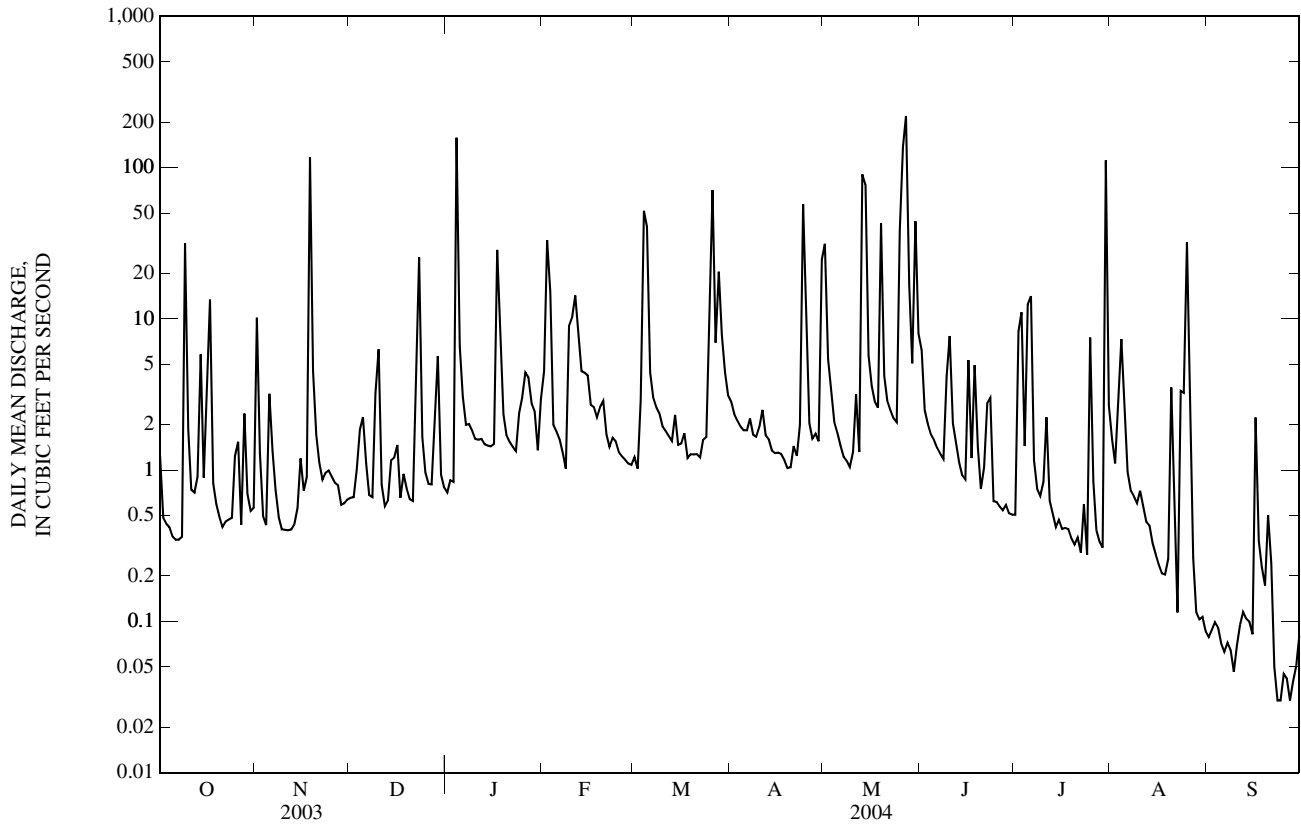
MEAN	3.14	2.96	2.69	5.27	6.31	6.97	6.14	11.9	7.88	6.08	3.23	2.07
MAX	5.38	5.13	8.45	13.2	17.1	18.5	11.3	24.5	18.0	18.5	10.9	5.66
(WY)	(2001)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(2003)	(1998)	(1998)	(2003)
MIN	0.50	0.95	1.22	0.90	3.62	1.71	1.23	3.27	1.66	0.32	1.05	0.18
(WY)	(1998)	(2000)	(2001)	(2000)	(2003)	(2000)	(2000)	(2001)	(1997)	(1997)	(2001)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	4.98	5.91	5.55
HIGHEST ANNUAL MEAN			8.19
LOWEST ANNUAL MEAN			2.89
HIGHEST DAILY MEAN	178	Jun 26	219
LOWEST DAILY MEAN	0.19	Aug 28	0.03
ANNUAL SEVEN-DAY MINIMUM	0.22	Aug 17	0.04
MAXIMUM PEAK FLOW	---		Unknown
MAXIMUM PEAK STAGE	---		10.92
INSTANTANEOUS LOW FLOW	---		0.01
ANNUAL RUNOFF (INCHES)	13.04	15.51	14.52
10 PERCENT EXCEEDS	8.3	7.9	9.1
50 PERCENT EXCEEDS	1.0	1.3	1.1
90 PERCENT EXCEEDS	0.39	0.26	0.24

e Estimated

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER

07001985 WATKINS CREEK AT BELLEFONTAINE NEIGHBORS, MO—Continued



07001985 WATKINS CREEK AT BELLEFONTAINE NEIGHBORS, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 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)
OCT 14...	0442	Environmental	30	7.6	6.6	69	7.5	555	15.8	200	53.0	16.0
OCT 14...	0443	Replicate	--	--	--	--	--	--	--	200	53.0	16.0
DEC 04...	0820	Environmental	1.9	5.0	10.9	88	7.8	957	5.4	390	102	33.0
FEB 10...	0815	Environmental	e10	5.1	12.9	91	7.7	3,010	0.3	260	72.0	19.0
MAR 26...	0954	Environmental	57	5.5	9.2	91	7.5	314	14.5	99	28.0	7.10
MAR 26...	0955	Replicate	--	--	9.2	91	7.7	314	14.5	99	28.0	7.10
MAY 17...	1520	Environmental	2.8	7.0	6.9	84	7.8	964	24.1	360	94.0	30.0
AUG 04...	0845	Environmental	1.5	3.8	3.7	45	7.9	768	24.3	270	73.6	20.9

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., field, mg/L (00450)	Carbonate, wat unfltrd incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite + nitrate water, unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 14...	133	131	160	<1	--	166	1.3	--	0.01	--	0.370	--	0.03
OCT 14...	--	--	--	--	--	159	1.2	--	0.02	--	0.370	--	0.03
DEC 04...	175	176	215	<1	160	4	0.40	--	0.12	--	0.510	--	<0.01
FEB 10...	123	123	150	<1	910	26	1.2	--	0.33	--	0.710	--	0.04
MAR 26...	80	76	93	<1	--	1,990	5.3	--	0.30	--	0.450	--	0.05
MAR 26...	--	--	--	--	--	3,670	6.9	--	0.32	--	0.440	--	0.05
MAY 17...	224	226	276	<1	--	9	0.40	--	0.09	--	0.990	--	0.03
AUG 04...	171	173	207	<1	--	<10	0.72	<0.04	--	0.59	--	0.027	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μg/L (01106)	Arsenic water, fltrd, μg/L (01000)	Beryllium, water, fltrd, μg/L (01010)	Cadmium water, fltrd, μg/L (01025)	Chromium, water, fltrd, μg/L (01030)	Copper, water, fltrd, μg/L (01040)
OCT 14...	--	0.330	0.54	22	3,000k	3,700k	6,200	<3	3	<1	<1.0	3.0	2.5
OCT 14...	--	0.330	0.56	23	--	--	--	<3	2	<1	<1.0	2.9	2.5
DEC 04...	--	0.130	0.13	12	1,100	1,800k	1,240	<3	1	<1	<1.0	3.0	1.6
FEB 10...	--	0.090	0.18	23	3,400	4,200k	2,500	6	2	<1	<1.0	1.4	5.8
MAR 26...	--	0.230	1.90	16	9,200k	14,000	15,000	7	1	<1	<1.0	<1.0	2.7
MAR 26...	--	0.230	2.50	22	10,000	20,000	6,000k	<3	2	<1	<1.0	<1.0	2.6
MAY 17...	--	0.120	0.14	19	260	1,300	520	<3	2	<1	<1.0	<1.0	1.7
AUG 04...	0.08	--	0.18	40	5,200k	5,600k	2,800	3	2.0	<0.06	0.08	E.4n	3.2

07001985 WATKINS CREEK AT BELLEFONTAINE NEIGHBORS, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 14...	Mmt	Mt	<3.4	<0.02	Mt	<1	<0.02	<2	<2	<2	<1	<1m	<2m
DEC 14...	Mmt	Mt	<3.4	<0.02	Mt	<1	<0.02	<2	<2	<2	<1	<1m	<2m
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	E1mn	E2	E.2t	<0.02	4	<1	<0.02	<1	<2	<1	Mt	<1m	<2m
MAR 26...	E1mn	3	E.3t	<0.02	5	<1	<0.02	<1	<2	<1	Mt	<1m	<2m
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Napthh-alene, water, unfltrd µg/L (34696)
OCT 14...	<2
DEC 14...	Mt
DEC 04...	--
FEB 10...	--
MAR 26...	Mt
MAR 26...	Mt
MAY 17...	--
AUG 04...	--

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

m -- Value is highly variable by this method

n -- Below the LRL and above the LT-MDL

t -- Below the long-term MDL

07005000 MALINE CREEK AT BELLEFONTAINE NEIGHBORS, MO

LOCATION.--Lat 38°44'12", long 90°13'34", in SE ¼ NE ¼ NE ¼ sec.9, T.46 N., R.7 E., St. Louis County, Hydrologic Unit 07140101, on left downstream wingwall of Bellefontaine Road bridge, 2.32 mi south of Interstate 270, 0.80 mi east of Highway 367 (Lewis and Clark Blvd.), and 1.03 mi upstream of Mississippi River.

DRAINAGE AREA.--24.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1996 to current year. Annual peaks only for 1968-1974 water years published in WRD MO 1974.

REVISED RECORDS.--WDR MO-03-1: 2001-2002(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 409.96 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records fair except for discharges below 1 ft³/s, which are poor. U.S.G.S. satellite telemeter at station.

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

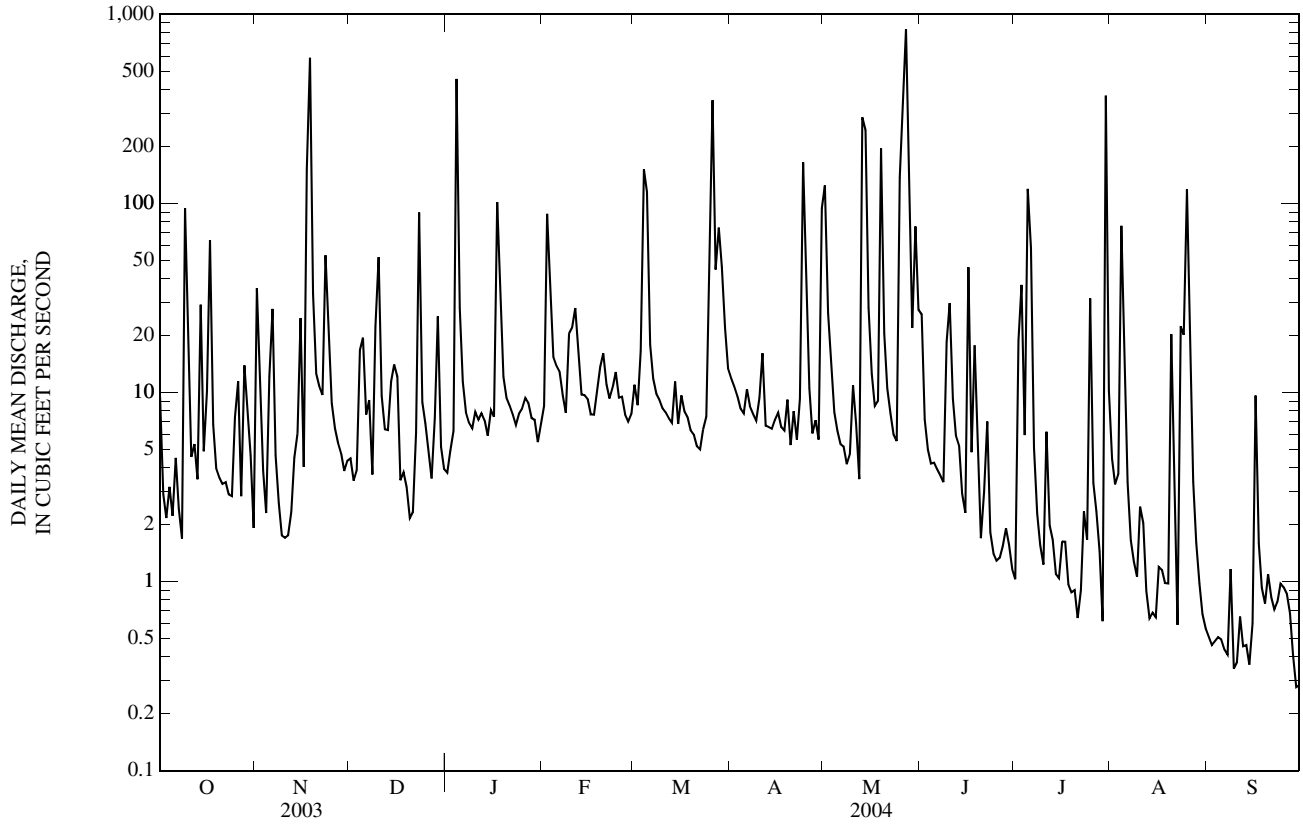
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	36	4.5	3.8	8.5	11	12	124	26	1.0	4.4	0.51
2	2.9	11	3.4	4.9	88	8.6	11	26	7.2	19	3.3	0.46
3	2.2	3.9	3.9	6.3	42	17	9.5	14	5.0	37	3.7	0.48
4	3.2	2.3	17	455	15	151	8.2	7.9	4.2	6.0	76	0.51
5	2.2	12	20	28	14	115	7.8	6.3	4.3	119	16	0.50
6	4.5	28	7.7	11	13	18	10	5.3	3.9	58	3.3	0.44
7	2.4	4.7	9.1	7.8	9.6	12	8.4	5.2	3.6	5.1	1.7	0.41
8	1.7	2.6	3.7	6.9	7.8	9.8	7.7	4.2	3.4	2.3	1.3	1.2
9	94	1.8	22	6.5	20	9.2	7.1	4.7	19	1.6	1.1	0.35
10	14	1.7	52	7.9	22	8.2	9.4	11	30	1.2	2.5	0.37
11	4.6	1.8	9.6	7.2	28	7.8	16	6.9	9.3	6.2	2.0	0.65
12	5.3	2.3	6.4	7.8	16	7.3	6.7	3.5	5.9	2.0	0.89	0.45
13	3.5	4.5	6.3	7.1	9.8	6.9	6.6	285	5.2	1.7	0.64	0.46
14	29	6.1	11	5.9	9.7	11	6.4	245	2.9	1.1	0.68	0.36
15	4.9	25	14	8.1	9.2	6.8	7.2	28	2.3	1.0	0.65	0.60
16	10	4.0	12	7.4	7.7	9.6	7.8	13	46	1.6	1.2	9.6
17	64	152	3.4	102	7.6	8.0	6.6	8.5	4.8	1.6	1.2	1.6
18	6.8	589	3.8	37	10	7.4	6.3	9.0	18	0.97	0.98	0.93
19	4.0	33	3.2	12	14	6.3	9.2	195	6.7	0.88	0.98	0.77
20	3.5	13	2.2	9.4	16	6.0	5.3	21	1.7	0.90	20	1.1
21	3.3	11	2.3	8.5	11	5.2	8.0	11	3.0	0.64	3.0	0.83
22	3.4	9.7	6.2	7.6	9.3	5.0	5.6	7.7	7.0	0.90	0.59	0.71
23	2.9	53	89	6.7	11	6.4	9.3	6.0	1.8	2.3	22	0.78
24	2.8	19	8.9	7.8	13	7.5	165	5.5	1.4	1.7	20	0.97
25	7.4	8.8	6.9	8.2	9.4	32	53	137	1.3	31	119	0.93
26	11	6.5	4.9	9.4	9.5	351	11	306	1.3	3.3	35	0.86
27	2.8	5.4	3.5	8.8	7.6	45	6.1	836	1.5	2.3	3.4	0.68
28	14	4.8	7.3	7.3	7.0	75	7.1	78	1.9	1.4	1.6	0.41
29	7.7	3.8	25	7.2	7.7	46	5.6	22	1.6	0.62	0.98	0.28
30	4.6	4.4	5.2	5.5	---	22	94	75	1.2	371	0.67	0.28
31	1.9	---	3.9	6.7	---	13	---	27	---	10	0.57	---
MEAN	10.8	35.4	12.2	26.6	15.6	33.7	17.8	81.8	7.71	22.4	11.3	0.95
MAX	94	589	89	455	88	351	165	836	46	371	119	9.6
MIN	1.7	1.7	2.2	3.8	7.0	5.0	5.3	3.5	1.2	0.62	0.57	0.28
IN.	0.51	1.62	0.58	1.26	0.69	1.59	0.81	3.86	0.35	1.06	0.53	0.04

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

MEAN	11.0	19.0	9.94	18.7	23.9	24.4	18.1	30.9	29.9	16.1	13.4	9.06
MAX	16.3	51.7	17.2	45.3	55.5	69.3	31.0	81.8	67.0	42.7	32.9	22.2
(WY)	(2003)	(1997)	(2000)	(1999)	(1999)	(1998)	(1998)	(2004)	(2003)	(1998)	(1998)	(2003)
MIN	6.56	7.54	2.89	7.54	7.18	7.12	7.57	7.73	6.96	1.16	4.14	0.95
(WY)	(2000)	(2003)	(2001)	(2001)	(2002)	(2000)	(2000)	(2001)	(2001)	(1997)	(2001)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1996 - 2004
ANNUAL MEAN	20.1	23.1	18.6
HIGHEST ANNUAL MEAN			27.7
LOWEST ANNUAL MEAN			7.08
HIGHEST DAILY MEAN	796	Jun 26	1,050
LOWEST DAILY MEAN	0.57	Aug 23	0.06
ANNUAL SEVEN-DAY MINIMUM	0.91	Aug 23	0.13
MAXIMUM PEAK FLOW	---	8,210 ^a	8,210 ^a
MAXIMUM PEAK STAGE	---	14.06	16.26
INSTANTANEOUS LOW FLOW	---	0.12	0.05
ANNUAL RUNOFF (INCHES)	11.16	12.91	10.33
10 PERCENT EXCEEDS	43	37	35
50 PERCENT EXCEEDS	6.1	6.9	4.6
90 PERCENT EXCEEDS	1.8	0.93	0.81

^a From rating extended above 1,270 ft³/s on basis of indirect measurement.



07005000 MALINE CREEK AT BELLEFONTAINE NEIGHBORS, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

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

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd μ S/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)
OCT 09...	1442	Environmental	541	2.1	7.2	78	7.6	226	18.4	66	19.0	4.40
DEC 04...	0930	Environmental	17	4.8	10.6	85	7.8	1,000	5.2	340	90.0	28.0
FEB 09...	1430	Environmental	9.9	3.7	15.5	116	8.0	5,870	2.1	480	136	34.0
MAR 04...	1238	Environmental	706	2.6	14.6	130	7.7	604	9.3	83	24.0	5.50
MAY 17...	1415	Environmental	9	9.1	6.7	76	7.6	971	21.1	310	83.0	24.0
AUG 04...	1000	Environmental	3.5	10	6.1	77	7.4	533	26.1	200	55.0	14.7

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	45	45	55	<1	--	1,300	2.8	--	0.07	--	0.490	--	0.06
DEC 04...	162	163	190	<1	140	5	0.50	--	0.07	--	0.660	--	0.02
FEB 09...	177	174	213	<1	2,140	6	1.6	--	0.36	--	0.950	--	0.06
MAR 04...	68	68	83	<1	--	2,190	3.5	--	0.14	--	0.580	--	0.06
MAY 17...	183	186	227	<1	--	6	0.60	--	0.14	--	0.970	--	0.04
AUG 04...	124	125	152	<1	--	13d	0.86	<0.04	--	0.19	--	0.012	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Copper, water, fltrd, ug/L (01040)
OCT 09...	--	0.280	1.30	20	21,000	22,000	25,000	5	2	<1	<1.0	1.4	2.0
DEC 04...	--	0.080	0.10	22	290	520	490	<3	1	<1	<1.0	3.0	1.7
FEB 09...	--	0.040	0.10	32	10k	20k	10k	<3	4	<1	<1.0	2.2	9.6
MAR 04...	--	0.220	2.10	15	4,800	11,000k	10,000	8	2	<1	<1.0	<1.0	2.2
MAY 17...	--	0.120	0.15	22	150k	1,000	240	<3	2	<1	<1.0	<1.0	2.0
AUG 04...	0.07	--	0.19	20	9,400k	7,200k	2,450	3	2.8	<0.06	0.06	E.5n	2.6

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER

07005000 MALINE CREEK AT BELLEFONTAINE NEIGHBORS, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	E2n	<3.4	<0.02	E2n	<1	E.01	<2	<2	<2	<1	<1m	<2m
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	E1mn	4	E.3t	<0.02	6	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 04...	--
FEB 09...	--
MAR 04...	Mt
MAY 17...	--
AUG 04...	--

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 extrapolated at low end

d -- Diluted sample: method hi range exceeded

k -- Counts outside acceptable range

m -- Value is highly variable by this method

n -- Below the LRL and above the LT-MDL

t -- Below the long-term MDL

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO

LOCATION.--Lat 38°37'51", long 90°10'40", Hydrologic Unit 07140101, on downstream side of west pier of Eads Bridge at St. Louis, 15.0 mi downstream from Missouri River, 19.2 mi upstream from Meramec River, and at mile 180.0 above the Ohio River.

DRAINAGE AREA.--697,000 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--

DISCHARGE: January 1861 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE HEIGHT: March 1933 to current year. Since January 1861 in reports of Mississippi River Commission. Since January 1890 in reports of the National Weather Service.

REVISED RECORDS.--WDR MO-76-1: Drainage area, WDR MO-98-1: Extreme outside period of record.

GAGE.--Water-stage recorder. Datum of gage is 379.94 ft above National Geodetic Vertical Datum of 1929. Prior to May 5, 1934, nonrecording gage 0.4 mi downstream; May 5, 1934, to Dec. 9, 1952, water-stage recorder at site 20 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Water-discharge records good. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River Basin and by many reservoirs and diversions for irrigation in Missouri River Basin. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 27, 1844, reached a stage of 41.32 ft, from floodmarks, discharge, 1,000,000 ft³/s, computed by U.S. Army Corps of Engineers. Flood in April 1785 may have reached a stage of 42.0 ft. Minimum flow, 18,000 ft³/s, Dec. 23, 1863.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76,400	68,100	118,000	121,000	88,700	129,000	301,000	213,000	396,000	343,000	177,000	283,000
2	69,100	68,700	105,000	131,000	90,300	131,000	305,000	225,000	394,000	331,000	158,000	233,000
3	66,900	71,100	96,700	124,000	85,700	133,000	302,000	226,000	428,000	317,000	144,000	215,000
4	68,000	80,900	100,000	132,000	79,900	149,000	291,000	225,000	451,000	299,000	147,000	194,000
5	66,900	97,000	97,400	164,000	79,500	213,000	284,000	218,000	443,000	281,000	159,000	165,000
6	64,600	111,000	86,200	156,000	82,100	306,000	277,000	208,000	430,000	265,000	174,000	145,000
7	62,300	122,000	82,400	133,000	84,700	379,000	272,000	191,000	415,000	245,000	192,000	134,000
8	62,200	120,000	81,000	114,000	83,500	407,000	272,000	180,000	401,000	246,000	176,000	123,000
9	66,600	116,000	89,000	110,000	78,800	389,000	266,000	168,000	390,000	251,000	159,000	115,000
10	80,400	113,000	105,000	107,000	77,800	361,000	258,000	156,000	385,000	249,000	156,000	117,000
11	72,900	108,000	184,000	107,000	78,400	327,000	250,000	146,000	379,000	245,000	142,000	115,000
12	66,900	107,000	197,000	104,000	80,400	288,000	235,000	136,000	368,000	243,000	133,000	108,000
13	64,300	103,000	193,000	102,000	85,500	270,000	221,000	146,000	369,000	242,000	130,000	105,000
14	65,300	92,400	176,000	99,900	85,200	258,000	207,000	172,000	372,000	248,000	118,000	100,000
15	67,700	86,500	151,000	99,300	82,900	238,000	191,000	180,000	364,000	263,000	110,000	101,000
16	69,300	85,200	138,000	98,800	80,700	222,000	161,000	175,000	370,000	270,000	99,900	107,000
17	81,300	84,000	134,000	97,400	76,800	220,000	157,000	172,000	397,000	259,000	104,000	118,000
18	83,300	133,000	136,000	106,000	75,000	212,000	150,000	173,000	421,000	241,000	104,000	122,000
19	77,200	158,000	141,000	111,000	76,300	207,000	149,000	183,000	426,000	228,000	97,800	125,000
20	67,700	150,000	131,000	111,000	78,900	211,000	141,000	222,000	419,000	229,000	98,200	124,000
21	64,500	148,000	118,000	111,000	93,900	209,000	147,000	246,000	414,000	227,000	110,000	117,000
22	71,100	142,000	111,000	119,000	103,000	204,000	147,000	267,000	405,000	218,000	110,000	118,000
23	71,000	143,000	120,000	111,000	115,000	187,000	151,000	287,000	400,000	206,000	106,000	137,000
24	73,600	142,000	143,000	105,000	129,000	183,000	152,000	271,000	397,000	199,000	92,200	150,000
25	72,900	124,000	160,000	103,000	125,000	176,000	164,000	264,000	399,000	195,000	94,400	154,000
26	74,800	124,000	143,000	106,000	145,000	181,000	172,000	301,000	394,000	186,000	148,000	151,000
27	73,400	131,000	128,000	101,000	156,000	230,000	180,000	369,000	387,000	181,000	190,000	144,000
28	69,500	131,000	118,000	92,700	139,000	281,000	181,000	449,000	379,000	178,000	261,000	142,000
29	69,400	121,000	122,000	84,800	131,000	290,000	206,000	460,000	368,000	181,000	314,000	134,000
30	69,200	111,000	119,000	89,400	---	281,000	211,000	440,000	356,000	180,000	300,000	129,000
31	65,800	---	113,000	88,500	---	290,000	---	416,000	---	175,000	301,000	---
MEAN	70,150	113,100	127,000	111,000	95,450	243,900	213,400	241,500	397,200	239,400	155,000	140,800
MAX	83,300	158,000	197,000	164,000	156,000	407,000	305,000	460,000	451,000	343,000	314,000	283,000
MIN	62,200	68,100	81,000	84,800	75,000	129,000	141,000	136,000	356,000	175,000	92,200	100,000
IN.	0.12	0.18	0.21	0.18	0.15	0.40	0.34	0.40	0.64	0.40	0.26	0.23

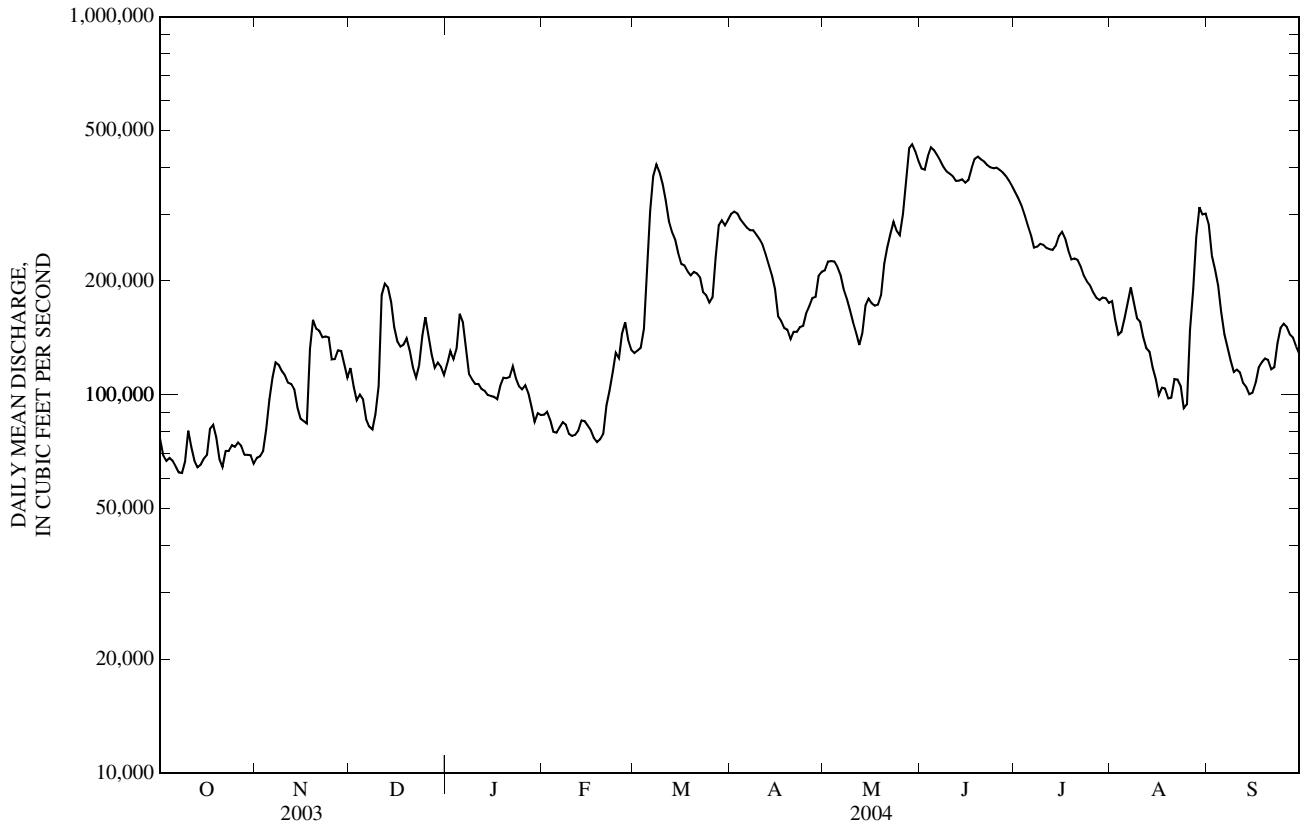
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2004, BY WATER YEAR (WY)

MEAN	138,300	142,900	123,500	114,800	144,200	228,800	302,400	295,400	273,900	222,600	145,100	136,500
MAX	575,300	359,200	452,400	307,800	301,400	521,800	692,500	588,700	600,600	808,800	700,200	531,800
(WY)	(1987)	(1986)	(1983)	(1973)	(1974)	(1973)	(1973)	(1995)	(1947)	(1993)	(1993)	(1993)
MIN	44,170	47,920	42,130	31,340	41,900	74,550	110,100	79,500	70,260	67,130	43,510	54,640
(WY)	(1940)	(1940)	(1938)	(1940)	(1940)	(1964)	(1934)	(1934)	(1934)	(1936)	(1936)	(1939)

MISSISSIPPI RIVER MAIN STEM

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1933 - 2004	
ANNUAL MEAN	129,200		179,000		189,100	
HIGHEST ANNUAL MEAN					429,700	1993
LOWEST ANNUAL MEAN					67,700	1934
HIGHEST DAILY MEAN	396,000	May 12	460,000	May 29	1,050,000	Aug 1, 1993
LOWEST DAILY MEAN	54,000	Jan 15	62,200	Oct 8	27,800	Dec 12, 1937
ANNUAL SEVEN-DAY MINIMUM	60,000	Jan 26	65,400	Oct 3	28,200	Jan 18, 1940
MAXIMUM PEAK FLOW	---		463,000	May 29	1,080,000	Aug 1, 1993
MAXIMUM PEAK STAGE	---		28.19	May 29	49.58	Aug 1, 1993
INSTANTANEOUS LOW FLOW	---		61,100	Oct 21	27,800	Dec 12, 1937
ANNUAL RUNOFF (INCHES)	2.52		3.50		3.69	
10 PERCENT EXCEEDS	232,000		365,000		369,000	
50 PERCENT EXCEEDS	108,000		146,000		152,000	
90 PERCENT EXCEEDS	65,900		78,700		69,400	



07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURES: October 1951 to current year.

SEDIMENT RECORDS: April 1948 to current year.

REMARKS.--Sediment discharge computed from turbidity readings. Sediment records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 6,720 mg/L, Feb. 24, 1985; minimum daily mean, 19 mg/L, Jan. 21 and 22, 1967.

SEDIMENT LOADS: Maximum daily, 9,830,000 tons, Feb. 24, 1985; minimum daily, 2,800 tons, Jan. 21, 1967.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,120 mg/L, June 3; minimum daily mean 53 mg/L, Feb. 17.

SEDIMENT LOADS: Maximum daily, 2,450,000 tons, June 3; minimum daily, 10,900 tons, Feb. 18.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	NOVEMBER			DECEMBER		
				Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER			NOVEMBER			DECEMBER		
1	76,400	148	30,400	68,100	118	21,700	118,000	124	39,500
2	69,100	141	26,200	68,700	107	19,900	105,000	116	32,800
3	66,900	136	24,600	71,100	103	19,800	96,700	115	29,900
4	68,000	133	24,300	80,900	103	22,500	100,000	117	31,700
5	66,900	167	30,100	97,000	106	27,900	97,400	131	34,500
6	64,600	134	23,400	111,000	113	34,000	86,200	103	23,900
7	62,300	118	19,900	122,000	135	44,500	82,400	95	21,100
8	62,200	117	19,600	120,000	127	41,300	81,000	91	20,000
9	66,600	122	21,900	116,000	99	31,100	89,000	90	21,600
10	80,400	122	26,500	113,000	108	32,900	105,000	84	23,800
11	72,900	129	25,300	108,000	108	31,500	184,000	181	90,100
12	66,900	108	19,600	107,000	98	28,400	197,000	255	135,000
13	64,300	105	18,300	103,000	108	30,100	193,000	376	196,000
14	65,300	130	22,900	92,400	114	28,400	176,000	481	228,000
15	67,700	118	21,500	86,500	99	23,200	151,000	507	207,000
16	69,300	110	20,500	85,200	98	22,500	138,000	407	152,000
17	81,300	107	23,500	84,000	94	21,400	134,000	339	123,000
18	83,300	109	24,600	133,000	247	88,600	136,000	272	99,800
19	77,200	118	24,500	158,000	377	161,000	141,000	208	79,200
20	67,700	103	18,900	150,000	277	112,000	131,000	189	66,800
21	64,500	139	24,200	148,000	250	99,900	118,000	177	56,400
22	71,100	114	22,000	142,000	249	95,600	111,000	146	43,800
23	71,000	107	20,400	143,000	211	81,400	120,000	139	45,100
24	73,600	109	21,600	142,000	229	87,900	143,000	154	59,400
25	72,900	111	21,800	124,000	187	62,700	160,000	231	99,600
26	74,800	104	21,000	124,000	179	59,800	143,000	322	124,000
27	73,400	116	23,000	131,000	154	54,300	128,000	249	86,000
28	69,500	109	20,500	131,000	164	58,200	118,000	234	74,700
29	69,400	105	19,600	121,000	155	50,800	122,000	213	70,200
30	69,200	107	20,000	111,000	131	39,200	119,000	127	40,800
31	65,800	117	20,900	---	---	---	113,000	110	33,600

MISSISSIPPI RIVER MAIN STEM

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	121,000	116	38,100	88,700	64	15,300	129,000	140	48,700
2	131,000	94	33,100	90,300	66	16,100	131,000	137	48,300
3	124,000	117	39,000	85,700	75	17,400	133,000	161	57,700
4	132,000	341	121,000	79,900	72	15,600	149,000	163	65,400
5	164,000	391	173,000	79,500	69	14,700	213,000	363	209,000
6	156,000	347	146,000	82,100	63	13,900	306,000	587	485,000
7	133,000	263	94,500	84,700	65	14,900	379,000	693	709,000
8	114,000	204	62,700	83,500	60	13,600	407,000	940	1,030,000
9	110,000	145	42,900	78,800	57	12,100	389,000	1,070	1,120,000
10	107,000	123	35,600	77,800	56	11,700	361,000	855	833,000
11	107,000	107	30,900	78,400	55	11,600	327,000	752	664,000
12	104,000	95	26,600	80,400	57	12,300	288,000	811	631,000
13	102,000	88	24,400	85,500	55	12,700	270,000	553	403,000
14	99,900	108	29,100	85,200	79	18,200	258,000	565	394,000
15	99,300	135	36,200	82,900	60	13,500	238,000	435	279,000
16	98,800	104	27,700	80,700	59	12,800	222,000	379	227,000
17	97,400	90	23,700	76,800	53	11,100	220,000	350	208,000
18	106,000	109	31,200	75,000	54	10,900	212,000	287	164,000
19	111,000	151	45,300	76,300	55	11,400	207,000	239	133,000
20	111,000	181	54,300	78,900	58	12,400	211,000	218	124,000
21	111,000	247	74,100	93,900	70	17,800	209,000	232	131,000
22	119,000	212	68,100	103,000	68	18,800	204,000	182	100,000
23	111,000	179	53,700	115,000	71	22,000	187,000	172	86,900
24	105,000	121	34,400	129,000	89	30,900	183,000	152	75,300
25	103,000	112	31,300	125,000	89	30,100	176,000	162	77,200
26	106,000	87	25,000	145,000	127	49,600	181,000	166	81,300
27	101,000	90	24,400	156,000	166	69,800	230,000	312	194,000
28	92,700	84	21,100	139,000	156	58,500	281,000	477	362,000
29	84,800	82	18,800	131,000	137	48,400	290,000	491	385,000
30	89,400	77	18,700	---	---	---	281,000	363	276,000
31	88,500	72	17,200	---	---	---	290,000	339	266,000
		APRIL			MAY			JUNE	
1	301,000	461	375,000	213,000	142	81,600	396,000	1,000	1,070,000
2	305,000	529	435,000	225,000	180	109,000	394,000	1,340	1,430,000
3	302,000	479	391,000	226,000	159	97,100	428,000	2,120	2,450,000
4	291,000	432	340,000	225,000	140	84,900	451,000	1,600	1,940,000
5	284,000	402	308,000	218,000	158	93,000	443,000	956	1,140,000
6	277,000	339	254,000	208,000	149	83,600	430,000	840	975,000
7	272,000	361	265,000	191,000	140	72,000	415,000	657	737,000
8	272,000	294	216,000	180,000	157	76,200	401,000	545	590,000
9	266,000	242	174,000	168,000	118	53,400	390,000	473	498,000
10	258,000	230	160,000	156,000	107	45,100	385,000	422	438,000
11	250,000	240	162,000	146,000	107	42,200	379,000	379	388,000
12	235,000	227	144,000	136,000	96	35,400	368,000	392	390,000
13	221,000	238	142,000	146,000	109	42,800	369,000	421	419,000
14	207,000	223	125,000	172,000	325	151,000	372,000	441	443,000
15	191,000	194	100,000	180,000	223	109,000	364,000	368	362,000
16	161,000	143	62,300	175,000	148	69,900	370,000	391	391,000
17	157,000	134	56,600	172,000	118	54,900	397,000	460	493,000
18	150,000	114	46,100	173,000	109	51,100	421,000	688	782,000
19	149,000	114	45,700	183,000	157	77,500	426,000	716	823,000
20	141,000	99	37,600	222,000	260	156,000	419,000	738	835,000
21	147,000	95	37,500	246,000	291	193,000	414,000	638	713,000
22	147,000	88	35,100	267,000	329	237,000	405,000	486	531,000
23	151,000	87	35,300	287,000	417	323,000	400,000	327	354,000
24	152,000	93	38,300	271,000	561	410,000	397,000	490	525,000
25	164,000	104	46,200	264,000	410	292,000	399,000	398	429,000
26	172,000	131	60,900	301,000	395	321,000	394,000	369	393,000
27	180,000	159	77,000	369,000	653	650,000	387,000	411	429,000
28	181,000	134	65,700	449,000	913	1,110,000	379,000	378	387,000
29	206,000	185	103,000	460,000	926	1,150,000	368,000	347	345,000
30	211,000	153	87,300	440,000	879	1,040,000	356,000	330	317,000
31	---	---	---	416,000	1,000	1,120,000	---	---	---

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)		Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
				JULY	AUGUST				
1	343,000	299	277,000	177,000	244	117,000	283,000	1,050	800,000
2	331,000	288	257,000	158,000	218	93,000	233,000	967	609,000
3	317,000	296	253,000	144,000	164	63,800	215,000	455	264,000
4	299,000	275	222,000	147,000	157	62,300	194,000	383	201,000
5	281,000	281	213,000	159,000	146	62,700	165,000	629	280,000
6	265,000	390	279,000	174,000	137	64,200	145,000	489	192,000
7	245,000	320	212,000	192,000	217	113,000	134,000	243	88,000
8	246,000	270	179,000	176,000	288	137,000	123,000	196	64,900
9	251,000	363	246,000	159,000	292	125,000	115,000	150	46,400
10	249,000	311	209,000	156,000	339	143,000	117,000	119	37,500
11	245,000	270	179,000	142,000	295	113,000	115,000	103	32,100
12	243,000	268	176,000	133,000	225	80,600	108,000	94	27,500
13	242,000	249	163,000	130,000	181	63,700	105,000	129	36,400
14	248,000	237	159,000	118,000	180	57,500	100,000	116	31,400
15	263,000	299	212,000	110,000	154	45,900	101,000	105	28,700
16	270,000	346	252,000	99,900	145	39,200	107,000	98	28,200
17	259,000	376	263,000	104,000	137	38,300	118,000	107	34,200
18	241,000	436	283,000	104,000	122	34,300	122,000	105	34,700
19	228,000	433	267,000	97,800	98	26,000	125,000	93	31,400
20	229,000	425	263,000	98,200	93	24,700	124,000	101	33,900
21	227,000	512	314,000	110,000	97	28,700	117,000	91	28,800
22	218,000	423	249,000	110,000	102	30,300	118,000	90	28,600
23	206,000	414	230,000	106,000	98	28,000	137,000	123	45,400
24	199,000	332	178,000	92,200	106	26,500	150,000	193	78,100
25	195,000	279	147,000	94,400	95	24,200	154,000	174	72,500
26	186,000	245	123,000	148,000	153	61,100	151,000	173	70,400
27	181,000	226	110,000	190,000	202	104,000	144,000	153	59,700
28	178,000	211	101,000	261,000	277	195,000	142,000	174	66,800
29	181,000	277	135,000	314,000	596	506,000	134,000	177	64,000
30	180,000	358	174,000	300,000	773	626,000	129,000	179	62,300
31	175,000	350	166,000	301,000	946	769,000	---	---	---

07010022 RIVER DES PERES NEAR UNIVERSITY CITY, MO

LOCATION.--Lat 38°40'06", long 90°19'25", St. Louis County, Hydrologic Unit 07140101, on top of left downstream abutment of Purdue Ave. bridge, 3.78 mi south of Interstate 70, and 2.01 mi east of Interstate 170.

DRAINAGE AREA.--8.94 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR MO-03-1: 1998-2002(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 491.97 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor. U.S.G.S. satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	31	0.83	0.93	2.4	2.3	2.3	83	7.1	0.00	0.27	0.51
2	0.05	1.0	1.0	1.1	71	1.6	1.9	8.2	0.63	15	0.26	0.43
3	0.07	0.12	6.6	e8.0	11	19	1.7	2.7	0.49	17	0.19	0.38
4	0.06	0.09	8.3	e6.0	1.3	133	1.5	1.8	0.26	0.42	26	0.36
5	0.05	e6.0	15	e13	5.5	58	1.3	1.8	0.12	224	2.0	0.33
6	0.05	e39	1.7	4.8	3.2	6.6	e1.0	0.73	0.10	33	0.21	0.35
7	0.06	e2.7	1.1	2.9	0.89	3.3	1.2	0.74	0.10	0.75	0.15	0.32
8	0.07	e1.1	0.82	2.3	1.3	2.5	1.1	0.69	0.11	0.30	0.13	0.30
9	85	e0.51	16	1.8	9.0	2.0	1.00	0.70	15	0.14	0.13	0.33
10	2.4	e0.32	59	1.3	8.5	1.8	7.5	8.9	6.6	0.13	0.26	0.31
11	0.12	e0.25	1.6	1.0	15	1.9	4.7	1.8	0.30	0.91	0.15	0.28
12	0.35	e0.91	0.60	0.70	3.8	2.0	0.99	0.96	7.0	0.23	0.13	0.26
13	0.05	e2.2	0.96	0.54	2.0	1.8	0.80	197	0.40	0.11	0.12	0.44
14	24	e1.6	3.3	0.46	2.4	4.0	0.91	129	0.14	0.11	0.14	0.18
15	0.10	e13	4.3	0.44	2.1	1.4	0.91	9.4	0.16	0.11	0.13	0.21
16	25	e1.4	2.3	1.3	1.0	4.2	0.88	3.4	90	0.10	0.11	0.28
17	46	e120	0.53	100	1.4	2.2	0.84	2.3	0.44	0.09	0.11	0.27
18	0.53	e220	2.6	25	2.4	1.6	0.80	8.2	16	0.09	0.09	0.28
19	0.13	e20	0.52	4.4	5.0	1.2	0.82	145	0.47	0.09	0.14	0.27
20	0.06	2.1	0.32	3.0	3.9	0.99	0.77	7.4	0.08	0.09	31	0.25
21	0.11	1.6	0.31	2.7	1.3	0.79	2.6	3.3	0.07	0.09	1.3	0.25
22	0.07	1.0	16	1.7	0.99	0.86	2.7	1.7	0.08	7.3	0.65	0.17
23	0.05	40	69	1.8	1.1	1.3	3.5	1.3	0.10	1.3	4.5	0.15
24	0.07	5.4	3.7	1.4	1.4	1.2	113	1.2	0.08	0.11	18	0.17
25	12	1.9	1.8	1.5	1.0	21	12	144	0.08	41	e100	0.17
26	1.1	1.5	1.3	2.3	0.98	320	1.7	179	0.08	0.25	4.0	0.17
27	0.05	1.2	0.95	3.6	1.4	24	1.1	278	0.08	0.11	1.2	0.11
28	9.3	1.1	8.8	1.8	1.1	36	0.95	30	0.07	0.12	0.61	0.11
29	0.09	0.99	18	0.31	1.2	11	1.5	2.4	0.04	0.11	0.56	0.11
30	0.04	0.98	2.0	0.31	---	4.5	68	7.1	0.01	260	0.53	0.11
31	0.04	---	e1.3	0.46	---	3.1	---	12	---	1.5	0.52	---
MEAN	6.72	17.3	8.08	6.35	5.64	21.8	8.00	41.1	4.87	19.5	6.24	0.26
MAX	85	220	69	100	71	320	113	278	90	260	100	0.51
MIN	0.04	0.09	0.31	0.31	0.89	0.79	0.77	0.69	0.01	0.00	0.09	0.11
IN.	0.87	2.16	1.04	0.82	0.68	2.81	1.00	5.30	0.61	2.52	0.81	0.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	7.61	7.13	5.57	8.36	10.4	13.5	11.2	20.2
MAX	18.5	17.3	13.3	20.9	27.7	33.4	18.4	41.1
(WY)	(2002)	(2004)	(2002)	(1999)	(1999)	(1998)	(2002)	(2004)
MIN	3.11	1.17	1.23	2.36	2.78	3.61	3.81	4.20
(WY)	(1998)	(2000)	(1999)	(2000)	(2002)	(2000)	(2000)	(1999)

SUMMARY STATISTICS

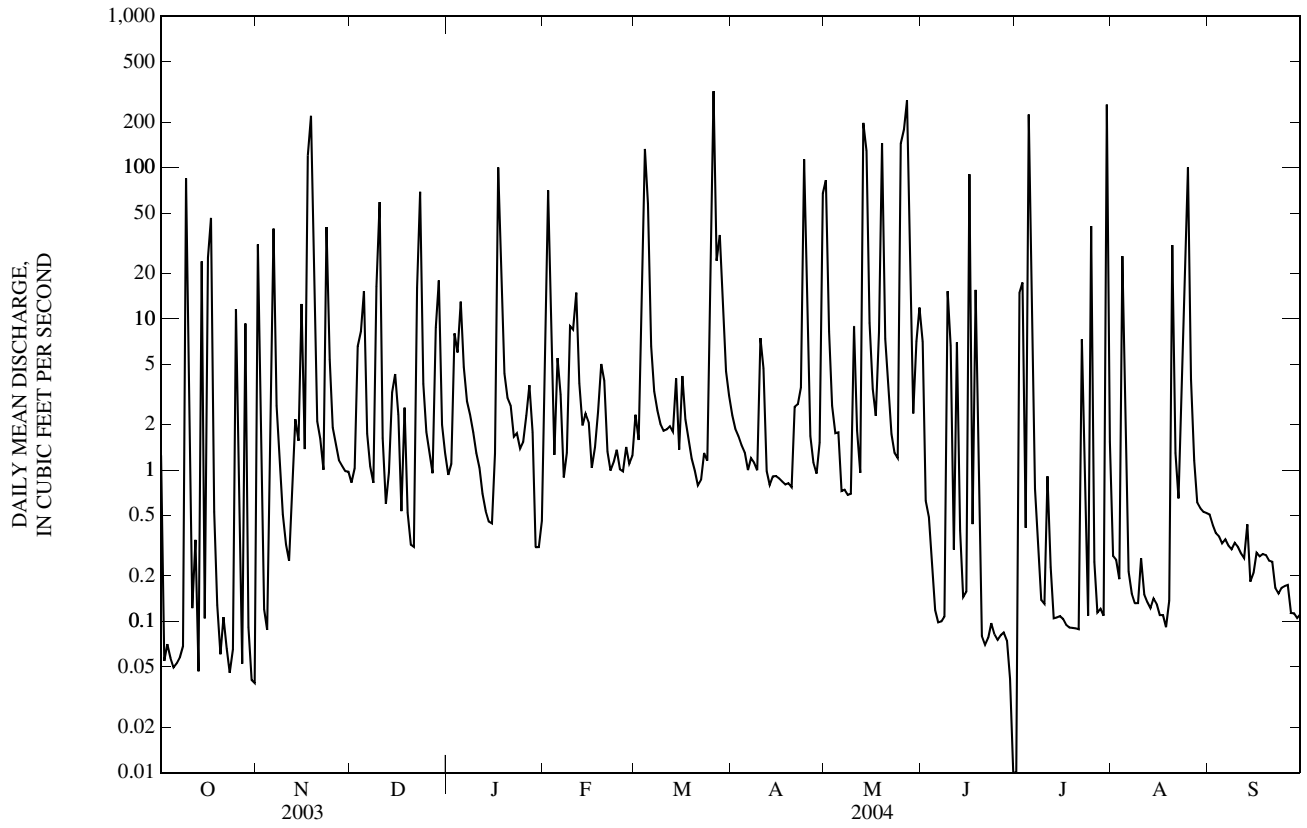
	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	13.1	12.2	10.8
HIGHEST ANNUAL MEAN			13.7
LOWEST ANNUAL MEAN			5.55
HIGHEST DAILY MEAN	347	320	711
LOWEST DAILY MEAN	0.01	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.05	0.05	0.00
MAXIMUM PEAK FLOW	---	4,050 ^a	4,430 ^b
MAXIMUM PEAK STAGE	---	15.56	16.31
INSTANTANEOUS LOW FLOW	---	0.00	0.00
ANNUAL RUNOFF (INCHES)	19.87	18.64	16.34
10 PERCENT EXCEEDS	39	24	21
50 PERCENT EXCEEDS	1.0	1.2	0.43
90 PERCENT EXCEEDS	0.08	0.10	0.00

e Estimated

^a From rating extended above 563 ft³/s on basis of indirect measurement.

^b Discharge determined by indirect measurement of peak flow.

07010022 RIVER DES PERES NEAR UNIVERSITY CITY, MO—Continued



07010022 RIVER DES PERES NEAR UNIVERSITY CITY, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

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

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
OCT 09...	1337	Environmental	691	6.8	8.6	94	7.0	127	18.8	37	12.0	1.70
DEC 17...	0835	Environmental	0.41	8.2	12.0	88	7.5	3,600	1.4	330	97.0	22.0
FEB 18...	0845	Environmental	1.04	7.1	7.6	57	7.7	1,990	3.0	390	95.0	37.0
MAR 03...	2021	Environmental	68	6.3	9.2	82	7.6	1,400	9.9	150	42.0	11.0
MAY 18...	0930	Environmental	1.5	5.8	7.0	79	7.8	1,140	20.8	310	85.0	23.0
AUG 03...	1015	Environmental	0.19	14	4.0	50	7.3	930	25.0	260	74.5	17.1

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	37	35	43	<1	--	784	2.5	--	0.10	--	0.430	--	0.05
DEC 17...	144	142	173	<1	1,000	2	1.7	--	0.86	--	0.950	--	0.07
FEB 18...	185	186	227	<1	420	11	4.0	--	3.10	--	0.820	--	0.07
MAR 03...	119	114	139	<1	--	721	8.5	--	0.94	--	0.280	--	0.05
MAY 18...	182	185	225	<1	--	7	0.80	--	0.29	--	0.600	--	0.10
AUG 03...	138	140	171	<1	--	<10	0.95	0.19	--	0.62	--	0.048	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7 μ MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.180	0.80	20	2,000k	6,000k	16,000k	13	2	<1	<1.0	1.9	3.9
DEC 17...	--	0.090	0.19	29	2,400k	11,000k	2,230k	5	2	<1	<1.0	1.7	5.8
FEB 18...	--	0.170	0.36	33	>1,600a	>1,200a	6,240k	<3	2	<1	<1.0	1.6	4.0
MAR 03...	--	0.130	1.60	46	41,000k	140,000k	76,000	8	2	<1	<1.0	<1.0	2.0
MAY 18...	--	0.090	0.14	28	6,200	1,900	6,200	6	2	<1	<1.0	<1.0	1.8
AUG 03...	0.07	--	0.15	20	4,000	5,000	1,190k	7	2.1	<0.06	0.04	<0.8	2.3

07010022 RIVER DES PERES NEAR UNIVERSITY CITY, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	3	<3.4	<0.02	6	<1	0.02	<2	<2	<2	Mt	<1m	<2m
DEC 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 03...	E6m	3	E.5t	<0.02	5	<1	<0.02	<1	<2	<1	Mt	<1m	<2m
MAY 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 17...	--
FEB 18...	--
MAR 03...	Mt
MAY 18...	--
AUG 03...	--

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

Value qualifier codes used in this table:
 a -- Value extrapolated at high end
 b -- Value extrapolated at low end
 k -- Counts outside acceptable range
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07010030 RIVER DES PERES TRIBUTARY AT PAGEDALE, MO

LOCATION.--Lat 38°40'37", long 90°18'53", St. Louis County, Hydrologic Unit 07140101, on right culvert wall next to sidewalk handrail at Page Ave., 3.04 mi south of Interstate 70, and 2.37 mi east of Interstate 170.

DRAINAGE AREA.--2.01 mi².

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

REVISED RECORDS.--WDR MO-03-1: 1997-2002(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 504.56 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Record poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.29	3.0	0.15	0.26	0.87	0.46	1.2	13	0.93	0.13	e0.32	0.21
2	0.14	0.43	0.13	0.41	7.4	0.36	1.0	1.5	0.54	1.7	0.29	0.17
3	0.13	0.19	0.47	0.55	e1.8	1.3	0.89	0.88	0.44	3.1	1.2	0.12
4	0.13	0.16	0.49	42	e1.0	20	0.78	0.70	0.42	0.38	5.8	0.13
5	0.09	0.84	0.89	2.5	1.0	13	0.69	0.58	0.35	31	0.94	0.11
6	0.09	2.6	0.20	1.2	0.81	1.9	0.65	0.51	0.28	3.1	0.45	0.11
7	0.08	0.27	0.15	0.87	0.66	1.3	0.66	0.42	0.26	0.64	0.36	0.11
8	0.06	0.15	0.15	0.86	e1.2	1.1	0.62	0.37	0.24	0.48	0.34	0.11
9	9.3	0.13	1.3	0.76	e1.4	0.97	0.55	0.34	1.2	0.46	0.30	0.08
10	0.67	0.12	4.4	0.63	1.8	0.86	0.99	0.94	2.7	0.35	0.23	0.10
11	0.39	0.13	0.43	0.59	2.5	0.75	0.77	0.34	0.57	0.60	0.17	1.1
12	0.40	0.16	0.28	0.56	0.99	0.69	0.56	0.29	0.80	0.88	0.16	0.18
13	0.25	0.18	0.31	0.53	0.81	0.66	0.53	35	0.41	0.28	0.18	0.16
14	2.3	0.86	0.43	0.53	0.87	0.96	0.49	32	0.32	0.26	0.17	0.19
15	0.37	1.6	0.55	0.49	0.73	0.66	0.45	2.3	0.26	0.20	0.15	0.28
16	3.2	0.24	0.45	0.56	0.58	1.00	0.43	1.1	4.4	0.20	0.14	0.47
17	5.6	20	0.26	11	0.69	0.69	0.43	0.81	0.49	0.28	0.14	0.22
18	0.69	60	0.35	3.1	0.86	0.61	0.40	0.99	1.1	0.26	0.11	0.11
19	0.54	2.1	0.21	1.3	1.1	0.54	0.38	20	0.41	3.1	0.16	0.13
20	0.43	0.88	0.17	0.98	1.1	0.55	0.40	1.5	0.27	0.14	1.5	0.12
21	0.31	0.54	0.17	0.86	0.69	0.49	0.65	0.79	0.26	0.13	0.32	0.10
22	0.22	0.43	2.1	0.72	0.63	0.48	0.59	0.57	0.26	0.21	0.20	0.08
23	0.18	4.6	7.5	0.67	0.60	0.55	0.56	0.46	0.26	0.21	4.0	0.07
24	0.11	0.77	0.74	0.63	0.56	0.56	20	0.36	0.22	0.15	2.9	0.06
25	0.62	0.44	0.45	0.70	0.45	1.6	2.3	13	0.19	3.3	20	0.05
26	0.33	0.36	0.38	0.69	0.41	60	0.73	38	0.16	0.26	1.9	0.03
27	0.13	0.29	0.31	0.62	0.36	3.9	0.53	61	0.16	e0.17	0.59	0.03
28	0.80	0.21	0.95	e0.60	0.34	8.3	0.44	4.9	0.17	e0.15	0.38	0.02
29	0.19	0.19	1.6	e0.64	0.39	2.9	0.48	1.2	0.14	e0.14	0.32	0.02
30	0.13	0.20	0.38	e0.60	---	1.8	8.8	1.2	0.15	e20	0.21	0.02
31	0.13	---	0.31	e0.58	---	1.4	---	1.6	---	e2.6	0.19	---
MEAN	0.91	3.40	0.86	2.48	1.12	4.20	1.60	7.63	0.61	2.41	1.42	0.16
MAX	9.3	60	7.5	42	7.4	60	20	61	4.4	31	20	1.1
MIN	0.06	0.12	0.13	0.26	0.34	0.36	0.38	0.29	0.14	0.13	0.11	0.02
IN.	0.52	1.89	0.49	1.42	0.60	2.41	0.89	4.38	0.34	1.39	0.82	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	(2002)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(2003)	(1998)	(2002)	(2003)
MEAN	1.00	1.19	0.83	1.61	2.04	2.45	1.68	3.35	3.79	1.55	1.19	0.89
MAX	2.59	3.40	1.98	4.50	7.35	6.56	3.06	7.63	6.10	6.51	2.79	2.99
(WY)	(2002)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(2003)	(1998)	(2002)	(2003)
MIN	0.39	0.12	0.33	0.22	0.50	0.37	0.48	0.51	0.45	0.25	0.12	0.14
(WY)	(2000)	(2000)	(1999)	(2003)	(2002)	(2000)	(2000)	(1999)	(2001)	(1997)	(2001)	(1999)

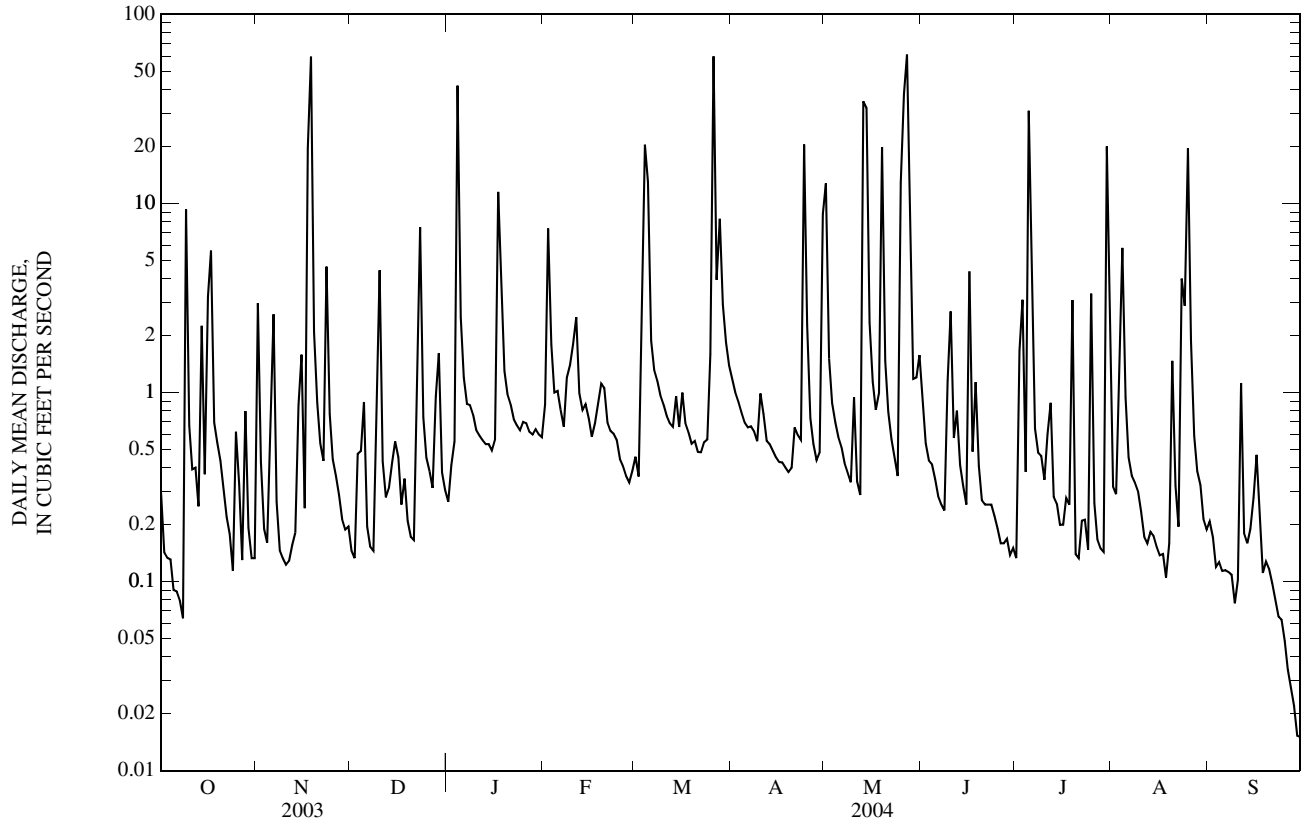
SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	1.81	2.25	1.81
HIGHEST ANNUAL MEAN			2.53
LOWEST ANNUAL MEAN			0.69
HIGHEST DAILY MEAN		61	148
LOWEST DAILY MEAN	0.01	0.02	0.00
ANNUAL SEVEN-DAY MINIMUM	0.01	0.03	0.00
MAXIMUM PEAK FLOW	---	1,000 ^a	2,490 ^a
MAXIMUM PEAK STAGE	---	8.20	8.84
INSTANTANEOUS LOW FLOW	---	0.01	0.00
ANNUAL RUNOFF (INCHES)	12.22	15.24	12.24
10 PERCENT EXCEEDS	4.0	3.1	2.7
50 PERCENT EXCEEDS	0.31	0.50	0.25
90 PERCENT EXCEEDS	0.05	0.13	0.05

e Estimated

^a From rating extended above 48 ft³/s on basis of indirect measurement.

07010030 RIVER DES PERES TRIBUTARY AT PAGEDALE, MO—Continued



07010035 ENGELHOLM CREEK NEAR WELLSTON, MO

LOCATION.--Lat 38°40'58", long 90°18'10", in NW ¼ NE ¼ SE ¼ sec.3, T.45 N., R.6 E., St. Louis County, Hydrologic Unit 07140101, on right downstream wingwall of Kingsland Ave. bridge, 0.25 mi south of St. Charles Rock Road, and 2.78 mi east of Interstate 170.

DRAINAGE AREA.--1.40 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1998 to current year. May 1997 to April 1998 published as Engelholm Creek at Pagedale (07010034).

REVISED RECORDS.--WDR MO-03-1: 1988-2002(P).

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

REMARKS.--Water-discharge records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.22	2.2	0.39	0.49	0.48	0.63	1.4	8.7	1.1	0.33	0.26	0.10
2	0.13	0.40	0.39	0.64	5.4	0.51	1.2	1.6	0.69	1.5	0.25	0.10
3	0.11	0.28	0.60	0.68	2.7	1.3	1.1	0.95	0.59	3.0	0.39	0.09
4	0.12	0.32	0.72	27	0.71	12	1.0	0.76	0.53	1.1	2.9	0.09
5	0.09	0.70	0.90	1.8	0.95	8.4	0.95	0.63	0.50	14	0.40	0.09
6	0.09	2.1	0.44	0.98	0.76	1.9	0.92	0.54	0.47	2.0	0.24	0.09
7	0.08	0.31	0.42	0.74	0.64	1.3	0.88	0.42	0.45	0.85	0.20	0.10
8	0.10	0.22	0.42	0.71	0.62	1.1	0.90	0.37	0.44	e0.52	0.22	0.11
9	8.0	0.20	1.2	0.61	1.3	1.0	0.85	0.33	1.1	e0.38	0.20	0.10
10	0.65	0.20	2.9	0.53	1.7	0.92	1.2	0.60	1.4	e0.32	0.17	0.09
11	0.36	0.22	0.54	0.54	2.7	0.86	0.99	0.30	0.56	e0.66	0.17	0.10
12	0.45	0.24	0.43	0.51	0.96	0.79	0.79	0.27	0.61	e0.48	0.16	0.09
13	0.39	0.28	0.45	0.45	0.90	0.75	0.74	20	0.37	e0.33	0.16	0.10
14	1.7	0.64	0.63	0.47	0.96	0.97	0.72	19	0.34	e0.31	0.15	0.11
15	0.30	1.3	0.70	0.40	0.75	0.73	0.70	1.8	0.34	e0.27	0.14	0.12
16	2.1	0.27	0.65	0.45	0.64	0.95	0.69	1.1	2.1	e0.38	0.15	0.17
17	4.2	9.7	0.43	8.7	0.73	0.82	0.63	0.82	0.42	e0.35	0.14	0.11
18	0.44	33	0.53	2.5	0.89	0.78	0.53	0.81	0.83	e0.30	0.13	0.14
19	0.33	1.7	0.42	0.95	1.1	0.71	0.49	11	0.38	e0.26	0.13	0.15
20	0.28	0.83	0.38	0.73	0.99	0.74	0.56	1.3	0.29	e0.27	0.34	0.15
21	0.28	0.62	0.39	0.70	0.71	0.65	0.81	0.80	0.31	e0.42	0.10	0.13
22	0.25	0.52	1.7	0.63	0.64	0.64	0.79	0.63	0.31	e0.27	0.10	0.14
23	0.25	3.7	6.2	0.69	0.65	0.74	0.71	0.53	0.30	e0.30	0.22	0.12
24	0.25	0.85	0.85	0.50	0.57	0.67	15	0.47	0.28	e0.19	0.56	0.13
25	0.54	0.60	0.63	0.65	0.54	1.6	2.7	7.5	e0.27	1.4	6.6	0.11
26	0.40	0.54	0.56	0.65	0.52	41	0.80	22	e0.26	0.34	0.53	0.11
27	0.28	0.50	0.52	0.64	0.50	3.5	0.55	32	e0.23	0.28	0.12	0.10
28	0.74	0.45	0.98	0.59	0.48	7.1	0.48	3.7	e0.24	0.28	0.11	0.09
29	0.38	0.44	1.8	0.50	0.52	3.1	0.50	1.5	0.25	0.28	0.13	0.10
30	0.36	0.45	0.65	0.50	---	2.0	5.3	1.5	0.21	18	0.11	0.11
31	0.37	---	0.59	0.50	---	1.6	---	1.5	---	0.38	0.10	---
MEAN	0.78	2.13	0.92	1.82	1.07	3.22	1.50	4.63	0.54	1.60	0.50	0.11
MAX	8.0	33	6.2	27	5.4	41	15	32	2.1	18	6.6	0.17
MIN	0.08	0.20	0.38	0.40	0.48	0.51	0.48	0.27	0.21	0.19	0.10	0.09
IN.	0.64	1.69	0.75	1.50	0.82	2.65	1.19	3.81	0.43	1.32	0.41	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	0.76	0.94	0.72	1.19	1.24	1.41	1.19	2.13	1.85	0.96	0.65	0.57
MAX	1.15	2.13	1.51	3.14	3.29	3.22	2.04	4.63	4.80	2.86	1.40	1.63
(WY)	(2002)	(2004)	(2002)	(1999)	(1999)	(2004)	(2002)	(2004)	(2003)	(1998)	(1998)	(2003)
MIN	0.42	0.22	0.30	0.29	0.62	0.38	0.36	0.56	0.28	0.22	0.10	0.11
(WY)	(2001)	(2000)	(2001)	(2003)	(2002)	(2000)	(2000)	(2001)	(2001)	(2001)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

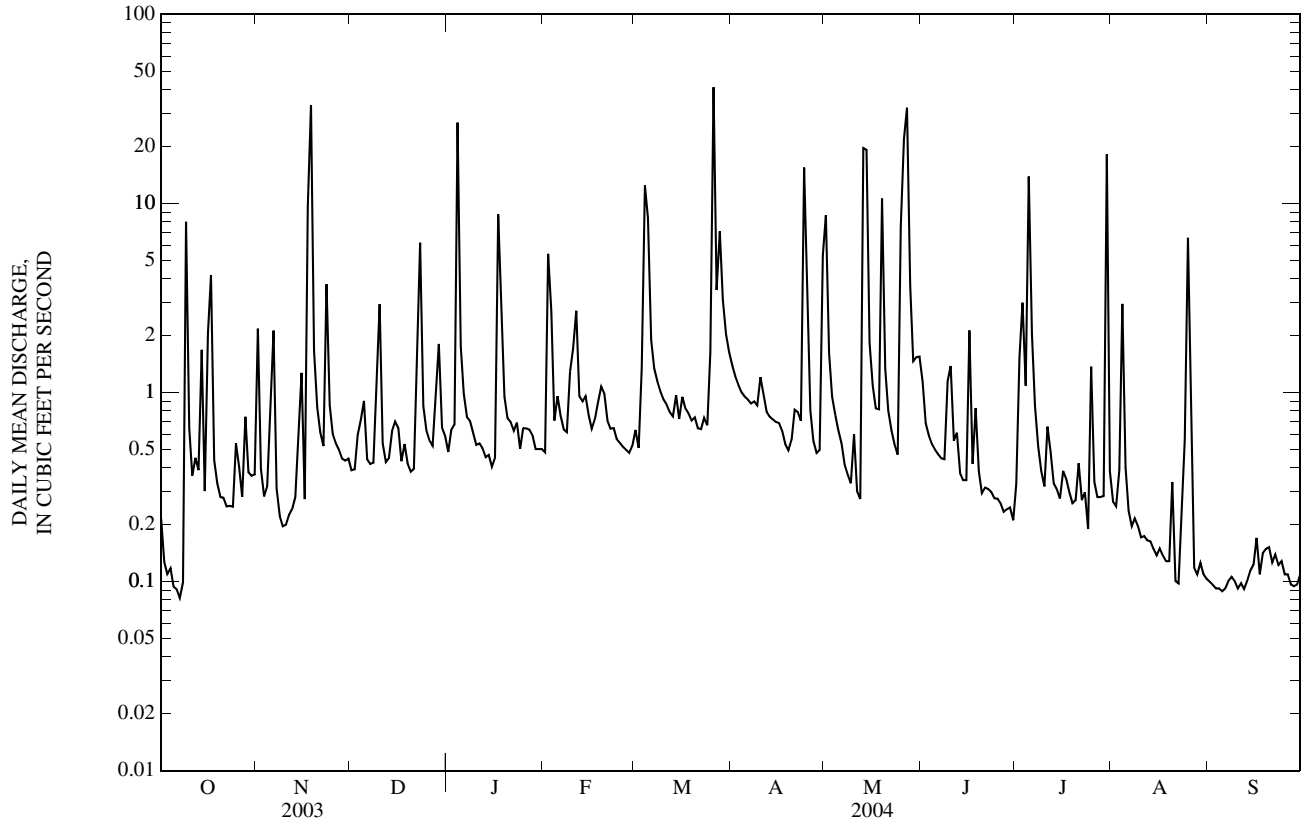
WATER YEARS 1998 - 2004

ANNUAL MEAN	1.34	1.58	1.09
HIGHEST ANNUAL MEAN			1.58
LOWEST ANNUAL MEAN			0.40
HIGHEST DAILY MEAN	49	41	49
LOWEST DAILY MEAN	0.04	0.08	0.04
ANNUAL SEVEN-DAY MINIMUM	0.04	0.09	0.04
MAXIMUM PEAK FLOW	---	697 ^a	1,086 ^a
MAXIMUM PEAK STAGE	---	7.56	8.88
INSTANTANEOUS LOW FLOW	---	0.08	0.03
ANNUAL RUNOFF (INCHES)	12.96	15.33	10.59
10 PERCENT EXCEEDS	2.7	2.1	1.8
50 PERCENT EXCEEDS	0.40	0.54	0.28
90 PERCENT EXCEEDS	0.12	0.13	0.10

e Estimated

^a From rating extended above 52 ft³/s on basis of indirect measurement.

07010035 ENGELHOLM CREEK NEAR WELLSTON, MO—Continued



07010035 ENGELHOLM CREEK NEAR WELLSTON, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1997 to September 30, 2004 (discontinued).

REMARKS.--Published as Engelholm Creek at Pagedale (07010034) October 1997 to September 1998.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)	
OCT 09...	1147	Environmental	34	0.8	7.5	80	8.3	248	18.0	58	18.0	3.10	
DEC 03...	1430	Environmental	0.42	1.3	10.3	86	8.4	767	7.0	260	69.0	22.0	
FEB 18...	1030	Environmental	0.59	2.0	13.8	105	8.1	987	3.6	260	67.0	22.0	
MAR 26...	0916	Environmental	45	2.7	8.9	88	7.9	195	14.5	59	18.0	3.50	
MAY 18...	0930	Environmental	0.64	8.0	6.8	74	7.6	792	18.2	280	75.0	22.0	
AUG 03...	0915	Environmental	0.31	17	5.0	60	7.2	568	23.1	220	60.9	16.6	
Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	77	79	97	<1	--	697	2.4	--	0.12	--	0.620	--	0.07
DEC 03...	161	160	194	1	66.0	1	0.70	--	0.28	--	0.940	--	0.03
FEB 18...	147	146	179	<1	140	2	0.80	--	0.26	--	0.830	--	0.02
MAR 26...	105	92	113	<1	--	1,990	6.5	--	0.14	--	0.440	--	0.04
MAY 18...	164	165	202	<1	--	5	0.70	--	0.14	--	1.10	--	--
AUG 03...	133	134	164	<1	--	<10	0.40	0.06	--	1.04	--	0.031	--
Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.110	0.74	20	9,000k	22,000	32,000	36	1	<1	<1.0	1.8	3.7
DEC 03...	--	0.120	0.12	21	78	240	130	<3	1	<1	<1.0	2.5	2.0
FEB 18...	--	0.070	0.12	9	10k	98	26k	<3	1	<1	<1.0	1.4	2.3
MAR 26...	--	0.120	1.70	17	4,500k	8,800	4,800	8	1	<1	<1.0	<1.0	4.7
MAY 18...	--	--	0.15	15	560k	720k	660k	4	<1	<1	<1.0	<1.0	2.1
AUG 03...	0.09	--	0.15	10	1,300	1,600	740	4	1.7	<0.06	E.03n	<0.8	2.9

07010035 ENGELHOLM CREEK NEAR WELLSTON, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	E1mn	4	<3.4	<0.02	8	<1	E.02n	<2	<2	<2	Mt	<1m	<2m
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	E2m	22	E.3t	<0.02	40	<1	<0.02	<1	<2	Mt	Mt	<1m	<2m
MAY 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 03...	--
FEB 18...	--
MAR 26...	Mt
MAY 18...	--
AUG 03...	--

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
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER

07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO

LOCATION.--Lat 38°37'20", long 90°22'31", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Litzinger Rd., 0.60 mi south of I-40, 0.7 mi west of Hanley Road, and 1.1 mi north of Manchester Road.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--June 6, 2001 to current year.

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

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

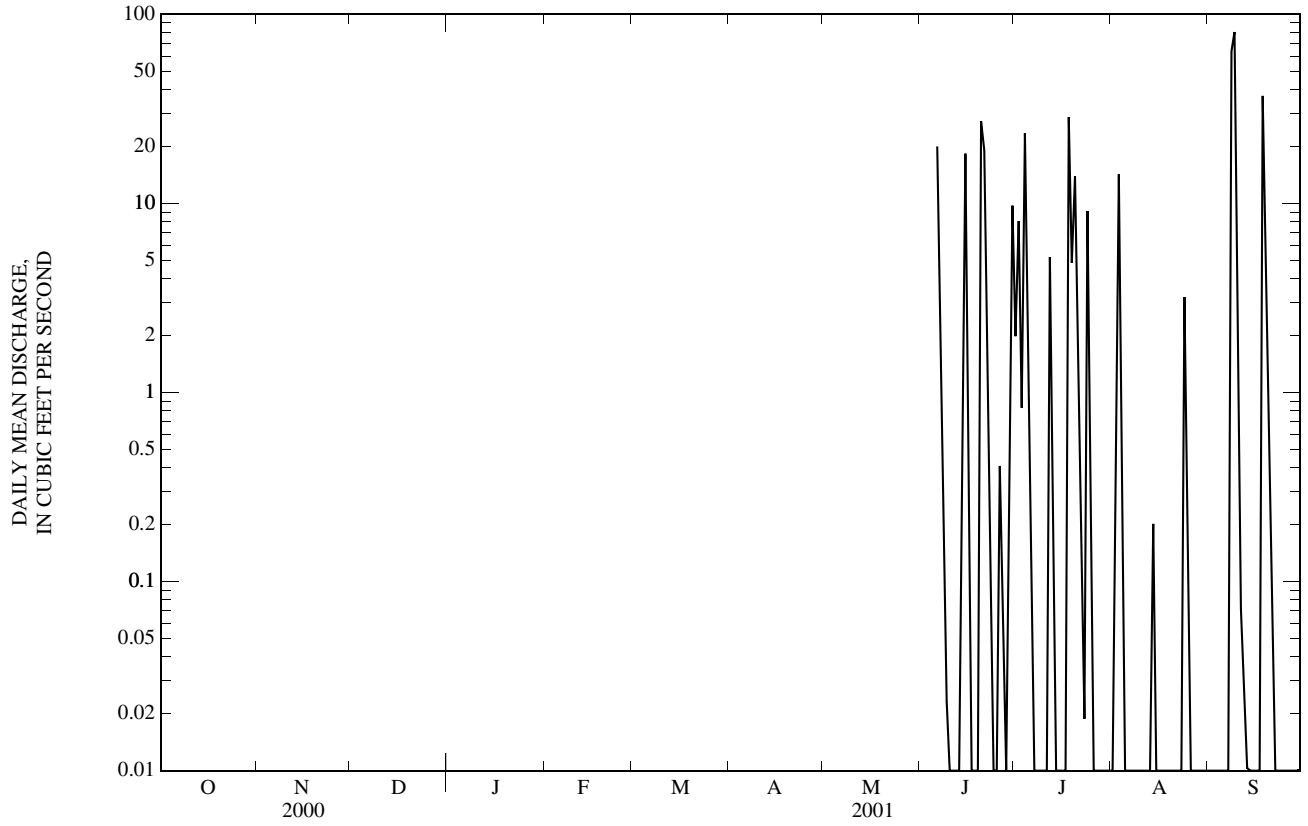
EXTREMES FOR CURRENT YEAR.--For the period June 6 to Sept. 30, maximum discharge 3,040^a ft³/s, Sept. 8, gage height, 10.30 ft; minimum, no flow, many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	2.0	0.00	0.00
2	---	---	---	---	---	---	---	---	---	8.1	2.6	0.00
3	---	---	---	---	---	---	---	---	---	0.83	14	0.00
4	---	---	---	---	---	---	---	---	---	24	0.10	0.00
5	---	---	---	---	---	---	---	---	---	1.5	0.00	0.00
6	---	---	---	---	---	---	---	---	20	0.17	0.00	0.00
7	---	---	---	---	---	---	---	---	1.3	0.01	0.00	0.00
8	---	---	---	---	---	---	---	---	0.16	0.00	0.00	64
9	---	---	---	---	---	---	---	---	0.02	0.00	0.00	81
10	---	---	---	---	---	---	---	---	0.01	0.00	0.00	0.88
11	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.07
12	---	---	---	---	---	---	---	---	0.00	5.2	0.00	0.03
13	---	---	---	---	---	---	---	---	0.00	0.46	0.00	0.01
14	---	---	---	---	---	---	---	---	0.46	0.00	0.20	0.00
15	---	---	---	---	---	---	---	---	18	0.00	0.01	0.00
16	---	---	---	---	---	---	---	---	0.19	0.00	0.00	0.00
17	---	---	---	---	---	---	---	---	0.01	0.00	0.00	0.00
18	---	---	---	---	---	---	---	---	0.00	29	0.00	37
19	---	---	---	---	---	---	---	---	0.00	4.8	0.00	2.6
20	---	---	---	---	---	---	---	---	27	14	0.00	0.12
21	---	---	---	---	---	---	---	---	19	0.91	0.00	0.03
22	---	---	---	---	---	---	---	---	2.1	0.07	0.00	0.01
23	---	---	---	---	---	---	---	---	0.21	0.02	0.00	0.00
24	---	---	---	---	---	---	---	---	0.01	9.1	3.2	0.00
25	---	---	---	---	---	---	---	---	0.00	0.25	0.54	0.00
26	---	---	---	---	---	---	---	---	0.41	0.00	0.01	0.00
27	---	---	---	---	---	---	---	---	0.12	0.00	0.00	0.00
28	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	---	---	0.89	0.00	0.00	0.00
30	---	---	---	---	---	---	---	---	9.7	0.00	0.00	0.00
31	---	---	---	---	---	---	---	---	---	0.00	0.00	---
MEAN	---	---	---	---	---	---	---	---	---	3.24	0.67	6.19
MAX	---	---	---	---	---	---	---	---	---	29	14	81
MIN	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00

^a From rating extended above 391 ft³/s on basis of indirect measurement.

07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO—Continued



07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO--Continued

LOCATION.--Lat 38°37'20", long 90°22'31", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Litzinger Rd., 0.60 mi south of I-40, 0.7 mi west of Hanley Road, and 1.1 mi north of Manchester Road.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--June 6, 2001 to current year.

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

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

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	0.00	0.00	3.5	0.00	25	0.08	1.8	1.4	0.11	0.11	0.00	0.00
2	0.00	2.6	1.3	0.00	5.2	55	2.0	0.94	0.08	0.08	0.00	0.00
3	0.00	0.44	0.72	0.00	2.5	7.4	1.1	0.48	0.05	0.04	0.00	0.00
4	0.00	0.03	0.87	0.00	1.2	2.3	1.5	0.30	0.03	0.01	0.00	0.00
5	32	0.01	0.51	0.01	0.52	2.2	0.59	0.09	26	0.00	0.00	0.00
6	1.5	0.00	1.3	0.01	0.23	2.1	0.34	17	2.0	0.00	14	0.00
7	0.05	0.00	0.55	0.01	0.12	1.1	0.56	190	0.32	0.00	0.76	0.00
8	0.01	0.00	0.09	0.01	0.10	0.91	32	122	0.08	0.00	0.05	0.00
9	0.00	0.00	0.04	0.01	0.09	66	5.2	202	1.5	0.00	0.00	0.00
10	92	0.00	0.02	0.01	0.74	3.7	1.8	11	6.1	0.00	0.00	0.00
11	101	0.00	0.02	0.00	0.55	2.1	1.3	5.0	270	0.00	0.00	0.00
12	26	0.00	31	0.00	0.10	1.7	5.3	84	441	0.00	0.00	0.00
13	18	0.00	12	0.32	0.07	1.3	1.4	179	12	0.00	2.0	0.00
14	4.2	0.00	54	1.6	0.07	0.96	1.0	12	4.5	0.00	2.9	0.00
15	29	0.00	5.2	0.36	0.07	38	0.53	4.8	1.8	0.00	0.49	0.00
16	21	0.00	149	0.02	0.07	9.2	0.35	18	0.84	5.3	0.06	0.00
17	1.8	2.1	135	0.00	0.07	2.7	1.0	98	0.58	4.6	0.00	12
18	0.60	4.9	12	0.00	0.06	1.6	0.25	18	0.46	7.4	28	2.9
19	0.15	1.8	4.0	1.3	16	22	42	4.8	0.38	1.7	2.6	35
20	0.04	0.21	1.8	0.83	3.8	12	40	2.8	0.34	0.14	0.27	25
21	0.01	0.01	0.94	0.21	0.73	3.3	24	1.8	0.28	0.01	0.06	2.3
22	0.01	0.00	4.8	0.17	0.15	2.0	5.1	1.1	0.23	6.1	0.01	0.28
23	2.7	0.00	1.6	0.07	0.06	1.7	2.1	0.59	0.17	12	0.00	0.12
24	57	140	0.53	8.2	0.05	3.0	16	2.6	22	1.1	0.00	0.04
25	5.3	3.8	0.16	0.47	0.07	88	4.2	1.1	7.2	0.12	0.00	0.00
26	1.1	3.6	0.06	0.06	2.4	26	1.4	0.33	1.3	0.03	0.00	0.00
27	0.30	1.6	0.04	0.01	0.39	9.0	86	4.2	0.46	0.00	0.00	0.00
28	0.06	30	0.03	0.00	0.19	4.3	21	9.4	0.29	0.00	0.00	0.00
29	0.02	21	0.01	3.3	---	3.1	3.9	3.0	0.20	0.00	0.00	0.00
30	0.01	51	0.01	123	---	2.3	2.0	0.62	0.15	0.00	0.00	0.00
31	0.00	---	0.00	235	---	1.6	---	0.20	---	0.00	0.00	---
MEAN	12.7	8.77	13.6	12.1	2.16	12.2	10.2	32.1	26.7	1.25	1.65	2.59
MAX	101	140	149	235	25	88	86	202	441	12	28	35
MIN	0.00	0.00	0.00	0.00	0.05	0.08	0.25	0.09	0.03	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
MEAN	12.7	8.77	13.6	12.1	2.16	12.1	10.2	32.1	26.7	2.24	1.16	4.39
MAX	12.7	8.77	13.6	12.1	2.16	12.1	10.2	32.1	26.7	3.24	1.65	6.19
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2001)	(2002)	(2001)
MIN	12.7	8.77	13.6	12.1	2.16	12.1	10.2	32.1	26.7	1.25	0.67	2.59
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2001)	(2002)

SUMMARY STATISTICS

ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
MAXIMUM PEAK FLOW
MAXIMUM PEAK STAGE
INSTANTANEOUS LOW FLOW
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2002 WATER YEAR

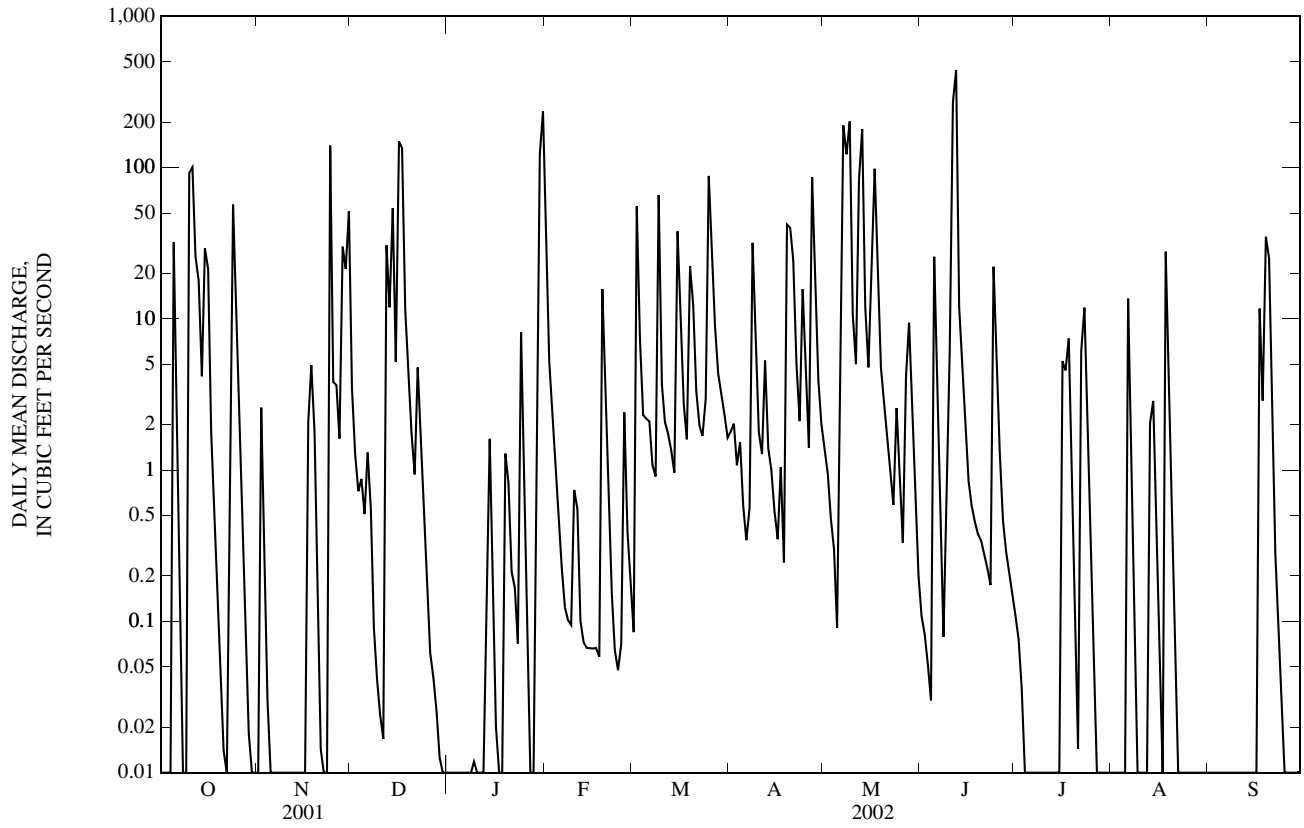
WATER YEARS 2001 - 2002

11.4
11.4
11.4
441 Jun 12
0.00 Many Days
0.00 At Times
5,390^a Jun 12
13.11 Jun 12
0.00 Many Days
25
0.46
0.00

11.4
11.4
11.4
441 Jun 12, 2002
0.00 Many Days 2001-2002
0.00 At Times
5,390^a Jun 12, 2002
13.11 Jun 12, 2002
0.00 Many Days 2001-2002
25
0.46
0.00

^a From rating extended above 391 ft³/s on basis of indirect measurement.

07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO—Continued



07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO--Continued

LOCATION.--Lat 38°37'20", long 90°22'31", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Litzinger Rd., 0.60 mi south of I-40, 0.7 mi west of Hanley Road, and 1.1 mi north of Manchester Road.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--June 6, 2001 to current year.

GAGE.--Water-stage recorder and crest-stage gage. 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	0.47	0.00	1.0	1.9	6.3	1.2	3.1	0.04	5.2	0.00	239
2	0.00	0.04	0.00	3.3	1.3	7.0	1.2	1.4	9.2	2.7	21	631
3	117	6.1	0.00	2.2	1.4	4.2	0.88	0.66	10	0.09	7.3	13
4	9.7	2.2	0.00	1.0	1.2	4.2	0.27	77	0.70	0.05	0.02	1.8
5	1.8	14	0.00	1.2	0.86	4.2	0.45	51	0.22	0.02	0.00	0.15
6	2.9	10	0.00	1.8	1.1	2.6	12	16	7.6	0.01	0.00	0.00
7	1.4	2.8	0.00	0.82	1.3	2.1	5.9	30	1.5	0.00	0.00	0.00
8	0.18	1.1	1.7	0.58	0.96	1.7	1.7	5.1	0.18	0.00	0.00	0.00
9	0.05	0.13	0.12	0.58	1.0	1.6	1.1	2.5	0.01	0.00	0.00	0.00
10	0.01	0.28	0.00	0.22	1.0	1.2	0.51	47	314	34	0.00	0.00
11	0.00	8.1	0.00	0.06	0.96	20	0.44	9.1	80	0.25	0.00	0.00
12	0.00	1.4	0.00	0.00	0.89	61	0.29	2.1	214	0.03	0.00	14
13	0.00	0.25	0.00	0.00	0.85	75	0.16	1.2	234	0.01	0.00	0.38
14	0.00	0.03	0.00	0.00	23	7.5	0.14	1.00	9.8	0.00	0.00	0.00
15	0.00	12	0.00	0.00	11	4.4	0.06	4.4	1.5	0.00	0.00	0.99
16	0.00	1.0	0.00	0.00	3.1	3.3	63	0.95	0.24	0.00	0.00	0.12
17	0.00	2.6	0.00	0.04	2.0	2.6	18	0.57	0.16	0.00	0.00	0.00
18	1.7	0.66	58	0.03	5.1	2.0	1.8	0.54	0.10	106	0.00	2.1
19	17	0.16	3.6	0.00	42	36	0.69	0.22	4.3	11	0.00	0.18
20	0.62	0.00	0.98	0.52	6.1	40	35	1.4	0.17	0.41	0.00	0.00
21	0.03	0.00	0.27	0.90	3.1	7.2	2.6	0.25	0.03	0.06	0.00	0.30
22	0.00	0.00	0.09	0.68	13	3.4	1.2	0.01	0.02	0.01	0.00	4.1
23	0.00	0.00	0.03	e0.62	4.1	3.5	0.60	0.00	0.01	0.00	0.00	0.27
24	0.00	1.3	0.00	e0.56	4.5	2.1	72	0.00	0.00	0.00	0.00	0.00
25	40	2.6	0.00	e2.9	2.8	4.5	43	49	55	0.00	0.00	0.00
26	2.8	0.94	0.41	e1.0	2.0	1.9	7.6	1.2	574	0.00	0.00	160
27	0.77	0.05	0.74	e1.5	2.3	1.5	1.9	0.17	4.8	0.00	3.3	20
28	0.08	0.00	1.2	2.1	3.3	9.2	21	0.05	0.30	0.00	0.02	2.3
29	71	0.00	2.3	1.8	---	3.0	11	0.03	0.16	0.00	0.00	0.23
30	3.8	0.00	2.1	1.6	---	1.5	4.4	2.2	0.23	0.00	0.39	2.0
31	1.6	---	5.4	4.9	---	1.3	---	0.50	---	0.00	21	---
MEAN	8.79	2.27	2.48	1.03	5.08	10.5	10.3	9.96	50.7	5.16	1.71	36.4
MAX	117	14	58	4.9	42	75	72	77	574	106	21	631
MIN	0.00	0.00	0.00	0.00	0.85	1.2	0.06	0.00	0.00	0.00	0.00	0.00

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

	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
MEAN	10.7	5.52	8.03	6.56	3.62	11.3	10.3	21.1	38.7	3.22	1.34	15.1
MAX	12.7	8.77	13.6	12.1	5.08	12.1	10.3	32.1	50.7	5.16	1.71	36.4
(WY)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)
MIN	8.79	2.27	2.48	1.03	2.16	10.5	10.2	9.96	26.7	1.25	0.67	2.59
(WY)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2002)	(2002)	(2001)	(2002)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 2001 - 2003

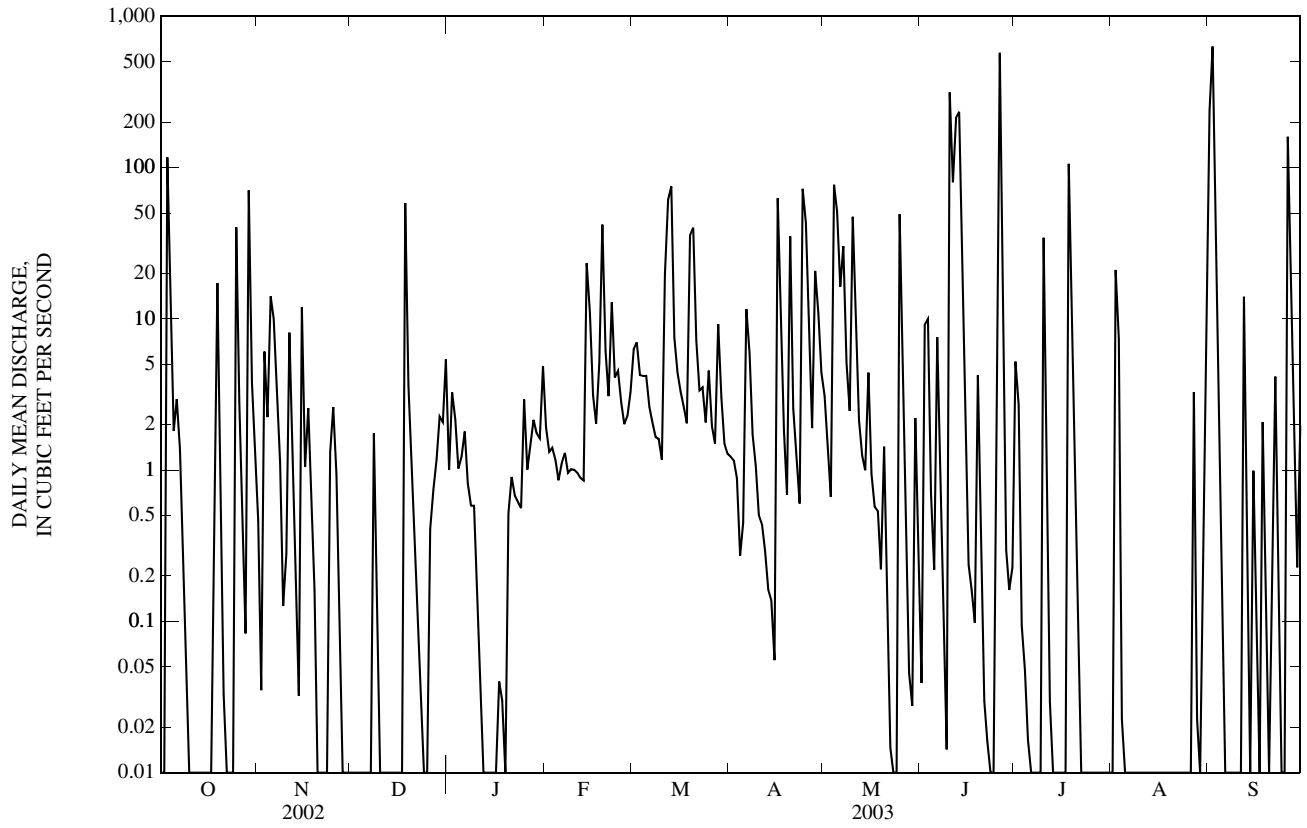
ANNUAL MEAN	9.59	12.0	11.7
HIGHEST ANNUAL MEAN			12.0
LOWEST ANNUAL MEAN			11.4
HIGHEST DAILY MEAN	441	631	631
LOWEST DAILY MEAN	0.00	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00
MAXIMUM PEAK FLOW	---	5,220 ^a	5,390 ^b
MAXIMUM PEAK STAGE	---	12.94	13.11
INSTANTANEOUS LOW FLOW	---	0.00	0.00
10 PERCENT EXCEEDS	16	17	21
50 PERCENT EXCEEDS	0.34	0.77	0.58
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

^a Discharge determined by indirect measurement of peak flow.

^b From rating extended above 391 ft³/s on basis of indirect measurement.

07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO—Continued



07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO--Continued

LOCATION.--Lat 38°37'20", long 90°22'31", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Litzinger Rd., 0.60 mi south of I-40, 0.7 mi west of Hanley Road, and 1.1 mi north of Manchester Road.

DRAINAGE AREA.--12.0 mi².

PERIOD OF RECORD.--June 6, 2001 to current year.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	15	0.07	0.78	2.9	1.3	3.1	72	7.5	0.00	0.05	0.00
2	0.00	1.4	0.06	0.90	e42	0.78	3.0	4.5	0.93	3.3	0.00	0.00
3	0.00	0.02	0.04	1.5	13	6.1	2.4	1.8	0.82	10	0.00	0.00
4	0.00	0.00	4.0	401	5.1	129	2.1	2.7	0.59	0.44	17	0.00
5	0.00	1.3	4.8	e26	2.6	75	1.1	1.5	0.00	573	3.2	0.00
6	0.00	17	1.5	e5.3	2.4	7.3	0.58	0.92	0.00	109	0.02	0.00
7	0.00	0.34	0.55	e3.1	1.8	3.7	0.89	0.52	0.02	2.8	0.00	0.00
8	0.00	0.01	0.59	1.7	e2.0	2.9	3.1	0.24	0.05	0.48	0.00	0.00
9	79	0.00	6.1	1.4	2.9	2.2	0.82	0.00	7.8	1.6	0.00	0.00
10	5.6	0.00	50	0.86	4.6	1.7	0.00	0.00	1.9	1.2	0.00	0.00
11	1.2	0.00	2.7	1.0	19	1.4	2.0	0.44	2.7	2.4	0.36	0.00
12	0.54	0.00	1.1	1.3	4.2	1.1	0.15	0.00	8.0	0.12	0.08	0.00
13	0.16	0.00	0.98	1.3	2.7	1.2	1.9	151	3.1	0.00	0.00	0.00
14	11	0.00	2.3	1.2	2.3	2.0	0.73	119	0.20	0.00	0.00	0.00
15	0.47	5.7	2.3	1.2	2.0	0.54	1.8	2.6	0.03	0.00	0.00	0.00
16	6.3	0.10	2.7	1.1	1.6	2.5	0.12	0.34	122	0.00	0.00	0.00
17	54	257	0.96	105	1.7	1.2	0.00	0.09	1.6	0.00	0.00	0.00
18	1.8	622	2.3	30	4.0	1.4	0.00	1.8	17	0.00	0.00	0.00
19	0.33	17	1.4	4.4	7.2	0.83	0.00	200	2.3	0.00	0.00	0.00
20	0.02	3.4	0.59	2.7	6.8	0.73	0.00	2.5	0.02	0.00	9.9	0.00
21	0.00	1.5	0.45	2.1	2.6	0.49	0.00	0.13	0.00	0.00	0.16	0.00
22	0.00	0.85	1.2	1.8	1.8	0.49	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	23	81	1.6	1.8	1.0	1.3	0.01	0.00	0.00	13	0.00
24	0.00	4.4	5.7	1.7	2.2	0.89	64	0.00	0.00	0.00	6.4	0.00
25	1.4	1.3	2.1	e2.0	1.6	8.6	13	291	0.00	28	121	0.00
26	1.5	1.4	1.7	e2.2	1.2	489	2.5	358	0.00	0.07	22	0.00
27	0.01	1.1	1.2	e1.7	1.0	30	2.0	463	0.00	0.00	0.13	0.00
28	1.8	0.52	2.1	1.2	0.77	31	0.84	66	0.00	0.00	0.00	0.00
29	0.10	0.14	9.8	e0.98	0.89	11	0.46	5.3	0.00	0.00	0.00	0.00
30	0.00	0.06	1.5	e0.90	---	5.4	46	3.5	0.00	434	0.00	0.00
31	0.00	---	1.3	e0.86	---	3.8	---	2.6	---	2.5	0.00	---
MEAN	5.38	32.5	6.23	19.6	4.99	26.6	5.13	56.5	5.89	37.7	6.24	0.00
MAX	79	622	81	401	42	489	64	463	122	573	121	0.00
MIN	0.00	0.00	0.04	0.78	0.77	0.49	0.00	0.00	0.00	0.00	0.00	0.00

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

MEAN	8.96	14.5	7.43	10.9	4.09	16.4	8.55	32.9	27.8	11.8	2.57	11.3
MAX	12.7	32.5	13.6	19.6	5.08	26.6	10.3	56.5	50.7	37.7	6.24	36.4
(WY)	(2002)	(2004)	(2002)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2003)
MIN	5.38	2.27	2.48	1.03	2.16	10.5	5.13	9.96	5.89	1.25	0.67	0.00
(WY)	(2004)	(2003)	(2003)	(2003)	(2002)	(2003)	(2004)	(2003)	(2004)	(2002)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

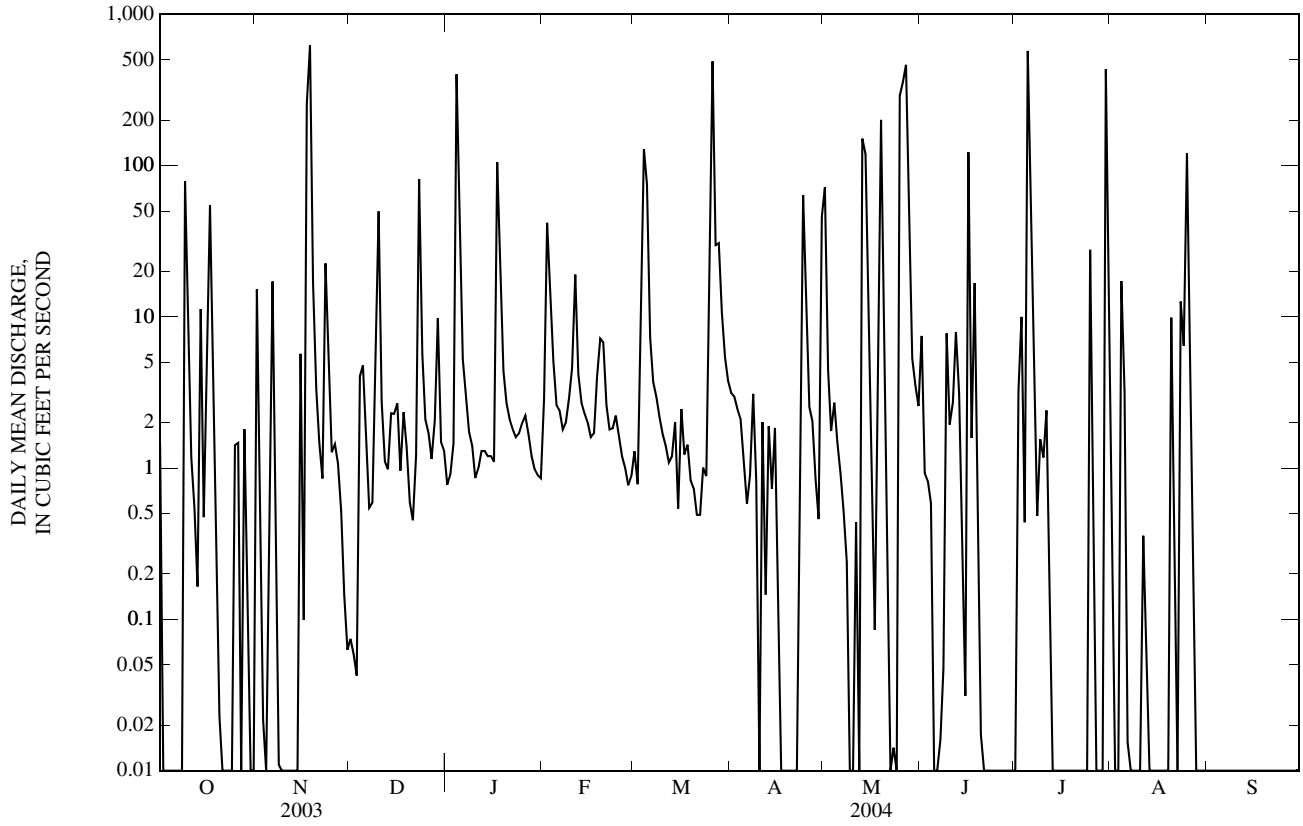
WATER YEARS 2001 - 2004

ANNUAL MEAN	14.5	17.4	13.6
HIGHEST ANNUAL MEAN			17.4
LOWEST ANNUAL MEAN			11.4
HIGHEST DAILY MEAN	631	Sep 2	631
LOWEST DAILY MEAN	0.00	Many Days	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	At Times	0.00
MAXIMUM PEAK FLOW	---	5,950 ^a	5,950 ^a
MAXIMUM PEAK STAGE	---	13.57	13.57
INSTANTANEOUS LOW FLOW	---	0.00	0.00
10 PERCENT EXCEEDS	20	17	21
50 PERCENT EXCEEDS	1.0	1.0	0.78
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

^a From rating extended above 391 ft³/s on basis of indirect measurement.

07010055 DEER CREEK AT LITZINGER ROAD, AT LADUE, MO—Continued



MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER

07010070 SEBAGO CREEK NEAR ROCK HILL, MO

LOCATION.--Lat 38°36'54", long 90°22'35", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Old Warson Road, 1.1 mi south of I-40, 0.75 mi west of Hanley Road, and 0.60 mi north of Manchester.

DRAINAGE AREA.--1.87 mi².

PERIOD OF RECORD.--July 26, 2001 to current year.

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

REMARKS.--Records fair except for estimated daily discharges and discharges above 40 ft³/s, which are poor.

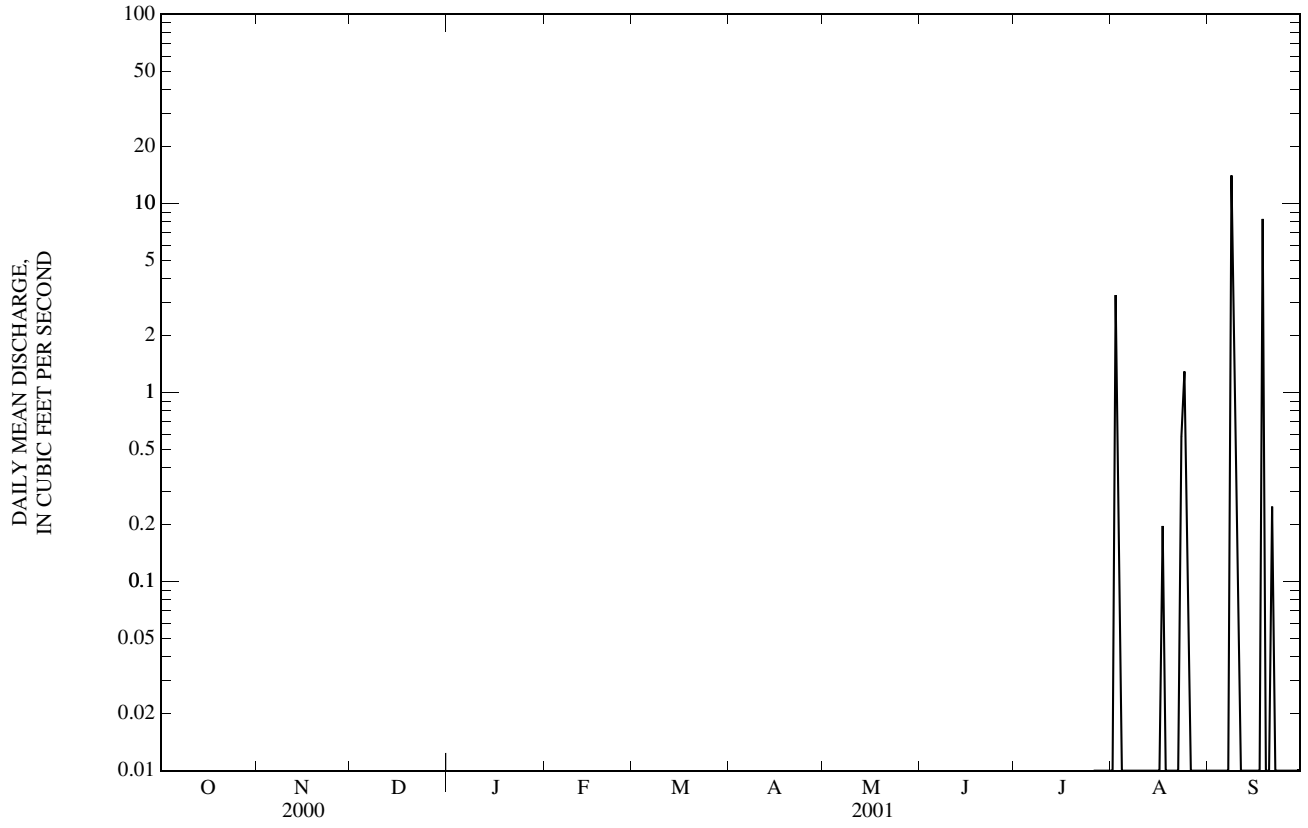
EXTREMES FOR CURRENT YEAR.--For period July 26 to Sept. 30, maximum discharge 530^a ft³/s, Sept. 8, gage height 4.98 ft; minimum, no flow, many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	0.00	0.00
2	---	---	---	---	---	---	---	---	---	---	3.3	0.00
3	---	---	---	---	---	---	---	---	---	---	0.27	0.00
4	---	---	---	---	---	---	---	---	---	---	0.00	0.00
5	---	---	---	---	---	---	---	---	---	---	0.00	0.00
6	---	---	---	---	---	---	---	---	---	---	0.00	0.00
7	---	---	---	---	---	---	---	---	---	---	0.00	0.00
8	---	---	---	---	---	---	---	---	---	---	0.00	14
9	---	---	---	---	---	---	---	---	---	---	0.00	2.6
10	---	---	---	---	---	---	---	---	---	---	0.00	0.07
11	---	---	---	---	---	---	---	---	---	---	0.00	0.00
12	---	---	---	---	---	---	---	---	---	---	0.00	0.00
13	---	---	---	---	---	---	---	---	---	---	0.00	0.00
14	---	---	---	---	---	---	---	---	---	---	0.00	0.00
15	---	---	---	---	---	---	---	---	---	---	0.00	0.00
16	---	---	---	---	---	---	---	---	---	---	0.00	0.00
17	---	---	---	---	---	---	---	---	---	---	0.20	0.00
18	---	---	---	---	---	---	---	---	---	---	0.00	8.3
19	---	---	---	---	---	---	---	---	---	---	0.00	0.00
20	---	---	---	---	---	---	---	---	---	---	0.00	0.00
21	---	---	---	---	---	---	---	---	---	---	0.00	0.25
22	---	---	---	---	---	---	---	---	---	---	0.00	0.00
23	---	---	---	---	---	---	---	---	---	---	0.58	0.00
24	---	---	---	---	---	---	---	---	---	---	1.3	0.00
25	---	---	---	---	---	---	---	---	---	---	0.13	0.00
26	---	---	---	---	---	---	---	---	---	0.00	0.01	0.00
27	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
28	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
29	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
30	---	---	---	---	---	---	---	---	---	0.00	0.00	0.00
31	---	---	---	---	---	---	---	---	---	0.00	0.00	---
MEAN	---	---	---	---	---	---	---	---	---	---	0.19	0.84
MAX	---	---	---	---	---	---	---	---	---	---	3.3	14
MIN	---	---	---	---	---	---	---	---	---	---	0.00	0.00

^a From rating extended above 103 ft³/s on basis of indirect measurement.

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER
07010070 SEBAGO CREEK NEAR ROCK HILL, MO—Continued



07010070 SEBAGO CREEK NEAR ROCK HILL, MO--Continued

LOCATION.--Lat 38°36'54", long 90°22'35", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Old Warson Road, 1.1 mi south of I-40, 0.75 mi west of Hanley Road, and 0.60 mi north of Manchester.

DRAINAGE AREA.--1.87 mi².

PERIOD OF RECORD.--July 26, 2001 to current year.

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

REMARKS.--Records fair except for estimated daily discharges and discharges above 40 ft³/s, which are poor.

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	0.00	0.00	0.05	0.00	1.3	0.00	0.01	0.07	0.00	0.00	0.00	0.00
2	0.00	0.85	0.00	0.00	0.32	12	0.06	0.02	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.15	0.60	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.04	0.20	0.00	0.00	0.00	0.00	0.00	0.00
5	6.3	0.00	0.13	0.00	0.02	0.23	0.00	0.00	3.2	0.00	0.00	0.00
6	0.00	0.00	0.07	0.01	0.01	0.10	0.00	4.5	0.00	0.00	0.86	0.00
7	0.00	0.00	0.00	0.00	0.00	0.04	0.55	22	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.02	6.5	21	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.01	15	0.15	29	0.28	0.00	0.00	0.06
10	17	0.00	0.00	0.00	0.21	0.27	0.01	0.84	0.37	0.00	0.00	0.00
11	16	0.00	0.00	0.01	0.00	0.13	0.00	0.43	34	0.00	0.56	0.00
12	0.69	0.00	6.5	0.00	0.00	0.12	0.46	14	41	0.00	1.0	0.00
13	2.3	0.00	0.34	0.00	0.00	0.03	0.00	25	0.33	0.00	0.65	0.00
14	0.01	0.00	9.6	0.00	0.00	0.03	0.21	1.4	0.09	0.00	0.14	0.17
15	5.3	0.00	1.7	0.00	0.00	8.3	0.00	0.82	0.02	0.00	0.00	0.00
16	0.74	0.00	28	0.00	0.00	0.48	0.00	4.3	0.00	0.00	0.00	0.00
17	0.00	0.00	19	0.01	0.00	0.15	0.00	20	0.00	0.00	0.00	6.0
18	0.00	0.21	0.51	0.00	0.00	0.06	0.00	1.0	0.00	0.00	7.3	0.01
19	0.00	0.02	0.15	0.28	5.9	5.2	10	0.37	0.00	0.00	0.00	2.1
20	0.00	0.00	0.04	0.00	0.70	0.98	3.5	0.19	0.00	0.00	0.00	3.9
21	0.00	0.00	0.02	0.00	0.01	0.21	7.9	0.14	0.00	0.00	0.00	0.00
22	0.00	0.00	0.46	0.00	0.00	0.12	0.36	0.06	0.00	0.00	0.00	0.00
23	2.1	0.00	0.01	1.3	0.00	0.07	0.09	0.03	0.00	0.53	0.18	0.18
24	9.5	24	0.00	0.21	0.00	1.3	11	0.48	1.9	0.00	0.00	0.00
25	0.03	0.00	0.00	0.00	0.26	10	0.52	0.03	0.00	0.00	0.00	0.05
26	0.00	0.32	0.17	0.00	0.11	2.4	0.12	0.00	0.00	0.02	0.00	0.00
27	0.00	0.00	0.02	0.00	0.01	0.43	26	4.1	0.00	0.00	0.00	0.00
28	0.00	4.5	0.00	0.00	0.00	0.28	2.5	12	0.00	0.00	0.00	0.00
29	0.00	6.4	0.00	0.79	---	0.22	0.40	0.28	0.00	0.00	0.00	0.00
30	0.00	6.2	0.00	20	---	0.08	0.27	0.03	0.00	0.00	0.00	0.00
31	0.00	---	0.00	35	---	0.03	---	0.02	---	0.00	0.00	---
MEAN	1.93	1.42	2.15	1.86	0.32	1.91	2.35	5.23	2.71	0.02	0.34	0.42
MAX	17	24	28	35	5.9	15	26	29	41	0.53	7.3	6.0
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)

MEAN	1.93	1.42	2.15	1.86	0.32	1.91	2.35	5.23	2.71	0.02	0.27	0.63
MAX	1.93	1.42	2.15	1.86	0.32	1.91	2.35	5.23	2.71	0.02	0.34	0.84
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2001)
MIN	1.93	1.42	2.15	1.86	0.32	1.91	2.35	5.23	2.71	0.02	0.19	0.42
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2001)	(2002)

SUMMARY STATISTICS

ANNUAL MEAN
 HIGHEST ANNUAL MEAN
 LOWEST ANNUAL MEAN
 HIGHEST DAILY MEAN
 LOWEST DAILY MEAN
 ANNUAL SEVEN-DAY MINIMUM
 MAXIMUM PEAK FLOW
 MAXIMUM PEAK STAGE
 INSTANTANEOUS LOW FLOW
 10 PERCENT EXCEEDS
 50 PERCENT EXCEEDS
 90 PERCENT EXCEEDS

FOR 2002 WATER YEAR

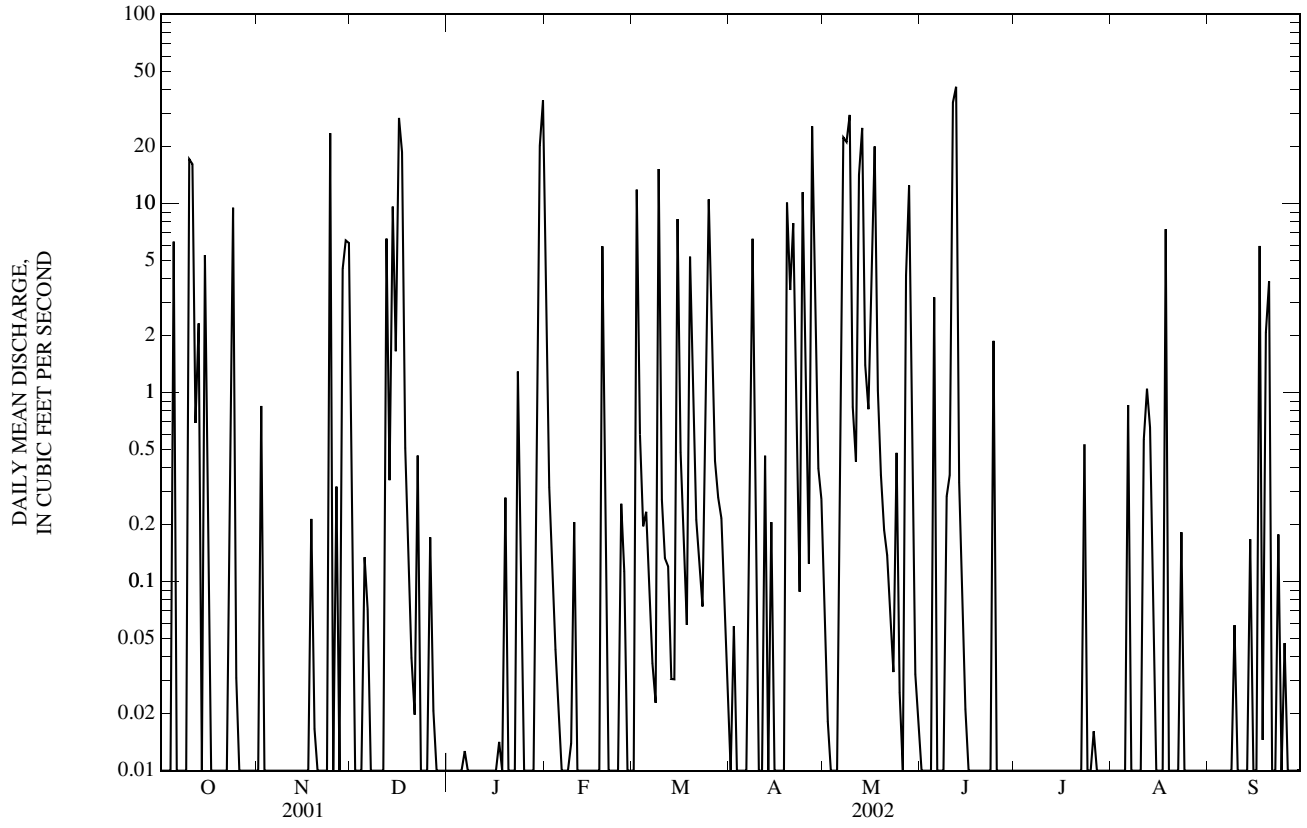
1.73
 1.73
 1.73
 41 Jun 12
 0.00 Many Days
 0.00 At Times
 872^a Jun 12
 5.96 Jun 12
 0.00 Many Days
 4.8
 0.00
 0.00

WATER YEARS 2001 - 2002

1.73
 1.73
 1.73
 41 Jun 12, 2002
 0.00 Many Days 2001-2002
 0.00 At Times
 872^a Jun 12, 2002
 5.96 Jun 12, 2002
 0.00 Many Days 2001-2002
 4.8
 0.00
 0.00

^a From rating extended above 103 ft³/s on basis of indirect measurement.

07010070 SEBAGO CREEK NEAR ROCK HILL, MO—Continued



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PERIOD OF RECORD.--July 26, 2001 to current year.

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REMARKS.--Records fair except for estimated daily discharges and discharges above 40 ft³/s, 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	0.00	0.01	0.00	1.4	0.07	1.0	0.00	5.7	0.03	e38
2	0.93	0.38	0.00	1.0	0.00	0.64	0.05	0.21	3.8	5.5	3.2	e60
3	11	0.91	0.00	1.3	0.08	0.31	0.02	0.08	0.58	0.25	0.12	0.20
4	0.91	0.00	0.00	0.05	0.00	0.29	0.00	27	0.56	0.60	0.00	0.00
5	0.00	1.8	0.00	0.18	0.01	0.37	0.00	11	0.00	0.00	0.00	0.04
6	0.56	0.00	0.00	0.04	0.09	0.05	3.3	8.2	2.2	0.00	0.00	0.07
7	0.00	0.00	0.00	0.00	0.00	0.02	0.36	2.4	0.01	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.02	0.22	0.46	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.30	0.00	0.00	0.00	0.28
10	0.00	0.00	0.00	0.00	0.00	0.00	0.03	15	34	8.1	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	6.7	0.00	2.1	11	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	5.7	0.00	0.35	28	0.41	0.00	6.9
13	0.00	0.00	0.28	0.00	0.00	10	0.00	0.15	8.5	0.03	0.00	0.00
14	0.00	1.3	0.00	0.00	5.0	0.46	0.00	0.07	0.43	0.00	0.00	0.00
15	0.00	0.57	0.00	0.00	2.6	0.20	0.12	3.4	0.11	0.00	0.00	0.00
16	0.14	0.00	0.00	0.00	0.07	0.10	19	0.16	0.02	0.00	0.00	0.00
17	0.04	0.00	0.00	0.00	0.15	0.06	1.5	0.15	0.00	0.00	0.00	0.00
18	1.8	0.00	8.1	0.00	1.8	0.03	0.17	0.27	0.00	27	0.00	0.00
19	2.3	0.00	0.23	0.00	7.5	6.3	0.18	0.10	2.0	0.27	0.00	0.00
20	0.06	0.00	0.00	0.00	0.31	3.0	7.1	0.55	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.09	0.48	0.20	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	1.9	0.21	0.26	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.26	0.35	0.07	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.54	0.09	16	1.5	0.00	0.00	0.00	0.00
25	8.9	0.00	0.07	0.00	0.03	1.9	23	22	30	0.00	0.00	0.00
26	0.00	0.00	0.05	0.48	0.02	0.16	1.2	0.21	37	0.00	0.00	19
27	0.27	0.00	0.07	0.00	0.29	0.12	0.39	0.03	0.23	0.00	1.4	1.5
28	0.00	0.00	0.34	0.00	0.30	2.9	3.6	0.00	0.02	0.71	0.00	0.02
29	16	0.00	0.12	0.00	---	0.25	6.8	0.00	0.00	0.00	1.2	0.00
30	0.00	0.00	0.04	0.04	---	0.10	0.72	0.75	0.00	0.00	0.00	0.75
31	0.00	---	1.3	0.85	---	0.10	---	0.00	---	0.00	1.4	---
MEAN	1.38	0.17	0.34	0.13	0.75	1.37	2.81	3.14	5.28	1.57	0.24	4.23
MAX	16	1.8	8.1	1.3	7.5	10	23	27	37	27	3.2	60
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

MEAN	1.66	0.79	1.25	0.99	0.54	1.64	2.58	4.19	3.99	0.79	0.26	1.83
MAX	1.93	1.42	2.15	1.86	0.75	1.91	2.81	5.23	5.28	1.57	0.34	4.23
(WY)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)	(2002)	(2003)
MIN	1.38	0.17	0.34	0.13	0.32	1.37	2.35	3.14	2.71	0.02	0.19	0.42
(WY)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2002)	(2002)	(2001)	(2002)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

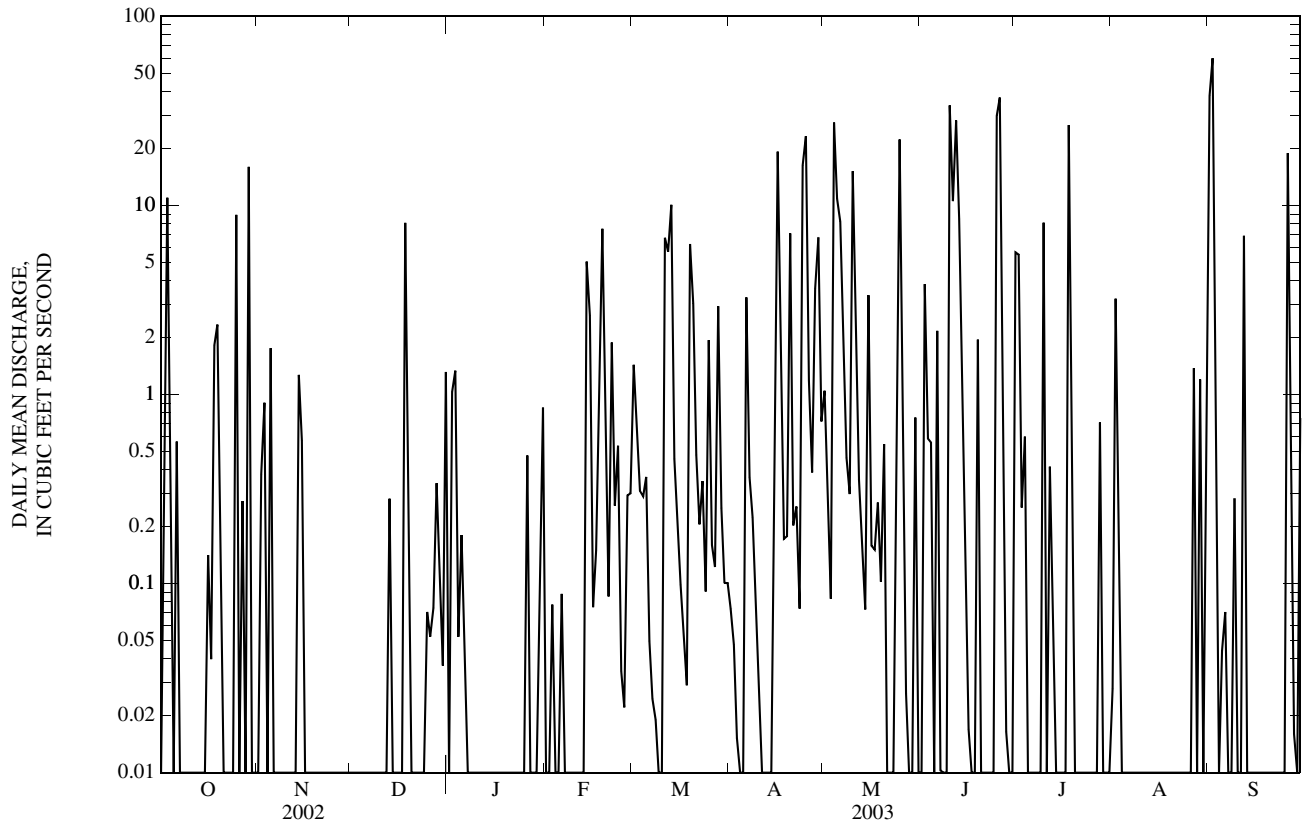
WATER YEARS 2001 - 2003

ANNUAL MEAN	1.43	1.78	1.76
HIGHEST ANNUAL MEAN			1.78
LOWEST ANNUAL MEAN			1.73
HIGHEST DAILY MEAN	41	60	60
LOWEST DAILY MEAN	0.00	0.00	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	0.00	0.00
MAXIMUM PEAK FLOW	---	872 ^a	872 ^b
MAXIMUM PEAK STAGE	---	5.96	5.96
INSTANTANEOUS LOW FLOW	---	0.00	0.00
10 PERCENT EXCEEDS	2.3	3.5	4.3
50 PERCENT EXCEEDS	0.00	0.00	0.00
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

^a Discharge determined by indirect measurement of peak flow.

^b From rating extended above 103 ft³/s on basis of indirect measurement.



07010070 SEBAGO CREEK NEAR ROCK HILL, MO--Continued

LOCATION.--Lat 38°36'54", long 90°22'35", St. Louis County, Hydrologic Unit 07140101, on left downstream side of bridge on Old Warson Road, 1.1 mi south of I-40, 0.75 mi west of Hanley Road, and 0.60 mi north of Manchester.

DRAINAGE AREA.--1.87 mi².

PERIOD OF RECORD.--July 26, 2001 to current year.

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

REMARKS.--Records fair except for estimated daily discharges and discharges above 40 ft³/s, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	e4.8	0.00	0.05	0.35	0.06	0.21	16	0.61	0.00	0.00	0.00
2	0.00	e0.28	0.00	0.06	e8.0	0.01	0.14	0.58	0.05	4.5	0.00	0.00
3	0.06	0.00	0.83	0.03	1.9	2.5	0.11	0.20	0.19	5.9	0.00	0.00
4	0.00	0.00	0.49	e45	0.16	36	0.08	0.28	0.00	0.03	3.8	0.00
5	0.00	e0.05	0.60	0.58	0.49	9.7	0.02	0.12	0.00	114	0.16	0.00
6	0.00	e5.5	0.00	0.21	0.16	0.58	0.00	0.06	0.00	15	0.00	0.00
7	0.00	e0.04	0.00	0.12	0.05	0.25	0.00	0.05	0.00	0.18	0.00	0.00
8	0.00	0.00	0.00	0.09	0.09	0.15	0.00	0.04	0.00	0.26	0.00	0.00
9	17	0.00	2.3	0.05	0.64	0.11	0.00	0.00	2.3	0.00	0.00	0.00
10	0.00	0.00	e10	0.04	1.5	0.06	0.62	0.00	0.63	0.00	0.30	0.00
11	0.00	0.00	0.10	0.03	2.9	0.04	0.08	0.00	0.00	0.08	0.01	0.00
12	0.00	0.00	0.03	0.03	0.30	0.03	0.00	0.01	0.98	0.00	0.00	0.00
13	0.00	0.00	0.09	0.02	0.35	0.02	0.00	40	0.00	0.00	0.00	0.00
14	1.5	0.00	e0.04	0.01	0.49	0.26	0.00	32	0.00	0.00	0.00	0.00
15	0.00	e0.10	0.57	e0.00	0.16	0.02	0.00	0.77	0.00	0.00	0.00	0.00
16	4.6	0.00	0.07	e0.00	0.10	0.29	0.00	0.21	8.8	0.00	0.00	0.00
17	6.5	0.44	e0.02	22	0.26	0.09	0.00	0.12	0.03	0.00	0.00	0.00
18	0.00	e60	0.84	2.0	0.79	0.02	0.00	2.0	8.4	0.00	0.00	0.00
19	0.00	0.62	0.02	0.17	0.79	0.01	0.00	20	0.09	0.00	0.28	0.23
20	0.00	0.21	0.01	0.09	0.44	0.00	0.00	0.39	0.00	0.00	2.6	0.01
21	0.00	0.02	e0.00	0.07	0.12	0.00	0.04	0.13	0.00	0.00	0.00	0.00
22	0.00	0.00	e0.00	0.04	0.08	0.00	0.70	0.07	0.00	0.00	0.00	0.00
23	0.00	2.2	e5.8	0.04	0.09	0.00	2.0	0.18	0.00	0.00	1.1	e0.00
24	0.00	0.06	0.31	0.02	0.10	0.00	33	0.04	0.00	0.01	3.2	e0.00
25	0.14	0.01	0.18	0.08	0.06	0.67	1.8	19	0.00	1.4	22	e0.00
26	e0.63	0.00	0.11	0.08	0.06	25	0.48	56	0.00	0.00	2.3	e0.00
27	0.00	0.00	0.07	0.09	0.04	10	0.17	30	0.00	0.00	0.01	e0.00
28	0.71	0.00	1.6	0.04	0.04	9.3	0.12	4.9	0.00	0.00	0.00	e0.00
29	0.00	0.00	1.9	e0.03	0.08	1.5	0.12	1.1	0.00	0.00	0.00	e0.00
30	0.00	0.00	0.11	e0.02	---	0.64	4.1	1.8	0.00	61	0.00	e0.00
31	0.00	---	0.05	0.04	---	0.34	---	1.7	---	0.15	0.00	---
MEAN	1.00	2.48	0.84	2.29	0.71	3.15	1.46	7.35	0.74	6.53	1.15	0.01
MAX	17	60	10	45	8.0	36	33	56	8.8	114	22	0.23
MIN	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

MEAN	1.44	1.35	1.11	1.43	0.60	2.14	2.21	5.24	2.91	2.71	0.48	1.37
MAX	1.93	2.48	2.15	2.29	0.75	3.15	2.81	7.35	5.28	6.53	1.15	4.23
(WY)	(2002)	(2004)	(2002)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2003)
MIN	1.00	0.17	0.34	0.13	0.32	1.37	1.46	3.14	0.74	0.02	0.19	0.01
(WY)	(2004)	(2003)	(2003)	(2003)	(2002)	(2003)	(2004)	(2003)	(2004)	(2002)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

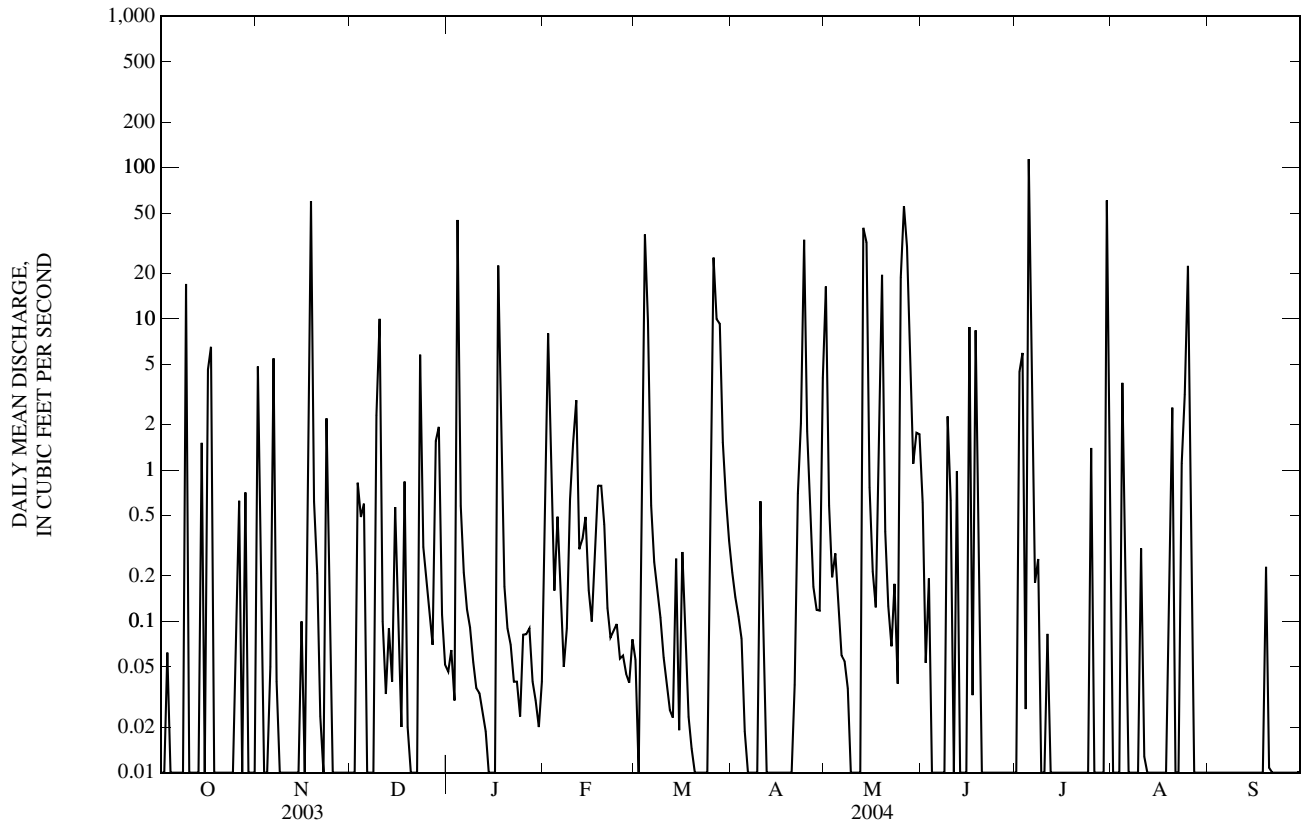
FOR 2004 WATER YEAR

WATER YEARS 2001 - 2004

ANNUAL MEAN	1.98	2.33	1.95
HIGHEST ANNUAL MEAN			2.33
LOWEST ANNUAL MEAN			1.73
HIGHEST DAILY MEAN	60	Sep 2	114
LOWEST DAILY MEAN	0.00	Many Days	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	At Times	0.00
MAXIMUM PEAK FLOW	---		Unknown
MAXIMUM PEAK STAGE	---		9.17
INSTANTANEOUS LOW FLOW	---		0.00
10 PERCENT EXCEEDS	4.9		3.0
50 PERCENT EXCEEDS	0.02		0.03
90 PERCENT EXCEEDS	0.00		0.00

e Estimated

07010070 SEBAGO CREEK NEAR ROCK HILL, MO—Continued



07010075 DEER CREEK AT LADUE, MO

LOCATION.--Lat 38°36'59", long 90°21'51", St. Louis County, Hydrologic Unit 07140101, on left upstream bank at bridge to Rock Hill Quarry, on McCarthy Construction Company complex, 5 mi east of I-270, 0.93 mi south of Highway 64/40, 0.17 mi west of McKnight.

DRAINAGE AREA.--21.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 31, 2001 to current year.

REVISED RECORDS.--WDR MO-03-1: 2001(M).

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

REMARKS.--Water-discharge records poor. U.S.G.S. satellite telemeter at station.

REVISIONS.--The maximum discharge for 2002 water year has been revised to 5,230 ft³/s, June 12, 2002, gage height, 16.30 ft. This supersedes figures published in WDR MO-02-1 and WDR MO-03-1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	32	0.00	0.00	0.53	0.11	2.6	164	19	0.00	0.34	0.00
2	0.00	1.9	0.00	0.01	100	0.01	2.9	13	4.3	5.8	0.15	0.00
3	0.00	0.00	0.78	0.30	22	5.6	2.4	2.1	4.0	17	0.07	0.00
4	0.00	0.00	2.3	840	6.5	296	2.1	4.9	3.1	0.30	23	0.00
5	0.00	2.0	4.0	30	2.0	158	1.0	1.5	0.21	781	5.0	0.00
6	0.00	36	0.32	4.3	1.5	5.6	0.08	0.47	0.02	276	0.00	0.00
7	0.00	0.11	0.00	1.7	0.71	1.8	0.05	0.02	0.02	3.5	0.00	0.00
8	0.00	0.00	0.00	1.1	0.72	1.6	3.9	0.01	0.00	0.44	0.00	0.00
9	153	0.00	7.7	0.72	2.2	0.92	0.96	0.00	11	1.3	0.00	0.00
10	4.7	0.00	105	0.31	5.2	0.53	0.56	0.00	2.5	0.49	0.08	0.00
11	0.46	0.00	2.3	0.30	19	0.14	2.1	0.00	1.5	2.0	0.12	0.00
12	0.05	0.00	0.15	0.45	5.4	0.02	0.02	0.00	9.2	0.10	0.00	0.00
13	0.00	0.00	0.11	0.30	1.7	0.03	1.6	307	2.1	0.00	0.00	0.00
14	12	0.00	1.2	0.12	1.2	0.52	1.8	265	0.02	0.00	0.00	0.00
15	0.14	6.5	1.2	0.08	0.91	0.00	1.8	9.1	0.00	0.00	0.00	0.00
16	7.2	0.00	2.3	0.02	0.44	0.70	0.07	1.6	174	0.05	0.00	0.00
17	106	335	0.10	226	0.67	0.03	0.00	0.46	1.1	0.39	0.00	0.00
18	1.0	1,020	2.1	42	3.0	0.07	0.00	6.9	46	0.37	0.00	0.00
19	0.06	34	0.69	3.1	7.2	0.00	0.10	328	2.3	0.24	0.00	0.00
20	0.00	4.4	0.00	1.3	5.8	0.00	0.00	11	0.00	0.06	12	0.00
21	0.00	0.97	0.00	0.78	0.83	0.00	0.00	2.1	0.00	0.07	0.16	0.00
22	0.00	0.17	4.5	0.51	0.28	0.00	0.77	0.13	0.00	0.00	0.00	0.00
23	0.00	42	161	0.27	0.28	0.02	3.0	0.31	0.00	0.00	15	0.00
24	0.00	6.7	6.0	0.40	0.46	0.01	171	0.07	0.00	0.00	12	0.00
25	0.90	0.22	1.1	0.42	0.13	5.9	27	341	0.00	65	224	0.00
26	2.5	0.01	0.49	0.72	0.04	634	1.6	642	0.00	0.01	48	0.00
27	0.00	0.00	0.12	0.44	0.01	73	0.45	590	0.00	0.00	0.51	0.00
28	2.3	0.00	2.2	0.24	0.00	65	0.02	121	0.00	0.00	0.00	0.00
29	0.02	0.00	17	0.13	0.00	22	0.00	21	0.00	0.00	0.00	0.00
30	0.00	0.00	0.42	0.03	---	6.5	74	12	0.00	718	0.00	0.00
31	0.00	---	0.24	0.09	---	3.6	---	12	---	4.4	0.00	---
MEAN	9.41	50.7	10.4	37.3	6.51	41.3	10.1	92.2	9.35	60.5	11.0	0.00
MAX	153	1,020	161	840	100	634	171	642	174	781	224	0.00
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
IN.	0.51	2.65	0.56	2.01	0.33	2.23	0.52	4.97	0.49	3.26	0.59	0.00

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

MEAN	16.4	22.9	13.4	21.1	5.67	26.4	16.5	58.8	32.9	19.4	3.81	19.0
MAX	25.1	50.7	26.0	37.3	6.99	41.3	20.1	92.2	71.8	60.5	11.0	61.0
(WY)	(2002)	(2004)	(2002)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2003)
MIN	9.41	2.12	3.85	1.11	3.47	15.5	10.1	21.2	8.41	0.59	0.73	0.00
(WY)	(2004)	(2003)	(2003)	(2003)	(2002)	(2003)	(2004)	(2003)	(2001)	(2002)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

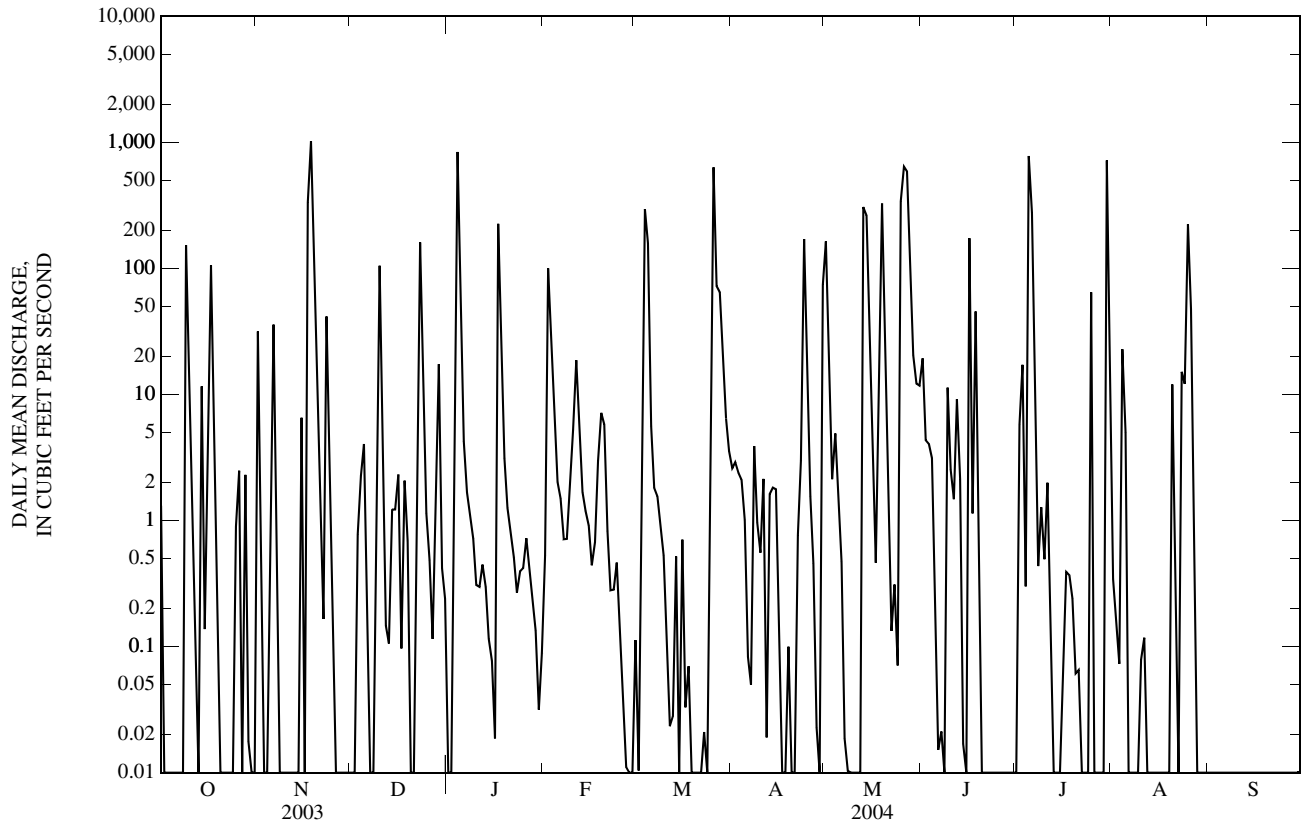
FOR 2004 WATER YEAR

WATER YEARS 2001 - 2004

ANNUAL MEAN	23.3	28.5	22.8
HIGHEST ANNUAL MEAN			28.5
LOWEST ANNUAL MEAN			19.2
HIGHEST DAILY MEAN	1,040	Sep 2	1,040
LOWEST DAILY MEAN	0.00	Many Days	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	At Times	0.00
MAXIMUM PEAK FLOW	---	6,120 ^a	6,120 ^a
MAXIMUM PEAK STAGE	---	17.90	17.90
INSTANTANEOUS LOW FLOW	---	0.00	0.00
ANNUAL RUNOFF (INCHES)	14.76	18.11	14.48
10 PERCENT EXCEEDS	32	33	32
50 PERCENT EXCEEDS	0.76	0.28	0.30
90 PERCENT EXCEEDS	0.00	0.00	0.00

^a From rating extended above 364 ft³/s on basis of indirect measurement.

07010075 DEER CREEK AT LADUE, MO—Continued



07010075 DEER CREEK AT LADUE, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2001 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)	
OCT 09...	1232	Environmental	536	2.9	6.8	72	7.7	375	17.1	100	29.0	6.60	
DEC 03...	1230	Environmental	e0.01	9.0	11.8	93	7.8	985	4.9	380	118	20.0	
10...	0137	Environmental	180	6.2	12.0	114	7.2	123	11.2	45	14.0	2.40	
FEB 17...	1425	Environmental	0.1	1.9	18.6	144	8.2	1,930	4.1	290	83.0	19.0	
MAR 04...	0945	Environmental	307	5.6	9.9	88	7.6	1,200	9.0	140	40.0	8.90	
APR 24...	1214	Environmental	90	6.9	5.8	57	7.5	793	14.3	200	60.0	12.0	
24...	1300	Blank	--	--	--	--	--	--	--	--	<0.02	<0.03	
MAY 18...	1100	Environmental	0.6	6.3	6.6	76	7.8	1,060	21.6	280	86.0	17.0	
AUG 03...	1130	Environmental	0.1	12	6.2	78	7.5	701	25.3	290	90.4	14.9	
Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., field, mg/L (00450)	Carbonate, wat unfltrd incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	68	68	82	<1	--	437	3.0	--	0.38	--	0.920	--	0.05
DEC 03...	275	278	339	<1	94.0	<1	0.30	--	0.06	--	0.470	--	<0.01
10...	45	45	55	<1	--	235	2.3	--	0.01	--	0.500	--	0.02
FEB 17...	154	155	189	<1	430	3	1.0	--	0.28	--	1.00	--	0.06
MAR 04...	105	97	119	<1	--	450	2.1	--	0.47	--	0.920	--	0.06
APR 24...	126	130	159	<1	--	97	1.7	--	0.18	--	0.480	--	0.02
24...	--	--	--	--	--	<1	<0.20	--	0.02	--	<0.020	--	<0.01
MAY 18...	197	198	241	<1	--	38	0.40	--	0.06	--	0.610	--	0.02
AUG 03...	195	193	236	<1	--	<10	0.40	<0.04	--	0.42	--	0.011	--

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER

07010075 DEER CREEK AT LADUE, MO—Continued

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

Date	Naphthalene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 03...	--
10...	Mt
FEB 17...	--
MAR 04...	<2
APR 24...	Mt
24...	<2
MAY 18...	--
AUG 03...	--

Remark codes used in this table:

e -- Estimated discharge value
 < -- Less than
 E -- Estimated value
 M -- Presence verified, not quantified

Value qualifier codes used in this table:

k -- Counts outside acceptable range
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07010082 BLACK CREEK NEAR BRENTWOOD, MO

LOCATION.--Lat 38°37'00", long 90°20'14", St. Louis County, Hydrologic Unit 07140101, on right upstream abutment on Litzinger Road, 0.9 mi south of I-40, 0.16 mi west of Hanley Road, and 0.35 mi north of Manchester Road.

DRAINAGE AREA.--5.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2004 to current year.

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

REMARKS.--No estimated daily discharges. Water-discharge records poor. U.S.G.S. satellite telemeter at station.

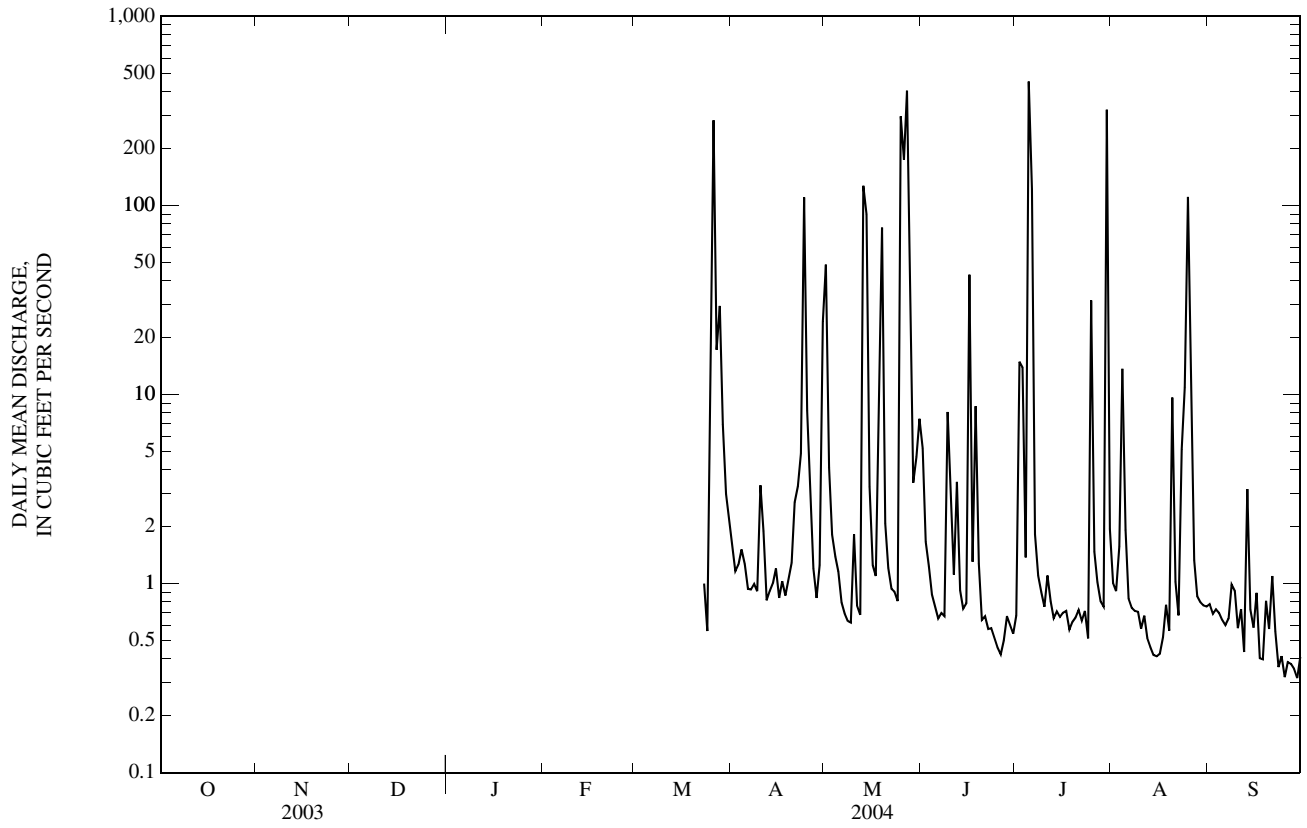
EXTREMES FOR CURRENT YEAR.--For period March 23 to Sept. 30, maximum discharge 5,110^a ft³/s, July 5, gage height 14.27 ft; minimum, 0.21 ft³/s, Sept. 27.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1.6	49	5.2	0.68	1.0	0.78
2	---	---	---	---	---	---	1.2	4.1	1.7	15	0.91	0.69
3	---	---	---	---	---	---	1.3	1.8	1.2	14	1.6	0.73
4	---	---	---	---	---	---	1.5	1.4	0.88	1.4	14	0.70
5	---	---	---	---	---	---	1.3	1.2	0.75	451	1.9	0.64
6	---	---	---	---	---	---	0.94	0.80	0.65	121	0.83	0.60
7	---	---	---	---	---	---	0.93	0.70	0.70	1.8	0.74	0.65
8	---	---	---	---	---	---	1.00	0.63	0.67	1.1	0.72	0.99
9	---	---	---	---	---	---	0.91	0.62	8.1	0.90	0.71	0.92
10	---	---	---	---	---	---	3.3	1.8	2.8	0.75	0.58	0.58
11	---	---	---	---	---	---	1.9	0.76	1.1	1.1	0.68	0.73
12	---	---	---	---	---	---	0.82	0.68	3.4	0.80	0.51	0.43
13	---	---	---	---	---	---	0.91	127	0.92	0.66	0.46	3.2
14	---	---	---	---	---	---	1.0	90	0.74	0.71	0.42	0.73
15	---	---	---	---	---	---	1.2	3.3	0.79	0.67	0.41	0.58
16	---	---	---	---	---	---	0.84	1.2	43	0.70	0.42	0.89
17	---	---	---	---	---	---	1.0	1.1	1.3	0.72	0.52	0.40
18	---	---	---	---	---	---	0.86	4.2	8.7	0.57	0.77	0.40
19	---	---	---	---	---	---	1.0	76	1.3	0.63	0.56	0.81
20	---	---	---	---	---	---	1.3	2.1	0.64	0.66	9.6	0.58
21	---	---	---	---	---	---	2.7	1.2	0.67	0.72	1.0	1.1
22	---	---	---	---	---	---	3.3	0.94	0.57	0.64	0.68	0.56
23	---	---	---	---	---	1.0	4.9	0.91	0.58	0.72	5.1	0.36
24	---	---	---	---	---	0.56	110	0.81	0.51	0.51	11	0.41
25	---	---	---	---	---	4.9	8.2	296	0.46	31	111	0.32
26	---	---	---	---	---	282	2.7	175	0.42	1.5	12	0.38
27	---	---	---	---	---	17	1.2	405	0.50	1.0	1.3	0.38
28	---	---	---	---	---	29	0.84	15	0.67	0.80	0.86	0.36
29	---	---	---	---	---	6.9	1.3	3.4	0.60	0.75	0.80	0.32
30	---	---	---	---	---	3.0	24	4.7	0.54	320	0.77	0.41
31	---	---	---	---	---	2.1	---	7.5	---	1.9	0.76	---
MEAN	---	---	---	---	---	---	6.13	41.3	3.00	31.4	5.89	0.69
MAX	---	---	---	---	---	---	110	405	43	451	111	3.2
MIN	---	---	---	---	---	---	0.82	0.62	0.42	0.51	0.41	0.32
IN.	---	---	---	---	---	---	1.18	8.19	0.58	6.24	1.17	0.13

^a From rating extended above 913 ft³/s on basis of indirect measurement.

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER
07010082 BLACK CREEK NEAR BRENTWOOD, MO—Continued



07010082 BLACK CREEK NEAR BRENTWOOD, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2003 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
DEC 03...	1400	Environmental	0.35	10	10.1	80	7.6	1,300	5.9	370	104	26.0
FEB 17...	1250	Environmental	0.40	3.6	15.2	117	8.0	3,110	3.8	460	135	31.0
MAR 26...	0532	Environmental	43	5.4	7.9	79	7.5	660	14.6	120	36.0	7.20
APR 24...	0949	Environmental	61	3.1	7.9	80	7.6	382	14.9	110	33.0	6.70
MAY 18...	1200	Environmental	0.84	7.1	7.0	79	7.7	1,550	20.4	410	118	29.0
AUG 03...	1315	Environmental	1.1	11	7.1	88	7.4	1,360	24.9	400	116	26.0

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
DEC 03...	215	217	264	<1	180	4	5.8	--	5.10	--	0.210	--	0.02
FEB 17...	170	171	208	<1	730	6	1.0	--	0.48	--	1.20	--	0.11
MAR 26...	91	81	99	<1	--	298	3.1	--	0.48	--	0.670	--	0.07
APR 24...	65	68	82	<1	--	239	3.0	--	0.46	--	0.590	--	0.08
MAY 18...	184	186	227	<1	--	13	0.50	--	0.11	--	1.50	--	0.05
AUG 03...	152	152	185	<1	--	<10	0.45	0.06	--	1.16	--	0.035	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
DEC 03...	--	0.550	0.62	24	54	200	96	3	2	<1	<1.0	3.6	2.3
FEB 17...	--	0.040	0.09	17	48	110	33k	6	3	<1	<1.0	1.5	4.1
MAR 26...	--	0.060	0.54	21	33,000	54,000	10,000	10	1	<1	<1.0	<1.0	4.6
APR 24...	--	0.090	0.54	19	19,000	35,000	12,300	8	2	<1	<1.0	1.4	5.1
MAY 18...	--	0.070	0.11	32	450k	320k	552k	24	2	<1	<1.0	<1.0	2.9
AUG 03...	0.07	--	0.12	10	430	1,600k	1,080	5	2.0	<0.06	0.24	E.7n	3.7

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	E2mn	7	E.4t	<0.02	10	<1	<0.02	<1	<2	<1	Mt	<1m	<2m
APR 24...	E1mn	2	E.3t	<0.02	4	<1	<0.02	<1	Mt	<1	Mt	<1m	<2m
MAY 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
DEC 03...	--
FEB 17...	--
MAR 26...	Mt
APR 24...	Mt
MAY 18...	--
AUG 03...	--

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
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07010086 DEER CREEK AT MAPLEWOOD, MO

LOCATION.--Lat 38°36'03", long 90°19'34", St. Louis County, Hydrologic Unit 07140101, on right downstream pier of Big Bend Road bridge, 0.44 mi north of Interstate 44, 4.35 mi east of U.S. 67 (Lindbergh Blvd.), and 0.63 mi upstream of River Des Peres Drainage Channel.

DRAINAGE AREA.--36.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1996 to current year. Annual peaks only for 1969-1974 water years published in WRD MO 1974.

REVISED RECORDS.--WDR MO-03-1: 1996-2000(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 415.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records fair. U.S.G.S. satellite telemeter at station.

REVISIONS.--The maximum discharge for the 2001 water year has been revised to 2,430 ft³/s, Sept. 9, gage height, 10.76 ft. The maximum discharge for the 2002 water year has been revised to 4,280 ft³/s, June 12, gage height, 14.44 ft. These supersede figures published in WDR MO-01-1, WDR MO-02-1 and WDR MO-03-1.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	62	2.0	2.6	2.9	2.7	5.4	257	27	1.4	2.8	1.5
2	3.6	8.6	1.9	2.8	155	2.0	4.7	23	6.6	45	1.9	1.4
3	3.2	1.9	4.0	3.2	41	19	4.2	5.6	4.3	69	2.4	1.4
4	1.8	1.2	7.5	1,100	8.9	471	4.1	5.6	3.3	8.7	43	1.3
5	1.3	5.1	8.7	51	9.3	275	3.6	4.6	2.2	824	19	1.2
6	1.1	72	3.7	11	7.8	20	2.5	2.7	1.6	578	2.4	1.1
7	1.2	5.9	1.9	8.6	3.8	7.8	2.0	1.8	1.5	15	1.8	1.1
8	1.2	5.1	1.5	4.7	4.5	6.1	2.8	1.5	1.4	5.0	1.7	1.3
9	253	2.0	18	4.0	7.9	4.8	3.6	1.3	22	3.8	1.6	1.7
10	16	0.86	146	3.1	13	3.8	4.5	2.3	8.2	2.8	1.5	1.2
11	3.6	1.1	7.7	2.6	29	3.4	6.2	1.5	3.0	4.6	1.5	1.3
12	2.2	2.6	3.1	3.4	16	3.2	2.2	1.2	10	3.2	1.5	0.92
13	1.6	5.3	2.8	2.7	5.8	2.7	1.8	436	2.9	1.8	1.3	3.8
14	26	4.9	5.3	2.7	5.7	5.3	2.3	468	1.8	1.7	1.3	1.8
15	3.1	16	5.1	2.1	6.1	2.8	2.2	29	1.4	1.5	1.2	1.1
16	19	1.9	6.4	4.8	4.1	6.1	2.4	7.7	210	1.7	1.2	1.4
17	175	318	3.2	329	3.6	3.5	1.9	4.6	7.1	1.7	1.4	1.0
18	5.4	1,450	4.7	79	5.8	3.4	1.8	20	77	1.6	1.6	1.0
19	2.7	53	4.6	9.9	12	2.4	1.7	438	14	1.3	1.4	1.3
20	1.7	9.9	2.2	5.0	16	2.9	2.1	25	2.5	1.3	28	1.1
21	1.8	5.1	1.8	4.0	5.7	1.7	3.6	7.0	2.0	1.9	4.0	1.1
22	1.9	3.5	9.3	3.5	3.8	1.5	4.3	2.6	1.8	1.7	1.7	1.2
23	1.9	68	229	2.7	3.7	1.7	18	2.2	1.6	1.6	20	0.83
24	1.8	16	12	3.0	3.6	2.7	354	2.2	1.5	1.0	42	0.85
25	4.2	3.7	5.2	3.3	3.1	15	71	533	1.4	152	328	0.93
26	3.9	2.7	3.9	4.0	2.5	752	7.0	839	1.3	4.6	126	0.69
27	1.2	2.3	3.1	3.4	2.3	107	3.7	769	1.4	2.0	4.6	0.75
28	5.5	1.9	12	2.7	2.0	128	2.5	208	1.5	1.5	2.6	0.88
29	2.3	1.8	36	2.5	1.9	42	2.4	27	1.5	1.4	2.3	0.88
30	1.1	1.8	4.8	2.0	---	12	105	17	1.4	965	2.1	1.0
31	1.5	---	3.2	2.0	---	6.7	---	24	---	13	1.9	---
MEAN	18.0	71.1	18.1	53.7	13.3	61.9	21.1	134	14.1	87.7	21.1	1.23
MAX	253	1,450	229	1,100	155	752	354	839	210	965	328	3.8
MIN	1.1	0.86	1.5	2.0	1.9	1.5	1.7	1.2	1.3	1.0	1.2	0.69
IN.	0.57	2.18	0.57	1.70	0.39	1.95	0.65	4.25	0.43	2.77	0.67	0.04

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

MEAN	17.3	28.6	12.4	27.2	32.6	38.0	26.2	50.3	55.0	32.5	16.5	18.5
MAX	40.0	82.3	40.8	53.7	77.0	108	46.9	134	101	87.7	35.3	87.0
(WY)	(2002)	(1997)	(2002)	(2004)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(1996)	(2003)
MIN	8.23	1.93	2.09	2.85	9.52	7.92	9.27	15.4	14.1	2.23	3.67	1.23
(WY)	(1998)	(2000)	(1999)	(2003)	(2002)	(2000)	(2000)	(1999)	(2004)	(1997)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

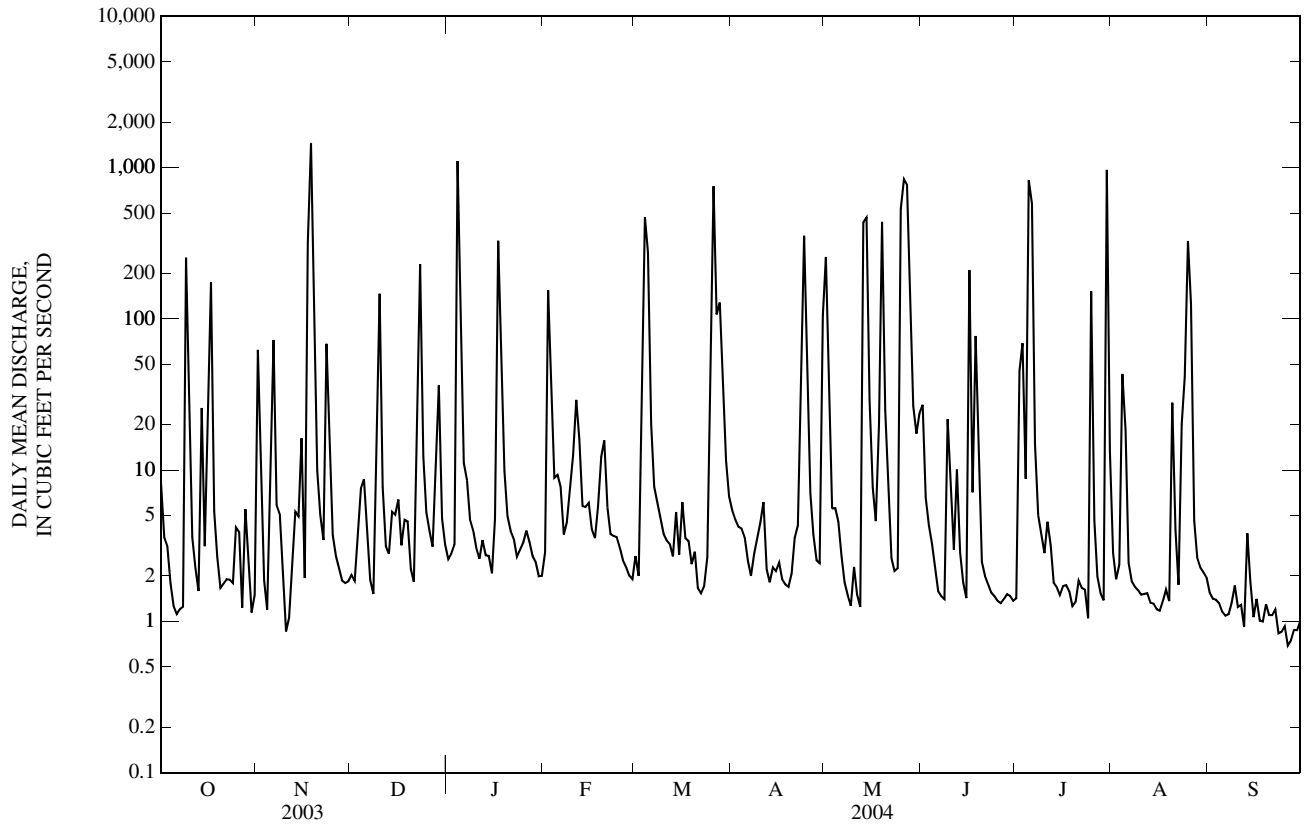
FOR 2004 WATER YEAR

WATER YEARS 1996 - 2004

ANNUAL MEAN	36.8	43.3	29.2
HIGHEST ANNUAL MEAN			43.3
LOWEST ANNUAL MEAN			15.7
HIGHEST DAILY MEAN	1,450	Nov 18	1,980
LOWEST DAILY MEAN	0.69	Aug 20	0.24
ANNUAL SEVEN-DAY MINIMUM	0.78	Aug 15	0.30
MAXIMUM PEAK FLOW	---	5,560 ^a	5,560 ^a
MAXIMUM PEAK STAGE	---	16.57	16.57
INSTANTANEOUS LOW FLOW	---	0.62	0.09
ANNUAL RUNOFF (INCHES)	13.70	16.16	10.88
10 PERCENT EXCEEDS	72	68	51
50 PERCENT EXCEEDS	3.5	3.2	2.4
90 PERCENT EXCEEDS	1.1	1.3	0.84

^a From rating extended above 1,050 ft³/s on basis of indirect measurement.

MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER
07010086 DEER CREEK AT MAPLEWOOD, MO—Continued



07010086 DEER CREEK AT MAPLEWOOD, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2001 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
OCT 09...	1327	Environmental	1,110	3.2	5.8	62	7.7	311	18.0	91	28.0	5.00
DEC 03...	1500	Environmental	1.2	8.6	7.8	62	7.7	1,230	5.0	390	115	24.0
DEC 09...	1027	Environmental	55	12	10.9	93	7.5	1,030	7.3	280	86.0	16.0
FEB 17...	1045	Blank	--	--	--	--	--	--	--	--	<0.02	<0.03
FEB 17...	1046	Environmental	3.5	6.1	12.2	91	7.8	2,240	2.2	340	100	21.0
MAR 03...	2126	Environmental	98	8.6	8.7	79	7.5	1,960	10.5	240	71.0	15.0
APR 23...	0019	Environmental	52	11	5.1	51	7.3	832	14.8	220	65.0	13.0
MAY 18...	1310	Environmental	3.9	9.4	4.6	53	7.6	1,200	21.8	330	102	19.0
AUG 03...	1415	Environmental	1.4	20	3.6	45	7.3	1,030	25.1	310	98.4	16.2

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., field, mg/L (00450)	Carbonate, wat unfltrd incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	73	74	90	<1	--	378	3.0	--	0.30	--	0.680	--	0.07
DEC 03...	238	239	291	<1	180	2	3.8	--	3.40	--	0.750	--	0.03
DEC 09...	185	188	230	<1	--	50	1.4	--	0.43	--	0.790	--	0.05
FEB 17...	--	--	--	--	<0.10	<1	<0.20	--	<0.01	--	<0.020	--	<0.01
FEB 17...	220	217	263	<1	490	5	1.2	--	0.55	--	1.20	--	0.04
MAR 03...	141	144	175	<1	--	134	1.7	--	0.33	--	0.840	--	0.06
APR 23...	125	123	151	<1	--	76	2.1	--	0.50	--	0.540	--	0.04
MAY 18...	213	215	262	<1	--	3	1.3	--	0.70	--	1.40	--	0.16
AUG 03...	193	197	240	<1	--	<10	0.80	0.27	--	1.19	--	0.048	--

07010086 DEER CREEK AT MAPLEWOOD, MO—Continued

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

Date	Naphthalene, water, unfltrd µg/L (34696)
OCT	
09...	Mt
DEC	
03...	--
09...	Mt
FEB	
17...	--
17...	--
MAR	
03...	Mt
APR	
23...	Mt
MAY	
18...	--
AUG	
03...	--

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 extrapolated at low end
 k -- Counts outside acceptable range
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07010090 MACKENZIE CREEK NEAR SHREWSBURY, MO

LOCATION.--Lat 38°34'36", long 90°19'25", St. Louis County, Hydrologic Unit 07140101, on right downstream bridge abutment at Resurrection Cemetery, 1.24 mi south of Interstate 44, 4.48 mi east of U.S. 67 (Lindbergh Blvd.), and 0.85 mi upstream of River Des Peres Drainage Channel.

DRAINAGE AREA.--3.49 mi².

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

REVISED RECORDS.--WDR MO-03-1: 1997-2002(M).

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

REMARKS.--Record fair except for estimated daily discharges and discharges below 0.5 ft³/s, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.2	e6.3	e0.41	e0.60	e1.1	e0.69	0.94	23	2.4	0.26	0.88	0.21
2	e0.29	e1.2	e0.37	e0.65	e16	e0.48	1.6	2.6	1.3	10	0.62	0.21
3	e0.23	e0.26	e0.81	e1.5	e4.2	e4.0	0.76	1.2	1.2	9.3	0.54	0.16
4	e0.20	e0.20	e1.3	e70	e1.4	e37	0.67	1.6	0.73	0.72	1.3	0.16
5	e0.18	e1.5	e1.3	e4.3	e1.5	e16	0.73	1.1	0.67	73	0.59	0.48
6	e0.15	e6.3	e0.70	e1.6	e1.3	e2.4	0.63	0.73	0.63	7.7	0.38	0.13
7	e0.16	e0.83	e0.46	e1.4	e0.79	e1.3	0.71	0.64	0.54	0.90	0.32	0.08
8	e0.61	e0.77	e0.47	e0.94	e0.95	e1.2	0.56	0.63	0.54	0.53	0.29	0.08
9	e23	e0.41	e3.3	e0.85	e1.5	e0.99	0.56	0.55	2.7	3.3	0.31	e0.07
10	e1.8	e0.26	e10	e0.70	e2.3	e0.85	1.2	0.72	1.3	0.43	0.26	e0.07
11	e0.37	e0.31	e1.1	e0.64	e3.7	e0.79	0.82	0.55	0.40	2.3	0.21	0.08
12	e0.28	e0.50	e0.67	e0.75	e2.1	e0.75	0.49	0.54	0.67	0.36	0.21	e0.06
13	e0.40	e0.74	e0.68	e0.64	e1.1	e0.69	0.43	13	0.25	0.29	0.18	e0.07
14	e3.2	e0.85	e1.0	e0.63	e1.1	e1.0	0.46	26	0.20	0.25	0.16	0.05
15	e0.61	e1.9	e0.98	e0.53	e1.1	e0.69	0.51	1.7	0.19	0.25	0.16	0.05
16	e3.3	e0.71	e1.1	e1.5	e0.85	e1.2	0.49	0.96	15	0.21	0.13	0.19
17	e13	e43	e0.68	e28	e0.83	e0.80	0.46	0.82	0.89	0.21	0.12	0.08
18	e0.81	e72	e0.90	e6.5	e1.3	e0.78	0.45	4.2	33	0.21	0.12	e0.07
19	e0.24	e4.6	e0.84	e1.5	e2.1	e0.61	0.44	48	1.9	0.20	0.09	0.08
20	e0.16	e1.5	e0.52	e1.0	e2.3	e0.67	0.43	2.5	0.64	0.19	1.6	e0.07
21	e0.18	e0.98	e0.50	e0.88	e1.1	e0.47	0.50	1.2	1.1	0.21	0.17	e0.06
22	e0.17	e1.0	e2.3	e0.80	e0.84	e0.46	1.5	0.83	0.59	0.19	0.11	e0.07
23	e0.21	e7.6	e17	e0.67	e0.83	0.57	4.2	2.6	0.39	0.16	1.0	0.05
24	e0.19	e2.1	e1.6	e0.73	e0.82	0.49	42	0.92	0.37	0.18	15	0.05
25	e0.86	e0.76	e0.97	e0.80	e0.73	1.3	6.0	49	0.32	25	28	0.07
26	e0.76	e0.64	e0.82	e0.88	e0.64	9.5	1.4	66	0.32	0.55	4.3	0.05
27	e0.17	e0.56	e0.70	e0.76	e0.59	7.2	0.95	73	0.27	1.9	0.53	0.16
28	e1.1	e0.48	e1.7	e0.65	e0.55	10	0.82	10	0.26	0.30	0.35	0.15
29	e0.29	e0.46	e3.3	e0.61	e0.55	6.2	0.89	3.5	0.26	0.27	0.29	0.76
30	e0.19	e0.50	e0.82	e0.53	---	2.9	4.2	4.0	0.26	114	0.22	0.40
31	e0.17	---	e0.68	e0.56	---	1.1	---	2.8	---	2.2	0.21	---
MEAN	1.76	5.31	1.87	4.26	1.87	3.65	2.53	11.1	2.31	8.24	1.89	0.14
MAX	23	72	17	70	16	37	42	73	33	114	28	0.76
MIN	0.15	0.20	0.37	0.53	0.55	0.46	0.43	0.54	0.19	0.16	0.09	0.05
IN.	0.58	1.70	0.62	1.41	0.58	1.21	0.81	3.68	0.74	2.72	0.63	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	1.98	2.03	1.73	2.68	3.33	3.94	3.65	6.27	6.57	4.45	2.39	1.48
MAX	3.42	5.31	4.41	4.97	8.01	11.4	5.68	11.1	13.2	10.1	7.16	3.83
(WY)	(2002)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(1998)	(1998)	(1998)	(2003)
MIN	1.10	0.32	0.43	0.78	1.33	0.85	1.05	1.29	2.31	0.38	0.32	0.14
(WY)	(2001)	(2000)	(1999)	(2003)	(2002)	(2000)	(2000)	(1999)	(2004)	(2002)	(2003)	(2004)

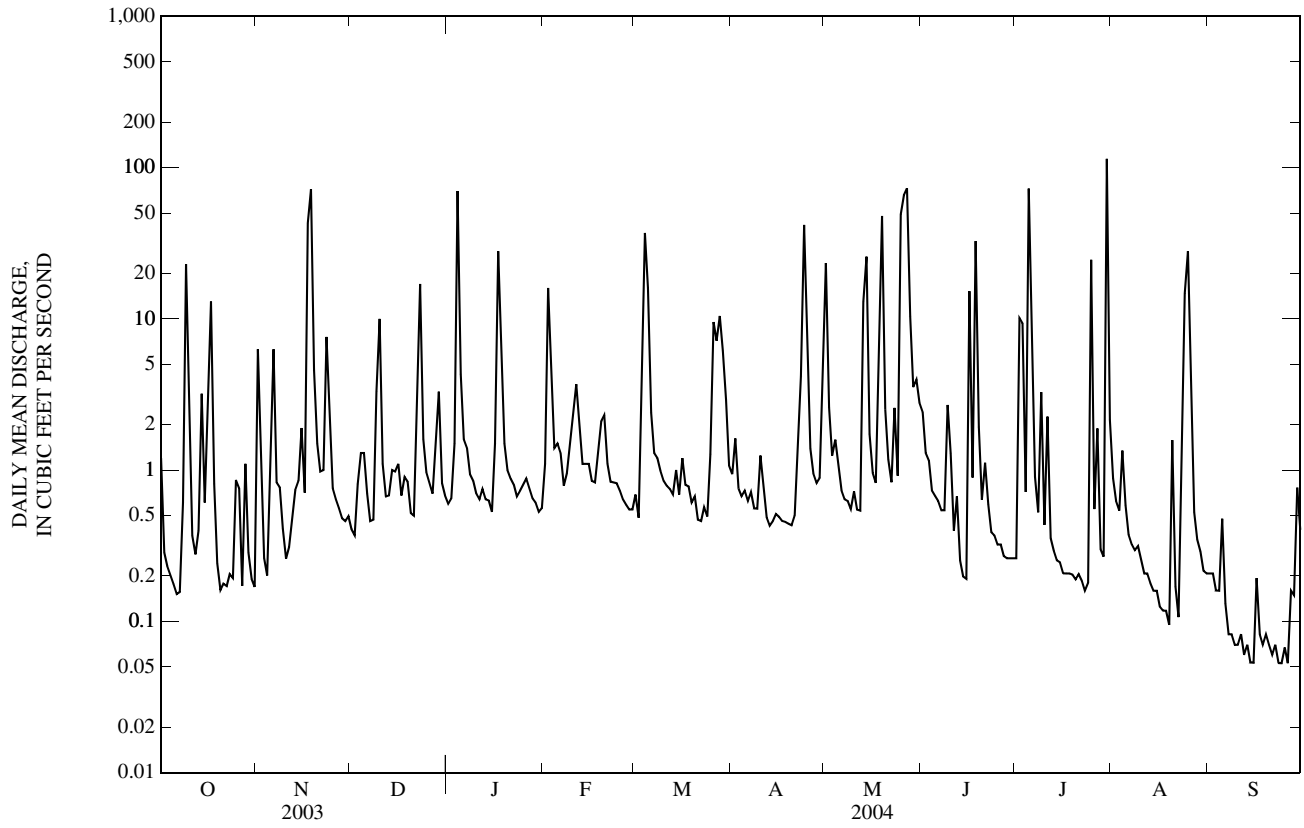
SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	3.58	3.77	3.43
HIGHEST ANNUAL MEAN			5.46
LOWEST ANNUAL MEAN			2.15
HIGHEST DAILY MEAN			209
LOWEST DAILY MEAN	0.11	0.05	0.05
ANNUAL SEVEN-DAY MINIMUM	0.12	0.06	0.06
MAXIMUM PEAK FLOW	---	1,610 ^a	1,730 ^a
MAXIMUM PEAK STAGE	---	10.51	10.80
INSTANTANEOUS LOW FLOW	---	0.05	0.03
ANNUAL RUNOFF (INCHES)	13.94	14.70	13.37
10 PERCENT EXCEEDS	8.8	6.3	6.3
50 PERCENT EXCEEDS	0.84	0.72	0.67
90 PERCENT EXCEEDS	0.21	0.17	0.18

e Estimated

^a From rating extended above 156 ft³/s on basis of indirect measurement.

07010090 MACKENZIE CREEK NEAR SHREWSBURY, MO—Continued



07010097 RIVER DES PERES AT ST. LOUIS, MO

LOCATION.--Lat 38°33'34", long 90°17'00", City of St. Louis, Hydrologic Unit 07140101, on right downstream abutment of Morganford Bridge, 0.6 mi north of I-55, 2.1 mi east of Mackenzie Road, and 2.4 mi upstream from confluence to the Mississippi River.

DRAINAGE AREA.--82.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Feb. 8, 2002 to current year.

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

REMARKS.--Water-discharge records fair. U.S.G.S. satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	127	2.1	4.5	11	5.6	e16	564	e30	e1.8	6.6	e1.5
2	3.4	17	2.1	4.0	370	5.5	e13	35	e13	e60	3.7	1.4
3	2.3	2.1	2.1	5.2	68	30	e11	9.2	e6.5	e99	2.9	0.66
4	2.2	2.0	8.4	2,490	14	782	e9.6	7.5	e5.5	e12	67	0.51
5	0.90	5.3	6.9	93	12	575	e8.6	8.6	e4.1	1,440	49	0.50
6	0.63	151	5.6	37	13	e176	e8.4	5.1	e3.6	1,070	2.6	0.53
7	0.78	6.7	3.7	17	9.1	e35	e8.0	4.0	e3.2	23	1.3	0.44
8	0.98	4.4	3.1	12	10	e15	e7.4	3.0	e3.0	9.4	1.1	0.40
9	639	3.3	16	11	13	e12	e6.6	1.9	e30	6.5	0.97	0.50
10	29	1.3	215	9.5	13	e8.6	e6.2	2.0	e11	3.4	0.79	0.78
11	3.3	1.2	9.7	7.3	19	e7.6	e37	13	e3.9	16	0.70	0.54
12	1.5	1.3	4.6	7.3	25	e6.1	5.6	3.5	e16	4.3	0.68	0.41
13	0.92	1.3	4.1	7.9	9.1	e5.7	4.9	735	e5.3	2.3	0.74	0.37
14	34	1.6	5.4	6.1	8.4	e15	4.9	988	e3.2	1.4	0.74	1.6
15	3.8	20	5.3	5.5	8.5	6.7	4.8	39	e2.5	1.1	0.66	0.64
16	11	3.9	7.9	6.9	7.5	8.4	5.0	15	e283	e2.3	0.54	0.66
17	457	610	4.7	630	6.8	8.7	3.6	9.5	e12	1.8	0.64	0.65
18	5.8	4,330	5.2	182	7.5	7.7	3.5	34	e112	1.5	0.63	0.44
19	2.7	96	5.4	19	10	6.5	3.4	1,030	e23	1.2	0.54	0.46
20	1.6	12	3.4	12	14	7.0	3.4	38	e5.2	0.98	18	0.51
21	0.90	6.7	3.4	9.4	8.6	6.0	5.2	13	e3.7	1.2	5.1	0.45
22	0.84	4.2	11	8.2	6.6	6.1	4.4	e7.5	e3.9	1.2	1.1	0.43
23	0.76	165	479	8.7	6.4	6.4	37	e5.8	e3.3	1.2	8.8	0.38
24	0.58	33	16	6.8	6.2	7.1	739	e4.7	e2.6	0.99	236	0.32
25	0.88	5.7	8.6	7.8	5.8	15	238	e402	e2.3	336	579	0.31
26	4.0	3.9	5.2	10	5.3	1,350	11	e839	e2.1	5.4	417	0.36
27	1.7	3.4	4.9	12	4.8	184	6.2	e1,050	e1.9	2.2	5.4	0.40
28	4.1	2.9	13	17	4.6	615	4.9	e366	e3.3	1.2	2.4	0.42
29	2.5	2.9	73	12	5.1	e131	3.6	e32	e2.1	1.5	e2.2	0.43
30	1.4	2.1	7.3	11	---	e28	212	e104	e1.8	2,280	e2.1	0.49
31	0.93	---	4.7	11	---	e18	---	e58	---	26	e1.9	---
MEAN	39.6	188	30.5	119	24.2	132	47.7	207	20.1	175	45.8	0.58
MAX	639	4,330	479	2,490	370	1,350	739	1,050	283	2,280	579	1.6
MIN	0.58	1.2	2.1	4.0	4.6	5.5	3.4	1.9	1.8	0.98	0.54	0.31
IN.	0.55	2.54	0.43	1.66	0.32	1.84	0.65	2.90	0.27	2.44	0.64	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	58.6	98.2	24.4	63.1	26.2	82.0	59.3	145	113	75.6	33.5	75.4
MAX	77.7	188	30.5	119	28.2	132	79.2	207	231	175	45.8	206
(WY)	(2003)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2003)
MIN	39.6	8.85	18.2	7.39	24.2	52.4	47.7	93.5	20.1	10.3	14.5	0.58
(WY)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2002)	(2003)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 2002 - 2004

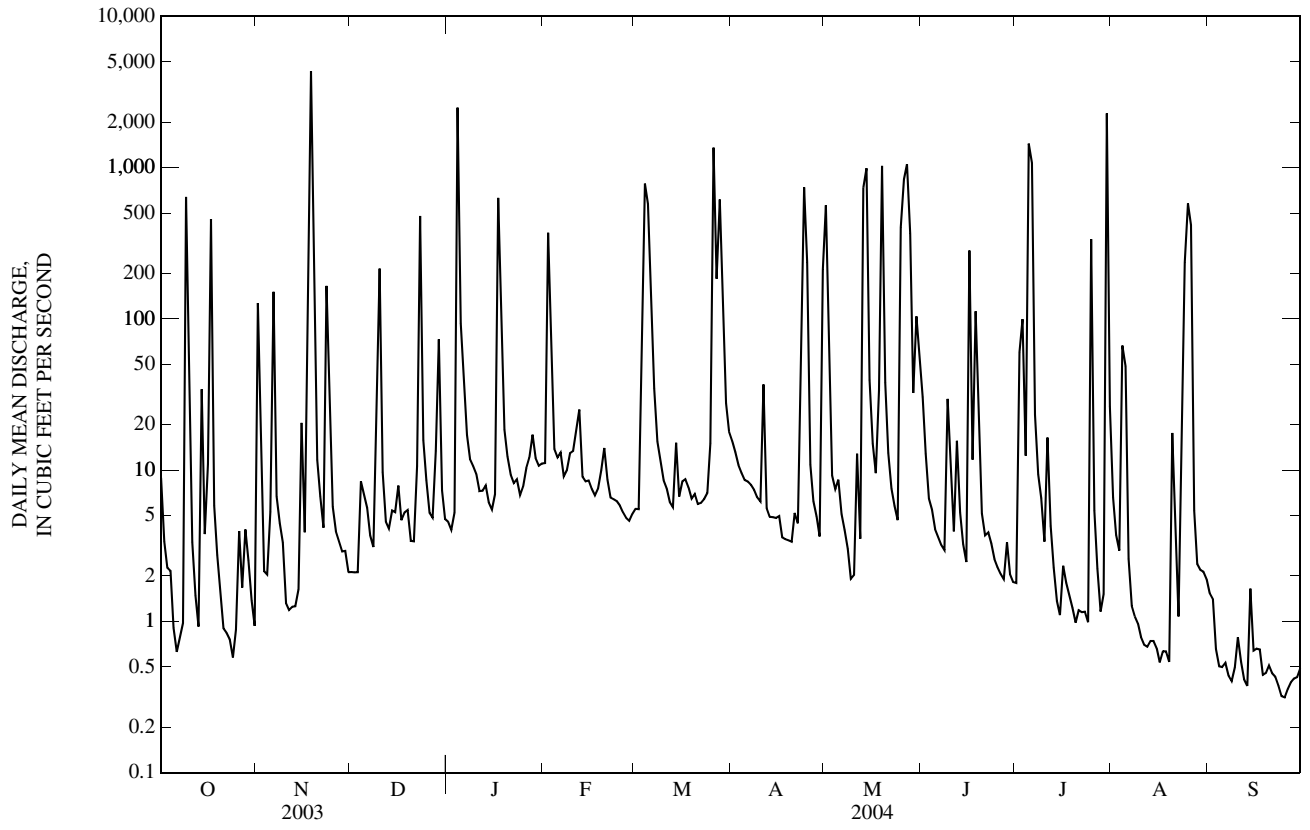
ANNUAL MEAN	83.7	86.3	78.8
HIGHEST ANNUAL MEAN			86.3
LOWEST ANNUAL MEAN			71.2
HIGHEST DAILY MEAN	4,330	Nov 18	4,330
LOWEST DAILY MEAN	0.28	Aug 23	0.31
ANNUAL SEVEN-DAY MINIMUM	0.43	Aug 10	0.37
MAXIMUM PEAK FLOW	---		15,200 ^a
MAXIMUM PEAK STAGE	---		17.70
INSTANTANEOUS LOW FLOW	---		0.27
ANNUAL RUNOFF (INCHES)	13.78		14.25
10 PERCENT EXCEEDS	170		155
50 PERCENT EXCEEDS	4.7		5.8
90 PERCENT EXCEEDS	0.99		0.74

e Estimated

^a From rating extended above 3,400 ft³/s on basis of indirect measurement.

^b Discharge determined by indirect measurement of peak flow.

07010097 RIVER DES PERES AT ST. LOUIS, MO—Continued



MISSISSIPPI RIVER BASIN BELOW MISSOURI RIVER
07010097 RIVER DES PERES AT ST. LOUIS, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2002 to current year.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
OCT 09...	1455	Environmental	2,860	4.3	4.1	45	7.5	275	19.0	84	26.0	4.60
DEC 04...	1020	Environmental	8.6	7.1	13.3	109	7.8	1,060	6.3	330	101	19.0
FEB 18...	0850	Environmental	7.9	2.8	15.4	111	8.1	1,550	1.8	290	84.0	20.0
MAR 04...	1100	Environmental	969	4.8	11.0	99	7.5	623	10.1	93	28.0	5.60
MAY 17...	1200	Environmental	9.0	1.2	15.1	189	8.5	932	26.1	270	82.0	16.0
AUG 03...	1545	Environmental	2.1	0.4	18.9	267	8.7	627	32.4	180	50.9	12.5

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	70	71	87	<1	--	588	4.3	--	0.81	--	0.570	--	0.09
DEC 04...	223	223	272	<1	140	14	2.1	--	1.60	--	1.10	--	0.04
FEB 18...	163	163	199	<1	310	9	0.90	--	0.38	--	1.20	--	0.04
MAR 04...	73	78	95	<1	--	433	3.6	--	0.76	--	0.590	--	0.06
MAY 17...	187	189	204	13	--	4	0.60	--	0.04	--	0.830	--	0.07
AUG 03...	85	85	75	14	--	<10	0.67	<0.04	--	E.04n	--	E.007n	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.050	1.00	26	63,000	84,000k	50,000	24	2	<1	<1.0	6.8	2.1
DEC 04...	--	0.190	0.21	23	830k	710k	690	<3	2	<1	<1.0	5.3	2.7
FEB 18...	--	0.050	0.09	12	52k	77k	<4b	3	2	<1	<1.0	<1.0	2.8
MAR 04...	--	0.160	0.94	18	29,000	190,000k	33,200	11	<1	<1	<1.0	1.1	1.8
MAY 17...	--	0.070	0.11	22	42	92	35k	14	2	<1	<1.0	<1.0	3.3
AUG 03...	<0.02	--	0.09	20	88	420	84	14	2.5	<0.06	E.04n	<0.8	3.3

07010097 RIVER DES PERES AT ST. LOUIS, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmn	3	<3.4	0.02	4	<1	0.02	<2	<2	<2	Mt	<1m	<2m
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	E2m	6	E.2t	<0.02	10	<1	<0.02	<1	<2	<1	Mt	<1m	<2m
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 04...	--
FEB 18...	--
MAR 04...	Mt
MAY 17...	--
AUG 03...	--

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 extrapolated at low end
 k -- Counts outside acceptable range
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

LOCATION.--Lat 38°31'37", long 90°17'59", St. Louis County, Hydrologic Unit 07140101, on center downstream pier of Green Park Road bridge, 1.10 mi south of Interstate 55, 0.24 mi west of Highway 267 (Lemay Ferry Road), and 3.48 mi upstream of River Des Peres Drainage Channel.

DRAINAGE AREA.--18.1 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 422.15 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	26	3.0	3.8	3.2	2.9	9.2	160	20	2.0	6.6	1.7
2	1.7	5.3	2.8	3.7	112	2.9	8.1	19	8.9	53	4.4	1.4
3	1.2	2.0	4.2	9.0	e27	19	7.7	7.0	8.0	57	3.7	1.3
4	1.2	1.5	11	1,040	9.2	e225	7.2	6.5	6.8	8.5	3.4	1.2
5	1.1	4.7	8.6	e150	7.5	41	6.6	9.0	6.2	325	5.2	1.0
6	0.92	44	4.2	e25	10	12	6.1	5.1	5.8	145	2.8	0.95
7	0.84	3.8	3.0	8.7	5.7	7.2	5.9	4.4	5.5	7.4	2.3	0.85
8	0.77	2.1	2.5	7.1	4.4	5.7	5.8	4.0	8.4	5.0	2.2	0.85
9	132	1.6	4.5	5.7	9.9	4.9	5.9	3.7	17	3.8	2.1	0.77
10	8.1	1.4	56	4.7	17	4.1	5.8	3.9	11	3.0	2.2	0.75
11	2.8	1.5	5.5	4.2	23	3.9	11	5.2	8.5	11	1.9	0.79
12	1.8	1.5	3.2	4.1	14	3.5	5.1	4.0	12	3.9	1.9	0.77
13	1.9	0.98	3.0	4.1	6.1	3.4	4.4	110	5.2	3.0	1.6	0.77
14	29	1.7	4.4	4.1	5.1	6.1	4.2	176	3.9	3.0	1.6	0.77
15	2.7	12	3.9	3.5	5.6	3.7	4.2	12	7.0	2.2	1.7	0.77
16	3.4	2.7	7.3	3.4	4.0	6.0	4.1	6.6	93	2.2	1.6	2.5
17	88	213	3.3	7.3	3.5	4.2	4.3	5.3	7.8	4.3	1.5	1.5
18	4.1	1,230	4.1	29	4.0	4.6	4.0	15	181	2.6	1.6	0.83
19	2.7	26	4.1	e120	6.0	3.3	3.9	340	20	2.3	1.4	0.72
20	2.3	10	3.0	5.3	8.3	3.0	4.2	16	8.4	1.9	17	0.68
21	1.9	7.0	2.7	4.7	5.0	2.7	5.0	8.4	5.3	1.7	4.3	0.61
22	1.8	5.6	4.6	4.2	3.9	2.3	6.3	6.5	7.2	1.9	2.0	0.50
23	1.7	20	32	3.7	3.7	2.7	34	27	4.1	1.8	5.5	0.50
24	1.5	10	7.2	3.7	3.7	3.6	275	14	3.4	1.7	77	0.49
25	2.3	4.7	4.5	4.0	3.7	4.5	54	303	2.9	118	145	0.49
26	5.6	4.3	3.7	4.6	3.4	e540	8.9	464	2.6	5.5	66	0.76
27	1.7	3.8	3.7	4.4	3.1	e100	5.9	397	2.5	3.5	4.6	0.60
28	4.5	3.1	3.9	4.1	3.0	33	4.9	82	2.4	2.8	2.9	0.45
29	2.6	3.0	e13	3.7	2.8	30	4.3	20	2.3	2.3	2.2	0.39
30	1.4	3.0	5.2	3.7	---	17	18	25	2.1	874	1.8	0.38
31	1.3	---	4.2	3.6	---	11	---	16	---	14	1.6	---
MEAN	10.3	55.2	7.30	48.0	11.0	35.9	17.8	73.4	16.0	54.0	12.2	0.87
MAX	132	1,230	56	1,040	112	540	275	464	181	874	145	2.5
MIN	0.77	0.98	2.5	3.4	2.8	2.3	3.9	3.7	2.1	1.7	1.4	0.38
IN.	0.66	3.40	0.47	3.06	0.65	2.29	1.10	4.68	0.98	3.44	0.78	0.05

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

	1996	1997	1998	1999	2000	2001	2002	2003	2004			
MEAN	11.9	20.2	10.3	23.4	22.9	25.7	19.6	33.3	36.9	24.1	12.6	16.0
MAX	20.4	55.2	34.1	51.4	49.5	69.8	32.0	73.4	65.6	54.0	27.3	70.9
(WY)	(2003)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(2000)	(2003)
MIN	7.44	2.04	4.02	2.42	8.53	7.19	6.43	8.31	15.4	3.57	1.63	0.87
(WY)	(1998)	(2000)	(2001)	(2003)	(2002)	(2000)	(2000)	(1999)	(2001)	(2002)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

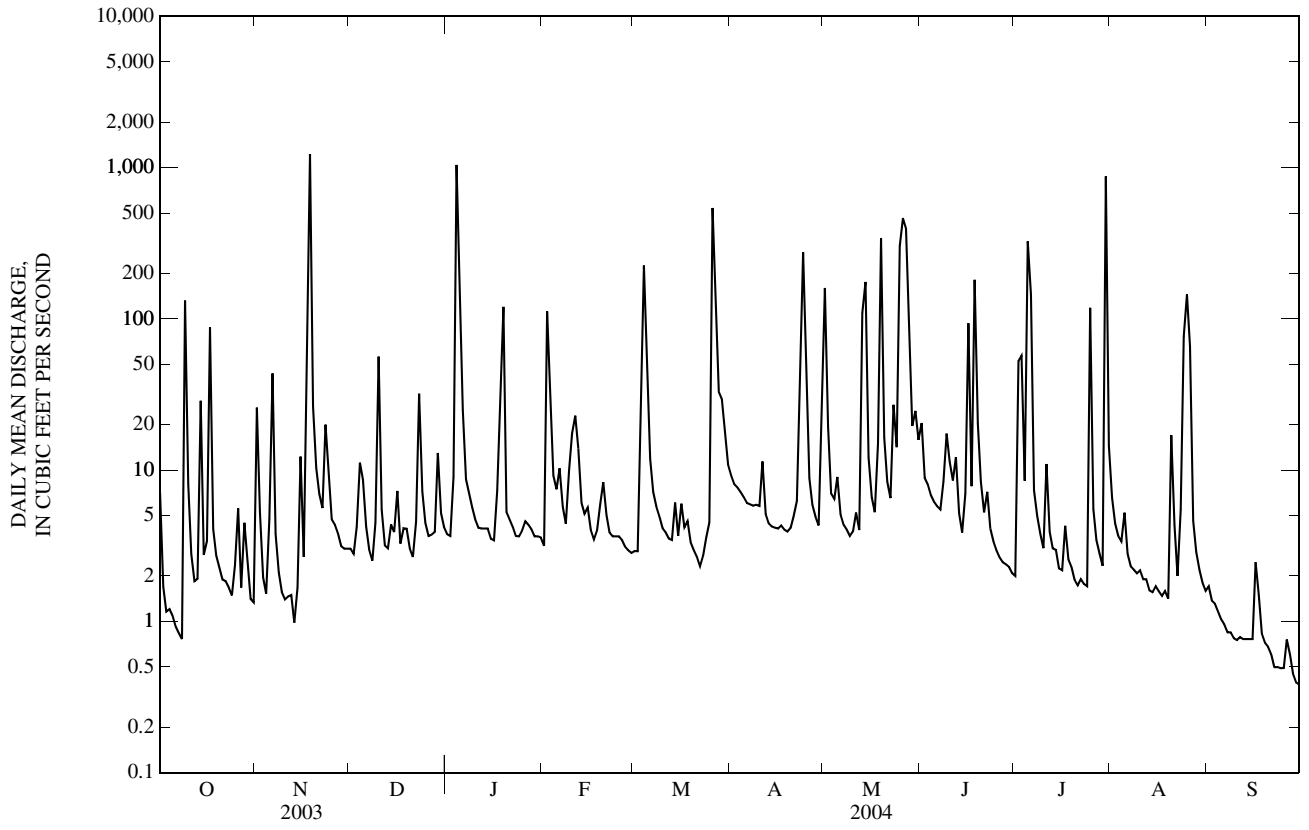
WATER YEARS 1996 - 2004

ANNUAL MEAN	26.1	28.7	21.3
HIGHEST ANNUAL MEAN			28.7
LOWEST ANNUAL MEAN			12.2
HIGHEST DAILY MEAN	1,290	Sep 2	1,290
LOWEST DAILY MEAN	0.69	Sep 20	0.14
ANNUAL SEVEN-DAY MINIMUM	0.82	Sep 18	0.18
MAXIMUM PEAK FLOW	---		4,450 ^a
MAXIMUM PEAK STAGE	---		16.66
INSTANTANEOUS LOW FLOW	---		0.14
ANNUAL RUNOFF (INCHES)	19.57	21.56	15.97
10 PERCENT EXCEEDS	40	33	38
50 PERCENT EXCEEDS	3.9	4.2	4.1
90 PERCENT EXCEEDS	1.1	1.4	1.1

e Estimated

^a From rating extended above 1,150 ft³/s on basis of indirect measurement.

07010180 GRAVOIS CREEK NEAR MEHLVILLE, MO—Continued



07010180 GRAVOIS CREEK NEAR MEHLVILLE, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1996 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
OCT 09...	1308	Environmental	278	7.0	8.4	91	7.6	141	18.5	210	63.0	12.0
DEC 04...	0930	Environmental	8.5	7.5	14.2	118	7.8	984	6.8	330	101	18.0
FEB 18...	0955	Environmental	4.1	4.4	11.7	89	8.0	2,430	3.4	370	115	21.0
MAR 03...	2122	Environmental	85	3.8	8.1	72	7.8	1,550	9.5	200	57.0	13.0
MAY 17...	1300	Environmental	5.4	12	7.7	87	7.5	991	20.3	280	87.0	16.0
AUG 02...	1510	Environmental	4.4	8.0	7.0	87	7.7	809	24.8	260	82.1	13.9

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	132	135	164	<1	--	790	1.6	--	0.13	--	0.500	--	0.02
DEC 04...	217	218	267	<1	120	14	0.50	--	0.11	--	1.20	--	<0.01
FEB 18...	221	222	271	<1	560	10	0.50	--	0.05	--	1.00	--	0.02
MAR 03...	132	136	166	<1	--	231	1.1	--	0.06	--	0.590	--	0.03
MAY 17...	209	211	257	<1	--	15	0.50	--	0.06	--	1.00	--	0.02
AUG 02...	186	186	227	<1	--	<10	0.37	E.02n	--	1.02	--	0.008	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.080	0.32	22	47,000	46,000	49,000	<3	2	<1	<1.0	3.8	3.3
DEC 04...	--	0.090	0.10	10	580	840	720	<3	1	<1	<1.0	4.7	2.1
FEB 18...	--	0.050	0.09	15	17k	30k	7k	<3	2	<1	<1.0	1.4	3.5
MAR 03...	--	0.050	0.22	27	2,300k	25,000	3,500k	5	1	<1	<1.0	1.4	3.1
MAY 17...	--	0.080	0.12	10	270	560	172	<3	2	<1	<1.0	<1.0	2.0
AUG 02...	0.08	--	0.12	<10	150	580	500	3	1.8	<0.06	0.05	E.4n	2.3

07010180 GRAVOIS CREEK NEAR MEHLVILLE, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	E2n	<3.4	<0.02	3	<1	<0.02	<2	<2	<2	<1	<1m	<2m
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 03...	E1mn	5	E.3t	<0.02	8	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 04...	--
FEB 18...	--
MAR 03...	Mt
MAY 17...	--
AUG 02...	--

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
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07010208 MARTIGNEY CREEK NEAR ARNOLD, MO

LOCATION.--Lat 38°29'27", long 90°17'35", St. Louis County, Hydrologic Unit 07140101, on left downstream abutment of Sunrise Height Drive bridge, 0.1 mi south of Interstate 255, 0.5 mi east of Highway 231 (Telegraph Road), and 1.04 mi upstream of Mississippi River.

DRAINAGE AREA.--2.64 mi².

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

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

REMARKS.--Records poor. U.S.G.S. satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	e0.71	1.0	1.2	0.52	0.68	1.7	30	2.5	0.40	1.2	0.42
2	0.72	e0.32	0.98	0.90	21	0.85	1.4	3.1	1.3	12	1.1	0.41
3	0.77	e0.25	1.9	1.6	3.3	8.9	1.2	1.7	1.1	7.2	0.95	0.38
4	0.50	0.20	2.0	92	1.3	22	1.3	1.9	0.95	1.1	2.8	0.38
5	0.43	1.7	3.2	3.5	1.3	13	1.3	1.5	0.89	25	0.98	0.37
6	0.68	14	1.4	1.7	1.1	2.2	1.3	1.1	0.88	2.8	0.69	0.38
7	0.81	0.57	1.0	1.3	0.74	1.5	1.3	0.98	0.83	0.90	0.69	0.32
8	0.83	0.52	0.96	1.1	0.67	1.3	1.3	0.97	0.80	0.66	0.67	0.35
9	10	0.43	1.1	0.95	3.9	1.2	1.3	1.1	1.6	0.62	0.65	0.32
10	1.4	0.39	4.5	0.84	3.0	1.1	1.8	1.9	0.91	0.60	0.65	0.30
11	0.63	0.74	1.4	0.81	3.3	0.96	1.9	1.1	0.67	0.64	0.72	0.34
12	0.68	0.64	0.98	0.76	1.5	0.92	1.5	1.1	0.68	0.75	0.68	0.31
13	0.61	0.51	1.1	0.69	0.94	0.92	1.4	8.5	0.60	0.74	0.50	0.30
14	5.7	0.97	1.3	0.68	1.1	1.6	1.00	21	0.56	0.86	0.60	0.42
15	1.6	3.8	1.2	0.67	0.81	0.85	1.1	2.2	0.52	0.68	0.60	0.31
16	2.2	0.45	1.6	0.67	0.66	1.8	1.1	1.4	2.0	2.1	0.59	1.6
17	9.1	52	1.1	25	0.67	0.99	1.1	1.2	0.57	0.66	0.60	0.30
18	0.96	125	1.6	3.8	0.79	0.88	0.87	2.1	59	0.47	0.61	0.40
19	0.68	4.8	1.1	1.4	1.0	0.68	0.61	13	2.7	0.47	1.9	0.34
20	0.58	2.6	0.91	1.0	1.3	0.71	0.68	2.1	0.68	0.46	1.7	0.33
21	0.66	2.1	0.90	0.91	0.96	1.0	1.5	1.4	0.84	0.48	0.50	0.33
22	0.61	1.9	3.5	0.84	0.81	1.4	1.5	1.4	0.78	1.5	0.41	0.29
23	0.65	10	15	0.76	0.80	2.3	5.4	14	0.47	0.44	0.75	0.25
24	0.75	2.8	1.9	0.70	0.78	1.1	24	3.0	0.41	0.49	11	0.29
25	0.91	1.9	1.3	0.77	0.75	1.6	5.1	27	0.36	9.0	16	0.26
26	0.98	1.6	1.1	0.74	0.75	33	1.4	46	0.34	0.90	3.9	0.35
27	0.71	1.5	1.1	0.72	0.92	4.8	1.0	55	0.33	0.58	3.6	0.40
28	e0.71	1.3	4.9	0.65	0.58	9.4	0.90	8.4	0.48	0.47	1.2	0.26
29	e0.51	1.2	10	0.58	0.51	4.0	1.1	2.3	0.35	0.46	e1.0	0.45
30	e0.42	1.1	1.8	0.56	---	2.4	3.3	6.7	0.36	70	0.62	0.30
31	e0.39	---	1.3	0.49	---	1.9	---	2.9	---	1.7	0.47	---
MEAN	1.53	7.87	2.36	4.78	1.92	4.06	2.35	8.58	2.82	4.68	1.88	0.38
MAX	10	125	15	92	21	33	24	55	59	70	16	1.6
MIN	0.39	0.20	0.90	0.49	0.51	0.68	0.61	0.97	0.33	0.40	0.41	0.25
IN.	0.67	3.33	1.03	2.09	0.79	1.77	0.99	3.75	1.19	2.05	0.82	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	(2003)	(2004)	(2002)	(2004)	(1999)	(1998)	(2003)	(2003)	(2003)	(1998)	(2000)	(2003)
MEAN	1.74	2.80	2.07	2.85	3.14	3.83	3.42	6.02	5.21	2.93	2.09	1.68
MAX	2.60	7.87	5.45	4.78	5.65	8.47	5.59	9.10	10.2	6.53	4.25	3.87
MIN	1.21	0.74	0.38	1.23	1.49	1.69	1.30	1.44	2.10	0.71	0.87	0.38
(WY)	(1998)	(2000)	(1999)	(2003)	(2002)	(2000)	(2000)	(1999)	(1999)	(1997)	(2003)	(2004)

SUMMARY STATISTICS

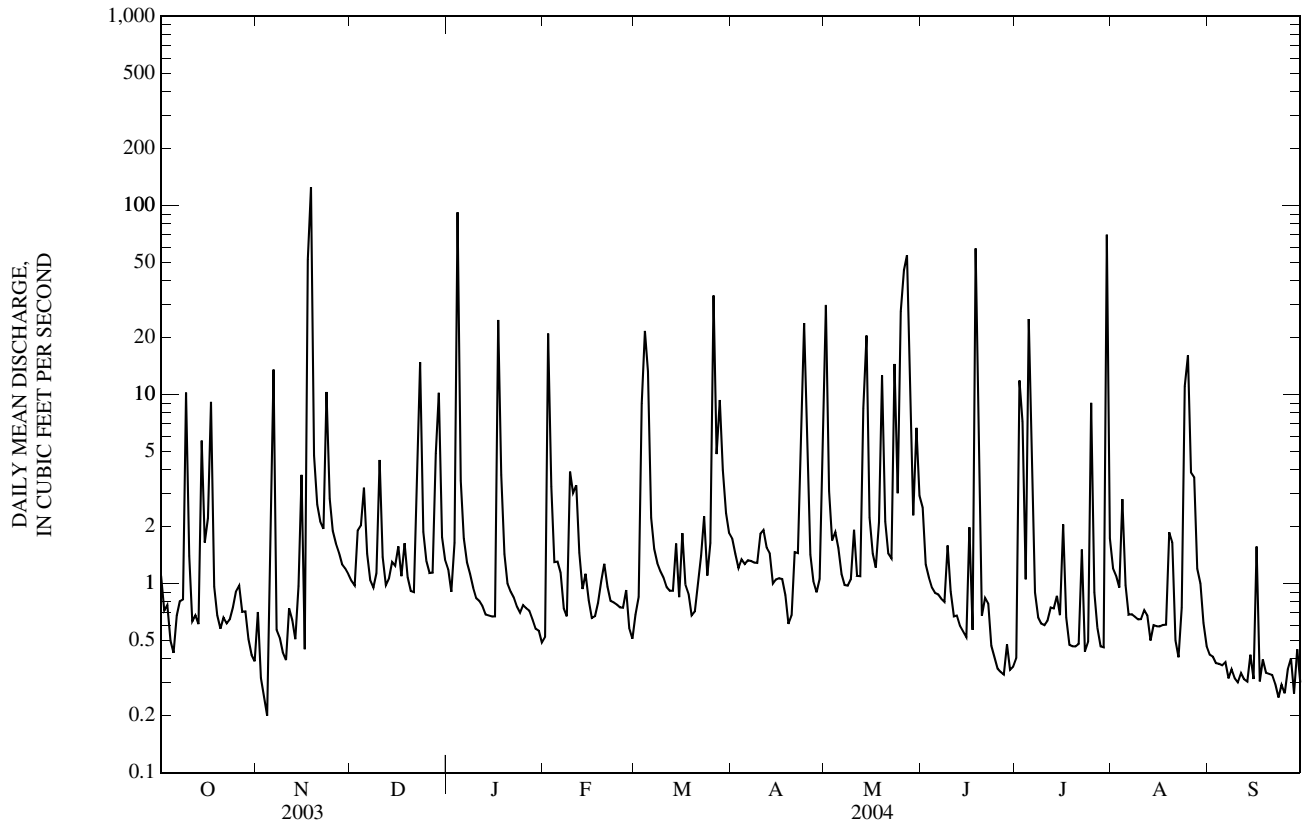
	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	4.15	3.61	3.21
HIGHEST ANNUAL MEAN			3.97
LOWEST ANNUAL MEAN			2.19
HIGHEST DAILY MEAN		Nov 18	126
LOWEST DAILY MEAN	0.20	Nov 4	0.17
ANNUAL SEVEN-DAY MINIMUM	0.34	Aug 20	0.20
MAXIMUM PEAK FLOW	---	1,060 ^a	1,430 ^b
MAXIMUM PEAK STAGE	---	10.82	12.79
INSTANTANEOUS LOW FLOW	---	0.20	0.13
ANNUAL RUNOFF (INCHES)	21.36	18.63	16.54
10 PERCENT EXCEEDS	9.0	5.5	6.1
50 PERCENT EXCEEDS	1.0	0.98	0.76
90 PERCENT EXCEEDS	0.45	0.41	0.37

e Estimated

^a From rating extended above 419 ft³/s on basis of indirect measurement.

^b Discharge determined by indirect measurement of peak flow.

07010208 MARTIGNEY CREEK NEAR ARNOLD, MO—Continued



07010500 MARAMEC SPRING NEAR ST. JAMES, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°57'20", long 91°31'57", SE ¼ SW ¼ NE ¼ sec.1, T.37 N., R.6 W., Phelps County, Hydrologic Unit 07140102, in Maramec Spring Park, approximately 5 mi east of St. James on Highway 8.

PERIOD OF RECORD.--November 1993 to August 1997, November 1999 to current year.

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

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)	Specific conductance, wat unfltrd, 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 10...	1325	Environmental	141	5.4	54	6.9	343	14.0	190	38.7	21.7	1.30	
JAN 06...	1245	Environmental	287	5.2	50	7.5	294	13.4	--	--	--	--	
MAR 15...	1045	Environmental	208	7.7	74	7.0	196	12.7	--	--	--	--	
MAY 05...	1420	Environmental	190	7.7	76	7.0	189	13.1	97	19.9	11.6	1.46	
JUL 27...	1100	Blank	--	--	--	--	--	--	--	--	--	--	
JUL 27...	1115	Environmental	205	7.3	73	7.2	328	14.0	--	--	--	--	
SEP 02...	0900	Environmental	197	5.2	51	7.0	334	13.9	--	--	--	--	
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, end pt, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., mg/L (00450)	Carbonate, wat unfltrd, titr., 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 fltrd, 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 10...	4.93	170	173	211	<1	7.56	<0.2	5.0	195	<10	<0.20	<0.01	0.77
JAN 06...	--	142	142	173	<1	--	--	--	--	<10	E.06n	<0.04	0.72
MAR 15...	--	79	79	96	<1	--	--	--	--	11	0.17	<0.04	0.72
MAY 05...	2.46	93	93	113	<1	3.87	<0.2	5.2	119	<10	0.11	<0.04	0.52
JUL 27...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
JUL 27...	--	153	156	190	<1	--	--	--	--	<10	<0.10	<0.04	0.76
SEP 02...	--	149	150	184	<1	--	--	--	--	<10	E.06n	<0.04	0.90
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, col/100 mL (31633)	Fecal coliform, M-FC 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 10...	<0.010	0.02	0.03	0.03	2k	2k	4k	2	38v	0.2	<0.04	<0.04	E.3n
JAN 06...	<0.008	E.01n	<0.04	E.03n	19k	21k	35	--	--	--	--	--	--
MAR 15...	<0.008	E.01n	E.02n	E.04n	14k	32k	8k	--	--	--	--	--	--
MAY 05...	E.007n	<0.02	E.02n	E.03n	12k	33k	18k	3	196	E.2n	<0.04	<0.04	0.5
JUL 27...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
JUL 27...	<0.008	0.02	E.02n	E.03n	1k	1k	2k	--	--	--	--	--	--
SEP 02...	<0.008	E.01n	E.02n	E.02n	28	67	385	--	--	--	--	--	--

07010500 MARAMEC SPRING NEAR ST. JAMES, MO—Continued

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

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 10...	<6	<0.08	<0.33	1.9	<0.02	E.2n	4	<2
JAN 06...	--	--	--	--	--	--	--	--
MAR 15...	--	--	--	--	--	--	--	--
MAY 05...	E3n	<0.08	0.20	E.6n	<0.02	E.2n	1	<2
JUL 27...	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--
SEP 02...	--	--	--	--	--	--	--	--

Remark codes used in this table:

< -- Less than
E -- Estimated value

Value qualifier codes used in this table:

k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL
v -- Analyte detected in laboratory blank

07013000 MERAMEC RIVER NEAR STEELVILLE, MO

LOCATION.--Lat 37°59'55", long 91°21'39", in NE 1/4 sec.21, T.38 N., R.4 W., Crawford County, Hydrologic Unit 07140102, on left bank 20 ft downstream from railroad bridge, 400 ft upstream from highway bridge, 0.8 mi upstream from Whittenburg Creek, 1.5 mi north of Steelville, and at mile 146.4.

DRAINAGE AREA.--781 mi².

PERIOD OF RECORD.--October 1922 to current year. Prior to January 1923 monthly discharges only, published in WSP 1311. Gage-height records for 1916-33 at site 1.0 mi upstream in reports of the National Weather Service.

REVISED RECORDS.--WSP 897: 1939. WSP 1007: Drainage Area.

GAGE.--Water-stage recorder. Datum of gage is 681.68 ft above National Geodetic Vertical Datum of 1929. Prior to May 24, 1934, and from July 20, 1966 to July 20, 1967, nonrecording gage, 400 ft downstream, same datum; May 24, 1934 to July 20, 1966, water-stage recorder at present site and datum; July 20, 1967 to Feb. 13, 1973, water-stage recorder at site 1,900 ft downstream and at datum 1.8 ft lower; Feb. 14, 1973 to current year, water-stage recorder at present site and datum.

REMARKS.--No estimated daily discharges. Records good. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 20, 1915, reached a stage of 26.5 ft, discharge, 60,000 ft³/s.

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

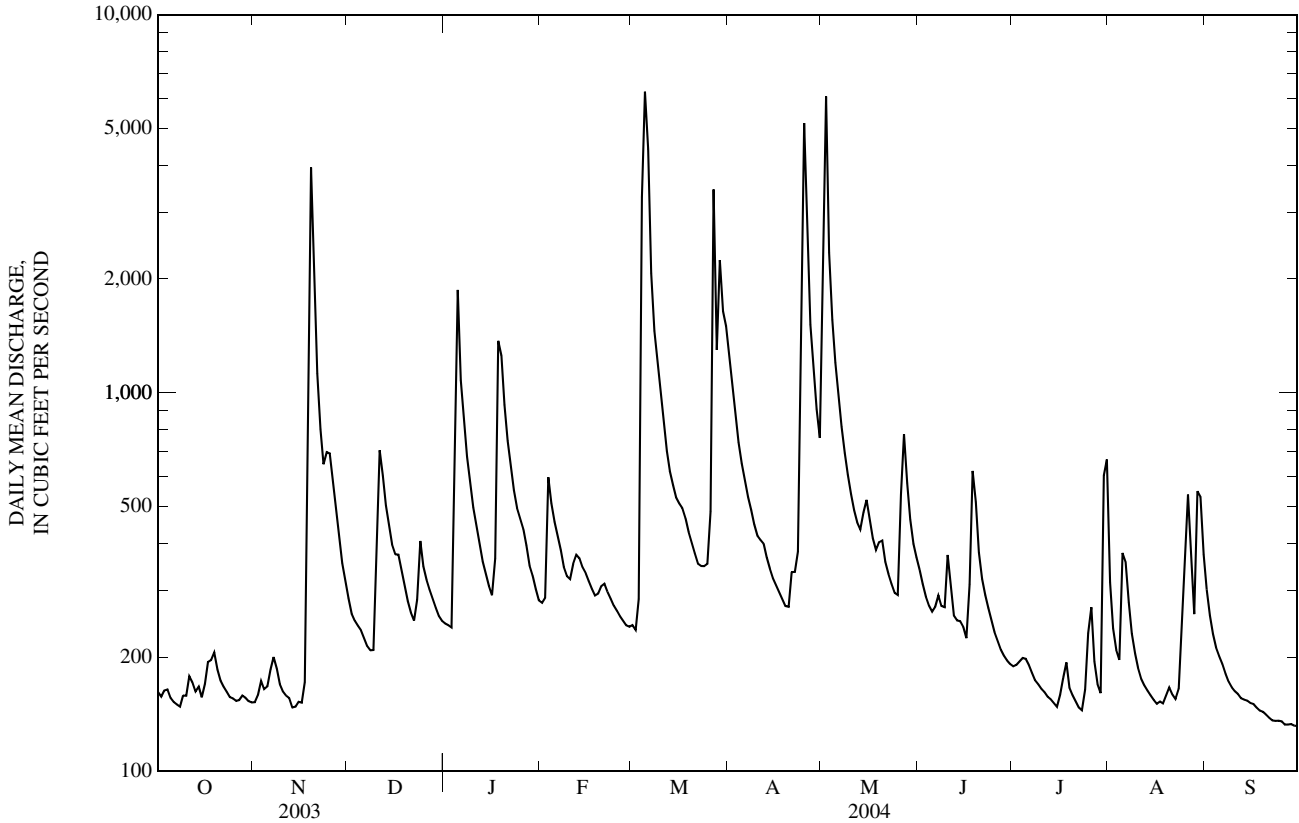
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	152	286	245	279	243	1,250	1,710	340	189	315	302
2	157	159	261	243	287	236	1,030	6,070	313	191	238	258
3	163	173	250	240	598	285	862	2,350	289	195	209	231
4	164	165	242	770	511	3,300	740	1,560	274	199	197	212
5	156	167	236	1,870	456	6,260	650	1,200	264	198	377	201
6	152	186	224	1,080	419	4,410	584	977	272	191	357	192
7	150	200	214	846	384	2,070	531	813	291	182	279	181
8	148	187	208	678	346	1,460	490	692	273	174	231	172
9	158	170	209	580	327	1,170	449	607	271	170	205	166
10	158	162	366	497	322	956	419	540	373	165	187	163
11	178	158	705	441	354	814	409	490	308	162	175	160
12	171	156	603	397	373	702	399	454	258	157	168	156
13	162	147	504	358	365	620	367	436	250	155	163	154
14	167	148	443	333	346	569	343	483	249	151	159	153
15	157	152	397	308	334	529	324	521	240	148	154	151
16	170	152	374	292	318	510	310	462	225	159	151	150
17	194	172	373	365	303	495	297	413	312	176	153	147
18	197	1,350	338	1,370	291	465	285	384	621	194	151	144
19	206	3,940	309	1,250	295	429	273	403	514	166	159	143
20	185	1,900	281	929	308	401	272	407	379	159	166	141
21	174	1,130	263	746	313	376	336	358	322	153	159	138
22	167	801	250	635	298	353	336	332	292	147	155	136
23	162	648	283	552	286	348	380	313	270	145	165	136
24	157	696	406	495	274	348	1,040	296	250	164	226	136
25	156	692	348	466	265	353	5,170	292	233	231	328	135
26	153	566	320	436	257	486	2,630	539	220	271	538	133
27	154	480	302	395	250	3,450	1,510	778	210	195	357	133
28	158	409	285	349	243	1,300	1,130	577	202	169	260	133
29	156	354	270	329	241	2,240	906	463	196	161	549	132
30	153	319	257	303	---	1,640	760	399	192	605	531	132
31	152	---	249	283	---	1,500	---	367	---	666	374	---
MEAN	164	536	324	583	333	1,236	816	829	290	206	253	164
MAX	206	3,940	705	1,870	598	6,260	5,170	6,070	621	666	549	302
MIN	148	147	208	240	241	236	272	292	192	145	151	132
IN.	0.24	0.77	0.48	0.86	0.46	1.83	1.17	1.22	0.41	0.30	0.37	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2004, BY WATER YEAR (WY)

MEAN	280	490	563	563	654	880	1,078	999	718	376	265	276
MAX	2,562	2,995	4,712	3,155	2,397	2,842	4,954	4,370	4,644	3,461	1,181	2,664
(WY)	(1950)	(1994)	(1983)	(1950)	(1985)	(1945)	(1994)	(2002)	(1935)	(1998)	(1982)	(1993)
MIN	85.2	118	116	114	126	141	138	131	134	92.9	104	82.2
(WY)	(1957)	(1965)	(1965)	(1956)	(1934)	(1954)	(1954)	(1977)	(1932)	(1934)	(1936)	(1956)

07013000 MERAMEC RIVER NEAR STEELVILLE, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1923 - 2004	
ANNUAL MEAN	465		479		594	
HIGHEST ANNUAL MEAN					1,473	1985
LOWEST ANNUAL MEAN					177	1954
HIGHEST DAILY MEAN	6,990	May 7	6,260	Mar 5	44,600	Jul 27, 1998
LOWEST DAILY MEAN	124	Aug 27	132	Sep 29,30	76	Jul 22, 1934
ANNUAL SEVEN-DAY MINIMUM	130	Aug 23	133	Sep 24	78	Oct 5, 1956
MAXIMUM PEAK FLOW	---		8,490	May 2	55,800	Jul 27, 1998
MAXIMUM PEAK STAGE	---		10.31	May 2	27.22	Jul 27, 1998
INSTANTANEOUS LOW FLOW	---		129	Sep 29,30	74	Jul 22, 1934
ANNUAL RUNOFF (INCHES)	8.09		8.35		10.34	
10 PERCENT EXCEEDS	791		851		1,090	
50 PERCENT EXCEEDS	302		290		266	
90 PERCENT EXCEEDS	153		154		132	



07014000 HUZDAH CREEK NEAR STEELVILLE, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°58'29", long 91°12'16", in SW ¼ SW ¼ SE ¼ sec.25, T.38 N., R.3 W., Crawford County, Hydrologic Unit 07140102, at bridge on State Highway 8 at Huzzah Valley Resort, approximately 9 mi east of Steelville.

DRAINAGE AREA.--259 mi².

PERIOD OF RECORD.--November 1993 to current year.

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

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)	Specific conductance, wat unfltrd, 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 10...	1115	Environmental	64	10.5	98	7.4	403	11.5	220	44.3	26.7	1.09		
JAN 08...	1315	Environmental	88	13.0	106	8.0	341	5.7	--	--	--	--		
MAR 17...	1215	Blank	--	--	--	--	--	--	--	--	--	--		
MAR 17...	1230	Environmental	63	11.5	103	8.2	347	9.3	--	--	--	--		
MAY 05...	1210	Environmental	438	9.3	96	7.8	252	16.0	140	29.2	16.8	1.07		
JUL 27...	1235	Environmental	64	9.1	107	7.9	390	21.9	--	--	--	--		
SEP 02...	1205	Environmental	163	9.2	106	8.1	419	21.3	--	--	--	--		
Date		ANC, wat unfltrd, end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Carbonate, wat unfltrd, 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 fltrd, 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 10...	7.60	195	198	242	<1	3.84	<0.2	19.0	238	<10	<0.20	<0.01	0.12	
JAN 08...	--	155	155	189	<1	--	--	--	--	<10	E.08n	<0.04	0.30	
MAR 17...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06	
MAR 17...	--	153	154	188	<1	--	--	--	--	<10	E.09n	<0.04	0.34	
MAY 05...	5.36	132	131	160	<1	3.34	<0.2	13.3	159	<10	E.09n	<0.04	0.22	
JUL 27...	--	188	190	232	<1	--	--	--	--	<10	E.07n	<0.04	0.21	
SEP 02...	--	187	186	227	<1	--	--	--	--	<10	E.08n	<0.04	0.19	
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, 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 10...	<0.010	<0.01	<0.02	<0.02	4k	23	25	2	24v	0.3	<0.04	<0.04	0.4	
JAN 08...	<0.008	<0.02	<0.04	<0.04	23	17k	26	--	--	--	--	--	--	
MAR 17...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--	
MAR 17...	<0.008	<0.02	<0.04	<0.04	1k	3k	2k	--	--	--	--	--	--	
MAY 05...	<0.008	<0.04d	<0.04	<0.04	50	76	128	2	70	0.2	<0.04	<0.04	0.6	
JUL 27...	<0.008	<0.02	<0.04	<0.04	35	47	23	--	--	--	--	--	--	
SEP 02...	<0.008	<0.02	<0.04	<0.04	5k	17k	38	--	--	--	--	--	--	

07014000 HUZAZH CREEK NEAR STEELVILLE, MO—Continued

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

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 10...	E6n	<0.08	<0.33	4.2	<0.02	<0.4	2	<2
JAN 08...	--	--	--	--	--	--	--	--
MAR 17...	--	--	--	--	--	--	--	--
MAY 05...	<6	<0.08	0.32	5.1	<0.02	E.4n	M	E1n
JUL 27...	--	--	--	--	--	--	--	--
SEP 02...	--	--	--	--	--	--	--	--

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
- v -- Analyte detected in laboratory blank

07014200 COURTOIS CREEK AT BERRYMAN, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°55'05", long 91°06'04", in NE ¼ SW ¼ SW ¼ sec.13, T.37 N., R.2 W., Crawford County, Hydrologic Unit 07140102, at bridge on State Highway 8, approximately 13 mi east of Steelville.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--November 1993 to current year.

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

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)	Specific conductance, wat unfltrd, 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 10...	0935	Environmental	37	9.7	91	7.4	415	11.8	240	48.6	29.6	0.90		
JAN 08...	1130	Environmental	210	14.1	113	7.9	290	4.8	--	--	--	--		
MAR 17...	1055	Environmental	114	12.4	108	7.8	324	8.1	--	--	--	--		
MAY 05...	1030	Environmental	289	9.3	94	7.9	266	14.7	150	30.2	17.7	0.81		
JUL 27...	1025	Environmental	37	7.7	89	7.8	395	21.1	--	--	--	--		
JUL 27...	1035	Replicate	--	7.5	87	7.9	395	21.1	--	--	--	--		
SEP 02...	1015	Environmental	46	7.9	90	8.0	407	20.6	--	--	--	--		
Date		ANC, wat unfltrd, end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Carbonate, wat unfltrd, 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 fltrd, 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 10...	3.07	198	202	246	<1	4.06	<0.2	22.1	244	<10	<0.20	<0.01	0.04	
JAN 08...	--	137	134	164	<1	--	--	--	--	<10	E.07n	<0.04	0.14	
MAR 17...	--	161	161	196	<1	--	--	--	--	<10	E.07n	<0.04	0.13	
MAY 05...	1.72	117	116	142	<1	2.27	<0.2	11.1	154	<10	E.09n	0.10	0.08	
JUL 27...	--	186	188	230	<1	--	--	--	--	<10	E.07n	<0.04	0.09	
JUL 27...	--	--	--	--	--	--	--	--	--	16	E.08n	<0.04	0.10	
SEP 02...	--	190	191	234	<1	--	--	--	--	<10	E.09n	<0.04	0.09	
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, col/100 mL (31633)	Fecal coliform, M-FC 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 10...	<0.010	<0.01	<0.02	<0.02	6k	23	34	E1n	24v	0.2	<0.04	<0.04	0.4	
JAN 08...	<0.008	<0.02	<0.04	<0.04	18k	13k	14k	--	--	--	--	--	--	
MAR 17...	<0.008	<0.02	<0.04	<0.04	1k	6k	6k	--	--	--	--	--	--	
MAY 05...	E.005n	<0.18d	<0.04	<0.04	16k	33	29	3	38	0.2	E.03n	E.03n	0.7	
JUL 27...	<0.008	<0.02	<0.04	<0.04	26	22	27	--	--	--	--	--	--	
JUL 27...	<0.008	<0.02	<0.04	<0.04	18k	21k	23	--	--	--	--	--	--	
SEP 02...	<0.008	<0.02	<0.04	<0.04	10k	24	37	--	--	--	--	--	--	

07014200 COURTOIS CREEK AT BERRYMAN, MO—Continued

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

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 10...	<6	<0.08	<0.33	1.4	<0.02	<0.4	3	E2n
JAN 08...	--	--	--	--	--	--	--	--
MAR 17...	--	--	--	--	--	--	--	--
MAY 05...	<6	E.06n	0.38	3.9	<0.02	<0.4	3	3
JUL 27...	--	--	--	--	--	--	--	--
JUL 27...	--	--	--	--	--	--	--	--
SEP 02...	--	--	--	--	--	--	--	--

Remark codes used in this table:

< -- Less than
E -- Estimated value

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
v -- Analyte detected in laboratory blank

07014500 MERAMEC RIVER NEAR SULLIVAN, MO

LOCATION.--Lat 38°09'31", long 91°06'30", in SE ¼ NE ¼ sec.35, T.40 N., R.2 W., Crawford County, Hydrologic Unit 07140102, on right bank at upstream side of Sappington Bridge, 3.8 mi downstream from Brazil Creek, 4.0 mi southeast of Sullivan, and at mile 117.0.

DRAINAGE AREA.--1,475 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1921 to September 1933, October 1943 to current year. Monthly discharge only for October 1943, published in WSP 1311.

REVISED RECORDS.--WSP 1007: 1922(M), 1924-30, 1933: Drainage area. WDR MO-02-1: 1982 peak stage.

GAGE.--Water-stage recorder. Datum of gage is 581.82 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 21, 1952, nonrecording gage at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1915 reached a stage of 33.5 ft, from information by local residents, discharge, 90,000 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	312	755	732	646	513	2,530	3,360	770	411	748	652
2	281	318	683	700	714	504	2,120	8,660	714	407	546	552
3	280	320	638	682	917	610	1,820	5,510	655	416	467	489
4	289	332	616	1,970	1,190	4,130	1,600	3,310	614	420	425	449
5	285	334	593	3,750	1,050	9,830	1,430	2,500	583	418	428	422
6	280	358	572	2,990	987	9,510	1,300	2,050	571	409	615	399
7	274	366	550	2,160	918	4,690	1,200	1,740	572	400	552	378
8	268	379	531	1,720	839	3,100	1,110	1,520	586	380	478	361
9	279	363	522	1,470	771	2,420	1,020	1,350	568	371	427	348
10	306	343	572	1,290	755	2,010	950	1,210	589	365	394	338
11	300	336	1,040	1,140	751	1,740	926	1,100	634	358	370	330
12	321	331	1,260	1,020	788	1,530	885	1,020	560	351	355	324
13	303	321	1,120	925	785	1,370	837	1,020	540	347	345	317
14	307	316	987	846	762	1,260	776	1,140	563	337	337	312
15	305	331	886	781	736	1,170	729	1,170	552	328	333	309
16	306	337	825	727	709	1,120	691	1,090	537	332	324	308
17	389	376	776	851	679	1,060	663	971	557	343	330	304
18	406	2,990	745	2,210	651	1,020	633	884	822	361	330	299
19	414	9,350	684	2,890	635	941	603	985	956	364	337	296
20	395	5,120	632	2,220	645	877	628	1,130	783	343	377	291
21	358	2,840	591	1,790	657	817	654	940	675	332	399	287
22	335	2,000	564	1,530	649	768	703	815	611	323	383	283
23	321	1,640	627	1,340	623	734	762	736	565	318	371	280
24	308	1,600	818	1,200	602	721	1,630	683	532	352	456	278
25	307	1,640	1,020	1,120	579	719	7,060	731	501	436	601	281
26	316	1,430	910	1,050	562	901	6,010	1,620	472	458	733	278
27	306	1,240	826	963	545	6,400	3,330	2,370	451	446	908	277
28	318	1,080	764	866	530	3,260	2,420	1,480	439	391	895	274
29	316	940	724	787	516	3,720	1,960	1,130	426	362	1,300	274
30	312	839	729	741	---	3,230	1,680	941	417	970	1,120	273
31	314	---	760	687	---	2,900	---	835	---	1,130	825	---
MEAN	316	1,283	752	1,392	731	2,373	1,622	1,742	594	419	533	342
MAX	414	9,350	1,260	3,750	1,190	9,830	7,060	8,660	956	1,130	1,300	652
MIN	268	312	522	682	516	504	603	683	417	318	324	273
IN.	0.25	0.97	0.59	1.09	0.53	1.86	1.23	1.36	0.45	0.33	0.42	0.26

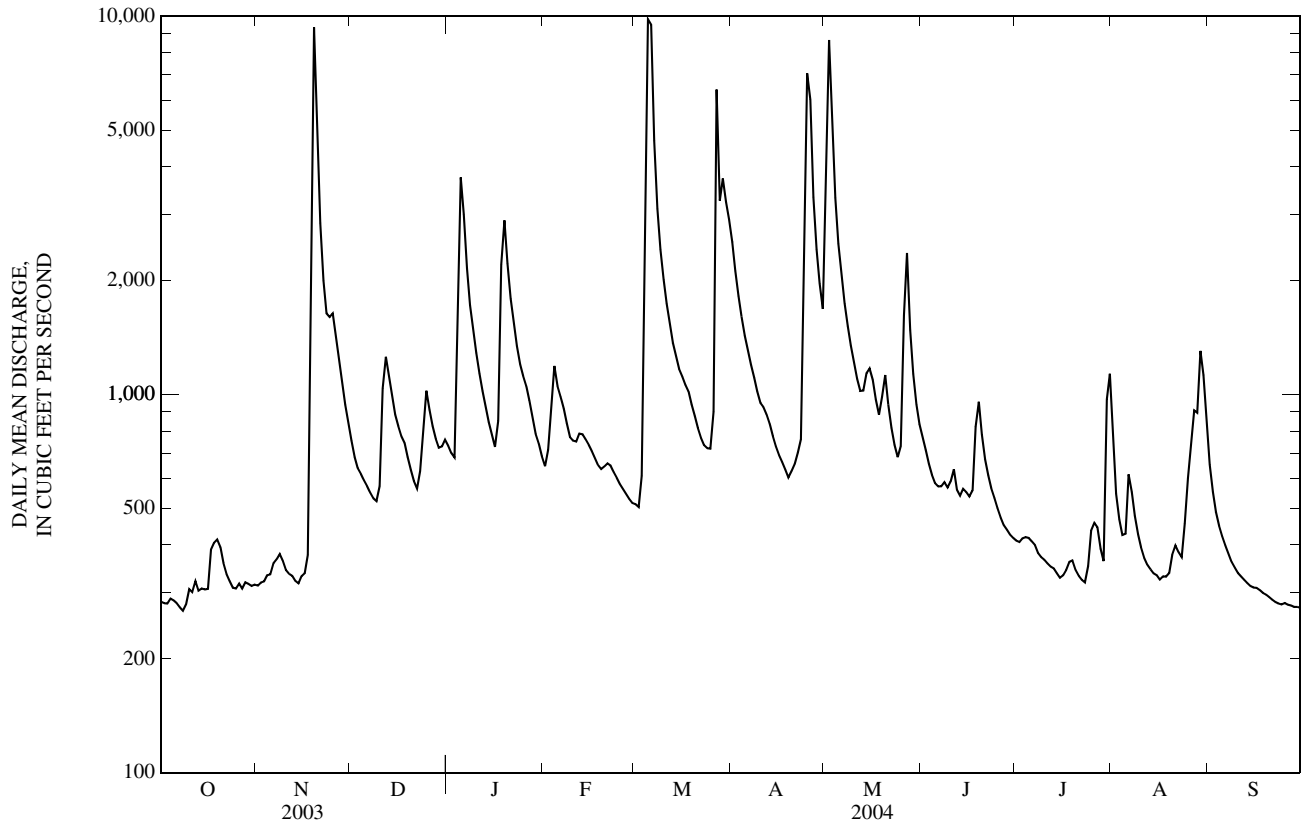
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	581	1,036	1,210	1,215	1,439	1,934	2,368	2,034	1,320	750	540	533
MAX	4,307	5,692	8,307	6,304	5,264	5,786	9,435	7,348	8,742	6,142	2,030	5,489
(WY)	(1950)	(1986)	(1983)	(1950)	(1982)	(1945)	(1994)	(2002)	(1945)	(1951)	(1982)	(1993)
MIN	156	249	232	216	281	295	347	292	263	205	199	146
(WY)	(1957)	(1957)	(1956)	(1956)	(1954)	(1954)	(1954)	(1932)	(1932)	(1954)	(1964)	(1956)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	1,026	1,010	1,244
HIGHEST ANNUAL MEAN			3,014
LOWEST ANNUAL MEAN			341
HIGHEST DAILY MEAN	11,900	9,830	70,600
LOWEST DAILY MEAN	261	268	131
ANNUAL SEVEN-DAY MINIMUM	272	276	133
MAXIMUM PEAK FLOW	---	11,400	77,300
MAXIMUM PEAK STAGE	---	12.01	32.34
INSTANTANEOUS LOW FLOW	---	262	131
ANNUAL RUNOFF (INCHES)	9.45	9.32	11.46
10 PERCENT EXCEEDS	1,890	1,980	2,400
50 PERCENT EXCEEDS	632	652	603
90 PERCENT EXCEEDS	304	312	273

07014500 MERAMEC RIVER NEAR SULLIVAN, MO—Continued



07014500 MERAMEC RIVER NEAR SULLIVAN, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1963 to July 1975, July 1977 to June 1990, November 1992 to current year.

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

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)	Specific conductance, wat unfltrd μ S/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 20...	1020	Environmental	396	8.6	87	7.7	368	15.2	--	--	--	--
NOV 13...	0950	Environmental	322	10.2	93	8.0	393	11.1	220	43.8	26.2	1.36
DEC 17...	1025	Blank	--	--	--	--	--	--	--	--	--	--
DEC 17...	1030	Environmental	722	12.7	101	8.2	330	4.7	--	--	--	--
JAN 21...	1315	Environmental	1,770	12.9	101	8.2	268	4.3	140	29.3	17.3	1.08
FEB 09...	0935	Environmental	766	13.9	104	8.3	325	2.6	--	--	--	--
MAR 02...	1315	Environmental	506	10.7	102	8.0	342	12.2	--	--	--	--
APR 20...	0900	Environmental	637	7.9	89	8.1	322	19.4	--	--	--	--
MAY 04...	1530	Environmental	3,140	9.2	94	7.8	213	14.9	110	23.6	13.5	1.29
JUN 01...	1100	Environmental	784	8.3	98	7.8	311	21.8	--	--	--	--
JUL 19...	1630	Environmental	358	7.8	102	8.1	356	27.7	190	37.5	22.6	1.35
SEP 01...	1400	Environmental	642	8.3	99	8.0	336	23.5	--	--	--	--

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

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, field, titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, field, titr., mg/L (00450)	Carbonate, wat unfltrd, field, titr., 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 fltrd 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 20...	--	184	188	229	<1	--	--	--	--	<10	0.11	<0.04	E.03n
NOV 13...	6.36	184	188	229	<1	7.31	<0.2	10.2	207	<10	<0.20	<0.01	0.10
DEC 17...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
DEC 17...	--	156	158	192	<1	--	--	--	--	<10	E.09n	<0.04	0.32
JAN 21...	4.09	123	122	149	<1	4.35	<0.2	11.6	155	<10	0.16	<0.04	0.32
FEB 09...	--	145	145	177	<1	--	--	--	--	<10	E.08n	<0.04	0.22
MAR 02...	--	152	153	187	<1	--	--	--	--	<10	0.15	<0.04	0.08
APR 20...	--	152	153	187	<1	--	--	--	--	<10	0.16	<0.04	0.12
MAY 04...	2.80	102	101	125	<1	2.72	<0.2	8.1	139	38	0.29	<0.04	0.25
JUN 01...	--	141	141	172	<1	--	--	--	--	<10	0.14	<0.04	0.10
JUL 19...	4.16	167	165	203	<1	5.15	<0.2	8.6	200	<10	0.13	<0.04	0.13
SEP 01...	--	156	156	190	<1	--	--	--	--	<10	0.18	<0.04	0.35

07014500 MERAMEC RIVER NEAR SULLIVAN, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, 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 coli-form, 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 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 20...	<0.008	<0.02	<0.04	<0.04	10k	18k	9k	--	--	--	--	--	--
NOV 13...	<0.010	<0.01	<0.02	<0.02	1k	7k	7k	E1n	46v	0.2	<0.04	<0.04	E.4n
DEC 17...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
DEC 17...	<0.008	<0.02	<0.04	E.02n	4k	6k	14k	--	--	--	--	--	--
JAN 21...	<0.008	<0.02	<0.04	E.02n	1k	32	26	4	141	0.3	<0.04	<0.04	0.7
FEB 09...	E.004n	<0.02	<0.04	<0.04	2k	5k	6k	--	--	--	--	--	--
MAR 02...	0.011	<0.02	<0.04	<0.04	<1b	1k	2k	--	--	--	--	--	--
APR 20...	E.004n	<0.02	<0.04	<0.04	20	29	13k	--	--	--	--	--	--
MAY 04...	<0.008	<0.02	<0.04	0.05	170k	260k	214k	5	432	0.3	<0.04	E.03n	0.7
JUN 01...	<0.008	<0.02	<0.04	<0.04	4k	13k	15k	--	--	--	--	--	--
JUL 19...	<0.008	<0.02	<0.04	<0.04	5k	4k	8k	2	79	0.5	<0.04	E.02n	0.8
SEP 01...	<0.008	E.01n	E.03n	E.03n	20k	48	22k	--	--	--	--	--	--

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

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)
OCT 20...	--	--	--	--	--	--	--	--
NOV 13...	8	<0.08	<0.33	5.4	<0.02	<0.4	M	<2
DEC 17...	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--
JAN 21...	9	0.21	0.98	6.5	<0.02	E.4n	2	E1n
FEB 09...	--	--	--	--	--	--	--	--
MAR 02...	--	--	--	--	--	--	--	--
APR 20...	--	--	--	--	--	--	--	--
MAY 04...	9	0.11	1.64	8.0	<0.02	<0.4	M	3
JUN 01...	--	--	--	--	--	--	--	--
JUL 19...	E3n	<0.08	0.54	6.8	<0.02	<0.4	2	7
SEP 01...	--	--	--	--	--	--	--	--

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 extrapolated at low end
- k -- Counts outside acceptable range
- n -- Below the LRL and above the LT-MDL
- v -- Analyte detected in laboratory blank

07015720 BOURBEUSE RIVER NEAR HIGH GATE, MO

LOCATION.--Lat 38°08'49", long 91°34'51", in SW ¼ NE ¼ sec.4, T.39 N., R.6 W., Phelps County, Hydrologic Unit 07140103, on downstream side of right bridge pier on State Highway B, 1.8 mi downstream from Lanes Fork, 5.0 mi east of High Gate, and 11.0 mi north of St. James.

DRAINAGE AREA.--135 mi².

PERIOD OF RECORD.--July 1965 to current year. Occasional low-flow measurements 1963, 1964.

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

GAGE.--Water-stage recorder. Datum of gage is 802.1 ft above National Geodetic Vertical Datum of 1929 (levels by Missouri State Highway and Transportation Commission). Datum of gage prior to Oct. 1, 1987 was 2 ft higher. Prior to Aug. 17, 1966, nonrecording gage at present site and datum.

REMARKS.--Records fair except for estimated daily discharges and discharges below 5 ft³/s, which are poor. U.S.G.S. satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1957 reached a stage of about 23 ft, from information by local resident.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.52	3.5	30	49	e21	32	170	1,370	35	3.3	305	22
2	0.50	5.6	27	48	289	29	118	621	24	3.7	159	18
3	0.51	13	25	46	461	146	91	270	19	4.4	96	15
4	0.53	7.1	28	4,120	e156	3,060	74	133	17	4.2	1,020	13
5	0.55	12	28	822	e93	1,940	63	80	15	4.0	876	11
6	0.59	31	27	e346	e65	507	57	56	43	3.5	293	8.6
7	0.59	25	24	e169	e44	238	52	44	64	3.0	146	7.7
8	0.55	17	26	100	e41	135	48	38	60	2.7	82	5.7
9	0.90	11	27	83	e47	97	45	33	767	2.5	54	4.9
10	1.4	8.0	527	67	82	75	43	30	423	2.5	40	4.4
11	2.7	6.8	258	58	118	63	47	28	130	2.6	30	3.3
12	3.1	5.3	143	51	110	53	43	26	55	2.4	24	2.8
13	2.0	3.8	111	45	70	46	39	101	42	2.2	20	2.8
14	2.2	3.5	96	39	51	50	36	308	31	2.3	17	2.3
15	1.9	3.7	115	34	47	47	33	132	23	2.3	14	2.3
16	1.6	3.7	272	31	42	54	29	66	20	2.6	12	3.1
17	7.4	17	143	930	40	56	27	46	21	2.8	9.6	2.9
18	27	1,350	110	938	45	56	23	37	20	2.4	8.3	3.1
19	12	569	88	323	60	50	21	326	20	2.5	7.0	3.0
20	7.4	168	72	e141	102	45	22	136	16	2.7	7.6	2.1
21	2.6	99	64	92	85	40	23	63	13	2.4	8.1	1.8
22	1.4	71	58	71	67	36	22	42	11	2.3	7.1	1.7
23	1.2	112	615	55	60	37	254	34	9.2	2.2	5.7	2.0
24	0.92	190	314	48	54	45	1,530	29	8.1	78	64	1.8
25	0.95	98	165	48	48	44	775	97	5.4	250	458	1.6
26	1.1	71	115	e46	43	214	240	1,240	4.2	48	508	1.5
27	1.2	56	92	e41	38	2,050	103	1,320	4.0	19	201	1.4
28	1.4	45	79	e39	34	1,720	62	239	4.3	11	81	1.2
29	1.4	38	72	e34	32	1,020	45	97	4.3	6.5	51	1.1
30	2.2	34	63	e29	---	615	232	57	3.4	5,920	38	1.8
31	2.1	---	54	e24	---	291	---	77	---	664	28	---
MEAN	2.92	103	125	289	84.3	416	146	231	63.7	228	151	5.13
MAX	27	1,350	615	4,120	461	3,060	1,530	1,370	767	5,920	1,020	22
MIN	0.50	3.5	24	24	21	29	21	26	3.4	2.2	5.7	1.1
IN.	0.02	0.85	1.07	2.47	0.67	3.55	1.20	1.98	0.53	1.95	1.29	0.04

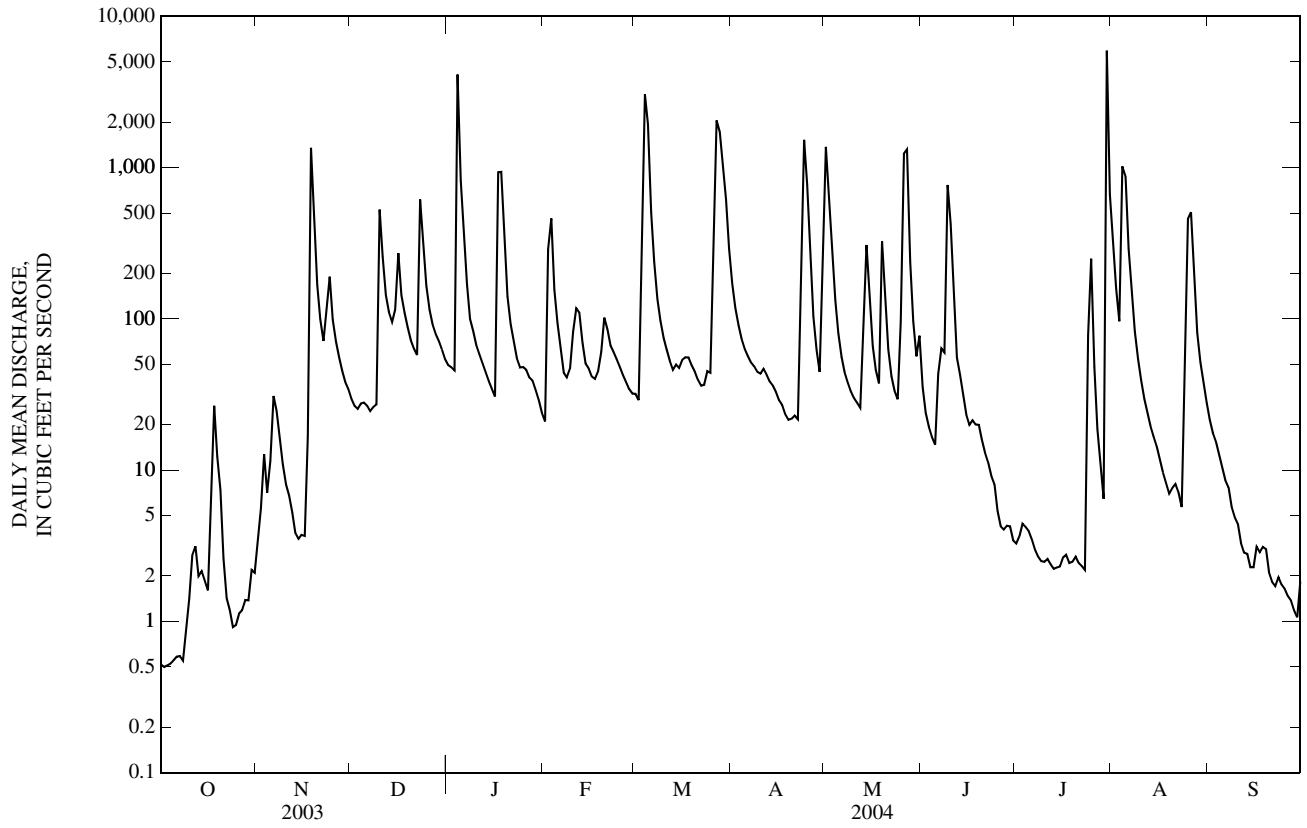
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	42.7	150	176	150	174	237	261	194	136	51.8	37.6	43.4
MAX	552	799	1,213	549	634	747	1,191	894	963	546	373	865
(WY)	(1987)	(1986)	(1983)	(1969)	(1985)	(1984)	(1994)	(1995)	(1985)	(1998)	(1982)	(1993)
MIN	0.34	0.94	1.68	0.65	12.4	1.32	1.57	3.88	0.95	0.25	0.19	0.14
(WY)	(1967)	(1981)	(1990)	(1977)	(1981)	(1981)	(1981)	(1977)	(1972)	(1972)	(1971)	(1971)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1965 - 2004
ANNUAL MEAN	109	155	137
HIGHEST ANNUAL MEAN			315
LOWEST ANNUAL MEAN			15.6
HIGHEST DAILY MEAN	9,080	Jun 11	21,000
LOWEST DAILY MEAN	0.35	Sep 28	0.00
ANNUAL SEVEN-DAY MINIMUM	0.40	Sep 25	0.00
MAXIMUM PEAK FLOW	---	17,300	49,300
MAXIMUM PEAK STAGE	---	19.86	23.65
INSTANTANEOUS LOW FLOW	---	0.46	0.00
ANNUAL RUNOFF (INCHES)	10.92	15.62	13.75
10 PERCENT EXCEEDS	177	297	225
50 PERCENT EXCEEDS	26	39	20
90 PERCENT EXCEEDS	0.92	2.2	0.83

e Estimated

07015720 BOURBEUSE RIVER NEAR HIGH GATE, MO—Continued



07016400 BOURBEUSE RIVER ABOVE UNION, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 38°25'55", long 91°01'11", in NE ¼ NE ¼ SW ¼ sec.34, T.43 N., R.1 W., Franklin County, Hydrologic Unit 07140103, at bridge on North Bend Drive, 0.5 mi southwest of Union, 5.5 mi upstream from the Bourbeuse River near Union gaging station.

DRAINAGE AREA.--808 mi², approximately.

PERIOD OF RECORD.--November 1983 to October 1987, November 1993 to current year.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd, std units (00400)	Specific conductance, wat unfltrd, μ S/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 12...	1015	Blank	--	--	--	--	--	--	--	E.01n	<0.008	<0.16	
NOV 12...	1020	Environmental	199	9.4	88	7.4	358	11.3	180	34.4	22.8	2.37	
JAN 12...	1130	Environmental	530	12.4	95	7.8	197	3.4	--	--	--	--	
MAR 01...	1330	Environmental	369	12.6	117	7.8	256	10.7	--	--	--	--	
MAY 04...	1300	Environmental	1,850	9.0	90	7.4	133	14.2	59	12.5	6.72	2.14	
JUL 19...	1400	Environmental	183	5.2	68	7.8	313	27.6	--	--	--	--	
SEP 22...	1015	Environmental	67	7.1	79	7.8	294	20.3	--	--	--	--	
SEP 22...	1016	Replicate	--	7.0	79	7.9	294	20.3	--	--	--	--	
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, mg/L (00450)	Carbonate, wat unfltrd, 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 fltrd, 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 12...	<0.10	--	--	--	--	1.59	<0.2	0.2	<10	<10	<0.20	0.02	<0.02
NOV 12...	6.88	149	150	183	<1	8.74	<0.2	21.3	196	<10	<0.20	<0.01	<0.02
JAN 12...	--	70	71	87	<1	--	--	--	--	11	0.41	E.02n	0.77
MAR 01...	--	91	90	110	<1	--	--	--	--	14	0.32	<0.04	E.05n
MAY 04...	3.37	53	53	64	<1	4.37	<0.2	9.9	96	64	0.76	E.03n	0.24
JUL 19...	--	135	135	165	<1	--	--	--	--	12	0.28	<0.04	<0.06
SEP 22...	--	129	130	158	<1	--	--	--	--	<10	0.27	<0.04	<0.06
SEP 22...	--	--	--	--	--	--	--	--	--	<10	0.28	<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 MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Aluminum, water, unfltrd recoverable, μ g/L (01105)	Arsenic water, fltrd, μ g/L (01000)	Cadmium water, fltrd, μ g/L (01025)	Cadmium water, unfltrd, μ g/L (01027)	Copper, water, fltrd, μ g/L (01040)
NOV 12...	<0.010	<0.01	<0.02	<0.02	--	--	--	<2	22v	<0.2	<0.04	<0.04	<0.4
NOV 12...	<0.010	<0.01	<0.02	<0.02	3k	8k	7k	E1n	98v	0.4	<0.04	<0.04	0.5
JAN 12...	E.004n	E.02n	E.03n	0.04	56	160k	104	--	--	--	--	--	--
MAR 01...	0.009	<0.02	<0.04	E.03n	1k	1k	1k	--	--	--	--	--	--
MAY 04...	E.005n	0.04d	E.04n	0.11	520	940	196	12	787	0.5	E.02n	E.03n	1.4
JUL 19...	<0.008	<0.02	<0.04	E.03n	21	21	26	--	--	--	--	--	--
SEP 22...	<0.008	<0.02	<0.04	<0.04	22	24	7k	--	--	--	--	--	--
SEP 22...	<0.008	<0.02	<0.04	<0.04	26	25	6k	--	--	--	--	--	--

07016400 BOURBEUSE RIVER ABOVE UNION, MO—Continued

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

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								
12...	<6	<0.08	<0.33	<0.8	<0.02	<0.4	<0.6	<2
12...	21	<0.08	0.41v	18.2	<0.02	<0.4	M	E2n
JAN								
12...	--	--	--	--	--	--	--	--
MAR								
01...	--	--	--	--	--	--	--	--
MAY								
04...	55	0.09	2.01	14.6	<0.02	<0.4	1	5
JUL								
19...	--	--	--	--	--	--	--	--
SEP								
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--

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
v -- Analyte detected in laboratory blank

07016500 BOURBEUSE RIVER AT UNION, MO

LOCATION.--Lat 38°26'39", long 90°59'44", in SW ¼ NW ¼ SE ¼ sec.26, T.43 N., R.1 W., Franklin County, Hydrologic Unit 07140103, on left bank at upstream side of the bridge on U.S. Highway 50, 800 ft upstream from Flat Creek, 0.5 mi east of Union, 7.0 mi upstream from Birch Creek, and at mile 13.4.

DRAINAGE AREA.--808 mi².

PERIOD OF RECORD.--June 1921 to current year. October 1916 to June 1921 gage heights only in reports of the National Weather Service.

REVISED RECORDS.--WSP 957: 1941. WSP 1147: Drainage area. WSP 1281: 1924.

GAGE.--Water-stage recorder. Datum of gage is 488.58 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1948, datum of all gages 3.00 ft higher. Prior to Oct. 21, 1933, nonrecording gage, at site 30 ft upstream; Oct. 21, 1933, to June 11, 1944, nonrecording gage, at present site.

REMARKS.--No estimated daily discharges. Records fair. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 22, 1915, reached a stage of 28.5 ft, present datum, from floodmarks, discharge, about 50,000 ft³/s, determined from extension of rating curve for main channel based on measurements made since 1921 and study of overflow areas in vicinity of gaging station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	78	264	326	308	262	1,820	4,150	942	106	11,600	417
2	46	71	232	297	302	238	1,220	8,180	669	106	8,650	337
3	49	62	209	272	317	241	922	5,130	532	114	1,120	273
4	50	60	193	3,350	552	1,060	747	2,030	440	115	776	230
5	46	80	176	8,340	854	6,550	628	1,270	378	118	623	198
6	42	132	163	11,100	646	10,900	541	912	339	108	1,620	173
7	40	117	152	3,730	514	6,300	481	705	302	96	1,310	154
8	38	146	147	1,260	432	1,770	436	569	272	120	692	138
9	37	155	151	901	370	1,150	397	480	273	95	513	125
10	30	146	190	729	364	854	367	418	373	88	416	112
11	29	136	183	612	397	683	344	374	957	83	354	104
12	33	120	448	532	487	569	321	348	843	80	306	97
13	34	108	720	473	666	491	304	494	530	77	266	90
14	40	96	512	429	647	445	289	1,200	402	73	237	85
15	33	86	419	393	524	405	276	2,580	330	70	214	84
16	34	76	372	361	450	392	263	1,740	287	67	193	120
17	92	271	378	709	407	373	247	929	263	66	179	96
18	49	1,950	632	2,520	374	374	233	643	249	63	171	100
19	63	4,450	569	5,310	364	383	220	696	256	61	162	89
20	57	4,320	451	2,300	384	403	214	954	254	59	180	80
21	51	1,520	377	1,230	432	372	209	2,160	219	57	170	75
22	53	810	335	862	496	342	204	958	215	54	146	69
23	54	725	661	683	501	316	230	628	186	51	144	67
24	54	680	1,370	573	438	295	467	500	167	100	214	64
25	60	703	1,900	516	387	297	2,390	497	152	367	279	60
26	58	667	1,080	472	351	1,000	4,960	2,950	140	1,290	511	57
27	52	543	728	441	322	2,440	1,850	8,260	131	1,060	2,440	53
28	55	430	568	404	295	5,470	1,030	10,500	124	505	1,610	51
29	54	357	478	365	275	5,430	709	4,050	118	345	1,220	51
30	51	304	414	358	---	6,690	946	1,400	109	3,780	736	52
31	51	---	366	336	---	3,010	---	1,180	---	7,790	514	---
MEAN	47.8	647	479	1,619	443	1,920	776	2,158	348	554	1,212	123
MAX	92	4,450	1,900	11,100	854	10,900	4,960	10,500	957	7,790	11,600	417
MIN	29	60	147	272	275	238	204	348	109	51	144	51
IN.	0.07	0.89	0.68	2.31	0.59	2.74	1.07	3.08	0.48	0.79	1.73	0.17

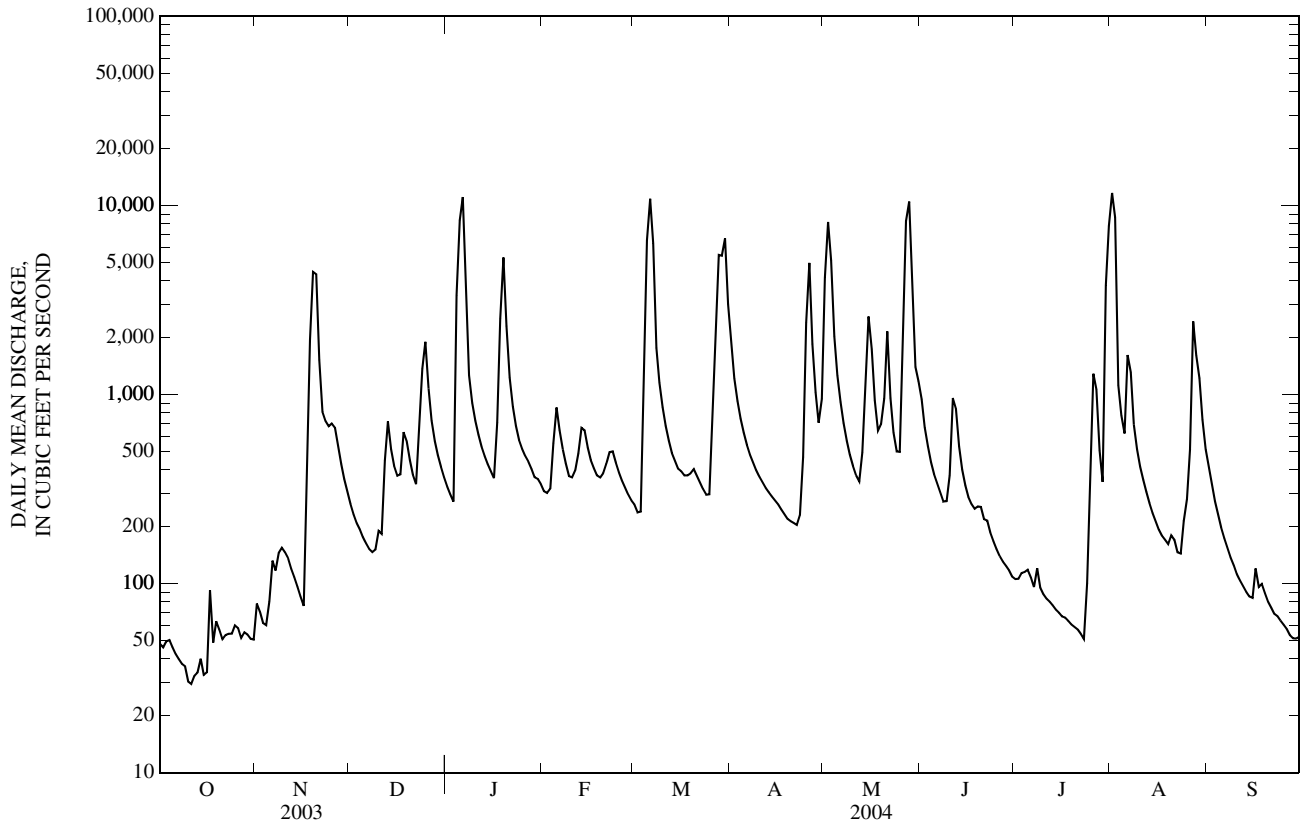
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2004, BY WATER YEAR (WY)

MEAN	292	526	644	649	789	1,133	1,279	1,178	847	333	199	244
MAX	4,575	3,320	6,107	3,518	3,214	4,207	5,303	4,578	4,583	3,650	1,927	4,859
(WY)	(1950)	(1986)	(1983)	(1950)	(1985)	(1984)	(1994)	(1995)	(1942)	(1993)	(1993)	(1993)
MIN	15.0	28.0	35.4	30.7	41.1	42.0	94.9	66.6	33.7	23.9	21.0	19.2
(WY)	(1957)	(1954)	(1954)	(1956)	(1963)	(1954)	(1956)	(1932)	(1936)	(1936)	(1936)	(1956)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1921 - 2004
ANNUAL MEAN	559	867	674
HIGHEST ANNUAL MEAN			1,771
LOWEST ANNUAL MEAN			106
HIGHEST DAILY MEAN	12,200	Jun 13	11,600
LOWEST DAILY MEAN	29	Oct 11	29
ANNUAL SEVEN-DAY MINIMUM	33	Oct 10	33
MAXIMUM PEAK FLOW	---		14,300
MAXIMUM PEAK STAGE	---		17.20
INSTANTANEOUS LOW FLOW	---		29
ANNUAL RUNOFF (INCHES)	9.39		14.61
10 PERCENT EXCEEDS	1,060		1,860
50 PERCENT EXCEEDS	203		358
90 PERCENT EXCEEDS	48		59

07016500 BOURBEUSE RIVER AT UNION, MO—Continued



07017200 BIG RIVER AT IRONDALE, MO

LOCATION.--Lat 37°49'48", long 90°41'27", in SE 1/4 SW 1/4 sec.15, T.36 N., R.3 E., Washington County, Hydrologic Unit 07140104, on right bank 50 ft upstream from bridge on State Highway U, 0.2 mi upstream from Mill Creek, and 0.8 mi west of Irondale.

DRAINAGE AREA.--175 mi².

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 753.28 ft above National Geodetic Vertical Datum of 1929 (Missouri State Highway and Transportation Commission bench mark).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	49	190	53	68	237	2,320	36	15	21	51
2	11	12	43	168	408	62	200	1,340	32	17	18	39
3	11	14	41	146	355	69	174	527	29	19	16	34
4	10	15	41	945	233	1,590	151	351	27	19	16	30
5	10	15	39	837	201	1,690	132	276	26	17	27	26
6	9.8	17	37	359	175	580	118	223	26	16	23	24
7	9.7	18	35	249	150	358	107	184	27	15	18	22
8	9.4	17	34	204	136	276	98	151	25	14	16	20
9	10	16	35	174	120	231	88	125	24	14	14	19
10	12	18	239	145	130	197	86	105	25	13	14	18
11	12	18	211	124	161	172	92	92	25	13	13	16
12	11	18	143	109	138	147	81	83	27	12	12	16
13	11	18	112	95	121	128	74	290	38	12	12	15
14	12	20	95	84	113	116	68	1,670	32	11	12	14
15	12	30	81	76	111	106	64	541	26	11	11	14
16	12	31	72	69	101	114	60	274	26	11	11	14
17	18	35	62	439	94	104	57	191	36	11	11	13
18	19	2,320	57	800	90	96	54	145	38	11	321	13
19	15	1,110	51	351	93	86	52	193	33	11	56	12
20	14	326	46	239	108	81	53	133	27	10	36	11
21	13	194	43	191	102	76	54	98	24	10	32	10
22	12	135	42	165	91	70	53	77	23	9.3	25	10
23	11	120	350	138	85	66	55	64	22	9.2	21	9.8
24	12	237	262	123	79	66	546	55	20	12	28	9.7
25	12	160	177	120	75	64	1,060	50	19	30	115	9.6
26	12	119	137	106	70	93	372	65	18	25	76	9.2
27	11	95	112	92	66	238	252	61	17	19	42	9.1
28	13	77	100	82	63	194	197	51	16	16	555	8.6
29	15	64	776	74	61	296	163	45	16	15	300	8.6
30	15	56	400	67	---	339	144	42	16	18	130	8.9
31	14	---	251	59	---	299	---	41	---	27	74	---
MEAN	12.3	178	135	226	130	260	165	318	25.9	14.9	67.0	17.1
MAX	19	2,320	776	945	408	1,690	1,060	2,320	38	30	555	51
MIN	9.4	12	34	59	53	62	52	41	16	9.2	11	8.6
IN.	0.08	1.13	0.89	1.49	0.80	1.72	1.05	2.10	0.16	0.10	0.44	0.11

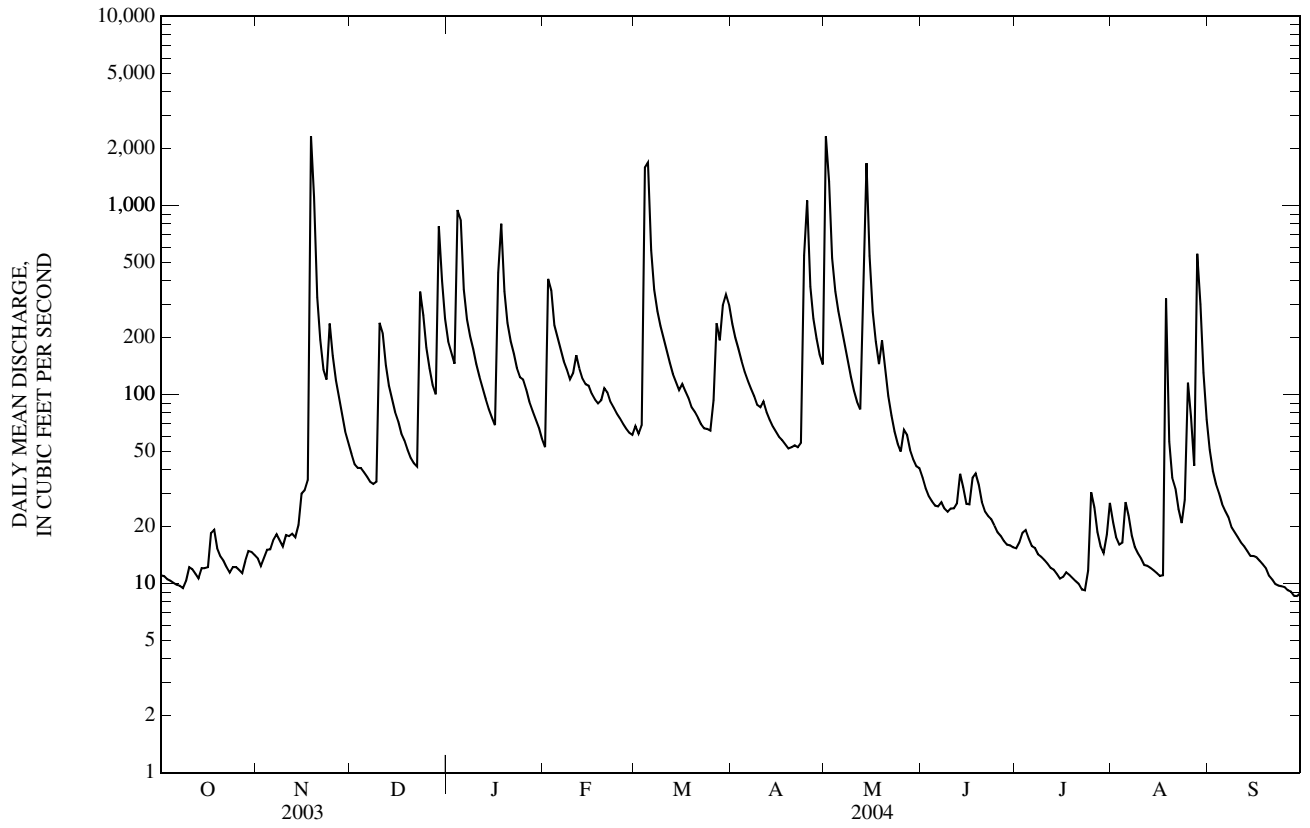
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	57.6	217	257	204	252	324	351	275	116	49.3	54.7	59.7
MAX	339	1,147	1,027	734	695	867	1,329	1,788	872	262	393	669
(WY)	(1971)	(1994)	(1983)	(1969)	(1985)	(1978)	(1994)	(2002)	(1985)	(1981)	(1970)	(1993)
MIN	6.95	10.5	13.7	11.1	24.9	38.9	39.7	17.3	9.95	4.69	4.27	3.10
(WY)	(1981)	(1981)	(1977)	(1981)	(1977)	(1981)	(2000)	(2000)	(1980)	(1980)	(2000)	(2000)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1965 - 2004
ANNUAL MEAN	148	130	184
HIGHEST ANNUAL MEAN			449
LOWEST ANNUAL MEAN			33.9
HIGHEST DAILY MEAN	2,320	Nov 18	21,300
LOWEST DAILY MEAN	8.5	Aug 27	1.2
ANNUAL SEVEN-DAY MINIMUM	9.1	Jul 26	1.5
MAXIMUM PEAK FLOW	---		4,840
MAXIMUM PEAK STAGE	---		8.62
INSTANTANEOUS LOW FLOW	---		8.3
ANNUAL RUNOFF (INCHES)	11.51		10.08
10 PERCENT EXCEEDS	345		275
50 PERCENT EXCEEDS	50		53
90 PERCENT EXCEEDS	11		11

07017200 BIG RIVER AT IRONDALE, MO—Continued



07018100 BIG RIVER NEAR RICHWOODS, MO

LOCATION.--Lat 38°09'35", long 90°42'22", in sec.33, T.40 N., R.3 E., Jefferson County, Hydrologic Unit 07140104, on left bank on downstream side of bridge on State Highway H, 1.8 mi east of Fletcher, 6.8 mi east of Richwoods, and at mile 53.7.

DRAINAGE AREA.--735 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year. Prior to May 1949 monthly discharge only, published in WSP 1311. Prior to 1984 published as Big River near De Soto (07018000).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 523.00 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1983 at site 5.5 mi downstream at datum 15.79 ft higher.

REMARKS.--Water-discharge records good except for estimated daily discharges, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1915 reached a stage of about 29.4 ft (former datum), discharge, about 70,500 ft³/s, from rating curve extended above 37,000 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	129	280	849	342	281	1,140	3,570	622	180	266	428
2	116	133	250	689	537	275	940	7,160	511	181	201	327
3	111	128	230	603	1,950	354	803	2,810	437	206	182	266
4	111	126	223	1,530	1,210	3,020	704	1,610	386	200	167	228
5	110	129	212	3,900	888	5,640	620	1,160	351	188	155	201
6	109	135	201	2,150	753	3,570	563	932	327	179	145	182
7	106	146	191	1,230	653	1,820	518	772	312	177	136	169
8	102	147	182	938	559	1,240	475	654	298	176	145	155
9	106	136	180	784	511	981	435	568	283	170	142	144
10	121	132	234	673	497	825	407	498	286	163	134	137
11	121	131	459	589	526	710	413	441	281	153	130	131
12	114	130	566	524	558	622	395	398	266	146	127	126
13	110	124	439	470	516	555	373	387	283	142	125	122
14	121	121	370	427	472	513	347	786	288	136	124	119
15	126	136	330	393	447	473	333	2,390	316	131	123	119
16	127	146	303	364	423	467	e319	1,220	421	129	122	118
17	164	153	278	604	399	462	e305	815	472	133	123	115
18	182	6,160	264	3,720	381	453	e291	643	369	130	123	112
19	165	7,340	248	2,330	375	413	289	887	482	125	123	109
20	149	2,610	231	1,310	402	384	292	1,050	427	121	280	105
21	142	1,240	217	979	433	354	300	721	332	119	315	101
22	133	820	207	814	417	329	292	547	293	117	245	99
23	125	634	514	695	384	317	325	447	261	126	212	97
24	120	681	1,050	616	363	311	635	387	238	134	273	96
25	120	741	850	577	344	304	2,790	610	222	172	397	99
26	120	615	623	548	326	707	2,230	4,550	209	212	1,140	98
27	120	501	506	505	310	5,440	1,220	4,340	198	192	758	94
28	123	419	438	419	296	2,030	894	1,570	193	180	458	92
29	124	357	1,210	408	284	1,790	718	987	190	163	1,950	92
30	125	314	2,040	372	---	1,550	614	796	182	213	1,060	91
31	122	---	1,200	380	---	1,370	---	852	---	313	614	---
MEAN	124	824	469	980	536	1,212	666	1,437	325	165	339	146
MAX	182	7,340	2,040	3,900	1,950	5,640	2,790	7,160	622	313	1,950	428
MIN	102	121	180	364	284	275	289	387	182	117	122	91
IN.	0.20	1.25	0.74	1.54	0.79	1.90	1.01	2.26	0.49	0.26	0.53	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)

MEAN	266	646	806	715	920	1,211	1,272	1,087	572	380	260	302
MAX	1,641	4,223	4,332	3,845	2,935	2,851	5,642	3,964	3,150	2,492	1,357	4,022
(WY)	(1950)	(1986)	(1983)	(1950)	(1985)	(1998)	(1994)	(2002)	(1985)	(1951)	(1950)	(1993)
MIN	47.5	87.9	90.5	84.0	124	123	175	148	110	86.0	69.9	40.6
(WY)	(1957)	(1977)	(1956)	(1977)	(1954)	(1954)	(2000)	(2001)	(1980)	(1980)	(1955)	(1956)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

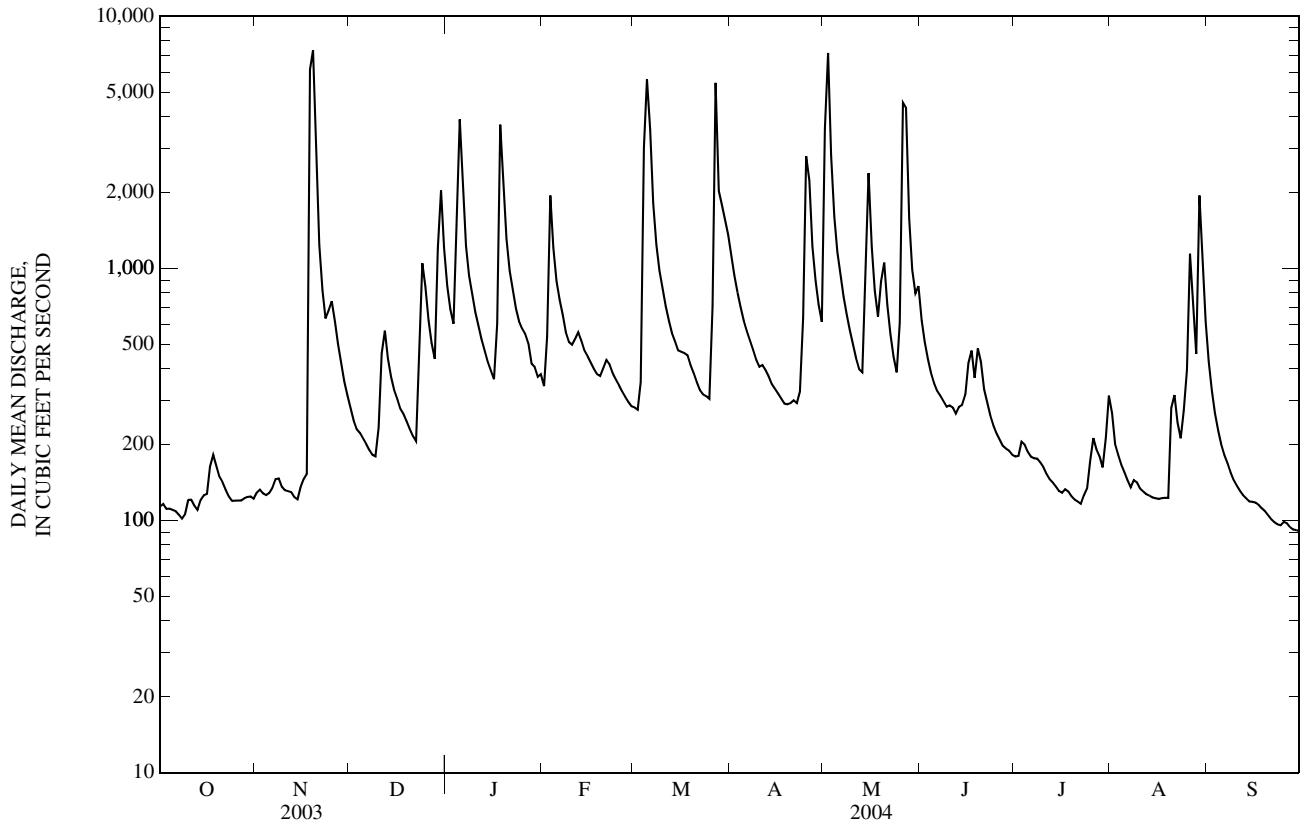
FOR 2004 WATER YEAR

WATER YEARS 1949 - 2004

ANNUAL MEAN	664	603	702
HIGHEST ANNUAL MEAN			1,766
LOWEST ANNUAL MEAN			171
HIGHEST DAILY MEAN	10,000	May 7	7,340
LOWEST DAILY MEAN	94	Aug 26	91
ANNUAL SEVEN-DAY MINIMUM	100	Aug 21	95
MAXIMUM PEAK FLOW	---		9,200
MAXIMUM PEAK STAGE	---		14.56
INSTANTANEOUS LOW FLOW	---		90
ANNUAL RUNOFF (INCHES)	12.27		11.18
10 PERCENT EXCEEDS	1,380		1,210
50 PERCENT EXCEEDS	299		326
90 PERCENT EXCEEDS	117		121

e Estimated

07018100 BIG RIVER NEAR RICHWOODS, MO—Continued



MERAMEC RIVER BASIN

07018100 BIG RIVER NEAR RICHWOODS, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1963 to July 1975, November 1983 to June 1987, November 1992 to current year. August 1963 to July 1975 published as Big River near De Soto (07018000).

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

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)	Specific conductance, wat unfltrd μ S/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)	
Date		ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Carbonate, wat unfltrd, 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 fltrd 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 12...	1235	Environmental											
JAN 21...	1015	Environmental											
JAN 21...	1016	Replicate											
MAR 02...	1015	Environmental											
MAY 04...	0945	Blank											
MAY 04...	1000	Environmental											
JUL 20...	1035	Environmental											
SEP 22...	1235	Environmental											
SEP 22...	1245	Blank											
NOV 12...	9.88	240	242	295	<1	13.9	<0.2	44.2	322	<10	<0.20	<0.01	<0.02
JAN 21...	--	138	139	170	<1	--	--	--	--	<10	0.22	<0.04	0.36
JAN 21...	--	--	--	--	--	--	--	--	--	<10	0.23	<0.04	0.36
MAR 02...	--	201	202	247	<1	--	--	--	--	<10	0.21	<0.04	<0.06
MAY 04...	<0.10	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
MAY 04...	3.33	125	126	154	<1	4.86	<0.2	16.2	174	37	0.37	<0.04	0.23
JUL 20...	--	237	238	290	<1	--	--	--	--	<10	0.16	<0.04	<0.06
SEP 22...	--	228	229	279	<1	--	--	--	--	<10	0.15	<0.04	<0.06
SEP 22...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06

07018100 BIG RIVER NEAR RICHWOODS, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, 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 coli-form, 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 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 12...	<0.010	<0.01	<0.02	<0.02	1	6k	11k	E2n	57v	0.5	0.11	0.19	1.1
JAN 21...	E.005n	E.01n	E.03n	E.03n	11k	190	110	--	--	--	--	--	--
JAN 21...	<0.008	E.01n	E.03n	E.03n	31k	130	114	--	--	--	--	--	--
MAR 02...	0.011	<0.02	<0.04	<0.04	3k	8k	3k	--	--	--	--	--	--
MAY 04...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.2	<0.04	<0.04	<0.4
MAY 04...	<0.008	E.01n	E.02n	0.06	270	340	168	6	380	0.4	0.16	0.89	1.9
JUL 20...	<0.008	<0.02	<0.04	<0.04	35	22	52	--	--	--	--	--	--
SEP 22...	<0.008	<0.02	<0.04	<0.04	13k	9k	13k	--	--	--	--	--	--
SEP 22...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--

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 12...	10	4.85	16.7	23.4	<0.02	<0.4	5	6
JAN 21...	--	--	--	--	--	--	--	--
JAN 21...	--	--	--	--	--	--	--	--
MAR 02...	--	--	--	--	--	--	--	--
MAY 04...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	<2
MAY 04...	16	3.93	113d	17.3	<0.02	<0.4	13	49
JUL 20...	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--
SEP 22...	--	--	--	--	--	--	--	--

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

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
- v -- Analyte detected in laboratory blank

07018500 BIG RIVER AT BYRNESVILLE, MO

LOCATION.--Lat 38°23'30", long 90°38'16, in SE ¼ sec.12, T.42 N., R.3 E., Jefferson County, Hydrologic Unit 07140104, on right bank on downstream side of pier of privately owned bridge at Byrnesville, 4.0 mi upstream from Heads Creek, and at mile 14.1.

DRAINAGE AREA.--917 mi².

PERIOD OF RECORD.--October 1921 to current year. Prior to June 1922 monthly discharge only, published WSP 1311.

REVISED RECORDS.--WSP 667: 1927. WSP 877: 1938. WSP 1007: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 433.69 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 9, 1940, nonrecording gage at present site and datum.

REMARKS.--Records good. U.S.G.S. satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 21, 1915, reached a stage of 30.2 ft from floodmarks, discharge, 80,000 ft³/s, by slope-area measurement of peak flow.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	163	448	1,130	477	386	1,490	1,450	910	223	e507	644
2	128	164	409	891	623	379	1,240	5,950	722	222	e380	486
3	134	167	380	773	1,230	408	1,050	5,310	609	225	281	387
4	135	165	357	3,170	1,780	2,150	925	2,350	530	242	246	323
5	131	163	340	3,730	1,190	5,770	823	1,590	474	244	223	279
6	132	178	323	3,490	975	5,200	740	1,220	433	219	197	248
7	132	173	308	1,870	848	2,860	682	1,010	401	206	180	224
8	130	177	295	1,300	748	1,740	633	859	376	216	166	205
9	145	182	286	1,060	673	1,310	589	746	361	205	161	191
10	146	178	301	913	639	1,080	552	669	344	191	160	177
11	146	171	330	804	631	938	527	605	334	186	150	167
12	154	168	502	721	652	825	517	548	322	173	141	159
13	150	165	597	655	663	737	496	558	306	165	136	152
14	152	163	531	602	625	681	473	695	304	157	132	146
15	148	166	475	558	591	630	447	1,460	312	149	128	141
16	155	168	440	521	561	603	425	1,860	712	144	123	142
17	185	240	412	711	537	588	407	1,140	705	142	118	135
18	185	4,110	391	2,270	514	597	389	866	619	139	115	131
19	209	7,550	371	3,460	499	586	367	869	700	138	112	127
20	206	5,420	352	1,950	512	546	355	1,190	542	133	129	123
21	187	2,020	333	1,320	537	509	353	1,050	490	129	171	119
22	178	1,230	321	1,070	545	476	355	793	469	131	269	116
23	169	941	435	918	528	451	366	651	431	508	271	112
24	161	817	712	812	500	439	546	576	344	250	299	110
25	158	816	1,050	748	477	432	2,300	793	304	558	429	109
26	158	821	860	705	455	704	2,780	4,520	275	392	462	108
27	152	721	704	659	434	4,710	1,800	6,530	255	274	955	109
28	155	620	615	603	415	4,330	1,190	3,280	243	239	733	106
29	156	547	598	548	400	2,430	942	1,610	233	212	597	104
30	155	493	1,530	489	---	2,060	798	1,120	224	1,360	1,590	102
31	155	---	1,700	e480	---	1,750	---	985	---	826	928	---
MEAN	155	969	539	1,256	664	1,494	819	1,705	443	277	338	189
MAX	209	7,550	1,700	3,730	1,780	5,770	2,780	6,530	910	1,360	1,590	644
MIN	128	163	286	480	400	379	353	548	224	129	112	102
IN.	0.20	1.18	0.68	1.58	0.78	1.88	1.00	2.14	0.54	0.35	0.43	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2004, BY WATER YEAR (WY)

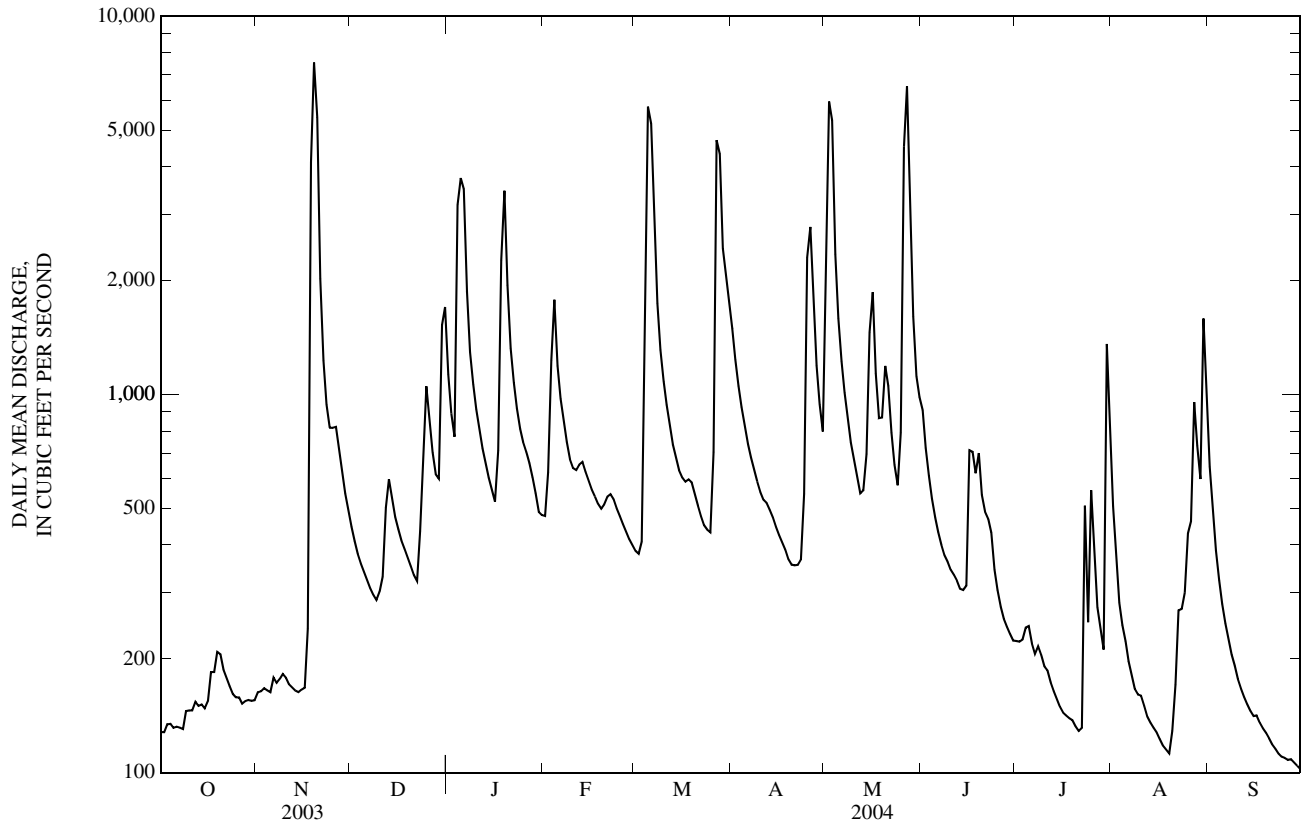
MEAN	322	698	863	907	1,101	1,432	1,654	1,461	826	476	294	342
MAX	2,290	5,084	5,594	5,064	3,696	4,539	7,230	5,196	4,530	3,895	1,490	6,464
(WY)	(1950)	(1994)	(1983)	(1950)	(1982)	(1945)	(1994)	(1990)	(1928)	(1957)	(1950)	(1993)
MIN	49.7	99.6	103	90.4	139	137	237	177	105	56.4	41.4	48.7
(WY)	(1957)	(1977)	(1956)	(1977)	(1954)	(1954)	(2000)	(1932)	(1936)	(1936)	(1936)	(1956)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1922 - 2004
ANNUAL MEAN	820	739	864
HIGHEST ANNUAL MEAN			1,934
LOWEST ANNUAL MEAN			227
HIGHEST DAILY MEAN	12,600	May 7	7,550
LOWEST DAILY MEAN	102	Aug 26	102
ANNUAL SEVEN-DAY MINIMUM	108	Aug 22	107
MAXIMUM PEAK FLOW	---		7,980
MAXIMUM PEAK STAGE	---		15.12
INSTANTANEOUS LOW FLOW	---		101
ANNUAL RUNOFF (INCHES)	12.15		10.97
10 PERCENT EXCEEDS	1,700		1,550
50 PERCENT EXCEEDS	375		458
90 PERCENT EXCEEDS	141		141

e Estimated

07018500 BIG RIVER AT BYRNESVILLE, MO—Continued



07019000 MERAMEC RIVER NEAR EUREKA, MO

LOCATION.--Lat 38°30'20", long 90°35'30", in SE 1/4 sec.32, T.44 N., R.4 E., St. Louis County, Hydrologic Unit 07140102, on right bank, 44 ft upstream from bridge on north access roadway of I-44, 2.0 mi east of Eureka, 3.0 mi downstream from Big River, and at mile 34.1.

DRAINAGE AREA.--3,788 mi².

PERIOD OF RECORD.--August 1903 to July 1906, October 1921 to current year. Monthly discharge only for January, February, and March 1904, published in WSP 1311.

REVISED RECORDS.--WSP 877: 1938(M), WSP 977: 1942. WSP 1007: Drainage area. WSP 1281: 1924-25.

GAGE.--Water-stage recorder. Datum of gage is 404.18 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 17, 1933, nonrecording gage at site 200 ft upstream at different datum; Jan. 17, 1933, to Sept. 22, 1937, nonrecording gage; Sept. 23, 1937, to Sept. 30, 1971, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records good. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 22, 1915, reached a stage of 42.2 ft, present datum, from floodmarks, discharge, 175,000 ft³/s, by slope-area measurement of peak flow.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	495	647	2,030	2,790	2,000	1,530	8,800	8,200	3,930	984	11,600	2,530
2	504	736	1,840	2,450	2,120	1,470	6,890	16,200	3,200	990	13,300	2,070
3	520	742	1,700	2,240	2,860	1,460	5,560	22,600	2,690	1,000	7,620	1,750
4	530	699	1,610	10,200	3,700	4,640	4,640	16,200	2,360	1,020	2,470	1,540
5	533	673	1,530	16,600	3,530	16,300	3,980	8,940	2,090	1,230	1,970	1,410
6	536	764	1,480	17,900	3,390	23,600	3,500	6,520	1,890	1,210	1,640	1,280
7	542	818	1,420	16,500	2,960	25,500	3,160	5,150	1,770	993	2,710	1,100
8	523	779	1,380	7,550	2,630	15,700	2,890	4,260	1,670	930	2,180	993
9	550	793	1,340	5,000	2,410	7,950	2,650	3,680	1,630	1,090	1,650	928
10	583	e805	1,380	4,040	2,330	5,940	2,460	3,290	1,650	909	1,430	899
11	571	e800	1,420	3,470	2,290	4,820	2,310	2,970	1,710	874	1,260	870
12	571	e805	1,540	3,070	2,350	4,060	2,190	2,670	2,290	831	1,110	851
13	570	801	2,470	2,760	2,390	3,540	2,090	2,630	2,060	800	998	816
14	608	782	2,670	2,510	2,520	3,210	2,000	4,720	1,740	775	940	805
15	581	779	2,330	2,310	2,430	2,900	1,890	5,790	1,610	749	889	784
16	582	769	2,120	2,140	2,240	2,710	1,800	7,050	1,850	730	847	855
17	701	844	1,950	2,480	2,100	2,590	1,710	4,710	1,930	714	821	827
18	790	9,850	1,900	5,660	2,000	2,530	1,640	3,550	1,800	706	805	755
19	802	14,900	2,110	10,700	1,940	2,460	1,570	4,500	1,940	698	799	766
20	802	19,600	1,950	10,500	1,980	2,370	1,520	4,190	1,950	709	818	738
21	800	13,600	1,770	6,610	2,010	2,240	1,500	4,750	1,920	714	849	690
22	777	6,870	1,650	4,900	2,050	2,080	1,490	4,230	1,760	689	947	672
23	729	4,700	2,210	4,010	2,090	1,960	1,570	3,020	1,690	1,140	975	664
24	659	4,320	2,700	3,470	2,040	1,880	1,860	2,580	1,450	1,180	1,020	683
25	630	3,740	3,900	3,130	1,910	1,850	6,030	2,320	1,330	1,800	1,330	677
26	628	3,660	3,990	2,910	1,800	2,610	13,500	7,650	1,250	1,970	2,170	678
27	626	3,360	3,140	2,710	1,710	10,500	14,200	19,800	1,180	2,450	2,430	654
28	632	2,920	2,690	2,470	1,640	17,200	7,950	20,300	1,120	1,950	4,610	623
29	630	2,550	2,450	2,290	1,590	15,600	5,560	15,400	1,070	1,460	3,120	604
30	646	2,270	2,880	2,060	---	14,100	4,790	6,870	1,020	8,720	4,030	601
31	650	---	3,470	2,020	---	12,800	---	4,660	---	13,300	3,290	---
MEAN	623	3,513	2,162	5,402	2,311	7,035	4,057	7,400	1,852	1,720	2,601	970
MAX	802	19,600	3,990	17,900	3,700	25,500	14,200	22,600	3,930	13,300	13,300	2,530
MIN	495	647	1,340	2,020	1,590	1,460	1,490	2,320	1,020	689	799	601
IN.	0.19	1.03	0.66	1.64	0.66	2.14	1.20	2.25	0.55	0.52	0.79	0.29

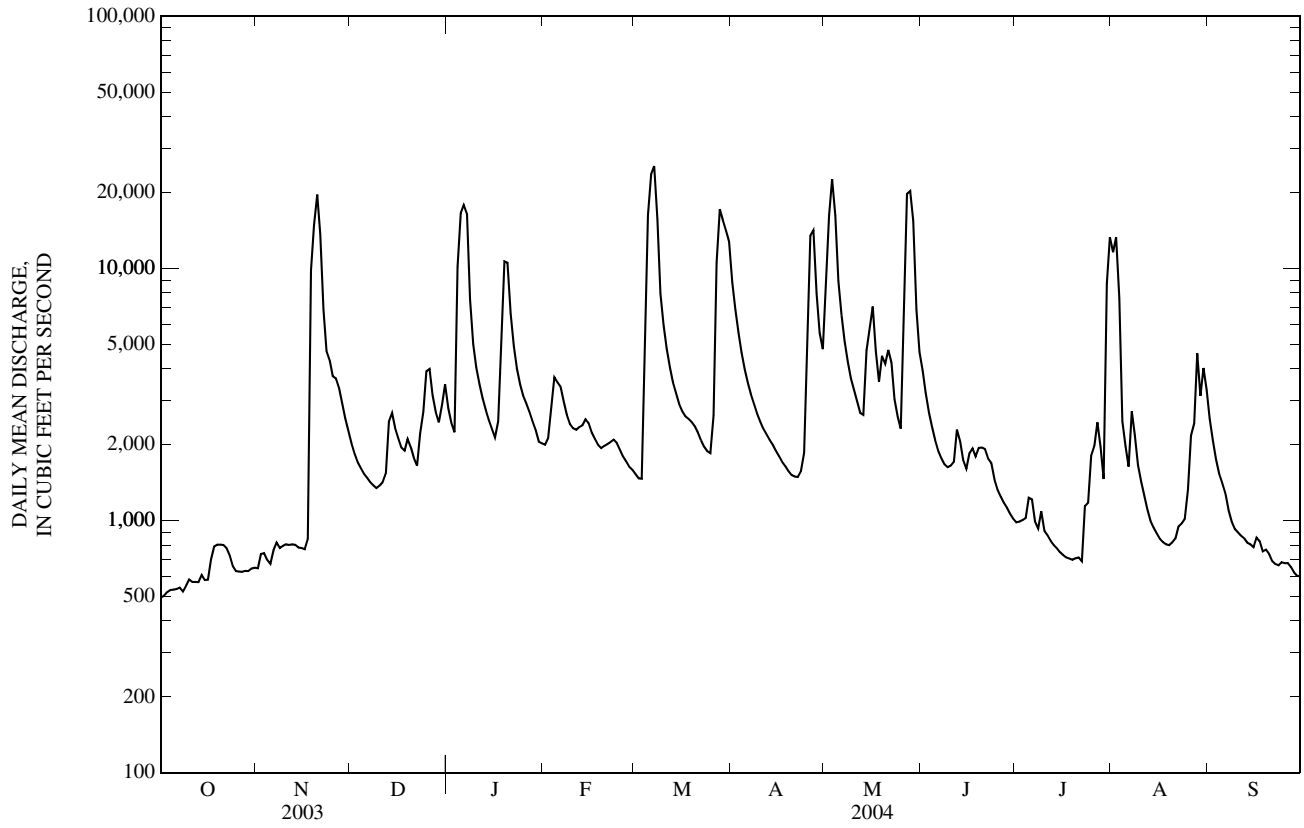
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	1,390	2,477	2,971	3,192	3,864	5,227	6,209	5,502	3,621	1,901	1,205	1,400
MAX	12,120	15,450	23,620	17,320	14,730	13,960	22,580	18,590	18,070	12,600	5,441	18,500
(WY)	(1950)	(1986)	(1983)	(1950)	(1982)	(1978)	(1927)	(2002)	(1945)	(1951)	(1993)	(1993)
MIN	236	464	426	374	538	514	945	708	503	318	255	244
(WY)	(1957)	(1957)	(1956)	(1956)	(1954)	(1954)	(1954)	(1932)	(1936)	(1936)	(1936)	(1956)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	3,109	3,317	3,233
HIGHEST ANNUAL MEAN			7,407
LOWEST ANNUAL MEAN			751
HIGHEST DAILY MEAN	37,200	May 8	25,500
LOWEST DAILY MEAN	495	Oct 1	495
ANNUAL SEVEN-DAY MINIMUM	520	Sep 30	523
MAXIMUM PEAK FLOW	---		25,800
MAXIMUM PEAK STAGE	---		15.55
INSTANTANEOUS LOW FLOW	---		490
ANNUAL RUNOFF (INCHES)	11.15		11.92
10 PERCENT EXCEEDS	6,590		7,740
50 PERCENT EXCEEDS	1,730		1,970
90 PERCENT EXCEEDS	610		690

07019000 MERAMEC RIVER NEAR EUREKA, MO—Continued



07019072 KIEFER CREEK NEAR BALLWIN, MO

LOCATION.--Lat 38°33'20", long 90°33'05", in NW ¼ SE ¼ NE ¼ sec.15, T.44 N., R.4 E., St. Louis County, Hydrologic Unit 07140102, on left downstream abutment of Castlewood Road bridge, 0.2 mi upstream of Spring Branch, 3.2 mi west of Highway 141, and 1.3 mi upstream of Meramec River.

DRAINAGE AREA.--3.91 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 438.90 ft above National Geodetic Vertical Datum of 1929.

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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	e9.6	2.2	2.9	2.2	3.0	5.7	37	14	1.9	7.9	1.9
2	2.2	e3.1	2.1	3.1	9.9	2.7	5.2	14	9.5	7.5	5.5	1.7
3	1.8	e2.6	2.1	2.9	7.8	4.2	4.6	7.0	7.2	9.7	4.0	1.7
4	1.9	1.9	2.6	97	5.0	29	4.1	5.1	6.5	6.1	3.6	2.1
5	1.8	e2.6	2.9	23	3.9	26	3.8	4.9	5.6	108	4.3	2.0
6	1.6	e14	2.4	10	3.7	12	3.6	3.9	4.8	30	3.0	1.9
7	1.5	e2.6	2.1	7.0	3.1	7.2	3.4	3.1	3.9	7.2	2.7	1.5
8	1.5	e2.3	2.1	6.1	2.7	5.6	3.2	2.6	3.3	4.2	2.4	1.5
9	21	e2.2	2.7	5.3	3.0	5.4	2.8	2.3	3.6	2.9	2.2	1.4
10	9.7	e2.0	7.5	4.4	4.1	4.5	2.7	2.0	4.6	2.3	2.1	1.4
11	5.7	e1.8	4.6	4.1	4.7	4.2	3.2	1.8	5.2	2.8	2.0	1.5
12	4.4	e1.7	2.9	3.7	5.5	3.7	2.6	2.0	3.8	2.3	1.9	1.5
13	4.6	e1.6	2.7	3.3	4.1	3.4	2.5	22	3.1	1.8	1.8	1.5
14	9.8	e1.5	2.9	3.3	3.7	3.7	2.3	31	2.6	1.6	1.7	1.6
15	6.0	e1.5	2.9	3.0	3.5	3.2	2.1	10	2.3	1.6	1.7	1.6
16	4.6	e1.6	3.2	2.8	3.1	3.6	2.0	4.6	2.4	1.6	1.6	3.3
17	19	e34	2.6	23	2.9	3.1	2.0	3.4	2.3	1.6	1.7	2.0
18	4.8	116	2.7	20	3.1	3.1	1.9	7.3	13	1.5	1.7	1.8
19	3.0	23	2.4	9.2	3.9	2.5	2.0	60	8.3	1.4	1.6	2.0
20	2.5	9.4	2.1	6.4	5.1	2.4	2.0	13	4.4	1.3	5.6	1.6
21	2.2	7.0	2.1	5.4	4.2	2.2	1.9	4.1	3.7	1.3	5.1	1.1
22	2.1	5.5	2.2	4.7	3.5	2.1	1.7	2.7	4.5	1.3	2.1	1.1
23	2.1	9.7	22	4.2	3.2	2.3	3.2	10	3.3	1.2	4.7	1.2
24	2.5	8.3	7.8	3.8	e3.1	2.3	5.6	8.5	3.1	1.4	5.5	1.3
25	e3.5	5.5	5.7	3.6	2.9	3.5	4.9	33	2.5	23	24	1.3
26	e2.5	4.7	4.7	3.5	2.7	60	2.5	146	2.2	5.1	12	1.3
27	e2.2	3.8	4.1	3.2	2.5	22	1.8	129	2.1	2.7	5.7	1.4
28	e2.9	3.1	3.9	2.9	2.4	14	1.7	54	2.2	2.1	3.6	1.4
29	e1.8	2.9	4.9	2.8	2.3	12	1.6	34	2.0	1.9	2.7	1.4
30	e1.5	2.8	3.7	2.5	---	8.2	28	23	1.9	118	2.3	1.4
31	e1.5	---	3.2	2.3	---	6.6	---	18	---	16	2.0	---
MEAN	4.38	9.61	3.94	9.01	3.86	8.64	3.82	22.6	4.60	12.0	4.15	1.61
MAX	21	116	22	97	9.9	60	28	146	14	118	24	3.3
MIN	1.5	1.5	2.1	2.3	2.2	2.1	1.6	1.8	1.9	1.2	1.6	1.1
IN.	1.29	2.74	1.16	2.66	1.06	2.55	1.09	6.65	1.31	3.53	1.22	0.46

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

	3.61	4.57	3.05	5.02	6.76	7.08	5.01	9.60	7.31	4.43	2.75	3.84
MAX	6.61	10.7	6.35	10.3	12.5	16.1	7.65	22.6	16.9	12.0	6.29	12.1
(WY)	(1997)	(1997)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(1998)	(1996)
MIN	1.86	1.35	1.35	1.41	3.14	2.75	1.97	3.12	1.68	1.70	0.96	0.82
(WY)	(2000)	(2000)	(1999)	(2000)	(2003)	(2001)	(2000)	(1997)	(1999)	(1997)	(2003)	(1999)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

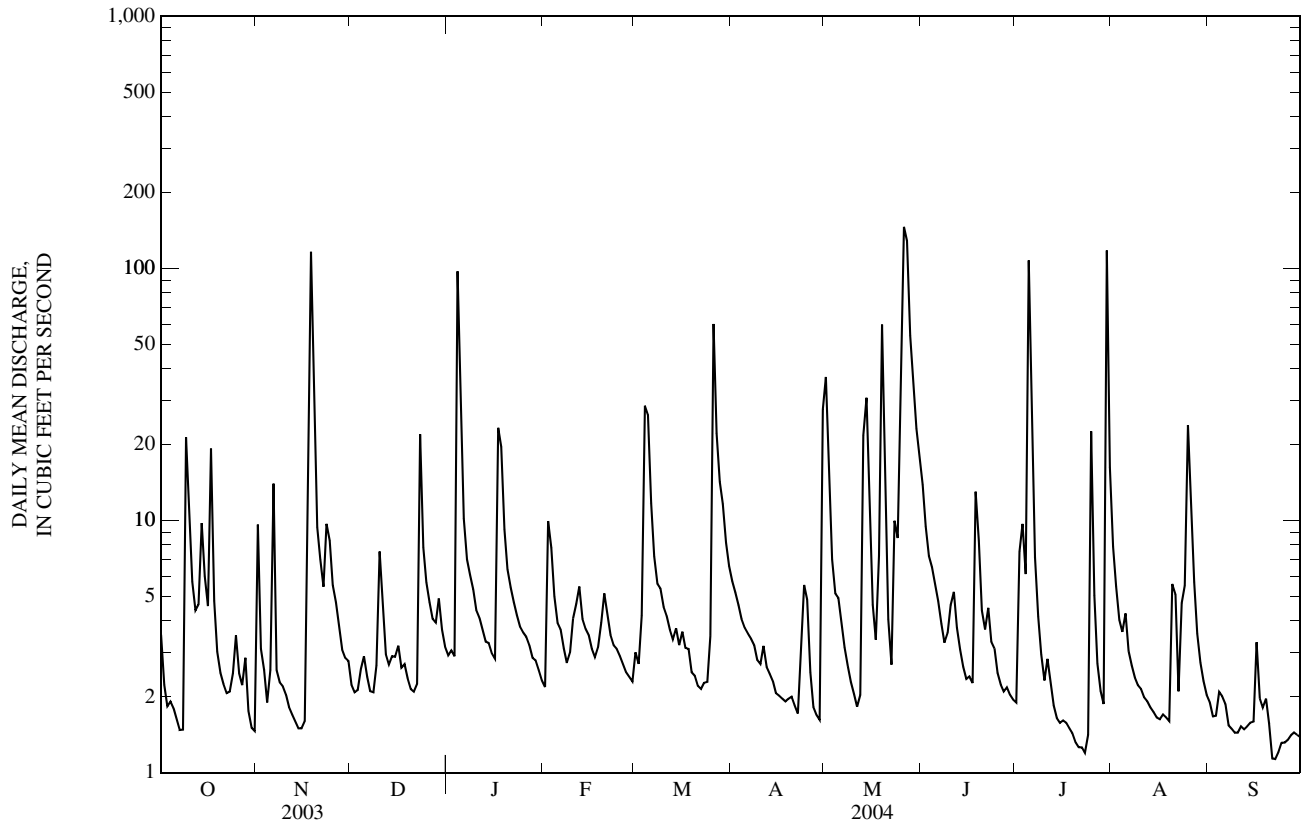
FOR 2004 WATER YEAR

WATER YEARS 1996 - 2004

ANNUAL MEAN	5.01	7.39	5.17
HIGHEST ANNUAL MEAN			7.39
LOWEST ANNUAL MEAN			3.11
HIGHEST DAILY MEAN	116	Nov 18	146
LOWEST DAILY MEAN	0.52	Aug 27	1.1
ANNUAL SEVEN-DAY MINIMUM	0.63	Aug 22	1.2
MAXIMUM PEAK FLOW	---		Unknown
MAXIMUM PEAK STAGE	---		9.04
INSTANTANEOUS LOW FLOW	---		0.92
ANNUAL RUNOFF (INCHES)	17.39	25.74	17.96
10 PERCENT EXCEEDS	9.7	13	9.7
50 PERCENT EXCEEDS	2.6	3.1	2.4
90 PERCENT EXCEEDS	1.1	1.6	1.1

e Estimated

07019072 KIEFER CREEK NEAR BALLWIN, MO—Continued



07019072 KIEFER CREEK NEAR BALLWIN, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1996 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)	
OCT 09...	1242	Environmental	86	6.2	8.5	90	7.3	176	17.4	65	20.0	3.70	
DEC 15...	1030	Blank	--	--	--	--	--	--	--	--	--	<0.03	
DEC 15...	1100	Environmental	3.3	41	8.7	85	7.0	2,640	13.2	--	--	20.0	
FEB 09...	1330	Environmental	2.6	27	10.3	98	7.2	1,780	12.8	380	119	19.0	
MAR 04...	1007	Environmental	27	14	10.0	90	7.2	879	10.0	180	57.0	9.70	
JUN 01...	1145	Environmental	23	26	9.5	96	7.2	777	14.6	270	88.0	12.0	
AUG 03...	1010	Environmental	4	41	8.2	84	7.0	810	14.9	290	92.4	15.2	
Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd titr., field, mg/L (00450)	Carbonate, wat unfltrd titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	60	60	73	<1	--	1,250	3.0	--	0.09	--	0.820	--	0.07
DEC 15...	--	--	--	--	<0.10	<1	<0.20	--	0.01	--	<0.020	--	<0.01
DEC 15...	215	216	264	<1	660	<1	<0.20	--	0.02	--	1.80	--	<0.01
FEB 09...	223	224	273	<1	390	1	0.20	--	<0.01	--	1.70	--	<0.01
MAR 04...	119	120	146	<1	--	279	0.70	--	0.03	--	1.30	--	0.02
JUN 01...	211	212	259	<1	--	4	<0.20	--	<0.01	--	1.60	--	<0.01
AUG 03...	215	221	269	<1	--	<10	0.12	<0.04	--	2.06	--	<0.008	--
Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.330	0.90	29	<1,000b	44,000	49,000	6	1	<1	<1.0	2.0	2.5
DEC 15...	--	<0.010	<0.02	<5	--	--	--	<3	<1	<1	<1.0	<1.0	<1.0
DEC 15...	--	0.030	0.05	10	28k	120	40	<3	1	<1	<1.0	2.8	2.3
FEB 09...	--	0.030	0.05	<5	4k	10k	3k	<3	2	<1	<1.0	3.5	1.5
MAR 04...	--	0.090	0.23	10	2,500k	1,500k	2,170k	6	<1	<1	<1.0	<1.0	<1.0
JUN 01...	--	0.020	0.04	<5	170	120	146	<3	<1	<1	<1.0	<1.0	<1.0
AUG 03...	0.04	--	0.04	<10	86	210	230	E1n	E.2n	<0.06	<0.04	<0.8	1.1

07019072 KIEFER CREEK NEAR BALLWIN, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	Mt	E.2t	<0.02	Mt	<1	E.01n	<2	<2	<2	<1	<1m	<2m
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	Mmt	Mn	E.5t	<0.02	E2	<1	<0.02	<1	<2	<1	<1	<1m	<2m
JUN 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 15...	--
DEC 15...	--
FEB 09...	--
MAR 04...	Mt
JUN 01...	--
AUG 03...	--

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 extrapolated at low end
 k -- Counts outside acceptable range
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07019090 WILLIAMS CREEK NEAR PEERLESS PARK, MO

LOCATION.--Lat 38°32'04", long 90°30'51", St. Louis County, Hydrologic Unit 07140102, on left downstream wingwall of Meramec Station Road bridge, 0.1 mi south of Interstate 44, 1.01 mi west of Highway 141, and 0.6 mi upstream of Meramec River.

DRAINAGE AREA.--7.62 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 415.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Water-discharge records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.0	2.3	5.1	2.9	3.9	17	15	13	1.6	9.9	2.2
2	1.2	2.5	1.9	4.8	7.4	3.5	15	15	11	1.7	6.6	1.8
3	0.96	1.6	1.8	4.5	11	3.2	14	9.8	8.5	3.8	5.0	1.7
4	0.86	1.1	1.9	104	7.2	30	12	8.0	7.2	3.9	4.3	1.6
5	0.78	0.90	1.9	47	5.5	48	11	6.9	6.8	14	4.1	1.5
6	0.75	4.1	1.8	29	5.1	29	9.9	5.9	6.2	12	3.6	1.5
7	0.68	2.8	1.7	22	4.4	21	9.6	4.8	5.4	5.4	3.1	1.4
8	0.63	1.7	1.6	19	3.7	17	9.0	4.3	4.8	3.4	2.9	1.3
9	3.9	1.3	1.6	16	3.5	14	7.8	3.9	4.3	2.9	2.6	1.1
10	4.9	0.93	8.5	12	4.0	12	7.3	3.4	4.5	2.3	2.3	1.0
11	2.6	0.84	6.1	11	5.2	10	7.1	3.0	4.2	2.2	2.3	1.0
12	2.7	0.81	4.5	9.7	6.3	8.8	6.4	2.9	3.8	1.8	2.1	1.1
13	2.2	1.2	3.9	8.1	5.7	8.1	5.9	9.4	3.5	1.5	1.9	1.1
14	3.2	1.2	3.5	7.6	5.5	7.9	5.7	36	3.1	1.3	1.8	1.1
15	3.0	1.2	3.3	6.9	5.0	7.5	5.4	24	2.8	1.2	1.9	1.4
16	2.2	1.2	3.1	6.2	4.2	7.2	5.3	15	3.1	1.1	1.8	1.2
17	8.6	13	2.7	16	3.8	6.9	5.0	11	2.8	1.0	1.7	1.1
18	4.7	98	2.6	31	3.7	6.6	4.7	8.6	10	0.87	1.7	0.99
19	3.0	30	2.4	21	4.7	5.7	4.5	27	11	0.84	1.5	0.89
20	2.3	16	2.2	16	6.9	5.6	4.5	24	5.1	0.79	1.6	0.76
21	2.0	10	2.1	13	6.1	5.0	4.5	15	4.0	0.73	1.6	0.70
22	1.7	7.3	2.2	11	5.5	4.7	4.1	11	4.5	0.65	1.5	0.63
23	1.5	7.0	17	9.4	5.4	4.7	5.1	12	3.4	0.60	1.5	0.63
24	1.5	9.4	15	8.4	5.2	4.8	8.7	12	2.8	0.54	1.5	0.63
25	1.5	6.7	11	7.4	4.9	4.8	24	12	2.5	7.3	2.4	0.63
26	1.8	5.6	7.7	6.9	4.4	14	15	25	2.3	2.7	3.2	0.66
27	1.7	4.7	6.3	5.6	4.1	29	10	81	2.1	1.4	3.2	0.73
28	1.6	3.6	5.7	4.6	3.8	25	7.8	63	1.9	1.0	3.2	0.77
29	1.8	3.0	6.6	4.1	3.8	27	5.8	31	1.9	0.87	2.9	0.83
30	1.8	2.8	6.1	3.6	---	23	4.9	21	1.7	102	2.5	0.73
31	1.8	---	5.4	3.1	---	20	---	16	---	20	2.3	---
MEAN	2.23	8.08	4.66	15.3	5.13	13.5	8.57	17.3	4.94	6.50	2.85	1.09
MAX	8.6	98	17	104	11	48	24	81	13	102	9.9	2.2
MIN	0.63	0.81	1.6	3.1	2.9	3.2	4.1	2.9	1.7	0.54	1.5	0.63
IN.	0.34	1.18	0.70	2.31	0.73	2.04	1.25	2.62	0.72	0.98	0.43	0.16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	1.67	2.62	3.10	5.70	8.34	11.3	9.41	11.6	7.18	3.57	2.29	1.49
MAX	3.22	8.08	10.4	15.3	21.5	30.5	17.8	25.3	16.7	8.27	5.75	3.77
(WY)	(2002)	(2004)	(2002)	(2004)	(1999)	(1998)	(1998)	(2002)	(1998)	(1998)	(1998)	(2003)
MIN	0.75	0.62	0.91	0.76	1.96	1.69	1.25	1.71	1.98	0.93	0.73	0.56
(WY)	(2000)	(2000)	(1999)	(2000)	(2000)	(2000)	(2000)	(2001)	(2001)	(2002)	(2002)	(1999)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

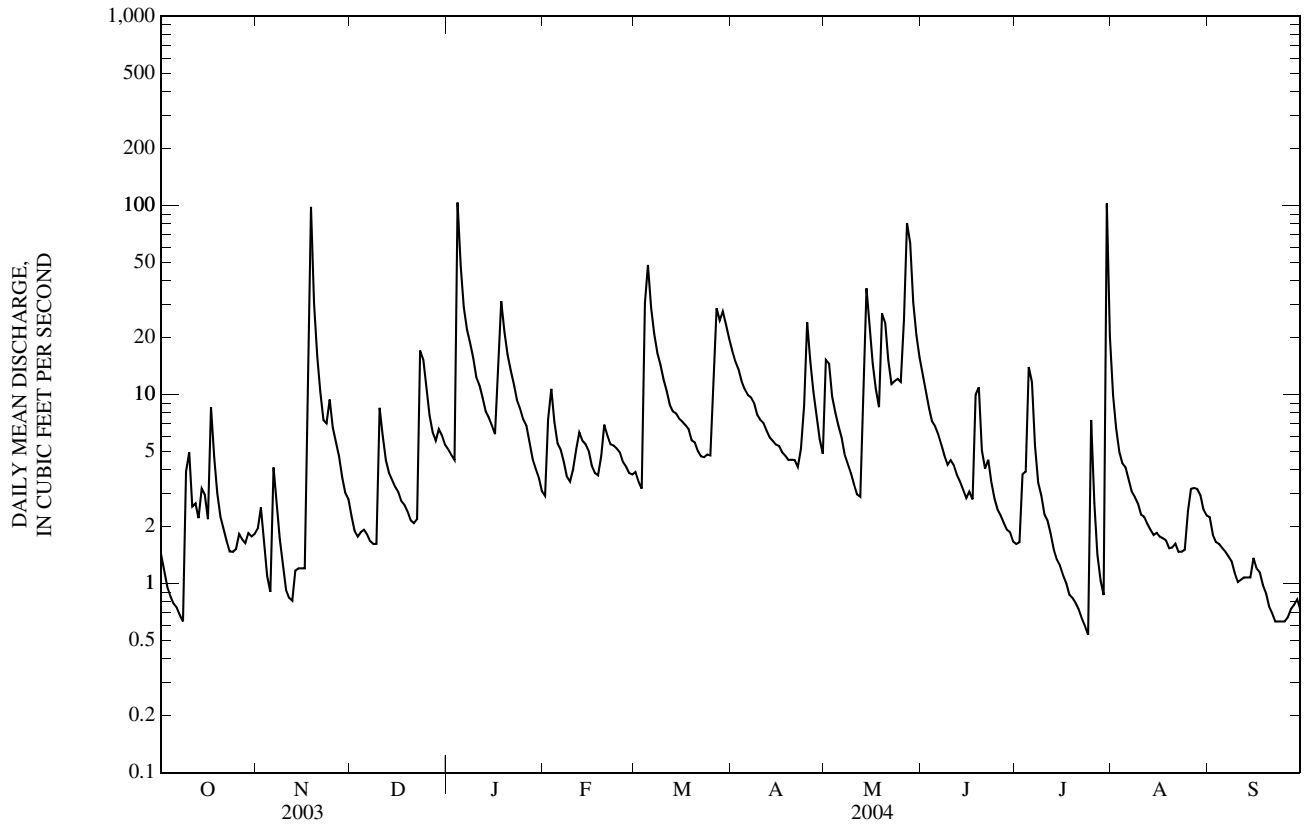
FOR 2004 WATER YEAR

WATER YEARS 1997 - 2004

ANNUAL MEAN	5.91	7.55	5.69
HIGHEST ANNUAL MEAN			9.20
LOWEST ANNUAL MEAN			2.61
HIGHEST DAILY MEAN	98	Nov 18	104
LOWEST DAILY MEAN	0.33	Aug 29	0.54
ANNUAL SEVEN-DAY MINIMUM	0.37	Aug 23	0.66
MAXIMUM PEAK FLOW	---		600 ^a
MAXIMUM PEAK STAGE	---		9.38
INSTANTANEOUS LOW FLOW	---		0.53
ANNUAL RUNOFF (INCHES)	10.54	13.48	10.15
10 PERCENT EXCEEDS	15	16	14
50 PERCENT EXCEEDS	2.3	4.1	1.9
90 PERCENT EXCEEDS	0.65	1.1	0.65

^a From rating extended above 305 ft³/s.

07019090 WILLIAMS CREEK NEAR PEERLESS PARK, MO—Continued



07019090 WILLIAMS CREEK NEAR PEERLESS PARK, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)	
NOV 17...	2134	Environmental	41	12	8.8	93	7.2	109	16.1	85	27.0	4.20	
DEC 16...	0945	Environmental	3	16	10.2	94	7.3	509	11.1	--	--	11.0	
FEB 10...	0920	Environmental	4	10	11.3	101	7.5	778	10.3	240	75.0	12.0	
MAR 04...	1108	Environmental	28	6.4	9.7	91	7.5	513	10.9	140	46.0	7.20	
MAY 25...	0730	Environmental	9.5	33	8.7	86	7.0	474	13.8	190	63.0	8.60	
AUG 03...	0800	Environmental	5.1	48	8.3	84	6.8	405	14.9	170	53.9	8.02	
AUG 03...	0801	Replicate	--	--	--	--	--	--	--	170	53.6	7.97	
Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., field, mg/L (00450)	Carbonate, wat unfltrd incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite + nitrate water, unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
NOV 17...	89	94	115	<1	--	1,770	4.4	--	0.04	--	0.660	--	0.02
DEC 16...	178	182	222	<1	45.0	7	0.30	--	0.02	--	2.20	--	<0.01
FEB 10...	174	176	215	<1	120	<1	0.20	--	0.01	--	1.70	--	<0.01
MAR 04...	100	100	122	<1	--	1,260	2.8	--	0.25	--	1.20	--	0.04
MAY 25...	157	157	191	<1	--	11	0.30	--	0.01	--	0.940	--	<0.01
AUG 03...	143	145	177	<1	--	<10	0.16	<0.04	--	1.32	--	<0.008	--
AUG 03...	--	--	--	--	--	<10	0.17	<0.04	--	1.32	--	<0.008	--
Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic, water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium, water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
NOV 17...	--	0.330	1.00	22	2,300k	12,000	8,600	9	<1	<1	<1.0	<1.0	2.9
DEC 16...	--	0.170	0.19	8	490	550	115	<3	<1	<1	<1.0	2.3	<1.0
FEB 10...	--	0.100	0.12	<5	12k	12k	25k	<3	<1	<1	<1.0	1.8	1.1
MAR 04...	--	0.280	0.80	16	2,270k	5,200k	2,930k	1,140	2	<1	<1.0	1.5	4.5
MAY 25...	--	0.100	0.12	6	2,200k	>600a	>1,000a	<3	<1	<1	<1.0	<1.0	<1.0
AUG 03...	0.12	--	0.14	<10	740	880	940	E1n	0.5	<0.06	<0.04	E.6n	1.1
AUG 03...	0.12	--	0.14	<10	620	820	1,040	Mn	0.5	<0.06	<0.04	E.6n	1.0

07019090 WILLIAMS CREEK NEAR PEERLESS PARK, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
NOV 17...	<2m	Mt	<1.6	<0.02	Mt	<1	<0.02	<1	<2	<1	<1	<1m	<2m
DEC 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	Mmn	Mt	E.5t	<0.02	Mt	<1	<0.02	<1	<2	Mt	Mt	<1m	<2m
MAY 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
OCT 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
NOV 17...	<2
DEC 16...	--
FEB 10...	--
MAR 04...	Mt
MAY 25...	--
AUG 03...	--
OCT 03...	--

Remark codes used in this table:

- > -- Greater than
- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

Value qualifier codes used in this table:

- a -- Value extrapolated at high end
- k -- Counts outside acceptable range
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

07019120 FISHPOT CREEK AT VALLEY PARK, MO

LOCATION.--Lat 38°33'06", long 90°30'41", in NE ¼ NE ¼ SE ¼ sec.13, T.44 N., R.4 E., St. Louis County, Hydrologic Unit 07140102, on right downstream abutment of Hanna Road bridge, 4.4 mi west of Interstate 270, 1.0 mi north of Interstate 44, and 1.7 mi upstream of confluence of Meramec River.

DRAINAGE AREA.--9.58 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1996 to current year. Annual peaks only for 1972-1974 water years published in WRD MO 1974.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 422.02 ft above National Geodetic Vertical Datum of 1929. Prior to July 1996, at datum 420.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 11, 1979 reached a stage of 12.00 ft, former datum, discharge 6,200 ft³/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.02	2.6	0.20	0.16	e0.11	0.17	0.60	49	2.6	0.00	1.2	0.00
2	e0.01	0.40	0.14	0.16	e23	0.11	0.47	1.1	1.4	2.1	0.60	0.00
3	e0.00	0.22	0.14	0.13	e3.2	0.35	0.39	0.66	0.98	2.8	0.40	0.00
4	e0.00	0.14	0.28	349	e0.82	73	0.31	0.56	0.77	0.94	0.34	0.00
5	e0.00	0.19	0.27	3.3	e1.1	18	0.26	0.40	0.56	e435	0.26	0.00
6	e0.00	2.5	0.12	e1.0	e0.35	0.72	0.24	0.29	0.41	87	0.11	0.00
7	e0.00	0.35	0.04	e0.62	e0.22	0.28	0.21	0.23	0.27	2.2	0.05	0.00
8	e0.00	0.22	0.02	e0.41	e0.17	0.17	0.18	0.18	0.18	0.42	0.01	0.00
9	e6.5	0.14	0.16	0.35	e0.16	0.13	0.15	0.15	0.34	0.19	0.00	0.00
10	e0.19	0.08	7.9	0.33	e0.15	0.10	0.15	0.09	0.14	0.10	0.00	0.00
11	e0.01	0.04	0.67	0.33	e0.19	0.07	0.18	0.05	0.09	0.06	0.00	0.00
12	e0.00	0.02	0.47	0.32	e0.35	0.07	0.12	0.03	0.07	0.03	0.00	0.00
13	e0.01	0.01	0.38	0.29	e0.30	0.06	0.09	68	0.08	0.01	0.00	0.00
14	e0.13	0.00	0.35	0.29	0.20	0.07	0.10	45	0.32	0.00	0.00	0.00
15	e0.03	0.04	0.29	0.29	0.17	0.05	0.09	0.58	0.27	0.00	0.00	0.00
16	e0.02	0.00	0.30	0.26	0.16	0.05	0.08	0.26	0.32	0.00	0.00	0.00
17	e0.02	e187	0.28	65	0.14	0.04	0.07	0.17	0.27	0.00	0.00	0.00
18	e0.01	e451	0.27	4.8	0.14	0.04	0.04	4.3	45	0.00	0.00	0.00
19	e0.00	4.2	0.21	e0.61	0.16	0.03	0.01	131	1.9	0.00	0.00	0.00
20	e0.00	2.0	0.15	e0.36	0.19	0.03	0.01	0.67	0.44	0.00	0.24	0.00
21	e0.00	1.5	0.11	e0.29	0.20	0.03	0.03	0.30	0.30	0.00	0.01	0.00
22	e0.00	0.98	0.21	0.27	0.21	0.03	0.04	0.18	0.26	0.00	0.00	0.00
23	e0.00	13	43	0.25	0.20	0.03	0.29	8.1	0.08	0.00	2.3	0.00
24	e0.00	1.5	0.63	0.21	0.19	0.03	3.6	0.98	0.04	0.00	0.89	0.00
25	e0.11	0.74	0.36	0.19	0.17	0.07	1.1	105	0.02	73	80	0.00
26	e0.03	0.57	0.25	e0.17	0.16	197	0.47	e478	0.01	4.6	5.8	0.00
27	e0.02	0.45	0.21	e0.14	0.15	4.7	0.37	e321	0.00	2.4	0.20	0.00
28	0.00	0.41	0.21	e0.13	0.14	17	0.31	46	0.00	1.3	0.02	0.00
29	0.00	0.37	0.30	e0.12	0.14	1.9	0.23	6.3	0.00	0.56	0.01	0.00
30	0.00	0.32	0.17	e0.12	---	1.2	52	9.6	0.00	e496	0.00	0.00
31	0.00	---	0.16	e0.11	---	0.78	---	5.6	---	4.7	0.00	---
MEAN	0.23	22.4	1.88	13.9	1.13	10.2	2.07	41.4	1.90	35.9	2.98	0.00
MAX	6.5	451	43	349	23	197	52	478	45	496	80	0.00
MIN	0.00	0.00	0.02	0.11	0.11	0.03	0.01	0.03	0.00	0.00	0.00	0.00
IN.	0.03	2.61	0.23	1.67	0.13	1.23	0.24	4.99	0.22	4.32	0.36	0.00

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

MEAN	2.38	7.13	2.03	5.94	9.25	6.60	3.57	14.7	11.9	7.61	2.05	6.16
MAX	8.26	22.4	9.44	13.9	19.0	21.5	6.23	41.4	31.5	35.9	4.95	32.6
(WY)	(2002)	(2004)	(2002)	(2004)	(2000)	(1998)	(1998)	(2004)	(2000)	(2004)	(1998)	(2003)
MIN	0.23	0.01	0.16	0.06	0.37	0.78	0.26	1.48	0.80	0.83	0.02	0.00
(WY)	(2004)	(2003)	(1999)	(2003)	(2003)	(2000)	(2000)	(1997)	(1999)	(1997)	(2003)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

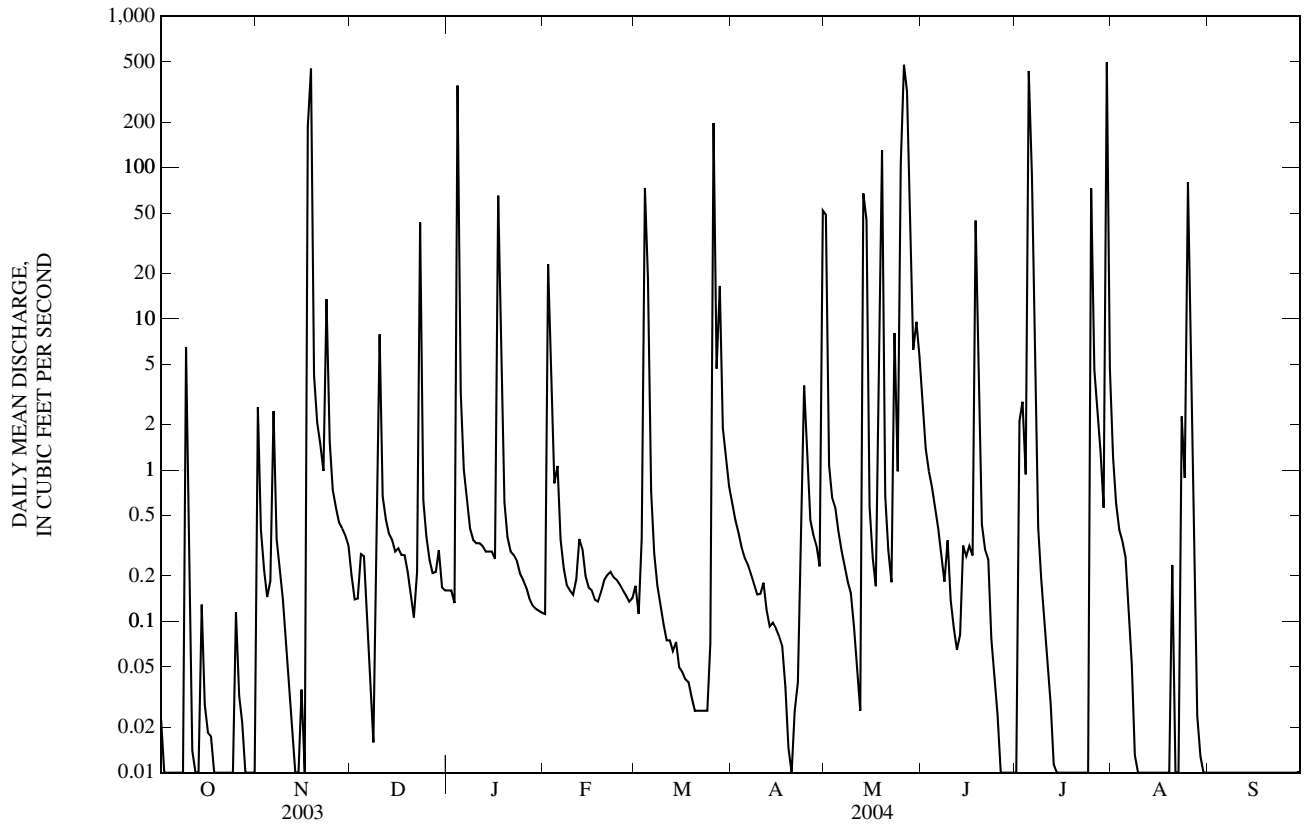
FOR 2004 WATER YEAR

WATER YEARS 1996 - 2004

ANNUAL MEAN	7.21	11.3	6.49
HIGHEST ANNUAL MEAN			11.3
LOWEST ANNUAL MEAN			3.38
HIGHEST DAILY MEAN	817	Sep 2	817
LOWEST DAILY MEAN	0.00	Many Days	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	At Times	0.00
MAXIMUM PEAK FLOW	---	Unknown	Unknown
MAXIMUM PEAK STAGE	---	9.92	10.08
INSTANTANEOUS LOW FLOW	---	0.00	0.00
ANNUAL RUNOFF (INCHES)	10.21	16.02	9.20
10 PERCENT EXCEEDS	4.1	4.6	4.7
50 PERCENT EXCEEDS	0.14	0.17	0.20
90 PERCENT EXCEEDS	0.00	0.00	0.00

e Estimated

07019120 FISHPOT CREEK AT VALLEY PARK, MO—Continued



07019120 FISHPOT CREEK AT VALLEY PARK, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1996 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
OCT 09...	1329	Environmental	--e	7.2	7.7	83	7.2	186	18.0	60	19.0	3.00
DEC 15...	1230	Environmental	0.29	20	11.3	90	7.2	632	4.9	--	--	10.0
FEB 10...	1005	Environmental	0.16	9.1	12.2	89	7.5	1,800	2.0	330	105	16.0
MAR 04...	0906	Environmental	41	5.9	10.5	92	7.5	678	8.6	100	32.0	5.20
JUN 01...	1400	Blank	--	--	--	--	--	--	--	1	0.32	0.07
JUN 01...	1415	Environmental	2.3	6.2	7.3	87	7.7	551	22.6	180	58.0	8.70
AUG 03...	1100	Environmental	0.37	13	4.5	55	7.3	447	24.4	160	53.7	7.35

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., field, mg/L (00450)	Carbonate, wat unfltrd incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite + nitrate water, unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	55	55	67	<1	--	958	2.2	--	0.06	--	0.730	--	0.04
DEC 15...	160	159	194	<1	69.0	<1	0.20	--	0.02	--	0.560	--	<0.01
FEB 10...	155	153	186	<1	430	21	0.30	--	0.03	--	0.990	--	<0.01
MAR 04...	99	100	122	<1	--	667	1.4	--	0.16	--	1.40	--	0.05
JUN 01...	--	--	--	--	--	1	<0.20	--	<0.01	--	<0.020	--	<0.01
JUN 01...	150	152	185	<1	--	4	<0.20	--	0.02	--	0.820	--	<0.01
AUG 03...	148	149	182	<1	--	<10	0.15	<0.04	--	0.73	--	<0.008	--

Date	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Ortho-phosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic, water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium, water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.290	0.94	23	31,000	28,500	39,500	4	1	<1	<1.0	2.0	2.9
DEC 15...	--	0.110	0.14	<5	6k	19k	12k	<3	<1	<1	<1.0	1.5	<1.0
FEB 10...	--	0.090	0.16	6	7k	12k	25k	<3	1	<1	<1.0	1.6	2.0
MAR 04...	--	0.240	0.55	15	3,600k	22,500	5,200k	509	2	<1	<1.0	1.3	3.2
JUN 01...	--	<0.010	<0.02	<5	--	--	--	<3	<1	<1	<1.0	<1.0	<1.0
JUN 01...	--	0.110	0.14	8	33k	120	80	<3	1	<1	<1.0	<1.0	1.2
AUG 03...	0.14	--	0.16	<10	240	500	260	2	1	<0.06	E.02n	<0.8	1.4

07019120 FISHPOT CREEK AT VALLEY PARK, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	Mt	<3.4	<0.02	E1n	<1	E.01n	<2	<2	Mt	<1	<1m	<2m
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	Mmt	Mn	E.2t	<0.02	E1n	<1	<0.02	M	<2	Mt	<1	Mm	<2m
JUN 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 15...	--
FEB 10...	--
MAR 04...	Mt
JUN 01...	--
JUN 01...	--
AUG 03...	--

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
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

Null value qualifier codes used in this table:
 e -- Required equipment not functional/available

07019150 GRAND GLAIZE CREEK NEAR MANCHESTER, MO

LOCATION.--Lat 38°35'34", long 90°29'35", in NE ¼ SE ¼ SE ¼ sec.31, T.45 N., R.5 E., St. Louis County, Hydrologic Unit 07140102, on left downstream abutment of Weidmann Road bridge, 0.15 mi south of Highway 100, 1.1 mi west of Interstate 270, and 6.9 mi upstream of confluence of Meramec River.

DRAINAGE AREA.--5.09 mi².

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

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

REMARKS.--No estimated daily discharges. Records fair except for discharges above 900 ft³/s and below 0.50 ft³/s, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.00	14	0.41	0.30	0.62	0.90	1.9	46	4.3	0.18	0.92	0.13
2	0.18	1.7	0.70	0.30	38	0.44	1.6	4.6	1.2	5.2	0.55	0.13
3	0.15	0.66	1.8	0.33	7.3	6.2	1.5	1.8	0.87	6.8	0.67	0.12
4	0.15	0.75	1.1	151	1.7	62	1.4	2.2	0.75	0.94	2.8	0.11
5	0.14	5.2	2.0	6.1	2.3	16	1.4	1.6	0.67	207	1.5	0.13
6	0.11	12	0.50	1.6	1.3	2.5	1.3	0.82	0.63	29	0.33	0.14
7	0.12	0.56	0.45	1.0	0.90	1.6	1.4	0.62	0.57	3.4	0.21	0.14
8	0.11	0.26	0.49	0.91	1.1	1.3	1.3	0.49	0.47	1.9	0.18	0.13
9	38	0.23	3.2	0.71	3.0	1.2	1.1	0.47	4.7	1.5	0.16	0.10
10	1.1	0.22	17	0.50	4.4	1.0	2.6	0.65	2.1	1.1	0.15	0.08
11	0.22	0.29	0.69	0.42	7.1	0.91	2.1	0.52	1.1	12	0.11	0.08
12	0.33	0.30	0.44	0.41	2.2	0.88	1.0	0.44	2.1	0.93	0.10	0.08
13	0.28	0.20	0.75	0.33	1.3	0.87	0.92	44	0.67	0.51	0.09	0.07
14	8.6	0.55	1.0	0.29	1.5	1.6	0.90	54	0.37	0.36	0.08	0.07
15	0.26	2.1	1.1	0.26	1.1	0.73	0.91	2.9	0.28	0.26	0.09	0.16
16	10	0.46	1.1	0.72	0.75	1.9	0.95	1.1	1.3	0.22	0.09	2.8
17	26	79	0.35	59	1.0	1.3	0.82	0.71	0.43	0.21	0.09	1.3
18	0.33	175	0.90	12	1.6	0.91	0.74	8.5	24	0.18	0.09	0.16
19	0.13	6.9	0.57	2.5	2.6	0.59	0.74	79	2.3	0.59	1.1	1.1
20	0.10	2.4	0.29	1.6	2.4	0.59	0.71	4.3	0.52	0.21	9.4	0.13
21	0.12	1.3	0.23	1.3	1.3	0.62	1.1	2.6	0.53	0.12	0.62	0.03
22	0.12	0.85	8.0	1.0	0.96	0.65	2.0	2.0	1.2	0.07	0.22	0.02
23	0.19	18	30	0.90	0.95	0.83	5.8	4.7	0.30	0.05	7.8	0.08
24	0.13	2.4	0.98	0.95	0.93	0.78	19	2.6	0.20	1.3	8.3	0.10
25	2.5	0.88	0.50	1.4	0.74	5.5	2.2	69	0.15	27	40	0.07
26	0.47	0.82	0.34	1.9	0.66	130	0.66	201	0.13	0.79	5.1	0.06
27	0.14	0.60	0.31	1.4	0.60	11	0.52	125	0.13	0.33	1.1	0.06
28	2.1	0.44	1.2	0.93	0.55	20	0.52	14	0.29	0.22	0.47	0.10
29	0.23	0.58	2.0	0.63	0.77	5.2	0.66	3.8	0.23	0.20	0.29	0.15
30	0.12	0.51	0.36	0.39	---	3.0	56	8.0	0.18	164	0.21	0.19
31	0.11	---	0.37	0.33	---	2.3	---	3.7	---	3.2	0.15	---
MEAN	3.02	11.0	2.55	8.11	3.09	9.14	3.79	22.3	1.76	15.2	2.68	0.27
MAX	38	175	30	151	38	130	56	201	24	207	40	2.8
MIN	0.10	0.20	0.23	0.26	0.55	0.44	0.52	0.44	0.13	0.05	0.08	0.02
IN.	0.68	2.41	0.58	1.84	0.66	2.07	0.83	5.05	0.38	3.43	0.61	0.06

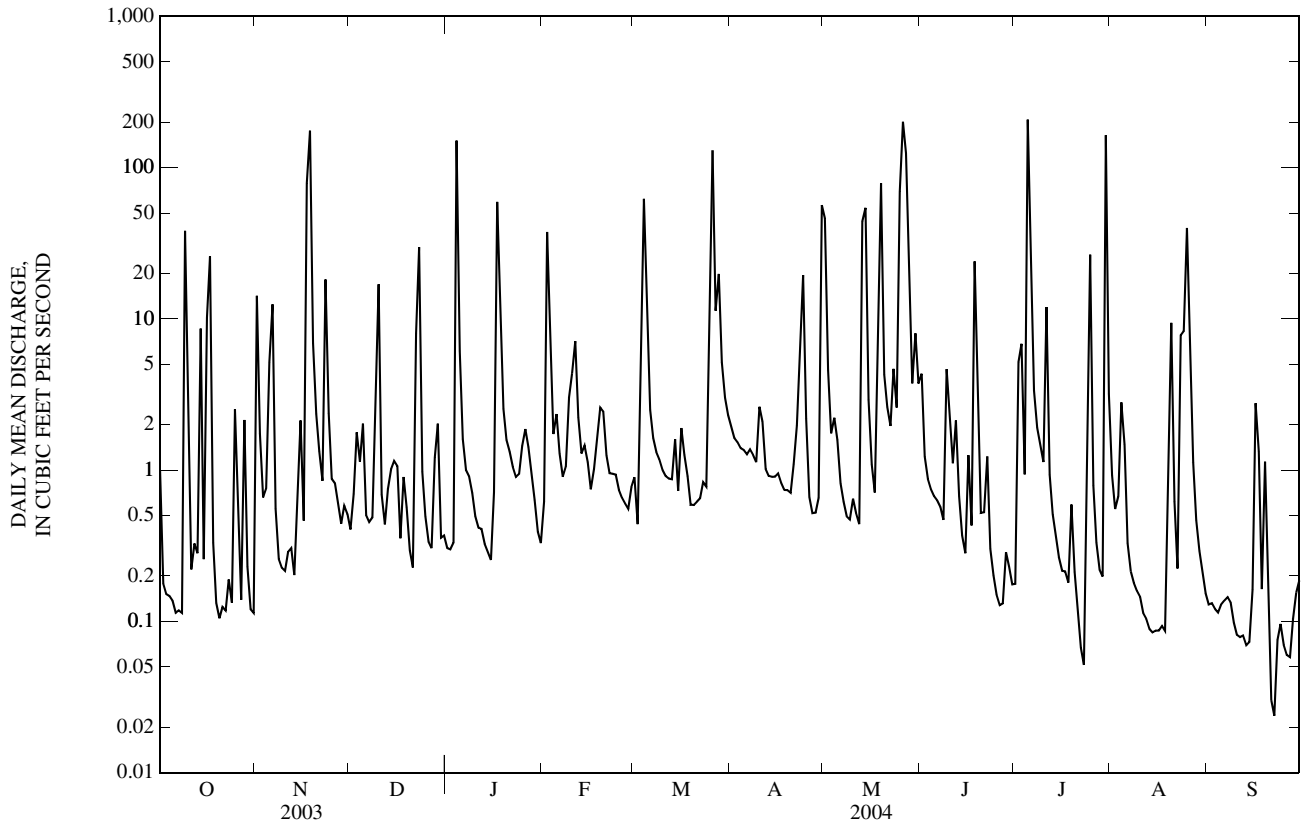
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	3.43	4.06	2.46	5.37	6.38	7.69	5.41	11.6	10.0	4.78	2.72	3.09
MAX	6.39	11.0	7.17	13.0	12.6	19.9	9.61	22.3	27.7	15.2	5.92	14.0
(WY)	(2003)	(2004)	(2002)	(1999)	(1999)	(1998)	(1999)	(2004)	(2000)	(2004)	(1998)	(2003)
MIN	1.39	1.03	0.38	0.77	1.43	2.96	2.92	3.61	1.76	0.43	0.78	0.27
(WY)	(2000)	(2000)	(1999)	(2003)	(2002)	(2001)	(2000)	(1998)	(2004)	(1997)	(2001)	(2004)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	5.47	6.95	5.73
HIGHEST ANNUAL MEAN			7.66
LOWEST ANNUAL MEAN			3.41
HIGHEST DAILY MEAN	283	207	562
LOWEST DAILY MEAN	0.01	0.02	0.00
ANNUAL SEVEN-DAY MINIMUM	0.06	0.06	0.00
MAXIMUM PEAK FLOW	---	Unknown	Unknown
MAXIMUM PEAK STAGE	---	8.43	9.37
INSTANTANEOUS LOW FLOW	---	0.01	0.00
ANNUAL RUNOFF (INCHES)	14.59	18.60	15.29
10 PERCENT EXCEEDS	11	9.6	11
50 PERCENT EXCEEDS	0.66	0.82	0.58
90 PERCENT EXCEEDS	0.09	0.13	0.12

07019150 GRAND GLAIZE CREEK NEAR MANCHESTER, MO—Continued



07019175 SUGAR CREEK AT KIRKWOOD, MO

LOCATION.--Lat 38°34'36", long 90°27'52", in SE ¼ SE ¼ SW ¼ sec.4, T.44 N., R.5 E., St. Louis County, Hydrologic Unit 07140102, gage attached to left upstream abutment of Barrett Station Road bridge, 2.3 mi north of Interstate 44, 1.1 mi west of Interstate 270, and 4.7 mi upstream from confluence of Meramec River.

DRAINAGE AREA.--5.08 mi².

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

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

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.87	6.6	0.81	0.66	0.96	0.77	2.2	33	3.7	0.59	1.8	0.55
2	0.47	0.71	0.96	0.67	22	0.60	1.9	3.0	2.1	1.9	1.2	0.82
3	0.42	0.62	1.3	0.70	3.7	3.7	1.7	1.6	1.8	10	1.3	0.57
4	0.65	0.71	1.4	247	1.5	69	1.5	1.3	1.9	1.2	1.8	0.43
5	0.49	1.6	1.3	6.8	1.9	25	1.5	1.5	1.5	182	1.3	0.42
6	0.36	8.2	0.75	3.4	1.8	4.6	1.4	1.1	1.4	105	0.77	0.57
7	0.29	1.1	0.71	2.6	1.6	3.2	1.3	0.82	1.3	2.5	0.62	0.40
8	0.30	0.75	0.65	2.4	1.6	2.8	1.3	0.72	1.2	1.6	0.56	0.43
9	27	0.67	2.1	2.1	2.4	2.5	1.2	0.63	4.0	1.2	0.50	0.57
10	0.69	0.66	17	1.8	2.4	2.3	1.4	0.56	2.2	0.99	0.48	0.57
11	0.27	0.72	1.5	1.8	4.4	2.1	2.0	0.52	1.6	3.9	0.44	0.51
12	0.60	0.72	0.93	1.8	1.9	1.9	1.0	0.48	3.5	1.1	0.45	0.49
13	0.55	0.64	0.82	1.6	1.6	1.9	0.91	60	1.4	0.89	0.44	0.60
14	1.3	0.65	0.92	1.7	1.6	2.4	0.90	45	0.97	0.82	0.39	0.42
15	0.39	1.4	0.94	1.9	1.4	1.9	0.85	3.9	0.90	0.65	0.39	0.41
16	2.5	0.65	1.7	2.0	0.99	2.4	0.90	2.1	4.9	0.59	0.39	0.47
17	19	92	1.1	44	0.97	1.9	0.84	2.0	1.2	2.2	0.41	0.34
18	0.79	306	1.8	8.4	1.3	1.9	0.73	4.4	28	0.69	0.48	0.27
19	0.53	3.3	1.4	e3.3	1.5	1.7	0.67	101	2.3	0.57	0.71	0.24
20	0.48	1.8	0.96	2.2	1.3	1.6	0.70	3.9	1.2	0.51	5.8	0.21
21	0.38	1.3	0.66	1.9	0.79	1.4	0.82	2.2	0.98	0.53	1.1	0.21
22	0.28	1.1	2.3	1.7	0.75	1.4	0.95	1.5	0.96	0.59	0.87	0.19
23	0.25	7.4	24	1.5	0.73	1.4	4.6	2.3	0.79	0.60	7.0	0.21
24	0.21	1.7	1.7	1.4	0.74	1.5	35	1.7	0.69	0.78	5.0	0.20
25	1.1	1.2	1.4	1.3	0.67	2.7	6.2	73	0.60	27	61	0.18
26	0.41	1.0	1.2	e2.2	0.62	118	1.7	231	0.59	1.4	7.7	0.17
27	0.67	1.1	1.0	e1.7	0.58	16	1.2	164	0.61	1.1	1.3	0.20
28	2.0	1.0	1.5	e1.0	0.65	14	0.94	22	0.60	0.68	0.97	0.21
29	1.1	0.93	3.1	e0.88	0.66	5.3	0.89	4.7	0.56	0.63	0.77	0.24
30	0.87	1.0	0.89	e0.77	---	3.3	22	4.9	0.60	272	0.61	0.20
31	0.55	---	0.74	e0.70	---	2.5	---	3.3	---	3.7	0.57	---
MEAN	2.12	14.9	2.50	11.4	2.17	9.73	3.31	25.1	2.47	20.3	3.46	0.38
MAX	27	306	24	247	22	118	35	231	28	272	61	0.82
MIN	0.21	0.62	0.65	0.66	0.58	0.60	0.67	0.48	0.56	0.51	0.39	0.17
IN.	0.48	3.27	0.57	2.58	0.46	2.21	0.73	5.70	0.54	4.60	0.78	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	2.32	4.01	2.30	5.10	5.64	6.60	4.42	11.5	10.4	5.66	2.02	2.92
MAX	5.06	14.9	5.91	11.4	16.2	19.4	7.97	25.1	19.2	20.3	3.64	17.5
(WY)	(2002)	(2004)	(2002)	(2004)	(1999)	(1998)	(1998)	(2004)	(2000)	(2004)	(2000)	(2003)
MIN	1.19	0.71	0.75	0.83	1.60	1.89	1.43	2.31	2.47	0.27	0.40	0.20
(WY)	(1998)	(2000)	(2001)	(2003)	(2002)	(2001)	(2000)	(1998)	(2004)	(2002)	(2001)	(1999)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

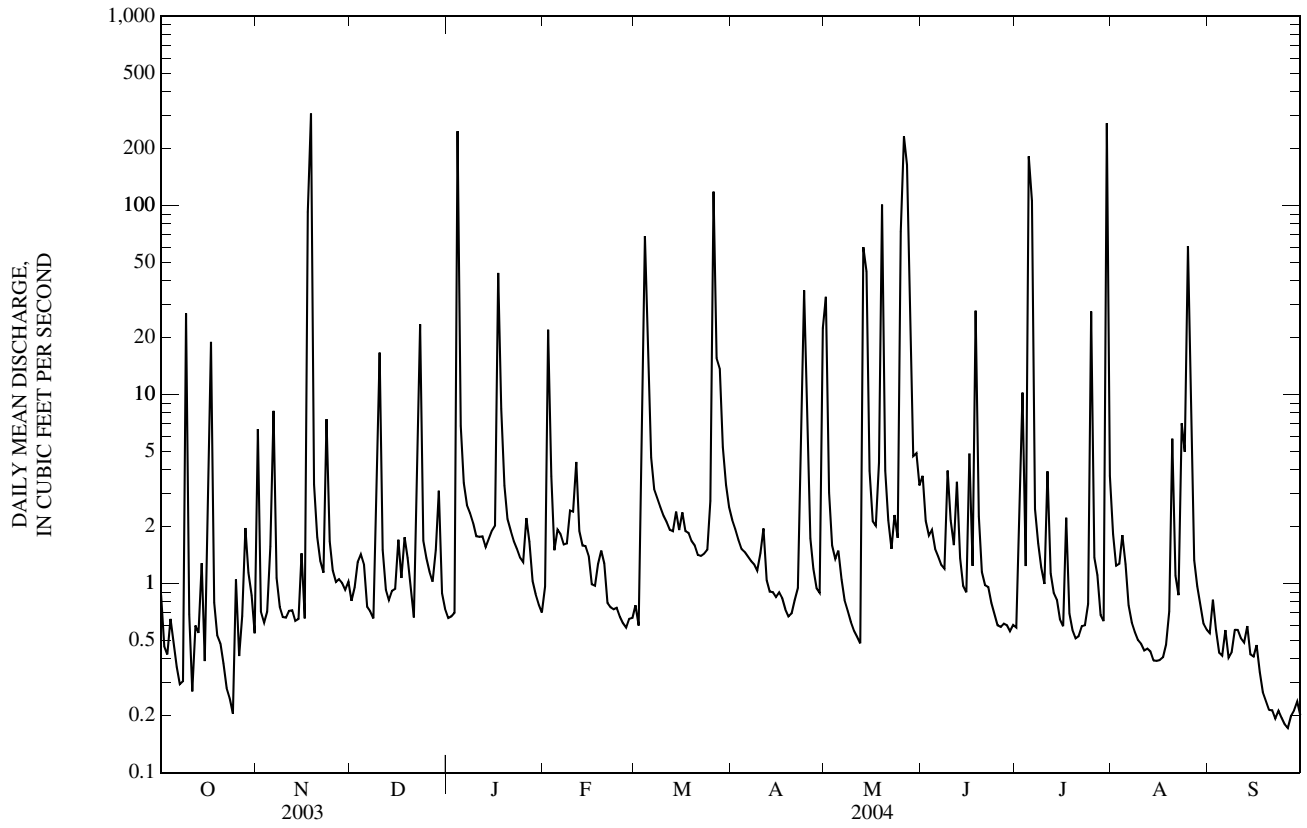
FOR 2004 WATER YEAR

WATER YEARS 1997 - 2004

ANNUAL MEAN	6.08	8.21	5.30
HIGHEST ANNUAL MEAN			8.21
LOWEST ANNUAL MEAN			2.46
HIGHEST DAILY MEAN	380	Sep 2	306
LOWEST DAILY MEAN	0.07	Aug 24-26	0.17
ANNUAL SEVEN-DAY MINIMUM	0.10	Aug 22	0.19
MAXIMUM PEAK FLOW	---	Unknown	Unknown
MAXIMUM PEAK STAGE	---	17.34	17.50
INSTANTANEOUS LOW FLOW	---	0.13	0.01
ANNUAL RUNOFF (INCHES)	16.26	22.00	14.18
10 PERCENT EXCEEDS	8.3	6.9	6.7
50 PERCENT EXCEEDS	0.90	1.2	0.79
90 PERCENT EXCEEDS	0.32	0.44	0.25

e Estimated

07019175 SUGAR CREEK AT KIRKWOOD, MO—Continued



07019185 GRAND GLAIZE CREEK NEAR VALLEY PARK, MO

LOCATION.--Lat 38°33'58", long 90°28'19", in NW ¼ NW ¼ SW ¼ sec.9, T.44 N., R.5 E., St. Louis County, Hydrologic Unit 07140102, on right upstream abutment of Quinette Road bridge, 1.7 mi north of Interstate 44, 1.8 mi west of Interstate 270, and 3.46 mi upstream of confluence of Meramec River.

DRAINAGE AREA.--21.8 mi².

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Water-discharge records fair except for estimated daily discharges and discharges below 1 ft³/s and above 3,000 ft³/s, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	54	3.8	4.2	6.0	7.5	11	166	18	2.2	e11	1.5
2	2.5	11	3.9	5.5	133	4.0	10	21	8.3	12	6.8	2.1
3	1.7	3.1	7.2	5.0	44	27	8.8	9.4	6.8	37	6.4	1.7
4	1.9	4.1	16	905	17	281	7.7	7.8	6.0	7.3	9.3	1.4
5	1.7	9.6	16	48	14	141	7.6	9.1	5.3	524	12	1.6
6	1.8	58	8.0	17	13	21	7.2	4.5	4.9	593	4.2	2.0
7	2.3	8.3	4.6	11	9.1	13	6.9	3.4	4.3	13	3.3	2.2
8	2.4	4.6	4.1	9.2	8.5	11	6.5	2.8	3.9	7.0	2.6	1.4
9	166	3.7	20	8.1	16	12	5.8	2.4	15	5.7	2.3	1.7
10	16	3.2	117	6.6	22	10	6.6	2.1	8.3	3.7	2.4	1.9
11	6.8	3.0	9.5	6.2	29	10	12	2.6	6.4	25	2.6	2.0
12	6.3	3.4	3.7	7.0	18	10	4.3	2.1	12	4.1	3.3	1.9
13	6.7	4.1	3.6	6.9	11	9.3	4.0	234	5.4	2.2	2.6	2.0
14	27	5.2	4.8	6.4	11	14	4.1	255	3.2	1.7	2.4	2.6
15	5.4	13	4.6	6.2	10	9.2	4.2	23	3.0	1.6	2.7	2.7
16	9.5	4.2	7.1	6.8	8.1	15	4.3	12	11	1.7	2.6	6.9
17	132	242	3.5	261	8.2	10	3.9	8.1	4.5	5.3	3.0	4.3
18	9.2	1,250	7.0	68	11	11	3.6	26	112	1.8	4.1	2.8
19	6.0	52	4.1	21	16	7.7	3.3	389	13	1.5	2.8	3.1
20	5.2	16	3.7	15	19	7.1	4.4	24	4.8	1.8	31	2.7
21	4.4	7.7	3.3	13	9.7	6.4	5.4	13	3.6	1.6	4.5	1.5
22	4.3	5.4	9.3	11	7.5	6.6	5.8	7.8	5.2	1.7	1.9	1.2
23	4.6	75	180	9.8	8.0	7.4	22	12	3.0	1.6	31	1.3
24	4.7	25	13	9.3	6.6	8.2	108	12	1.8	e2.3	24	1.7
25	12	9.1	6.1	10	6.4	21	27	278	1.6	e60	191	1.8
26	11	6.1	4.6	10	6.5	485	6.5	831	1.4	e6.8	46	1.6
27	4.5	5.3	4.4	9.3	6.4	60	4.0	591	1.4	3.4	6.4	1.4
28	15	4.3	9.1	7.9	6.1	75	3.2	174	2.0	2.0	3.4	1.4
29	4.9	5.5	28	7.7	5.8	30	3.3	22	1.8	2.1	2.4	1.3
30	3.9	4.7	6.0	6.3	---	18	124	26	1.8	e850	1.8	1.2
31	4.3	---	4.9	5.4	---	13	---	17	---	e26	1.8	---
MEAN	15.9	63.4	16.8	49.2	16.8	43.9	14.5	103	9.32	71.3	13.9	2.10
MAX	166	1,250	180	905	133	485	124	831	112	850	191	6.9
MIN	1.7	3.0	3.3	4.2	5.8	4.0	3.2	2.1	1.4	1.5	1.8	1.2
IN.	0.84	3.24	0.89	2.60	0.83	2.32	0.74	5.44	0.48	3.77	0.74	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	2002	2004	2002	2004	1999	1998	1998	2004	1998	2004	1998	2003
MEAN	12.4	18.0	12.2	23.5	26.0	32.2	22.0	42.8	33.8	22.1	10.6	15.5
MAX	25.5	63.4	33.5	49.2	64.3	78.5	35.3	103	67.2	71.3	19.2	70.4
(WY)	(2002)	(2004)	(2002)	(2004)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(1998)	(2003)
MIN	5.23	3.68	4.52	4.35	10.8	11.1	5.64	12.5	8.40	2.80	2.01	2.10
(WY)	(2000)	(2000)	(2001)	(2003)	(2002)	(2001)	(2000)	(1998)	(1999)	(2002)	(2001)	(2004)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

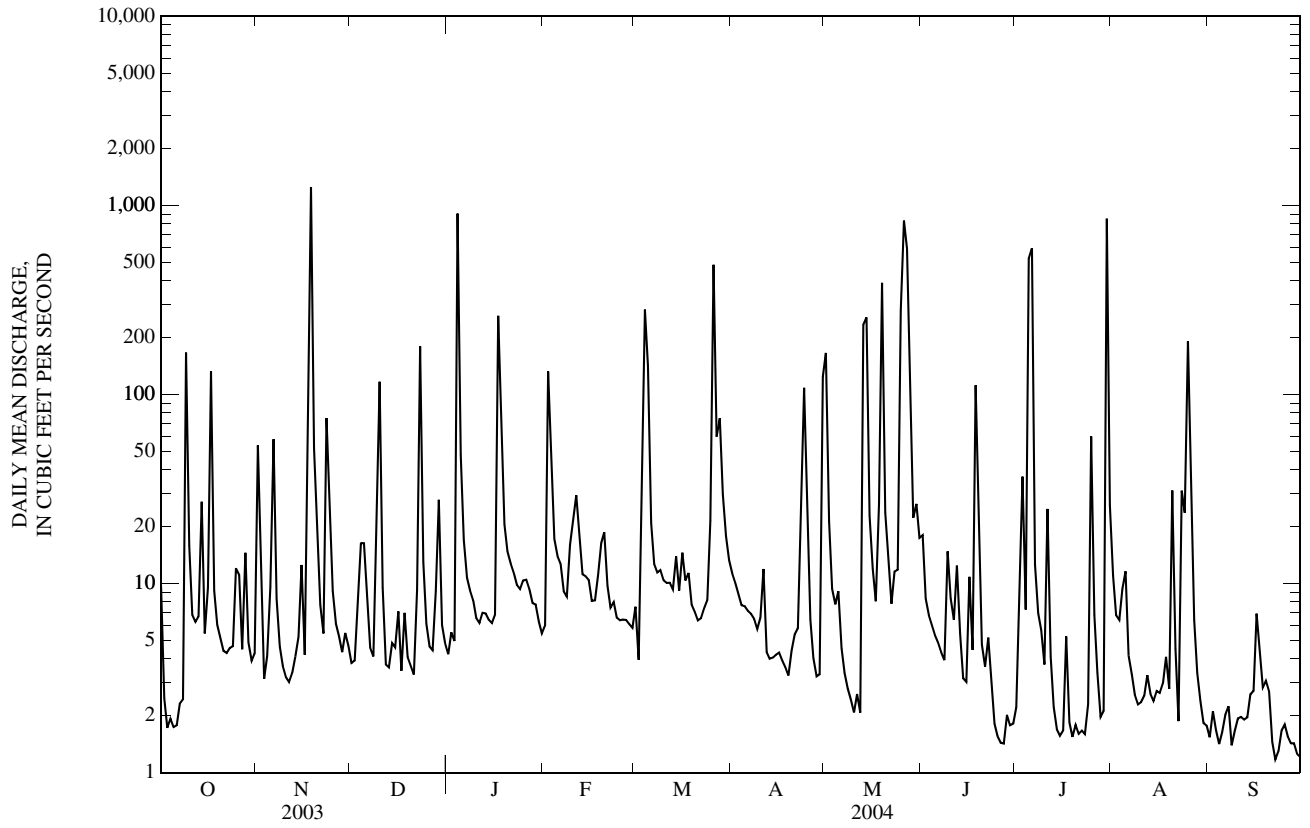
FOR 2004 WATER YEAR

WATER YEARS 1997 - 2004

ANNUAL MEAN	28.5	35.2	23.3
HIGHEST ANNUAL MEAN			35.2
LOWEST ANNUAL MEAN			11.4
HIGHEST DAILY MEAN	1,430	Sep 2	1,430
LOWEST DAILY MEAN	0.57	Aug 24	0.21
ANNUAL SEVEN-DAY MINIMUM	0.68	Aug 22	0.26
MAXIMUM PEAK FLOW	---	Unknown	Unknown
MAXIMUM PEAK STAGE	---	13.33	14.95
INSTANTANEOUS LOW FLOW	---	0.94	0.01
ANNUAL RUNOFF (INCHES)	17.74	22.00	14.49
10 PERCENT EXCEEDS	45	47	41
50 PERCENT EXCEEDS	5.4	6.6	4.4
90 PERCENT EXCEEDS	1.5	1.9	1.1

e Estimated

07019185 GRAND GLAIZE CREEK NEAR VALLEY PARK, MO—Continued



07019185 GRAND GLAIZE CREEK NEAR VALLEY PARK, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

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

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/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)
OCT 09...	1202	Environmental	509	7.8	7.3	77	7.5	405	17.3	170	47.0	12.0
DEC 15...	1400	Environmental	3.1	9.8	13.4	103	7.7	2,860	2.8	--	--	28.0
FEB 09...	1445	Environmental	9.7	7.8	17.7	128	7.8	2,680	1.4	530	152	37.0
MAR 04...	0859	Environmental	302	16	9.6	85	7.2	1,250	9.0	180	52.0	12.0
JUN 01...	1315	Environmental	14	9.1	6.9	78	7.6	898	20.1	270	79.0	18.0
AUG 03...	0920	Environmental	5.8	9.3	7.2	89	7.6	924	25.0	300	85.9	20.5

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	117	116	142	<1	--	1,400	2.3	--	0.10	--	0.630	--	0.03
DEC 15...	236	235	286	<1	690	6	0.40	--	0.09	--	0.680	--	0.01
FEB 09...	233	234	285	<1	1,460	16	0.60	--	0.36	--	0.830	--	0.03
MAR 04...	123	126	154	<1	--	741	1.8	--	0.23	--	0.830	--	0.03
JUN 01...	196	196	240	<1	--	120	0.90	--	0.05	--	0.740	--	0.01
AUG 03...	192	194	236	<1	--	<10	0.35	E.03n	--	0.57	--	E.006n	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.120	0.76	17	28,500	26,000	22,500	5	2	<1	<1.0	2.9	1.9
DEC 15...	--	0.050	0.09	11	23k	260	90	<3	2	<1	<1.0	2.5	3.2
FEB 09...	--	0.050	0.10	15	<2b	3k	8k	<3	4	<1	<1.0	2.4	4.4
MAR 04...	--	0.120	0.54	14	5,600	50,000	5,600	5	1	<1	<1.0	<1.0	1.3
JUN 01...	--	0.060	0.17	11	470	580	370	<3	1	<1	<1.0	<1.0	1.1
AUG 03...	0.07	--	0.11	<10	480	570	280	2	1.6	<0.06	0.09	<0.8	2.1

07019185 GRAND GLAIZE CREEK NEAR VALLEY PARK, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	Mt	<3.4	<0.02	E1n	<1	0.02	<2	<2	<2	<1	<1m	<2m
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	<2m	3	E.2t	<0.02	4	<1	<0.02	<1	<2	<1	<1	<1m	<2m
JUN 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 15...	--
FEB 09...	--
MAR 04...	Mt
JUN 01...	--
AUG 03...	--

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 extrapolated at low end
 k -- Counts outside acceptable range
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07019195 YARNELL CREEK AT FENTON, MO

LOCATION.--Lat 38°31'37", long 90°26'50", St. Louis County, Hydrologic Unit 07140102, on right downstream abutment of Fabick Drive bridge, 0.9 mi north of Highway 30, 1.05 mi south of Interstate 44, and 1.09 mi upstream from confluence of Meramec River.

DRAINAGE AREA.--2.71 mi².

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

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

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.69	4.4	0.32	0.30	0.72	0.55	1.6	17	1.5	0.56	1.1	0.47
2	0.36	0.47	0.32	0.33	18	0.51	1.5	1.8	0.73	e10	0.77	0.39
3	0.31	0.25	0.67	0.38	e4.9	3.4	1.4	0.90	0.66	e6.5	0.65	0.33
4	0.33	0.25	0.73	107	1.8	36	1.4	1.1	0.61	e1.0	0.81	0.32
5	0.32	0.89	1.1	5.6	2.2	16	1.3	1.1	0.60	e32	0.95	0.32
6	0.32	5.5	0.48	e2.0	2.3	2.1	1.4	0.73	0.60	e3.5	0.60	0.32
7	0.32	0.31	0.36	1.4	e1.5	1.3	1.3	0.60	0.57	e0.91	0.60	e0.30
8	0.29	0.24	0.32	1.3	1.3	1.1	1.3	0.57	0.56	0.83	0.57	e0.31
9	7.7	0.22	1.2	1.2	2.1	1.2	1.3	0.56	e2.0	0.73	0.56	e0.28
10	0.79	0.22	15	1.1	2.4	1.1	1.5	0.56	e0.96	0.73	0.56	e0.26
11	0.55	0.20	0.49	0.98	3.2	1.0	1.6	0.54	e0.65	1.0	0.52	e0.25
12	0.84	0.20	0.32	0.94	2.1	1.1	1.2	0.52	0.62	0.71	0.52	e0.23
13	0.62	0.20	0.31	0.92	1.4	1.1	1.2	38	0.56	0.68	0.50	e0.22
14	2.2	0.24	0.32	0.86	1.4	1.4	1.2	35	0.56	0.65	0.48	e0.29
15	0.37	1.2	0.41	0.93	1.3	0.94	1.2	2.2	e4.9	0.70	0.48	e0.23
16	2.6	0.54	0.64	0.88	1.3	1.3	1.2	1.0	e2.8	0.68	0.47	0.44
17	11	50	0.37	21	1.3	1.2	1.2	0.82	e0.64	0.71	0.56	e0.26
18	0.41	125	0.48	4.5	1.1	1.2	0.98	2.2	e51	0.71	0.57	e0.21
19	0.32	1.9	0.44	e1.6	0.99	1.1	0.94	42	e2.4	0.73	1.8	e0.19
20	0.34	0.71	0.41	0.83	0.92	0.79	0.91	2.1	e0.64	0.77	8.5	e0.19
21	0.43	0.49	0.39	0.76	0.71	0.78	1.2	1.00	e1.4	0.82	1.1	e0.18
22	0.50	0.42	2.6	0.62	0.64	0.81	1.7	0.71	e2.1	0.78	0.78	e0.19
23	0.62	7.5	15	0.56	0.65	0.87	4.0	8.4	e0.82	0.74	9.1	e0.18
24	0.78	0.85	0.75	0.54	0.60	0.99	40	1.6	e0.68	1.4	13	0.22
25	1.1	0.41	0.37	0.52	0.59	1.7	5.4	20	e0.61	26	31	e0.19
26	0.58	0.31	0.32	0.52	0.58	15	1.4	59	e0.57	1.0	9.5	e0.23
27	0.69	0.27	0.29	0.52	0.56	8.5	1.0	93	0.56	0.76	1.7	e0.19
28	1.3	0.28	0.97	0.53	0.52	8.5	0.84	11	e0.93	0.72	1.1	e0.18
29	0.56	0.31	2.3	0.56	0.50	3.9	0.90	1.7	e0.67	0.73	0.80	e0.17
30	0.78	0.32	0.35	0.56	---	2.6	2.2	1.5	e0.58	190	0.64	e0.18
31	0.81	---	0.30	0.54	---	1.8	---	1.2	---	2.8	0.55	---
MEAN	1.25	6.80	1.56	5.17	1.99	3.87	2.81	11.2	2.75	9.35	2.93	0.26
MAX	11	125	15	107	18	36	40	93	51	190	31	0.47
MIN	0.29	0.20	0.29	0.30	0.50	0.51	0.84	0.52	0.56	0.56	0.47	0.17
IN.	0.53	2.80	0.66	2.20	0.79	1.65	1.16	4.78	1.13	3.98	1.25	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

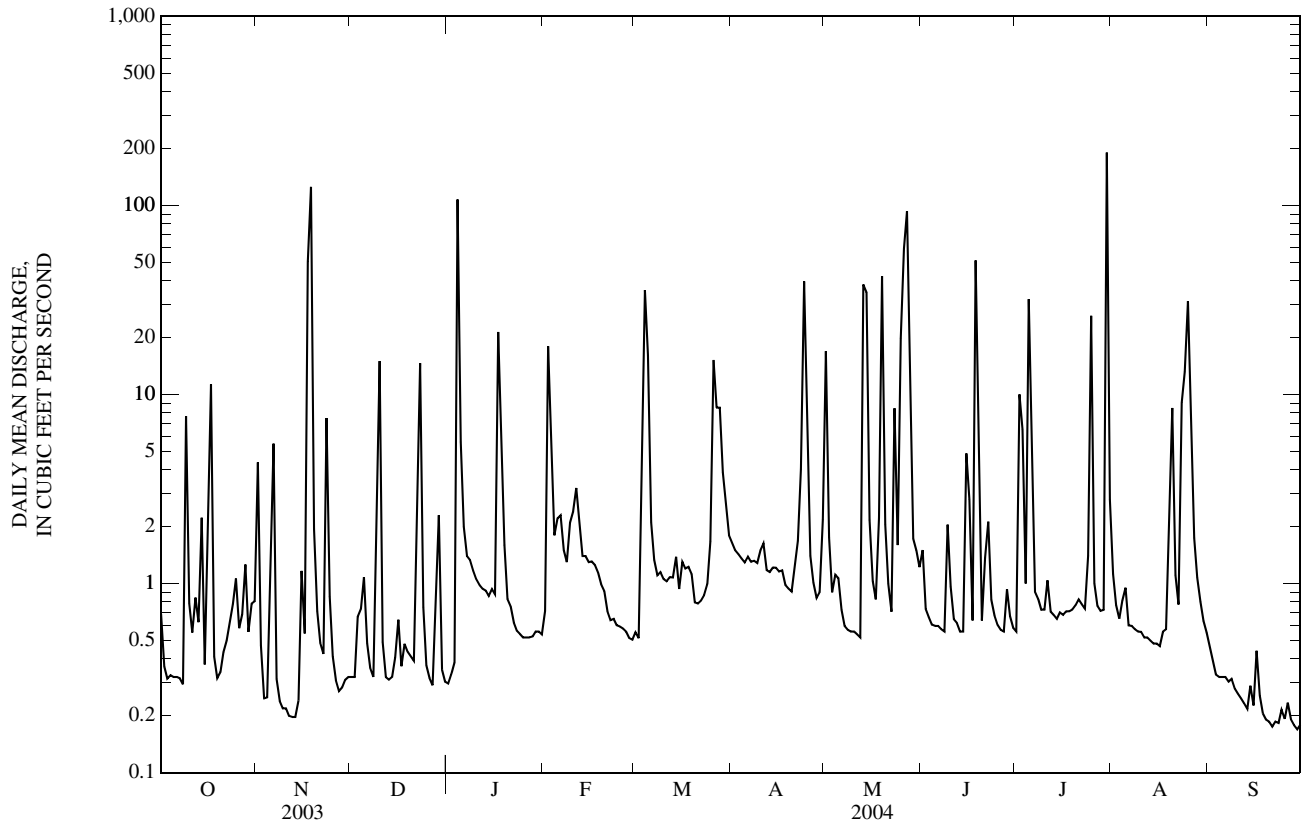
MEAN	1.88	2.34	1.53	2.99	3.54	3.99	3.49	5.72	5.65	3.54	1.97	1.80
MAX	2.96	6.80	4.32	6.59	9.37	11.8	6.08	11.2	11.7	9.35	3.76	6.87
(WY)	(2002)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(1997)	(2003)
MIN	1.25	0.40	0.44	0.38	1.03	1.18	0.81	1.61	2.17	0.48	0.43	0.26
(WY)	(2004)	(2000)	(1999)	(2003)	(2003)	(2000)	(2000)	(1998)	(2001)	(2002)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1997 - 2004
ANNUAL MEAN	3.02	4.19	3.21
HIGHEST ANNUAL MEAN			4.64
LOWEST ANNUAL MEAN			1.88
HIGHEST DAILY MEAN	138	Sep 2	190
LOWEST DAILY MEAN	0.17	Mar 10	0.17
ANNUAL SEVEN-DAY MINIMUM	0.20	Feb 7	0.19
MAXIMUM PEAK FLOW	---	Unknown	Jul 30
MAXIMUM PEAK STAGE	---	8.52	Jul 30
INSTANTANEOUS LOW FLOW	---	0.20 ^a	Nov 3,11-14, Sep 24
ANNUAL RUNOFF (INCHES)	15.15	21.04	16.10
10 PERCENT EXCEEDS	4.9	5.9	5.5
50 PERCENT EXCEEDS	0.43	0.78	0.56
90 PERCENT EXCEEDS	0.25	0.30	0.23

e Estimated

^a Minimum recorded, may have been less during period of estimated record in September.

07019195 YARNELL CREEK AT FENTON, MO—Continued



07019220 FENTON CREEK NEAR FENTON, MO

LOCATION.--Lat 38°30'40", long 90°26'39", St. Louis County, Hydrologic Unit 07140102, on left bank 100 ft downstream of Highway 141 bridge, 0.66 mi north of county line, 0.24 mi south of Highway 30, and 1.4 mi upstream from confluence of Meramec River.

DRAINAGE AREA.--4.29 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 416.09 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 2001, gage was located on left downstream abutment of Highway 141 bridge, 100 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Water-discharge records fair except for discharges above 650 ft³/s, which are poor. U.S.G.S. satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	4.0	0.83	1.4	1.0	1.1	1.8	46	2.0	0.53	1.5	0.50
2	1.6	0.42	0.76	1.5	30	0.93	1.6	5.8	1.0	4.4	1.2	0.49
3	1.7	0.25	1.3	3.0	6.2	9.1	1.4	2.1	0.87	9.1	1.1	0.49
4	1.5	0.26	1.2	159	2.0	96	1.4	2.1	0.83	1.1	1.3	1.1
5	1.4	0.78	1.6	8.9	2.3	52	1.3	2.0	0.80	44	1.1	0.78
6	1.4	6.4	1.0	3.0	1.8	9.5	1.3	1.4	0.83	5.3	0.92	0.33
7	1.4	0.29	0.88	2.0	1.2	6.6	1.3	1.2	1.0	1.4	0.87	0.33
8	1.4	0.20	0.86	1.7	1.2	5.3	1.3	1.2	0.83	1.3	0.86	0.33
9	13	0.17	1.7	1.5	4.1	4.7	1.2	1.2	2.6	1.1	0.88	0.34
10	2.2	0.18	30	1.3	5.1	4.2	1.6	1.3	1.2	1.0	0.88	0.33
11	1.1	0.21	2.2	1.2	7.0	3.9	1.3	1.4	0.79	1.1	0.85	0.32
12	0.81	0.20	1.4	1.2	2.6	3.7	1.1	1.5	1.1	0.97	0.83	0.31
13	0.56	0.16	1.3	1.1	1.8	3.5	1.1	72	0.67	0.96	0.78	0.32
14	4.1	0.37	1.2	1.1	1.9	3.9	1.0	95	0.58	0.90	0.76	0.32
15	0.32	0.50	1.3	0.99	1.5	3.2	1.00	5.7	9.0	0.98	0.75	0.31
16	2.0	0.20	1.6	1.1	1.2	4.3	1.0	2.6	7.6	1.0	0.75	0.63
17	18	70	0.94	51	1.2	3.3	1.1	2.0	0.70	0.98	0.74	0.32
18	0.27	216	1.1	9.7	1.8	2.8	1.2	4.3	57	0.92	0.74	0.30
19	0.19	17	0.89	2.4	3.1	2.3	1.3	78	2.8	0.90	1.6	0.30
20	0.18	8.1	0.81	1.7	3.5	2.2	1.3	5.6	0.71	0.91	11	0.31
21	0.18	5.1	0.81	1.5	1.8	1.9	1.5	2.6	1.7	0.92	0.87	0.32
22	0.21	2.4	5.5	1.3	1.3	1.9	2.2	2.1	2.7	0.88	0.63	0.32
23	0.22	20	38	1.2	1.3	2.0	7.0	29	0.64	0.83	8.2	0.34
24	0.21	2.7	4.6	1.1	1.2	1.7	109	3.9	0.53	1.6	29	0.32
25	0.63	1.3	3.4	1.2	1.1	1.8	20	32	0.49	23	36	0.28
26	0.25	1.2	2.8	1.1	1.0	30	5.4	60	0.48	1.4	6.5	0.27
27	0.24	0.98	1.9	1.1	0.99	19	4.2	151	0.47	0.98	1.9	0.33
28	0.47	0.92	4.6	1.1	0.96	21	3.8	15	0.66	0.94	1.0	0.38
29	0.24	0.85	11	0.96	1.1	6.5	2.2	3.1	0.49	0.92	0.61	0.29
30	0.24	0.84	2.6	0.88	---	3.2	4.8	2.8	0.48	263	0.56	0.29
31	0.23	---	2.1	0.87	---	2.2	---	1.9	---	3.4	0.52	---
MEAN	1.88	12.1	4.20	8.62	3.15	10.1	6.19	20.5	3.38	12.2	3.72	0.39
MAX	18	216	38	159	30	96	109	151	57	263	36	1.1
MIN	0.18	0.16	0.76	0.87	0.96	0.93	1.0	1.2	0.47	0.53	0.52	0.27
IN.	0.50	3.14	1.13	2.32	0.79	2.72	1.61	5.51	0.88	3.27	1.00	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	2.30	3.56	2.61	4.94	5.32	6.86	5.89	9.21	7.18	4.30	2.43	1.82
MAX	3.45	12.1	7.10	12.7	12.6	18.1	10.4	20.5	14.3	12.2	4.80	7.78
(WY)	(2003)	(2004)	(2002)	(1999)	(1999)	(1998)	(2002)	(2004)	(1998)	(2004)	(2000)	(2003)
MIN	1.08	0.83	0.37	0.76	1.76	1.69	1.23	1.87	2.83	0.64	0.45	0.26
(WY)	(1998)	(2003)	(1999)	(2003)	(2002)	(2000)	(2000)	(1998)	(2001)	(2002)	(2003)	(1999)

SUMMARY STATISTICS

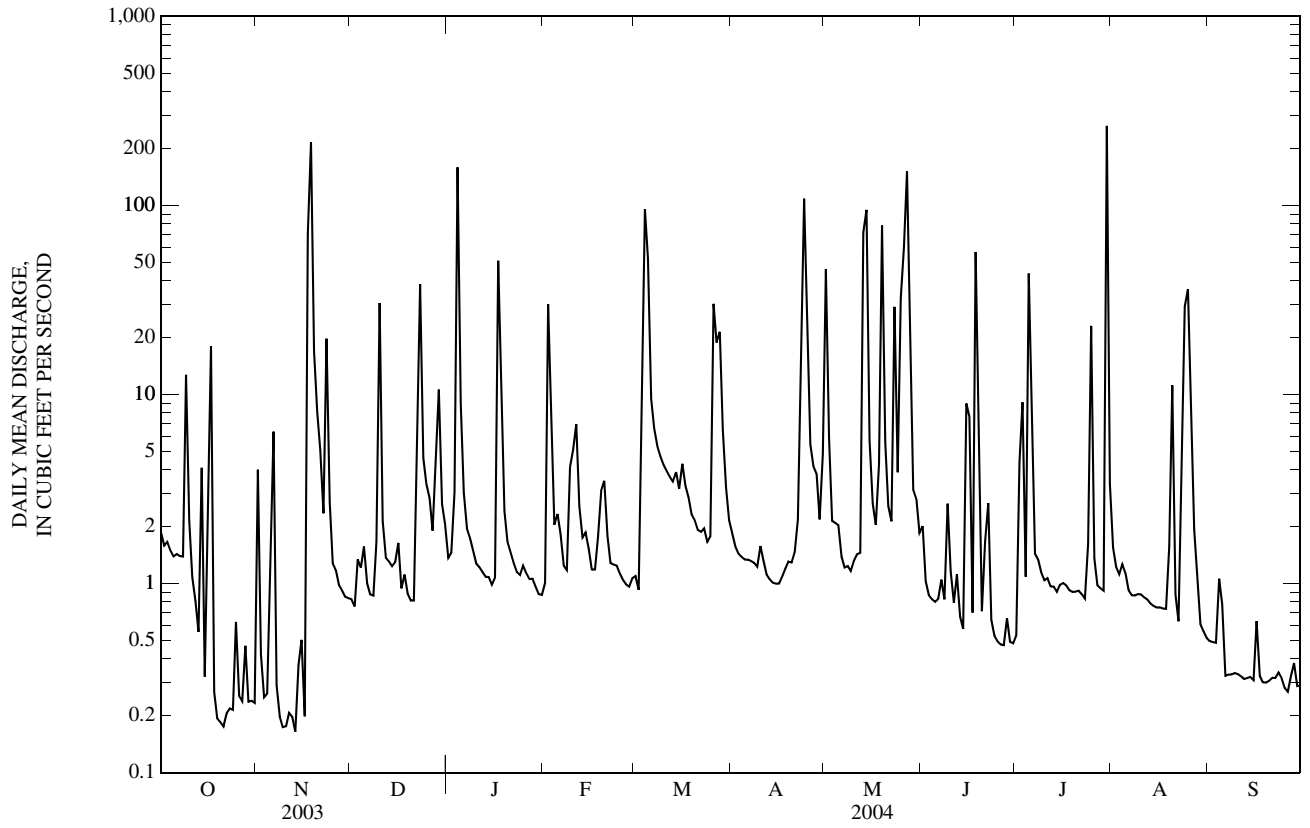
FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1997 - 2004

ANNUAL MEAN	5.32	7.24	4.73
HIGHEST ANNUAL MEAN			7.24
LOWEST ANNUAL MEAN			2.51
HIGHEST DAILY MEAN	216	Nov 18	263
LOWEST DAILY MEAN	0.16	Nov 13	0.16
ANNUAL SEVEN-DAY MINIMUM	0.20	Nov 7	0.20
MAXIMUM PEAK FLOW	---		Unknown
MAXIMUM PEAK STAGE	---		7.21
INSTANTANEOUS LOW FLOW	---		0.11
ANNUAL RUNOFF (INCHES)	16.83	22.97	14.98
10 PERCENT EXCEEDS	12	9.6	8.5
50 PERCENT EXCEEDS	0.92	1.3	0.80
90 PERCENT EXCEEDS	0.31	0.32	0.31

07019220 FENTON CREEK NEAR FENTON, MO—Continued



07019220 FENTON CREEK NEAR FENTON, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd μ S/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)
OCT 09...	1347	Environmental	94	5.4	7.0	76	7.5	344	18.2	130	38.0	7.70
DEC 16...	0815	Environmental	1.9	8.1	10.3	87	7.7	2,220	6.8	--	--	33.0
FEB 10...	0820	Environmental	1.9	5.7	12.8	92	7.8	2,380	1.4	450	123	35.0
MAR 26...	1122	Environmental	125	5.0	8.9	89	7.7	610	14.6	170	47.0	13.0
MAY 18...	0800	Environmental	1.7	9.2	8.1	87	7.7	1,430	18.3	570	154	45.0
AUG 02...	1635	Environmental	1.2	8.4	10.2	128	7.7	1,360	25.2	510	132	43.4

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	97	96	118	<1	--	288	1.4	--	0.06	--	0.680	--	0.04
DEC 16...	216	218	266	<1	460	19	0.60	--	0.04	--	1.80	--	0.01
FEB 10...	178	178	217	<1	560	8	0.60	--	0.17	--	1.50	--	0.01
MAR 26...	139	141	172	<1	--	307	1.7	--	0.12	--	0.690	--	0.03
MAY 18...	262	262	320	<1	--	4	0.20	--	0.04	--	3.30	--	0.02
AUG 02...	240	245	299	<1	--	<10	0.25	<0.04	--	3.28	--	E.005n	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7 μ MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.120	0.35	26	25,000	36,000k	38,500	<3	2	<1	<1.0	2.7	2.5
DEC 16...	--	0.040	0.08	11	950k	1,300	510	<3	1	<1	<1.0	2.6	3.3
FEB 10...	--	0.050	0.09	10	13k	12k	36k	<3	2	<1	<1.0	2.5	2.2
MAR 26...	--	0.040	0.34	12	1,700	6,800	8,000	5	<1	<1	<1.0	1.6	2.1
MAY 18...	--	0.030	0.04	8	1,600	480	460	<3	<1	<1	<1.0	<1.0	1.1
AUG 02...	0.03	--	0.05	<10	270	520	268	2	1.1	<0.06	0.04	<0.8	3.1

07019220 FENTON CREEK NEAR FENTON, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	Mt	E.2t	<0.02	Mt	<1	E.02n	<2	<2	<2	<1	<1m	<2m
DEC 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	Mmt	3	E.3t	<0.02	4	<1	<0.02	<1	Mt	<1	<1	<1m	<2m
MAY 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 16...	--
FEB 10...	--
MAR 26...	Mt
MAY 18...	--
AUG 02...	--

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
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 t -- Below the long-term MDL

07019280 MERAMEC RIVER AT PAULINA HILLS, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 38°27'46", long 90°24'53", Jefferson County, Hydrologic Unit 07140102, at bridge on State Highway 21 at Paulina Hills, 0.3 mi downstream from Saline Creek, and 10 mi upstream from mouth of Meramec River.

DRAINAGE AREA.--3,950 mi², approximately.

PERIOD OF RECORD.--August 1963 to July 1975, October 1981 to current year. August 1963 to September 1970 published as Meramec River at Paulina Hills, Mo. (07019045).

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

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)	Specific conductance, wat unfltrd 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															
20...	1330	Blank	--	--	--	--	--	--	--	--	--	--			
20...	1345	Environmental	882	10.6	115	8.1	434	18.6	--	--	--	--			
NOV															
13...	1130	Environmental	882	7.2	66	8.0	441	11.4	200	41.5	23.6	2.03			
DEC															
17...	0822	Environmental	2,130	11.9	90	7.9	409	3.1	--	--	--	--			
JAN															
12...	1400	Blank	--	--	--	--	--	--	--	0.02	E.005n	<0.16			
12...	1410	Environmental	3,340	11.3	88	8.0	308	4.5	150	32.4	16.8	1.62			
FEB															
09...	1245	Environmental	2,650	13.3	98	7.8	372	2.6	--	--	--	--			
MAR															
02...	0830	Environmental	1,630	11.1	100	8.0	401	10.3	--	--	--	--			
APR															
19...	1600	Environmental	1,730	8.9	105	8.1	384	21.2	--	--	--	--			
MAY															
03...	1605	Environmental	25,200	7.2	73	7.5	161	15.1	83	18.9	8.79	2.14			
JUN															
01...	1445	Blank	--	--	--	--	--	--	--	--	--	--			
01...	1450	Environmental	4,240	5.7	68	7.9	278	23.1	--	--	--	--			
JUL															
20...	1215	Environmental	780	6.9	92	7.4	429	28.7	210	44.5	23.1	2.25			
SEP															
01...	1100	Environmental	2,760	5.6	67	7.6	295	24.2	--	--	--	--			
Date			Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Carbonate, wat unfltrd, 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 fltrd 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															
20...	--	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06	
20...	--	183	183	224	<1	--	--	--	--	--	17	0.37	0.07	0.23	
NOV															
13...	11.0	198	199	243	<1	15.4	<0.2	22.2	255	13	0.42	0.15	0.33		
DEC															
17...	--	164	164	200	<1	--	--	--	--	<10	0.41	0.15	0.56		
JAN															
12...	E.07n	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06		
12...	6.38	128	129	157	<1	8.97	<0.2	16.5	177	25	0.43	0.10	0.47		
FEB															
09...	--	135	135	164	<1	--	--	--	--	16	0.49	0.18	0.47		
MAR															
02...	--	156	156	190	<1	--	--	--	--	20	0.49	0.14	0.09		
APR															
19...	--	161	163	199	<1	--	--	--	--	28	0.49	0.17	0.08		
MAY															
03...	3.11	73	73	89	<1	4.35	<0.2	9.2	116	207d	0.93	<0.04	0.24		
JUN															
01...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06		
01...	--	108	108	132	<1	--	--	--	--	42	0.53	<0.04	0.38		
JUL															
20...	11.9	178	182	222	<1	17.5	<0.2	21.9	323	27	0.59	<0.04	0.20		
SEP															
01...	--	125	124	153	<1	--	--	--	--	38	0.48	E.04n	0.34		

07019280 MERAMEC RIVER AT PAULINA HILLS, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, 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, col/100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, 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 20...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
OCT 20...	0.055	0.04	0.05	0.08	16k	52	13k	--	--	--	--	--	--
NOV 13...	0.036	0.02	0.07	0.09	18k	110	5k	E2n	226v	0.6	<0.04	0.05	0.8
DEC 17...	0.017	0.04	E.04n	0.08	110k	140	47	--	--	--	--	--	--
JAN 12...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	E1n	<0.2	<0.04	<0.04	<0.4
JAN 12...	E.004n	<0.02	E.03n	0.06	28k	210	78	3	388	0.4	E.03n	0.09	1.0
FEB 09...	0.011	0.04	0.05	0.08	140	250	270	--	--	--	--	--	--
MAR 02...	0.016	E.01n	<0.04	0.06	51	100	31	--	--	--	--	--	--
APR 19...	0.015	0.02	E.03n	0.06	6k	3k	5k	--	--	--	--	--	--
MAY 03...	0.008	0.02	E.04n	0.23	1,500k	1,400k	1,220	9	2,340d	0.6	E.04n	0.75	2.2
JUN 01...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
JUN 01...	0.016	0.02	0.04	0.10	210k	200	360	--	--	--	--	--	--
JUL 20...	0.044	E.01n	0.05	0.12	33k	23k	17k	3	376	1.3	<0.04	0.07	1.1
SEP 01...	0.016	0.02	0.05	0.09	62	98	74	--	--	--	--	--	--

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)
OCT 20...	--	--	--	--	--	--	--	--
OCT 20...	--	--	--	--	--	--	--	--
NOV 13...	E5n	0.31	7.40	16.5	<0.02	E.2n	1	4
DEC 17...	--	--	--	--	--	--	--	--
JAN 12...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	<2
JAN 12...	10	0.25	7.37	22.4	<0.02	E.2n	2	9
FEB 09...	--	--	--	--	--	--	--	--
MAR 02...	--	--	--	--	--	--	--	--
APR 19...	--	--	--	--	--	--	--	--
MAY 03...	46	1.65	120d	8.3	E.02n	<0.4	4	51
JUN 01...	--	--	--	--	--	--	--	--
JUN 01...	--	--	--	--	--	--	--	--
JUL 20...	10	0.39	14.7	10.7	<0.02	E.3n	1	7
SEP 01...	--	--	--	--	--	--	--	--

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

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
- v -- Analyte detected in laboratory blank

07019317 MATTESE CREEK NEAR MATTESE, MO

LOCATION.--Lat 38°29'00", long 90°20'28", in SW ¼ NW ¼ NW ¼ sec.10, T.43 N., R.6 E., St. Louis County, Hydrologic Unit 07140102, on right downstream pier of Ringer Road bridge, 0.86 mi east of Interstate 55, 1.4 mi south of Interstate 255, and 3.4 mi above confluence to Meramec River.

DRAINAGE AREA.--7.88 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR MO-03-1: 1996-2002(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 413.57 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.59	7.7	0.72	3.0	1.3	1.4	3.6	87	6.5	0.01	2.2	e0.00
2	0.00	0.26	0.53	2.6	36	0.89	3.0	8.0	2.8	28	1.7	e0.00
3	0.00	0.00	4.1	11	9.8	19	2.6	3.6	2.1	13	1.8	0.00
4	0.00	0.00	7.3	353	e6.1	83	2.1	3.9	1.9	1.3	2.4	0.00
5	0.00	0.75	11	13	5.1	48	1.9	3.3	1.6	77	2.4	0.00
6	0.00	21	2.7	e6.0	4.7	8.3	1.7	1.7	1.4	6.2	0.85	0.00
7	0.00	0.20	1.3	3.8	2.1	4.9	1.5	1.2	1.3	1.8	0.69	0.00
8	0.00	0.00	1.3	3.0	2.1	3.9	1.3	0.89	1.2	0.83	0.49	0.00
9	55	0.00	1.5	2.4	7.7	3.2	1.1	0.75	3.8	0.84	0.30	0.00
10	1.0	0.00	34	2.0	11	2.5	1.6	0.77	4.0	0.48	0.24	0.00
11	0.00	0.34	4.2	1.8	14	2.2	2.9	1.8	1.3	2.3	0.18	0.00
12	0.00	0.05	2.1	1.6	4.9	1.8	0.93	0.58	2.0	0.44	0.10	0.00
13	0.00	0.00	2.0	1.4	3.5	1.8	0.69	11	0.72	0.23	0.04	0.00
14	14	0.11	3.8	0.96	4.0	4.5	0.62	64	0.38	0.22	0.07	0.00
15	0.05	5.1	3.6	0.74	2.9	1.7	0.56	4.0	1.1	0.15	0.47	0.00
16	2.4	0.02	8.7	0.74	1.9	5.3	0.55	2.1	9.5	0.15	0.04	1.3
17	27	207	2.0	70	1.8	2.7	0.47	1.5	1.1	0.23	0.00	0.01
18	0.26	643	4.9	14	2.6	2.7	0.29	2.7	113	0.14	0.04	0.00
19	0.00	23	1.9	e6.0	3.9	1.5	0.20	68	3.3	0.08	0.18	0.00
20	0.00	12	1.2	3.3	4.2	1.3	0.36	4.7	0.55	0.11	4.9	0.00
21	0.00	6.7	0.88	2.5	2.7	0.97	1.6	2.5	0.72	0.06	0.71	0.00
22	0.00	4.3	7.3	4.1	2.0	0.84	2.3	1.9	1.8	0.05	0.13	0.00
23	0.00	32	65	1.6	2.2	1.6	13	38	0.21	0.10	1.2	0.00
24	0.00	8.7	7.6	1.5	1.7	1.4	91	5.6	0.18	0.54	65	0.00
25	0.12	4.1	4.1	1.3	1.6	2.0	13	92	0.14	26	67	0.00
26	0.30	3.0	2.8	1.3	1.3	47	3.1	138	0.05	2.1	12	0.00
27	0.00	2.8	2.2	1.3	1.1	12	2.0	155	0.03	0.87	2.2	0.00
28	1.0	1.5	14	1.3	1.4	32	1.3	20	0.27	0.54	1.8	0.00
29	0.04	1.0	34	1.3	1.1	12	0.97	6.9	0.05	0.44	1.3	0.00
30	0.00	0.98	6.3	1.3	---	6.9	5.6	14	0.01	253	0.48	0.00
31	0.00	---	4.0	1.3	---	4.6	---	5.6	---	5.1	e0.20	---
MEAN	3.28	32.9	7.97	16.7	4.99	10.4	5.39	24.2	5.43	13.6	5.52	0.04
MAX	55	643	65	353	36	83	91	155	113	253	67	1.3
MIN	0.00	0.00	0.53	0.74	1.1	0.84	0.20	0.58	0.01	0.01	0.00	0.00
IN.	0.48	4.65	1.17	2.45	0.68	1.52	0.76	3.55	0.77	1.99	0.81	0.01

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

MEAN	3.72	9.30	4.33	8.11	9.64	10.5	8.34	12.9	16.3	8.77	4.66	5.05
MAX	8.11	32.9	11.3	16.7	23.9	31.9	19.6	24.2	30.8	18.7	10.7	17.8
(WY)	(2002)	(2004)	(2002)	(2004)	(1997)	(1998)	(1998)	(2004)	(2000)	(1998)	(1998)	(2003)
MIN	1.58	0.62	0.66	0.62	3.00	2.63	2.33	3.50	3.01	1.12	0.41	0.04
(WY)	(2000)	(2003)	(1999)	(2003)	(2002)	(2001)	(2000)	(1999)	(2001)	(2002)	(2003)	(2004)

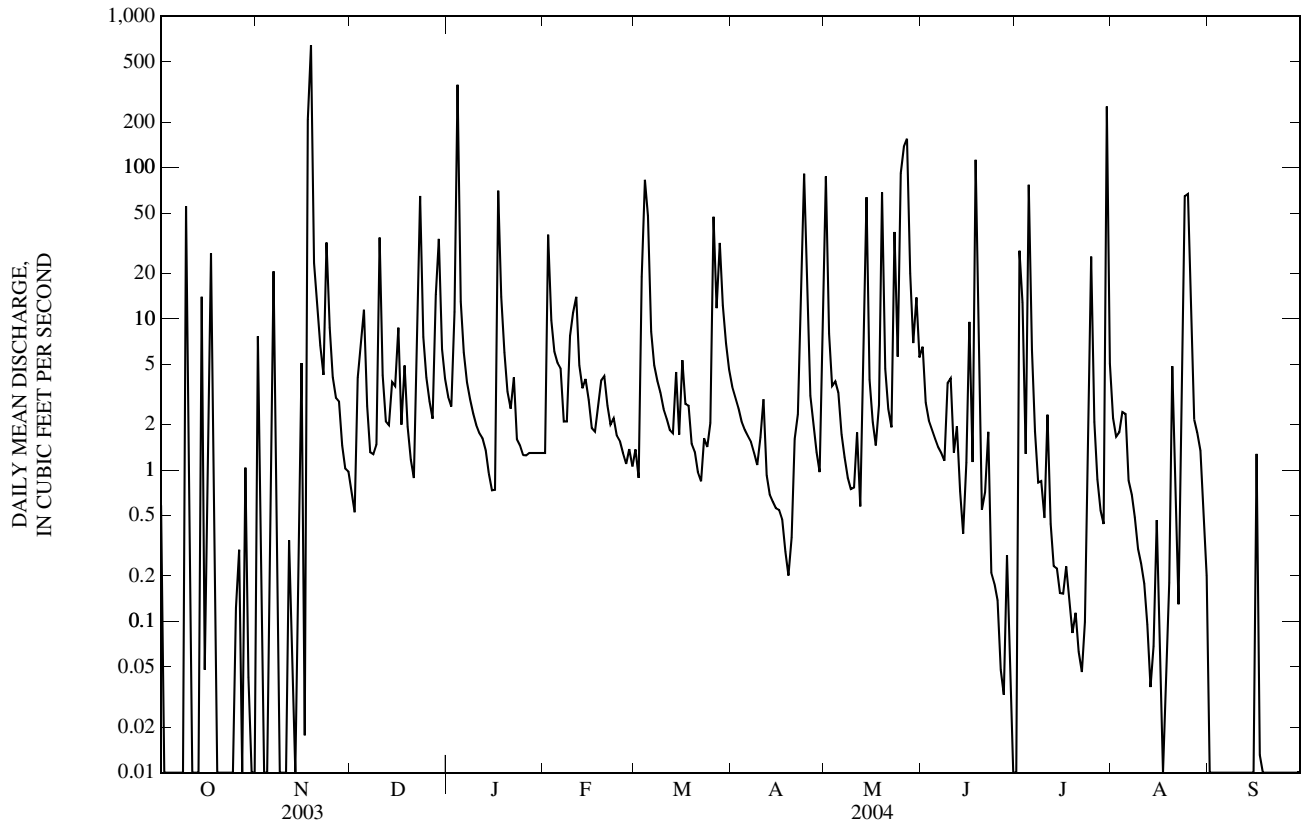
SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL MEAN	10.5		10.9		8.42	
HIGHEST ANNUAL MEAN					12.0	
LOWEST ANNUAL MEAN					4.85	
HIGHEST DAILY MEAN	643	Nov 18	643	Nov 18	643	
LOWEST DAILY MEAN	0.00	Many Days	0.00	Many Days	0.00	
ANNUAL SEVEN-DAY MINIMUM	0.00	At Times	0.00	At Times	0.00	
MAXIMUM PEAK FLOW	---		5,290 ^a	Nov 18	5,290 ^a	
MAXIMUM PEAK STAGE	---		12.82	Nov 18	12.82	
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	
ANNUAL RUNOFF (INCHES)	18.12		18.84		14.52	
10 PERCENT EXCEEDS	15		14		16	
50 PERCENT EXCEEDS	1.1		1.5		0.93	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

^a From rating extended above 571 ft³/s on basis of indirect measurement.

07019317 MATTESE CREEK NEAR MATTESE, MO—Continued



07019317 MATTESE CREEK NEAR MATTESE, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1996 to September 30, 2004 (discontinued).

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Carbon dioxide water, unfltrd mg/L (00405)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd μ S/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)
OCT 09...	1256	Environmental	709	3.1	7.8	85	7.7	215	18.4	88	28.0	4.50
DEC 04...	0830	Environmental	5.6	7.5	10.8	91	7.7	790	7.3	260	82.0	14.0
FEB 18...	1100	Environmental	1.9	4.6	10.5	81	8.0	1,830	4.3	390	120	22.0
MAR 03...	2027	Environmental	110	4.5	6.5	58	7.7	876	9.5	120	36.0	6.40
MAY 17...	1455	Environmental	1.3	4.5	8.9	109	8.0	1,220	24.5	340	105	20.0
AUG 02...	1350	Environmental	1.7	5.7	10.6	134	7.9	1,120	26.2	340	103	19.7

Date	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., mg/L (00450)	Carbonate, wat unfltrd incrm. titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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)	Ammonia water, unfltrd mg/L as N (00610)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite water, unfltrd mg/L as N (00615)
OCT 09...	78	79	97	<1	--	829	2.1	--	0.13	--	0.920	--	0.06
DEC 04...	186	187	228	<1	98.0	5	0.40	--	0.12	--	1.30	--	0.01
FEB 18...	234	235	287	<1	380	6	0.80	--	0.37	--	0.750	--	0.04
MAR 03...	107	109	133	<1	--	584	2.3	--	0.08	--	0.640	--	0.06
MAY 17...	225	231	278	<1	--	4	0.20	--	0.02	--	0.510	--	0.01
AUG 02...	220	222	271	<1	--	<10	0.26	<0.04	--	0.54	--	<0.008	--

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Orthophosphate, water, unfltrd mg/L as P (70507)	Phosphorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC 0.7 μ MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Arsenic water, fltrd, μ g/L (01000)	Beryllium, water, fltrd, μ g/L (01010)	Cadmium water, fltrd, μ g/L (01025)	Chromium, water, fltrd, μ g/L (01030)	Copper, water, fltrd, μ g/L (01040)
OCT 09...	--	0.160	0.71	24	36,000k	58,000	60,000	6	2	<1	<1.0	3.4	4.3
DEC 04...	--	0.080	0.08	13	800	790k	740	<3	<1	<1	<1.0	3.1	2.4
FEB 18...	--	0.090	0.16	11	1,000	1,800k	1,180	<3	2	<1	<1.0	1.1	2.4
MAR 03...	--	0.060	0.50	19	3,500k	4,800	8,830	5	<1	<1	<1.0	2.5	2.0
MAY 17...	--	0.060	0.06	12	80	160	84	4	<1	<1	<1.0	<1.0	1.6
AUG 02...	0.07	--	0.09	10	820	700	240	4	1.6	<0.06	0.09	<0.8	2.1

07019317 MATTESE CREEK NEAR MATTESE, MO—Continued

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

Date	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Phenan-threne, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxa-phene, water, unfltrd µg/L (39400)	Tribu-phos, water, unfltrd µg/L (39040)	1,2,4-Tri-chloro-benzene water unfltrd µg/L (34551)	1,2-Di-chloro-benzene water unfltrd µg/L (34536)	1,3-Di-chloro-benzene water unfltrd µg/L (34566)	1,4-Di-chloro-benzene water unfltrd µg/L (34571)	Hexa-chloro-buta-diene, water, unfltrd µg/L (39702)	Hexa-chloro-ethane, water, unfltrd µg/L (34396)
OCT 09...	Mmt	E1t	E.2t	<0.02	2	<1	E.02n	<2	<2	Mt	<1	<1m	<2m
DEC 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 03...	E2m	6	E.6t	<0.02	11	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT 09...	Mt
DEC 04...	--
FEB 18...	--
MAR 03...	Mt
MAY 17...	--
AUG 02...	--

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
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL