06900050 MEDICINE CREEK AT LAREDO, MO

LOCATION.--Lat 40°01'36", long 93°26'10", in SW ¼ NW ¼ SE ¼ sec.12, T.60 N., R.23 W., Grundy County, Hydrologic Unit 10280103, on downstream side of Highway E bridge, approximately 0.5 mi east of Laredo.

DRAINAGE AREA.--355 mi^2.

PERIOD OF RECORD.--November 14, 2000 to current year.

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

REMARKS.--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	4.7	6.0	7.9	51	e15	64	201	92	722	42	21	246
2	4.4	6.5	6.6	43	e14	67	150	66	322	50	24	178
3	4.2	6.9	6.5	36	e12	63	119	43	221	80	23	135
4	4.0	7.3	6.8	23	e12	1,570	99	34	159	69	3,100	109
5	3.6	7.2	7.4	e19	e11	7,970	86	31	125	50	1,440	93
6	3.4	20	7.9	e16	e10	1,640	73	29	103	46	322	238
7	3.4	14	7.7	e13	e10	441	68	27	86	39	154	345
8	3.4	11	7.6	e13	e9.0	245	61	24	73	38	94	158
9	4.5	9.1	52	e14	e9.0	169	53	22	64	35	66	103
10	3.7	8.2	428	e14	e10	127	47	22	106	33	50	75
11	4.3	7.2	321	e14	e11	101	44	21	953	72	41	62
12	5.5	6.7	121	e16	e12	82	41	19	331	171	35	53
13	5.6	6.5	48	e19	e11	68	38	20	4,620	186	32	47
14	12	6.2	45	e24	e11	75	37	24	3,750	96	29	42
15	10	6.4	41	e27	e12	82	35	25	3,240	59	27	43
16	7.3	6.6	48	e27	e12	110	34	21	1,420	49	25	49
17	6.1	7.5	33	40	e15	177	34	18	1,180	41	24	43
18	6.2	13	57	e180	e20	240	33	41	497	36	22	46
19	5.0	10	80	e150	e50	239	33	340	415	31	24	43
20	4.4	12	36	e111	e1,180	141	38	160	272	27	32	32
21	3.8	12	34	e61	714	101	48	78	193	25	30	29
22	3.6	9.1	71	e48	297	76	41	53	158	29	23	27
23	3.8	116	82	e41	204	65	35	577	121	34	26	26
24	4.2	48	31	e36	161	61	32	842	96	48	38	25
25	4.1	21	22	e29	114	59	32	2,990	86	49	2,130	24
26	3.9	14	25	e27	86	194	30	885	67	34	1,720	24
27	4.6	12	145	e25	69	219	29	273	59	28	2,930	23
28	5.7	9.9	821	e23	67	5,000	28	158	53	24	18,500	22
29	5.6	7.7	231	e20	67	1,880	27	138	48	23	6,870	20
30	5.7	7.8	107	e17	---	578	56	4,980	44	21	745	20
31	5.4	---	70	e16	---	306	---	5,500	---	20	351	---
MEAN	5.04	14.5	97.0	38.5	111	716	56.1	566	653	51.1	1,256	79.3
MAX	12	116	821	180	1,180	7,970	201	5,500	4,620	186	18,500	345
MIN	3.4	6.0	6.5	13	9.0	59	27	18	44	20	21	20
IN.	0.02	0.05	0.32	0.13	0.34	2.33	0.18	1.84	2.05	0.17	4.08	0.25

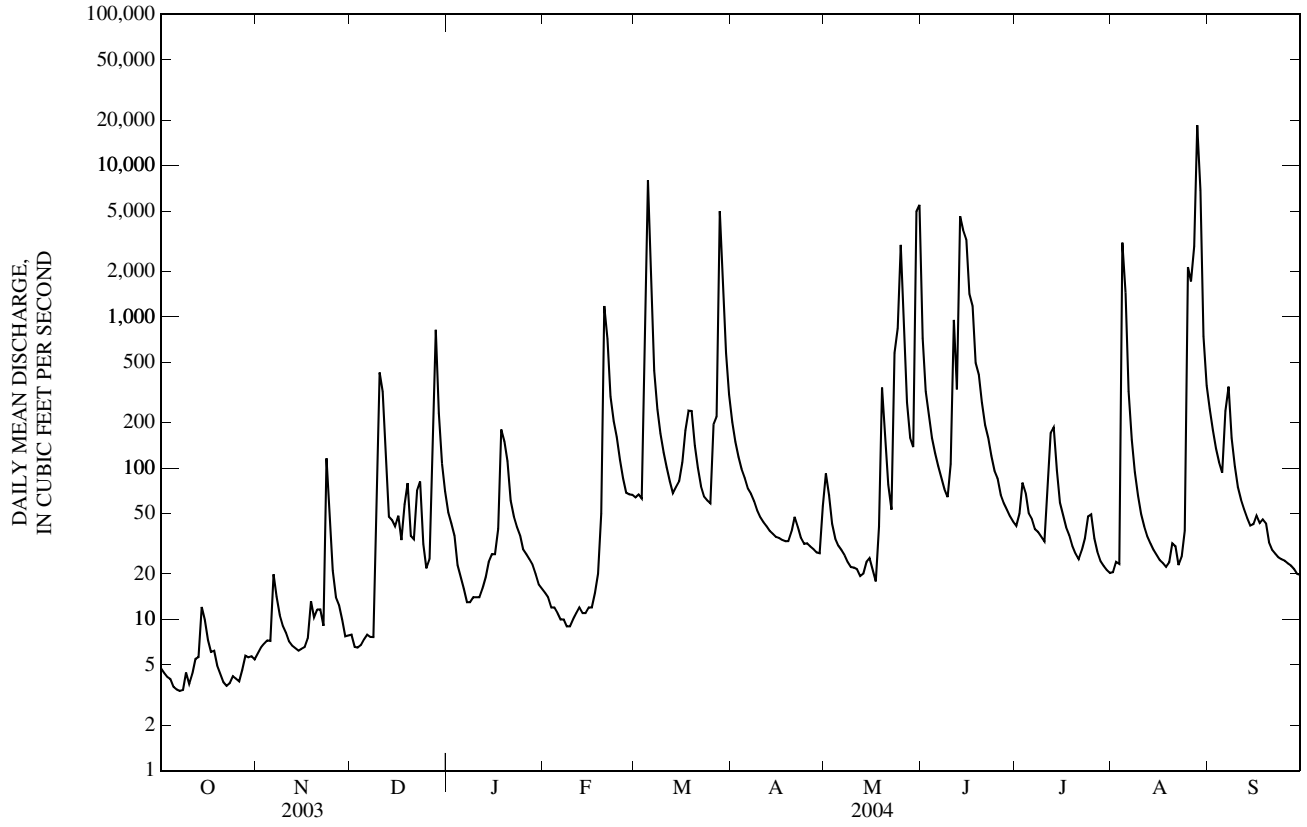
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	17.1	10.8	31.1	48.9	286	414	264	621	532	82.9	327	32.1
MAX	40.2	14.5	97.0	141	971	860	504	1,026	1,307	252	1,256	79.3
(WY)	(2002)	(2004)	(2004)	(2001)	(2001)	(2001)	(2001)	(2002)	(2001)	(2001)	(2004)	(2004)
MIN	5.04	5.84	5.35	5.16	8.38	16.8	25.1	97.7	32.6	12.7	2.98	5.21
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2003)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL MEAN	37.4		306		161	
HIGHEST ANNUAL MEAN					306	2004
LOWEST ANNUAL MEAN					29.0	2003
HIGHEST DAILY MEAN	987	Jun 26	18,500	Aug 28	18,500	Aug 28, 2004
LOWEST DAILY MEAN	1.7	Aug 23,24	3.4	Oct 6-8	1.7	Aug 23,24, 2003
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 20	3.7	Oct 4	1.8	Aug 20, 2003
MAXIMUM PEAK FLOW	---		19,300	Aug 28	19,300	Aug 28, 2004
MAXIMUM PEAK STAGE	---		19.63	Aug 28	19.63	Aug 28, 2004
INSTANTANEOUS LOW FLOW	---		3.1	Oct 6	1.2	Aug 25,26, 2003
ANNUAL RUNOFF (INCHES)	1.43		11.73		6.17	
10 PERCENT EXCEEDS	80		342		182	
50 PERCENT EXCEEDS	8.2		38		15	
90 PERCENT EXCEEDS	3.7		6.7		5.0	

e Estimated

06900050 MEDICINE CREEK AT LAREDO, MO—Continued



06900100 LITTLE MEDICINE CREEK NEAR HARRIS, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°19'02", long 93°22'52", in SW $^1/_4$ SE $^1/_4$ NW $^1/_4$ sec.28, T.64 N., R.22 W., Mercer County, Hydrologic Unit 10280103, on the left bank on upstream side of bridge on State Highway E, approximately 1.7 mi west of Harris.

DRAINAGE AREA.--66.5 mi^2.

PERIOD OF RECORD.--November 1997 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
22...	0950	Environmental	0.30	8.7	79	7.9	473	11.5	--	--	--	--
NOV												
20...	0745	Environmental	0.52	10.1	80	7.8	484	5.0	220	65.3	13.6	3.75
DEC												
10...	1045	Environmental	98	12.8	90	7.9	198	1.0	--	--	--	--
JAN												
07...	1030	Blank	--	--	--	--	--	--	--	0.02	<0.008	<0.16
07...	1045	Environmental	0.73	7.5	52	7.5	668	0.5	310	93.3	19.1	5.69
FEB												
26...	1520	Environmental	10	11.4	94	8.1	372	7.0	--	--	--	--
MAR												
16...	1220	Environmental	25	12.5	99	8.0	367	4.5	--	--	--	--
APR												
22...	1405	Environmental	4.6	9.8	99	8.2	489	16.0	--	--	--	--
MAY												
13...	1125	Environmental	8.9	7.5	80	7.8	443	18.5	210	61.5	12.8	5.10
13...	1126	Replicate	--	--	--	--	--	--	200	60.5	12.7	4.97
JUN												
23...	1340	Environmental	12	7.9	99	8.0	443	26.5	--	--	--	--
JUL												
14...	1120	Environmental	6.0	7.7	92	8.1	409	24.0	180	52.8	10.5	7.56
AUG												
25...	1415	Environmental	2,150	6.7	68	7.6	105	23.5	--	--	--	--
SEP												
16...	1015	Environmental	5.8	9.1	96	8.0	451	17.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
22...	--	173	176	215	<1	--	--	--	--	<10	0.33	<0.04	<0.06
NOV													
20...	17.6	172	174	212	<1	7.94	0.2	67.3	306	<10	0.26	<0.04	<0.06
DEC													
10...	--	60	59	72	<1	--	--	--	--	470d	3.3	0.06	3.22
JAN													
07...	<0.10	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
07...	19.9	221	220	268	<1	17.9	0.2	100	447	16	0.74	0.26	1.44
FEB													
26...	--	116	114	139	<1	--	--	--	--	36	0.70	0.09	1.47
MAR													
16...	--	117	117	143	<1	--	--	--	--	56	0.61	E.02n	1.11
APR													
22...	--	170	169	206	<1	--	--	--	--	<10	0.42	<0.04	<0.06
MAY													
13...	13.3	156	156	191	<1	8.41	0.2	55.3	277	102d	1.0	E.04n	0.18
13...	13.2	--	--	--	--	7.87	0.2	52.5	258	100d	0.98	0.04	0.17
JUN													
23...	--	169	170	208	<1	--	--	--	--	33	0.62	<0.04	0.65
JUL													
14...	11.1	144	145	177	<1	9.29	0.2	39.3	263	37	0.76	E.03n	0.50
AUG													
25...	--	47	41	50	<1	--	--	--	--	1,395d	5.4d	<0.04	0.39
SEP													
16...	--	168	166	203	<1	--	--	--	--	64	0.58	0.07	0.07

06900100 LITTLE MEDICINE CREEK NEAR HARRIS, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
22...	E.004n	E.01n	E.03n	0.07	50	31k	230	--	--	--	--	--	--
NOV													
20...	<0.008	E.01n	<0.04	0.05	17k	12k	78	Mn	82	0.4	<0.04	E.03n	0.9
DEC													
10...	0.015	0.06	0.10	0.93	2,800k	4,800	34,000k	--	--	--	--	--	--
JAN													
07...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	E1n	<0.2	<0.04	<0.04	<0.4
07...	0.009	<0.02	<0.04	E.03n	<2b	5k	35k	E2n	31	0.6	0.07	0.07	2.5
FEB													
26...	0.015	0.03	0.05	0.11	<10b	<10b	140k	--	--	--	--	--	--
MAR													
16...	E.007n	E.01n	E.03n	0.14	100k	36k	110	--	--	--	--	--	--
APR													
22...	<0.008	E.01n	E.03n	0.04	58k	70	180	--	--	--	--	--	--
MAY													
13...	0.013	0.02	E.04n	0.18	--u	21,000k	19,000	2	1,590d	0.9	E.04n	0.10	1.7
13...	0.014	0.02	E.04n	0.18	--	--	--	2	1,580d	0.9	E.03n	0.10	1.7
JUN													
23...	0.010	0.04	0.04	0.13	400	230k	520	--	--	--	--	--	--
JUL													
14...	0.017	0.06	0.07	0.15	--u	890	1,400	3	618	1.3	<0.04	0.05	2.1
AUG													
25...	0.011	0.09	0.12	1.91	48,000	53,000	76,000	--	--	--	--	--	--
SEP													
16...	E.004n	0.04	0.06	0.17	870	1,300	1,300	--	--	--	--	--	--

06900100 LITTLE MEDICINE CREEK NEAR HARRIS, 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)	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								
22...	--	--	--	--	--	--	--	--
NOV								
20...	18	<0.08	0.09	686	<0.02	<0.4	<0.6	E1n
DEC								
10...	--	--	--	--	--	--	--	--
JAN								
07...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	<2
07...	102	<0.08	0.06	2,990	<0.02	1.3	1	E2n
FEB								
26...	--	--	--	--	--	--	--	--
MAR								
16...	--	--	--	--	--	--	--	--
APR								
22...	--	--	--	--	--	--	--	--
MAY								
13...	6n	<0.08	1.94	118	<0.02	0.5n	M	8
13...	6	<0.08	1.93	116	<0.02	E.4n	M	8
JUN								
23...	--	--	--	--	--	--	--	--
JUL								
14...	<6	<0.08	0.89	81.6	<0.02	0.6	Mn	4
AUG								
25...	--	--	--	--	--	--	--	--
SEP								
16...	--	--	--	--	--	--	--	--

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

Null value qualifier codes used in this table:
u -- Unable to determine-matrix interference

06900900 LOCUST CREEK NEAR UNIONVILLE, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°28'23", long 93°07'37", in SW $^1/_4$ SW $^1/_4$ SW $^1/_4$ sec.35, T.66 N., R.20 W., Putnam County, Hydrologic Unit 10280103, on left bank on upstream side of bridge on Highway HH approximately 3.2 mi west of State Highway 5, 9.4 mi south of Unionville.

DRAINAGE AREA.--77.5 mi^2.

PERIOD OF RECORD.--October 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
21...	1400	Environmental	0.09	8.3	86	8.2	433	17.5	--	--	--	--
NOV												
19...	1315	Environmental	0.26	11.2	93	8.0	428	7.5	190	55.9	12.2	4.99
DEC												
09...	1420	Environmental	5.8	9.2	119	8.1	279	4.5	--	--	--	--
JAN												
06...	1515	Environmental	4.1	13.2	91	7.8	437	0.5	200	58.5	12.3	6.45
FEB												
19...	1315	Environmental	44	13.6	93	7.8	264	0.5	--	--	--	--
19...	1316	Replicate	--	--	--	--	--	--	--	--	--	--
MAR												
17...	1445	Environmental	89	12.3	100	8.1	367	5.0	--	--	--	--
APR												
21...	1535	Environmental	17	9.2	102	8.3	459	20.5	--	--	--	--
MAY												
12...	1415	Environmental	3.3	8.3	94	8.2	535	21.0	250	74.4	15.9	5.02
JUN												
24...	1340	Environmental	9.2	8.0	93	8.1	480	23.0	--	--	--	--
JUL												
15...	1145	Environmental	14	7.6	88	8.0	383	23.0	170	50.4	9.62	6.97
AUG												
24...	1520	Environmental	80	7.3	82	7.8	227	21.0	--	--	--	--
SEP												
15...	1040	Environmental	4.2	7.6	83	8.0	466	22.0	--	--	--	--
15...	1041	Blank	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
21...	--	197	198	242	<1	--	--	--	--	<20d	0.99	E.03n	E.05n
NOV													
19...	13.9	189	188	229	<1	8.65	0.2	21.3	245	<10	0.39	<0.04	<0.06
DEC													
09...	--	108	107	131	<1	--	--	--	--	13	0.59	0.04	0.09
JAN													
06...	13.2	153	152	185	<1	14.6	0.2	47.4	282	<10	0.76	0.06	1.07
FEB													
19...	--	74	74	90	<1	--	--	--	--	36d	3.0	0.64	0.90
19...	--	--	--	--	--	--	--	--	--	36d	2.8	0.67	0.93
MAR													
17...	--	111	109	133	<1	--	--	--	--	145d	0.96	E.03n	0.92
APR													
21...	--	159	160	195	<1	--	--	--	--	35	0.86	<0.04	0.10
MAY													
12...	17.0	206	206	251	<1	10.2	0.3	60.2	330	<10	0.55	0.04	<0.06
JUN													
24...	--	183	184	225	<1	--	--	--	--	13	0.56	<0.04	0.52
JUL													
15...	9.52	145	146	178	<1	9.77	0.2	28.3	243	58d	0.95	<0.04	0.52
AUG													
24...	--	81	81	99	<1	--	--	--	--	1,110d	1.7	E.03n	0.51
SEP													
15...	--	--r	--r	--r	--r	--	--	--	--	<10	0.49	<0.04	E.05n
15...	--	--	--	--	--	--	--	--	--	<10	<0.10	0.07	<0.06

06900900 LOCUST CREEK NEAR UNIONVILLE, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
21...	0.017	<0.02	E.03n	0.07	100	95	160	--	--	--	--	--	--
NOV													
19...	<0.008	<0.02	<0.04	0.06	20k	110	290	E1n	74	0.6	<0.04	E.03n	0.6
DEC													
09...	<0.008	E.01n	E.02n	0.08	690	550	4,000	--	--	--	--	--	--
JAN													
06...	0.008	<0.02	<0.04	0.07	24k	30k	110	E1n	227	0.8	E.04n	E.03n	1.9
FEB													
19...	0.017	0.30	0.43	0.60	--u	1,300	5,700	--	--	--	--	--	--
19...	0.017	0.32	0.43	0.58	--	--	--	--	--	--	--	--	--
MAR													
17...	E.007n	0.02	E.02n	0.23	170k	560	280	--	--	--	--	--	--
APR													
21...	0.009	E.02n	0.04	0.12	>1100a	>860a	1,000	--	--	--	--	--	--
MAY													
12...	E.006n	E.01n	E.02n	0.05	460	320	480	E1n	91	1.1	E.02n	E.03n	1.9
JUN													
24...	0.012	<0.02	<0.04	0.09	370	280	330	--	--	--	--	--	--
JUL													
15...	0.022	0.03	0.05	0.15	<4b	810	1,100	2	594	1.4	<0.04	0.05	1.9
AUG													
24...	0.024	0.04	0.07	0.79	--u	>12000a	>20000a	--	--	--	--	--	--
SEP													
15...	<0.008	E.01n	E.02n	0.07	440	600	500	--	--	--	--	--	--
15...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--

06900900 LOCUST CREEK NEAR UNIONVILLE, 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)
OCT								
21...	--	--	--	--	--	--	--	--
NOV								
19...	29	<0.08	0.12	340	<0.02	<0.4	<0.6	<2
DEC								
09...	--	--	--	--	--	--	--	--
JAN								
06...	E4n	<0.08	0.33	491	<0.02	1.2	Mn	<2
FEB								
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
APR								
21...	--	--	--	--	--	--	--	--
MAY								
12...	24	<0.08	0.17	730	<0.02	E.3n	Mn	<2
JUN								
24...	--	--	--	--	--	--	--	--
JUL								
15...	E5n	<0.08	1.02	111	<0.02	0.6	M	3
AUG								
24...	--	--	--	--	--	--	--	--
SEP								
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--

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 -- Vaue extrapolated at low end
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

Null value qualifer codes used in this table:
r -- Sample ruined in preparation
u -- Unable to determine-matrix interference

06901500 LOCUST CREEK NEAR LINNEUS, MO

LOCATION.--Lat 39°53'45", long 93°14'11", in NW ¼ NE ¼ sec.34, T.59 N., R.21 W., Linn County, Hydrologic Unit 10280103, on right bank on upstream side of county road, 1 mi upstream from Boyer bridge, 1.5 mi upstream from Strawberry and Couch Creeks, 3 mi northwest of Linneus, and 5 mi downstream from West Locust Creek.

DRAINAGE AREA.--550 sq mi^2.

REVISED RECORDS.--WSP 896: 1939.

PERIOD OF RECORD.--October 1928 to September 1972, July 2000 to current year. Prior to April 1929 monthly discharge only published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 692.61 ft above National Geodetic Vertical Datum of 1929. Prior to July 26, 1956, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1909 reached a discharge of about 18,000 ft^3/s, determination by the Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	3.3	9.4	67	e7.0	85	395	176	3,750	79	38	1,040
2	5.6	5.3	10	50	e8.0	82	301	155	1,110	96	42	666
3	5.3	5.2	12	36	e8.0	82	244	106	510	131	42	461
4	4.7	4.3	13	33	e7.0	1,730	204	70	310	196	4,540	322
5	4.8	4.0	12	e17	e7.0	8,080	178	61	220	154	1,680	240
6	4.4	4.1	11	e11	e7.0	3,630	149	51	175	115	397	415
7	3.8	4.2	10	e10	e6.0	1,140	132	41	148	103	192	277
8	4.1	3.7	11	e9.0	e5.0	641	130	34	130	96	132	211
9	4.2	3.7	59	e10	e5.0	438	120	30	117	86	102	146
10	3.9	3.9	426	e10	e6.0	325	114	25	698	77	85	120
11	4.0	4.0	358	e11	e6.0	259	105	20	1,540	219	71	106
12	4.2	3.8	216	e11	e6.0	222	96	19	754	547	62	93
13	4.7	3.3	155	e11	e6.0	197	89	20	1,170	642	55	82
14	8.6	3.8	150	e12	e5.0	199	83	23	3,680	220	51	72
15	5.8	4.4	70	e12	e5.0	194	77	23	3,420	142	48	70
16	7.2	4.4	56	e12	e5.0	252	71	25	2,110	111	46	71
17	7.0	5.0	68	e14	e6.0	354	65	23	2,040	97	44	68
18	4.7	7.7	50	e23	e10	381	59	26	613	94	42	69
19	3.7	7.5	63	e32	e18	370	56	267	508	83	42	62
20	3.2	10	40	e70	e190	274	63	231	313	71	45	56
21	3.0	6.0	26	e28	e1,100	212	76	96	233	65	43	49
22	3.1	5.6	86	e25	471	175	93	63	207	62	45	45
23	3.2	12	232	e18	271	171	77	454	181	59	43	42
24	3.3	11	72	e20	208	146	56	1,380	147	54	73	40
25	3.0	11	75	e14	153	138	49	5,410	559	50	4,360	37
26	3.2	17	32	e12	111	888	45	1,210	150	47	3,170	35
27	3.6	17	26	e10	101	934	41	723	115	45	1,560	35
28	4.4	13	575	e9.0	92	3,980	35	413	102	43	22,200	32
29	4.4	10	638	e8.0	89	3,400	32	222	91	40	23,800	32
30	3.8	8.6	224	e8.0	---	1,080	44	523	85	39	11,200	31
31	3.4	---	110	e7.0	---	585	---	3,390	---	38	1,910	---
MEAN	4.46	6.89	126	20.0	101	989	109	494	840	126	2,457	168
MAX	8.6	17	638	70	1,100	8,080	395	5,410	3,750	642	23,800	1,040
MIN	3.0	3.3	9.4	7.0	5.0	82	32	19	85	38	38	31
IN.	0.01	0.01	0.26	0.04	0.20	2.07	0.22	1.04	1.70	0.26	5.15	0.34

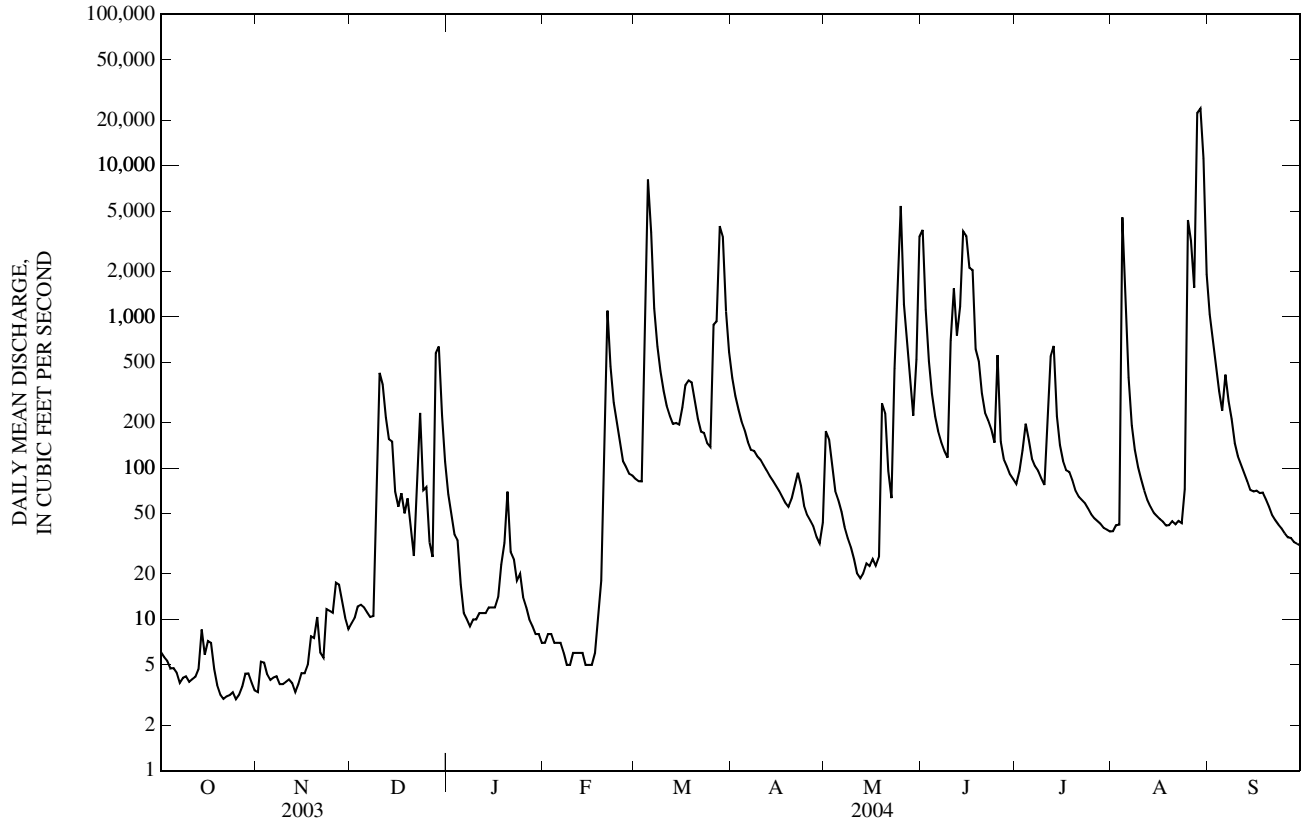
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	156	190	137	181	316	482	570	494	694	268	175	157
MAX	1,174	2,272	803	1,027	1,557	1,898	2,103	2,647	5,820	2,903	2,457	2,079
(WY)	(1930)	(1932)	(1943)	(1946)	(2001)	(1961)	(1944)	(1935)	(1947)	(1958)	(2004)	(1970)
MIN	0.92	2.38	2.70	1.29	3.61	6.47	5.92	23.2	4.72	0.40	0.67	1.97
(WY)	(1957)	(1957)	(1938)	(1940)	(1957)	(1957)	(1956)	(1938)	(1934)	(1934)	(1936)	(1955)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	31.5		457		314	
HIGHEST ANNUAL MEAN					796	1947
LOWEST ANNUAL MEAN					21.4	2003
HIGHEST DAILY MEAN	638	Dec 29	23,800	Aug 29	27,300	Jun 6, 1947
LOWEST DAILY MEAN	0.56	Aug 26	3.0	Oct 21,25	0.00	Jul 17-Aug 11, 1934
ANNUAL SEVEN-DAY MINIMUM	0.63	Aug 21	3.1	Oct 20	0.00	Jul 17, 1934
MAXIMUM PEAK FLOW	---		27,700	Aug 29	38,000	Jun 6, 1947
MAXIMUM PEAK STAGE	---		26.82	Aug 29	26.93	Jun 6, 1947
INSTANTANEOUS LOW FLOW	---		2.9	Oct 21,25,26	0.00	Jul 17-Aug 11 1934
ANNUAL RUNOFF (INCHES)	0.78		11.31		7.75	
10 PERCENT EXCEEDS	71		649		575	
50 PERCENT EXCEEDS	6.3		62		41	
90 PERCENT EXCEEDS	3.1		4.7		4.1	

e Estimated

06901500 LOCUST CREEK NEAR LINNEUS, MO—Continued



06902000 GRAND RIVER NEAR SUMNER, MO

LOCATION.--Lat 39°38'24", long 93°16'25", in NE $^1/_4$ sec.29, T.56 N., R.21 W., Livingston County, Hydrologic Unit 10280103, near right bank on downstream side of pier of bridge on State Highway 139, 240 ft downstream from Chicago, Burlington and Quincy Railroad Bridge, 2.0 mi southwest of Sumner, 2.5 mi downstream from Locust Creek, and at mile 41.0.

DRAINAGE AREA.--6,880 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 631.18 ft above National Geodetic Vertical Datum of 1929. Prior to July 11, 1926, nonrecording gage at site 200 ft upstream at same datum; July 11, 1926, to July 9, 1939, nonrecording gage at same site and datum; July 10, 1939, to Aug. 8, 1952, water-stage recorder at site 200 ft upstream at same datum; Aug. 9, 1952, to Nov. 12, 1953, nonrecording gage at site 120 ft upstream and at same datum; Nov. 13, 1953, to July 6, 1964, water-stage recorder and nonrecording gage, for stages below 8.3 ft, at site 120 ft upstream and at same datum; July 7, 1964, to May 26, 1965, nonrecording gage at present site and datum. Auxiliary water-stage recorder at site 3.2 mi downstream from base gage at datum 631.30 ft above National Geodetic Vertical Datum of 1929; Mar. 15, 1939, to Aug. 4, 1942, auxiliary nonrecording gage at various sites; Aug. 5, 1942, to Dec. 14, 1956, auxiliary nonrecording gage at present site.

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

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

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	141	76	145	884	e160	1,230	9,730	2,100	105,000	1,290	640	e23,000
2	130	78	137	733	e165	1,190	6,640	2,500	65,300	1,390	838	e12,000
3	125	72	130	640	e165	1,190	4,910	1,910	19,800	6,640	1,110	e6,700
4	117	73	124	e510	e160	2,250	3,360	1,350	10,500	14,000	6,790	e4,800
5	114	282	119	e425	e155	71,000	2,300	1,070	7,690	11,800	34,600	e3,800
6	111	772	123	e280	e155	79,600	2,020	934	5,940	4,860	20,700	e5,600
7	107	452	127	e275	e150	43,500	1,800	828	4,680	2,100	11,500	e7,500
8	102	389	128	e290	e145	17,100	1,650	733	3,350	1,900	5,830	e7,400
9	97	407	194	e300	e145	8,800	1,490	658	2,170	1,660	2,840	5,620
10	95	330	6,990	e295	e145	5,720	1,350	598	1,970	1,420	1,760	3,500
11	92	270	10,100	e295	e140	4,410	1,240	609	e13,000	1,220	1,400	2,140
12	93	226	3,310	e295	e135	3,020	1,130	687	e10,000	6,610	1,150	1,780
13	96	203	1,260	e290	e130	2,120	1,060	802	e22,000	e19,000	980	1,530
14	258	182	899	e275	e130	1,810	991	772	e91,000	14,300	872	1,360
15	303	165	874	e265	e125	1,780	941	761	e105,000	7,340	787	1,210
16	217	153	866	e260	e125	2,510	890	879	83,200	4,520	718	1,160
17	160	152	861	e255	e130	4,660	851	1,320	51,100	8,810	654	1,130
18	144	169	893	e245	e150	4,880	818	1,130	25,000	12,500	595	1,120
19	119	218	1,730	e240	e300	4,340	772	15,200	21,600	5,110	559	2,230
20	105	243	1,660	e230	e900	3,530	786	34,500	16,100	2,090	581	8,890
21	96	199	1,100	e225	e3,000	2,480	2,890	19,700	9,860	1,560	636	3,820
22	92	164	962	e235	e7,000	2,400	1,830	9,450	6,940	1,290	561	1,690
23	95	158	1,850	e235	6,110	2,020	1,390	5,250	5,860	e1,120	553	1,240
24	91	763	1,790	e240	6,040	1,720	1,360	14,300	4,820	e1,030	1,130	1,030
25	86	833	1,020	e230	e4,000	1,520	1,260	43,900	5,050	e970	12,400	918
26	83	376	760	e220	e2,400	2,790	1,070	65,700	5,910	e940	43,600	831
27	84	270	698	e205	1,970	17,700	918	30,800	3,570	e910	29,100	753
28	86	215	6,410	e180	1,540	34,600	849	20,000	1,950	893	92,500	700
29	84	186	8,970	e175	1,300	64,500	797	14,200	1,630	806	133,000	661
30	81	159	2,760	e170	---	35,700	815	20,700	1,430	731	136,000	630
31	76	---	1,210	e165	---	17,000	---	101,000	---	673	70,100	---
MEAN	119	274	1,877	308	1,282	14,420	1,930	13,370	23,710	4,499	19,820	3,825
MAX	303	833	10,100	884	7,000	79,600	9,730	101,000	105,000	19,000	136,000	23,000
MIN	76	72	119	165	125	1,190	772	598	1,430	673	553	630
IN.	0.02	0.04	0.31	0.05	0.20	2.42	0.31	2.24	3.85	0.75	3.32	0.62

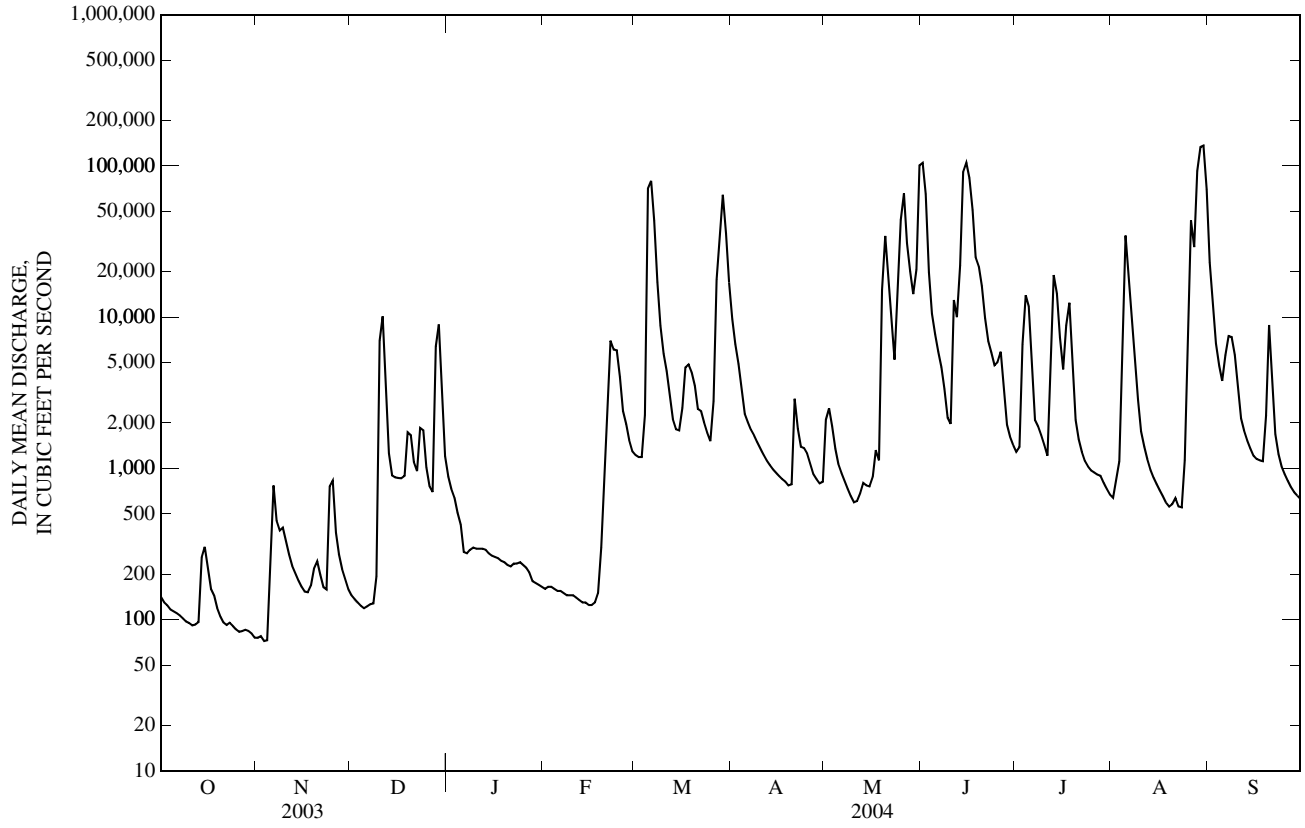
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	2,634	2,846	1,998	1,890	3,730	6,072	6,955	6,633	7,576	4,585	1,913	3,019
MAX	20,630	29,030	15,440	14,750	19,250	34,220	26,680	43,450	67,270	87,900	19,820	28,090
(WY)	(1974)	(1932)	(1983)	(1932)	(1962)	(1979)	(1973)	(1995)	(1947)	(1993)	(2004)	(1926)
MIN	37.1	40.3	53.0	32.1	57.0	79.5	67.3	130	176	52.8	41.0	62.5
(WY)	(1957)	(1957)	(1956)	(1940)	(1939)	(1957)	(1956)	(1956)	(1988)	(1934)	(1936)	(1955)

06902000 GRAND RIVER NEAR SUMNER, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL MEAN	629		7,148		4,147	
HIGHEST ANNUAL MEAN					17,390	1993
LOWEST ANNUAL MEAN					367	1934
HIGHEST DAILY MEAN	10,100	Dec 11	136,000	Aug 30	166,000	Jun 8, 1947
LOWEST DAILY MEAN	55	Aug 27	72	Nov 3	10	Aug 12, 1934
ANNUAL SEVEN-DAY MINIMUM	59	Aug 22	77	Oct 29	12	Aug 7, 1934
MAXIMUM PEAK FLOW	---		147,000	Aug 30	180,000	Jun 8, 1947
MAXIMUM PEAK STAGE	---		37.15	Aug 30	42.52	Jul 10, 1993
INSTANTANEOUS LOW FLOW	---		71	Nov 3,4	10	Aug 12, 1934
ANNUAL RUNOFF (INCHES)	1.24		14.15		8.19	
10 PERCENT EXCEEDS	1,650		17,000		10,100	
50 PERCENT EXCEEDS	183		1,080		960	
90 PERCENT EXCEEDS	92		130		128	

e Estimated



06902000 GRAND RIVER NEAR SUMNER, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1974 to September 1981.
WATER TEMPERATURE: January 1974 to September 1981.

REMARKS.--National Stream-Quality Accounting Network station October 1967 to September 1993. Ambient Water-Quality Monitoring Network station October 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
21...	1245	Environmental	96	9.4	101	7.7	364	17.6	--	--	--	--
NOV												
05...	1215	Environmental	75	10.7	96	8.2	467	9.9	200	60.4	11.0	3.67
DEC												
15...	1315	Environmental	888	13.4	100	7.7	260	1.5	--	--	--	--
JAN												
07...	1025	Blank	--	--	--	--	--	--	--	0.02	E.004n	<0.16
07...	1040	Environmental	e275	14.9	104	7.4	451	0.4	210	67.7	10.9	4.62
FEB												
03...	0815	Environmental	e165	12.4	87	7.0	631	0.1	--	--	--	--
MAR												
02...	0840	Environmental	1,170	10.9	92	7.8	342	6.9	--	--	--	--
APR												
06...	0900	Environmental	2,040	8.6	84	7.8	376	13.5	--	--	--	--
06...	0905	Replicate	--	8.5	84	7.9	376	13.5	--	--	--	--
MAY												
19...	1500	Environmental	21,000	4.0	47	7.3	224	21.2	98	31.4	4.73	4.46
JUN												
28...	1310	Environmental	1,910	8.0	95	7.8	384	22.5	--	--	--	--
JUL												
15...	1003	Environmental	7,510	5.4	70	7.0	229	26.8	95	29.8	5.02	5.26
AUG												
16...	1230	Environmental	715	9.1	108	8.0	418	23.0	--	--	--	--
16...	1300	Blank	--	--	--	--	--	--	--	--	--	--
SEP												
02...	1010	Environmental	e12,500	4.2	51	7.1	206	23.7	--	--	--	--

06902000 GRAND RIVER NEAR SUMNER, MO—Continued

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

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicar-bonate, wat unf incrm. titr., field, mg/L (00450)	Carbon-ate, wat unf incrm. titr., field, mg/L (00447)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
21...	--	156	158	193	<1	--	--	--	--	44	1.2	E.02n	<0.06
NOV													
05...	19.5	182	182	222	<1	16.4	0.2	32.4	276	26	0.64	<0.04	<0.06
DEC													
15...	--	102	100	122	<1	--	--	--	--	89d	1.3	0.14	1.85
JAN													
07...	<0.10	--	--	--	--	E.10n	<0.2	<0.2	<10	<10	<0.10	E.03n	<0.06
07...	13.9	166	166	203	<1	14.0	0.2	41.8	286	<10	0.62	0.12	0.97
FEB													
03...	--	207	207	253	<1	--	--	--	--	<10	0.72	0.23	0.68
MAR													
02...	--	99	100	122	<1	--	--	--	--	112d	1.2	0.22	1.56
APR													
06...	--	131	129	157	<1	--	--	--	--	136d	0.88	<0.04	1.48
06...	--	--	--	--	--	--	--	--	--	146d	0.87	<0.04	1.44
MAY													
19...	5.43	83	82	100	<1	6.28	0.2	12.4	147	1,070d	5.9d	0.15	2.97
JUN													
28...	--	146	142	173	<1	--	--	--	--	158d	1.2	<0.04	0.08
JUL													
15...	4.85	84	84	102	<1	5.81	0.2	13.3	155	475d	3.1	<0.04	0.71
AUG													
16...	--	165	166	202	<1	--	--	--	--	49	0.91	<0.04	<0.06
16...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
SEP													
02...	--	83	83	101	<1	--	--	--	--	543d	1.5	<0.04	0.19

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover -able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
21...	<0.008	<0.02	E.02n	0.20	320	390k	97	--	--	--	--	--	--
NOV													
05...	<0.008	<0.02	<0.04	0.09	41	66k	46	<2	236	0.7	E.03n	0.06	0.9
DEC													
15...	0.014	<0.02	0.05	0.32	790k	1,600k	8,000	--	--	--	--	--	--
JAN													
07...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.2	<0.04	<0.04	<0.4
07...	0.036	<0.02	<0.04	0.08	8k	52	48	E2n	230	0.9	0.04	0.05	1.9
FEB													
03...	0.013	<0.02	<0.04	0.08	9k	11k	26	--	--	--	--	--	--
MAR													
02...	0.026	E.01n	0.05	0.26	9k	30	63	--	--	--	--	--	--
APR													
06...	E.007n	E.01n	0.06	0.25	70	260	120	--	--	--	--	--	--
06...	0.008	<0.02	0.05	0.25	64	180	102	--	--	--	--	--	--
MAY													
19...	0.065	0.03	0.06	2.37d	25,000	37,000	70,000	2	22,000d	1.7	E.03n	1.73	1.9
JUN													
28...	E.007n	E.01n	0.05	0.28	250	340k	127	--	--	--	--	--	--
JUL													
15...	0.022	<0.02	0.10	1.22	5,300	4,100	2,200	E2n	12,900d	1.7	<0.04	0.64	2.8
AUG													
16...	<0.008	E.02n	E.04n	0.19	38k	20k	32k	--	--	--	--	--	--
16...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
SEP													
02...	E.004n	0.06	0.09	0.57	550	1,000	507	--	--	--	--	--	--

06902000 GRAND RIVER NEAR SUMNER, 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)	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								
21...	--	--	--	--	--	--	--	--
NOV								
05...	8	<0.08	0.65v	1,250	<0.02	E.3n	1	2
DEC								
15...	--	--	--	--	--	--	--	--
JAN								
07...	<6	0.09	<0.06	<0.8	<0.02	<0.4	<0.6	<2
07...	13	0.35	0.44	412	<0.02	1.5	1	E2n
FEB								
03...	--	--	--	--	--	--	--	--
MAR								
02...	--	--	--	--	--	--	--	--
APR								
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
MAY								
19...	13	<0.08	41.4	76.6	0.08	0.6	Mn	123
JUN								
28...	--	--	--	--	--	--	--	--
JUL								
15...	<6	<0.08	21.9	<0.8	0.05	0.7	Mn	67
AUG								
16...	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--
SEP								
02...	--	--	--	--	--	--	--	--

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:
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

06904050 CHARITON RIVER AT LIVONIA, MO

LOCATION.--Lat 40°29'02", long 92°41'09", in NW ¼ SE ¼ NW ¼ sec.34, T.66 N., R.16 W., Schuyler County, Hydrologic Unit 10280201, on left bank 10 ft downstream from bridge on U.S. Highway 136, 1.0 mi upstream from Shoal Creek, 0.5 mi east of Livonia, and at mile 90.9.

DRAINAGE AREA.--864 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 770.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Considerable regulation by Rathbun Lake (station 06903880), 51.0 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	34	33	118	e90	163	428	77	2,160	789	62	1,080
2	35	30	29	95	e90	e164	372	73	2,130	798	70	987
3	32	30	28	83	e85	e489	339	64	1,440	683	103	938
4	28	72	31	70	e85	955	314	59	1,080	466	413	e912
5	29	97	35	e60	e85	2,490	298	58	955	427	945	e900
6	32	69	35	e57	e80	2,110	288	56	907	419	570	e874
7	33	52	35	e59	e80	1,610	279	54	876	417	883	e862
8	33	42	37	e60	e75	647	270	56	859	415	1,110	e847
9	33	37	61	e65	e75	699	263	53	859	418	1,110	e835
10	33	34	e879	72	e80	1,200	257	48	931	415	1,100	e820
11	33	32	e518	71	e80	1,170	250	47	1,440	718	886	809
12	33	30	e201	72	e82	1,140	246	47	1,050	1,780	609	803
13	35	30	172	75	e80	1,130	227	54	1,240	952	599	799
14	41	30	195	e78	e80	1,160	118	59	1,270	476	479	548
15	41	29	141	e80	e80	1,150	85	61	1,610	830	172	149
16	48	28	93	88	e80	1,150	79	53	1,170	809	133	219
17	40	29	97	461	e80	1,240	75	47	1,240	809	126	790
18	36	28	86	795	e88	1,540	71	85	595	823	83	794
19	34	29	81	621	e150	1,450	66	78	518	796	64	791
20	34	42	80	e390	e900	1,250	74	75	875	784	64	791
21	33	35	77	e320	1,170	1,160	95	60	861	778	62	787
22	33	32	86	e240	1,060	1,120	95	54	847	780	58	785
23	33	120	88	e195	798	1,110	80	53	832	778	56	654
24	34	241	88	e200	668	1,100	72	62	820	605	67	446
25	35	141	63	e175	499	779	70	452	809	416	105	438
26	33	74	79	e150	338	377	70	914	800	411	599	434
27	32	53	76	e145	241	451	66	318	796	367	2,140	432
28	33	43	721	e125	196	989	63	156	791	230	4,360	343
29	34	34	617	e108	168	1,710	59	110	787	200	3,440	233
30	34	34	273	e100	---	851	63	1,560	783	97	2,130	225
31	33	---	163	e95	---	544	---	2,790	---	63	1,100	---
MEAN	34.4	53.7	168	172	264	1,068	171	249	1,044	605	764	678
MAX	48	241	879	795	1,170	2,490	428	2,790	2,160	1,780	4,360	1,080
MIN	28	28	28	57	75	163	59	47	518	63	56	149
IN.	0.05	0.07	0.22	0.23	0.33	1.43	0.22	0.33	1.35	0.81	1.02	0.88

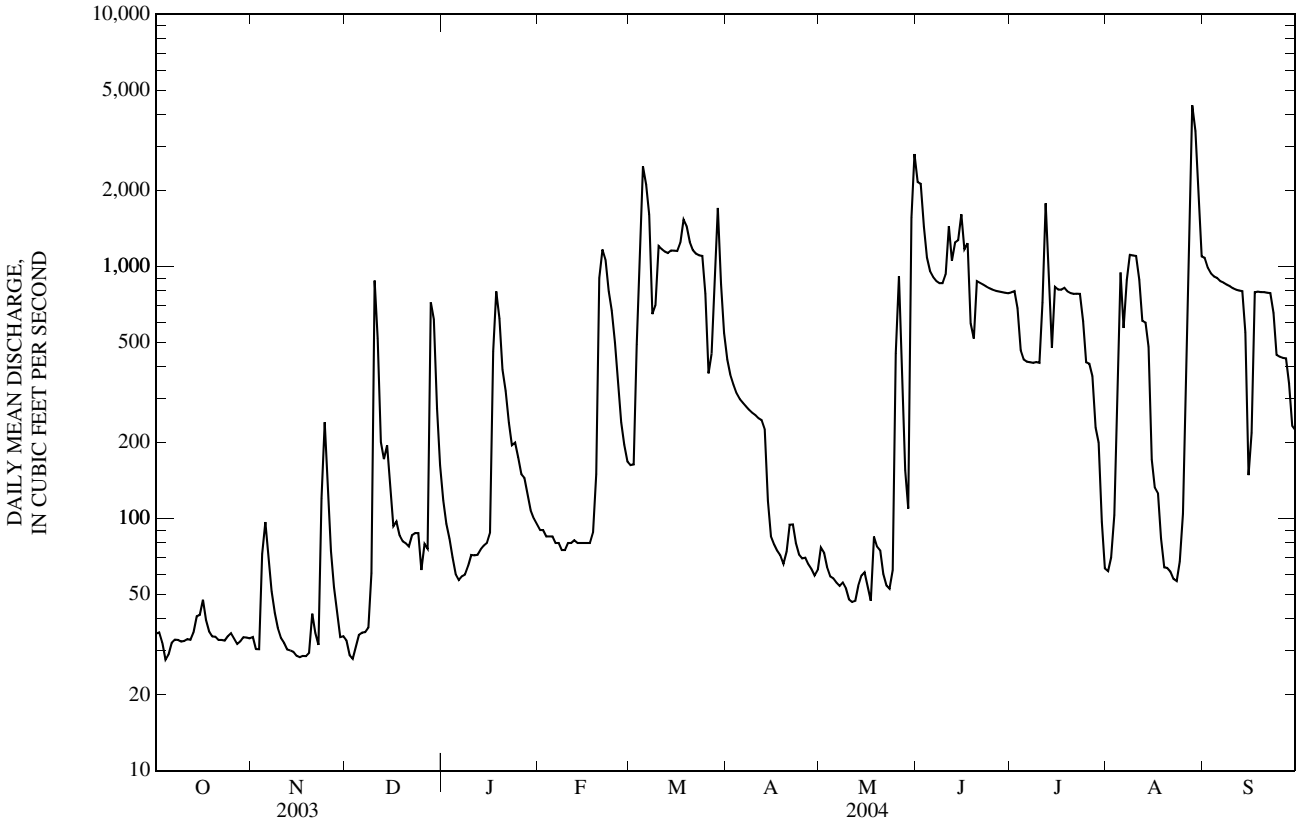
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	395	427	557	325	514	831	808	891	858	969	599	465
MAX	1,764	1,714	2,005	1,797	1,956	2,046	1,898	2,239	1,839	3,923	2,045	2,029
(WY)	(1994)	(1994)	(1983)	(1993)	(1983)	(1993)	(1983)	(1995)	(1980)	(1993)	(1993)	(1993)
MIN	27.2	26.2	19.9	13.6	23.0	47.6	31.1	33.1	33.6	23.6	32.3	29.0
(WY)	(1977)	(1990)	(1977)	(1977)	(1989)	(2000)	(1989)	(2000)	(1988)	(1988)	(1988)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL MEAN	82.3		440		637	
HIGHEST ANNUAL MEAN					1,838	1993
LOWEST ANNUAL MEAN					69.2	2003
HIGHEST DAILY MEAN	1,160	May 11	4,360	Aug 28	8,960	Jul 18, 1982
LOWEST DAILY MEAN	23	Jan 18,24,25	28	Oct 4,Nov 16,18,Dec 3	13	Jan 11, 1977
ANNUAL SEVEN-DAY MINIMUM	25	Jan 21	29	Nov 13	13	Jan 11, 1977
MAXIMUM PEAK FLOW	---		4,580	Aug 28	9,200	Jul 18, 1982
MAXIMUM PEAK STAGE	---		19.95	Aug 28	28.33	Jul 18, 1982
INSTANTANEOUS LOW FLOW	---		26	Oct 4	11	Jan 1, 2003
ANNUAL RUNOFF (INCHES)	1.29		6.93		10.02	
10 PERCENT EXCEEDS	141		1,110		1,540	
50 PERCENT EXCEEDS	40		163		287	
90 PERCENT EXCEEDS	30		34		32	

e Estimated

06904050 CHARITON RIVER AT LIVONIA, MO—Continued



06904500 CHARITON RIVER AT NOVINGER, MO

LOCATION.--Lat 40°14'04", long 92°41'11", on south line of SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.63 N., R.16 W., Adair County, Hydrologic Unit 10280202, on downstream side of center pier of bridge on State Highway 6, 0.6 mi east of Novinger, 1.0 mi downstream from Rye Creek, 2.0 mi upstream from Spring Creek, and at mile 73.1.

DRAINAGE AREA.--1,370 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 737.65 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 20, 1939, nonrecording gage at bridge over old channel, 500 ft east, at the same datum; Dec. 20, 1939, to Sept. 30, 1952, and Oct. 1, 1954, to Aug. 1, 1956, water-stage recorder, supplemented by nonrecording gage, at same site and datum; Aug. 3, 1956, to May 16, 1957, nonrecording gage at present site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Some regulation by Rathbun Lake (Iowa station 06903880). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.6 ft, discharge, 27,000 ft^3/s, June 1917.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	37	51	314	e100	317	911	436	6,100	909	205	1,970
2	42	40	46	264	e98	319	744	299	4,260	954	249	1,660
3	43	38	40	228	e98	518	639	190	2,670	946	243	1,480
4	39	38	39	205	e98	2,420	569	144	1,870	685	1,400	1,370
5	33	88	44	140	e96	12,300	515	129	1,550	548	1,870	1,280
6	34	86	46	e100	e96	6,810	485	111	1,380	505	1,110	1,300
7	35	71	48	e95	e96	3,970	465	96	1,280	497	1,030	1,280
8	36	56	48	e92	e95	1,870	443	87	1,210	482	1,500	1,210
9	36	48	141	e95	e94	1,220	420	83	1,180	476	1,480	1,140
10	35	43	2,850	e98	e98	1,940	402	72	1,240	472	1,460	1,090
11	35	41	1,450	e100	e96	1,850	385	66	3,200	1,740	1,340	1,050
12	37	39	513	e105	e100	1,730	372	66	1,880	7,860	857	1,030
13	37	36	293	e110	e100	1,670	362	88	2,560	2,690	788	998
14	61	37	364	e115	e100	1,730	275	109	2,750	1,230	747	896
15	50	38	359	e125	e100	1,750	177	100	3,020	1,370	414	432
16	51	36	273	e190	e95	1,700	155	86	2,570	1,330	253	271
17	56	37	242	876	e95	1,950	142	70	2,950	1,270	233	783
18	47	45	266	1,510	e115	2,660	132	818	1,520	1,270	208	975
19	42	40	220	817	e275	2,470	126	845	864	1,200	155	957
20	39	42	195	e525	e1,850	1,960	196	341	1,220	1,160	150	944
21	38	59	235	e360	2,300	1,700	386	216	1,220	1,130	148	932
22	37	52	267	e260	1,420	1,560	263	157	1,180	1,120	135	921
23	37	156	347	e210	998	1,520	190	236	1,080	1,110	126	868
24	36	585	222	e225	756	1,500	151	220	1,030	1,030	157	574
25	38	307	194	e215	585	1,340	149	1,150	991	729	391	523
26	37	162	206	e205	443	756	133	1,770	961	681	5,920	516
27	37	101	204	e180	399	753	123	799	944	653	5,540	510
28	38	76	1,880	e130	361	2,210	109	386	926	512	18,400	487
29	37	62	1,550	e115	334	4,300	100	248	915	434	13,900	313
30	38	54	663	e105	---	2,050	249	3,990	906	347	5,370	296
31	37	---	418	e100	---	1,220	---	8,900	---	230	2,420	---
MEAN	40.1	85.0	442	265	396	2,260	326	720	1,848	1,147	2,200	935
MAX	61	585	2,850	1,510	2,300	12,300	911	8,900	6,100	7,860	18,400	1,970
MIN	33	36	39	92	94	317	100	66	864	230	126	271
IN.	0.03	0.07	0.37	0.22	0.31	1.90	0.27	0.61	1.51	0.97	1.85	0.76

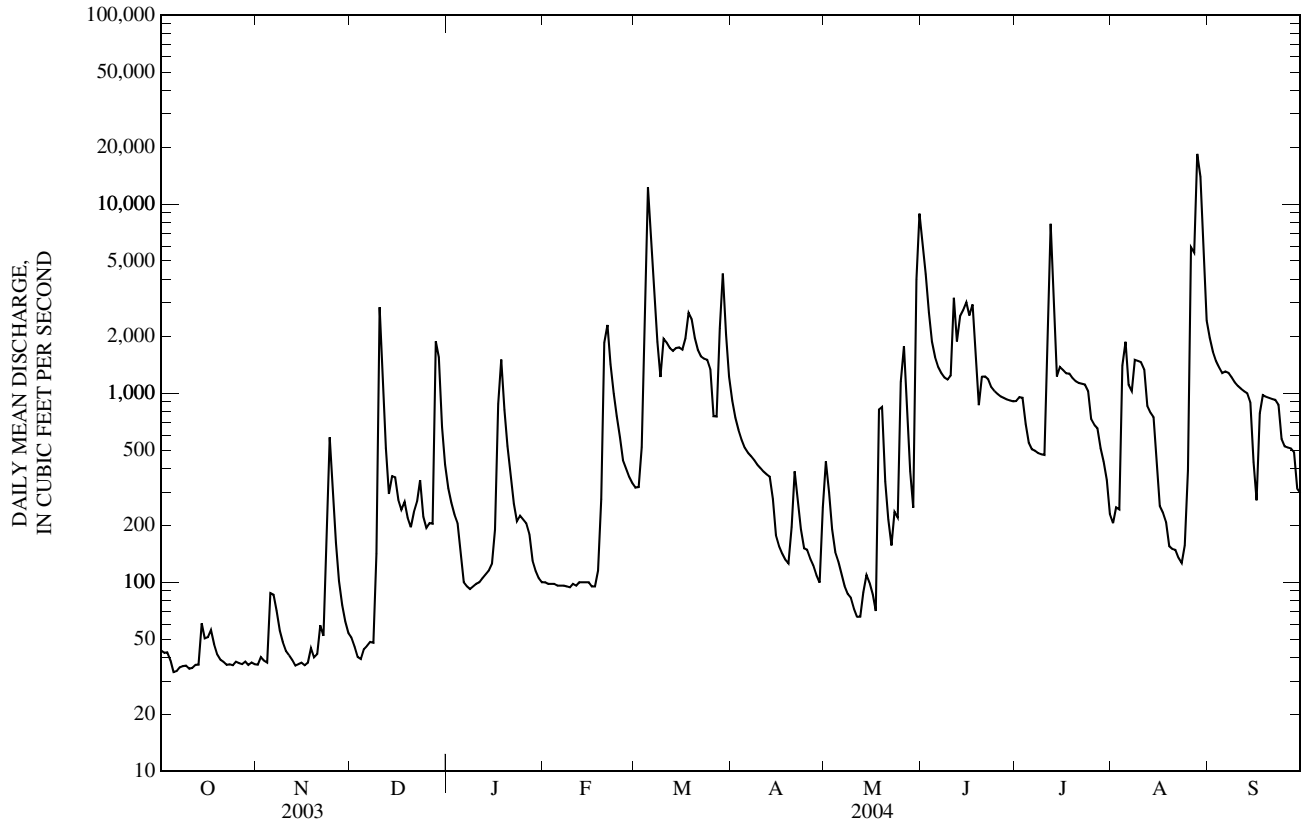
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004[a], BY WATER YEAR (WY)

MEAN	717	679	829	538	934	1,533	1,535	1,805	1,346	1,436	787	717
MAX	3,352	2,403	3,318	2,686	2,652	4,105	5,302	5,447	4,482	9,877	2,770	3,232
(WY)	(1974)	(1993)	(1983)	(1993)	(2001)	(1993)	(1973)	(1995)	(2001)	(1993)	(1993)	(1993)
MIN	25.6	30.2	20.0	13.6	28.0	73.8	35.8	43.0	46.1	32.2	28.1	31.8
(WY)	(1972)	(1990)	(1977)	(1977)	(1989)	(2000)	(1989)	(2000)	(1988)	(1970)	(1971)	(2002)

06904500 CHARITON RIVER AT NOVINGER, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004[a]	
ANNUAL MEAN	162		892		1,072	
HIGHEST ANNUAL MEAN					3,299	1993
LOWEST ANNUAL MEAN					107	2000
HIGHEST DAILY MEAN	2,990	May 5	18,400	Aug 28	22,900	May 12, 2002
LOWEST DAILY MEAN	22	Jan 15	33	Oct 5	11	Aug 1, 1970
ANNUAL SEVEN-DAY MINIMUM	27	Jan 12	35	Oct 5	12	Jul 26, 1970
MAXIMUM PEAK FLOW	---		19,600	Aug 28	24,200	May 12, 2002
MAXIMUM PEAK STAGE	---		21.44	Aug 28	25.71	Jul 24, 1993
INSTANTANEOUS LOW FLOW	---		32	Oct 5	11	1970,1995,2000,2003
ANNUAL RUNOFF (INCHES)	1.61		8.87		10.63	
10 PERCENT EXCEEDS	334		1,870		2,300	
50 PERCENT EXCEEDS	50		344		472	
90 PERCENT EXCEEDS	34		42		40	

e Estimated
[a] Post-regulation period.



06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO

LOCATION.--Lat 39°32'24", long 92°47'27", in NW ¼ SW ¼ sec.26, T.55 N., R.17 W., Chariton County, Hydrologic Unit 10280202, on right bank on downstream side of road at bridge on State Highway 129, 3.2 mi northwest of Prairie Hill, 13.5 mi upstream from Puzzle Creek, and at mile 19.6.

DRAINAGE AREA.--1,870 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Prior to Oct. 1, 1953, published as Chariton River near Keytesville (06905600). Prior to May 1929, monthly discharge only, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 632.05 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to Oct. 1, 1953, nonrecording gage at site 8.2 mi downstream at datum 13.68 ft lower; Oct. 1, 1953, to July 2, 1958, nonrecording gage at present site and datum.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Some regulation by Rathbun Lake (Iowa station 06903880), 122 mi upstream, since 1970. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters 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	90	48	125	499	e105	443	1,390	1,080	7,880	987	146	2,270
2	81	50	113	371	e105	413	1,060	1,170	4,590	1,090	102	1,890
3	73	49	97	291	e105	402	873	693	3,500	1,410	84	1,610
4	69	53	92	245	e105	808	757	462	2,300	1,470	3,070	1,440
5	68	58	92	175	e100	9,710	672	344	1,680	1,060	4,040	1,320
6	62	40	85	e120	e100	7,720	612	283	1,430	798	1,950	1,270
7	52	76	88	e80	e102	5,160	571	238	1,300	724	1,160	1,270
8	44	131	106	e80	e105	3,360	542	200	1,220	725	862	1,240
9	50	103	391	e90	e108	1,820	503	170	1,170	696	1,230	1,160
10	55	92	7,070	e85	e110	1,260	476	154	1,310	647	1,220	1,110
11	52	77	4,680	e95	e105	1,840	455	142	1,790	634	1,180	1,050
12	49	81	1,730	e105	e105	1,780	431	130	3,120	4,660	1,100	1,020
13	58	65	764	e127	e110	1,670	429	142	1,930	5,270	738	993
14	147	54	418	114	e112	1,640	426	142	2,680	2,210	629	960
15	174	48	356	104	e114	1,710	415	154	3,450	1,030	620	1,040
16	144	46	653	137	e110	1,770	306	150	3,340	1,100	430	813
17	114	112	478	174	e105	1,810	234	133	2,550	1,360	216	349
18	92	919	346	433	e120	2,060	204	124	2,850	1,100	149	535
19	91	826	364	1,120	e340	2,520	193	391	1,670	1,040	123	1,000
20	86	365	319	1,520	e580	2,300	205	1,160	956	976	139	948
21	69	190	246	e770	2,430	1,870	1,030	553	1,200	923	117	936
22	60	121	230	e640	1,960	1,640	1,180	374	1,250	901	77	e890
23	55	175	630	e370	1,380	1,540	620	349	1,260	883	59	e880
24	50	401	680	e350	1,090	1,510	409	358	1,120	883	76	e865
25	43	594	373	e270	886	1,490	323	4,570	1,420	838	1,240	607
26	40	589	235	e230	726	1,930	278	2,500	1,280	580	4,810	476
27	39	386	244	e200	574	2,100	234	2,210	1,080	475	4,900	463
28	44	261	431	e150	505	1,680	204	2,320	1,030	451	17,900	453
29	45	194	1,880	e125	466	4,190	182	927	998	382	21,700	444
30	39	152	1,520	e112	---	3,970	214	815	986	268	11,700	331
31	37	---	756	e106	---	2,130	---	6,080	---	224	4,500	---
MEAN	70.1	212	826	300	444	2,395	514	920	2,078	1,155	2,783	988
MAX	174	919	7,070	1,520	2,430	9,710	1,390	6,080	7,880	5,270	21,700	2,270
MIN	37	40	85	80	100	402	182	124	956	224	59	331
IN.	0.04	0.13	0.51	0.18	0.26	1.48	0.31	0.57	1.24	0.71	1.72	0.59

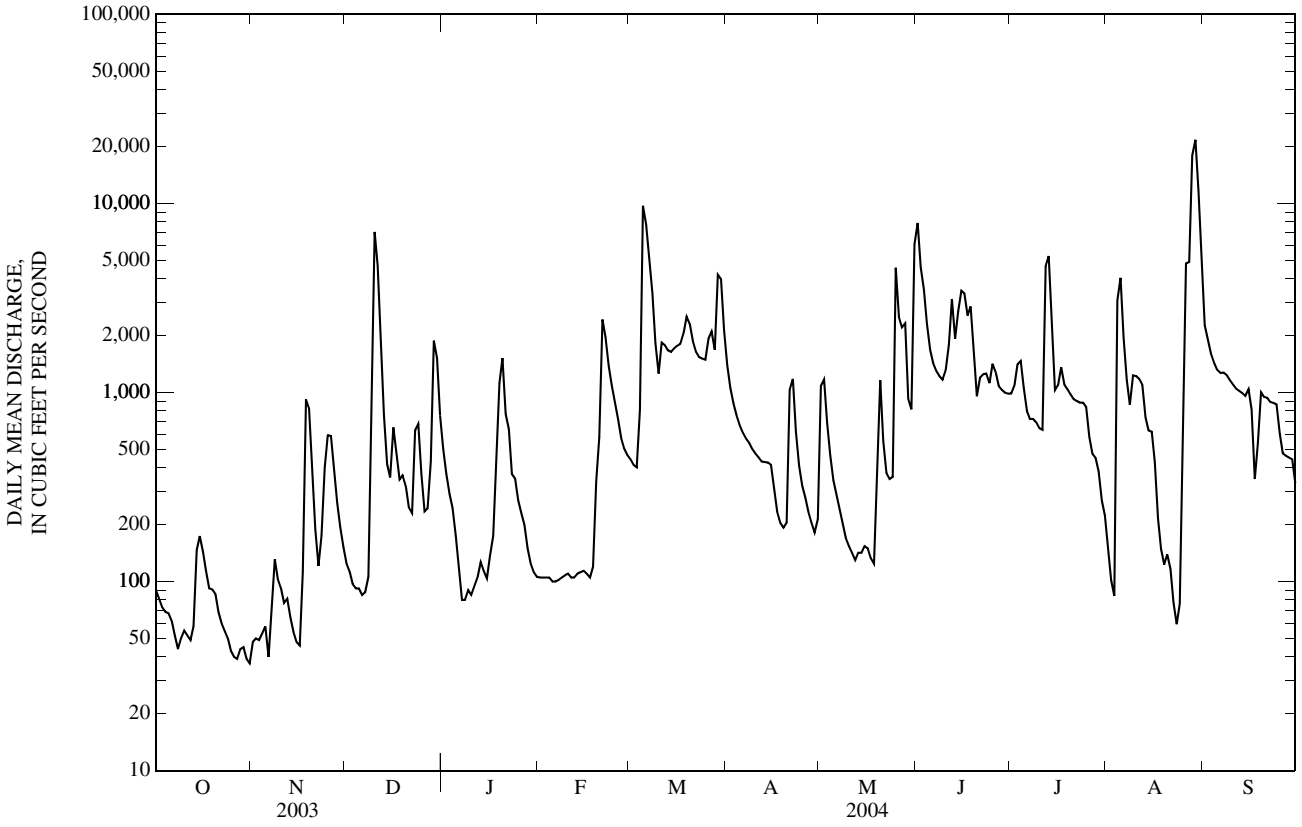
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	718	796	739	708	1,114	1,879	2,032	2,090	2,010	1,412	735	713
MAX	5,695	6,574	5,449	4,516	4,102	5,724	8,981	9,560	14,830	15,980	4,856	5,203
(WY)	(1974)	(1962)	(1983)	(1946)	(1937)	(1973)	(1973)	(1995)	(1947)	(1993)	(1932)	(1993)
MIN	9.59	9.77	13.0	12.9	18.1	37.3	45.9	69.8	25.8	13.4	7.97	13.6
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1957)	(1956)	(2000)	(1934)	(1934)	(1936)	(1953)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL MEAN	284		1,061		1,243	
HIGHEST ANNUAL MEAN					4,320	1993
LOWEST ANNUAL MEAN					159	2000
HIGHEST DAILY MEAN	7,070	Dec 10	21,700	Aug 29	35,600	May 13, 2002
LOWEST DAILY MEAN	19	Jan 15	37	Oct 31	4.6	Aug 7, 1934
ANNUAL SEVEN-DAY MINIMUM	25	Jan 11	41	Oct 25	4.8	Aug 4, 1934
MAXIMUM PEAK FLOW	---		22,700	Aug 29	37,100	May 13, 2002
MAXIMUM PEAK STAGE	---		19.56	Aug 29	23.01	May 13, 2002
INSTANTANEOUS LOW FLOW	---		37	Oct 30,31,Nov 6,7	4.6	Aug 7, 1934
ANNUAL RUNOFF (INCHES)	2.06		7.73		9.03	
10 PERCENT EXCEEDS	619		2,230		3,060	
50 PERCENT EXCEEDS	100		470		352	
90 PERCENT EXCEEDS	43		77		40	

e Estimated

06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO—Continued



06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

REMARKS.--National Stream-Quality Accounting Network station January 1978 to September 1986 and an Ambient Water-Quality Monitoring Network station 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
05...	0850	Environmental	61	10.2	91	8.2	400	9.8	170	50.2	10.6	4.30
JAN												
07...	0840	Environmental	e80	13.9	98	7.5	525	0.6	--	--	--	--
MAR												
01...	1550	Environmental	444	11.0	84	7.9	418	2.5	--	--	--	--
MAY												
19...	1100	Blank	--	--	--	--	--	--	--	<0.01	<0.008	<0.16
19...	1105	Environmental	136	8.0	93	7.9	493	21.6	230	67.5	14.4	5.46
JUL												
14...	1440	Environmental	1,970	5.7	72	7.0	247	26.1	--	--	--	--
SEP												
01...	1335	Environmental	2,100	6.9	82	7.1	235	23.2	--	--	--	--
01...	1336	Replicate	--	7.0	82	7.2	235	22.2	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
05...	13.1	143	143	175	<1	10.1	0.2	39.6	226	<10	0.33	<0.04	<0.06
JAN													
07...	--	176	176	215	<1	--	--	--	--	29	0.88	0.28	0.70
MAR													
01...	--	115	114	139	<1	--	--	--	--	160d	0.89	0.09	0.89
MAY													
19...	<0.10	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
19...	15.4	163	162	198	<1	11.4	0.2	66.2	303	44	0.79	<0.04	0.78
JUL													
14...	--	81	81	99	<1	--	--	--	--	595d	3.0	<0.04	0.53
SEP													
01...	--	85	85	104	<1	--	--	--	--	636d	1.3	<0.04	0.16
01...	--	--	--	--	--	--	--	--	--	493d	1.3	<0.04	0.17

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
05...	<0.008	<0.02	<0.04	E.02n	27	41	60	<2	62v	0.5	<0.04	E.03n	1.0
JAN													
07...	E.007n	<0.02	E.02n	0.09	20k	40	88	--	--	--	--	--	--
MAR													
01...	0.019	<0.02	E.04n	0.24	10k	17k	60k	--	--	--	--	--	--
MAY													
19...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.2	<0.04	<0.04	<0.4
19...	0.035	<0.02	E.02n	0.13	3,400k	3,900k	2,000k	3	570	1.5	<0.04	0.05	1.6
JUL													
14...	0.012	<0.02	0.06	1.16	>800a	>600a	1,650k	--	--	--	--	--	--
SEP													
01...	E.004n	E.01n	0.05	0.54	560	680	500	--	--	--	--	--	--
01...	E.004n	0.03	0.05	0.52	820	860	527	--	--	--	--	--	--

06905500 CHARITON RIVER NEAR PRAIRIE HILL, 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								
05...	22	<0.08	0.20v	275	<0.02	E.4n	M	<2
JAN								
07...	--	--	--	--	--	--	--	--
MAR								
01...	--	--	--	--	--	--	--	--
MAY								
19...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	<2
19...	E6n	<0.08	0.82	143	<0.02	0.5	M	4
JUL								
14...	--	--	--	--	--	--	--	--
SEP								
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--

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

06905725 MUSSEL FORK NEAR MYSTIC, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 40°09'38", long 92°53'25", in NE ¼ NW ¼ SW ¼ sec.23, T.62 N., R.18 W., Sullivan County, Hydrologic Unit 10280202, approximately 2 mi east of Mystic on the left bank on upstream side of bridge on County Highway H.

DRAINAGE AREA.--24.0 mi^2.

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

REMARKS.--October sample collected at alternate site Mussel Fork near Musselfork (06906000), due to drought conditions.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
19...	0855	Environmental	e.01	3.4	27	7.4	423	6.0	160	44.4	11.8	12.3
DEC												
11...	0955	Environmental	7.9	12.7	87	7.7	201	0.5	--	--	--	--
JAN												
08...	0905	Environmental	0.24	11.6	80	7.7	390	0.5	150	44.3	9.39	6.68
FEB												
20...	1010	Environmental	41	13.0	90	7.7	170	0.5	--	--	--	--
MAR												
17...	1055	Environmental	25	12.8	100	8.0	324	3.5	--	--	--	--
APR												
21...	1045	Environmental	1.6	8.3	85	8.0	476	16.0	--	--	--	--
MAY												
12...	1010	Environmental	0.55	5.3	58	7.8	431	21.0	180	52.9	11.6	6.32
JUN												
24...	0900	Environmental	1.9	6.2	70	7.6	247	21.0	--	--	--	--
JUL												
13...	1425	Environmental	11	7.8	100	7.7	241	27.5	92	27.6	5.57	6.15
AUG												
24...	1035	Environmental	0.25	6.6	67	7.8	299	20.5	--	--	--	--
24...	1036	Replicate	--	--	--	--	--	--	--	--	--	--
SEP												
15...	1605	Environmental	0.52	7.4	86	8.0	356	22.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
19...	15.9	154	151	184	<1	24.2	0.2	21.5	256d	38d	1.2	<0.04	<0.06
DEC													
11...	--	42	42	51	<1	--	--	--	--	84d	2.0	0.15	2.95
JAN													
08...	17.6	109	108	132	<1	26.5	<0.2	42.5	255	19d	1.0	0.10	1.00
FEB													
20...	--	42	42	51	<1	--	--	--	--	81d	2.4	0.29	1.03
MAR													
17...	--	78	78	95	<1	--	--	--	--	60d	1.0	E.04n	0.76
APR													
21...	--	152	155	189	<1	--	--	--	--	15	0.83	<0.04	<0.06
MAY													
12...	18.9	140	144	176	<1	21.1	0.2	37.6	248	<10	0.94	E.03n	<0.06
JUN													
24...	--	87	87	106	<1	--	--	--	--	31	1.2	<0.04	0.33
JUL													
13...	8.40	82	80	98	<1	10.1	<0.2	14.3	169	52d	1.4	E.04n	0.15
AUG													
24...	--	95	94	115	<1	--	--	--	--	21	1.0	0.05	0.07
24...	--	--	--	--	--	--	--	--	--	15	1.0	0.04	0.07
SEP													
15...	--	139	139	170	<1	--	--	--	--	<10	1.1	<0.04	E.04n

06905725 MUSSEL FORK NEAR MYSTIC, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
19...	<0.008	0.02	0.05	0.27	230k	490k	190	E1n	374	1.9	E.03n	0.07	0.8
DEC													
11...	0.024	0.14	0.19	0.41	3,300	3,800k	26,000k	--	--	--	--	--	--
JAN													
08...	0.012	E.01n	<0.04	0.17	33k	E22k	61	3	1,500d	0.7	E.03n	0.05	2.5
FEB													
20...	0.018	0.24	0.31	0.52	--u	930	8,700	--	--	--	--	--	--
MAR													
17...	0.008	0.03	0.04	0.18	1,400k	1,100k	340	--	--	--	--	--	--
APR													
21...	<0.008	<0.02	<0.04	0.06	910	880	440	--	--	--	--	--	--
MAY													
12...	E.004n	<0.02	E.03n	0.07	120k	280	370	E1n	167	1.4	E.03n	E.03n	1.8
JUN													
24...	0.033	0.04	0.08	0.21	410	400	720	--	--	--	--	--	--
JUL													
13...	0.017	0.04	0.07	0.21	--u	1,100k	1,600	3	1,140d	1.8	<0.04	0.06	2.8
AUG													
24...	E.005n	<0.02	<0.04	0.07	800	1,000	1,700	--	--	--	--	--	--
24...	E.005n	<0.02	E.02n	0.07	--	--	--	--	--	--	--	--	--
SEP													
15...	<0.008	<0.02	E.02n	0.09	2,100	2,000	1,700	--	--	--	--	--	--

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover-able, µg/L (71900)	Selen-ium, water, fltrd, µg/L (01145)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
NOV								
19...	254	<0.08	1.18	2,820	<0.02	E.2n	M	3
DEC								
11...	--	--	--	--	--	--	--	--
JAN								
08...	44	E.04n	1.34	663	<0.02	1.0	2	5
FEB								
20...	--	--	--	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
APR								
21...	--	--	--	--	--	--	--	--
MAY								
12...	16	<0.08	0.35	440	<0.02	0.5	Mn	E1n
JUN								
24...	--	--	--	--	--	--	--	--
JUL								
13...	28	<0.08	2.07	68.2	<0.02	0.4	Mn	5
AUG								
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
SEP								
15...	--	--	--	--	--	--	--	--

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:
b -- Value extrapolated at low end
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

Null value qualifier codes used in this table:
u -- Unable to determine-matrix interference

06906000 MUSSEL FORK NEAR MUSSELFORK, MO

LOCATION.--Lat 39°31'25", long 92°56'59", in SW ¼ SW ¼ SE ¼ sec.32, T.55 N., R.18 W., Chariton County, Hydrologic Unit 10280202, on downstream side of pier of bridge on State Highway 5, 4.5 mi southwest of Musselfork, and 1.5 mi upstream from Long Branch.

DRAINAGE AREA.--267 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to December 1951, October 1962 to February 1990, December 2002 to current year. Prior to Jan. 1, 1952, nonrecording gage at site 100 ft upstream at same datum; Oct. 1, 1962 to March 1, 1990, water-stage recorder at same site and datum; March 1, 1990 to Aug. 26, 1994, stage only station at same site and datum.

GAGE.--Water-stage recorder. Datum of gage is 639.25 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	2.8	e2.7	9.9	81	e12	38	163	529	462	22	10	282
2	2.4	e2.5	9.2	64	e12	37	118	464	161	32	10	148
3	2.1	e2.4	8.6	53	e13	34	91	249	96	117	11	105
4	2.3	e2.3	8.2	47	e12	275	74	135	67	88	616	82
5	2.8	e2.2	7.9	e52	e12	1,810	61	91	53	163	1,920	67
6	2.8	e2.1	7.8	e41	e12	2,090	53	70	43	93	1,300	66
7	3.0	e2.1	7.7	e24	e12	692	47	55	37	54	157	63
8	3.2	e2.1	7.5	e21	e12	219	45	47	32	39	80	57
9	3.5	e2.1	119	e19	e12	137	41	36	27	37	52	51
10	3.3	e2.1	2,580	e18	e12	98	37	28	41	36	38	43
11	3.0	e2.1	2,420	e17	e12	76	34	23	292	28	29	37
12	3.3	e2.2	609	e20	e12	60	31	20	179	246	23	32
13	3.7	e2.1	170	21	e12	51	29	22	115	283	20	28
14	6.6	e2.0	121	20	e12	47	27	26	80	195	17	25
15	18	e2.0	94	21	e14	50	25	24	280	68	15	31
16	10	e2.1	184	22	e15	71	24	20	292	40	14	61
17	5.3	e3.7	175	39	e16	133	23	16	146	41	13	33
18	3.8	e139	125	e80	e19	192	22	15	144	87	12	34
19	3.3	383	103	e82	e45	180	22	165	199	44	11	44
20	2.6	113	80	e59	e175	119	22	41	94	25	12	27
21	2.4	40	66	48	e440	80	96	29	60	19	20	21
22	2.4	23	59	40	241	57	405	53	47	16	21	18
23	2.3	40	112	29	134	46	178	319	37	14	17	16
24	2.2	160	283	24	95	44	90	247	30	13	85	15
25	e2.2	52	147	22	75	42	64	1,190	34	13	182	14
26	e2.2	27	87	e18	59	206	52	2,250	157	13	1,630	13
27	e2.5	20	78	e15	48	689	42	1,480	111	12	797	12
28	e2.7	16	204	e14	40	901	35	1,690	53	11	2,300	12
29	e2.9	12	336	e13	38	1,400	30	598	35	11	2,970	11
30	e2.9	11	234	e13	---	674	55	336	26	10	3,490	11
31	e2.6	---	124	e13	---	260	---	593	---	10	1,880	---
TOTAL	115.1	1,074.8	8,576.8	1,050	1,623	10,808	2,036	10,861	3,430	1,880	17,752	1,459
MEAN	3.71	35.8	277	33.9	56.0	349	67.9	350	114	60.6	573	48.6
MAX	18	383	2,580	82	440	2,090	405	2,250	462	283	3,490	282
MIN	2.1	2.0	7.5	13	12	34	22	15	26	10	10	11

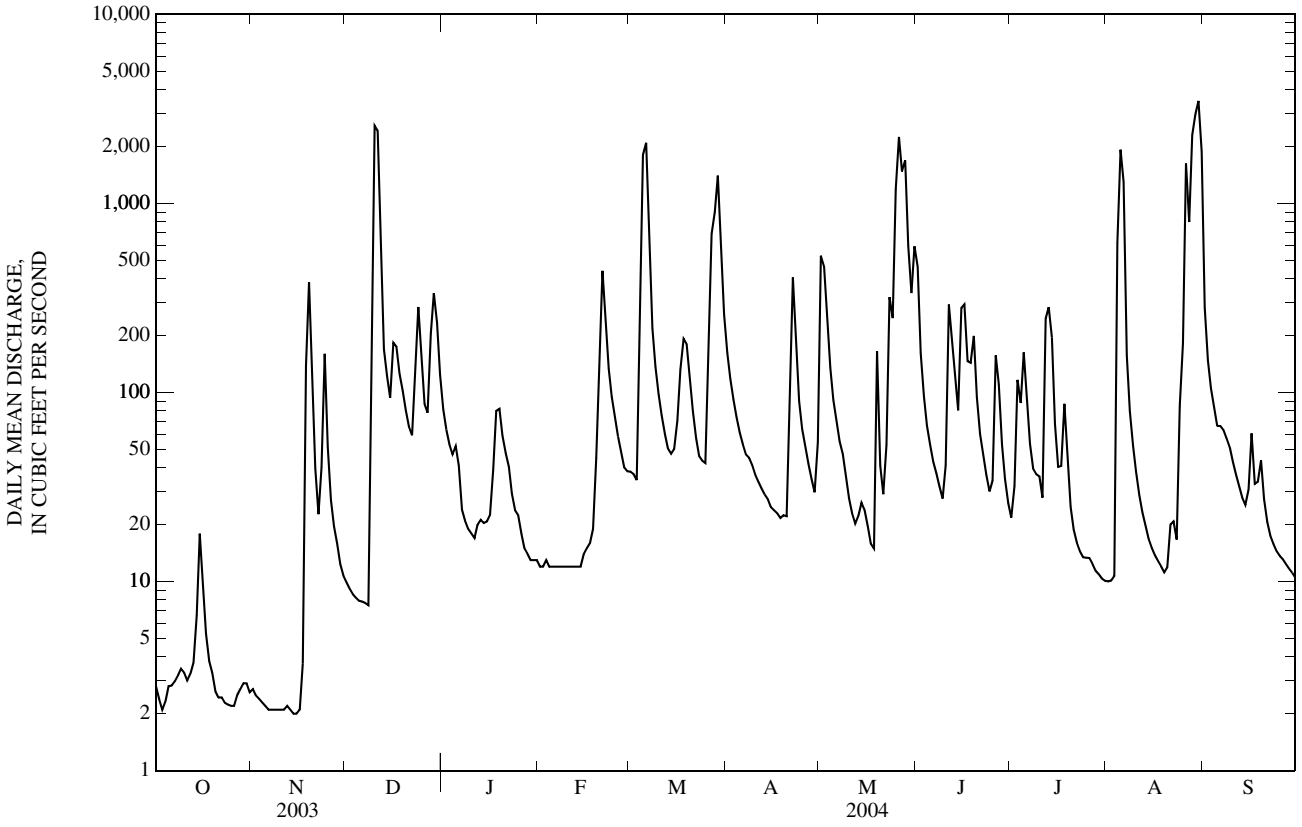
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	158	154	172	136	230	310	438	329	300	231	84.8	151
MAX	1,246	976	1,335	729	1,453	1,370	2,585	1,538	1,225	3,029	573	1,295
(WY)	(1986)	(1986)	(1983)	(1965)	(1982)	(1973)	(1973)	(1973)	(1981)	(1981)	(2004)	(1973)
MIN	0.04	1.05	0.61	0.44	0.89	5.84	18.0	9.77	2.37	0.94	0.54	0.59
(WY)	(1964)	(1977)	(1964)	(1964)	(1964)	(2003)	(1989)	(1980)	(1988)	(2003)	(2003)	(1976)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	49.4		166		232	
HIGHEST ANNUAL MEAN					719	1973
LOWEST ANNUAL MEAN					22.9	1989
HIGHEST DAILY MEAN	2,580	Dec 10	3,490	Aug 30	18,300	Apr 22, 1973
LOWEST DAILY MEAN	0.03	Aug 28	2.0	Nov 14,15	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	0.10	Aug 24	2.1	Nov 9	0.00	At Times
MAXIMUM PEAK FLOW	---		3,640	Aug 30	23,100	Apr 22, 1973
MAXIMUM PEAK STAGE	---		20.94	Aug 30	22.11	Apr 22, 1973
INSTANTANEOUS LOW FLOW	---		1.9	Oct 3	0.00	Several Years
10 PERCENT EXCEEDS	102		286		500	
50 PERCENT EXCEEDS	6.0		37		28	
90 PERCENT EXCEEDS	0.48		3.1		2.5	

e Estimated

06906000 MUSSEL FORK NEAR MUSSELFORK, MO—Continued



06906000 MUSSEL FORK NEAR MUSSELFORK, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

REMARKS.--This is an alternative sampling site for primary site Mussel Fork near Mystic (06905725), due to drought conditions.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)
OCT												
23...	1555	Environmental	2.3	6.2	64	8.0	301	17.0	111	106	130	<1

Date	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)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)
OCT											
23...	14	0.78	<0.04	0.07	0.008	0.02	0.06	0.14	100	140	100

Remark codes used in this table:
< -- Less than

06906150 LONG BRANCH CREEK AT ATLANTA, MO

LOCATION.--Lat 39°53'50", long 92°29'36", in SE ¼ NW ¼ NW ¼ sec.20, T.59N., R.14W., Macon County, Hydrologic Unit 10280203, at right upstream end of bridge on Marion Street, 0.65 mi east of Highway RA, and 0.3 mi west of Atlanta.

DRAINAGE AREA.--23.0 mi^2.

PERIOD OF RECORD.--July 1995 to current year. Published as "near Atlanta" 1995 to 2000.

GAGE.--Water-stage recorder. Datum of gage is 814.75 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--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	0.10	0.09	0.89	7.5	e0.20	3.7	5.1	80	6.6	0.34	0.06	1.7
2	0.10	0.17	0.77	7.0	e0.30	3.7	4.3	19	2.1	0.38	0.14	1.2
3	0.10	0.21	0.74	6.6	e0.30	3.4	3.8	4.4	1.2	70	0.14	1.0
4	0.08	0.22	0.74	6.6	e0.30	120	3.4	2.7	0.81	69	132	0.85
5	0.07	0.20	0.77	6.4	e0.30	546	3.1	2.9	0.61	5.8	56	0.78
6	0.06	0.21	0.78	5.8	e0.30	39	2.9	2.6	0.54	3.4	9.2	0.70
7	0.06	0.19	0.87	e4.0	e0.20	9.4	2.9	1.5	0.44	2.0	4.9	0.61
8	0.06	0.17	0.87	e3.3	e0.20	5.7	2.7	1.5	0.36	1.4	3.1	0.57
9	0.06	0.18	144	e2.3	e0.20	4.4	2.6	1.3	0.38	1.0	2.3	0.57
10	0.07	0.18	812	e1.9	e0.30	3.5	2.2	1.2	1.8	0.77	1.8	0.85
11	0.07	0.21	259	e1.5	e0.40	2.9	2.1	1.0	32	15	1.5	1.2
12	0.08	0.21	17	e1.5	e0.40	2.5	2.0	0.89	4.2	49	1.2	0.97
13	0.14	0.17	6.6	e1.5	e0.50	2.3	1.8	0.89	1.9	14	1.1	0.82
14	1.8	0.15	5.1	e1.4	e0.70	2.7	1.8	0.78	2.4	3.3	0.97	0.75
15	24	0.13	4.9	e1.4	e1.0	3.0	1.8	0.70	2.0	1.6	0.92	0.75
16	3.7	0.14	20	e1.5	e1.2	3.9	1.6	0.72	1.6	0.99	0.86	4.7
17	1.4	0.30	22	e1.5	e1.4	7.2	1.5	0.67	1.0	0.83	0.81	2.9
18	0.65	33	8.0	e1.8	e3.2	7.0	1.3	0.67	2.2	0.73	0.79	1.4
19	0.39	95	13	e1.8	e15	5.0	1.1	0.49	1.3	0.66	1.00	0.88
20	0.26	12	17	e1.7	e72	3.7	6.8	0.57	0.86	0.78	3.6	0.63
21	0.17	3.3	6.5	e1.6	36	2.8	114	0.90	0.67	0.89	5.5	0.52
22	0.15	1.7	16	e1.4	16	2.3	12	0.66	0.52	0.77	2.5	0.44
23	0.13	14	183	e1.3	11	2.2	3.8	0.64	0.41	0.48	1.6	0.36
24	0.13	19	26	e1.3	9.0	2.2	2.4	77	0.37	0.35	2.2	0.32
25	0.15	4.6	8.9	e1.3	8.2	2.2	2.1	365	3.1	0.28	387	0.29
26	0.15	2.4	7.1	e1.0	6.0	17	1.8	17	2.2	0.23	386	0.27
27	0.18	1.8	7.9	e0.80	7.8	27	1.6	3.1	1.2	0.16	112	0.24
28	0.24	1.5	48	e0.40	4.3	34	1.3	2.6	0.87	0.12	570	0.20
29	0.22	1.3	39	e0.30	3.6	45	1.1	1.9	0.58	0.11	61	0.20
30	0.15	1.2	12	e0.30	---	11	15	3.1	0.42	0.10	7.8	0.16
31	0.12	---	8.8	e0.20	---	6.5	---	19	---	0.08	2.7	---
MEAN	1.13	6.46	54.8	2.48	6.91	30.0	7.00	19.9	2.49	7.89	56.8	0.89
MAX	24	95	812	7.5	72	546	114	365	32	70	570	4.7
MIN	0.06	0.09	0.74	0.20	0.20	2.2	1.1	0.49	0.36	0.08	0.06	0.16
IN.	0.06	0.31	2.75	0.12	0.32	1.51	0.34	1.00	0.12	0.40	2.85	0.04

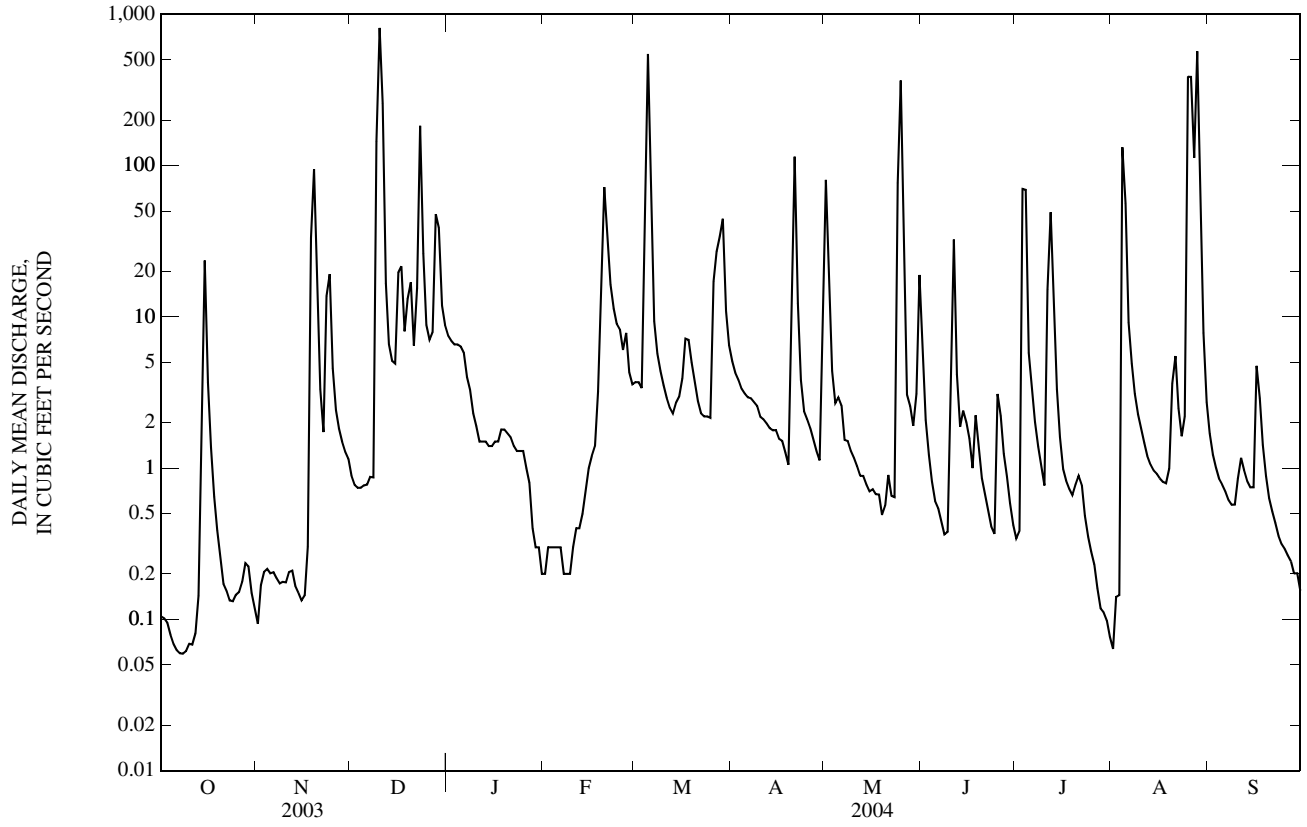
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	11.0	9.35	10.5	15.1	27.4	23.6	34.6	56.2	20.5	9.73	10.5	3.45
MAX	87.7	68.9	54.8	61.7	84.1	81.8	86.7	191	71.0	60.9	56.8	20.2
(WY)	(1999)	(1999)	(2004)	(1999)	(1997)	(1998)	(1999)	(2002)	(1998)	(1998)	(2004)	(2003)
MIN	0.01	0.02	0.01	0.02	1.26	0.98	0.63	0.54	0.97	0.25	0.02	0.02
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2000)	(2000)	(2002)	(1999)	(2003)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL MEAN	10.5		16.6		19.2	
HIGHEST ANNUAL MEAN					37.0	1999
LOWEST ANNUAL MEAN					1.88	2000
HIGHEST DAILY MEAN	812	Dec 10	812	Dec 10	2,060	May 12, 2002
LOWEST DAILY MEAN	0.00	Many Days	0.06	Oct 6-9,Aug 1	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	0.00	At Times	0.06	Oct 5	0.00	At Times
MAXIMUM PEAK FLOW	---		840	Dec 10	3,360	May 12, 2002
MAXIMUM PEAK STAGE	---		11.75	Dec 10	16.44	May 12, 2002
INSTANTANEOUS LOW FLOW	---		0.06	Oct 5-11,Jul 31,Aug 1	0.00	Several Years
ANNUAL RUNOFF (INCHES)	6.19		9.81		11.33	
10 PERCENT EXCEEDS	13		19		21	
50 PERCENT EXCEEDS	0.37		1.5		0.72	
90 PERCENT EXCEEDS	0.00		0.17		0.02	

e Estimated

06906150 LONG BRANCH CREEK AT ATLANTA, MO—Continued



06906190 LONG BRANCH RESERVOIR NEAR MACON, MO

LOCATION.--Lat 39°45'01", long 92°30'25", in NW $\frac{1}{4}$ sec.10, T.57 N., R.14 W., Macon County, Hydrologic Unit 10280203, in Administration Building at left end of dam on East Fork Little Chariton River, 2.0 mi west of junction of U.S. Highways 63 and 36 in Macon, and 2.0 mi below confluence with Long Branch.

DRAINAGE AREA.--109 mi^2.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 70,500 ac-ft, May 13, 2002, elevation, 802.58 ft; minimum, 14,300 ac-ft, Dec. 5, 1980, elevation, 780.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 42,200 ac-ft, Aug. 29, elevation, 794.06 ft; minimum, 24,400 ac-ft, Nov. 17, elevation, 786.49 ft.

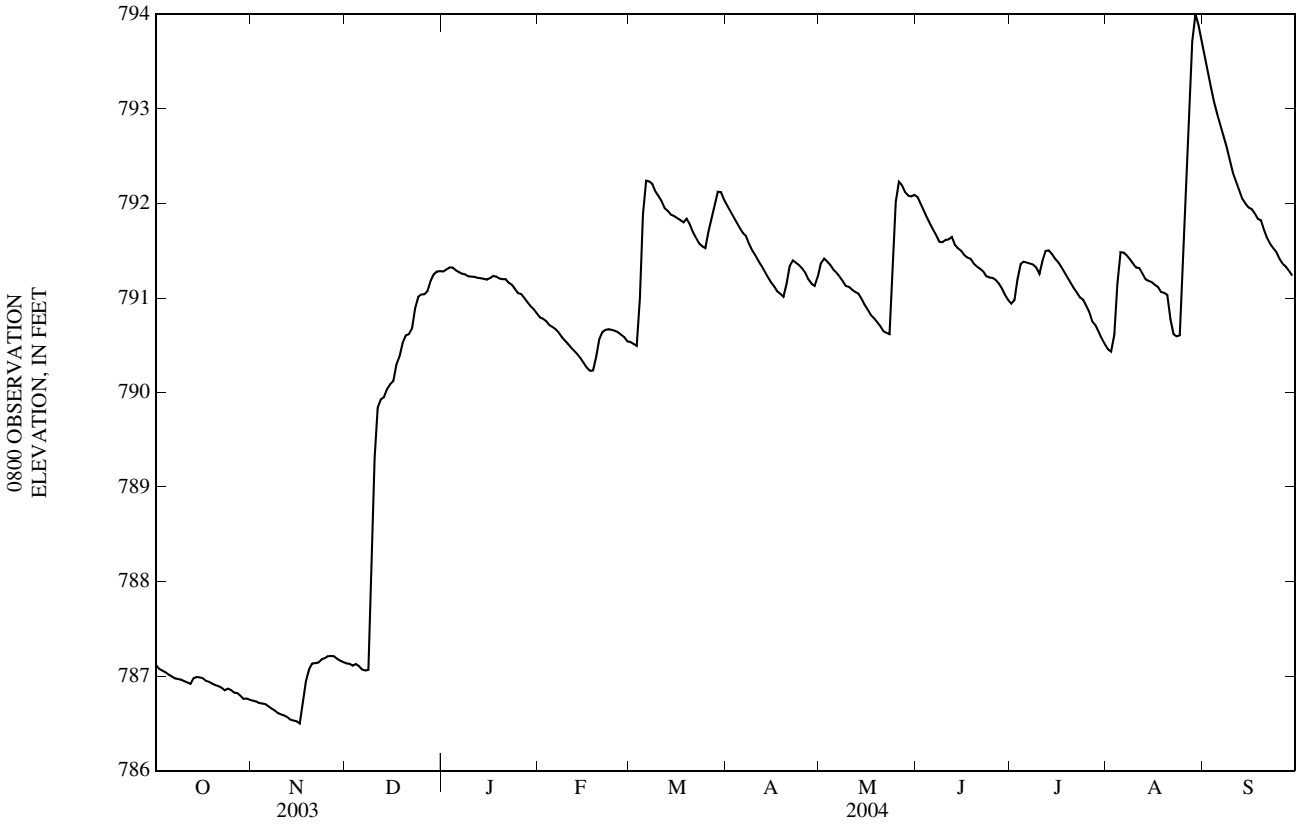
ELEVATION, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
OBSERVATION AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	787.13	786.74	787.14	791.28	790.82	790.52	792.01	791.28	792.10	790.96	790.49	793.67
2	787.11	786.74	787.13	791.28	790.78	790.54	791.96	791.41	792.05	790.93	790.44	793.51
3	787.06	786.73	787.13	791.31	790.78	790.50	791.90	791.42	791.97	791.00	790.43	793.34
4	787.06	786.71	787.10	791.33	790.74	790.49	791.84	791.37	791.90	791.30	790.70	793.17
5	787.03	786.71	787.14	791.32	790.70	791.26	791.78	791.34	791.83	791.39	791.37	793.02
6	787.01	786.70	787.09	791.28	790.69	792.20	791.72	791.28	791.76	791.38	791.54	792.91
7	786.99	786.67	787.06	791.27	790.66	792.26	791.67	791.26	791.70	791.37	791.45	792.79
8	786.97	786.65	787.06	791.25	790.62	792.22	791.65	791.21	791.64	791.36	791.45	792.67
9	786.97	786.63	787.07	791.25	790.57	792.20	791.53	791.16	791.57	791.35	791.39	792.56
10	786.96	786.60	788.43	791.22	790.54	792.09	791.49	791.11	791.60	791.31	791.35	792.40
11	786.94	786.59	789.75	791.23	790.50	792.07	791.43	791.12	791.62	791.23	791.31	792.29
12	786.93	786.58	789.88	791.22	790.46	792.00	791.37	791.07	791.62	791.47	791.32	792.20
13	786.91	786.56	789.95	791.21	790.43	791.92	791.32	791.06	791.66	791.51	791.23	792.11
14	787.01	786.53	789.95	791.21	790.39	791.92	791.26	791.04	791.51	791.50	791.18	792.02
15	786.98	786.53	790.08	791.20	790.35	791.86	791.20	790.97	791.53	791.45	791.18	791.99
16	786.99	786.52	790.09	791.19	790.29	791.87	791.15	790.91	791.48	791.40	791.16	791.94
17	786.97	786.49	790.14	791.22	790.25	791.83	791.11	790.86	791.44	791.37	791.13	791.94
18	786.94	786.83	790.37	791.24	790.22	791.82	791.05	790.80	791.42	791.31	791.11	791.87
19	786.94	787.01	790.39	791.22	790.24	791.79	791.04	790.78	791.41	791.25	791.04	791.82
20	786.91	787.10	790.59	791.20	790.45	791.86	791.00	790.73	791.34	791.20	791.06	791.82
21	786.90	787.15	790.61	791.20	790.62	791.74	791.23	790.69	791.33	791.14	791.02	791.67
22	786.89	787.13	790.62	791.20	790.65	791.68	791.39	790.63	791.30	791.09	790.65	791.61
23	786.87	787.15	790.71	791.14	790.67	791.61	791.40	790.63	791.27	791.04	790.60	791.55
24	786.84	787.19	790.98	791.14	790.67	791.56	791.36	790.61	791.21	790.99	790.59	791.51
25	786.88	787.19	791.03	791.07	790.66	791.54	791.34	791.55	791.22	790.98	790.61	791.47
26	786.84	787.22	791.04	791.04	790.65	791.52	791.30	792.25	791.21	790.89	791.74	791.38
27	786.82	787.21	791.04	791.04	790.63	791.80	791.25	792.22	791.18	790.83	792.36	791.35
28	786.82	787.21	791.09	790.98	790.60	791.86	791.17	792.18	791.14	790.71	793.06	791.32
29	786.78	787.17	791.23	790.94	790.58	792.05	791.14	792.09	791.08	790.71	794.04	791.27
30	786.75	787.16	791.26	790.90	---	792.16	791.12	792.08	791.01	790.61	793.98	791.22
31	786.77	---	791.29	790.87	---	792.10	---	792.07	---	790.55	793.84	---
MAX	787.13	787.22	791.29	791.33	790.82	792.26	792.01	792.25	792.10	791.51	794.04	793.67
MIN	786.75	786.49	787.06	790.87	790.22	790.49	791.00	790.61	791.01	790.55	790.43	791.22
(-)	24,900	25,700	34,900	33,900	33,200	36,900	34,500	36,800	34,200	33,100	41,500	34,700
(=)	-800	+800	+9,200	-1,000	-700	+3,700	-2,400	+2,300	-2,600	-1,100	+8,400	-6,800

CALYR 2003.... +10,600
WTR YR 2004.... +9,000

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

06906190 LONG BRANCH RESERVOIR NEAR MACON, MO—Continued



06906200 EAST FORK LITTLE CHARITON RIVER NEAR MACON, MO

LOCATION.--Lat 39°45'05", long 92°31'08", in NW ¼ NW ¼ NW ¼ sec.18, T.57 N., R.14 W., Macon County, Hydrologic Unit 10280203, on right bank 250 ft downstream from Long Branch Lake and 3.0 mi west of Macon.

DRAINAGE AREA.--112 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 741.43 ft above National Geodetic Vertical Datum of 1929. Sept. 8, 1971, to Aug. 1, 1985, water-stage recorder at site 400 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Complete regulation by Long Branch Reservoir (06906190), 250 ft upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,700 ft^3/s, Apr. 21, 1973; gage height, 20.60 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.4	8.2	13	49	48	115	59	119	52	52	279
2	9.0	8.4	8.2	13	48	48	100	62	110	52	52	266
3	9.0	8.3	8.2	13	48	48	89	62	94	52	51	251
4	9.0	8.3	8.2	14	48	51	79	60	83	56	42	235
5	8.9	8.3	8.3	13	48	67	73	59	76	58	59	220
6	8.9	8.3	8.3	12	48	137	68	58	72	57	60	209
7	8.8	8.2	8.4	12	47	142	65	57	69	57	58	196
8	8.9	8.2	8.4	12	48	137	64	56	65	56	57	182
9	e9.0	8.3	8.7	11	48	132	60	55	64	55	55	168
10	e9.0	8.3	13	11	49	124	59	54	65	54	54	155
11	e9.0	8.3	8.9	11	48	118	58	55	65	54	53	144
12	e8.8	8.3	8.8	11	48	110	57	53	66	59	52	134
13	e8.6	8.3	8.7	11	48	101	55	52	64	61	52	120
14	e8.8	8.2	8.7	10	48	99	54	52	62	e60	52	106
15	e8.8	8.2	8.7	10	48	92	52	52	62	e55	52	99
16	8.7	8.2	8.8	10	48	93	51	51	59	57	51	98
17	8.7	8.3	8.8	11	47	79	51	51	58	57	52	86
18	8.7	8.3	8.8	11	48	79	51	51	57	55	52	78
19	8.7	8.3	8.8	10	48	75	51	52	56	54	52	75
20	8.6	8.4	8.8	10	48	75	52	51	54	53	52	71
21	8.6	8.3	8.7	10	48	69	56	52	54	50	52	67
22	8.7	8.4	8.8	25	48	64	61	51	53	48	52	64
23	8.6	8.4	8.8	52	48	61	61	51	52	52	52	62
24	8.6	8.4	8.9	51	49	60	60	55	52	52	52	61
25	8.6	8.4	9.1	51	48	58	59	109	52	53	53	59
26	8.6	8.3	9.4	50	48	91	58	144	52	52	98	58
27	8.4	8.1	9.5	50	48	86	56	142	52	52	157	56
28	8.4	8.2	10	49	48	100	54	137	52	52	254	55
29	8.3	8.1	14	48	48	120	54	124	52	52	306	53
30	8.3	8.1	13	48	---	128	55	122	52	52	299	53
31	8.3	---	13	49	---	121	---	122	---	52	290	---
MEAN	8.72	8.28	9.32	23.0	48.0	90.7	62.6	71.3	64.8	54.2	87.9	125
MAX	9.0	8.4	14	52	49	142	115	144	119	61	306	279
MIN	8.3	8.1	8.2	10	47	48	51	51	52	48	42	53
IN.	0.09	0.08	0.10	0.24	0.46	0.93	0.62	0.73	0.65	0.56	0.91	1.25

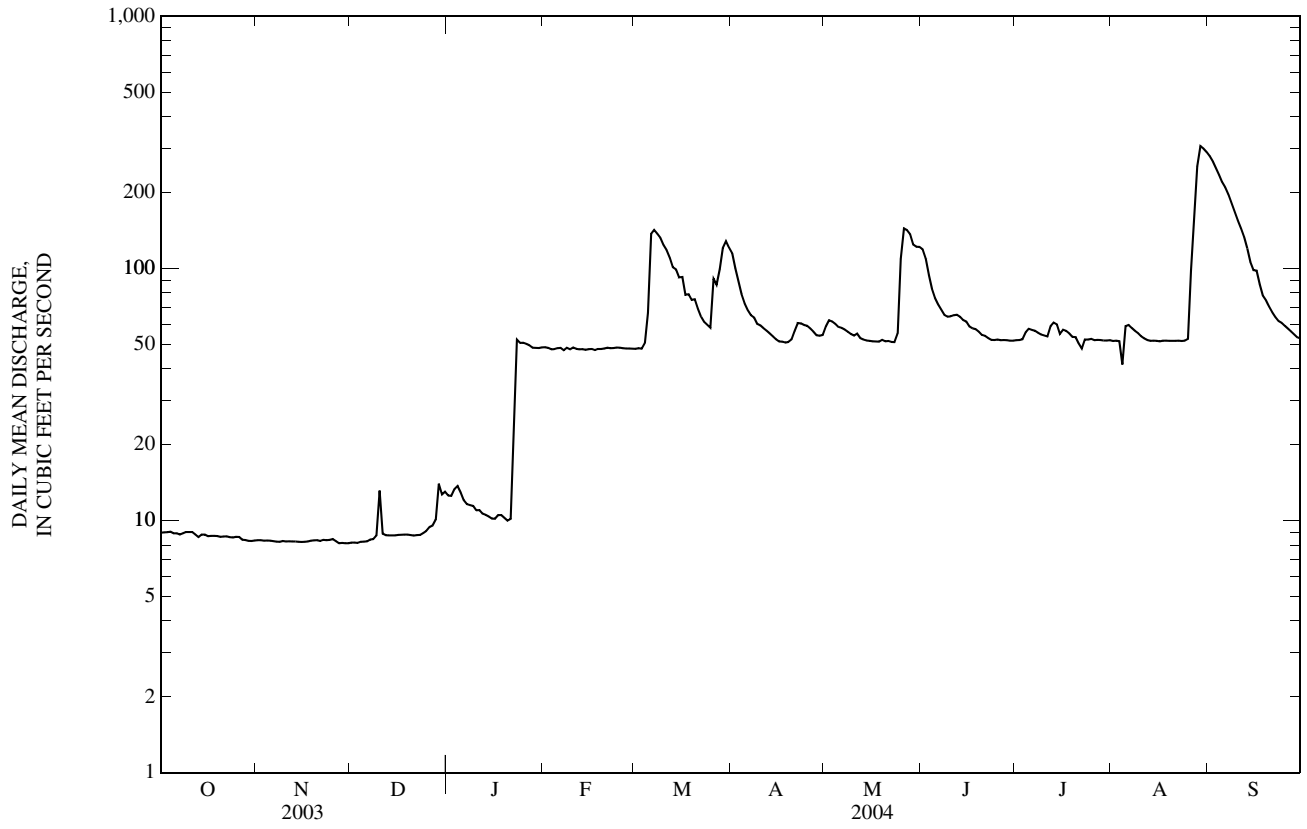
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004[a], BY WATER YEAR (WY)

MEAN	53.2	60.3	72.3	44.8	55.3	107	123	183	126	115	66.4	51.8
MAX	406	354	304	223	200	502	475	680	369	743	401	341
(WY)	(1987)	(1986)	(1993)	(1993)	(1999)	(1985)	(1983)	(1995)	(1995)	(1993)	(1981)	(1981)
MIN	0.16	0.27	0.00	0.00	0.00	7.30	7.27	7.21	5.45	5.52	2.48	7.06
(WY)	(1979)	(1979)	(1979)	(1979)	(1979)	(1989)	(1989)	(1988)	(1988)	(1989)	(1980)	(1984)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004[a]	
ANNUAL MEAN	8.56		54.4		88.3	
HIGHEST ANNUAL MEAN					242	1993
LOWEST ANNUAL MEAN					7.13	1989
HIGHEST DAILY MEAN	14	Apr 28-May 2	306	Aug 29	1,380	May 18, 1995
LOWEST DAILY MEAN	6.4	Jun 9	8.1	Nov 27,29,30	0.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	6.7	Jun 7	8.2	Nov 27	0.00	Many Years
MAXIMUM PEAK FLOW	---		309	Aug 29	1,560	May 7, 1996
MAXIMUM PEAK STAGE	---		9.95	Aug 29	15.00	May 13, 2002
INSTANTANEOUS LOW FLOW	---		0.12	Aug 4	0.00	Many Years
ANNUAL RUNOFF (INCHES)	1.04		6.62		10.71	
10 PERCENT EXCEEDS	10		110		272	
50 PERCENT EXCEEDS	8.4		52		42	
90 PERCENT EXCEEDS	7.0		8.4		6.8	

e Estimated
[a] Post-regulation period.

06906200 EAST FORK LITTLE CHARITON RIVER NEAR MACON, MO—Continued



06906300 EAST FORK LITTLE CHARITON RIVER NEAR HUNTSVILLE, MO

LOCATION.--Lat 39°27'18", long 92°34'07", in NW ¼ NW ¼ NW ¼ sec.26, T.54 N., R.15 W., Randolph County, Hydrologic Unit 10280203, on right bank at downstream end of bridge on State Highway C, 1.0 mi downstream from Sugar Creek, and 1.5 mi northwest of Huntsville.

DRAINAGE AREA.--220 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 655.86 ft above National Geodetic Vertical Datum of 1929 (levels by the Missouri State Highway and Transportation Commission). Oct. 29, 1962 to July 18, 1972, on former bridge, at same datum; July 18, 1972 to Sept. 23, 1974, at datum 0.63 ft higher.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Some regulation by Long Branch Reservoir (station 06906190), 34 mi upstream since 1978. Low flow affected by operation of pumps 7 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft^3/s, Apr. 21, 1973; gage height, 20.78 ft, former datum.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	14	15	55	e71	e71	164	162	187	57	52	341
2	12	16	16	55	e70	e70	141	115	139	104	55	306
3	11	19	16	53	e69	68	125	97	121	199	55	275
4	12	157	17	56	e68	794	114	89	108	142	2,070	250
5	11	116	16	52	e67	1,430	104	84	99	86	453	228
6	11	30	15	73	e66	335	105	78	92	317	170	213
7	11	20	14	49	e66	228	102	73	87	296	106	197
8	11	18	14	43	e66	177	103	70	81	144	84	180
9	16	16	140	42	e66	153	94	67	78	137	74	166
10	18	14	3,690	42	e65	137	92	65	1,440	88	66	189
11	17	14	606	40	e63	126	88	122	463	76	61	148
12	16	14	187	40	e62	113	83	123	207	192	56	132
13	16	14	115	e32	e63	106	80	93	137	113	59	124
14	24	13	93	e32	e64	110	76	88	108	84	57	116
15	24	13	142	e32	e65	105	74	77	815	73	54	400
16	17	13	350	e37	e66	113	72	70	247	68	53	839
17	14	67	140	e39	e67	115	70	62	138	91	52	191
18	13	916	103	e37	e77	111	69	61	115	70	53	138
19	13	266	85	e36	178	103	67	66	130	63	51	117
20	13	86	61	e35	178	97	80	61	91	59	58	102
21	13	48	58	e36	117	92	326	61	84	56	56	94
22	13	34	55	e40	94	85	160	60	79	54	52	90
23	13	33	88	e51	92	84	146	72	70	55	53	84
24	14	31	69	e59	85	85	111	69	64	56	58	81
25	22	25	52	e66	78	81	104	326	69	58	170	78
26	20	21	53	e71	73	2,740	93	209	64	55	285	74
27	17	20	50	e71	71	2,500	83	299	60	53	810	70
28	18	17	138	e72	71	586	78	517	59	52	5,730	67
29	19	19	100	e72	72	430	75	186	58	54	3,930	66
30	16	17	72	e72	---	261	93	353	57	56	611	63
31	18	---	60	e71	---	198	---	583	---	54	401	---
MEAN	15.3	70.0	214	50.4	79.7	378	106	144	185	98.8	513	181
MAX	24	916	3,690	73	178	2,740	326	583	1,440	317	5,730	839
MIN	11	13	14	32	62	68	67	60	57	52	51	63
IN.	0.08	0.36	1.12	0.26	0.39	1.98	0.54	0.75	0.94	0.52	2.69	0.92

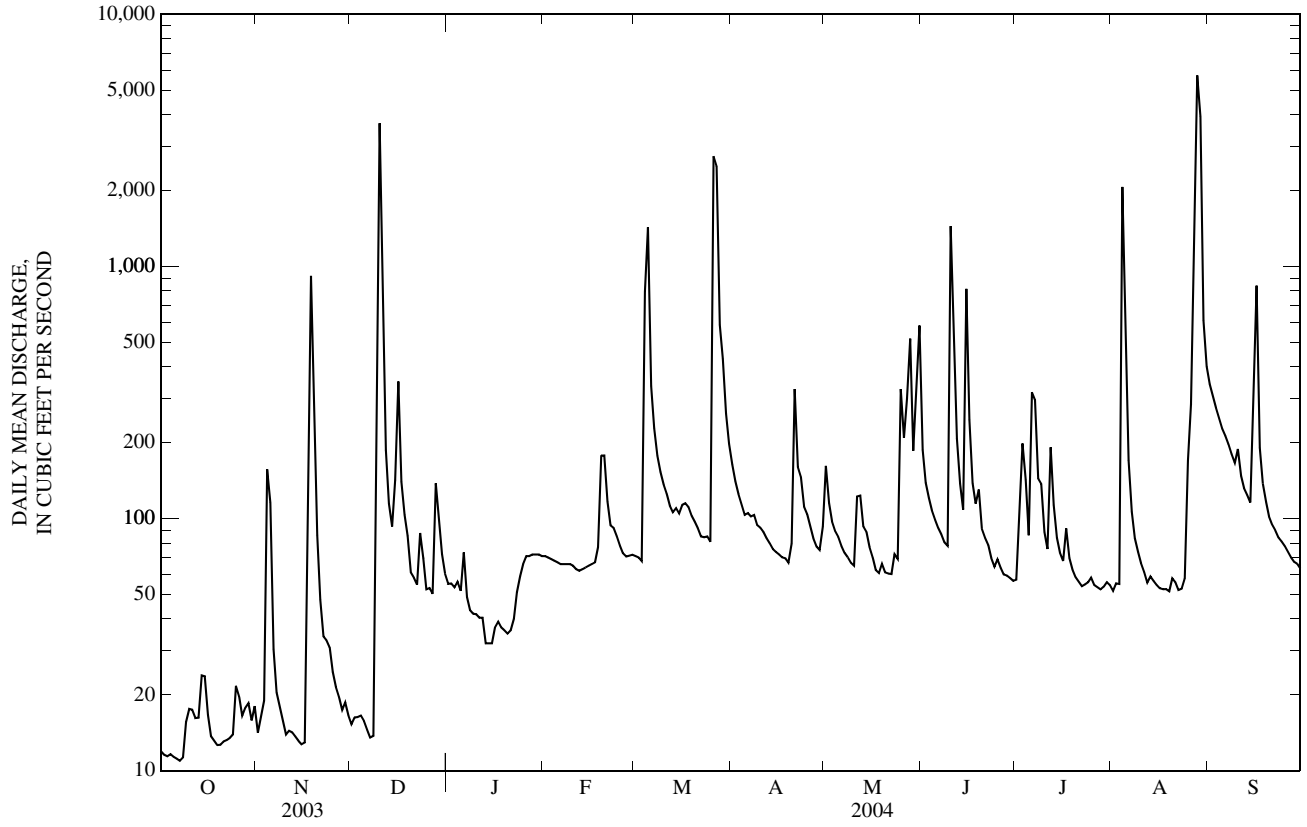
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004[a], BY WATER YEAR (WY)

MEAN	97.1	123	137	92.8	163	226	238	346	220	214	118	108
MAX	1,019	756	666	362	732	945	935	1,403	562	1,569	514	774
(WY)	(1987)	(1986)	(1983)	(1993)	(1985)	(1985)	(1983)	(2002)	(1995)	(1993)	(1993)	(1993)
MIN	6.44	2.66	4.95	6.48	7.59	10.6	10.2	12.1	2.56	5.34	3.64	2.70
(WY)	(1981)	(1981)	(1989)	(1989)	(1989)	(1989)	(1989)	(1988)	(1988)	(1989)	(1980)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004[a]	
ANNUAL MEAN	60.2		170		174	
HIGHEST ANNUAL MEAN					468	1993
LOWEST ANNUAL MEAN					17.3	1989
HIGHEST DAILY MEAN	3,690	Dec 10	5,730	Aug 28	7,760	Oct 3, 1986
LOWEST DAILY MEAN	6.5	Mar 5	11	Oct 3,5-8	0.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	7.5	Feb 27	11	Oct 2	0.40	Oct 9, 1980
MAXIMUM PEAK FLOW	---		6,130	Aug 28	10,400	Jun 27, 1981
MAXIMUM PEAK STAGE	---		16.69	Aug 28	19.30	Sep 2, 1982
INSTANTANEOUS LOW FLOW	---		10	Oct 5,6,8	0.00	Many Years
ANNUAL RUNOFF (INCHES)	3.72		10.54		10.73	
10 PERCENT EXCEEDS	87		262		380	
50 PERCENT EXCEEDS	17		72		59	
90 PERCENT EXCEEDS	9.0		16		9.0	

e Estimated
[a] Post-regulation period.

06906300 EAST FORK LITTLE CHARITON RIVER NEAR HUNTSVILLE, MO—Continued



06906300 EAST FORK LITTLE CHARITON RIVER NEAR HUNTSVILLE, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
04...	1330	Environmental	28	8.4	87	7.9	988	15.4	440	105	43.1	6.17
04...	1530	Blank	--	--	--	--	--	--	--	<0.01	<0.008	<0.16
JAN												
06...	1440	Environmental	38	16.2	113	7.5	901	0.3	--	--	--	--
MAR												
01...	1355	Environmental	57	11.7	107	7.8	611	9.4	--	--	--	--
MAY												
19...	0845	Environmental	51	7.2	82	7.6	496	20.4	210	54.1	18.4	4.64
JUL												
14...	1140	Environmental	64	6.8	88	7.4	502	26.9	--	--	--	--
14...	1141	Replicate	--	6.7	87	7.5	502	26.9	--	--	--	--
SEP												
01...	1135	Environmental	304	7.6	90	7.3	364	23.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
04...	44.0	116	116	142	<1	7.20	0.3	392d	727	<10	0.43	E.02n	<0.06
04...	<0.10	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	E.02n	<0.06
JAN													
06...	--	117	116	142	<1	--	--	--	--	<10	0.46	0.05	0.20
MAR													
01...	--	86	84	103	<1	--	--	--	--	33	0.60	0.04	0.31
MAY													
19...	16.3	78	75	92	<1	7.35	0.2	148	333	51d	0.87	E.02n	0.30
JUL													
14...	--	92	92	113	<1	--	--	--	--	66	0.71	<0.04	0.08
14...	--	--	--	--	--	--	--	--	--	47	0.69	<0.04	0.08
SEP													
01...	--	79	79	96	<1	--	--	--	--	188d	0.90	<0.04	<0.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
04...	<0.008	E.01n	E.02n	0.04	56	88	96	44	220	0.7	E.03n	0.05	2.5
04...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	21v	<0.2	<0.04	<0.04	<0.4
JAN													
06...	E.004n	<0.02	<0.04	0.04	8k	37	48	--	--	--	--	--	--
MAR													
01...	0.021	<0.02	<0.04	0.07	5k	30k	22k	--	--	--	--	--	--
MAY													
19...	0.014	<0.02	<0.04	0.12	540k	480k	1,500k	91	945	1.0	E.03n	0.07	2.0
JUL													
14...	<0.008	<0.02	E.03n	0.10	200	380	120	--	--	--	--	--	--
14...	<0.008	<0.02	E.03n	0.10	250	200	160	--	--	--	--	--	--
SEP													
01...	<0.008	<0.02	<0.04	0.16	340	360	500	--	--	--	--	--	--

06906300 EAST FORK LITTLE CHARITON RIVER NEAR HUNTSVILLE, 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								
04...	12	<0.08	0.33v	198	<0.02	E.4n	2	4
04...	<6	<0.08	<0.11	<0.8	<0.02	<0.4	<0.6	<2
JAN								
06...	--	--	--	--	--	--	--	--
MAR								
01...	--	--	--	--	--	--	--	--
MAY								
19...	E4n	<0.08	1.19	331	<0.02	0.5	3	7
JUL								
14...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
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

06906500 MISSOURI RIVER AT GLASGOW, MO

LOCATION.--Lat 39°13'20", long 92°51'00", in NE ¼ NE ¼ NE ¼ sec.3, T.51 N., R.17 W., Howard County, Hydrologic Unit 10300102, at bridge on State Highway 240 in Glasgow, 75 ft downstream from Chicago and Alton Railway bridge, 1 mi downstream from Little Chariton River, and at mile 226.8.

DRAINAGE AREA.--497,900 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

PERIOD OF RECORD.--October 2000 to current year. Gage-height records collected at site 1878-99 in reports of the Missouri River Commission. Gage-height records collected from January 1929 to August 1950 in files of the Corps of Engineers, Kansas City District. August 1950 to September 2000 gage-height records collected in files of the U.S.G.S.

GAGE.--Water-stage recorder. Datum of gage 586.49 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for discharges above 100,000 ft^3/s and estimated daily discharges, which are poor. Some regulation from many upstream reservoirs. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 29, 1993 reached a stage of 39.50 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,300	34,800	24,400	27,100	23,900	35,200	73,400	44,400	148,000	61,600	49,200	114,000
2	34,700	35,100	23,500	26,700	23,000	33,700	62,200	50,600	147,000	58,700	47,500	91,700
3	35,000	35,300	23,200	26,900	22,500	33,200	55,800	46,500	127,000	61,900	46,500	68,900
4	34,600	35,700	23,200	27,000	21,900	39,600	52,100	43,500	107,000	69,700	52,900	56,000
5	34,300	36,500	23,400	26,600	21,400	84,400	49,100	42,100	89,400	77,500	66,900	49,900
6	34,100	39,300	23,600	25,700	21,800	138,000	46,400	40,100	77,400	81,000	68,800	47,200
7	34,600	46,800	23,800	25,000	22,400	134,000	43,900	39,200	73,400	85,400	59,900	49,400
8	34,400	47,200	23,900	24,700	22,600	109,000	41,800	39,700	70,100	85,800	60,100	54,200
9	33,800	42,700	24,100	24,100	22,900	84,400	40,500	40,300	66,600	77,700	56,500	49,800
10	33,800	40,100	38,400	23,200	23,400	72,300	39,400	39,300	68,900	68,700	49,900	46,500
11	34,000	38,900	50,100	22,100	23,600	65,300	38,700	38,900	73,400	65,000	46,700	44,600
12	34,100	37,900	45,700	21,200	23,200	62,500	38,300	42,000	79,000	73,700	44,300	42,500
13	34,200	37,300	32,500	20,900	22,900	62,800	38,000	42,800	77,600	94,000	42,800	40,500
14	34,700	37,000	27,500	20,900	23,000	59,400	37,600	43,900	92,800	99,600	41,300	39,500
15	e35,600	36,800	25,600	21,400	22,900	53,300	37,100	46,600	117,000	87,100	40,400	39,400
16	37,500	36,500	25,600	22,300	22,900	49,000	36,800	47,300	140,000	74,700	39,300	41,400
17	37,200	36,700	24,900	23,000	23,400	46,400	37,100	46,900	134,000	78,900	38,800	40,600
18	37,200	39,100	24,200	23,700	23,900	44,000	37,000	46,900	126,000	95,900	38,200	39,500
19	37,200	41,700	24,600	24,600	24,200	42,000	36,600	49,700	119,000	86,600	37,500	48,000
20	36,500	38,900	26,400	25,600	25,000	40,600	35,900	85,800	105,000	75,300	37,300	60,700
21	36,200	38,300	26,700	25,500	27,400	38,600	36,500	103,000	98,700	70,800	37,700	62,100
22	35,600	38,600	26,400	25,200	36,600	36,800	42,100	80,600	90,900	63,800	37,400	58,600
23	34,900	38,100	26,700	25,300	35,300	35,700	41,900	66,500	82,700	56,900	37,000	52,100
24	34,600	37,100	28,500	25,200	e32,800	34,500	38,600	62,800	79,800	54,200	39,500	48,000
25	34,800	36,500	28,800	24,500	35,000	33,200	38,200	69,200	76,400	55,800	55,300	48,300
26	34,800	34,400	27,500	23,900	36,200	35,100	38,400	130,000	72,700	78,600	87,500	49,200
27	34,500	31,600	26,500	24,000	35,800	42,900	38,500	146,000	68,600	71,700	95,400	46,800
28	34,500	29,400	26,400	24,400	35,300	54,600	38,700	133,000	64,400	59,500	110,000	45,200
29	34,600	27,200	31,200	24,400	35,400	74,800	40,100	114,000	62,100	57,200	153,000	45,600
30	34,800	25,700	36,100	24,400	---	84,300	41,000	99,700	62,100	54,500	148,000	47,400
31	34,800	---	30,100	24,500	---	82,500	---	106,000	---	50,800	130,000	---
MEAN	35,030	37,040	28,180	24,320	26,570	59,420	42,390	65,400	93,230	72,020	61,150	52,250
MAX	37,500	47,200	50,100	27,100	36,600	138,000	73,400	146,000	148,000	99,600	153,000	114,000
MIN	33,800	25,700	23,200	20,900	21,400	33,200	35,900	38,900	62,100	50,800	37,000	39,400
IN.	0.08	0.08	0.07	0.06	0.06	0.14	0.09	0.15	0.21	0.17	0.14	0.12

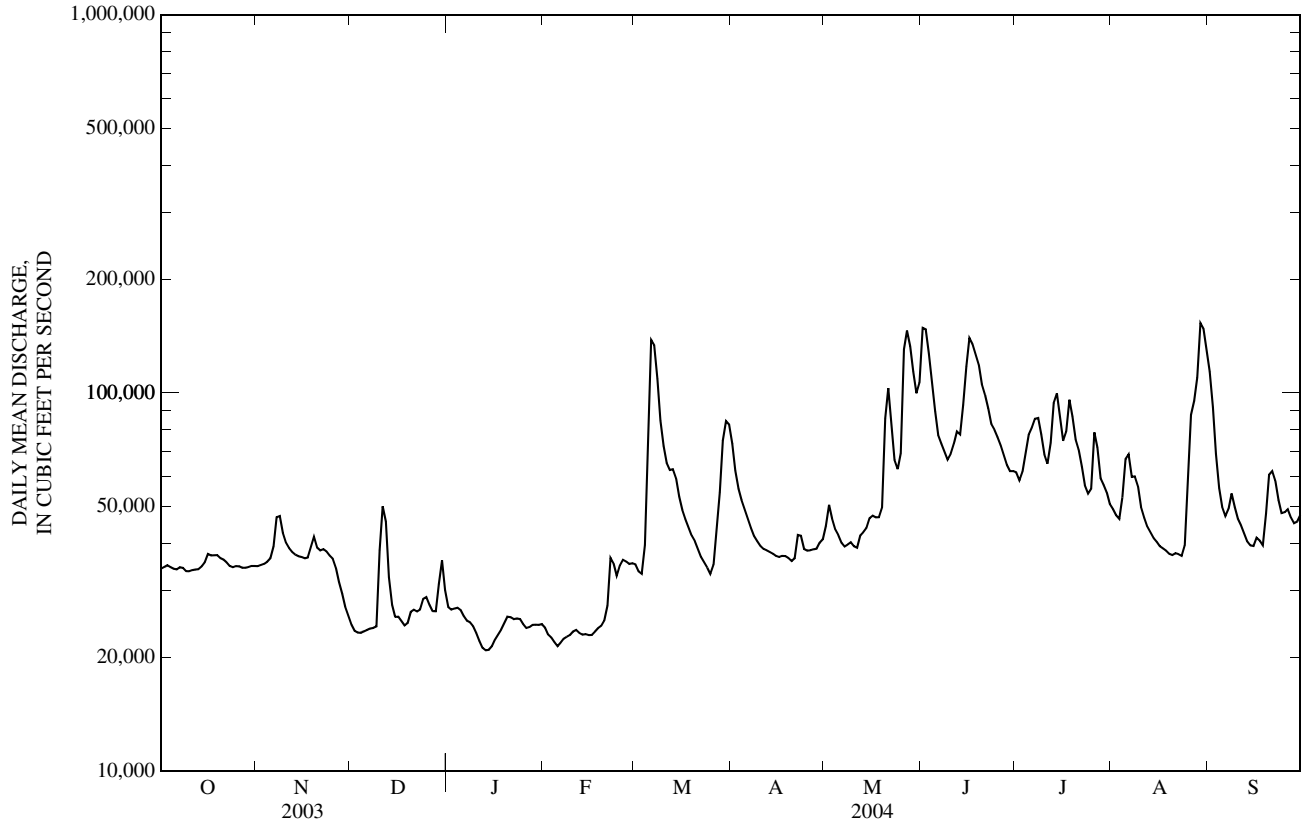
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	41,740	40,540	27,770	25,590	35,140	53,590	56,260	82,460	89,050	57,400	45,230	46,400
MAX	47,720	44,860	33,050	29,060	58,990	96,960	93,040	106,000	155,200	72,690	61,150	55,750
(WY)	(2002)	(2001)	(2002)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2004)	(2001)
MIN	35,030	37,040	24,460	21,660	23,540	26,810	38,960	58,080	50,710	37,180	32,520	36,670
(WY)	(2004)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)

06906500 MISSOURI RIVER AT GLASGOW, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL MEAN	36,820		49,810		50,120	
HIGHEST ANNUAL MEAN					69,160	2001
LOWEST ANNUAL MEAN					37,010	2003
HIGHEST DAILY MEAN	95,600	May 11	153,000	Aug 29	261,000	Jun 8, 2001
LOWEST DAILY MEAN	19,800	Jan 24	20,900	Jan 13,14	18,400	Dec 20, 2000
ANNUAL SEVEN-DAY MINIMUM	20,200	Jan 21	21,700	Jan 11	19,900	Dec 19, 2000
MAXIMUM PEAK FLOW	---		160,000	Jun 1	272,000	Jun 7, 2001
MAXIMUM PEAK STAGE	---		24.73	Jun 2	31.66	Jun 7, 2001
INSTANTANEOUS LOW FLOW	---		20,800	Jan 13	18,300	Dec 20, 2000
ANNUAL RUNOFF (INCHES)	1.00		1.36		1.37	
10 PERCENT EXCEEDS	53,100		86,800		88,500	
50 PERCENT EXCEEDS	34,800		39,400		41,300	
90 PERCENT EXCEEDS	22,300		24,100		23,900	

e Estimated



06906800 LAMINE RIVER NEAR OTTERVILLE, MO

LOCATION.--Lat 38°42'08", long 92°58'44", in NE ¼ NE ¼ NW ¼ sec.2, T.45 N., R.19 W., Cooper County, Hydrologic Unit 10300103, on left bank at the left downstream end of Highway A, 7.2 mi downstream from confluence of Flat Creek and Richland Creek, 2.2 mi upstream from Otter Creek, and 1.1 mi east of Otterville.

DRAINAGE AREA.--543 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 652.87 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good 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	24	18	33	253	132	140	313	427	304	26	71	92
2	23	18	30	223	134	130	256	430	180	78	53	61
3	23	18	30	197	138	125	213	300	127	309	41	44
4	22	17	29	633	155	6,510	179	232	99	396	124	34
5	20	17	30	1,080	146	18,800	155	181	81	784	357	28
6	18	16	30	449	146	2,190	137	140	70	1,460	227	26
7	17	16	29	311	132	804	127	110	61	384	89	23
8	16	16	28	238	115	511	117	90	53	183	47	21
9	15	16	31	205	131	405	107	74	50	103	32	19
10	16	16	e1,600	179	125	333	101	59	57	68	25	17
11	17	16	e7,600	159	130	286	105	50	451	49	20	15
12	17	16	e2,800	152	172	246	103	45	478	41	17	13
13	17	16	e1,600	144	215	216	95	51	1,160	34	15	12
14	27	16	e600	135	202	204	87	108	675	29	13	11
15	49	16	e270	128	178	194	80	264	375	26	12	9.8
16	128	16	e2,800	129	189	206	75	171	211	50	11	12
17	110	20	1,040	1,410	201	211	71	108	125	223	10	23
18	109	1,490	471	6,440	346	192	66	88	92	162	9.6	21
19	105	990	381	1,210	639	172	60	2,670	90	80	9.2	161
20	72	320	310	519	689	156	58	3,730	101	49	12	322
21	48	169	217	374	604	141	77	560	85	36	12	213
22	37	104	238	315	387	128	102	317	60	30	11	82
23	30	82	7,720	267	309	136	106	209	47	567	788	43
24	26	74	1,460	236	251	193	118	150	39	3,880	7,480	34
25	26	69	580	244	214	189	320	858	34	11,000	6,350	25
26	24	57	403	313	183	253	291	3,440	30	1,010	732	21
27	23	49	322	270	160	317	188	1,760	28	452	411	18
28	22	43	726	222	144	419	134	730	28	254	484	16
29	21	39	942	196	139	1,700	104	421	28	155	416	16
30	20	36	429	156	---	600	150	355	27	112	255	16
31	19	---	309	144	---	402	---	637	---	90	148	---
MEAN	36.8	127	1,067	546	231	1,178	136	605	175	714	590	48.3
MAX	128	1,490	7,720	6,440	689	18,800	320	3,730	1,160	11,000	7,480	322
MIN	15	16	28	128	115	125	58	45	27	26	9.2	9.8

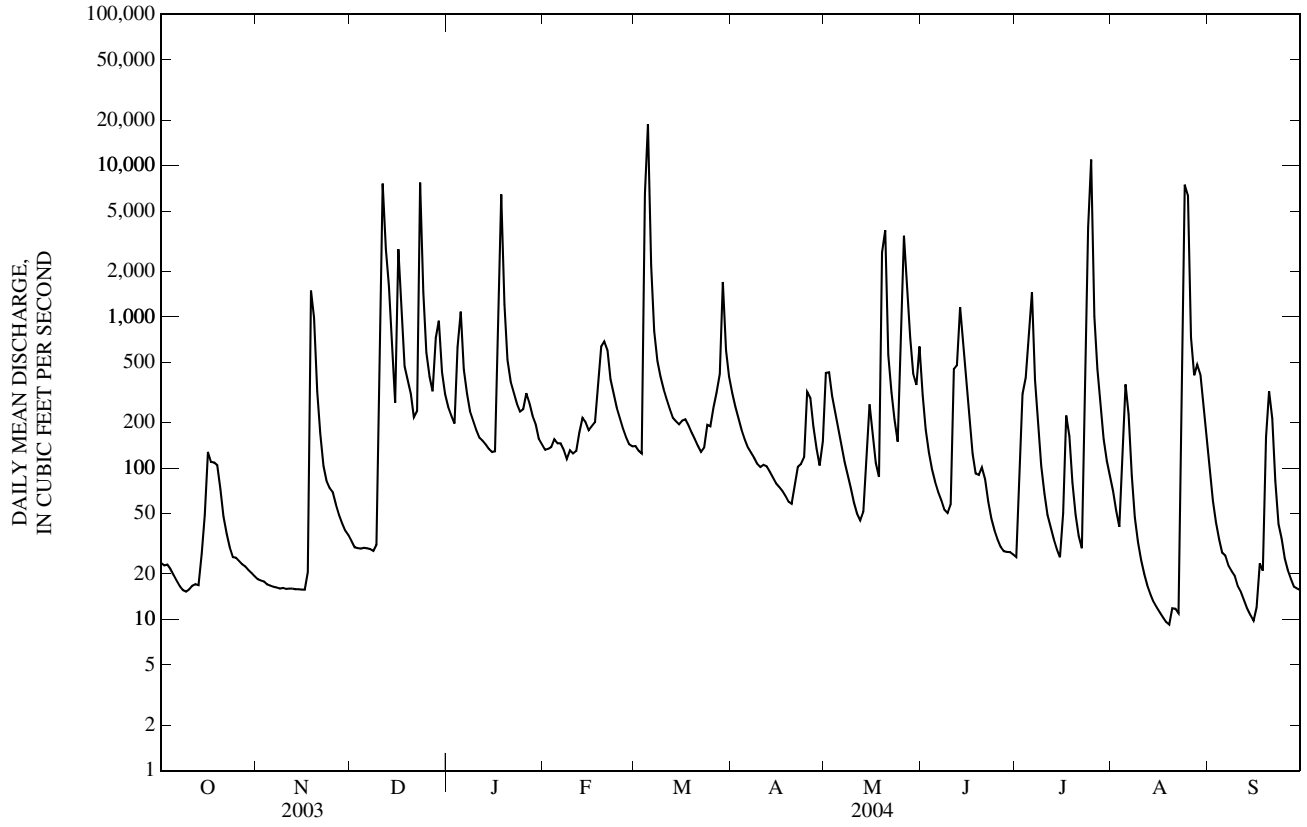
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

MEAN	175	472	343	326	580	583	844	1,267	607	622	168	273
MAX	2,130	3,347	1,564	956	2,422	2,174	3,809	4,718	3,176	4,077	850	3,689
(WY)	(1999)	(1993)	(1993)	(1999)	(1997)	(1998)	(1994)	(1990)	(1998)	(1993)	(1995)	(1993)
MIN	6.40	7.19	11.1	14.4	21.3	46.4	22.2	38.8	10.5	5.34	1.97	4.03
(WY)	(2003)	(2003)	(1990)	(2003)	(2003)	(1996)	(2000)	(1992)	(1988)	(2003)	(2003)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004	
ANNUAL MEAN	217		459		521	
HIGHEST ANNUAL MEAN					1,464	1993
LOWEST ANNUAL MEAN					115	2003
HIGHEST DAILY MEAN	7,720	Dec 23	18,800	Mar 5	47,000	May 18, 1995
LOWEST DAILY MEAN	1.1	Aug 18,19	9.2	Aug 19	1.1	Aug 18,19, 2003
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 13	11	Aug 16	1.3	Aug 13, 2003
MAXIMUM PEAK FLOW	---		20,800	Mar 5	84,900	May 18, 1995
MAXIMUM PEAK STAGE	---		20.67	Mar 5	29.43	May 18, 1995
INSTANTANEOUS LOW FLOW	---		8.5	Aug 19	1.1	Aug 18,19, 2003
ANNUAL RUNOFF (INCHES)	5.43		11.52		13.03	
10 PERCENT EXCEEDS	338		727		745	
50 PERCENT EXCEEDS	26		128		70	
90 PERCENT EXCEEDS	2.8		17		8.7	

e Estimated

06906800 LAMINE RIVER NEAR OTTERVILLE, MO—Continued



06907300 LAMINE RIVER NEAR PILOT GROVE, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 38°53'32", long 93°02'00", in SE ¼ NW ¼ NW ¼ sec.32, T.48 N., R.19 W., Cooper County, Hydrologic Unit 10300102. Approximately 2 mi southeast of County Highway Z on Shackleford Road.

DRAINAGE AREA.--949 mi^2.

PERIOD OF RECORD.--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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
24...	1520	Environmental	163	9.9	83	7.7	287	7.2	120	31.1	11.4	6.33
JAN												
14...	0930	Environmental	187	13.5	100	8.0	360	1.8	--	--	--	--
FEB												
02...	1205	Environmental	196	13.9	98	7.5	448	0.1	--	--	--	--
02...	1205	Blank	--	--	--	--	--	--	--	--	--	--
MAR												
09...	0915	Environmental	782	9.7	86	7.3	284	9.0	--	--	--	--
APR												
19...	1125	Environmental	98	11.1	124	8.3	454	19.9	--	--	--	--
MAY												
20...	1200	Environmental	6,490	5.5	63	7.0	124	21.0	53	12.6	5.27	4.32
JUN												
15...	0930	Environmental	877	5.8	70	7.4	170	23.8	--	--	--	--
JUL												
06...	1420	Environmental	755	5.8	69	7.4	197	23.4	86	21.0	8.04	5.71
SEP												
20...	1540	Environmental	357	9.6	115	7.5	375	23.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
24...	6.41	106	105	128	<1	10.5	<0.2	15.7	179	16	1.0	0.12	1.46
JAN													
14...	--	128	128	156	<1	--	--	--	--	15	0.58	E.03n	1.74
FEB													
02...	--	147	147	180	<1	--	--	--	--	11	0.41	<0.04	2.07
02...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
MAR													
09...	--	112	112	136	<1	--	--	--	--	90d	0.92	0.07	1.90
APR													
19...	--	176	178	212	2	--	--	--	--	17	0.97	<0.04	0.30
MAY													
20...	2.12	51	49	60	<1	3.37	<0.2	4.8	87	548d	3.0	0.06	0.61
JUN													
15...	--	60	62	76	<1	--	--	--	--	166d	1.5	0.07	1.11
JUL													
06...	4.52	84	82	101	<1	7.17	<0.2	8.6	136	460d	2.7	<0.04	0.55
SEP													
20...	--	150	153	187	<1	--	--	--	--	29	0.56	<0.04	0.98

06907300 LAMINE RIVER NEAR PILOT GROVE, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
24...	0.015	0.20	0.28	0.39	110	110	156	3	692	1.4	<0.04	E.02n	2.7
JAN													
14...	0.013	0.14	0.18	0.24	15k	41k	44	--	--	--	--	--	--
FEB													
02...	0.036	0.25	0.34	0.43	20	20	13k	--	--	--	--	--	--
02...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
MAR													
09...	0.014	0.07	0.12	0.28	140	190	184	--	--	--	--	--	--
APR													
19...	0.011	0.14	0.15	0.28	28	22	21	--	--	--	--	--	--
MAY													
20...	0.022	0.06	0.10	0.95	18,000	17,000	69,000	7	8,280d	1.8	<0.04	0.39	2.5
JUN													
15...	0.046	0.21	0.25	0.48	1,900k	3,200k	5,920k	--	--	--	--	--	--
JUL													
06...	0.018	0.15	0.19	0.97	>1,600a	>1,200a	>2,000a	3	5,880d	1.5	<0.04	0.23	2.0
SEP													
20...	0.009	0.14	0.16	0.21	80	150	216	--	--	--	--	--	--

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								
24...	57	<0.08	1.03	51.3	<0.02	<0.4	Mn	4
JAN								
14...	--	--	--	--	--	--	--	--
FEB								
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
MAR								
09...	--	--	--	--	--	--	--	--
APR								
19...	--	--	--	--	--	--	--	--
MAY								
20...	75	0.16	25.6	72.5	0.04	E.3n	1	53
JUN								
15...	--	--	--	--	--	--	--	--
JUL								
06...	13	<0.08	13.9	1.9	0.03	<0.4	Mn	37
SEP								
20...	--	--	--	--	--	--	--	--

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
d -- Diluted sample: method hi range exceeded
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

06908000 BLACKWATER RIVER NEAR BLUE LICK, MO

LOCATION.--Lat 38°59'32", long 93°11'48", in SW ¼ SW ¼ SW ¼ sec.26, T.49 N., R.21 W., Saline County, Hydrologic Unit 10300104, on left bank at upstream side of bridge on northbound lane of U.S. Highway 65, 1.2 mi downstream from Finney Creek, 1.8 mi southeast of Blue Lick, and at mile 30.3.

DRAINAGE AREA.--1,120 mi^2.

PERIOD OF RECORD.--June 1922 to September 1933, May 1938 to current year. Published as "at Blue Lick" for periods of record from 1922 to 2000.

REVISED RECORDS.--WSP 1006: 1929. WDR MO-84-1: 1982(M).

GAGE.--Water-stage recorder. Datum of gage is 593.79 ft above National Geodetic Vertical Datum of 1929. Prior to July 25, 1925, nonrecording gage at site 75 ft downstream at datum 0.10 ft lower; July 25 to Sept. 30, 1933, and May 23, 1938 to Dec. 3, 1956, nonrecording gage at site 25 ft downstream at same datum; Dec. 4, 1956, to Oct. 1, 1986, at site 0.5 mi upstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. U.S. Army Corps of Engineers 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	41	6.9	39	384	145	176	2,570	1,950	203	186	233	194
2	39	6.5	33	311	137	188	910	963	156	906	186	149
3	45	6.3	31	285	e145	185	602	492	132	1,700	161	125
4	52	6.8	29	383	e145	1,430	470	352	114	398	5,000	108
5	41	8.2	36	877	e145	6,720	374	266	102	879	6,730	94
6	34	9.8	53	522	e140	7,100	309	211	91	3,010	1,860	97
7	29	8.1	50	223	e135	7,740	273	175	85	4,560	471	133
8	25	6.7	45	256	e130	8,120	246	146	84	1,620	279	149
9	22	7.8	287	215	e140	3,400	215	127	76	429	265	118
10	18	9.2	6,350	203	e140	793	193	114	1,460	263	214	94
11	95	8.3	6,870	184	147	536	194	109	4,870	398	174	77
12	110	7.0	5,990	182	e180	416	210	106	4,940	459	153	66
13	60	5.3	2,800	184	e230	333	189	120	5,520	187	137	58
14	56	3.4	833	174	262	303	164	176	4,450	145	128	51
15	313	3.1	610	165	e255	296	148	254	3,920	119	122	51
16	216	3.9	1,840	173	e355	302	139	202	3,490	1,620	115	53
17	111	18	2,450	1,100	391	372	136	138	1,660	2,030	108	66
18	74	1,550	1,210	4,420	542	331	131	118	2,050	551	814	167
19	57	1,900	1,480	4,050	1,340	273	119	4,660	4,100	266	315	3,190
20	44	569	929	2,460	1,590	240	117	5,640	2,130	167	212	3,790
21	35	208	529	777	1,010	211	809	4,390	704	121	149	3,170
22	29	129	469	551	577	184	1,070	4,120	469	93	118	951
23	21	103	2,760	405	418	170	453	1,820	344	75	259	398
24	15	166	3,070	340	351	185	292	635	255	410	2,580	244
25	25	200	1,140	e335	291	226	450	3,210	208	4,500	4,590	166
26	19	129	556	e350	246	403	568	4,300	173	4,690	3,150	130
27	13	96	433	e300	213	880	347	1,780	147	4,580	877	107
28	15	75	1,610	e255	189	2,200	232	806	126	2,990	1,940	94
29	20	60	2,290	287	178	5,700	178	517	141	793	1,360	81
30	15	49	970	232	---	6,060	567	367	142	419	671	70
31	11	---	522	177	---	5,850	---	281	---	300	312	---
MEAN	54.8	179	1,494	670	351	1,978	422	1,243	1,411	1,254	1,087	475
MAX	313	1,900	6,870	4,420	1,590	8,120	2,570	5,640	5,520	4,690	6,730	3,790
MIN	11	3.1	29	165	130	170	117	106	76	75	108	51
MED	35	9.5	833	300	213	372	260	352	232	429	265	113
IN.	0.06	0.18	1.54	0.69	0.34	2.04	0.42	1.28	1.41	1.29	1.12	0.47

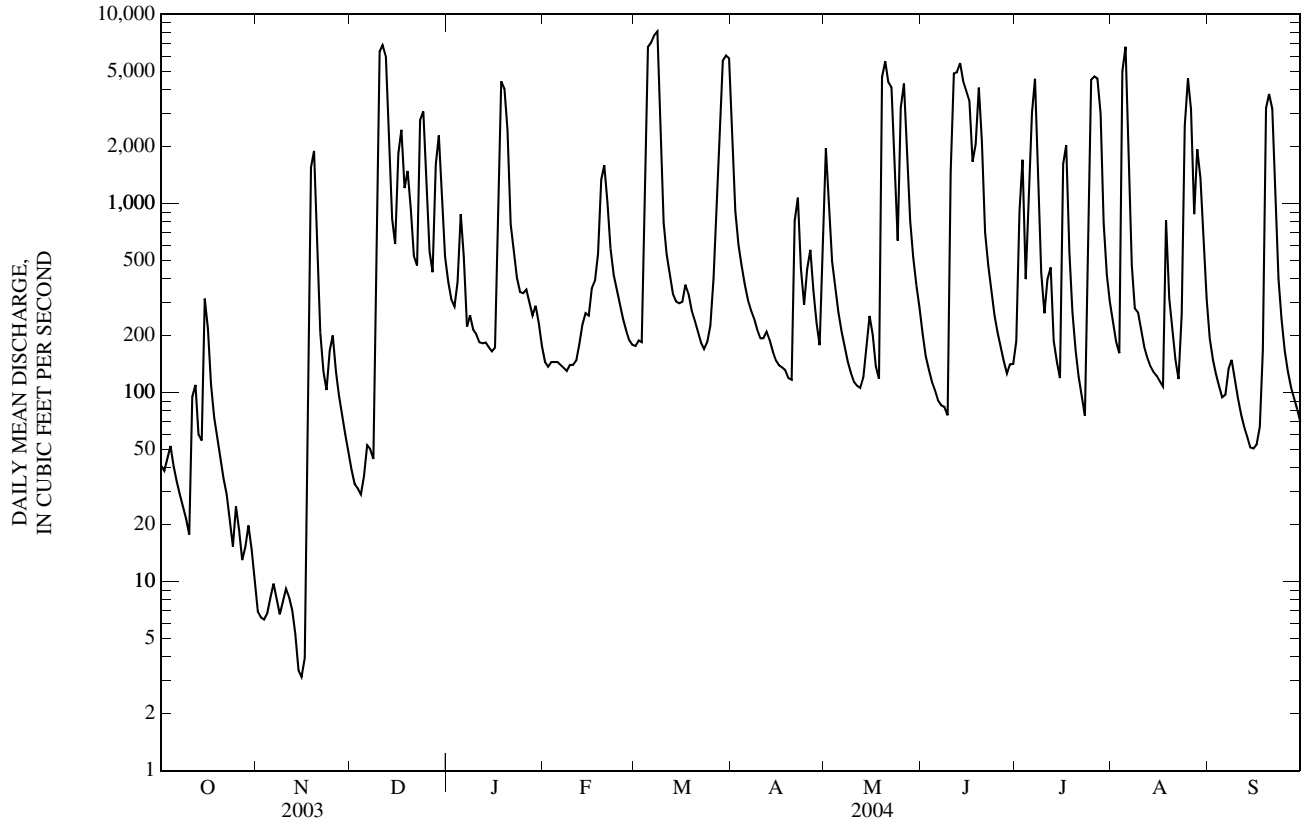
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	549	594	466	460	747	1,037	1,425	1,313	1,279	830	304	610
MAX	9,500	6,100	3,359	2,326	5,206	4,706	8,473	8,090	6,235	8,855	1,835	5,979
(WY)	(1987)	(1929)	(1983)	(1974)	(1985)	(1973)	(1973)	(1995)	(2001)	(1951)	(1998)	(1961)
MIN	0.13	0.32	1.66	1.55	5.54	9.50	29.6	9.93	18.4	1.78	1.61	0.13
(WY)	(1957)	(1957)	(1957)	(1957)	(1954)	(1956)	(1977)	(1932)	(1956)	(1933)	(1930)	(1956)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	326		891		803	
HIGHEST ANNUAL MEAN					2,540	1993
LOWEST ANNUAL MEAN					95.8	1957
HIGHEST DAILY MEAN	8,010	May 11	8,120	Mar 8	48,400	Nov 18, 1928
LOWEST DAILY MEAN	3.1	Nov 15	3.1	Nov 15	0.00	Jul 17-31, 1980
ANNUAL SEVEN-DAY MINIMUM	3.9	Aug 23	5.7	Nov 10	0.00	Jul 17, 1980
MAXIMUM PEAK FLOW	---		8,890	Aug 4	54,000	Nov 18, 1928
MAXIMUM PEAK STAGE	---		28.04	Aug 4	41.53	Oct 3, 1986
INSTANTANEOUS LOW FLOW	---		2.7	Nov 14,15	0.00	Jul 17-31, 1980
ANNUAL RUNOFF (INCHES)	3.96		10.83		9.74	
10 PERCENT EXCEEDS	693		3,160		2,410	
50 PERCENT EXCEEDS	25		228		90	
90 PERCENT EXCEEDS	6.4		36		5.0	

e Estimated

06908000 BLACKWATER RIVER NEAR BLUE LICK, MO—Continued



06909000 MISSOURI RIVER AT BOONVILLE, MO

LOCATION.--Lat 38°58'52", long 92°44'46", sec.26, T.49 N., R.17 W., Cooper County, Hydrologic Unit 10300102, near mid-span of the Highway 40 and 5 bridge just north of Boonville, 5.4 mi below Lamine River, and at mile 196.6.

DRAINAGE AREA.--500,700 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

PERIOD OF RECORD.--October 1925 to current year. Gage-height records collected at same site 1893-99 are in reports of the Missouri River Commission; since 1900 in reports of the National Weather Service.

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

GAGE.--Water-stage recorder. Datum of gage is 565.42 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1928, nonrecording gage on old Highway 40 bridge, at datum 3.14 ft lower; Oct. 1, 1928, to May 9, 1931, nonrecording gage at site .4 mile upstream at the old Missouri/Kansas/Texas Railroad bridge at present datum; May 10, 1931, to Apr. 12, 1934, water-stage recorder on old Highway 40 bridge at present datum; April 12, 1934 to April 8, 2003, water-stage recorder at site .4 mile upstream at the Missouri/Kansas/Texas Railroad Bridge at present datum; April 8, 2003 to present, water-stage recorder at present site and datum.

REMARKS.--No estimated daily discharges. Records good except for periods Dec. 5 to Jan. 9, July 11-12, and Aug. 29-30, which are fair. Some regulation from many upstream reservoirs. National Weather Service gage-height and U.S. Army Corps of Engineers satellite telemeters at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 21, 1844, reached a stage of 32.7 ft, discharge, about 710,000 ft^3/s, computed by the U.S. Army Corps of Engineers. Flood of June 6, 1903, reached a stage of 30.5 ft, discharge, about 612,000 ft^3/s, computed by the U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35,100	35,400	27,400	30,700	26,000	37,100	82,600	46,900	138,000	63,100	50,500	116,000
2	35,000	35,400	26,200	29,200	24,800	36,000	68,500	52,800	151,000	60,300	48,200	97,300
3	35,400	35,700	25,500	29,100	24,000	35,000	60,000	50,900	131,000	64,200	45,900	75,800
4	35,400	35,900	25,400	29,300	24,000	39,300	55,200	46,200	112,000	68,900	56,900	60,200
5	35,000	36,400	25,300	30,400	23,300	85,400	51,900	44,300	94,200	80,200	73,700	52,600
6	34,900	37,600	25,600	30,300	23,200	154,000	48,900	42,100	81,400	91,300	77,000	48,900
7	35,000	42,500	25,800	28,200	23,600	149,000	46,300	40,600	76,000	94,800	62,700	48,200
8	35,100	46,700	26,000	27,000	24,000	122,000	44,000	40,400	72,700	94,200	59,100	53,700
9	34,700	43,600	26,500	26,200	24,300	95,500	42,400	41,100	68,800	84,500	58,500	52,400
10	34,400	40,600	39,400	25,500	24,600	78,800	41,300	40,800	71,200	74,000	51,600	48,400
11	34,600	39,300	61,300	24,300	25,100	69,600	40,300	39,900	80,300	68,100	47,500	46,000
12	34,800	38,300	56,500	23,200	24,700	64,600	39,900	41,300	86,100	72,400	45,000	43,900
13	34,900	37,700	43,200	22,700	24,300	64,900	39,600	43,700	87,200	89,800	43,400	41,700
14	35,100	37,300	32,700	22,500	24,400	62,800	39,100	44,200	94,400	99,900	42,100	40,300
15	35,600	37,200	29,100	22,700	24,500	57,600	38,700	46,600	117,000	92,400	41,100	39,900
16	37,400	36,900	29,400	23,400	24,400	52,700	38,300	48,700	140,000	79,500	40,400	40,800
17	37,800	37,200	34,500	25,300	24,700	49,500	38,400	48,300	139,000	79,800	39,900	41,700
18	37,500	43,100	30,100	33,600	25,500	47,400	38,500	48,100	130,000	93,700	40,100	40,200
19	37,700	47,700	28,400	38,400	27,100	45,000	38,300	58,400	125,000	92,100	39,800	44,000
20	37,300	43,200	29,500	32,700	29,400	43,600	37,700	85,000	113,000	78,600	39,100	63,700
21	36,900	39,900	29,800	29,600	30,800	42,100	38,200	118,000	102,000	72,800	39,200	70,800
22	36,600	39,800	29,100	27,900	37,300	40,100	42,300	95,300	95,200	66,700	39,400	67,000
23	35,900	39,500	33,000	27,500	39,300	38,900	45,400	78,000	85,800	58,900	39,100	59,500
24	35,500	38,700	40,900	27,500	36,000	37,900	41,500	69,700	81,700	55,300	42,000	53,100
25	35,500	38,300	36,400	27,000	36,100	36,800	39,900	74,300	78,900	62,700	60,600	50,500
26	35,500	37,000	31,400	26,100	37,800	40,100	40,100	127,000	75,000	89,400	89,700	51,200
27	35,300	34,600	29,700	25,700	37,900	48,500	40,300	151,000	71,100	87,500	99,900	49,600
28	35,000	32,400	29,500	25,800	37,300	56,800	39,900	139,000	66,300	70,200	107,000	46,600
29	35,100	30,700	33,700	26,100	37,100	78,300	40,700	120,000	63,200	62,300	152,000	45,600
30	35,300	29,000	39,800	26,100	---	92,700	42,300	104,000	62,300	58,600	151,000	46,900
31	35,300	---	35,800	26,100	---	89,300	---	103,000	---	53,500	132,000	---
MEAN	35,630	38,250	32,800	27,420	28,470	64,240	44,680	68,700	96,330	76,120	63,050	54,550
MAX	37,800	47,700	61,300	38,400	39,300	154,000	82,600	151,000	151,000	99,900	152,000	116,000
MIN	34,400	29,000	25,300	22,500	23,200	35,000	37,700	39,900	62,300	53,500	39,100	39,900
IN.	0.08	0.09	0.08	0.06	0.06	0.15	0.10	0.16	0.21	0.18	0.15	0.12

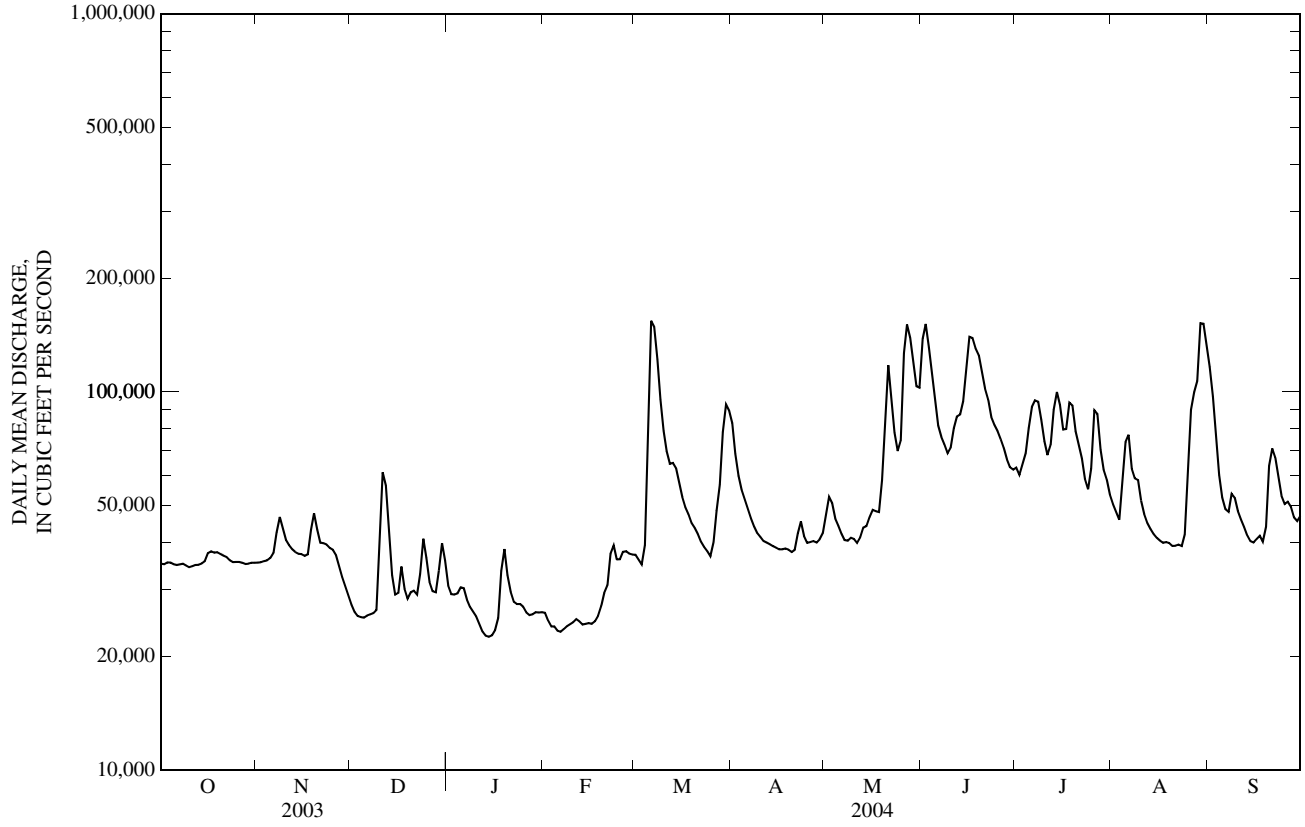
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004[a], BY WATER YEAR (WY)

MEAN	64,640	60,940	44,590	35,550	48,630	69,980	88,840	92,440	94,260	83,550	63,290	65,560
MAX	187,800	139,100	106,200	90,150	106,300	183,900	212,700	234,700	201,100	375,200	213,600	165,900
(WY)	(1974)	(1999)	(1983)	(1973)	(1982)	(1973)	(1973)	(1995)	(1984)	(1993)	(1993)	(1993)
MIN	35,630	24,600	13,840	14,770	17,620	19,460	39,060	40,770	41,990	37,530	33,550	36,730
(WY)	(2004)	(1991)	(1964)	(1963)	(1964)	(1964)	(1989)	(1989)	(1988)	(2002)	(2003)	(1991)

06909000 MISSOURI RIVER AT BOONVILLE, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1958 - 2004[a]	
ANNUAL MEAN	38,700		52,590		67,730	
HIGHEST ANNUAL MEAN					140,500	1993
LOWEST ANNUAL MEAN					38,560	2003
HIGHEST DAILY MEAN	109,000	May 11	154,000	Mar 6	721,000	Jul 30, 1993
LOWEST DAILY MEAN	20,600	Jan 24,25	22,500	Jan 14	5,000	Dec 21, 1963
ANNUAL SEVEN-DAY MINIMUM	21,000	Jan 20	23,400	Jan 11	5,730	Dec 19, 1963
MAXIMUM PEAK FLOW	---		162,000	Aug 29	755,000	Jul 29, 1993
MAXIMUM PEAK STAGE	---		21.15	Aug 29	37.10	Jul 29, 1993
INSTANTANEOUS LOW FLOW	---		22,500	Jan 13-15	5,500	Jan 22,24,1963
ANNUAL RUNOFF (INCHES)	1.05		1.43		1.84	
10 PERCENT EXCEEDS	55,600		93,800		122,000	
50 PERCENT EXCEEDS	35,600		40,800		54,200	
90 PERCENT EXCEEDS	23,600		26,100		28,700	

[a] Post-regulation period.



06909500 MONITEAU CREEK NEAR FAYETTE, MO

LOCATION.--Lat 39°07'15", long 92°34'02", in SE ¼ SE ¼ sec.14, T.50 N., R.15 W., Howard County, Hydrologic Unit , on downstream side of County Road 406 bridge, 1 mi downstream from Hungry Mother Creek, 7.5 mi east of Fayette, and 15 mi upstream from mouth.

DRAINAGE AREA.--75.1 mi^2.

PERIOD OF RECORD.--March 1948 to September 1969, July 13, 2002 to current year. Fragmentary record for the 1961 water year.

GAGE.--Water-stage recorder. Datum of gage is unknown. Prior to Aug. 14, 1957, nonrecording gage at county highway bridge at datum of 607.93 ft above National Geodetic Vertical Datum of 1929. Aug. 14, 1957 to September 1969 water-stage recorder on right upstream side of bridge at same datum; 1970 to 1992 crest-stage partial record station. Re-established July 13, 2002.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.9 ft, probably in April 1944, 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	5.7	1.2	1.0	23	e3.3	9.2	77	95	30	0.54	0.58	53
2	4.6	1.6	0.71	20	e3.1	7.7	51	40	17	2.2	0.66	33
3	3.5	1.8	0.70	16	e3.3	7.4	39	24	12	47	0.56	20
4	2.5	3.1	0.67	52	e2.8	766	32	16	8.1	20	992	12
5	1.9	24	0.67	46	e2.7	1,080	25	13	5.9	42	267	8.9
6	1.4	34	0.58	46	e2.5	200	22	9.0	4.0	1,100	61	7.9
7	1.1	13	0.41	26	e2.5	87	18	5.2	2.8	282	28	5.1
8	0.86	7.0	0.46	19	e2.4	49	16	3.4	2.4	62	14	3.6
9	0.74	4.8	48	14	e2.2	36	13	2.3	2.9	25	8.1	2.7
10	0.65	4.1	1,940	12	2.1	27	13	1.7	5.8	14	6.2	2.3
11	0.55	4.6	350	11	4.8	22	12	8.3	11	9.3	3.4	1.8
12	0.49	5.3	136	8.8	e16	16	10	5.3	8.7	87	1.9	1.6
13	0.56	3.4	73	11	e15	13	8.6	4.2	4.8	26	1.4	1.3
14	0.69	2.5	50	14	e13	13	7.5	4.8	25	10	1.1	1.2
15	0.65	2.8	109	11	e15	13	6.7	2.0	39	7.3	0.83	1.2
16	0.49	3.4	498	8.3	e14	13	6.2	1.2	32	5.6	0.66	19
17	0.39	75	112	213	22	14	5.1	0.96	12	56	0.65	10
18	0.44	1,240	73	303	49	17	4.4	1.1	6.9	12	0.65	5.1
19	0.37	275	60	82	103	16	3.6	e636	11	5.4	0.65	3.3
20	0.28	89	37	75	114	14	6.4	e145	8.4	3.1	0.70	1.7
21	0.20	48	29	51	54	13	73	49	4.7	1.7	0.85	1.3
22	0.16	28	130	24	34	10	34	28	3.0	1.0	0.85	0.99
23	0.38	27	630	25	25	30	18	27	1.8	0.89	11	0.83
24	1.5	18	112	13	20	58	15	24	1.1	1.4	23	0.69
25	2.9	11	51	14	16	34	13	21	1.2	2.7	15	0.66
26	4.3	6.3	41	15	12	1,790	9.0	23	1.0	0.83	152	0.62
27	4.0	3.2	31	13	10	1,050	6.7	17	0.80	0.63	38	0.58
28	2.3	2.5	134	7.1	9.0	568	4.9	13	0.76	0.57	1,650	0.54
29	2.2	1.6	79	5.1	8.4	377	5.2	10	0.65	0.52	367	0.50
30	1.2	2.0	42	e4.2	---	181	83	67	0.62	0.59	128	0.48
31	1.2	---	31	e3.8	---	108	---	71	---	0.61	80	---
MEAN	1.55	64.8	155	38.3	20.0	214	21.3	44.1	8.84	59.0	124	6.73
MAX	5.7	1,240	1,940	303	114	1,790	83	636	39	1,100	1,650	53
MIN	0.16	1.2	0.41	3.8	2.1	7.4	3.6	0.96	0.62	0.52	0.56	0.48
IN.	0.02	0.89	2.20	0.54	0.27	3.05	0.29	0.63	0.12	0.84	1.77	0.09

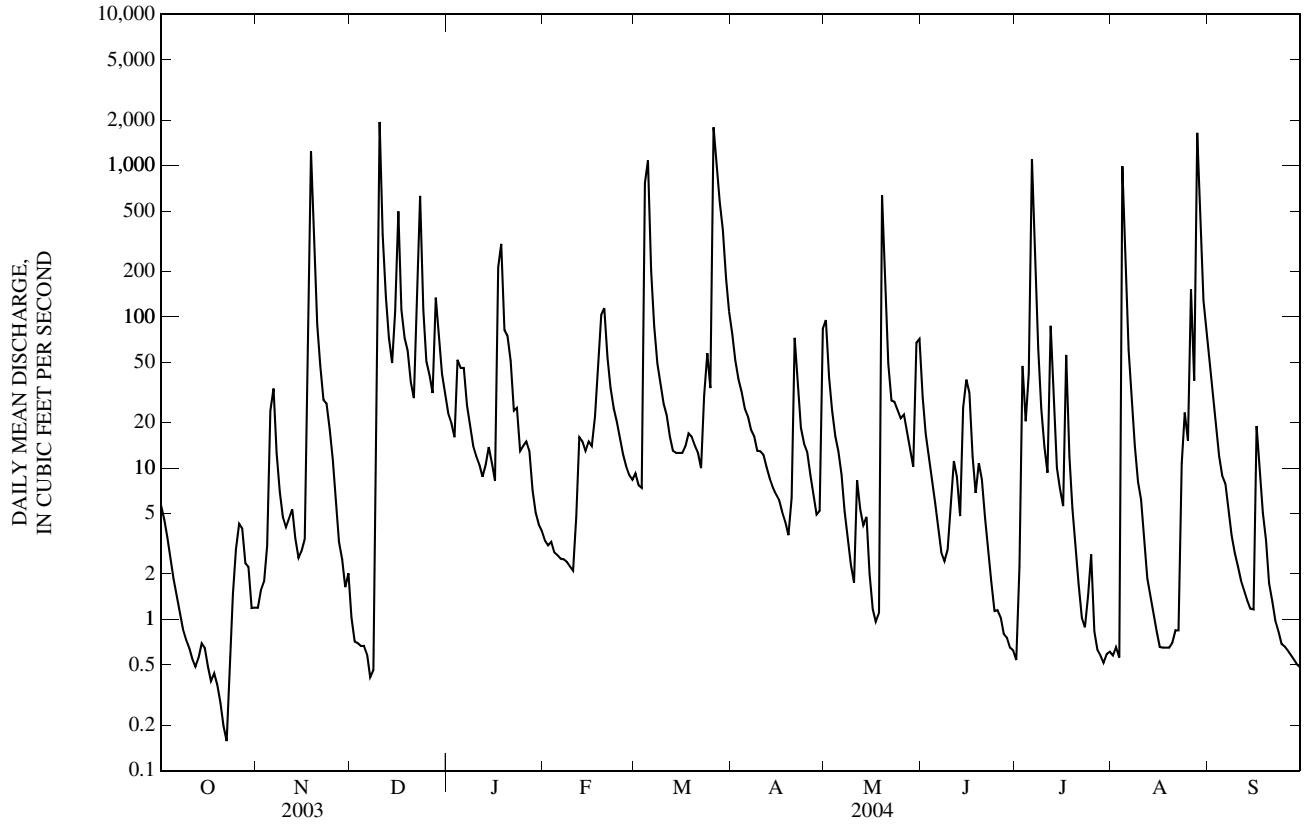
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	19.8	22.1	24.2	30.5	49.4	67.4	61.2	47.5	51.1	48.0	14.8	16.0
MAX	108	179	155	163	143	214	172	211	245	317	124	142
(WY)	(1950)	(1962)	(2004)	(1949)	(1949)	(2004)	(1969)	(2003)	(1969)	(1969)	(2004)	(2003)
MIN	0.00	0.00	0.00	0.00	0.00	0.06	3.63	1.25	0.24	0.00	0.00	0.00
(WY)	(1953)	(1954)	(1954)	(1964)	(1964)	(1954)	(1963)	(1965)	(1963)	(1954)	(1964)	(1953)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	67.1		63.8		38.4	
HIGHEST ANNUAL MEAN					103	1969
LOWEST ANNUAL MEAN					5.65	1963
HIGHEST DAILY MEAN	1,940	Dec 10	1,940	Dec 10	5,430	Jul 10, 1969
LOWEST DAILY MEAN	0.00	Aug 14-30	0.16	Oct 22	0.00	Most Years
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 14	0.32	Oct 17	0.00	At Times
MAXIMUM PEAK FLOW	---		2,970	Mar 26	11,300	Jul 10, 1969
MAXIMUM PEAK STAGE	---		20.67	Mar 26	21.59	Jul 10, 1969
INSTANTANEOUS LOW FLOW	---		0.15	Oct 22,23	0.00	Most Years
ANNUAL RUNOFF (INCHES)	11.24		10.73		6.45	
10 PERCENT EXCEEDS	116		91		65	
50 PERCENT EXCEEDS	3.5		9.2		3.0	
90 PERCENT EXCEEDS	0.20		0.66		0.00	

e Estimated

06909500 MONITEAU CREEK NEAR FAYETTE, MO—Continued



06910750 MOREAU RIVER NEAR JEFFERSON CITY, MO

LOCATION.--Lat 38°31'45", long 92°11'31", SE ¼ NW ¼ SE ¼ sec.25, T.44 N., R.11 W., Cole County, Hydrologic Unit 10300102, near right bank on downstream side of right pier of bridge on Tanner Bridge Road, 3 mi south of Jefferson City, 15.8 mi downstream from confluence of North and South Moreau Creeks, and at mile 17.

DRAINAGE AREA.--561 mi^2.

PERIOD OF RECORD.--December 1947 to September 1974, November 13, 2000 to current year. Published as Moureau River near Jefferson City (06910500), 1948 to 1974. Discharge measurements only October 1956 to September 1957.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 546.33 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1958, nonrecording gage, and Aug. 17, 1958, to May 21, 1969, water-stage recorder at site 10 mi upstream and at datum 16.4 ft higher, drainage area 531 mi^2.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1905 reached a stage of 38.2 ft, flood of 1929 reached a stage of 32.91 ft, and flood of 1943 reached a stage of 35.1 ft, present site, from information and floodmarks by local residents

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	48	97	293	194	192	442	1,240	201	29	96	175
2	93	46	88	257	202	184	356	987	167	29	83	117
3	83	46	83	234	357	175	297	607	140	43	79	89
4	73	79	83	1,050	403	3,200	256	413	111	226	161	72
5	66	390	85	2,290	335	13,700	221	316	93	232	785	61
6	57	188	87	737	300	8,820	190	244	85	837	457	53
7	50	108	86	404	e262	979	178	191	76	476	265	46
8	43	84	82	331	e233	646	162	153	72	231	157	40
9	40	70	84	290	226	504	148	127	75	129	109	35
10	40	62	1,130	260	229	422	137	108	90	86	81	32
11	35	59	2,220	234	259	364	132	96	144	65	64	30
12	33	59	671	219	421	311	129	88	105	53	54	28
13	28	54	440	208	414	271	125	106	91	45	47	26
14	44	50	365	194	e360	262	116	145	81	39	43	25
15	49	47	444	180	e337	277	108	372	75	34	43	28
16	51	47	2,020	173	e321	277	101	271	73	54	37	83
17	422	50	1,340	796	e308	280	96	186	70	196	35	46
18	505	1,050	608	6,200	546	269	90	138	62	193	35	33
19	320	1,070	458	1,780	1,230	244	85	1,120	60	101	32	29
20	192	577	373	647	1,260	218	84	1,580	53	64	39	33
21	131	342	296	452	841	192	118	659	52	53	40	31
22	99	238	388	380	539	169	157	368	53	52	38	26
23	82	218	6,560	331	419	161	137	247	52	353	54	22
24	68	382	3,610	290	369	200	316	177	52	553	606	20
25	60	260	783	e266	322	262	710	522	46	4,800	3,400	18
26	63	208	528	e246	277	398	476	3,300	40	1,650	1,430	16
27	65	176	418	e232	243	690	313	2,280	35	498	438	15
28	70	145	431	e221	218	720	216	880	35	302	629	14
29	66	124	604	e213	200	1,390	165	510	32	190	699	12
30	59	109	492	e207	---	872	338	360	30	147	526	10
31	54	---	359	e201	---	591	---	267	---	119	286	---
MEAN	102	213	817	639	401	1,201	213	583	78.4	383	350	42.2
MAX	505	1,070	6,560	6,200	1,260	13,700	710	3,300	201	4,800	3,400	175
MIN	28	46	82	173	194	161	84	88	30	29	32	10
IN.	0.21	0.42	1.68	1.31	0.77	2.47	0.42	1.20	0.16	0.79	0.72	0.08

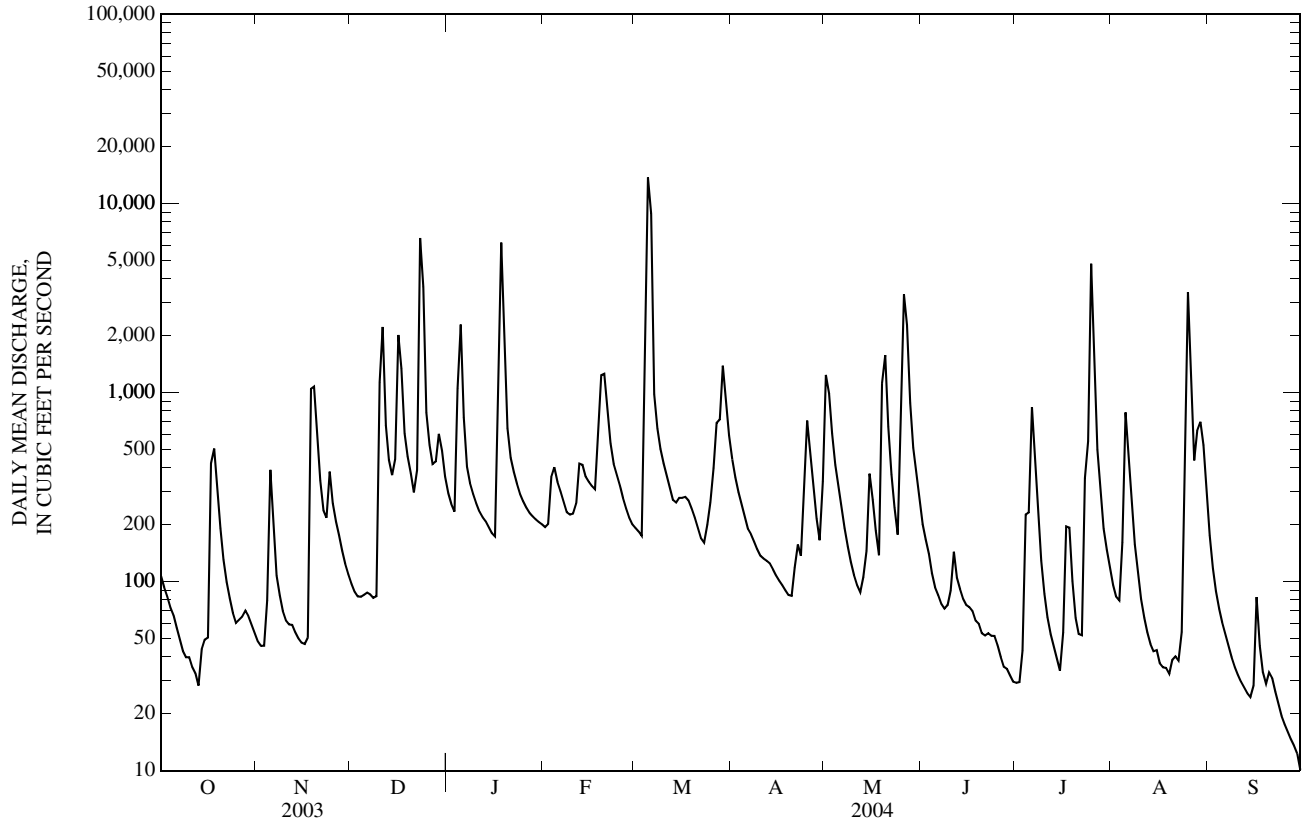
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	303	211	226	350	441	631	548	614	604	314	118	271
MAX	2,076	1,298	1,040	1,591	1,866	3,169	2,256	2,815	2,548	2,237	534	2,987
(WY)	(1970)	(1973)	(1969)	(1949)	(1951)	(1973)	(1973)	(1970)	(1948)	(1951)	(1950)	(1965)
MIN	0.81	1.03	4.29	5.57	7.75	11.9	9.36	29.7	13.2	4.41	1.78	1.35
(WY)	(1954)	(1954)	(1954)	(1964)	(1954)	(1954)	(1956)	(1965)	(1952)	(1959)	(1953)	(1960)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	278		422		379	
HIGHEST ANNUAL MEAN					881	1973
LOWEST ANNUAL MEAN					50.4	1954
HIGHEST DAILY MEAN	6,560	Dec 23	13,700	Mar 5	20,800	Jun 23, 1948
LOWEST DAILY MEAN	1.6	Aug 25,26	10	Sep 30	0.10	Sep 30, 1956
ANNUAL SEVEN-DAY MINIMUM	2.3	Aug 21	15	Sep 24	0.21	Sep 24, 1956
MAXIMUM PEAK FLOW	---		16,700	Mar 5	24,400	Oct 14, 1969
MAXIMUM PEAK STAGE	---		24.86	Mar 5	28.60	Oct 14, 1969
INSTANTANEOUS LOW FLOW	---		10	Sep 30	0.10	Sep 30, 1956
ANNUAL RUNOFF (INCHES)	6.72		10.23		9.18	
10 PERCENT EXCEEDS	596		751		656	
50 PERCENT EXCEEDS	83		182		69	
90 PERCENT EXCEEDS	16		39		6.6	

e Estimated

06910750 MOREAU RIVER NEAR JEFFERSON CITY, MO—Continued



06916675 MIAMI CREEK NEAR BUTLER, MO

LOCATION.--Lat 38°12'41", long 94°22'40", in NW $^1/_4$ SW $^1/_4$ NE $^1/_4$ sec.6, T.39 N., R.31 W., Bates County, Hydrologic Unit 10290102, on right downstream pier on County Road SW1067 bridge, 2.25 mi southwest of junction of Highways 71 and 52.

DRAINAGE AREA.--137 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 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	e1.1	e2.7	11	e4.7	7.5	86	47	14	13	8.9	2.8
2	1.4	e0.86	e8.2	8.5	e4.1	5.9	64	42	11	15	7.3	1.5
3	1.4	e0.72	e24	7.5	e3.9	6.6	50	30	8.4	102	6.2	1.9
4	1.7	e0.61	e10	7.2	e3.7	800	41	23	6.0	54	6.8	2.0
5	1.3	e0.49	e5.1	30	e3.5	2,530	35	20	4.5	43	5.7	1.4
6	1.3	e0.44	e3.7	20	e3.4	590	30	16	4.0	38	4.0	46
7	0.94	e0.37	e3.1	11	e3.3	155	28	13	3.4	19	3.1	21
8	0.71	e0.33	e2.5	6.1	e3.5	95	24	11	3.7	13	3.0	7.7
9	0.90	e0.28	2.2	5.2	4.8	79	22	9.1	4.8	10	2.7	4.3
10	0.72	e0.27	45	4.5	4.8	83	22	7.0	494	8.2	2.9	3.4
11	0.64	e0.28	34	4.2	5.2	52	27	6.5	506	6.6	3.0	2.8
12	0.75	e0.23	12	3.7	6.8	29	28	7.5	562	4.8	2.9	2.3
13	0.79	e0.20	5.4	3.7	6.5	29	22	15	390	4.1	2.5	2.2
14	1.0	e0.17	3.1	3.8	5.7	28	17	44	167	2.9	2.3	2.3
15	0.80	e0.16	7.9	4.1	9.4	30	15	39	73	2.2	2.1	2.3
16	0.68	e0.15	68	4.4	11	59	13	27	50	115	2.0	2.8
17	0.49	e27	67	125	14	76	12	17	84	193	2.2	2.4
18	0.38	e50	26	656	50	44	11	40	313	51	2.3	1.9
19	0.33	e23	15	139	147	31	10	334	187	16	2.0	2.1
20	0.31	e12	13	48	108	25	12	125	67	9.0	2.1	2.1
21	0.30	e7.5	5.2	29	68	20	166	41	44	5.4	2.7	1.1
22	0.26	e7.5	13	22	34	17	80	23	31	3.4	2.1	1.5
23	e0.24	e20	338	18	21	15	36	15	22	2.4	1.7	1.4
24	e0.23	e8.6	120	15	15	16	375	11	17	106	10	1.1
25	e2.0	e5.7	30	16	12	16	271	215	13	447	12	1.5
26	e1.8	e4.5	17	18	9.4	27	87	146	10	82	5.1	1.4
27	e1.8	e3.9	12	e19	7.8	61	52	82	15	33	2.6	1.2
28	e1.6	e3.7	62	e13	7.0	1,220	39	165	32	17	1.8	1.1
29	e1.3	e3.3	72	e9.2	7.5	1,140	31	71	31	13	1.5	1.00
30	e1.1	e3.0	28	e6.5	---	358	28	32	17	12	3.7	0.96
31	e1.1	---	16	e5.4	---	143	---	20	---	10	3.8	---
MEAN	0.95	6.21	34.6	41.1	20.2	251	57.8	54.6	106	46.8	3.90	4.25
MAX	2.0	50	338	656	147	2,530	375	334	562	447	12	46
MIN	0.23	0.15	2.2	3.7	3.3	5.9	10	6.5	3.4	2.2	1.5	0.96

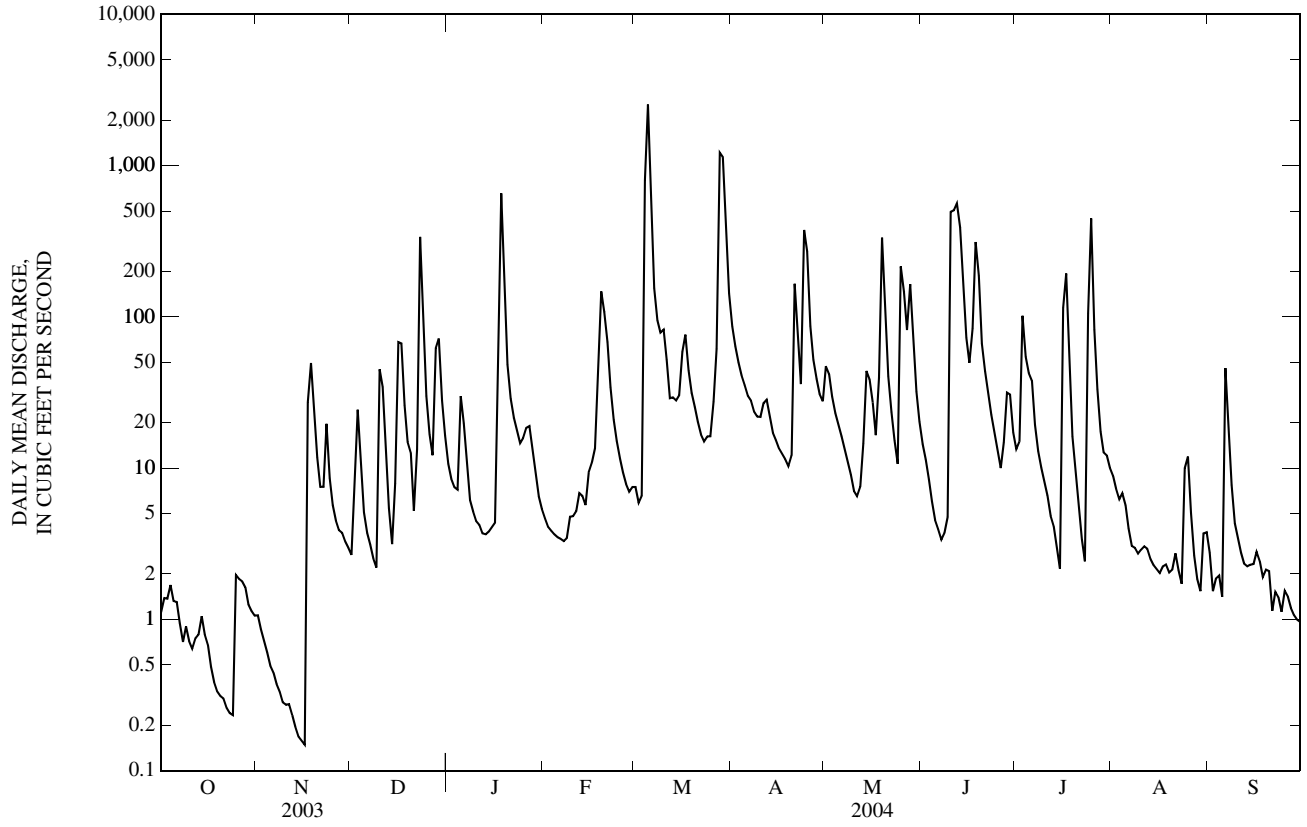
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	29.7	2.75	12.2	19.4	19.6	93.0	51.5	156	57.3	15.9	1.55	4.50
MAX	87.3	6.21	34.6	41.1	38.2	251	92.7	380	106	46.8	3.90	8.55
(WY)	(2002)	(2004)	(2004)	(2004)	(2002)	(2004)	(2002)	(2002)	(2004)	(2004)	(2004)	(2003)
MIN	0.95	0.03	0.06	0.14	0.54	11.0	3.91	33.1	19.0	0.30	0.25	0.71
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2002)	(2003)	(2003)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL MEAN	12.7		52.6		38.9	
HIGHEST ANNUAL MEAN					54.7	2002
LOWEST ANNUAL MEAN					9.28	2003
HIGHEST DAILY MEAN	344	Jun 13	2,530	Mar 5	2,530	Mar 5, 2004
LOWEST DAILY MEAN	0.01	Aug 18,21-28	0.15	Nov 16	0.00	Many Days 2002-2003
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 21	0.21	Nov 10	0.00	Nov 21, 2002
MAXIMUM PEAK FLOW	---		2,930	Mar 5	2,930	Mar 5, 2004
MAXIMUM PEAK STAGE	---		20.81	Mar 5	20.81	Mar 5, 2004
INSTANTANEOUS LOW FLOW	---		0.20[a]	Oct 22	0.00	Many Days 2002-2003
10 PERCENT EXCEEDS	26		89		61	
50 PERCENT EXCEEDS	0.67		10		2.6	
90 PERCENT EXCEEDS	0.11		1.1		0.09	

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

06916675 MIAMI CREEK NEAR BUTLER, MO—Continued



06917060 LITTLE OSAGE RIVER AT HORTON, MO

LOCATION.--Lat 37°59'41", long 94°22'09", in SW ¼ NE ¼ NW ¼ sec. 17, T.37 N., R.31 W., Vernon County, Hydrologic Unit 10290103, on left bank at the upstream side of the southbound bridge of U.S. Highway 71, 4 mi above Marmaton River, and 1 mi north of Horton.

DRAINAGE AREA.--498 mi^2.

PERIOD OF RECORD.--October 2000 to current year. Nov. 18, 1988 to Sept. 30, 2000, stage only.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above sea level.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1986 reached a stage of 59.4 ft (by U.S. Army Corps of Engineers).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.17	0.00	1.2	187	e149	80	e845	e818	76	247	119	16
2	0.03	0.00	0.66	155	e125	80	613	e718	59	1,140	94	10
3	0.52	0.00	3.9	137	114	80	378	e451	47	e1,410	72	8.4
4	0.30	0.00	17	126	e109	1,420	298	357	40	e684	57	6.9
5	0.05	0.00	13	119	e101	4,770	250	249	34	e313	46	6.2
6	0.05	0.00	7.4	107	e96	e6,180	219	190	30	e881	38	6.7
7	0.14	0.00	10	101	e93	e5,400	198	158	26	e593	31	7.1
8	0.64	0.00	7.7	89	e86	e3,750	180	131	23	e395	25	7.1
9	1.8	0.00	95	78	e83	e2,510	161	110	22	394	22	17
10	0.83	0.00	e500	71	e81	e1,700	146	96	47	253	19	13
11	0.68	0.00	e556	68	95	e1,450	142	86	381	211	17	17
12	0.16	0.00	e350	66	94	e1,100	150	81	611	157	15	15
13	0.10	0.00	e185	64	106	e793	161	276	1,300	122	13	12
14	0.27	0.00	133	62	130	533	153	982	2,900	96	12	8.5
15	0.59	0.00	195	60	132	335	132	1,090	e1,490	76	11	7.1
16	0.22	0.00	e926	59	136	310	112	e700	e599	197	9.5	6.2
17	0.10	12	e700	252	153	430	100	446	364	567	9.1	5.3
18	0.06	432	e432	1,540	185	365	91	451	326	340	8.4	4.9
19	0.04	659	e268	1,750	249	289	83	951	552	142	7.6	4.1
20	0.05	453	157	1,070	265	238	79	e612	476	90	8.5	3.4
21	0.06	65	117	434	244	205	84	507	286	67	8.4	3.1
22	0.02	20	141	274	194	177	144	293	188	54	6.9	2.9
23	e0.01	25	e1,340	222	158	154	219	205	152	53	6.6	2.9
24	e0.00	21	e1,460	192	133	142	755	155	121	41	41	3.0
25	0.00	8.1	e865	182	115	133	2,570	234	94	576	49	2.3
26	0.00	4.5	e268	220	101	127	e3,000	239	72	797	51	2.0
27	0.00	3.0	e206	265	92	122	e1,620	200	58	572	37	1.7
28	0.00	1.9	e576	e199	85	889	e784	184	52	510	22	1.5
29	0.00	2.1	e453	e165	80	2,540	e718	155	48	252	19	1.4
30	0.00	1.7	e288	e216	---	e2,440	e618	114	46	129	36	1.4
31	0.00	---	e227	e187	---	e1,280	---	98	---	138	28	---
MEAN	0.22	56.9	339	281	130	1,291	500	366	351	371	30.3	6.80
MAX	1.8	659	1,460	1,750	265	6,180	3,000	1,090	2,900	1,410	119	17
MIN	0.00	0.00	0.66	59	80	80	79	81	22	41	6.6	1.4

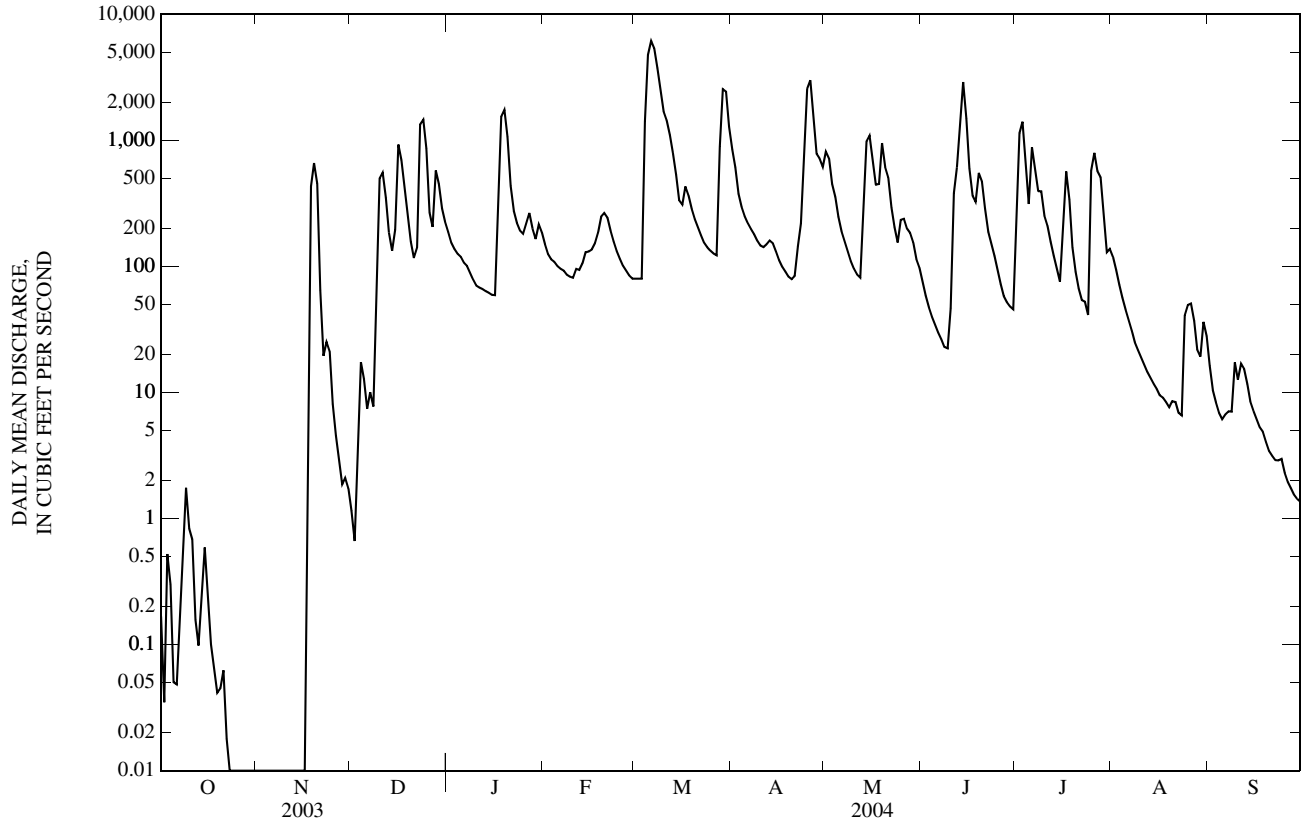
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

MEAN	19.2	18.5	88.3	95.9	204	503	318	614	447	123	13.5	46.8
MAX	55.4	56.9	339	281	561	1,291	500	1,530	812	371	30.3	175
(WY)	(2002)	(2004)	(2004)	(2004)	(2001)	(2004)	(2004)	(2002)	(2001)	(2004)	(2004)	(2003)
MIN	0.00	0.04	0.60	1.16	10.3	43.8	68.8	174	256	0.05	0.17	0.00
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2001)	(2003)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL MEAN	116		312		208	
HIGHEST ANNUAL MEAN					312	2004
LOWEST ANNUAL MEAN					83.1	2003
HIGHEST DAILY MEAN	2,210	Jun 7	6,180	Mar 6	6,180	Mar 6, 2004
LOWEST DAILY MEAN	0.00	Many Days	0.00	Oct 24-Nov 16	0.00	Many Days 2002-2004
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 13	0.00	Oct 24	0.00	At Times
MAXIMUM PEAK FLOW	---		8,510	Mar 7	8,510	Mar 7, 2004
MAXIMUM PEAK STAGE	---		45.71	Mar 7	45.71	Mar 7, 2004
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Many Days Each Year
10 PERCENT EXCEEDS	356		787		513	
50 PERCENT EXCEEDS	4.8		101		17	
90 PERCENT EXCEEDS	0.00		0.15		0.00	

e Estimated

06917060 LITTLE OSAGE RIVER AT HORTON, MO—Continued



06917630 EAST DRYWOOD CREEK AT PRAIRIE STATE PARK, MO

LOCATION.--Lat 37°32'07", long 94°33'29", in NE ¼ NW ¼ NE ¼ sec.16, T.32 N., R.33 W., Barton County, Hydrologic Unit 10290104, on left bank in Prairie State Park on northfence line, approximately 3 mi southwest of Liberal, and 17 mi northwest of Lamar.

DRAINAGE AREA.--3.38 mi^2.

PERIOD OF RECORD.--November 7, 2001 to current year.

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

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

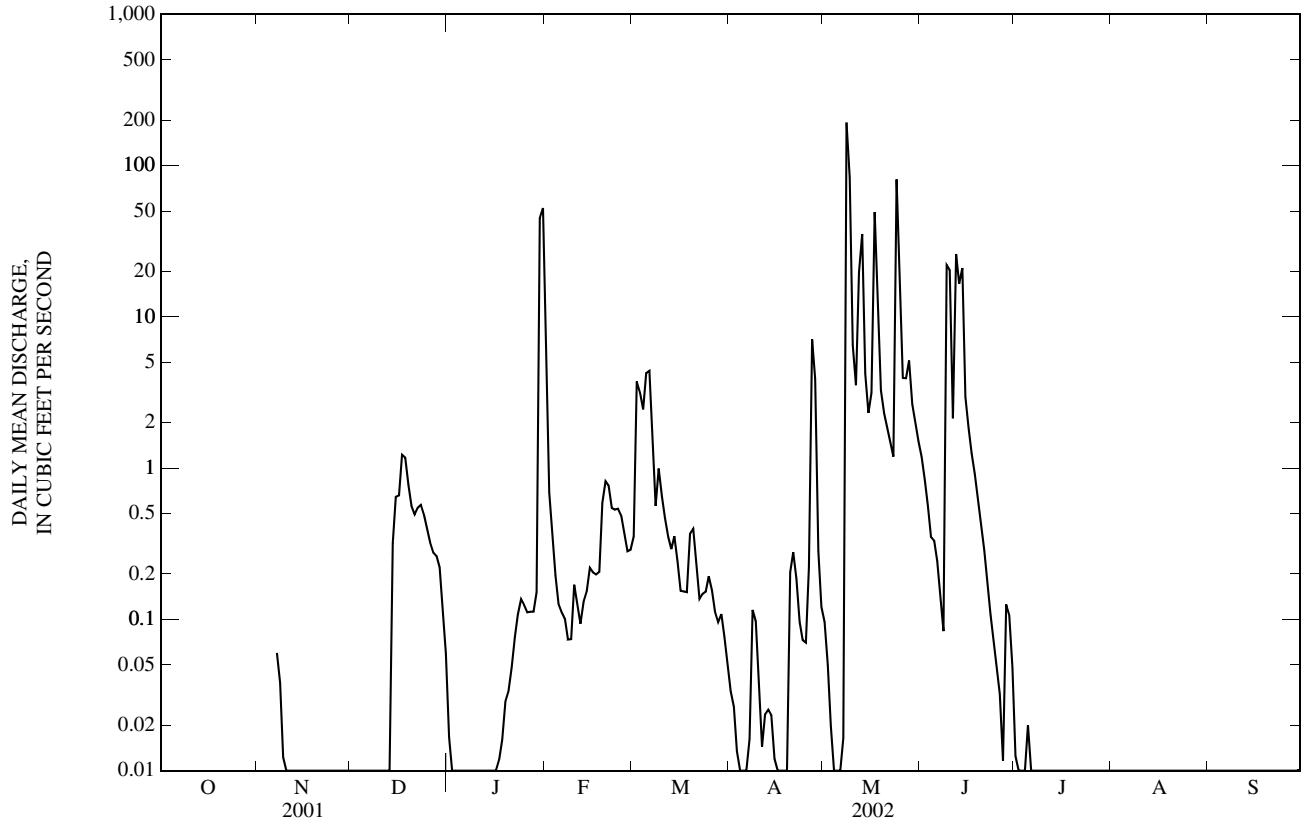
EXTREMES FOR CURRENT YEAR.--For period Nov. 7 to Sept. 30, maximum discharge 751[a] ft^3/s, May 8, gage height, 6.22 ft; minimum, no flow many days.

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	0.02	3.5	0.35	0.03	0.10	1.2	0.01	0.00	0.00
2	---	---	0.00	0.00	0.69	3.7	0.03	0.05	0.84	0.00	0.00	0.00
3	---	---	0.00	0.00	0.36	3.2	0.01	0.02	0.56	0.00	0.00	0.00
4	---	---	0.00	0.00	0.20	2.4	0.01	0.01	0.35	0.00	0.00	0.00
5	---	---	0.00	0.00	0.13	4.2	0.00	0.00	0.33	0.02	0.00	0.00
6	---	---	0.00	0.00	0.11	4.4	0.00	0.00	0.24	0.00	0.00	0.00
7	---	0.06	0.00	0.00	0.10	1.4	0.02	0.02	0.14	0.00	0.00	0.00
8	---	0.04	0.00	0.00	0.07	0.56	0.12	192	0.08	0.00	0.00	0.00
9	---	0.01	0.00	e0.00	0.07	0.99	0.10	83	22	0.00	0.00	0.00
10	---	0.00	0.00	e0.00	0.17	0.65	0.04	6.5	20	0.00	0.00	0.00
11	---	0.00	0.00	e0.00	0.12	0.47	0.01	3.5	2.1	0.00	0.00	0.00
12	---	0.00	0.00	e0.00	0.09	0.35	0.02	20	26	0.00	0.00	0.00
13	---	0.00	0.00	e0.00	0.13	0.29	0.03	35	17	0.00	0.00	0.00
14	---	0.00	0.32	e0.00	0.15	0.35	0.02	4.2	21	0.00	0.00	0.00
15	---	0.00	0.65	e0.00	0.22	0.24	0.01	2.3	3.0	0.00	0.00	0.00
16	---	0.00	0.66	0.01	0.20	0.15	0.00	3.1	1.8	0.00	0.00	0.00
17	---	0.00	1.2	0.01	0.20	0.15	0.00	49	1.3	0.00	0.00	0.00
18	---	0.00	1.2	0.02	0.21	0.15	0.00	13	0.91	0.00	0.00	0.00
19	---	0.00	0.77	0.03	0.59	0.37	0.00	3.3	0.64	0.00	0.00	0.00
20	---	0.00	0.56	0.03	0.82	0.40	0.20	2.3	0.42	0.00	0.00	0.00
21	---	0.00	0.49	0.05	0.77	0.24	0.28	1.9	0.29	0.00	0.00	0.00
22	---	0.00	0.55	0.08	0.55	0.14	0.19	1.5	0.18	0.00	0.00	0.00
23	---	0.00	0.57	0.11	0.53	0.15	0.10	1.2	0.11	0.00	0.00	0.00
24	---	0.00	0.49	0.14	0.54	0.15	0.07	81	0.07	0.00	0.00	0.00
25	---	0.00	0.40	0.12	0.49	0.19	0.07	13	0.05	0.00	0.00	0.00
26	---	0.00	0.32	0.11	0.37	0.16	0.22	3.9	0.03	0.00	0.00	0.00
27	---	0.00	0.28	0.11	0.28	0.11	7.1	3.9	0.01	0.00	0.00	0.00
28	---	0.00	0.26	0.11	0.29	0.10	3.9	5.1	0.13	0.00	0.00	0.00
29	---	0.00	0.22	0.15	---	0.11	0.28	2.6	0.11	0.00	0.00	0.00
30	---	0.00	0.12	45	---	0.08	0.12	2.0	0.05	0.00	0.00	0.00
31	---	---	0.06	52	---	0.05	---	1.5	---	0.00	0.00	---
MEAN	---	---	0.29	3.16	0.43	0.85	0.43	17.3	4.03	0.00	0.00	0.00
MAX	---	---	1.2	52	3.5	4.4	7.1	192	26	0.02	0.00	0.00
MIN	---	---	0.00	0.00	0.07	0.05	0.00	0.00	0.01	0.00	0.00	0.00
IN.	---	---	0.01	0.06	0.01	0.02	0.01	0.32	0.07	0.00	0.00	0.00

[a] Discharge determined by indirect measurement of peak flow.
e Estimated

06917630 EAST DRYWOOD CREEK AT PRAIRIE STATE PARK, MO—Continued



06917630 EAST DRYWOOD CREEK AT PRAIRIE STATE PARK, MO—Continued

LOCATION.--Lat 37°32'07", long 94°33'29", in NE ¼ NW ¼ NE ¼ sec.16, T.32 N., R.33 W., Barton County, Hydrologic Unit 10290104, on left bank in Prairie State Park on northfence line, approximately 3 mi southwest of Liberal, and 17 mi northwest of Lamar.

DRAINAGE AREA.--3.38 mi^2.

PERIOD OF RECORD.--November 7, 2001 to current year.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	2.1	1.9	2.9	0.14	0.00	0.00	58
2	0.00	0.00	0.00	0.00	0.00	2.8	1.7	1.6	6.2	0.00	0.00	15
3	0.00	0.00	0.00	0.00	0.00	2.6	1.6	1.1	3.1	0.00	0.00	2.7
4	0.00	0.00	0.00	0.00	0.00	2.7	1.7	0.99	1.0	0.00	0.00	0.73
5	0.00	0.00	0.00	0.00	0.00	2.9	1.7	0.94	0.70	0.00	0.00	0.36
6	0.00	0.00	0.00	0.00	0.00	2.5	12	0.77	1.9	0.00	0.00	0.25
7	0.00	0.00	0.00	0.00	0.00	2.4	5.2	0.60	1.3	0.00	0.00	0.17
8	0.00	0.00	0.00	0.00	0.00	2.5	2.8	0.48	0.71	0.00	0.00	0.19
9	0.00	0.00	0.00	0.00	0.00	2.3	2.2	0.39	0.42	0.00	0.00	0.20
10	0.00	0.00	0.00	0.00	0.00	2.1	1.9	0.30	0.34	0.00	0.00	0.22
11	0.00	0.00	0.00	0.00	0.00	2.3	1.6	0.27	0.30	0.00	0.00	0.56
12	0.00	0.00	0.00	0.00	0.00	2.8	1.5	0.20	0.22	0.00	0.00	0.62
13	0.00	0.00	0.00	0.00	0.00	8.2	1.4	0.35	0.16	0.00	0.00	0.74
14	0.00	0.00	0.00	0.00	0.00	3.8	1.3	0.46	0.06	0.00	0.00	0.62
15	0.00	0.00	0.00	0.00	0.00	2.5	1.2	0.33	0.02	0.00	0.00	0.61
16	0.00	0.00	0.00	0.00	0.00	2.1	1.7	28	0.00	0.00	0.00	0.62
17	0.00	0.00	0.00	0.00	0.00	1.8	1.8	22	0.00	0.00	0.00	0.48
18	0.00	0.00	0.00	0.00	0.00	1.5	1.6	3.0	0.00	0.00	0.00	0.57
19	0.00	0.00	0.00	0.00	0.00	12	2.4	2.0	0.00	0.00	0.00	0.75
20	0.00	0.00	0.00	0.00	0.83	17	4.8	15	0.00	0.00	0.00	0.57
21	0.00	0.00	0.00	0.00	2.3	5.8	2.5	2.5	0.00	0.00	0.00	34
22	0.00	0.00	0.00	0.00	2.1	3.2	1.9	1.3	0.00	0.00	0.00	5.6
23	0.00	0.00	0.00	0.00	1.9	2.6	6.7	0.98	0.00	0.00	0.00	1.3
24	0.00	0.00	0.00	0.00	1.6	2.2	18	1.1	0.00	0.00	0.00	0.78
25	0.00	0.00	0.00	0.00	1.4	2.8	3.1	1.1	0.00	0.00	0.00	0.54
26	0.00	0.00	0.00	0.00	1.4	2.7	1.9	0.79	0.00	0.00	0.00	1.7
27	0.00	0.00	0.00	0.00	1.6	2.5	1.4	0.56	0.00	0.00	0.00	2.7
28	0.00	0.00	0.00	0.00	1.6	12	1.2	0.54	0.00	0.00	0.00	1.1
29	0.00	0.00	0.00	0.00	---	5.0	1.2	0.44	0.00	0.00	0.00	0.61
30	0.00	0.00	0.00	0.00	---	2.8	0.84	0.27	0.00	0.00	0.00	8.5
31	0.00	---	0.00	0.00	---	2.3	---	0.16	---	0.00	18	---
MEAN	0.00	0.00	0.00	0.00	0.53	3.96	3.02	2.95	0.55	0.00	0.58	4.69
MAX	0.00	0.00	0.00	0.00	2.3	17	18	28	6.2	0.00	18	58
MIN	0.00	0.00	0.00	0.00	0.00	1.5	0.84	0.16	0.00	0.00	0.00	0.17
IN.	0.00	0.00	0.00	0.00	0.01	0.07	0.05	0.05	0.01	0.00	0.01	0.08

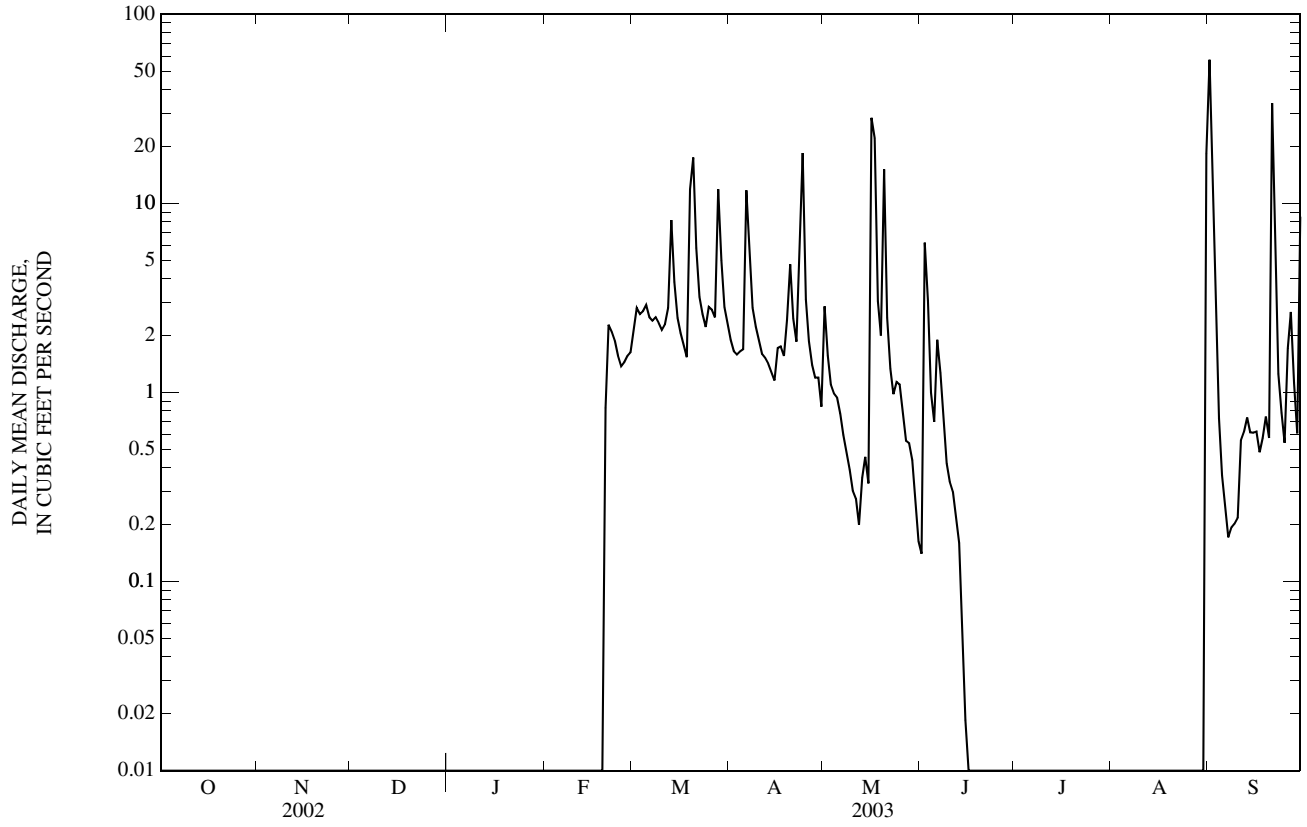
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	0.00	0.00	0.15	1.58	0.48	2.40	1.73	10.1	2.29	0.00	0.29	2.35
MAX	0.00	0.00	0.29	3.16	0.53	3.96	3.02	17.3	4.03	0.00	0.58	4.69
(WY)	(2003)	(2003)	(2002)	(2002)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)
MIN	0.00	0.00	0.00	0.00	0.43	0.85	0.43	2.95	0.55	0.00	0.00	0.00
(WY)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL MEAN	2.21		1.36		1.36	
HIGHEST ANNUAL MEAN					1.36	2003
LOWEST ANNUAL MEAN					1.36	2003
HIGHEST DAILY MEAN	192	May 8	58	Sep 1	192	May 8, 2002
LOWEST DAILY MEAN	Many Days	Jan 2	0.00	Many Days	0.00	Many Days Each Year
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 2	0.00	Oct 1	0.00	Nov 10, 2001
MAXIMUM PEAK FLOW	---		136	Sep 21	751[a]	May 8, 2002
MAXIMUM PEAK STAGE	---		3.17	Sep 21	6.22	May 8, 2002
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Many Days Each Year
ANNUAL RUNOFF (INCHES)	0.48		0.30		0.30	
10 PERCENT EXCEEDS	2.0		2.7		2.7	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

[a] Discharge determined by indirect measurement of peak flow.

06917630 EAST DRYWOOD CREEK AT PRAIRIE STATE PARK, MO—Continued



06917630 EAST DRYWOOD CREEK AT PRAIRIE STATE PARK, MO—Continued

LOCATION.--Lat 37°32'07", long 94°33'29", in NE ¼ NW ¼ NE ¼ sec.16, T.32 N., R.33 W., Barton County, Hydrologic Unit 10290104, on left bank in Prairie State Park on northfence line, approximately 3 mi southwest of Liberal, and 17 mi northwest of Lamar.

DRAINAGE AREA.--3.38 mi^2.

PERIOD OF RECORD.--November 7, 2001 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	9.7	1.2	e1.8	e2.0	e0.63	2.1	1.5	8.9	0.02	42	0.00	0.00
2	2.2	1.2	6.0	e1.7	e0.61	1.8	1.1	3.0	0.01	10	0.00	0.00
3	1.7	1.2	22	e1.5	e0.61	6.3	0.84	1.5	0.01	3.2	0.00	0.00
4	1.2	1.2	5.1	8.9	e0.59	176	0.67	1.1	0.00	1.2	0.00	0.00
5	1.1	1.2	3.1	3.4	e0.61	39	0.59	0.81	0.00	0.62	0.00	0.00
6	0.91	1.2	2.5	1.7	e0.59	5.5	0.59	0.53	0.00	0.53	0.00	0.00
7	0.78	1.1	2.3	1.5	e0.57	3.3	0.54	0.36	0.00	0.33	0.00	0.00
8	0.75	0.89	2.1	1.8	e0.54	2.6	0.48	0.29	0.00	0.35	0.00	0.00
9	1.2	0.74	67	1.7	1.3	2.2	0.46	0.23	0.01	0.41	0.00	0.00
10	0.97	0.70	32	1.6	1.8	1.9	1.3	0.17	0.07	0.40	0.00	0.00
11	1.1	0.70	e14	e1.4	3.6	1.7	2.2	0.14	0.06	0.27	0.00	0.00
12	1.2	0.62	e6.0	e1.2	4.2	1.6	0.91	0.10	0.06	0.17	0.00	0.00
13	3.5	0.47	e4.0	e1.2	2.2	1.6	0.56	66	1.8	0.11	0.00	0.00
14	8.9	0.44	e3.2	e1.1	e1.8	1.9	0.42	44	0.40	0.07	0.00	0.00
15	1.8	0.41	70	e1.0	e1.6	1.9	0.38	3.3	0.12	0.03	0.00	0.00
16	1.1	0.41	11	6.3	e1.5	2.1	0.30	1.6	0.05	0.02	0.00	0.00
17	0.90	26	4.2	47	e1.3	1.8	0.23	1.1	0.04	0.01	0.00	0.00
18	0.86	43	3.6	16	e1.2	1.6	0.20	0.80	0.04	0.01	0.00	0.00
19	0.74	8.7	2.9	3.5	2.5	1.3	0.21	0.60	0.02	0.00	0.00	0.00
20	0.90	4.8	2.5	2.6	3.1	1.2	1.1	0.35	0.01	0.00	0.00	0.00
21	1.2	4.3	2.5	2.7	2.2	1.0	11	0.22	0.02	0.00	0.00	0.00
22	1.1	5.0	33	2.4	2.0	0.89	2.0	0.14	5.5	0.00	0.00	0.00
23	1.00	17	28	2.1	2.5	0.75	29	0.09	1.4	0.00	0.00	0.00
24	0.93	4.9	4.7	2.2	2.3	0.68	213	0.08	0.20	e0.00	0.00	0.00
25	2.0	3.9	3.4	e1.4	1.9	0.68	7.0	0.07	0.04	e0.00	0.00	0.00
26	3.5	3.7	2.9	e1.1	1.7	0.88	2.2	0.06	0.01	e0.00	0.00	0.00
27	2.6	e3.0	19	e0.85	1.6	0.99	1.3	0.20	0.01	e0.00	0.00	0.00
28	2.0	e2.5	21	e0.82	1.5	45	0.87	0.27	0.01	0.00	0.00	0.00
29	1.8	e2.2	4.6	e0.78	1.7	7.8	0.77	0.19	0.00	0.00	0.00	0.00
30	1.6	e1.9	3.0	e0.71	---	6.9	0.83	0.13	0.00	0.00	0.00	0.00
31	1.3	---	e2.4	e0.69	---	2.2	---	0.06	---	0.00	0.00	---
MEAN	1.95	4.82	12.6	3.96	1.66	10.5	9.42	4.40	0.33	1.93	0.00	0.00
MAX	9.7	43	70	47	4.2	176	213	66	5.5	42	0.00	0.00
MIN	0.74	0.41	1.8	0.69	0.54	0.68	0.20	0.06	0.00	0.00	0.00	0.00
IN.	0.04	0.09	0.23	0.07	0.03	0.20	0.17	0.08	0.01	0.04	0.00	0.00

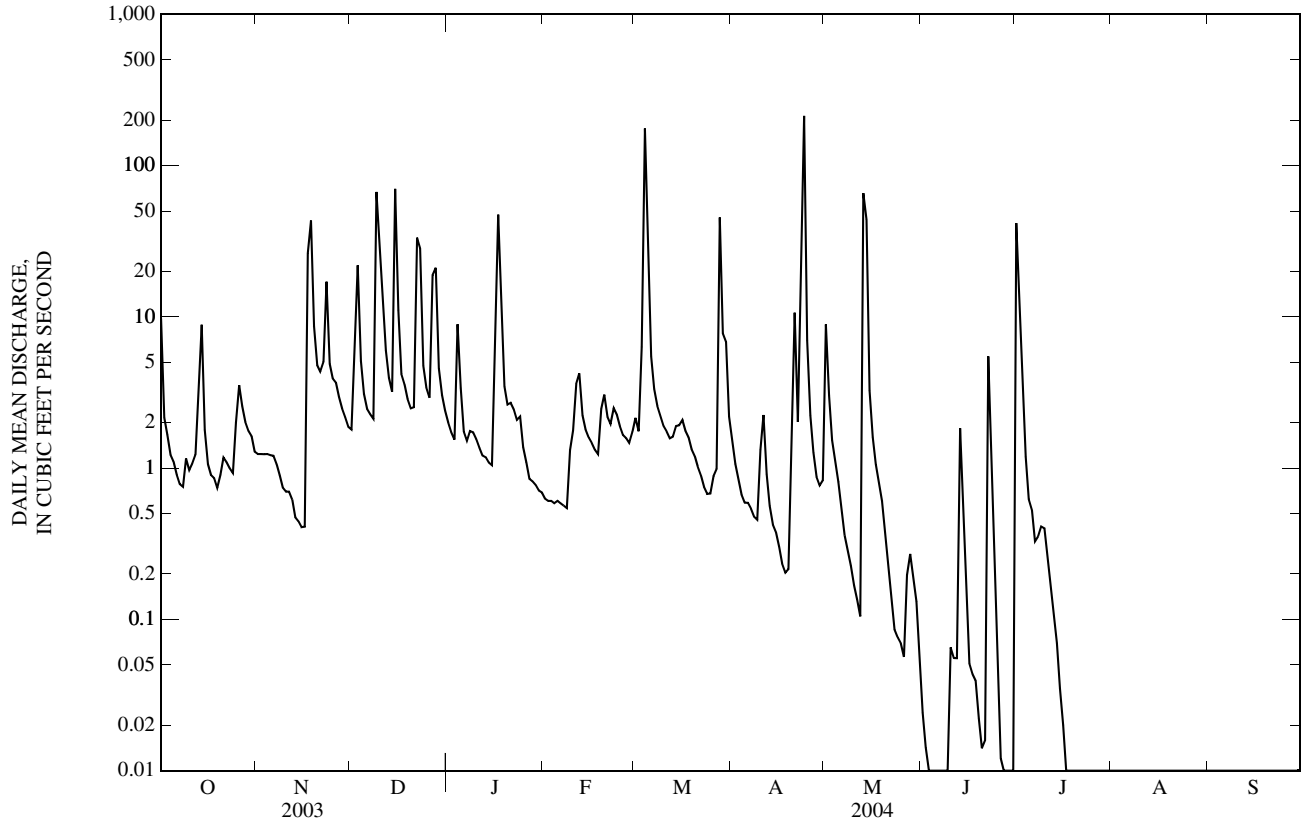
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	0.98	2.41	4.29	2.38	0.88	5.10	4.29	8.20	1.64	0.64	0.19	1.56
MAX	1.95	4.82	12.6	3.96	1.66	10.5	9.42	17.3	4.03	1.93	0.58	4.69
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2002)	(2004)	(2003)	(2003)
MIN	0.00	0.00	0.00	0.00	0.43	0.85	0.43	2.95	0.33	0.00	0.00	0.00
(WY)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2004)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL MEAN	2.99		4.32		2.84	
HIGHEST ANNUAL MEAN					4.32	2004
LOWEST ANNUAL MEAN					1.36	2003
HIGHEST DAILY MEAN	70	Dec 15	213	Apr 24	213	Apr 24, 2004
LOWEST DAILY MEAN	0.00	Many Days	0.00	Many Days	0.00	Many Days Each Year
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Jul 19	0.00	Nov 10, 2001
MAXIMUM PEAK FLOW	---		658[a]	Apr 24	751[b]	May 8, 2002
MAXIMUM PEAK STAGE	---		5.86	Apr 24	6.22	May 8, 2002
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Many Days Each Year
ANNUAL RUNOFF (INCHES)	0.65		0.95		0.62	
10 PERCENT EXCEEDS	5.4		6.0		3.7	
50 PERCENT EXCEEDS	0.79		0.88		0.35	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated
[a] From rating extended above 198 ft^3/s on basis of indirect measurement.
[b] Discharge determined by indirect measurement of peak flow.

06917630 EAST DRYWOOD CREEK AT PRAIRIE STATE PARK, MO—Continued



06917680 DRY WOOD CREEK NEAR DEERFIELD, MO

LOCATION.--Lat 37°47'53", long 94°30'55", in SW $^1/_4$ SE $^1/_4$ sec.24, T.35 N., R.33 W., Vernon County, Hydrologic Unit 10290104, on left downstream pier on State Highway KK bridge, 7.2 mi southwest of Nevada.

DRAINAGE AREA.--358 mi^2.

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

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

REMARKS.--Records good 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	272	12	58	267	126	82	323	485	50	2,120	35	11
2	239	12	51	231	111	98	248	674	43	4,290	28	9.5
3	109	12	121	215	103	87	203	351	39	2,490	23	8.4
4	72	15	446	234	e98	2,240	174	254	39	1,350	21	7.8
5	58	15	242	450	e97	11,700	151	205	35	567	18	7.3
6	47	14	146	222	e93	e7,500	137	172	33	921	16	9.0
7	40	13	110	138	e91	e1,900	128	146	33	856	13	9.8
8	37	13	97	147	e88	e1,100	119	126	32	255	11	13
9	36	13	435	135	e88	548	110	114	31	332	10	13
10	40	13	3,210	128	111	339	108	101	37	538	9.9	10
11	42	12	2,770	118	137	269	169	93	73	239	12	8.3
12	38	11	937	120	200	220	195	88	73	140	12	7.8
13	34	12	484	117	216	193	138	443	975	98	12	7.1
14	52	12	486	109	174	180	112	3,480	1,640	76	11	6.2
15	166	13	969	104	147	177	100	3,080	389	61	11	5.7
16	83	12	3,650	108	143	188	94	794	167	56	10	7.4
17	54	48	2,410	935	155	195	89	319	213	57	10	10
18	43	1,550	668	2,620	201	166	82	227	1,240	54	9.7	17
19	36	1,600	367	1,230	257	144	77	192	610	43	9.2	12
20	32	432	273	395	258	126	77	168	217	36	9.3	8.2
21	29	201	226	264	186	115	317	129	134	31	8.2	6.4
22	e24	139	310	235	136	100	418	104	143	27	11	4.8
23	e22	182	3,600	206	116	92	273	87	140	23	11	4.2
24	e20	268	4,280	181	107	87	4,240	75	103	23	17	7.1
25	e18	174	1,620	178	104	82	12,000	67	70	26	22	7.6
26	e16	121	504	216	91	81	e4,500	62	52	30	18	7.3
27	e15	100	340	189	82	83	e1,800	374	54	28	16	7.8
28	e14	84	1,800	128	77	1,390	724	382	148	24	16	6.8
29	19	71	1,470	154	74	3,200	336	124	74	23	14	5.3
30	17	63	527	195	---	1,470	271	79	47	24	12	4.5
31	15	---	339	171	---	562	---	61	---	32	11	---
MEAN	56.1	175	1,063	327	133	1,120	924	421	231	480	14.4	8.34
MAX	272	1,600	4,280	2,620	258	11,700	12,000	3,480	1,640	4,290	35	17
MIN	14	11	51	104	74	81	77	61	31	23	8.2	4.2
IN.	0.18	0.54	3.42	1.05	0.40	3.61	2.88	1.36	0.72	1.55	0.05	0.03

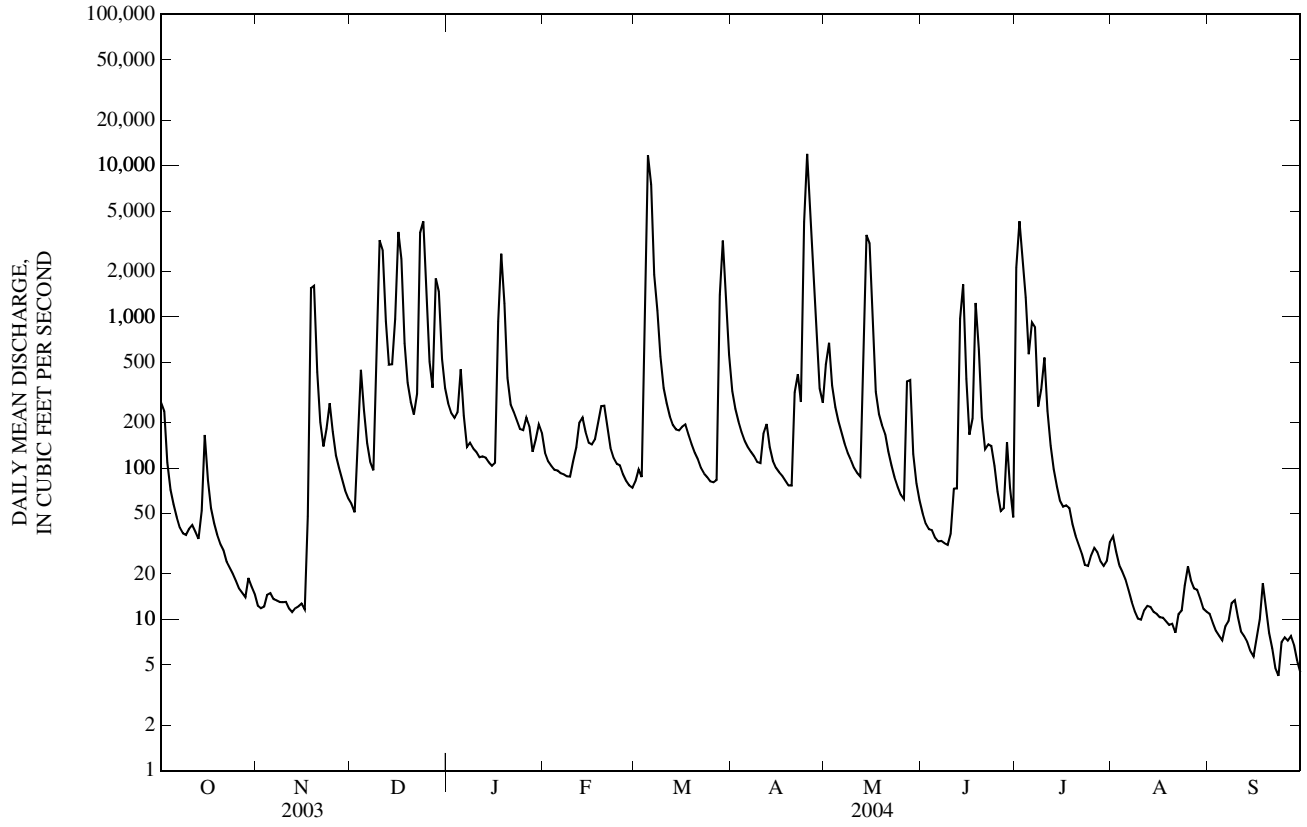
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

MEAN	43.7	67.3	364	140	109	437	438	954	220	167	13.0	204
MAX	72.1	175	1,063	327	165	1,120	924	2,058	308	480	20.5	596
(WY)	(2002)	(2004)	(2004)	(2004)	(2002)	(2004)	(2004)	(2002)	(2002)	(2004)	(2003)	(2003)
MIN	3.02	4.64	9.05	6.60	27.5	51.9	77.3	384	120	6.34	4.18	7.31
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2002 - 2004	
ANNUAL MEAN	224		415		264	
HIGHEST ANNUAL MEAN					415	2004
LOWEST ANNUAL MEAN					116	2003
HIGHEST DAILY MEAN	6,160	Sep 2	12,000	Apr 25	12,000	Apr 25, 2004
LOWEST DAILY MEAN	2.4	Jul 31,Aug 13,14	4.2	Sep 23	2.0	Sep 2, 2002
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 9	6.5	Sep 21	2.2	Aug 28, 2002
MAXIMUM PEAK FLOW	---		14,100	Mar 5	14,100	Mar 5, 2004
MAXIMUM PEAK STAGE	---		22.26	Mar 5	22.56	May 9, 2002
INSTANTANEOUS LOW FLOW	---		3.9	Sep 23	1.9	Sep 2, 2002
ANNUAL RUNOFF (INCHES)	8.49		15.79		10.04	
10 PERCENT EXCEEDS	433		936		391	
50 PERCENT EXCEEDS	36		103		30	
90 PERCENT EXCEEDS	4.3		11		4.3	

e Estimated

06917680 DRY WOOD CREEK NEAR DEERFIELD, MO—Continued



06918060 MARMATON RIVER NEAR NEVADA, MO

LOCATION.--Lat 37°51'43", long 94°23'57", in NW ¼ SW ¼ NW ¼ sec.31, T.36 N., R.31 W., Vernon County, Hydrologic Unit 10290104, on left downstream wingwall of Old Pumphouse Bridge, 26 mi above Osage River, and 2.0 mi northwest of Nevada.

DRAINAGE AREA.--1,074 mi^2.

PERIOD OF RECORD.--October 2003 to current year. October 2000 to September 2003, records collected at site 5 mi downstream, published as Marmaton River below Nevada (06918065).

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

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1986 reached a stage of 62.2 ft (by U.S. Army Corps of Engineers), at former site.

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

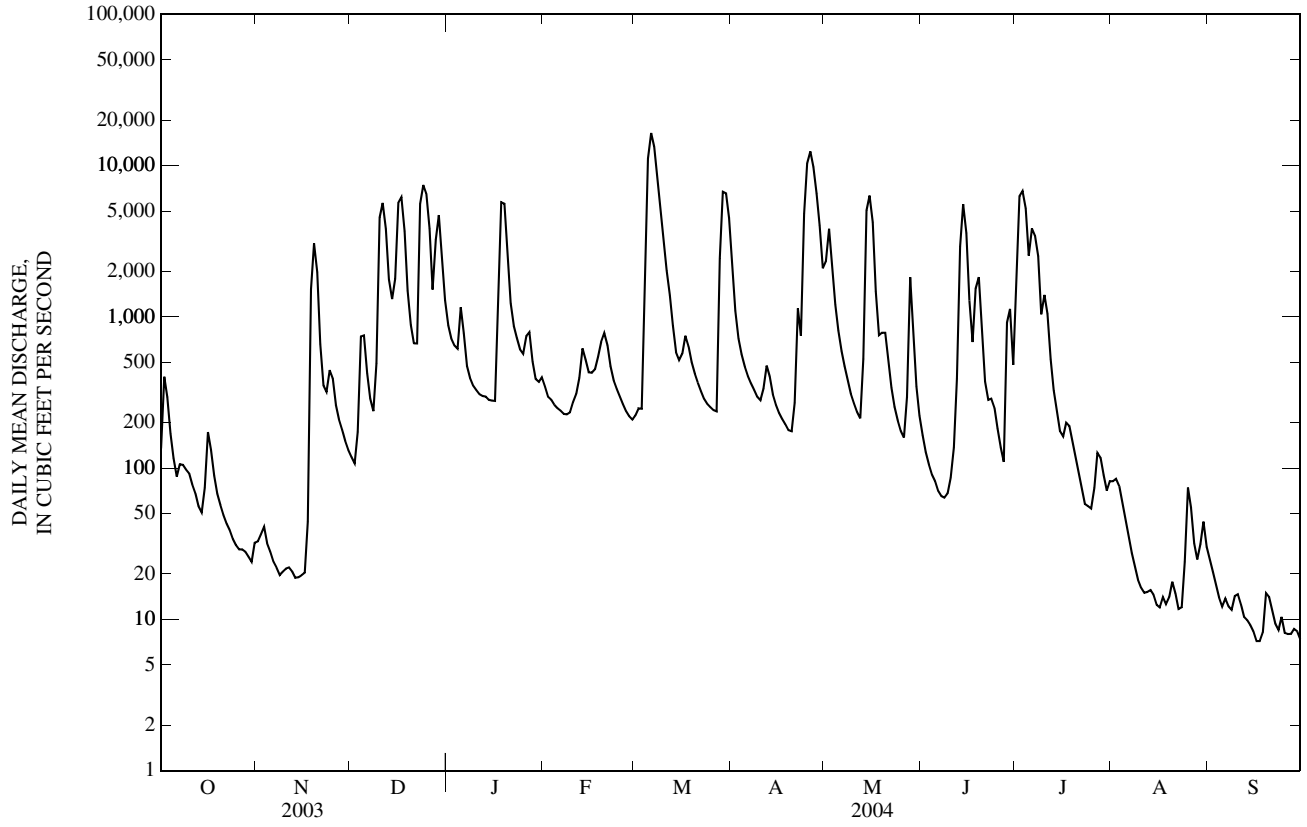
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	33	119	878	346	223	2,150	2,330	164	2,230	82	25
2	402	36	108	719	296	248	1,100	3,820	128	6,280	85	21
3	294	41	173	646	283	247	718	2,270	106	6,800	76	17
4	169	32	741	615	e263	3,010	566	1,200	91	e5,220	60	14
5	116	e28	754	1,160	e249	11,100	471	811	82	e2,540	47	12
6	88	e24	424	780	e240	16,400	406	595	71	e3,840	36	14
7	106	22	289	473	e228	13,300	364	472	65	e3,450	28	12
8	105	20	238	395	e227	8,810	329	380	64	2,520	22	12
9	98	21	492	351	e234	5,660	297	311	68	1,040	18	14
10	92	22	4,550	328	e273	3,500	282	268	86	1,400	16	15
11	78	22	5,660	308	310	2,020	335	235	137	1,050	15	12
12	68	21	3,810	300	394	1,390	475	214	389	525	15	10
13	56	19	1,770	297	619	873	404	526	2,930	327	16	9.9
14	51	19	1,310	283	523	582	307	5,060	5,570	235	15	9.2
15	74	20	1,780	279	430	518	262	6,340	3,580	176	12	8.3
16	173	20	5,690	279	427	572	231	4,220	1,280	162	12	7.2
17	132	44	6,190	1,460	451	751	211	1,470	682	200	14	7.2
18	89	1,520	3,690	5,710	544	638	194	755	1,540	190	13	8.2
19	68	3,060	1,490	5,590	686	503	178	786	1,830	151	14	15
20	57	1,970	883	2,880	782	422	175	786	789	120	18	14
21	49	660	668	1,230	650	368	270	527	373	95	15	11
22	43	352	666	868	472	322	1,140	339	282	73	12	9.4
23	39	320	5,580	724	380	287	750	255	288	58	12	8.5
24	34	444	7,440	608	335	266	4,810	207	250	e56	24	10
25	31	393	6,520	570	296	253	10,400	177	183	e54	74	8.1
26	29	260	3,830	747	265	242	12,400	159	137	74	55	8.0
27	29	210	1,520	792	238	237	9,790	296	110	126	32	8.0
28	28	179	3,240	506	220	2,440	6,530	1,830	918	117	25	8.7
29	26	151	4,700	389	209	6,720	4,030	842	1,130	e90	32	8.3
30	24	132	2,490	372	---	6,560	2,100	346	482	71	44	7.4
31	32	---	1,280	399	---	4,490	---	222	---	82	30	---
MEAN	90.8	336	2,519	998	375	2,998	2,056	1,227	794	1,269	31.3	11.5
MAX	402	3,060	7,440	5,710	782	16,400	12,400	6,340	5,570	6,800	85	25
MIN	24	19	108	279	209	223	175	159	64	54	12	7.2

SUMMARY STATISTICS FOR 2004 WATER YEAR

ANNUAL MEAN	1,065	
HIGHEST DAILY MEAN	16,400	Mar 6
LOWEST DAILY MEAN	7.2	Sep 16,17
ANNUAL SEVEN-DAY MINIMUM	8.4	Sep 24
MAXIMUM PEAK FLOW	17,600	Mar 6
MAXIMUM PEAK STAGE	26.48	Mar 6
INSTANTANEOUS LOW FLOW	6.8	Sep 16,17,30
10 PERCENT EXCEEDS	3,610	
50 PERCENT EXCEEDS	279	
90 PERCENT EXCEEDS	15	

e Estimated

06918060 MARMATON RIVER NEAR NEVADA, MO—Continued



06918070 OSAGE RIVER ABOVE SCHELL CITY, MO

LOCATION.--Lat 38°03'21", long 94°08'43", in SE ¼ SW ¼ NW ¼ sec.20, T.38 N., R.29 W., Bates County, Hydrologic Unit 10290105, on downstream side of left pier of bridge on State Highway M, 0.8 mi downstream from Shaw Branch, 0.2 mi upstream from McKenzie Creek, and 3.0 mi northwest of Schell City.

DRAINAGE AREA.--5,410 mi^2, by U.S. Army Corps of Engineers.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1981 to current year.

GAGE.--Water-stage recorder and slope gage 1.7 mi downstream. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records poor. Discharge is calculated using fall computations due to backwater from Harry S. Truman Reservoir. U.S. Army Corps of Engineers 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	261	130	270	2,070	1,180	1,350	13,300	e6,960	e1,200	3,290	5,890	1,830
2	257	125	257	1,570	977	1,350	8,560	e5,690	861	6,740	5,190	1,850
3	397	127	254	1,280	914	1,480	6,400	e4,840	859	9,920	4,330	1,940
4	351	113	295	e1,220	833	7,610	5,210	e4,080	886	13,600	4,060	1,840
5	288	125	770	e1,300	937	28,800	3,920	3,320	766	15,100	3,900	1,390
6	291	128	810	1,500	884	36,500	3,300	2,580	590	13,300	3,740	1,270
7	216	129	568	1,130	855	41,400	3,050	1,750	567	11,000	2,850	2,820
8	168	137	430	809	892	46,800	2,840	1,370	639	10,000	1,360	2,490
9	168	134	571	690	820	44,000	2,410	1,100	706	8,000	639	1,680
10	159	131	3,900	630	747	39,700	2,010	895	1,070	6,150	524	1,370
11	155	129	e6,000	592	716	35,300	1,930	783	4,900	6,650	859	975
12	164	126	e6,200	563	770	26,400	1,850	726	8,550	6,880	782	602
13	156	130	e3,800	545	931	16,700	1,760	1,170	11,600	5,590	554	380
14	144	135	e2,000	522	1,170	10,400	1,630	4,940	11,600	4,060	475	244
15	146	135	e1,700	501	1,120	7,850	1,400	6,520	10,300	3,400	441	197
16	150	135	5,150	508	1,040	7,430	1,160	7,040	7,810	3,290	413	167
17	181	154	6,890	1,480	1,100	7,530	1,050	5,410	5,480	4,120	265	139
18	169	958	6,660	7,720	1,300	6,880	959	3,900	7,480	3,950	177	133
19	152	3,380	4,270	10,000	1,860	6,300	868	5,060	11,500	2,960	174	136
20	137	3,940	2,380	8,110	2,600	5,310	767	6,490	12,700	2,520	208	197
21	135	2,040	1,690	5,110	3,260	4,710	1,100	6,000	9,560	2,310	209	199
22	129	858	1,440	3,020	3,570	4,390	3,440	3,090	5,150	1,870	185	211
23	133	548	6,340	2,200	2,890	4,210	e4,440	1,740	3,140	1,200	e160	194
24	130	541	7,930	1,800	2,290	4,160	e8,500	1,220	3,360	1,310	272	173
25	134	605	7,470	1,580	2,300	3,900	e12,000	1,050	3,530	7,530	1,770	154
26	128	562	6,850	1,650	1,660	3,610	e14,100	3,160	3,210	15,800	3,980	153
27	128	419	4,500	2,000	1,570	3,520	13,500	6,350	2,690	17,800	3,940	155
28	126	330	3,990	1,840	1,490	8,820	12,600	e5,120	2,840	17,100	3,580	153
29	132	295	5,820	1,290	1,400	20,900	11,000	e3,910	5,720	9,880	2,570	152
30	125	285	5,460	1,150	---	24,500	e8,880	e3,410	5,440	5,220	5,150	167
31	122	---	3,290	1,290	---	19,400	---	e1,960	---	5,390	4,230	---
MEAN	178	566	3,482	2,118	1,451	15,520	5,131	3,601	4,823	7,288	2,028	779
MAX	397	3,940	7,930	10,000	3,570	46,800	14,100	7,040	12,700	17,800	5,890	2,820
MIN	122	113	254	501	716	1,350	767	726	567	1,200	160	133
IN.	0.04	0.12	0.74	0.45	0.29	3.31	1.06	0.77	1.00	1.55	0.43	0.16

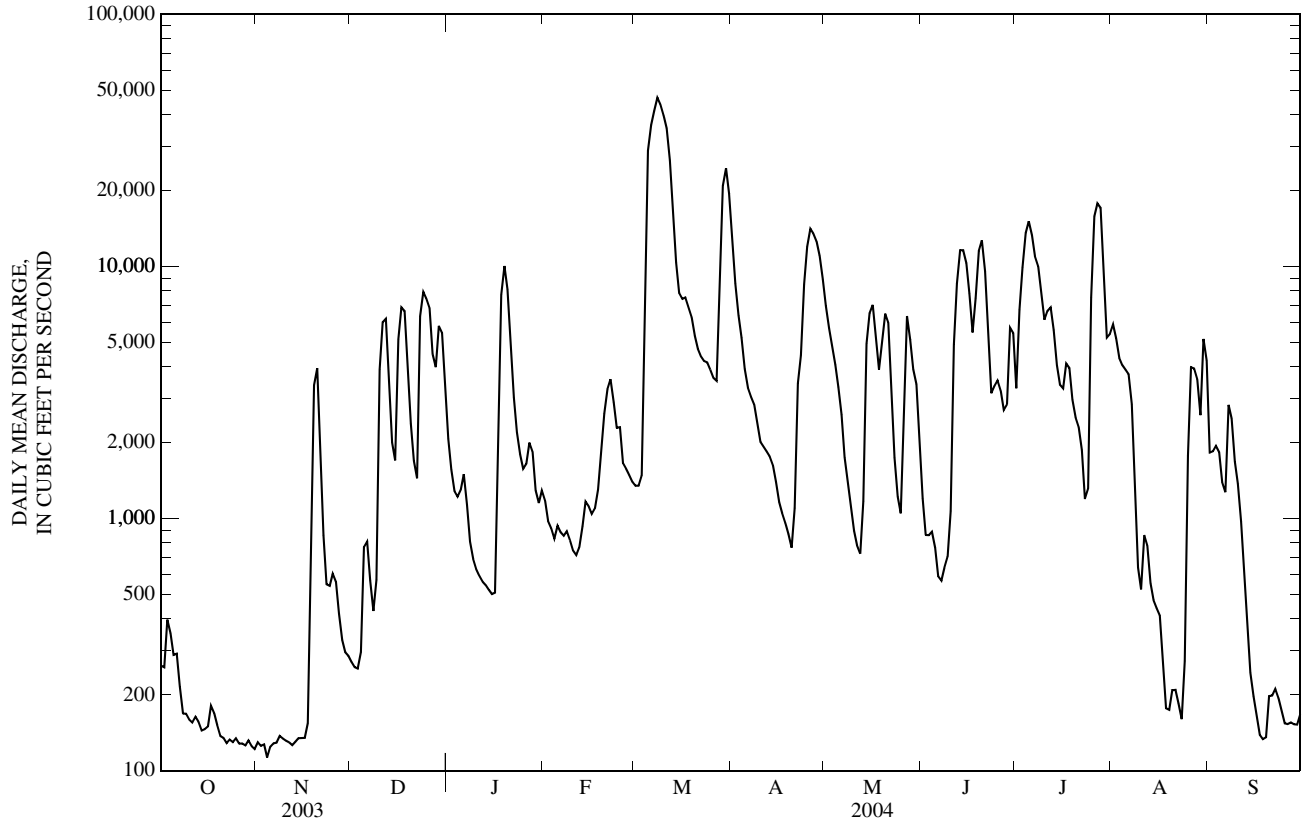
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2004, BY WATER YEAR (WY)

MEAN	2,453	4,389	3,232	2,123	3,117	6,555	5,659	8,660	8,709	4,855	1,653	2,326
MAX	24,810	19,890	15,700	8,103	10,470	18,920	19,970	28,260	26,530	22,150	6,925	15,510
(WY)	(1999)	(1999)	(1993)	(1993)	(1997)	(1987)	(1994)	(1995)	(1995)	(1993)	(1989)	(1998)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	639	2,091	418	3.35	0.00
(WY)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(2000)	(2003)	(2002)	(1984)	(1982)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1981 - 2004	
ANNUAL MEAN	1,271		3,940		4,427	
HIGHEST ANNUAL MEAN					10,140	1993
LOWEST ANNUAL MEAN					941	2003
HIGHEST DAILY MEAN	16,700	Sep 4	46,800	Mar 8	133,000	Oct 5, 1986
LOWEST DAILY MEAN	88	Aug 27	113	Nov 4	20.0	Oct 1-6, 1980
ANNUAL SEVEN-DAY MINIMUM	98	Aug 22	124	Oct 30	20.0	Oct 1, 1980
MAXIMUM PEAK FLOW	---		49,100	Mar 8	78,700	Apr 13, 1994
MAXIMUM PEAK STAGE	---		33.00	Mar 8	37.42	Apr 13, 1994
ANNUAL RUNOFF (INCHES)	3.19		9.91		11.12	
10 PERCENT EXCEEDS	3,960		9,080		13,100	
50 PERCENT EXCEEDS	327		1,680		1,000	
90 PERCENT EXCEEDS	128		153		128	

e Estimated

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO—Continued



06918070 OSAGE RIVER ABOVE SCHELL CITY, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1979 to September 1993, November 1994 to current year. Formerly published as Osage River near Schell City (06918080).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1979 to September 1981.
WATER TEMPERATURE: March 1979 to September 1981.
SUSPENDED-SEDIMENT: February 1991 to September 1999.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,950 microsiemens per centimeter, Oct. 11, 1980; minimum daily, 114 microsiemens per centimeter, June 12, 1981.
WATER TEMPERATURE: Maximum daily, 32.0 °C, July 11, 1980; minimum daily, 0.0 °C, Feb. 5, 1980, and Feb. 11-14, 1981.
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 4,020 mg/L, Feb. 21, 1997; minimum daily mean, 8 mg/L, Aug. 4 and 5, 1993, and Jan. 10-12, 1995.
SUSPENDED-SEDIMENT LOAD: Maximum daily, 160,000 tons, Feb. 21, 1997; minimum daily, 1.7 tons, Nov. 7-13, 1991.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
04...	1400	Environmental	113	7.2	76	7.9	506	16.3	200	55.8	15.3	5.56
MAR												
09...	1115	Environmental	44,000	8.0	73	6.9	182	10.3	--	--	--	--
APR												
19...	1400	Environmental	860	8.1	90	8.0	477	19.5	--	--	--	--
MAY												
11...	1425	Environmental	783	6.3	77	8.1	486	23.9	230	71.0	12.2	3.53
JUN												
07...	1410	Blank	--	--	--	--	--	--	--	--	--	--
07...	1415	Environmental	567	6.6	85	7.1	421	26.3	--	--	--	--
JUL												
21...	1200	Environmental	2,310	6.3	83	7.7	361	28.3	160	50.8	7.79	4.07

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
04...	25.1	114	113	137	<1	16.5	0.3	114	338	32	0.71	<0.04	<0.06
MAR													
09...	--	56	57	70	<1	--	--	--	--	164d	1.7	0.04	0.82
APR													
19...	--	146	147	179	<1	--	--	--	--	49	0.69	<0.04	<0.06
MAY													
11...	13.5	158	158	193	<1	9.89	0.2	74.7	306	62	0.84	<0.04	0.13
JUN													
07...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
07...	--	160	162	198	<1	--	--	--	--	83	0.82	<0.04	0.33
JUL													
21...	10.6	128	127	155	<1	8.28	0.3	33.9	214	130d	0.79	<0.04	0.44

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover -able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
04...	<0.008	<0.36d	<0.04	0.08	21	14k	36	2	501	0.7	<0.04	0.04	2.2
MAR													
09...	0.022	0.05	0.08	0.56	390	660	2,020	--	--	--	--	--	--
APR													
19...	<0.008	<0.02	E.02n	0.10	27k	12k	20k	--	--	--	--	--	--
MAY													
11...	0.008	<0.02	E.02n	0.12	28k	35k	14k	3	789	1.1	<0.04	0.06	1.5
JUN													
07...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
07...	0.048	<0.02	0.06	0.17	50	77	76	--	--	--	--	--	--
JUL													
21...	E.006n	0.04	0.07	0.22	73k	65k	58k	3	2,240d	1.8	<0.04	0.11	1.8

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)	2,6-Di-ethyl-aniline water fltrd 0.7µ GF µg/L (82660)	CIAT, water, fltrd, µg/L (04040)	Aceto-chlor, water, fltrd, µg/L (49260)	Ala-chlor, water, fltrd, µg/L (46342)	alpha-HCH, water, fltrd, µg/L (34253)
NOV													
04...	E5n	<0.08	1.17	15.3	<0.02	E.4n	2	5	<0.006	E.066	0.011	<0.004	<0.005
MAR													
09...	--	--	--	--	--	--	--	--	<0.006	E.050	0.007	<0.004	<0.005
APR													
19...	--	--	--	--	--	--	--	--	<0.006	E.028	0.011	<0.004	<0.005
MAY													
11...	6	<0.08	1.27	22.9	<0.02	0.8	M	6	<0.006	E.059	0.075	0.020	<0.005
JUN													
07...	--	--	--	--	--	--	--	--	<0.006	<0.006	<0.006	<0.004	<0.005
07...	--	--	--	--	--	--	--	--	<0.006	E.184	0.066	0.041	<0.005
JUL													
21...	<6	<0.08	3.53	11.9	<0.02	0.5	Mn	13	<0.006	E.048	0.013	0.009	<0.005

Date	Atra-zine, water, fltrd, µg/L (39632)	Azin-phos-methyl, water, fltrd 0.7µ GF µg/L (82686)	Ben-flur-alin, water, fltrd 0.7µ GF µg/L (82673)	Butyl-ate, water, fltrd, µg/L (04028)	Car-baryl, water, fltrd 0.7µ GF µg/L (82680)	Carbo-furan, water, fltrd 0.7µ GF µg/L (82674)	Chlor-pyrifos water, fltrd, µg/L (38933)	cis-Per-methrin water fltrd 0.7µ GF µg/L (82687)	Cyana-zine, water, fltrd, µg/L (04041)	DCPA, water fltrd 0.7µ GF µg/L (82682)	Diazi-non, water, fltrd, µg/L (39572)	Diel-drin, water, fltrd, µg/L (39381)	Disul-foton, water, fltrd 0.7µ GF µg/L (82677)
NOV													
04...	0.194	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02
MAR													
09...	0.667	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02
APR													
19...	0.283	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02
MAY													
11...	1.71	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02
JUN													
07...	<0.007	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02
07...	2.58	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02
JUL													
21...	0.757	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO—Continued

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

Date	EPTC, water, fltrd 0.7µ GF µg/L (82668)	Ethalfluralin, water, fltrd 0.7µ GF µg/L (82663)	Ethoprop, water, fltrd 0.7µ GF µg/L (82672)	Fonofos water, fltrd, µg/L (04095)	Lindane water, fltrd, µg/L (39341)	Linuron water fltrd 0.7µ GF µg/L (82666)	Malathion, water, fltrd, µg/L (39532)	Methyl parathion, water, fltrd 0.7µ GF µg/L (82667)	Metolachlor, water, fltrd, µg/L (39415)	Metribuzin, water, fltrd, µg/L (82630)	Molinate, water, fltrd 0.7µ GF µg/L (82671)	Napropamide, water, fltrd 0.7µ GF µg/L (82684)	p,p-' DDE, water, fltrd, µg/L (34653)
NOV													
04...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006	0.029	<0.006	<0.002	<0.007	<0.003
MAR													
09...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.220	0.023	<0.006	<0.002	<0.007	<0.003
APR													
19...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006	0.023	<0.006	<0.002	<0.007	<0.003
MAY													
11...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006	0.142	<0.006	<0.002	<0.007	<0.003
JUN													
07...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006	<0.013	<0.006	<0.002	<0.007	<0.003
07...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006	0.313	<0.006	<0.002	<0.007	<0.003
JUL													
21...	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006	0.056	<0.006	<0.002	<0.007	<0.003

Date	Parathion, water, fltrd, µg/L (39542)	Pebulate, water, fltrd 0.7µ GF µg/L (82669)	Pendimethalin, water, fltrd 0.7µ GF µg/L (82683)	Phorate water fltrd 0.7µ GF µg/L (82664)	Prometon, water, fltrd, µg/L (04037)	Pronamide, water, fltrd 0.7µ GF µg/L (82676)	Propachlor, water, fltrd, µg/L (04024)	Propanil, water, fltrd 0.7µ GF µg/L (82679)	Propargite, water, fltrd 0.7µ GF µg/L (82685)	Simazine, water, fltrd, µg/L (04035)	Tebuthiuron water fltrd 0.7µ GF µg/L (82670)	Terbacil, water, fltrd 0.7µ GF µg/L (82665)	Terbufos, water, fltrd 0.7µ GF µg/L (82675)
NOV													
04...	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011	<0.02	0.009	<0.02	<0.034	<0.02
MAR													
09...	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011	<0.02	0.020	<0.02	<0.034	<0.02
APR													
19...	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.034	<0.02
MAY													
11...	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011	<0.02	0.015	<0.02	<0.034	<0.02
JUN													
07...	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011	<0.02	<0.005	<0.02	<0.034	<0.02
07...	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011	<0.02	0.014	<0.02	<0.034	<0.02
JUL													
21...	<0.010	<0.004	<0.022	<0.011	0.08	<0.004	<0.010	<0.011	<0.02	<0.010	<0.02	<0.034	<0.02

06918070 OSAGE RIVER ABOVE SCHELL CITY, MO—Continued

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

Date	Thio-bencarb water fltrd 0.7µ GF µg/L (82681)	Tri-allate, water, fltrd 0.7µ GF µg/L (82678)	Tri-flur-alin, water, fltrd 0.7µ GF µg/L (82661)
NOV			
04...	<0.005	<0.002	<0.009
MAR			
09...	<0.005	<0.002	E.005t
APR			
19...	<0.005	<0.002	<0.009
MAY			
11...	<0.005	<0.002	<0.009
JUN			
07...	<0.005	<0.002	<0.009
07...	<0.005	<0.002	<0.009
JUL			
21...	<0.005	<0.002	<0.009

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
t -- Below the long-term MDL

06918440 SAC RIVER NEAR DADEVILLE, MO

LOCATION.--Lat 37°26'35", long 93°41'06", in NE ¼ NE ¼ NW ¼ sec.9, T.31 N., R.25 W., Dade County, Hydrologic Unit 10290106, on downstream side of bridge on State Highway 245, 2 mi upstream from Cave Spring Branch, and 2 mi south of Dadeville.

DRAINAGE AREA.--257 mi^2.

PERIOD OF RECORD.--June 1966 to current year. Annual maximum only, for water years 1965-66.

GAGE.--Water-stage recorder. Datum of gage is 869.78 ft above National Geodetic Vertical Datum of 1929 (levels by the Missouri State Highway and Transportation Commission). Prior to June 1966, crest-stage gage at same site and datum.

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

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

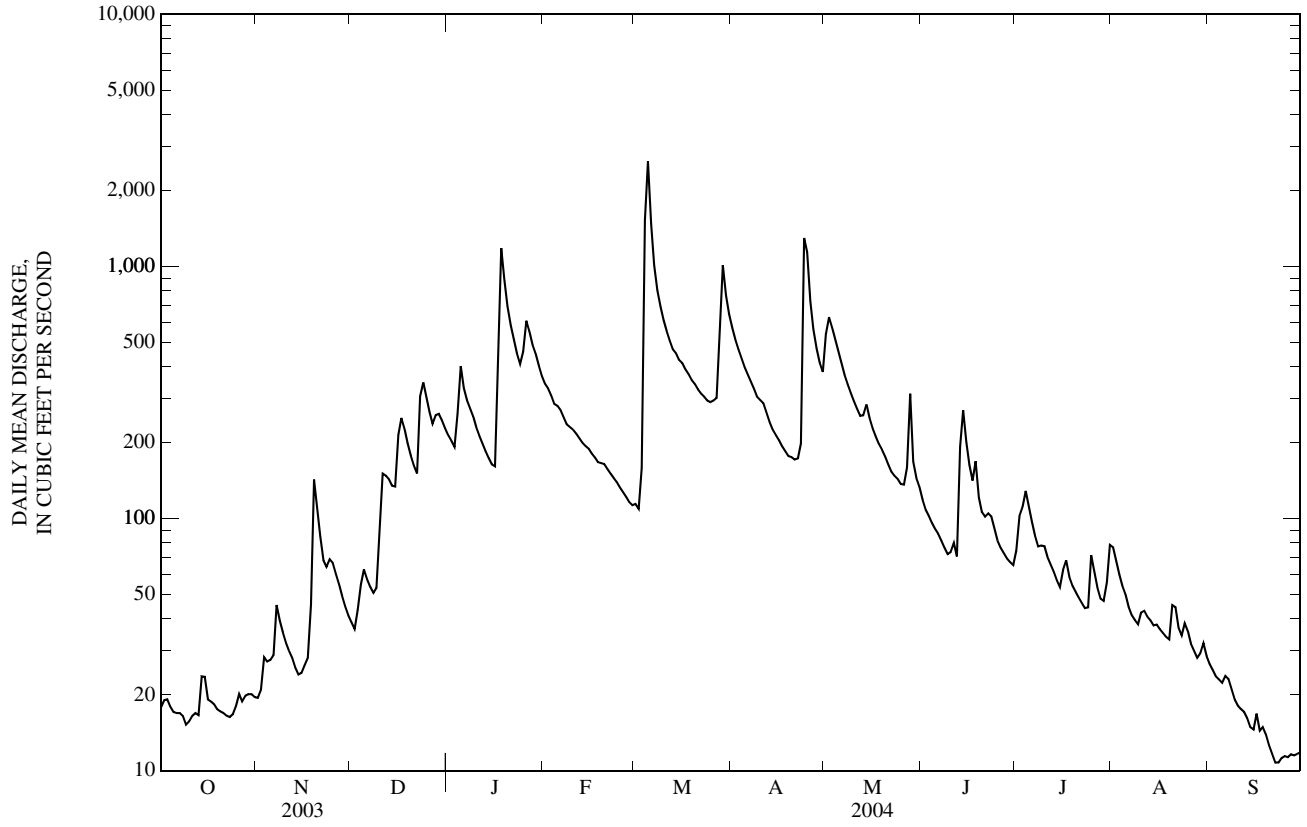
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	19	39	214	342	114	571	539	119	75	77	26
2	19	21	36	204	328	109	514	629	108	102	68	25
3	19	28	43	193	307	159	469	573	102	111	60	24
4	18	27	55	261	285	1,530	432	512	96	129	54	23
5	17	28	63	402	280	2,610	398	459	91	112	50	22
6	17	29	57	330	269	1,470	371	411	87	97	45	24
7	17	45	54	295	252	1,010	349	372	82	86	41	23
8	16	39	51	274	236	802	326	341	77	78	40	21
9	15	35	53	254	230	696	304	315	72	78	38	19
10	16	32	95	231	225	612	294	292	74	78	42	18
11	16	30	151	213	217	555	286	273	80	70	43	18
12	17	28	148	199	209	506	262	256	71	66	41	17
13	17	26	143	185	200	469	241	257	193	62	39	16
14	24	24	135	174	194	452	225	284	269	57	38	15
15	24	24	134	164	189	426	214	251	200	54	38	15
16	19	26	215	161	181	413	204	228	163	63	36	17
17	19	28	251	546	175	391	193	212	141	68	35	14
18	18	46	227	1,180	167	374	185	197	169	59	34	15
19	18	143	199	880	166	355	177	188	121	54	33	14
20	17	109	178	694	164	342	175	176	106	51	45	13
21	17	85	162	586	157	326	171	164	102	49	45	12
22	17	68	151	511	151	313	173	153	105	46	37	11
23	16	64	306	453	145	305	199	148	102	44	34	11
24	17	69	347	411	140	294	1,300	144	91	44	38	11
25	18	67	302	460	133	290	1,140	137	82	72	36	11
26	20	60	265	609	127	294	727	136	76	62	32	11
27	19	55	238	553	122	301	562	159	73	53	30	12
28	20	49	257	489	116	562	473	313	69	48	28	11
29	20	45	260	451	113	1,010	416	168	67	47	29	12
30	20	41	245	405	---	766	382	145	65	56	32	12
31	20	---	229	369	---	647	---	133	---	79	28	---
MEAN	18.2	46.3	164	398	201	597	391	276	108	69.4	40.8	16.4
MAX	24	143	347	1,180	342	2,610	1,300	629	269	129	77	26
MIN	15	19	36	161	113	109	171	133	65	44	28	11
IN.	0.08	0.20	0.74	1.79	0.84	2.68	1.70	1.24	0.47	0.31	0.18	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

MEAN	131	276	285	231	283	425	390	385	211	111	60.3	103
MAX	780	1,139	1,058	743	918	1,170	1,427	1,747	820	392	205	1,545
(WY)	(1987)	(1986)	(1993)	(1991)	(1985)	(1975)	(1994)	(2002)	(1995)	(1993)	(1968)	(1993)
MIN	16.6	16.8	19.7	14.0	23.5	29.2	30.1	30.1	39.2	22.1	10.1	6.78
(WY)	(1992)	(1981)	(1977)	(1981)	(1981)	(1996)	(1981)	(1977)	(1972)	(1980)	(1980)	(1980)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1966 - 2004	
ANNUAL MEAN	91.9		194		241	
HIGHEST ANNUAL MEAN					560	1993
LOWEST ANNUAL MEAN					50.2	1977
HIGHEST DAILY MEAN	396	Apr 7	2,610	Mar 5	23,300	Sep 25, 1993
LOWEST DAILY MEAN	14	Aug 25-28	11	Sep 22-26,28	4.5	Sep 14, 1980
ANNUAL SEVEN-DAY MINIMUM	14	Aug 22	11	Sep 22	5.3	Sep 11, 1980
MAXIMUM PEAK FLOW	---		2,880	Mar 5	36,100	Sep 25, 1993
MAXIMUM PEAK STAGE	---		12.02	Mar 5	27.56	Sep 25, 1993
INSTANTANEOUS LOW FLOW	---		10	Sep 22,23	3.8	Aug 8, 1996
ANNUAL RUNOFF (INCHES)	4.85		10.30		12.74	
10 PERCENT EXCEEDS	231		459		524	
50 PERCENT EXCEEDS	49		112		110	
90 PERCENT EXCEEDS	17		18		23	

06918440 SAC RIVER NEAR DADEVILLE, MO—Continued



06918460 TURNBACK CREEK ABOVE GREENFIELD, MO

LOCATION.--Lat 37°24'09", long 93°48'07", sec.21, T.31 N., R.26 W., Dade County, Hydrologic Unit 10290106, on left downstream side of bridge pier on State Highway O, 1.5 mi downstream from Limestone Creek, and 2.0 mi southeast of Greenfield.

DRAINAGE AREA.--252 mi^2.

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

REVISED RECORDS.--WDR MO-84-1: 1968, 1970, 1972-74, 1976, 1978-79, 1983 (M). WDR MO-93-1: 1987 (M).

GAGE.--Water-stage recorder. Datum of gage is 870.49 ft above National Geodetic Vertical Datum of 1929 (levels by the Missouri State Highway and Transportation Commission).

REMARKS.--Records good except for estimated daily discharges, which are poor. U.S. Army Corps of Engineers 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	26	e28	49	261	309	129	604	779	144	125	90	35
2	26	e31	46	244	299	125	533	723	135	143	82	34
3	25	38	54	228	287	244	475	669	127	206	76	33
4	23	36	63	313	266	1,920	429	599	121	280	73	33
5	23	36	64	397	262	2,320	391	536	116	237	68	32
6	23	38	61	341	260	1,250	361	477	113	207	63	35
7	23	38	59	314	244	963	337	426	109	187	60	35
8	22	36	57	295	231	809	311	386	101	175	59	31
9	22	35	59	271	227	700	281	353	99	182	57	30
10	24	35	130	247	231	615	276	324	100	211	55	29
11	25	35	176	231	227	544	275	304	102	199	54	28
12	26	34	173	216	220	487	240	283	96	181	52	26
13	25	31	171	201	212	443	215	285	220	165	50	25
14	43	31	162	188	208	420	197	341	234	152	49	25
15	41	34	162	178	204	387	188	289	188	141	48	25
16	36	35	245	179	195	372	181	261	164	137	46	25
17	32	37	275	865	189	344	172	243	238	133	45	23
18	29	57	251	1,280	184	319	164	227	296	121	42	22
19	29	146	223	932	182	292	156	216	222	114	39	22
20	28	109	198	754	177	269	154	201	188	107	49	21
21	25	88	181	637	170	238	151	188	171	101	49	21
22	24	77	170	548	163	219	152	177	171	95	45	21
23	23	74	430	478	159	204	218	171	165	89	42	20
24	23	74	432	430	154	193	1,950	200	148	90	45	20
25	23	71	377	489	148	190	1,380	199	134	97	41	20
26	e23	67	327	505	143	191	956	186	124	89	38	19
27	e23	63	288	433	139	226	775	176	117	83	36	18
28	e23	58	329	397	133	755	660	282	111	79	34	19
29	26	54	331	383	130	1,040	573	193	106	79	40	18
30	27	52	309	352	---	815	508	167	104	93	42	19
31	27	---	284	327	---	693	---	156	---	103	37	---
MEAN	26.4	52.6	198	417	205	571	442	323	149	142	51.8	25.5
MAX	43	146	432	1,280	309	2,320	1,950	779	296	280	90	35
MIN	22	28	46	178	130	125	151	156	96	79	34	18
IN.	0.12	0.23	0.91	1.91	0.88	2.62	1.96	1.48	0.66	0.65	0.24	0.11

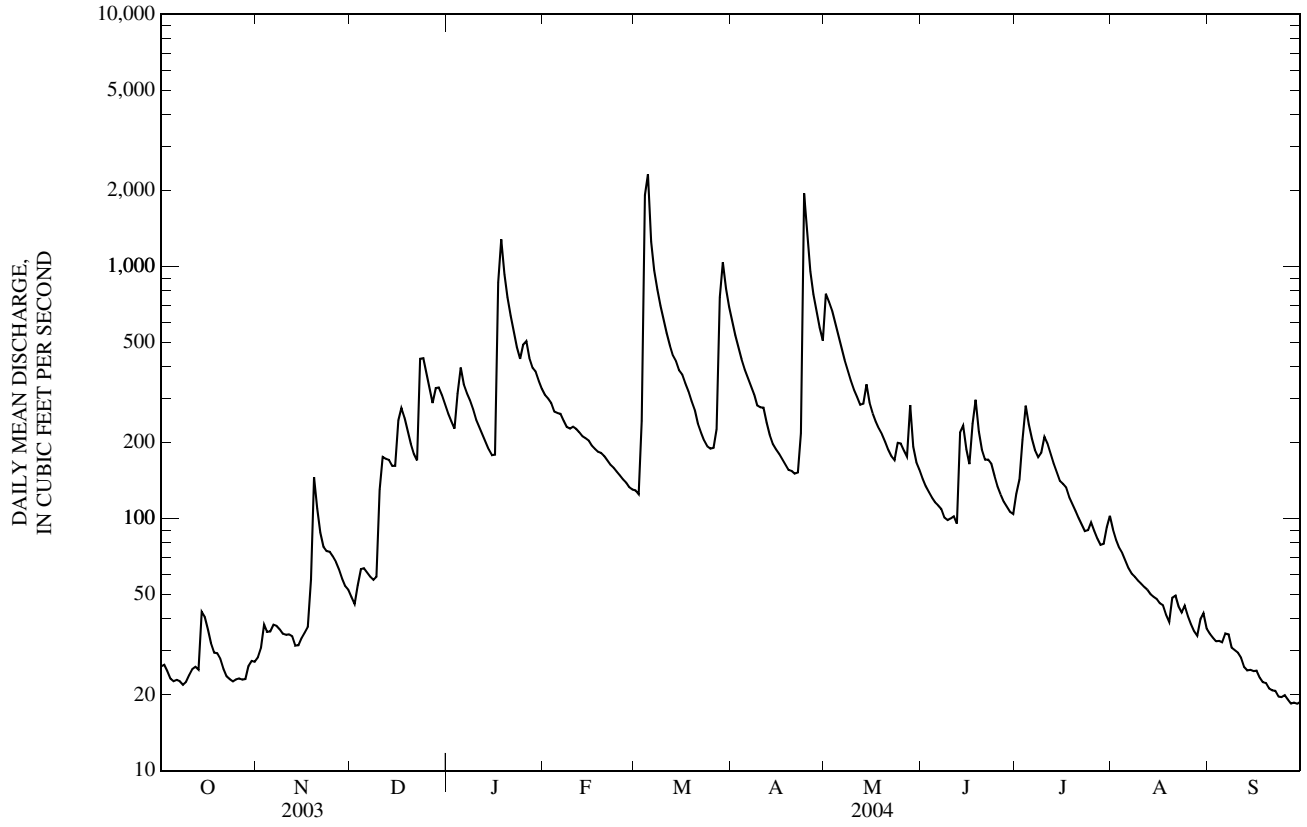
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	144	293	282	242	310	452	430	391	243	154	85.7	124
MAX	921	1,385	982	765	1,020	1,377	1,410	1,797	874	636	354	1,579
(WY)	(1987)	(1986)	(1988)	(1973)	(1985)	(1973)	(1994)	(1990)	(1993)	(1992)	(1982)	(1993)
MIN	23.4	21.7	20.2	19.9	27.5	27.1	39.3	93.9	44.3	24.2	14.4	11.6
(WY)	(1979)	(1981)	(1990)	(1981)	(1981)	(1996)	(1981)	(1981)	(1972)	(1972)	(1980)	(1980)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL MEAN	116		218		262	
HIGHEST ANNUAL MEAN					612	1993
LOWEST ANNUAL MEAN					84.1	1981
HIGHEST DAILY MEAN	696	Apr 7	2,320	Mar 5	23,700	Sep 25, 1993
LOWEST DAILY MEAN	16	Aug 27,28	18	Sep 27,29	9.4	Oct 12, 1980
ANNUAL SEVEN-DAY MINIMUM	17	Aug 23	19	Sep 24	10	Oct 8, 1980
MAXIMUM PEAK FLOW	---		3,170	Mar 5	44,000	Oct 1, 1986
MAXIMUM PEAK STAGE	---		12.96	Mar 5	26.34	Sep 25, 1993
INSTANTANEOUS LOW FLOW	---		17	Sep 27	9.4	Oct 12, 1980
ANNUAL RUNOFF (INCHES)	6.25		11.75		14.12	
10 PERCENT EXCEEDS	269		477		564	
50 PERCENT EXCEEDS	60		156		127	
90 PERCENT EXCEEDS	23		26		31	

e Estimated

06918460 TURNBACK CREEK ABOVE GREENFIELD, MO—Continued



06918600 LITTLE SAC RIVER NEAR WALNUT GROVE, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°23'55", long 93°24'36", in SW $^1/_4$ NW $^1/_4$ SE $^1/_4$ sec.24, T.31 N., R.23 W., Greene County, Hydrologic Unit 10290106, approximately 7.5 mi east of Walnut Grove at bridge on Highway BB.

DRAINAGE AREA.--119 mi^2.

PERIOD OF RECORD.--Water years 1974 to 1978, 1984 to 1986, 1988 to 1990, 1994 to 1996, October 1999 to current year. Published as "at Walnut Grove", for periods of record from 1994 to 2000.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
15...	0920	Environmental	9.1	5.0	46	8.1	658	13.1	--	--	--	--
NOV												
05...	1040	Environmental	21	7.0	70	7.8	569	14.0	200	68.2	6.89	6.70
DEC												
09...	1300	Environmental	21	12.1	110	7.8	600	9.1	--	--	--	--
JAN												
20...	1515	Blank	--	--	--	--	--	--	--	0.01	<0.008	<0.16
20...	1600	Environmental	203	13.2	114	8.1	427	8.0	230	79.8	6.64	2.06
FEB												
09...	1115	Environmental	73	14.5	114	8.2	565	4.0	--	--	--	--
MAR												
11...	0850	Environmental	194	9.4	86	7.5	483	10.3	--	--	--	--
APR												
19...	1110	Environmental	37	6.6	75	7.8	541	19.3	--	--	--	--
MAY												
12...	1020	Environmental	71	6.9	78	7.9	535	19.5	250	88.0	6.22	2.62
JUN												
07...	1100	Environmental	22	6.4	79	7.6	719	23.2	--	--	--	--
JUL												
19...	1455	Environmental	9.1	8.1	103	8.1	618	25.5	220	79.8	6.15	5.03
AUG												
24...	0915	Blank	--	--	--	--	--	--	--	--	--	--
24...	0930	Environmental	9.4	5.4	66	8.0	673	23.5	--	--	--	--
SEP												
13...	1445	Environmental	7.8	9.5	116	8.1	677	23.3	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
15...	--	205	206	252	<1	--	--	--	--	<10	0.41	<0.04	0.46
NOV													
05...	39.2	184	183	224	<1	55.8	0.3	16.9	328	<10	0.40	<0.04	0.67
DEC													
09...	--	216	218	267	<1	--	--	--	--	<10	0.32	<0.04	1.23
JAN													
20...	<0.10	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
20...	11.5	188	187	228	<1	22.8	<0.2	12.1	246	<10	0.25	<0.04	1.91
FEB													
09...	--	209	209	255	<1	--	--	--	--	<10	0.18	<0.04	1.70
MAR													
11...	--	194	197	240	<1	--	--	--	--	10	0.25	<0.04	1.91
APR													
19...	--	192	192	235	<1	--	--	--	--	17	0.32	<0.04	0.86
MAY													
12...	16.1	205	205	251	<1	28.2	<0.2	13.2	278	18	0.30	<0.04	1.65
JUN													
07...	--	216	218	267	<1	--	--	--	--	16	0.38	E.02n	1.19
JUL													
19...	36.1	189	194	236	<1	55.6	0.3	21.4	288	15	0.43	<0.04	1.36
AUG													
24...	--	--	--	--	--	--	--	--	--	<10	E.09n	<0.04	<0.06
24...	--	201	202	246	<1	--	--	--	--	14	0.43	<0.04	1.29
SEP													
13...	--	204	204	249	<1	--	--	--	--	10	0.42	E.02n	1.46

06918600 LITTLE SAC RIVER NEAR WALNUT GROVE, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
15...	E.005n	0.16	0.18	0.20	200	150	130	--	--	--	--	--	--
NOV													
05...	E.005n	<0.36d	0.20	0.20	150	190	300	Mn	85v	0.6	0.07	0.09	2.3
DEC													
09...	E.004n	0.02	E.04n	0.07	23	25	40	--	--	--	--	--	--
JAN													
20...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	E2n	<0.2	<0.04	<0.04	<0.4
20...	0.008	E.01n	<0.04	E.04n	58	100	76	<2	58	0.3	<0.04	E.02n	1.0
FEB													
09...	0.010	E.01n	E.02n	E.03n	8k	17k	8k	--	--	--	--	--	--
MAR													
11...	E.006n	E.01n	E.02n	E.04n	40	200	40	--	--	--	--	--	--
APR													
19...	0.032	<0.02	0.04	0.05	120	77k	36	--	--	--	--	--	--
MAY													
12...	0.009	0.05	0.07	0.09	130	120	58	E1n	147	0.5	E.03n	0.04	1.2
JUN													
07...	0.020	0.03	0.11	0.13	200	140	96	--	--	--	--	--	--
JUL													
19...	<0.008	0.14	0.17	0.19	72k	28k	59	E1n	179	0.8	0.07	0.09	2.0
AUG													
24...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
24...	E.005n	0.11	0.13	0.15	390	360	390	--	--	--	--	--	--
SEP													
13...	E.006n	0.17	0.19	0.21	180	240	130	--	--	--	--	--	--

06918600 LITTLE SAC RIVER NEAR WALNUT GROVE, 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)	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								
15...	--	--	--	--	--	--	--	--
NOV								
05...	11	0.12	0.47v	19.3	<0.02	E.3n	11	10
DEC								
09...	--	--	--	--	--	--	--	--
JAN								
20...	<6	0.12	0.25	<0.8	<0.02	<0.4	M	<2
20...	E3n	E.05n	0.28	6.0	<0.02	0.5	2	3
FEB								
09...	--	--	--	--	--	--	--	--
MAR								
11...	--	--	--	--	--	--	--	--
APR								
19...	--	--	--	--	--	--	--	--
MAY								
12...	7	0.15	0.75	11.7	<0.02	E.3n	4	5
JUN								
07...	--	--	--	--	--	--	--	--
JUL								
19...	<6	0.13	0.82	21.4	<0.02	E.2n	8	10
AUG								
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
SEP								
13...	--	--	--	--	--	--	--	--

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

06918740 LITTLE SAC RIVER NEAR MORRISVILLE, MO

LOCATION.--Lat 37°28'58", long 93°29'08", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.32 N., R.23 W., Polk County, Hydrologic Unit 10290106, on downstream side of center pier of Hamilton Bridge on State Highway 215, 0.7 mi upstream from Slagle Creek, and 3 mi west of Morrisville.

DRAINAGE AREA.--237 mi^2.

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

REVISED RECORDS.--WDR MO-84-1: 1969-70, 1972-75, 1977-79, 1981, 1983 (M).

GAGE.--Water-stage recorder. Elevation of gage is 881 ft above National Geodetic Vertical Datum of 1929, from topographic map.

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

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

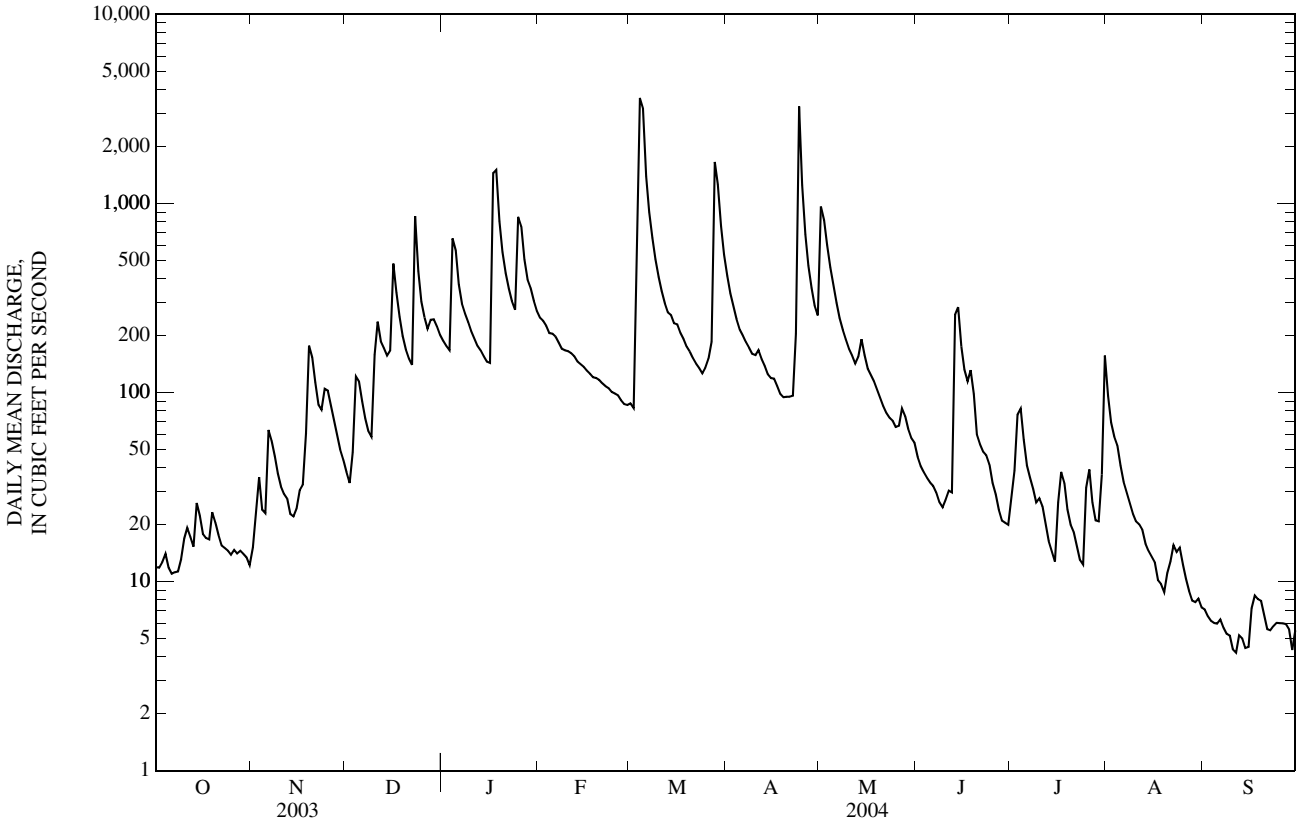
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	38	187	249	87	414	963	46	28	96	7.1
2	12	23	33	176	240	83	335	816	41	39	69	6.5
3	13	36	48	167	225	371	283	603	38	76	58	6.2
4	14	24	122	653	206	3,610	245	459	35	82	53	6.0
5	12	23	115	565	205	3,190	215	369	33	56	41	6.0
6	11	63	90	373	198	1,390	200	298	32	41	34	6.3
7	11	56	73	295	184	899	185	248	29	36	30	5.7
8	11	46	62	262	171	656	172	215	26	31	26	5.3
9	13	37	58	236	167	506	160	191	25	26	23	5.2
10	17	32	158	211	165	408	158	170	27	28	21	4.4
11	19	29	237	192	161	344	168	157	30	25	20	4.2
12	17	27	186	176	155	296	150	142	30	20	19	5.2
13	15	23	172	167	146	265	139	154	258	16	16	5.0
14	26	22	157	155	141	257	125	191	283	14	15	4.4
15	22	24	167	146	137	232	119	158	175	13	14	4.5
16	18	30	480	143	131	229	118	134	132	26	13	7.2
17	17	33	339	1,450	126	207	109	124	115	38	10	8.4
18	17	61	251	1,510	120	192	98	115	131	33	9.7	8.1
19	23	177	199	805	119	175	94	104	98	24	8.8	7.9
20	20	153	169	553	116	164	95	94	60	20	11	6.7
21	18	113	152	429	112	152	95	85	53	18	13	5.6
22	16	86	140	354	108	142	96	78	49	15	16	5.5
23	15	81	858	305	105	135	205	74	47	13	14	5.8
24	15	105	438	274	101	126	3,250	71	42	12	15	6.0
25	14	102	303	849	99	135	1,250	66	33	31	12	6.0
26	15	86	249	754	97	151	687	67	29	39	10	6.0
27	14	72	217	506	91	185	468	83	24	26	8.9	6.0
28	15	60	243	396	87	1,660	357	75	21	21	7.9	5.6
29	14	50	244	357	86	1,260	289	64	21	21	7.8	4.3
30	13	44	223	306	---	760	255	57	20	37	8.1	5.5
31	12	---	202	270	---	535	---	54	---	157	7.3	---
MEAN	15.5	57.8	207	427	146	607	351	209	66.1	34.3	22.8	5.89
MAX	26	177	858	1,510	249	3,610	3,250	963	283	157	96	8.4
MIN	11	15	33	143	86	83	94	54	20	12	7.3	4.2
IN.	0.08	0.27	1.01	2.08	0.67	2.95	1.65	1.02	0.31	0.17	0.11	0.03

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

MEAN	119	291	270	226	278	446	397	342	197	82.9	35.9	115
MAX	809	1,256	1,045	752	1,139	1,290	1,409	1,359	968	387	145	1,691
(WY)	(1987)	(1986)	(1988)	(1991)	(1985)	(1973)	(1994)	(1990)	(1995)	(2000)	(1988)	(1993)
MIN	10.2	10.5	10.7	9.05	29.4	29.2	32.7	23.7	20.7	11.6	4.90	3.15
(WY)	(1996)	(2000)	(1990)	(1981)	(1996)	(1996)	(1981)	(2000)	(1972)	(1980)	(1980)	(1980)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL MEAN	110		180		233	
HIGHEST ANNUAL MEAN					516	1973
LOWEST ANNUAL MEAN					58.6	1977
HIGHEST DAILY MEAN	1,150	Jun 13	3,610	Mar 4	18,600	Sep 25, 1993
LOWEST DAILY MEAN	6.2	Aug 27	4.2	Sep 11	0.60	Sep 15, 1980
ANNUAL SEVEN-DAY MINIMUM	8.7	Aug 22	4.7	Sep 9	1.6	Aug 27, 1980
MAXIMUM PEAK FLOW	---		5,030	Mar 5	29,100	Sep 25, 1993
MAXIMUM PEAK STAGE	---		11.47	Mar 5	23.33	Sep 25, 1993
INSTANTANEOUS LOW FLOW	---		3.5	Sep 14	0.30	Sep 15, 1980
ANNUAL RUNOFF (INCHES)	6.29		10.34		13.34	
10 PERCENT EXCEEDS	247		370		504	
50 PERCENT EXCEEDS	69		83		80	
90 PERCENT EXCEEDS	14		9.5		12	

06918740 LITTLE SAC RIVER NEAR MORRISVILLE, MO—Continued



06918990 STOCKTON LAKE NEAR STOCKTON, MO

LOCATION.--Lat 37°41'39", long 93°46'11", SW ¼ SE ¼ SW ¼ sec.10, T.34 N., R.26 W., Cedar County, Hydrologic Unit 10290106, in power house at dam on Sac River, 2 mi east of Stockton.

DRAINAGE AREA.--1,160 mi^2.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Nonrecording gage prior to May 30, 1973. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by a rock shell earthfill type dam. Spillway is equipped with 4 tainter gates, 40 ft by 30.5 ft, crest elevation, 861.5 ft. Embankment closed and river diverted on Sept. 23, 1968. Gates closed and storage began on Dec. 12, 1969; minimum power elevation 830.0 ft reached on May 1, 1970. Gross storage at top of flood control pool is 1,666,659 ac-ft at elevation 892.0 ft, of which 779,550 ac-ft between elevations 867.0 ft and 892.0 ft is used for flood control, and 887,109 ac-ft between elevations 760.0 ft and 867.0 ft is used for multipurpose and power. Sedimentation reserve is 25,000 ac-ft. Lake is used for flood control, power, and recreational purposes. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,450,000 ac-ft, Apr. 28, 1973, elevation, 885.94 ft; minimum, since initial filling to minimum power pool level, 352,000 ac-ft, Aug. 27 to Sept. 4, 1970, elevation, 839.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 998,000 ac-ft, April 28, elevation, 871.77 ft; minimum, 748,000 ac-ft, Nov. 17, elevation, 861.59 ft.

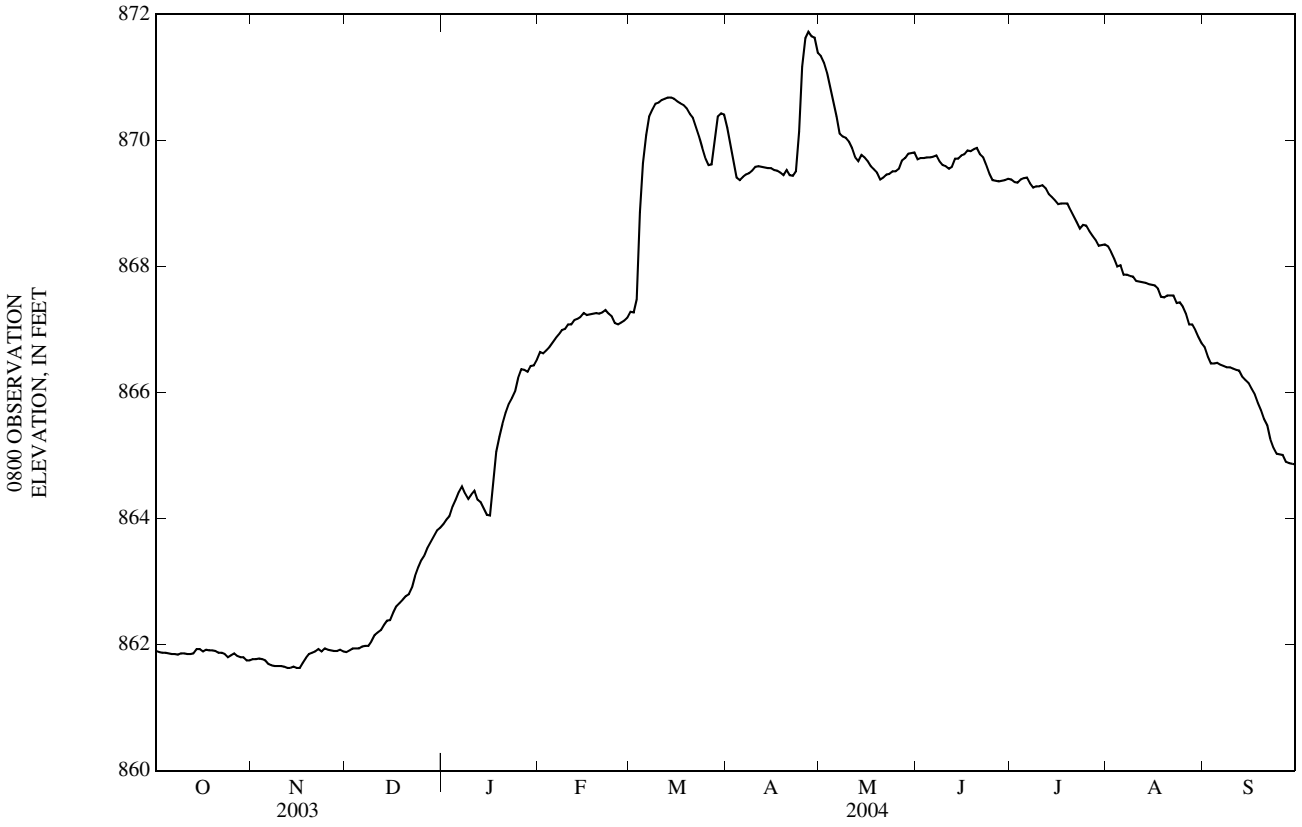
ELEVATION, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
OBSERVATION AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	861.90	861.75	861.87	863.89	866.55	867.21	870.36	871.35	869.82	869.40	868.36	866.78
2	861.89	861.77	861.89	863.96	866.62	867.20	870.12	871.31	869.71	869.41	868.33	866.72
3	861.90	861.78	861.94	864.00	866.63	867.24	869.87	871.19	869.72	869.33	868.23	866.57
4	861.86	861.78	861.94	864.11	866.67	867.88	869.62	871.01	869.73	869.36	868.13	866.46
5	861.86	861.77	861.90	864.24	866.74	869.16	869.35	870.78	869.73	869.40	868.02	866.46
6	861.84	861.74	861.95	864.35	866.81	869.82	869.41	870.56	869.74	869.39	868.02	866.46
7	861.84	861.67	861.98	864.45	866.88	870.20	869.45	870.29	869.75	869.41	867.88	866.44
8	861.85	861.67	861.98	864.47	866.96	870.47	869.46	870.13	869.77	869.33	867.87	866.42
9	861.88	861.66	861.98	864.35	866.99	870.52	869.50	870.09	869.68	869.24	867.84	866.40
10	861.86	861.66	862.08	864.33	867.03	870.60	869.52	870.03	869.62	869.28	867.84	866.39
11	861.87	861.66	862.18	864.43	867.09	870.62	869.58	869.97	869.61	869.29	867.76	866.38
12	861.85	861.64	862.21	864.39	867.10	870.64	869.59	869.83	869.56	869.30	867.76	866.36
13	861.85	861.63	862.29	864.28	867.14	870.66	869.58	869.65	869.71	869.25	867.75	866.34
14	861.93	861.66	862.33	864.21	867.17	870.70	869.57	869.71	869.73	869.15	867.73	866.26
15	861.93	861.64	862.41	864.13	867.20	870.66	869.56	869.79	869.73	---	867.72	866.19
16	861.92	861.63	862.42	864.03	867.24	870.62	869.54	869.74	869.76	868.99	867.72	866.15
17	861.91	861.64	862.54	864.13	867.21	870.59	869.53	869.67	869.78	869.00	867.70	866.06
18	861.92	861.68	862.54	864.79	867.22	870.56	869.51	869.62	869.87	869.00	867.65	865.94
19	861.91	861.82	862.67	865.18	867.24	870.55	869.47	869.55	869.86	869.00	867.52	865.84
20	861.92	861.87	862.73	865.40	867.24	870.50	869.46	869.51	869.86	868.99	867.59	865.84
21	861.89	861.86	862.81	865.58	867.26	870.42	869.54	869.40	869.90	868.89	867.54	865.97
22	861.86	861.88	862.81	865.71	867.30	870.34	869.50	869.45	869.80	868.80	867.54	865.39
23	861.86	861.92	862.96	865.86	867.30	870.16	869.46	869.46	869.74	868.72	867.54	865.25
24	861.86	861.92	863.15	865.94	867.23	870.05	870.07	869.47	869.62	868.62	867.49	865.12
25	861.81	861.95	863.28	866.10	867.19	869.84	871.08	869.50	869.46	868.65	867.44	865.03
26	861.83	861.92	863.37	866.28	867.08	869.73	871.44	869.52	869.37	868.65	867.37	865.02
27	861.83	861.91	863.45	866.36	867.10	869.62	871.69	869.63	869.37	868.56	867.25	865.00
28	861.80	861.90	863.57	866.35	867.11	869.65	871.68	869.69	869.35	868.49	867.07	864.90
29	861.80	861.94	863.65	866.37	867.15	870.15	871.61	869.75	869.37	868.49	867.08	864.88
30	861.82	861.92	863.76	866.42	---	870.46	871.54	869.77	869.38	868.34	866.99	864.87
31	861.76	---	863.80	866.45	---	870.44	---	869.81	---	868.35	866.88	---
MAX	861.93	861.95	863.80	866.45	867.30	870.70	871.69	871.35	869.90	---	868.36	866.78
MIN	861.76	861.63	861.87	863.89	866.55	867.20	869.35	869.40	869.35	---	866.88	864.87
(-)	751,000	755,000	799,000	863,000	880,000	962,000	988,000	946,000	935,000	909,000	870,000	823,000
(=)	-4,000	+4,000	+44,000	+64,000	+17,000	+82,000	+26,000	-42,000	-11,000	-26,000	-39,000	-47,000

CALYR 2003.... +29,000
WTR YR 2004.... +68,000

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

06918990 STOCKTON LAKE NEAR STOCKTON, MO—Continued



06919020 SAC RIVER AT HIGHWAY J BELOW STOCKTON, MO

LOCATION.--Lat 37°44'09", long 93°46'47", in NW $^1/_4$ sec.4, T.34 N., R.26 W., Cedar County, Hydrologic Unit 10290106, on right bank on downstream side of bridge on State Highway J, 4.5 mi downstream from Bear Creek, 6.3 mi downstream from Stockton Lake, 3.0 mi north of Stockton, and at mile 44.9.

DRAINAGE AREA.--1,292 mi^2.

PERIOD OF RECORD.--October 1973 to current year. Occasional discharge measurements in 1973 water year.

GAGE.--Water-stage recorder. Datum of gage is 750.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Considerable regulation by Stockton Lake (06918990), 6.3 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

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

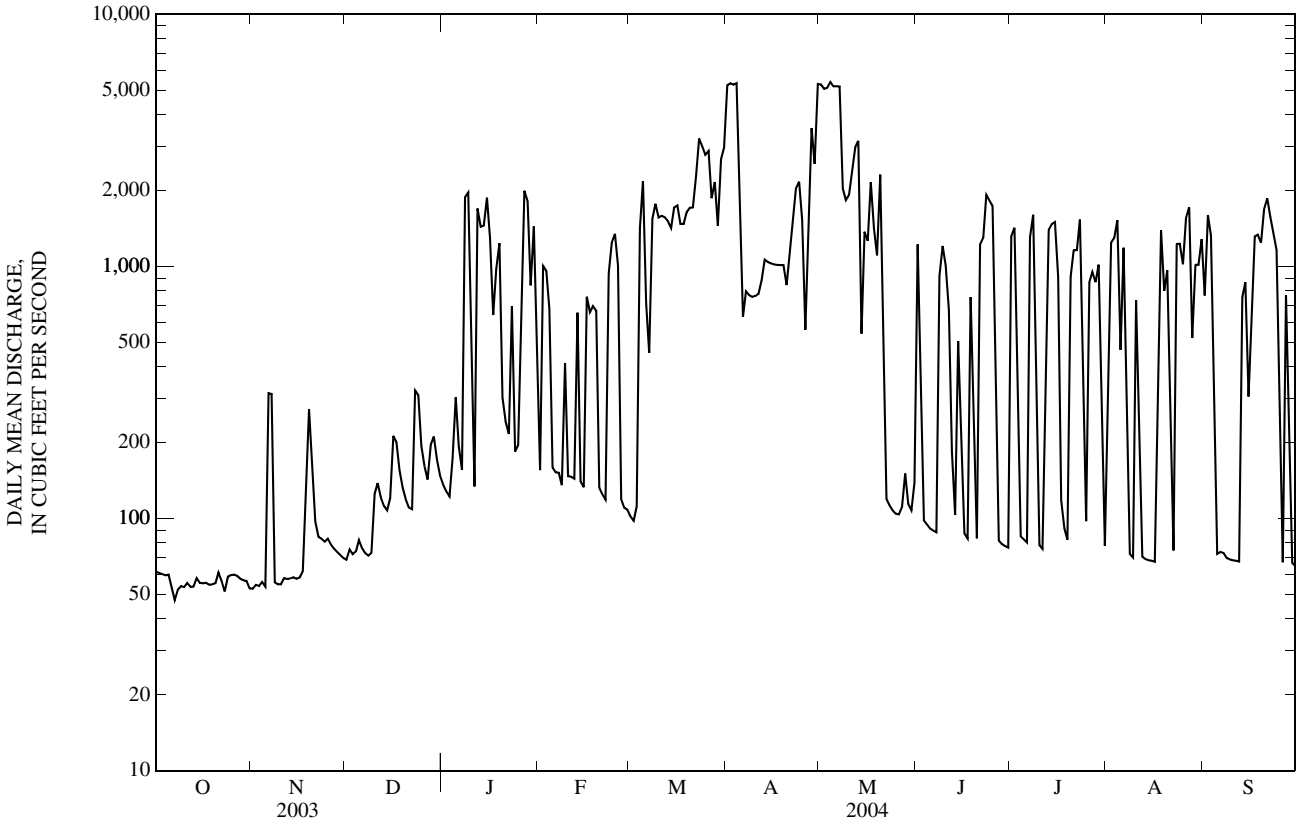
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	53	69	136	155	102	5,230	5,280	1,220	1,310	379	767
2	61	55	75	128	1,000	98	5,330	5,060	361	1,420	1,240	1,600
3	60	54	72	122	961	112	5,260	5,110	98	371	1,300	1,320
4	60	56	74	173	679	1,420	5,330	5,390	95	85	1,530	276
5	60	54	82	303	159	2,180	2,490	5,180	91	83	467	72
6	53	314	76	193	153	714	631	5,190	90	80	1,190	74
7	47	312	73	156	152	454	797	5,170	88	1,310	357	73
8	52	56	71	1,880	136	1,550	770	2,040	916	1,600	72	70
9	54	55	73	1,970	413	1,770	757	1,830	1,210	237	70	69
10	53	55	125	450	147	1,560	763	1,920	1,010	78	735	68
11	56	58	138	134	146	1,590	778	2,380	673	76	243	68
12	54	58	121	1,700	144	1,570	884	2,970	184	582	71	68
13	54	58	112	1,440	656	1,510	1,060	3,150	103	1,400	69	756
14	58	58	108	1,450	140	1,420	1,040	541	506	1,470	68	865
15	56	58	120	1,870	133	1,710	1,030	1,370	220	1,500	68	305
16	55	58	213	1,300	759	1,750	1,020	1,270	87	908	67	700
17	56	62	201	642	658	1,470	1,010	2,160	83	118	445	1,320
18	55	123	155	977	696	1,470	1,010	1,410	757	91	1,390	1,340
19	55	271	133	1,240	667	1,640	1,010	1,110	248	83	801	1,240
20	55	149	119	302	133	1,710	844	2,310	83	909	963	1,680
21	61	97	111	242	125	1,710	1,100	635	1,220	1,160	253	1,860
22	57	85	109	216	119	2,290	1,480	120	1,300	1,160	75	1,570
23	51	83	322	695	938	3,220	2,040	113	1,920	1,530	1,230	1,350
24	59	81	309	184	1,240	3,000	2,170	108	1,820	303	1,230	1,160
25	60	83	194	195	1,350	2,770	1,530	104	1,740	98	1,020	252
26	60	79	161	631	1,010	2,870	561	104	298	864	1,550	67
27	59	76	143	2,000	119	1,870	1,230	111	82	951	1,720	769
28	58	74	196	1,820	111	2,160	3,540	151	79	866	520	242
29	57	72	212	842	108	1,450	2,550	115	78	1,020	1,020	67
30	56	70	170	1,440	---	2,660	5,290	108	77	345	1,010	65
31	53	---	148	426	---	2,970	---	139	---	78	1,280	---
MEAN	56.3	93.9	138	815	455	1,702	1,951	2,021	558	712	724	671
MAX	61	314	322	2,000	1,350	3,220	5,330	5,390	1,920	1,600	1,720	1,860
MIN	47	53	69	122	108	98	561	104	77	76	67	65
IN.	0.05	0.08	0.12	0.73	0.38	1.52	1.69	1.80	0.48	0.64	0.65	0.58

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

MEAN	604	779	1,102	1,119	1,087	1,411	1,695	1,624	1,550	1,184	961	765
MAX	4,922	4,697	3,983	4,464	2,763	4,230	4,613	3,403	4,863	4,726	2,488	1,949
(WY)	(1994)	(1994)	(1986)	(1993)	(1988)	(1975)	(1974)	(1994)	(1990)	(1995)	(1992)	(1993)
MIN	51.1	60.1	61.9	66.7	98.8	64.8	60.5	110	186	121	71.6	80.4
(WY)	(1974)	(1981)	(1981)	(1981)	(1981)	(1977)	(1981)	(2001)	(1991)	(1977)	(1991)	(1991)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL MEAN	377		827		1,157	
HIGHEST ANNUAL MEAN					2,450	1994
LOWEST ANNUAL MEAN					256	1977
HIGHEST DAILY MEAN	2,320	Jul 3	5,390	May 4	12,800	Sep 25, 1993
LOWEST DAILY MEAN	47	Oct 7	47	Oct 7	25	Mar 25, 1977
ANNUAL SEVEN-DAY MINIMUM	53	Oct 6	53	Oct 6	33	Oct 20, 1973
MAXIMUM PEAK FLOW	---		6,470	May 2	14,800	Oct 1, 1986
MAXIMUM PEAK STAGE	---		17.68	May 2	24.91	Feb 23, 1985
INSTANTANEOUS LOW FLOW	---		38	Oct 6	24	Mar 25, 1977
ANNUAL RUNOFF (INCHES)	3.96		8.71		12.16	
10 PERCENT EXCEEDS	1,470		1,890		3,140	
50 PERCENT EXCEEDS	98		304		523	
90 PERCENT EXCEEDS	58		59		69	

06919020 SAC RIVER AT HIGHWAY J BELOW STOCKTON, MO—Continued



06919500 CEDAR CREEK NEAR PLEASANT VIEW, MO

LOCATION.--Lat 37°50'03", long 93°52'31", in NE $^1/_4$ sec.2, T.35 N., R.27 W., Cedar County, Hydrologic Unit 10290106, on downstream side of right pier of bridge on State Highway 39, 1.5 mi north of Pleasant View, 1.8 mi downstream from Alder Creek, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--420 mi^2.

PERIOD OF RECORD.--April 1923 to September 1926, October 1948 to current year.

REVISED RECORDS.--WSP 1146: 1923-26, drainage area. WSP 1176: 1924(M).

GAGE.--Water-stage recorder. Datum of gage is 739.46 ft above National Geodetic Vertical Datum of 1929. Apr. 22, 1923, to Sept. 30, 1926 and Oct. 1, 1948, to May 10, 1950, nonrecording gage at site 50 ft downstream at same datum; May 11, 1950, to Dec. 17, 1952, nonrecording gage, at present site and datum.

REMARKS.--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.--Maximum stage, 27.7 ft, July 20, 1909, from floodmark.

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	15	81	361	e273	112	585	1,020	89	88	7.2	26
2	16	15	73	312	e279	109	453	1,320	71	143	7.0	19
3	12	15	112	279	e267	116	369	761	57	522	6.7	15
4	10	16	186	406	e248	2,650	313	545	49	223	6.8	12
5	9.6	15	214	747	e236	7,590	273	427	43	211	6.6	9.5
6	9.1	15	173	526	e226	5,730	245	339	39	128	5.8	9.4
7	8.2	13	144	360	e224	1,270	224	275	36	89	4.9	8.4
8	7.8	21	129	272	e218	748	205	230	33	61	4.4	6.8
9	8.4	27	125	256	e210	569	186	197	31	47	4.1	6.0
10	8.5	20	749	230	e216	451	181	171	29	59	3.9	7.9
11	8.5	19	1,090	211	e220	370	222	152	27	39	3.7	9.6
12	9.5	18	648	197	e230	307	267	137	27	32	3.3	7.5
13	11	16	481	184	e244	269	227	204	155	28	2.8	5.8
14	16	15	450	173	e245	257	190	2,110	568	20	2.7	5.3
15	21	15	741	162	e232	253	168	1,660	346	15	2.3	4.8
16	70	15	2,610	189	225	284	154	564	179	21	2.1	4.1
17	58	19	1,470	1,510	209	288	143	365	121	26	2.0	3.4
18	62	663	688	4,240	200	259	131	283	100	17	1.9	3.1
19	46	1,690	493	2,030	202	227	119	269	305	12	1.8	2.6
20	35	705	383	793	202	205	123	210	177	9.9	2.4	2.0
21	28	376	317	557	190	183	275	170	112	8.5	2.5	1.7
22	22	253	297	460	168	166	634	141	80	7.3	2.6	1.6
23	18	225	2,300	380	158	158	473	121	61	6.5	26	1.4
24	15	224	2,080	327	153	150	5,110	104	50	6.6	216	1.4
25	12	194	814	376	146	144	8,260	90	76	7.1	448	1.3
26	11	159	539	e674	139	141	3,970	81	70	7.6	185	1.2
27	10	138	414	e476	130	141	907	80	48	7.0	93	1.1
28	10	118	916	e420	123	953	638	403	37	6.6	67	0.96
29	10	102	1,240	e373	118	2,960	489	206	38	6.5	76	0.85
30	13	90	674	e334	---	1,390	463	133	93	7.8	57	0.83
31	14	---	466	e285	---	817	---	101	---	8.0	35	---
MEAN	19.4	174	681	584	205	944	867	415	105	60.3	41.6	6.02
MAX	70	1,690	2,610	4,240	279	7,590	8,260	2,110	568	522	448	26
MIN	7.8	13	73	162	118	109	119	80	27	6.5	1.8	0.83
IN.	0.05	0.46	1.87	1.60	0.53	2.59	2.30	1.14	0.28	0.17	0.11	0.02

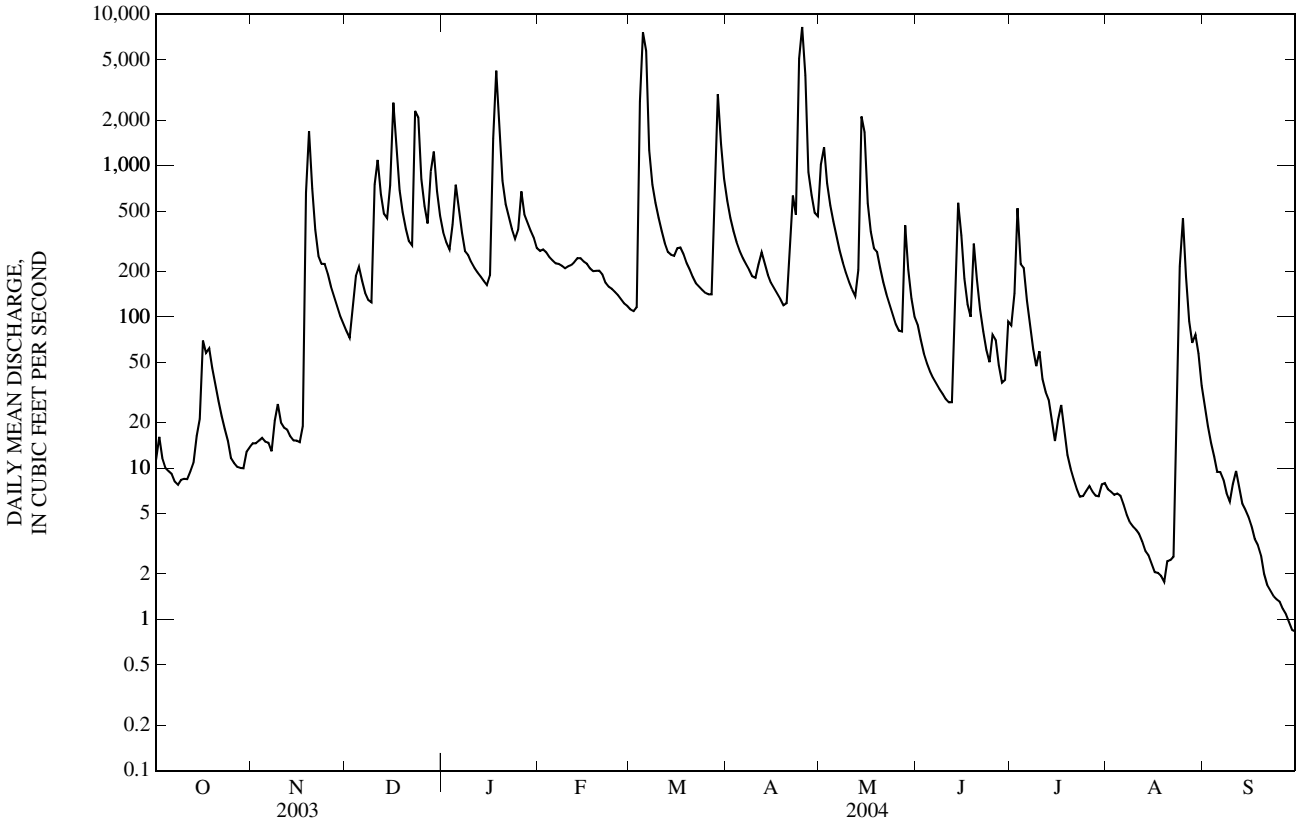
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	187	330	286	261	397	563	543	531	362	224	77.0	168
MAX	3,055	1,923	1,490	1,063	2,307	2,275	2,766	2,969	1,753	2,229	641	2,033
(WY)	(1987)	(1993)	(1993)	(1949)	(1985)	(1973)	(1994)	(1961)	(1981)	(1958)	(1950)	(1993)
MIN	0.00	0.00	0.06	0.12	0.14	0.23	4.09	39.1	4.52	0.03	0.00	0.00
(WY)	(1954)	(1954)	(1954)	(1954)	(1954)	(1954)	(1956)	(1988)	(1991)	(1954)	(1954)	(1953)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	155		343		326	
HIGHEST ANNUAL MEAN					807	1993
LOWEST ANNUAL MEAN					16.0	1954
HIGHEST DAILY MEAN	2,610	Dec 16	8,260	Apr 25	26,200	Jul 17, 1958
LOWEST DAILY MEAN	0.32	Aug 26	0.83	Sep 30	0.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	0.47	Aug 23	1.1	Sep 24	0.00	Many Years
MAXIMUM PEAK FLOW	---		9,030	Apr 25	37,000	Jul 17, 1958
MAXIMUM PEAK STAGE	---		20.42	Apr 25	27.36	Apr 12, 1994
INSTANTANEOUS LOW FLOW	---		0.83	Sep 29,30	0.00	Many Years
ANNUAL RUNOFF (INCHES)	5.02		11.12		10.56	
10 PERCENT EXCEEDS	472		678		662	
50 PERCENT EXCEEDS	31		138		71	
90 PERCENT EXCEEDS	3.4		6.3		1.2	

e Estimated

06919500 CEDAR CREEK NEAR PLEASANT VIEW, MO—Continued



06919900 SAC RIVER NEAR CAPLINGER MILLS, MO

LOCATION.--Lat 37°52'11", long 93°48'11", in NW ¼ NE ¼ SW ¼ sec.21, T.36 N., R.26 W., St. Clair County, Hydrologic Unit 10290106, on right downstream wingwall of bridge on State Highway W, 1.5 mi downstream from Cedar Creek, and 5.0 mi north of Caplinger Mills.

DRAINAGE AREA.--1,810 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 720.82 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Some regulation from Stockton Lake (06918990). U.S. Army Corps of Engineers 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	82	65	136	586	443	221	5,560	6,500	413	475	125	1,180
2	82	65	126	508	880	214	5,950	6,800	1,340	1,470	736	1,010
3	80	64	160	446	1,590	219	5,810	5,870	181	1,870	1,160	1,630
4	78	62	236	624	989	3,560	5,800	5,900	153	363	1,540	1,080
5	77	61	284	1,130	549	11,400	4,220	5,730	144	301	1,470	130
6	72	61	242	895	419	8,320	921	5,640	139	223	324	115
7	68	537	204	586	383	2,480	1,070	5,510	135	427	1,290	108
8	65	94	182	1,480	343	1,880	1,030	2,820	189	1,820	139	104
9	63	81	180	2,340	549	3,170	971	2,210	1,180	1,100	118	101
10	62	76	714	1,490	435	2,370	969	2,750	1,160	172	131	90
11	61	73	1,390	390	437	2,110	1,030	2,030	911	144	811	e88
12	62	71	898	1,140	567	2,070	1,090	3,080	632	127	132	e86
13	61	69	659	2,170	1,000	2,050	1,320	3,490	170	964	110	e110
14	61	69	596	1,520	565	1,800	1,260	3,640	650	1,520	103	810
15	63	69	789	2,170	427	2,320	1,200	2,830	1,030	1,410	94	922
16	107	69	2,810	1,940	940	2,340	1,170	2,040	307	1,830	89	130
17	104	75	2,090	2,400	926	2,130	1,150	2,690	217	363	85	1,130
18	96	689	1,010	5,700	947	2,020	1,120	1,650	246	147	697	1,330
19	89	2,260	716	4,030	940	2,130	1,110	1,810	1,080	128	1,310	1,280
20	83	1,080	561	1,450	468	1,980	1,120	2,060	319	167	831	1,620
21	77	562	465	961	335	2,230	681	2,040	391	1,150	908	1,640
22	73	361	435	799	305	2,110	2,300	299	1,380	1,200	131	1,770
23	70	308	2,550	1,140	687	3,660	2,700	236	1,830	1,400	404	1,470
24	67	305	2,930	678	1,410	3,100	8,090	222	e1,400	e1,000	1,580	1,330
25	67	270	1,280	634	1,460	3,350	11,300	203	e1,600	165	1,880	931
26	69	228	834	1,000	1,690	3,200	6,300	194	1,280	355	1,470	116
27	67	199	650	2,500	386	2,800	1,740	191	173	1,130	1,680	138
28	67	175	1,130	2,430	238	3,360	4,290	466	143	768	1,720	849
29	67	156	1,710	1,570	223	5,390	3,900	356	130	789	374	111
30	67	145	1,050	1,580	---	3,990	5,000	245	165	1,080	1,110	97
31	67	---	728	1,390	---	4,410	---	225	---	144	1,310	---
MEAN	73.4	280	895	1,538	708	2,980	3,006	2,572	636	781	770	717
MAX	107	2,260	2,930	5,700	1,690	11,400	11,300	6,800	1,830	1,870	1,880	1,770
MIN	61	61	126	390	223	214	681	191	130	127	85	86
IN.	0.05	0.17	0.57	0.98	0.42	1.90	1.85	1.64	0.39	0.50	0.49	0.44

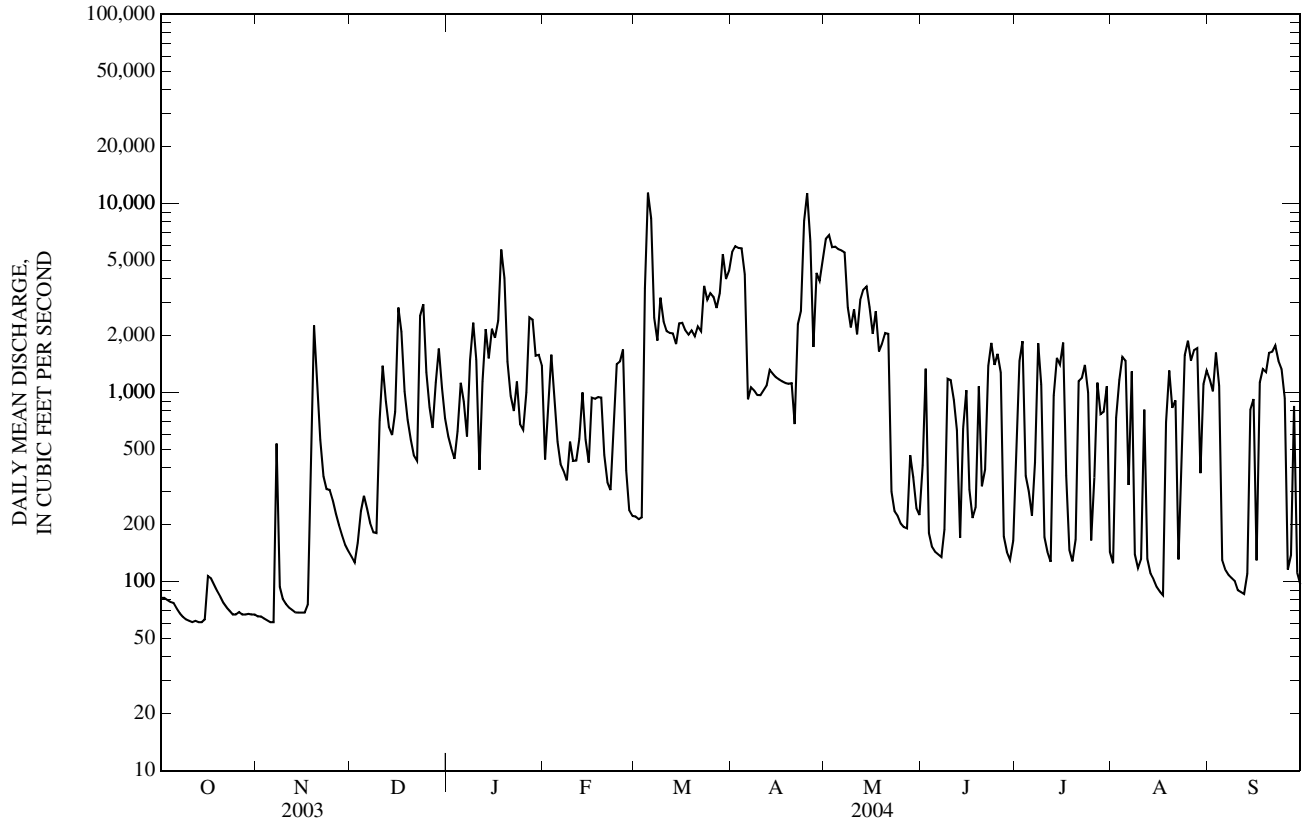
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2004, BY WATER YEAR (WY)

MEAN	1,146	1,336	1,577	1,415	1,657	2,167	2,410	2,456	2,049	1,418	1,056	962
MAX	11,070	5,392	5,838	5,487	5,202	5,630	6,805	5,782	7,046	5,283	2,850	5,283
(WY)	(1987)	(1994)	(1986)	(1993)	(1985)	(1985)	(1994)	(1995)	(1995)	(1995)	(1992)	(1993)
MIN	61.1	66.7	56.6	53.5	101	82.7	76.3	278	241	170	77.3	103
(WY)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(1981)	(2001)	(1991)	(1988)	(1991)	(1991)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1975 - 2004	
ANNUAL MEAN	586		1,250		1,637	
HIGHEST ANNUAL MEAN					3,267	1994
LOWEST ANNUAL MEAN					399	1977
HIGHEST DAILY MEAN	3,000	May 7	11,400	Mar 5	51,200	Oct 2, 1986
LOWEST DAILY MEAN	61	Oct 11,13,14,Nov 5,6	61	Oct 11,13,14,Nov 5,6	34	Aug 25, 1999
ANNUAL SEVEN-DAY MINIMUM	62	Oct 9	62	Oct 9	47	Oct 7, 1980
MAXIMUM PEAK FLOW	---		12,200	Apr 25	61,500	Apr 12, 1994
MAXIMUM PEAK STAGE	---		19.32	Apr 25	30.95	Apr 12, 1994
INSTANTANEOUS LOW FLOW	---		61	Oct 10-14,Nov 5-7	33	Aug 24, 1999
ANNUAL RUNOFF (INCHES)	4.39		9.40		12.29	
10 PERCENT EXCEEDS	1,690		2,860		4,010	
50 PERCENT EXCEEDS	240		789		904	
90 PERCENT EXCEEDS	75		78		95	

e Estimated

06919900 SAC RIVER NEAR CAPLINGER MILLS, MO—Continued



06921070 POMME DE TERRE RIVER NEAR POLK, MO

LOCATION.--Lat 37°40'58", long 93°22'13", in NE ¼ NW ¼ NW ¼ sec.17, T.34 N., R.22 W., Polk County, Hydrologic Unit 10290107, on right bank 150 ft upstream from Jefferson Bridge on State Highway D, and 5 mi southwest of Polk.

DRAINAGE AREA.--276 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 872.61 ft above National Geodetic Vertical Datum of 1929.

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

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

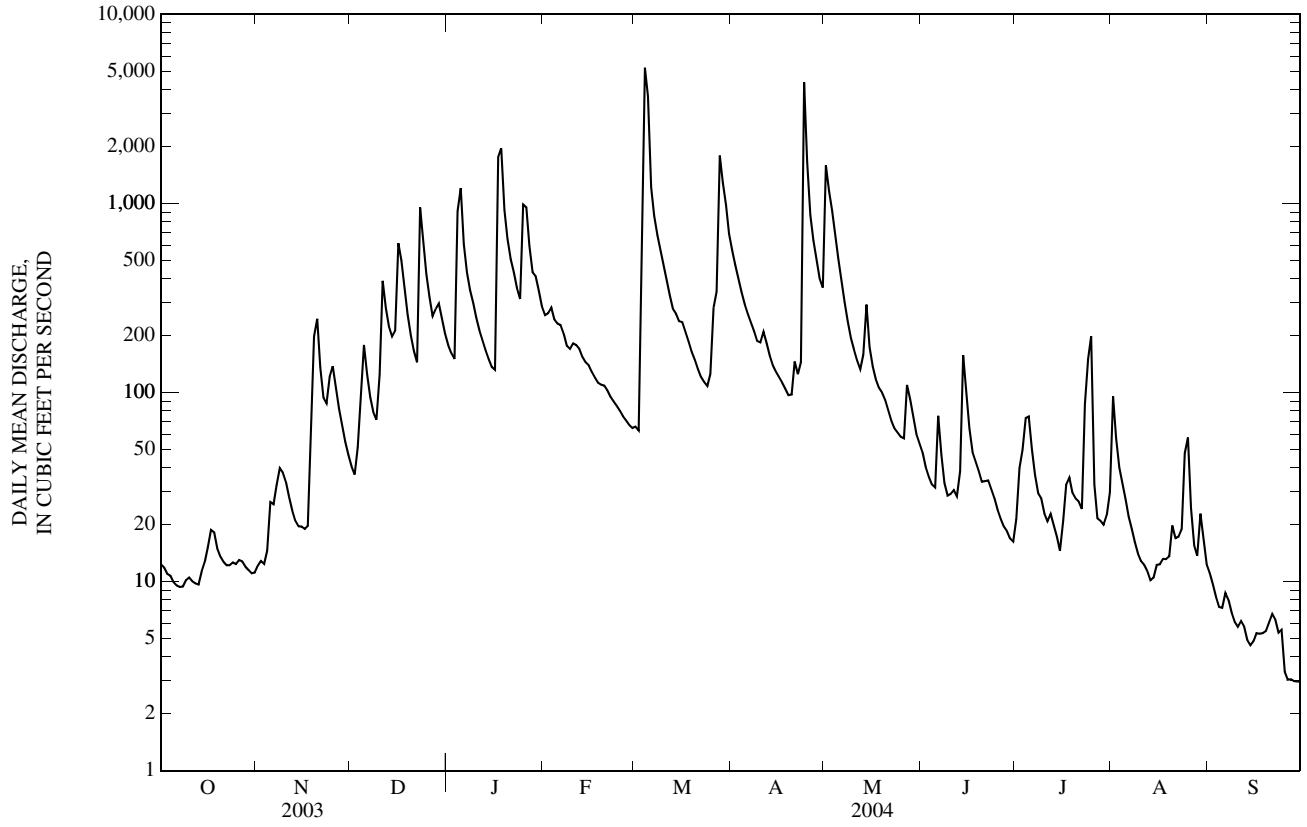
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	41	178	257	66	562	1,590	48	21	95	11
2	12	13	37	162	263	63	472	1,160	40	40	57	9.7
3	11	12	51	150	281	508	398	917	36	50	40	8.3
4	11	15	104	909	244	5,220	339	673	33	73	33	7.3
5	9.9	26	179	1,200	231	3,690	293	507	31	75	27	7.3
6	9.5	26	124	611	227	1,220	260	392	75	50	22	8.7
7	9.4	32	95	430	204	859	234	300	47	37	19	8.0
8	9.4	40	79	348	177	680	211	237	33	29	16	6.9
9	10	38	72	298	170	572	187	195	28	28	14	6.1
10	11	33	125	249	182	475	184	168	29	23	13	5.8
11	10	28	389	213	178	396	209	148	30	21	12	6.2
12	9.8	24	279	189	170	325	182	133	28	23	11	5.8
13	9.6	21	224	167	154	277	157	159	38	20	10	4.9
14	11	20	198	150	145	261	139	292	158	17	10	4.6
15	13	20	212	136	139	238	129	174	102	15	12	4.8
16	15	19	616	132	128	236	120	137	65	21	12	5.3
17	19	20	499	1,750	120	209	113	118	48	33	13	5.3
18	18	55	347	1,960	113	186	104	106	43	35	13	5.3
19	15	198	258	923	110	165	97	100	38	29	14	5.5
20	14	245	200	650	109	149	98	91	34	28	20	6.1
21	13	136	166	509	102	133	146	81	34	27	17	6.7
22	12	94	144	432	95	121	125	71	34	24	17	6.3
23	12	88	952	358	90	114	145	65	31	87	19	5.4
24	13	121	620	313	85	108	4,370	61	28	151	48	5.6
25	12	138	422	986	80	125	1,660	58	24	198	58	3.3
26	13	105	318	951	75	281	866	57	21	33	25	3.0
27	13	82	253	597	71	341	637	110	20	22	16	3.0
28	12	67	277	432	67	1,790	503	92	18	21	14	3.0
29	12	55	296	413	65	1,290	400	74	17	20	23	3.0
30	11	47	243	345	---	978	359	60	16	23	17	3.0
31	11	---	204	286	---	689	---	54	---	30	12	---
MEAN	12.1	61.0	259	530	149	702	457	270	40.9	42.1	23.5	5.84
MAX	19	245	952	1,960	281	5,220	4,370	1,590	158	198	95	11
MIN	9.4	12	37	132	65	63	97	54	16	15	10	3.0
IN.	0.05	0.25	1.08	2.21	0.58	2.93	1.85	1.13	0.17	0.18	0.10	0.02

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

MEAN	146	335	317	269	333	523	506	407	217	90.9	39.7	145
MAX	1,094	1,408	1,488	822	1,496	1,673	1,978	1,658	1,252	450	154	2,348
(WY)	(1987)	(1986)	(1983)	(1991)	(1985)	(1973)	(1994)	(2002)	(1995)	(2000)	(1985)	(1993)
MIN	8.07	9.94	8.94	10.8	42.5	43.4	26.8	23.5	15.9	4.16	2.72	1.70
(WY)	(2003)	(1990)	(1990)	(1977)	(1981)	(1996)	(1981)	(2000)	(1988)	(1980)	(1980)	(1980)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL MEAN	116		214		277	
HIGHEST ANNUAL MEAN					554	1993
LOWEST ANNUAL MEAN					85.6	2000
HIGHEST DAILY MEAN	1,440	Jul 12	5,220	Mar 4	24,300	Sep 25, 1993
LOWEST DAILY MEAN	5.4	Aug 28	3.0	Sep 26-30	0.30	Aug 10, 1980
ANNUAL SEVEN-DAY MINIMUM	6.2	Aug 23	3.4	Sep 24	0.34	Aug 9, 1980
MAXIMUM PEAK FLOW	---		7,470	Mar 4	34,300	Sep 24, 1993
MAXIMUM PEAK STAGE	---		12.95	Mar 4	27.10	Sep 24, 1993
INSTANTANEOUS LOW FLOW	---		2.7	Sep 28,30	0.30	Aug 10, 1980
ANNUAL RUNOFF (INCHES)	5.72		10.55		13.63	
10 PERCENT EXCEEDS	287		500		558	
50 PERCENT EXCEEDS	52		74		84	
90 PERCENT EXCEEDS	11		10		10	

06921070 POMME DE TERRE RIVER NEAR POLK, MO—Continued



06921070 POMME DE TERRE RIVER NEAR POLK, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1983 to February 1986, November 1992 to current year.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
05...	0850	Environmental	27	5.3	53	7.6	439	14.0	220	44.1	27.6	4.03
JAN												
20...	1255	Environmental	641	15.6	116	8.1	327	2.2	--	--	--	--
MAR												
08...	1310	Environmental	674	11.0	100	7.7	338	9.9	--	--	--	--
MAY												
12...	0800	Environmental	135	6.5	77	7.8	402	21.9	210	42.6	24.1	2.74
JUL												
19...	1300	Environmental	29	7.2	91	8.0	399	24.9	--	--	--	--
SEP												
13...	1245	Environmental	5.2	6.2	73	7.9	401	21.8	--	--	--	--
13...	1246	Replicate	--	6.2	73	8.0	401	21.8	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
05...	6.71	208	208	254	<1	12.0	<0.2	7.5	248	10	0.31	<0.04	<0.60d
JAN													
20...	--	136	136	166	<1	--	--	--	--	10	0.48	<0.04	1.60
MAR													
08...	--	145	146	178	<1	--	--	--	--	11	0.41	0.09	1.27
MAY													
12...	5.50	183	182	222	<1	11.0	<0.2	8.0	222	12	0.30	<0.04	0.12
JUL													
19...	--	180	179	219	<1	--	--	--	--	<10	0.41	<0.04	0.10
SEP													
13...	--	190	191	232	<1	--	--	--	--	<10	0.38	<0.04	E.03n
13...	--	--	--	--	--	--	--	--	--	<10	0.41	<0.04	<0.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
05...	<0.008	<0.36d	0.06	0.08	44	60	105	Mn	113v	0.8	<0.04	<0.04	0.6
JAN													
20...	E.004n	0.06	0.07	0.10	210k	220k	470	--	--	--	--	--	--
MAR													
08...	0.035	0.03	E.04n	0.08	110	180	91	--	--	--	--	--	--
MAY													
12...	E.005n	<0.02	<0.04	E.02n	80	110	53	4	98	0.5	<0.04	<0.04	0.6
JUL													
19...	<0.008	0.05	0.07	0.08	41	37	53	--	--	--	--	--	--
SEP													
13...	<0.008	0.03	0.04	0.07	32	41	66	--	--	--	--	--	--
13...	<0.008	0.03	0.04	0.07	40	44	53	--	--	--	--	--	--

06921070 POMME DE TERRE RIVER NEAR POLK, 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								
05...	18	<0.08	0.39	41.1	<0.02	<0.4	1	<2
JAN								
20...	--	--	--	--	--	--	--	--
MAR								
08...	--	--	--	--	--	--	--	--
MAY								
12...	17	E.06n	0.30	13.0	<0.02	E.2n	Mn	<2
JUL								
19...	--	--	--	--	--	--	--	--
SEP								
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--

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

06921200 LINDLEY CREEK NEAR POLK, MO

LOCATION.--Lat 37°45'02", long 93°15'58", in NE ¼ SE ¼ sec.29, T.35 N., R.21 W., Polk County, Hydrologic Unit 10290107, on left bank 30 ft upstream from county highway bridge, 0.5 mi downstream from Panther Creek, 2.5 mi northeast of Polk, and 11 mi upstream from Ingalls Creek.

DRAINAGE AREA.--112 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 884.08 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 25, 1957, nonrecording gage at site 30 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair except for discharges below 5 ft^3/s, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

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

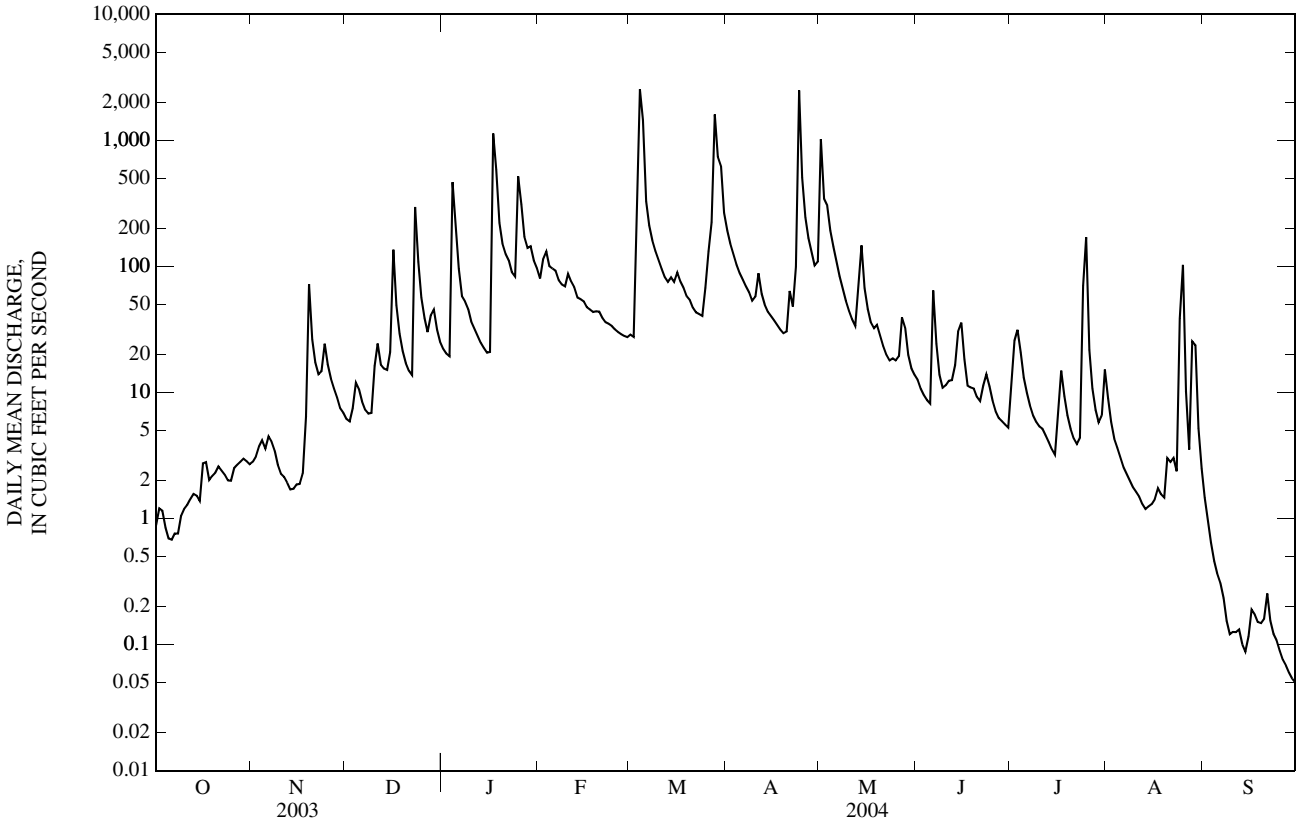
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.88	2.8	6.2	22	80	29	193	1,020	13	12	9.0	1.5
2	1.2	3.1	5.9	20	114	28	152	345	11	26	5.9	0.96
3	1.2	3.7	7.5	19	131	257	124	307	9.5	31	4.3	0.65
4	0.85	4.2	12	467	100	2,540	104	192	8.7	21	3.6	0.46
5	0.69	3.6	11	223	96	1,450	88	144	8.2	13	3.0	0.37
6	0.68	4.5	8.4	96	93	328	78	110	64	9.9	2.6	0.31
7	0.76	4.1	7.3	58	78	212	69	84	24	7.9	2.3	0.23
8	0.76	3.4	6.8	53	72	161	62	66	14	6.5	2.0	0.15
9	1.0	2.7	6.9	46	70	133	53	54	11	5.8	1.8	0.12
10	1.2	2.3	16	37	88	112	58	44	11	5.4	1.6	0.13
11	1.3	2.1	24	32	76	96	88	38	12	5.2	1.5	0.13
12	1.4	1.9	17	28	68	82	61	34	13	4.6	1.3	0.13
13	1.6	1.7	15	25	57	75	50	64	17	4.1	1.2	0.10
14	1.5	1.7	15	23	55	82	44	147	31	3.5	1.2	0.09
15	1.4	1.9	21	21	53	75	40	67	36	3.2	1.3	0.12
16	2.7	1.9	136	21	47	90	37	46	18	7.2	1.4	0.19
17	2.8	2.3	49	1,140	46	76	34	36	11	15	1.7	0.17
18	2.0	6.4	29	587	44	68	31	32	11	9.3	1.6	0.15
19	2.2	73	21	222	44	58	30	34	11	6.6	1.5	0.15
20	2.3	26	17	152	44	54	30	28	9.2	5.1	3.0	0.16
21	2.6	17	15	126	39	47	64	23	8.6	4.3	2.8	0.25
22	2.4	14	14	111	36	43	48	20	11	3.9	3.0	0.15
23	2.2	15	295	90	35	42	99	18	14	4.4	2.4	0.12
24	2.0	24	109	83	34	41	2,490	19	11	70	39	0.11
25	2.0	17	57	518	32	67	508	18	8.7	170	103	0.09
26	2.5	13	39	311	30	132	246	19	7.1	22	10	0.08
27	2.7	11	30	172	29	224	169	39	6.3	11	3.5	0.07
28	2.8	9.1	41	140	28	1,610	129	33	5.9	7.3	25	0.06
29	3.0	7.5	46	144	27	741	102	20	5.6	5.8	24	0.05
30	2.8	6.9	32	112	---	625	109	16	5.3	6.6	5.2	0.05
31	2.7	---	25	97	---	266	---	14	---	15	2.5	---
MEAN	1.81	9.59	36.6	168	60.2	318	180	101	14.2	16.9	8.78	0.24
MAX	3.0	73	295	1,140	131	2,540	2,490	1,020	64	170	103	1.5
MIN	0.68	1.7	5.9	19	27	28	30	14	5.3	3.2	1.2	0.05
IN.	0.02	0.10	0.38	1.73	0.58	3.27	1.79	1.04	0.14	0.17	0.09	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

MEAN	77.2	102	112	96.9	126	192	178	170	79.2	36.5	13.7	51.2
MAX	812	566	526	358	764	855	903	854	421	534	100	1,134
(WY)	(1987)	(1986)	(1983)	(1973)	(1985)	(1973)	(1994)	(2002)	(1985)	(1958)	(1958)	(1993)
MIN	0.00	0.04	0.38	0.75	1.49	15.9	4.86	6.04	0.73	0.08	0.00	0.00
(WY)	(1977)	(1964)	(1964)	(1964)	(1964)	(1996)	(1981)	(2000)	(1988)	(1980)	(1980)	(1960)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1957 - 2004	
ANNUAL MEAN	43.3		76.5		103	
HIGHEST ANNUAL MEAN					247	1993
LOWEST ANNUAL MEAN					18.8	2000
HIGHEST DAILY MEAN	812	Jul 12	2,540	Mar 4	12,000	Oct 1, 1986
LOWEST DAILY MEAN	0.00	Aug 22-28	0.05	Sep 29,30	0.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 22	0.07	Sep 24	0.00	Many Years
MAXIMUM PEAK FLOW	---		4,170	Apr 24	31,900	Oct 1, 1986
MAXIMUM PEAK STAGE	---		12.72	Apr 24	23.60	May 5, 1961
INSTANTANEOUS LOW FLOW	---		0.05	Sep 29,30	0.00	Many Years
ANNUAL RUNOFF (INCHES)	5.26		9.31		12.44	
10 PERCENT EXCEEDS	104		137		182	
50 PERCENT EXCEEDS	6.9		18		25	
90 PERCENT EXCEEDS	0.50		1.1		0.45	

06921200 LINDLEY CREEK NEAR POLK, MO—Continued



06921325 POMME DE TERRE LAKE NEAR HERMITAGE, MO

LOCATION.--Lat 37°54'11", long 93°19'01", in NE $\frac{1}{4}$ sec.2, T.36 N., R.22 W., Hickory County, Hydrologic Unit 10290107, in intake tower at dam on Pomme de Terre River, 3.0 mi southwest of Hermitage.

DRAINAGE AREA.--611 mi^2.

PERIOD OF RECORD.--June 1960 to current year.

GAGE.--Water-stage recorder. Nonrecording gage prior to Nov. 9, 1961. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers).

REMARKS.--Lake is formed by earthfill embankment with a concrete gravity section-type dam. Closure operation began on June 28, 1960; conservation pool level reached June 15, 1963. Capacity at top of flood control pool, 648,700 ac-ft at elevation 874.0 ft, crest of spillway, of which 407,200 ac-ft between elevations 839.0 ft and 874.0 ft is used for flood control, and 228,700 ac-ft between elevation 783.0 ft and 839.0 ft is used for conservation and 12,840 ac-ft below elevation 783.0 ft is sediment storage. Lake is used for flood control and recreational purposes. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 506,000 ac-ft, Sept. 27, 1993, elevation, 864.58 ft; minimum, since initial filling to conservation pool level, 216,000 ac-ft, Mar. 3, 1964, elevation, 835.61 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 290,000 ac-ft, April 26, elevation 845.21 ft; minimum, 236,000 ac-ft, Nov. 3, elevation, 838.80 ft.

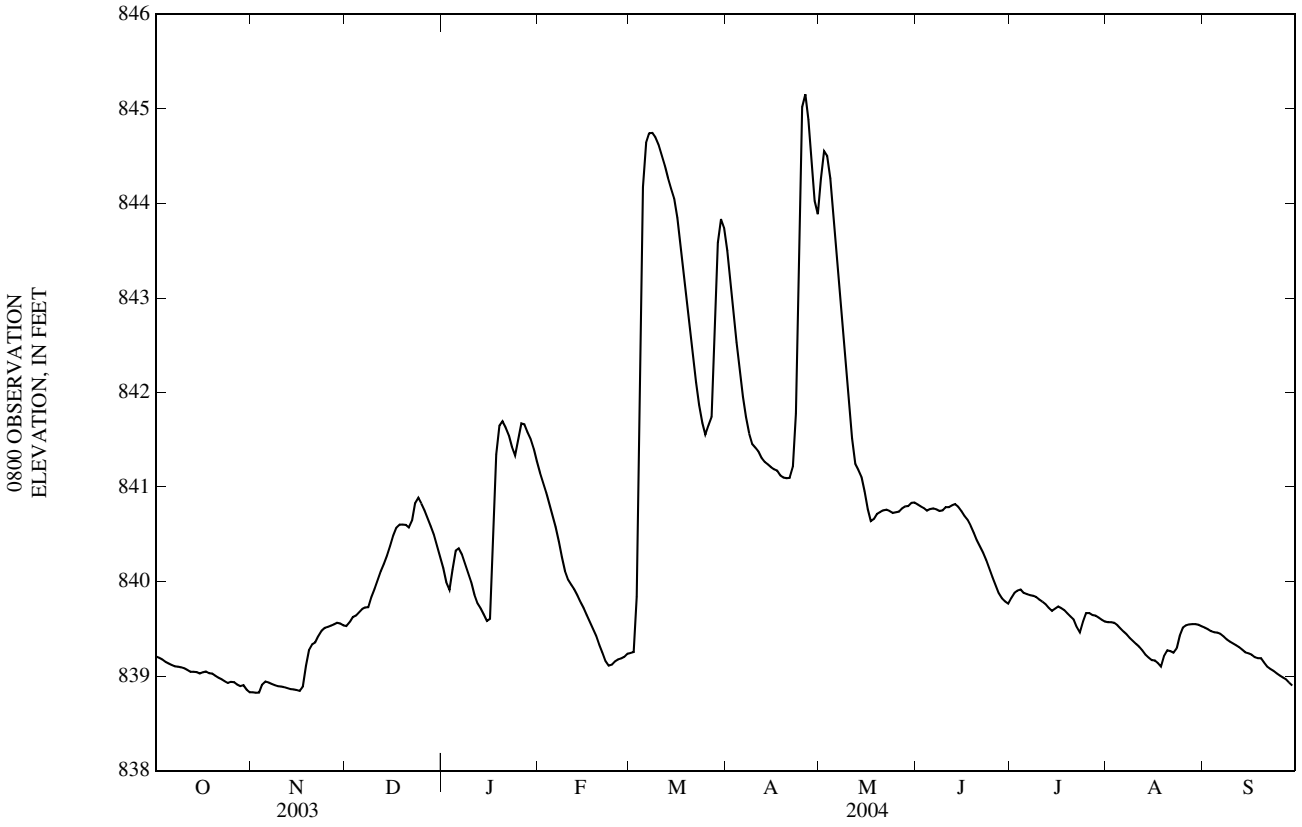
ELEVATION, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	839.22	838.83	839.53	840.23	841.23	839.25	843.68	843.89	840.83	839.76	839.57	839.52
2	839.20	838.83	839.53	840.10	841.11	839.24	843.41	844.44	840.81	839.86	839.57	839.51
3	839.19	838.82	839.59	839.94	841.02	839.26	843.09	844.61	840.79	839.89	839.57	839.49
4	839.17	838.83	839.64	839.90	840.90	840.13	842.77	844.45	840.77	839.91	839.56	839.47
5	839.14	838.95	839.64	840.24	840.78	843.50	842.41	844.17	840.74	839.92	839.53	839.46
6	839.13	838.94	839.69	840.37	840.66	844.51	842.14	843.84	840.78	839.86	839.49	839.46
7	839.11	838.93	839.72	840.34	840.54	844.71	841.86	843.48	840.77	839.87	839.46	839.44
8	839.10	838.91	839.73	840.26	840.37	844.76	841.68	843.10	840.76	839.85	839.43	839.41
9	839.10	838.90	839.73	840.16	840.21	844.74	841.51	842.70	840.74	839.85	839.39	839.38
10	839.09	838.89	839.89	840.06	840.06	844.68	841.43	842.26	840.76	839.83	839.36	839.36
11	839.08	838.89	839.94	839.96	840.00	844.59	841.41	841.82	840.80	839.80	839.33	839.34
12	839.06	838.88	840.05	839.81	839.95	844.48	841.36	841.36	840.78	839.78	839.30	839.32
13	839.04	838.87	840.14	839.75	839.90	844.36	841.28	841.19	840.82	839.75	839.26	839.30
14	839.05	838.86	840.21	839.70	839.83	844.23	841.26	841.18	840.82	839.71	839.21	839.27
15	839.04	838.86	840.31	839.63	839.76	844.12	841.23	841.07	840.78	839.68	839.19	839.24
16	839.02	838.85	840.41	839.56	839.70	844.02	841.20	840.90	840.73	839.73	839.16	839.24
17	839.05	838.84	840.53	839.63	839.62	843.76	841.18	840.70	840.68	839.74	839.17	839.22
18	839.05	838.91	840.59	840.98	839.55	843.50	841.17	840.61	840.64	839.71	839.12	839.19
19	839.02	839.21	840.61	841.53	839.48	843.21	841.10	840.69	840.57	839.69	839.09	839.19
20	839.03	839.31	840.60	841.71	839.40	842.93	841.10	840.73	840.49	839.65	839.28	839.19
21	838.99	839.35	840.60	841.69	839.30	842.62	841.09	840.74	840.41	839.62	839.27	839.12
22	838.98	839.36	840.56	841.60	839.22	842.32	841.10	840.76	840.35	839.59	839.26	839.09
23	838.96	839.46	840.69	841.52	839.13	842.00	841.27	840.76	840.28	839.48	839.24	839.07
24	838.94	839.49	840.90	841.38	839.10	841.80	842.03	840.74	840.20	839.45	839.32	839.05
25	838.92	839.52	840.88	841.31	839.13	841.62	844.70	840.72	840.10	839.64	839.48	839.02
26	838.95	839.52	840.80	841.60	839.17	841.52	845.18	840.74	840.02	839.68	839.53	839.00
27	838.93	839.54	840.73	841.71	839.18	841.72	845.14	840.74	839.93	839.66	839.54	838.98
28	838.90	839.55	840.64	841.64	839.19	841.75	844.76	840.79	839.85	839.64	839.55	838.96
29	838.89	839.57	840.56	841.55	839.21	843.23	844.32	840.80	839.81	839.64	839.55	838.92
30	838.91	839.55	840.47	841.49	---	843.76	843.88	840.80	839.78	839.61	839.55	838.89
31	838.83	---	840.34	841.36	---	843.87	---	840.85	---	839.59	839.54	---
MAX	839.22	839.57	840.90	841.71	841.23	844.76	845.18	844.61	840.83	839.92	839.57	839.52
MIN	838.83	838.82	839.53	839.56	839.10	839.24	841.09	840.61	839.78	839.45	839.09	838.89
(-)	236,000	242,000	248,000	256,000	239,000	278,000	278,000	252,000	244,000	242,000	242,000	236,000
(=)	-3,000	+6,000	+6,000	+8,000	-17,000	+39,000	0	-26,000	-8,000	-2,000	0	-6,000

CALYR 2003.... +24,000
WTR YR 2004.... -3,000

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

06921325 POMME DE TERRE LAKE NEAR HERMITAGE, MO—Continued



06921350 POMME DE TERRE RIVER NEAR HERMITAGE, MO

LOCATION.--Lat 37°54'22", long 93°19'44", in NW ¼ NW ¼ sec.2, T.36 N., R.22 W., Hickory County, Hydrologic Unit 10290107, on right bank 2,000 ft downstream from outlet of Pomme de Terre Lake, 2.5 mi southwest of Hermitage, 4.5 mi upstream from Green Branch, and at mile 43.4.

DRAINAGE AREA.--615 mi^2.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.-- Water-stage recorder. Datum of gage is 749.33 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Pomme de Terre Lake (06921325), 0.5 mi upstream. U.S. Army Corps of Engineers satellite telemeter at station.

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

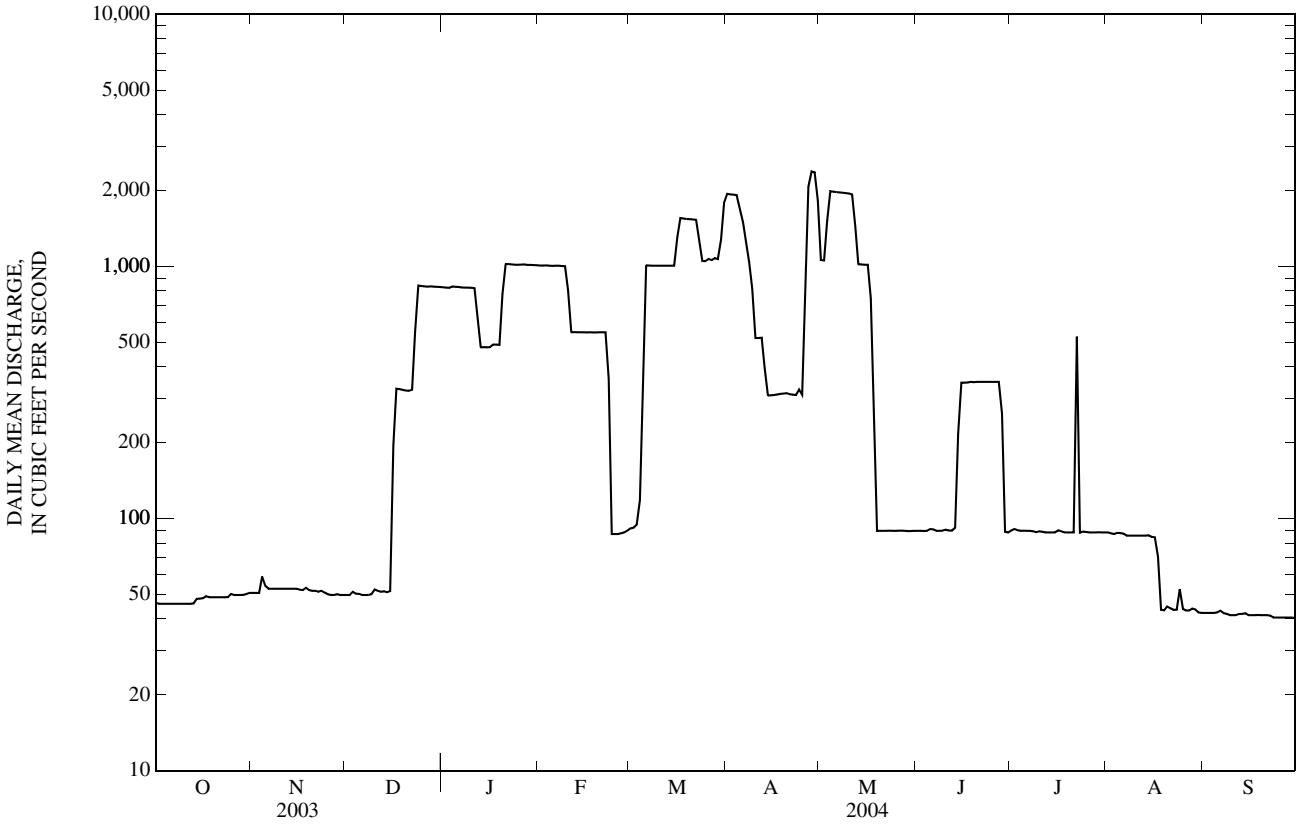
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	51	50	826	1,010	91	1,940	1,060	89	90	88	42
2	46	51	50	824	1,010	92	1,930	1,060	89	91	87	42
3	46	51	51	824	1,010	95	1,930	1,510	89	90	87	42
4	46	59	50	832	1,010	118	1,920	1,990	89	89	88	42
5	46	54	50	830	1,010	408	1,690	1,980	91	90	88	42
6	46	53	50	829	1,010	1,010	1,500	1,970	91	89	87	43
7	46	53	50	826	1,010	1,010	1,260	1,970	89	89	86	42
8	46	53	50	824	1,000	1,010	1,040	1,960	89	89	86	42
9	46	53	50	824	1,000	1,010	816	1,950	90	88	86	41
10	46	53	52	823	802	1,010	520	1,950	90	89	86	41
11	46	53	52	821	549	1,010	520	1,930	90	89	86	41
12	46	53	51	638	549	1,010	522	1,440	90	88	86	42
13	46	53	51	478	549	1,010	394	1,020	92	88	86	42
14	48	53	51	478	548	1,010	308	1,020	217	88	86	42
15	48	53	52	478	548	1,010	308	1,020	346	88	85	41
16	48	52	196	479	548	1,310	309	1,020	346	90	84	41
17	49	52	327	490	548	1,560	310	749	347	89	71	41
18	49	53	326	490	547	1,550	312	270	349	88	44	41
19	49	52	324	488	547	1,540	313	89	347	88	43	41
20	49	52	322	778	548	1,540	314	89	348	88	45	41
21	49	52	321	1,020	549	1,540	311	89	348	88	44	41
22	49	51	324	1,020	549	1,530	310	89	349	526	43	41
23	49	52	552	1,020	357	1,280	309	90	349	88	43	40
24	49	51	840	1,020	87	1,050	325	89	349	89	52	40
25	50	50	837	1,020	87	1,050	309	89	349	88	44	40
26	50	50	834	1,020	87	1,070	934	89	349	88	43	40
27	50	50	832	1,020	87	1,060	2,080	90	349	88	43	40
28	50	50	833	1,010	88	1,080	2,380	89	261	88	44	40
29	50	50	832	1,010	90	1,070	2,370	89	89	88	44	40
30	50	50	831	1,010	---	1,280	1,820	89	88	88	42	40
31	51	---	828	1,010	---	1,790	---	89	---	88	42	---
MEAN	47.9	52.1	326	808	598	1,039	977	872	212	103	66.7	41.1
MAX	51	59	840	1,020	1,010	1,790	2,380	1,990	349	526	88	43
MIN	46	50	50	478	87	91	308	89	88	88	42	40
IN.	0.09	0.09	0.61	1.52	1.05	1.95	1.77	1.63	0.38	0.19	0.13	0.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	315	524	604	499	567	854	844	903	625	345	117	129
MAX	3,116	2,872	2,886	2,042	2,100	3,487	2,948	4,799	2,397	2,349	480	1,110
(WY)	(1994)	(1987)	(1986)	(1993)	(1975)	(1985)	(1984)	(1961)	(2002)	(1995)	(1978)	(1993)
MIN	13.1	7.50	20.5	20.4	21.5	24.6	26.8	26.4	31.9	26.0	18.6	1.27
(WY)	(1969)	(1977)	(1963)	(1962)	(1963)	(1963)	(1963)	(1963)	(1969)	(1970)	(1961)	(1960)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL MEAN	201		429		527	
HIGHEST ANNUAL MEAN					1,163	1973
LOWEST ANNUAL MEAN					67.8	1963
HIGHEST DAILY MEAN	1,910	May 8	2,380	Apr 28	9,000	May 9, 1961
LOWEST DAILY MEAN	44	Sep 8-10	40	Sep 23-30	0.00	1960,1971,1977
ANNUAL SEVEN-DAY MINIMUM	45	Sep 4	40	Sep 23	0.00	Mar 9, 1971
MAXIMUM PEAK FLOW	---		2,420	Apr 27	5,910	May 5, 1970
MAXIMUM PEAK STAGE	---		8.03	Apr 27	12.15	May 5, 1970
INSTANTANEOUS LOW FLOW	---		40	Sep 22-30	0.00	1960,1971,1977
ANNUAL RUNOFF (INCHES)	4.43		9.49		11.64	
10 PERCENT EXCEEDS	583		1,060		1,910	
50 PERCENT EXCEEDS	52		89		103	
90 PERCENT EXCEEDS	46		43		44	

06921350 POMME DE TERRE RIVER NEAR HERMITAGE, MO—Continued



06921582 SOUTH GRAND RIVER BELOW FREEMAN, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 38°35'20", long 94°26'30", in NW $^1/_4$ NW $^1/_4$ NE $^1/_4$ sec.27, T.44N., R.32 W., Cass County, Hydrologic Unit 10290108, on the left bank on upstream side of bridge on gravel road, approximately 2 mi south of State Highway 2, approximately 6.1 mi southwest of Harrisonville, and 4 mi southeast of Freeman.

DRAINAGE AREA.--150 mi^2.

PERIOD OF RECORD.--October 1997 to current year. October 1998 to September 2000 published as South Grand River at Grand River Church (06921881).

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
10...	1225	Environmental	2.9	7.8	66	8.1	1,060	7.5	380	115	23.3	8.57
JAN												
13...	1145	Environmental	8.3	15.2	107	8.4	624	1.0	--	--	--	--
MAR												
10...	1140	Environmental	107	10.5	91	8.1	467	9.0	--	--	--	--
MAY												
07...	1030	Environmental	24	7.1	80	8.2	532	21.0	230	81.1	7.82	3.01
JUL												
20...	1155	Environmental	17	5.6	70	7.9	424	26.5	--	--	--	--
20...	1200	Blank	--	--	--	--	--	--	--	--	--	--
SEP												
22...	1250	Environmental	18	6.4	74	8.0	400	21.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
10...	91.3	175	177	216	<1	22.4	0.3	208	697	11	0.63	E.03n	<0.06
JAN													
13...	--	217	219	258	4	--	--	--	--	<10	0.29	<0.04	1.58
MAR													
10...	--	177	176	215	<1	--	--	--	--	44	0.61	0.04	1.91
MAY													
07...	16.6	182	182	222	<1	18.7	0.2	39.2	312	30	0.53	--p	--p
JUL													
20...	--	138	136	166	<1	--	--	--	--	44d	0.72	<0.04	0.51
20...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
SEP													
22...	--	128	131	160	<1	--	--	--	--	60	0.70	<0.04	0.82

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
10...	<0.008	0.03	E.04n	0.09	31k	77	58	3	236	1.5	0.04	0.07	1.7
JAN													
13...	E.004n	0.09	0.10	0.13	2k	8k	43	--	--	--	--	--	--
MAR													
10...	0.017	0.05	0.06	0.13	27k	100k	160k	--	--	--	--	--	--
MAY													
07...	--p	--p	--p	0.11	--u	220	180	E1n	487	1.5	E.02n	0.05c	1.6
JUL													
20...	0.013	0.05	0.07	0.17	140k	240	200	--	--	--	--	--	--
20...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
SEP													
22...	0.013	0.11	0.12	0.23	320	670	720	--	--	--	--	--	--

06921582 SOUTH GRAND RIVER BELOW FREEMAN, 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)	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								
10...	14	<0.08	0.41	198	<0.02	1.1	M	3
JAN								
13...	--	--	--	--	--	--	--	--
MAR								
10...	--	--	--	--	--	--	--	--
MAY								
07...	E4n	<0.08	0.82	64.9	<0.02	0.6	M	3
JUL								
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
SEP								
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

Null value qualifier codes used in this table:
p -- Sample discarded: improper preservation
u -- Unable to determine-matrix interference

06921760 SOUTH GRAND RIVER NEAR CLINTON, MO

LOCATION.--Lat 38°22'12", long 93°51'29", in NW ¼ SW ¼ SE ¼ sec.1, T.4l N., R.27 W., Henry County, Hydrologic Unit 10290108, at right upstream end of bridge on State Highway 18, 4.4 mi west of Clinton, and 5.4 mi downstream from Big Creek.

DRAINAGE AREA.--1,270 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder 3.3 mi upstream from base gage at same datum.

REMARKS.--Discharge is calculated using fall computations due to backwater from Harry S. Truman Reservoir. Records poor. U.S. Army Corps of Engineers satellite telemeter at base and auxiliary gage.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	38	84	609	300	367	2,110	392	658	432	761	222
2	55	37	78	535	296	380	1,410	452	478	364	539	182
3	59	38	81	489	289	380	1,080	474	354	516	388	154
4	61	39	80	463	280	1,000	873	407	285	618	e415	136
5	56	32	84	730	270	6,630	691	341	248	611	e600	124
6	62	33	95	588	273	17,700	556	297	246	824	e478	121
7	59	33	106	396	268	11,600	476	257	234	520	e343	194
8	55	34	109	320	265	4,780	421	229	206	503	e229	205
9	54	34	163	287	284	1,920	416	208	189	405	e180	170
10	54	34	2,450	267	291	1,260	381	191	854	302	148	147
11	52	33	2,700	254	299	914	354	178	3,530	238	132	126
12	45	32	e1,500	254	320	687	353	171	3,370	201	117	108
13	41	30	e1,000	238	385	532	332	198	2,360	234	104	94
14	36	34	e600	218	361	415	306	408	1,930	e210	90	84
15	34	34	e580	217	328	391	278	480	1,260	e200	80	e76
16	33	33	1,330	235	356	569	255	383	1,170	200	70	69
17	30	44	1,420	638	370	879	237	318	1,650	847	67	69
18	30	248	1,040	3,180	448	692	224	274	2,470	1,040	106	391
19	36	635	915	3,600	850	521	210	2,650	3,940	699	154	4,020
20	38	369	864	1,690	1,300	430	205	17,900	4,010	449	131	6,290
21	42	219	691	973	1,200	366	837	29,300	1,850	306	99	2,690
22	35	153	574	771	948	313	1,210	17,000	1,150	233	80	1,420
23	32	125	1,760	640	764	303	709	7,530	804	e677	73	882
24	44	109	1,940	568	640	416	1,060	3,460	561	e2,760	724	575
25	38	115	1,130	537	554	427	2,450	2,560	402	e15,000	3,000	359
26	37	124	782	534	479	377	1,660	2,970	314	e21,000	1,950	223
27	41	114	606	517	426	364	985	2,150	502	14,600	1,240	168
28	39	102	1,000	468	390	1,740	681	2,200	2,120	5,920	716	139
29	40	93	1,480	429	366	7,920	506	2,180	1,220	2,100	479	123
30	42	91	1,040	372	---	9,660	405	1,380	608	1,390	411	111
31	36	---	756	319	---	4,500	---	939	---	1,020	290	---
MEAN	44.3	103	872	688	469	2,530	722	3,157	1,299	2,401	458	656
MAX	62	635	2,700	3,600	1,300	17,700	2,450	29,300	4,010	21,000	3,000	6,290
MIN	30	30	78	217	265	303	205	171	189	200	67	69
IN.	0.04	0.09	0.79	0.62	0.40	2.30	0.63	2.87	1.14	2.18	0.42	0.58

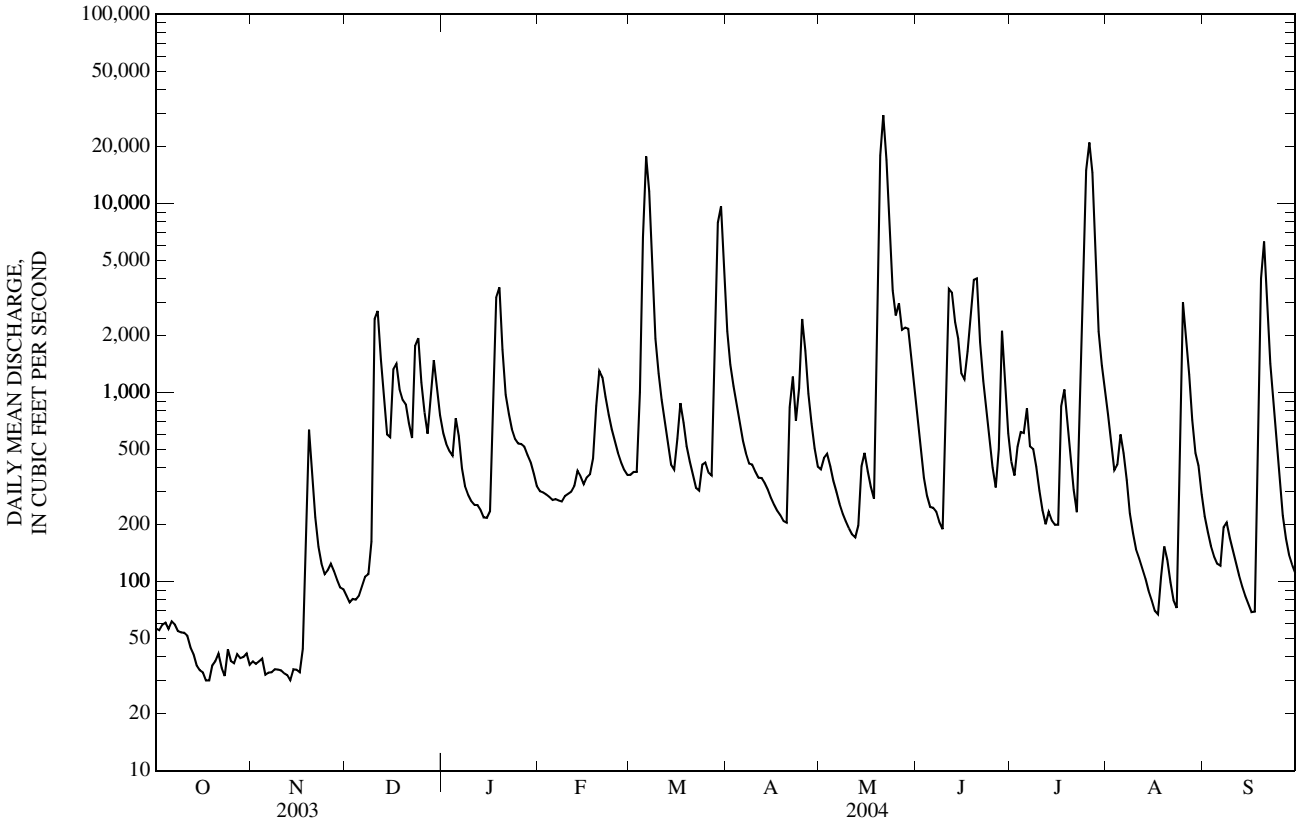
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)

MEAN	812	1,030	871	565	999	1,195	1,792	2,812	1,991	1,294	232	760
MAX	8,670	4,031	4,455	2,815	5,191	4,000	5,186	8,536	10,840	10,610	866	3,861
(WY)	(1999)	(1993)	(1993)	(1993)	(1997)	(1998)	(1994)	(1995)	(2001)	(1993)	(1993)	(1998)
MIN	13.1	18.5	11.5	26.9	47.0	44.5	87.5	158	81.7	69.6	18.8	14.6
(WY)	(2001)	(2003)	(2001)	(2003)	(2003)	(1996)	(2003)	(1992)	(1992)	(2003)	(1999)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004	
ANNUAL MEAN	215		1,125		1,215	
HIGHEST ANNUAL MEAN					2,996	1993
LOWEST ANNUAL MEAN					134	2003
HIGHEST DAILY MEAN	3,060	May 11	29,300	May 21	45,500	Jul 8, 1993
LOWEST DAILY MEAN	12	Aug 25	30	Oct 17	8.0	Oct 28,Nov 23, 2000
ANNUAL SEVEN-DAY MINIMUM	14	Aug 22	33	Nov 7	9.3	Oct 22, 2000
MAXIMUM PEAK FLOW	---		30,900	May 21	47,800	Jul 8, 1993
MAXIMUM PEAK STAGE	---		21.39	May 21	--	
ANNUAL RUNOFF (INCHES)	2.30		12.06		13.00	
10 PERCENT EXCEEDS	615		2,190		2,620	
50 PERCENT EXCEEDS	61		378		208	
90 PERCENT EXCEEDS	24		45		30	

e Estimate

06921760 SOUTH GRAND RIVER NEAR CLINTON, MO—Continued



06922440 HARRY S. TRUMAN RESERVOIR AT WARSAW, MO

LOCATION.-- Lat 38°15'24", long 93°23'43", in NW ¼ NE ¼ sec.7, T.40 N., R.22 W., Benton County, Hydrologic Unit 10290105, in control room near middle of dam on Osage River, 1.5 mi northwest of Warsaw, and at mile 175.

DRAINAGE AREA.--11,500 mi^2, with 7,856 mi^2 uncontrolled area below other reservoirs.

PERIOD OF RECORD.--October 1981 to current year. Records collected at same site since 1977 available from U.S. Army Corps of Engineers.

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

REMARKS.--Lake is formed by a rolled earthfill type dam. Storage began on July 21, 1977. Spillway is equipped with 4 tainter gates 40 ft wide by 47.3 ft high. Capacity of surcharge pool 2,911,000 ac-ft (elevation 739.6 ft to 751.1 ft); of flood control pool 4,006,000 ac-ft (elevation 706.0 ft to 739.6 ft); and of multipurpose pool 1,203,000 ac-ft (elevation 635.0 ft to 706.0). Lake is used for flood control, power, recreation, and fish and wildlife enhancement. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,020,000 ac-ft, Oct. 11, 12, 1986, elevation, 738.69 ft, Oct. 11, 1986; minimum, 41,700 ac-ft, Nov. 14, 1978, elevation, 661.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,870,000 ac-ft, March 14, elevation, 715.78 ft; minimum, 1,164,000 ac-ft, Nov. 8, elevation, 705.70 ft.

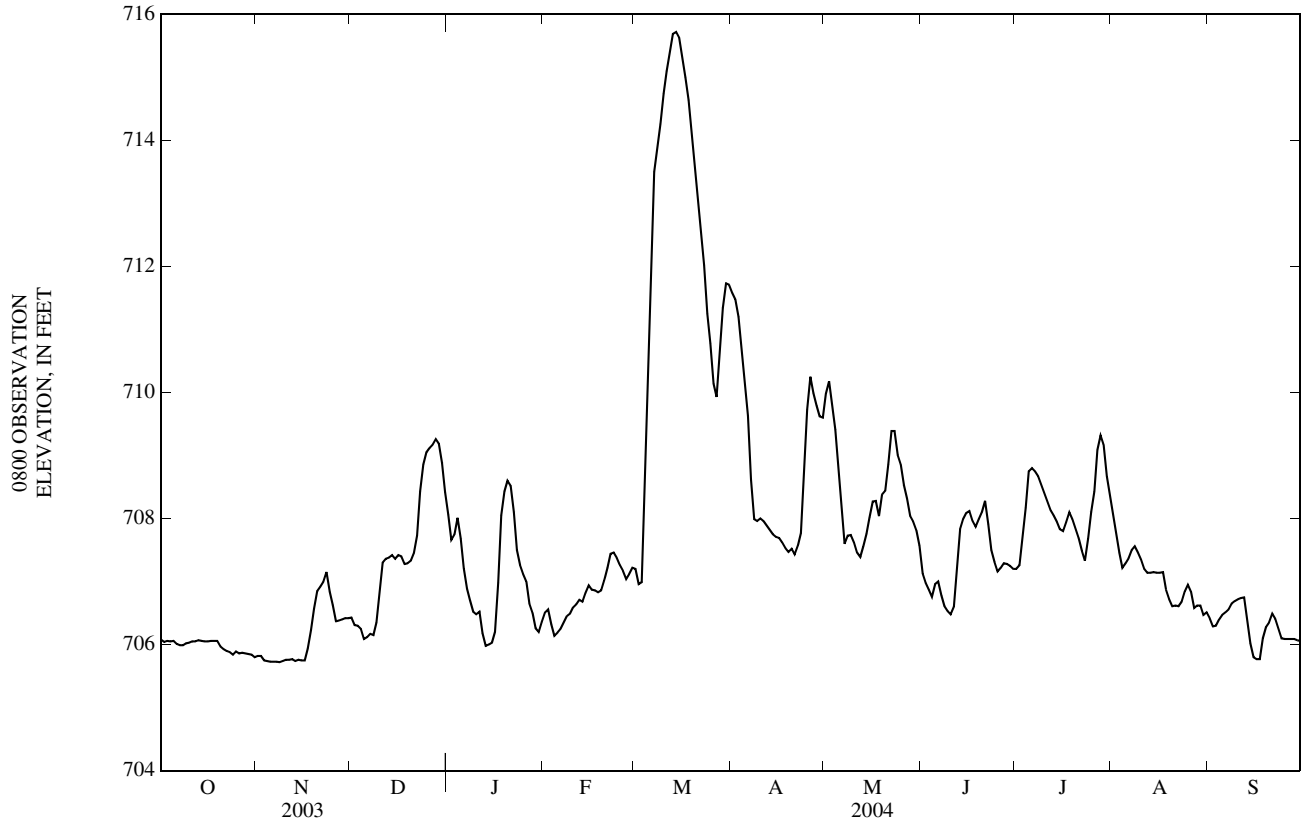
ELEVATION, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
OBSERVATION AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	706.07	705.81	706.42	708.32	706.41	707.23	711.71	709.66	707.47	707.24	708.42	706.51
2	706.07	705.82	706.42	707.97	706.50	707.08	711.55	710.06	707.13	707.22	708.16	706.43
3	706.06	705.82	706.33	707.66	706.42	706.96	711.46	710.10	706.99	707.42	707.83	706.34
4	706.06	705.82	706.30	707.86	706.16	707.11	711.11	709.72	706.87	707.95	707.51	706.32
5	706.06	705.72	706.20	707.84	706.16	710.01	710.57	709.43	706.76	708.35	707.22	706.41
6	706.06	705.73	706.08	707.48	706.18	711.64	709.98	708.65	707.01	708.95	707.32	706.52
7	705.99	705.73	706.14	707.07	706.28	712.96	709.24	708.65	707.02	708.94	707.40	706.52
8	705.99	705.71	706.17	706.72	706.38	713.66	708.41	707.69	706.78	708.86	707.54	706.60
9	706.01	705.71	706.15	706.57	706.53	714.04	707.96	707.77	706.62	708.79	707.58	706.66
10	706.02	705.73	706.58	706.50	706.51	714.43	707.93	707.76	706.55	708.60	707.46	706.70
11	706.03	705.74	707.00	706.46	706.68	714.92	707.99	707.68	706.48	708.45	707.34	706.74
12	706.05	705.76	707.19	706.38	706.67	715.24	707.88	707.43	706.74	708.33	707.19	706.75
13	706.04	705.76	707.33	706.15	706.64	715.54	707.84	707.52	707.48	708.19	707.14	706.75
14	706.10	705.75	707.43	706.05	706.74	715.76	707.79	707.71	708.04	708.06	707.14	706.37
15	706.06	705.75	707.34	705.97	706.86	715.68	707.80	707.92	708.14	707.97	707.14	705.99
16	706.07	705.75	707.49	706.04	706.84	715.56	707.70	708.03	708.23	707.88	707.14	705.77
17	706.07	705.75	707.37	706.33	706.83	715.26	707.66	708.40	708.21	707.84	707.16	705.75
18	706.06	706.03	707.32	707.38	706.76	714.93	707.58	708.36	708.10	708.00	707.13	705.87
19	706.06	706.33	707.23	708.33	706.73	714.49	707.52	708.17	708.02	708.14	706.84	706.15
20	706.08	706.69	707.26	708.40	706.97	714.10	707.47	708.55	708.11	708.05	706.73	706.15
21	705.95	706.91	707.37	708.57	707.10	713.54	707.50	708.59	708.31	707.86	706.59	706.44
22	705.92	706.93	707.38	708.43	707.29	712.91	707.44	709.19	708.33	707.70	706.62	706.55
23	705.89	707.09	708.07	707.97	707.42	712.32	707.62	709.56	707.85	707.50	706.62	706.43
24	705.86	707.03	708.59	707.47	707.38	712.02	708.01	709.33	707.55	707.33	706.77	706.24
25	705.84	706.74	708.88	707.26	707.29	711.25	709.12	709.11	707.34	707.82	706.84	706.11
26	705.87	706.50	709.11	707.03	707.20	710.63	710.03	708.83	707.18	708.29	706.95	706.09
27	705.89	706.34	709.16	706.85	706.98	709.98	710.25	708.63	707.25	708.77	706.84	706.09
28	705.88	706.42	709.19	706.50	707.05	709.96	709.93	708.36	707.35	709.36	706.58	706.08
29	705.85	706.41	709.34	706.39	707.14	710.76	709.70	708.36	707.24	709.36	706.62	706.09
30	705.86	706.43	709.15	706.21	---	711.53	709.59	708.00	707.32	709.06	706.62	706.05
31	705.81	---	708.82	706.24	---	711.71	---	707.83	---	708.68	706.47	---
MAX	706.10	707.09	709.34	708.57	707.42	715.76	711.71	710.10	708.33	709.36	708.42	706.75
MIN	705.81	705.71	706.08	705.97	706.16	706.96	707.44	707.43	706.48	707.22	706.47	705.75
(-)	1,170,000	1,200,000	1,320,000	1,200,000	1,250,000	1,550,000	1,400,000	1,270,000	1,250,000	1,320,000	1,210,000	1,180,000
(=)	-10,000	+30,000	+120,000	-120,000	+50,000	+300,000	-150,000	-130,000	-20,000	+70,000	-110,000	-30,000

CALYR 2003....+170,000
WTR YR 2004.... 0

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

06922440 HARRY S. TRUMAN RESERVOIR AT WARSAW, MO—Continued



06923700 NIANGUA RIVER BELOW BENNETT SPRINGS, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°44'17", long 92°51'37", in NE ¼ SE ¼ SE ¼ sec.25, T.35 N., R.18 W., Dallas County, Hydrologic Unit 10290110, at bridge on Highway 64, 1,200 ft downstream from inflow of Bennett Spring Branch.

DRAINAGE AREA.--4,370 mi^2.

PERIOD OF RECORD.--October 1983 to September 1988, July 1991 to current year.

REMARKS.--Ambient Water-Quality Monitoring Network station October 1983 to September 1988, November 1993 to current year. Special project station July 1991 to October 1995.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
25...	1000	Environmental	280	11.9	107	8.0	379	9.3	200	40.8	23.7	2.06
JAN												
22...	1500	Environmental	510	12.1	103	7.8	296	7.5	--	--	--	--
MAR												
11...	1030	Environmental	534	9.8	91	7.5	295	11.0	--	--	--	--
MAY												
24...	1200	Environmental	627	10.8	120	7.7	342	18.9	190	38.9	22.8	1.93
JUL												
07...	1240	Environmental	179	9.8	112	7.5	357	20.3	--	--	--	--
07...	1241	Replicate	--	--	--	--	--	--	--	--	--	--
SEP												
21...	0950	Environmental	113	14.3	147	7.2	384	15.4	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
25...	3.81	182	181	221	<1	7.51	<0.2	7.1	212	<10	0.19	E.03n	0.84
JAN													
22...	--	135	135	165	<1	--	--	--	--	<10	0.23	<0.04	1.37
MAR													
11...	--	121	121	147	<1	--	--	--	--	56	0.26	<0.04	1.22
MAY													
24...	3.70	114	116	142	<1	7.19	<0.2	4.1	196	<10	0.16	<0.04	0.65
JUL													
07...	--	175	174	213	<1	--	--	--	--	<10	0.20	<0.04	0.72
07...	--	--	--	--	--	--	--	--	--	<10	0.23	<0.04	0.73
SEP													
21...	--	187	190	232	<1	--	--	--	--	<10	0.15	<0.04	0.88

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
25...	<0.008	E.02n	E.03n	E.04n	100	110k	165	E1n	67	0.3	<0.04	<0.04	0.4
JAN													
22...	<0.008	0.03	E.03n	0.04	8k	52	60	--	--	--	--	--	--
MAR													
11...	<0.008	<0.02	E.02n	0.04	35	47	61	--	--	--	--	--	--
MAY													
24...	0.012	<0.04d	E.03n	E.03n	17k	54	46	2	60	0.4	<0.04	<0.04	1.2
JUL													
07...	E.004n	0.02	E.03n	0.05	26	44	21	--	--	--	--	--	--
07...	E.004n	0.02	E.03n	0.05	23	42	20	--	--	--	--	--	--
SEP													
21...	<0.008	E.01n	E.02n	<0.04	34	54	58	--	--	--	--	--	--

06923700 NIANGUA RIVER BELOW BENNETT SPRINGS, 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)	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								
25...	34	<0.08	0.16	8.9	<0.02	<0.4	1	<2
JAN								
22...	--	--	--	--	--	--	--	--
MAR								
11...	--	--	--	--	--	--	--	--
MAY								
24...	<6	<0.08	0.29	7.5	<0.02	<0.4	Mn	<2
JUL								
07...	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--
SEP								
21...	--	--	--	--	--	--	--	--

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

06923950 NIANGUA RIVER AT TUNNEL DAM NEAR MACKS CREEK, MO

LOCATION.--Lat 37°56'13", long 92°51'05", in SE ¼ SW ¼ SW ¼ sec.19, T.37 N., R.17 W., Camden County, Hydrologic Unit 10290110, at left end of concrete structure on top of Tunnel Dam, 6.5 mi southeast of Macks Creek.

DRAINAGE AREA.--598 mi^2.

PERIOD OF RECORD.--September 1995 to current year.

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

REMARKS.--No estimated daily discharges. Records good. Diversion upstream through tunnel for power generation. 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	181	178	226	117	312	125	437	865	326	209	250	135
2	177	184	105	134	287	124	377	1,570	306	293	249	88
3	178	198	172	141	317	116	253	1,400	290	293	244	87
4	176	195	123	383	340	2,110	241	812	277	325	218	218
5	173	196	73	1,420	331	7,990	355	507	267	408	196	210
6	171	223	115	1,210	299	5,280	295	303	294	406	174	196
7	169	234	153	373	271	2,310	301	295	276	323	161	193
8	169	230	142	323	236	1,240	271	387	280	215	153	183
9	180	228	133	206	198	674	242	307	303	215	147	175
10	177	226	184	215	176	465	225	279	286	216	144	168
11	173	224	339	205	170	309	219	268	279	203	149	161
12	168	217	612	144	175	212	227	221	279	168	147	156
13	167	209	461	128	200	222	249	281	313	155	142	154
14	175	207	355	196	250	248	190	381	316	156	141	153
15	172	203	299	150	229	228	179	387	310	151	138	147
16	174	203	326	129	213	220	221	338	366	183	135	156
17	187	210	572	436	195	207	219	282	308	171	162	151
18	187	252	515	3,100	176	232	200	313	282	159	168	145
19	188	323	344	2,610	163	198	174	444	265	156	153	140
20	189	985	230	889	174	217	169	422	248	151	169	139
21	184	314	150	603	200	250	173	400	246	148	151	137
22	182	182	148	506	189	222	201	379	257	143	153	135
23	179	244	343	381	175	216	335	364	246	143	174	134
24	179	208	687	303	163	207	1,550	369	233	155	496	133
25	189	215	465	304	151	275	5,420	362	222	170	569	132
26	181	227	199	462	139	328	3,020	375	212	155	171	130
27	174	191	255	656	129	475	1,220	375	206	146	153	130
28	173	153	179	438	120	616	548	389	203	146	82	130
29	175	118	185	355	126	1,150	542	391	196	147	147	131
30	173	101	225	406	---	1,340	352	371	201	161	522	131
31	167	---	158	366	---	767	---	346	---	202	315	---
MEAN	177	236	273	558	210	922	614	458	270	202	206	149
MAX	189	985	687	3,100	340	7,990	5,420	1,570	366	408	569	218
MIN	167	101	73	117	120	116	169	221	196	143	82	87
IN.	0.34	0.44	0.53	1.08	0.38	1.78	1.14	0.88	0.50	0.39	0.40	0.28

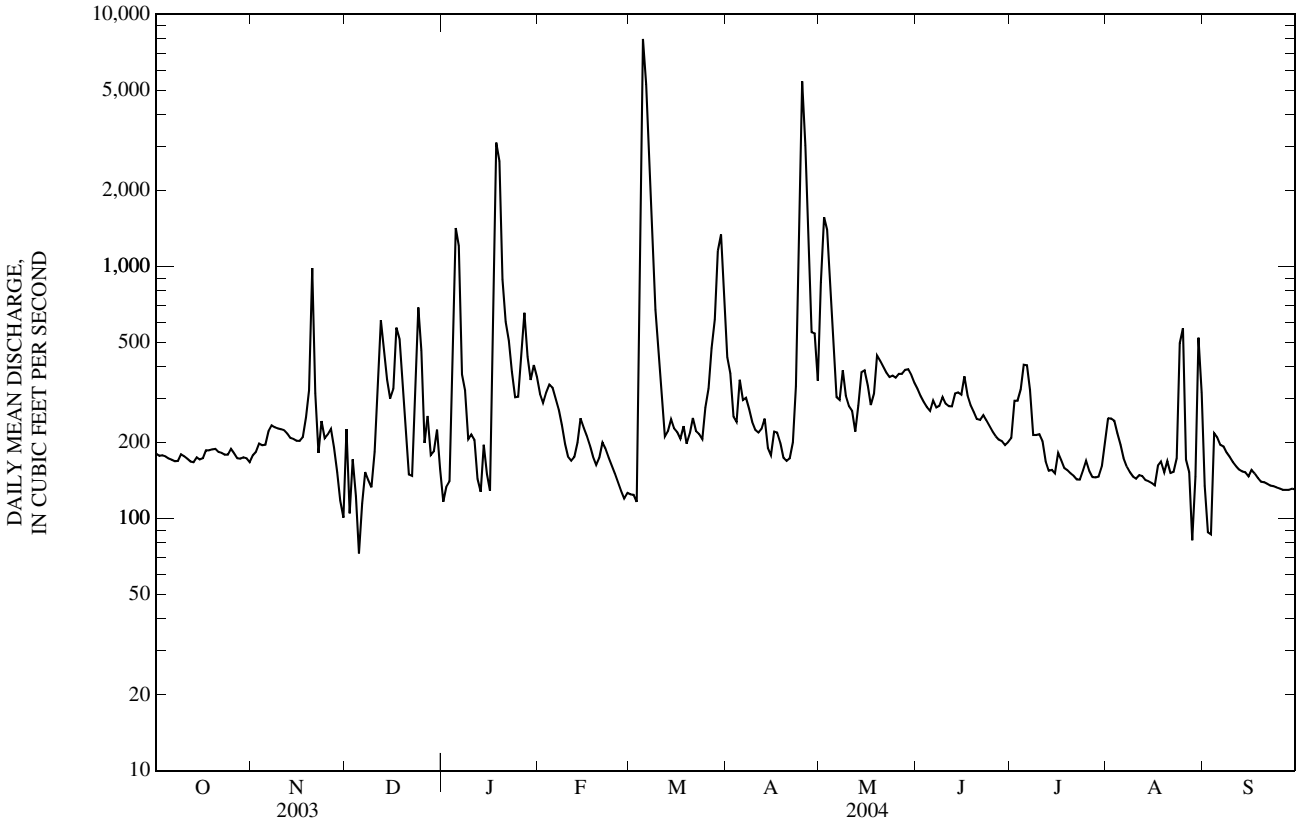
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	214	315	256	226	425	546	570	780	245	173	172	182
MAX	492	1,345	535	558	845	1,458	1,696	2,819	370	248	385	462
(WY)	(1999)	(1997)	(2002)	(2004)	(2001)	(1998)	(1999)	(2002)	(1999)	(2001)	(1997)	(1996)
MIN	59.8	66.8	130	56.9	39.2	47.9	106	28.1	55.4	54.8	43.9	110
(WY)	(1998)	(1998)	(1998)	(1997)	(1996)	(1996)	(2000)	(1997)	(1996)	(1997)	(1996)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL MEAN	242		357		345	
HIGHEST ANNUAL MEAN					555	1999
LOWEST ANNUAL MEAN					143	2000
HIGHEST DAILY MEAN	1,510	Jun 27	7,990	Mar 5	14,500	Nov 8, 1996
LOWEST DAILY MEAN	72	Aug 9	73	Dec 5	0.00	Oct 18, 1997
ANNUAL SEVEN-DAY MINIMUM	126	Dec 2	126	Feb 26	8.1	Sep 25, 1997
MAXIMUM PEAK FLOW	---		8,760	Mar 5	15,200[a]	Nov 8, 1996
MAXIMUM PEAK STAGE	---		10.53	Mar 5	14.19	Nov 8, 1996
INSTANTANEOUS LOW FLOW	---		46	Aug 29	0.00	Oct 18, 1997
ANNUAL RUNOFF (INCHES)	5.50		8.14		7.83	
10 PERCENT EXCEEDS	401		499		520	
50 PERCENT EXCEEDS	193		212		175	
90 PERCENT EXCEEDS	148		141		66	

[a] From rating extended above 10,500 ft^3/s.

06923950 NIANGUA RIVER AT TUNNEL DAM NEAR MACKS CREEK, MO—Continued



06925500 LAKE OF THE OZARKS NEAR BAGNELL, MO

LOCATION.--Lat 38°12'19", long 92°37'21", in SE $\frac{1}{4}$ sec.19, T.40 N., R.15 W., Miller County, Hydrologic Unit 10290111, at left end of powerhouse section near left end of Bagnell Dam on Osage River, 2 mi southwest of Bagnell, and at mile 81.7.

DRAINAGE AREA.--14,000 mi^2.

PERIOD OF RECORD.--April 1931 to current year. Gage-height records collected at same site since 1932 are in reports of the National Weather Service, published as "Osage River at Bagnell Dam, Lakeside".

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. To obtain National Geodetic Vertical Datum of 1929, subtract 0.88 ft.

REMARKS.--Lake is formed by concrete gravity dam. Spillway is equipped with 12 tainter gates 34 ft wide by 22 ft high. Storage began in 1931. Usable capacity 1,218,000 ac-ft between elevation 630.00 ft (maximum draw-down) and 660.00 ft (top of gates). Dead storage, 708,800 ac-ft. Figures given herein are usable contents. Lake is used for flood control, power, and recreational purposes.

COOPERATION.--Records furnished by the AmerenUE of Missouri.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,527,000 ac-ft, May 22, 1943, elevation, 665.45 ft; minimum, 322,100 ac-ft, Feb. 13, 1948, elevation, 639.95 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,215,000 ac-ft, June 20, elevation, 659.94 ft; minimum, 912,000 ac-ft, March 21, elevation, 654.32 ft.

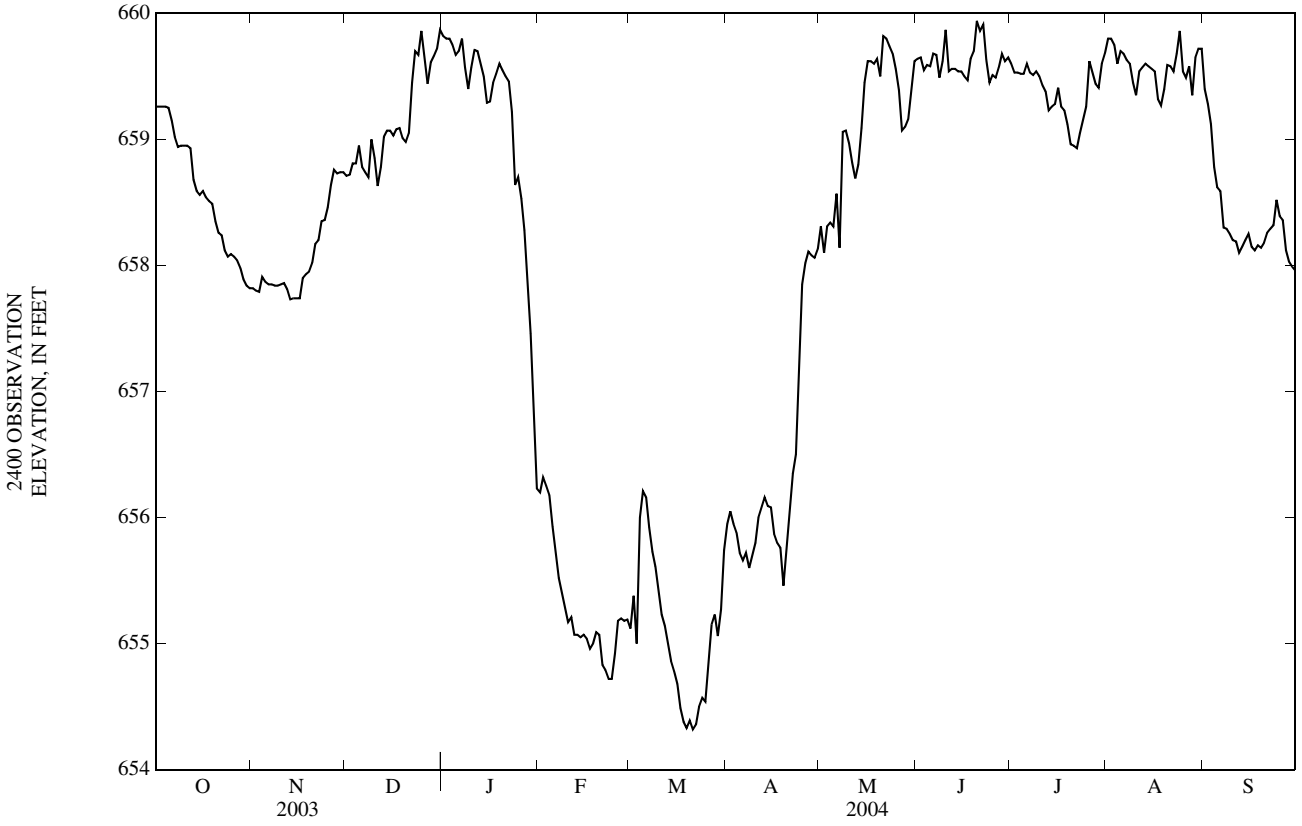
ELEVATION, IN FEET, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
OBSERVATION AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	659.26	657.82	658.71	659.82	656.20	655.12	655.95	658.31	659.64	659.60	659.80	659.40
2	659.26	657.80	658.72	659.80	656.32	655.38	656.05	658.10	659.65	659.53	659.80	659.28
3	659.26	657.79	658.81	659.80	656.25	655.00	655.95	658.31	659.55	659.53	659.75	659.12
4	659.26	657.91	658.81	659.75	656.18	656.00	655.88	658.34	659.59	659.52	659.60	658.78
5	659.25	657.87	658.95	659.67	655.93	656.21	655.72	658.31	659.58	659.52	659.70	658.62
6	659.15	657.85	658.78	659.70	655.74	656.16	655.66	658.57	659.68	659.60	659.68	658.59
7	659.02	657.85	658.74	659.80	655.52	655.92	655.72	658.14	659.67	659.53	659.63	658.30
8	658.94	657.84	658.70	659.57	655.40	655.73	655.60	659.06	659.49	659.51	659.60	658.29
9	658.95	657.84	659.00	659.40	655.28	655.61	655.70	659.07	659.62	659.54	659.45	658.25
10	658.95	657.85	658.85	659.57	655.17	655.41	655.80	658.97	659.87	659.50	659.35	658.20
11	658.95	657.86	658.63	659.71	655.21	655.23	656.00	658.82	659.54	659.43	659.54	658.19
12	658.93	657.81	658.78	659.70	655.07	655.14	656.08	658.69	659.56	659.38	659.57	658.10
13	658.68	657.73	659.02	659.60	655.07	655.01	656.16	658.80	659.56	659.23	659.60	658.15
14	658.59	657.74	659.07	659.50	655.05	654.86	656.09	659.09	659.54	659.26	659.58	658.20
15	658.56	657.74	659.07	659.29	655.07	654.78	656.08	659.45	659.54	659.28	659.56	658.25
16	658.59	657.74	659.03	659.30	655.04	654.68	655.87	659.62	659.50	659.41	659.54	658.15
17	658.54	657.90	659.08	659.45	654.96	654.49	655.80	659.62	659.47	659.26	659.32	658.12
18	658.51	657.93	659.09	659.52	655.00	654.38	655.76	659.60	659.64	659.23	659.27	658.16
19	658.49	657.95	659.01	659.60	655.09	654.33	655.46	659.64	659.70	659.12	659.40	658.14
20	658.35	658.02	658.98	659.55	655.07	654.39	655.76	659.50	659.94	658.96	659.59	658.18
21	658.26	658.17	659.05	659.50	654.83	654.32	656.06	659.82	659.86	658.95	659.58	658.26
22	658.24	658.20	659.45	659.46	654.79	654.36	656.35	659.80	659.91	658.93	659.54	658.29
23	658.12	658.35	659.70	659.22	654.72	654.50	656.50	659.74	659.63	659.05	659.68	658.32
24	658.07	658.36	659.67	658.64	654.72	654.57	657.19	659.68	659.45	659.16	659.86	658.52
25	658.09	658.46	659.86	658.70	654.92	654.54	657.85	659.56	659.51	659.26	659.54	658.39
26	658.07	658.64	659.64	658.53	655.18	654.85	658.02	659.39	659.49	659.62	659.49	658.36
27	658.04	658.76	659.44	658.28	655.20	655.15	658.11	659.07	659.57	659.53	659.58	658.12
28	657.98	658.73	659.61	657.82	655.18	655.23	658.08	659.10	659.68	659.44	659.35	658.03
29	657.89	658.74	659.66	657.46	655.19	655.06	658.06	659.16	659.62	659.41	659.65	657.99
30	657.84	658.74	659.72	656.82	---	655.27	658.13	659.38	659.65	659.60	659.72	657.96
31	657.82	---	659.87	656.23	---	655.74	---	659.62	---	659.68	659.72	---
MEAN	658.58	658.07	659.15	659.12	655.29	655.08	656.38	659.11	659.62	659.37	659.58	658.36
MAX	659.26	658.76	659.87	659.82	656.32	656.21	658.13	659.82	659.94	659.68	659.86	659.40
MIN	657.82	657.73	658.63	656.23	654.72	654.32	655.46	658.10	659.45	658.93	659.27	657.96
(-)	1,094,000	1,146,000	1,210,000	1,010,000	955,000	984,000	1,111,000	1,200,000	1,200,000	1,200,000	1,202,000	1,102,000
(=)	-83,000	+52,000	+64,000	-200,000	-55,000	+29,000	+127,000	+89,000	0	0	+2,000	-100,000

CALYR 2003.... +189,000
WTR YR 2004.... -75,000

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

06925500 LAKE OF THE OZARKS NEAR BAGNELL, MO—Continued



06926000 OSAGE RIVER NEAR BAGNELL, MO

LOCATION.--Lat 38°11'29", long 92°36'26", in NW ¼ NE ¼ SE ¼ sec.29, T.40 N., R.15 W., Miller County, Hydrologic Unit 10290111, on center pier of U.S. Highway 54 bridge, 1.3 mi downstream from hydroelectric plant of AmerenUE of Missouri, and at mile 80.5.

DRAINAGE AREA.--14,000 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1880 to current year. Monthly discharge only for some periods published in WSP 1310. Gage-height records collected in this vicinity 1880-1931 are contained in reports of the Missouri River Commission or the National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 549.13 ft above National Geodetic Vertical Datum of 1929 (levels by the Missouri State Highway and Transportation Commission). Nonrecording gage from October 1880 to Oct. 15, 1930, and recording gage from Oct. 15, 1930, to Sept. 30, 1979, at site 1.7 mi downstream at datum 0.56 ft lower.

REMARKS.--Water-discharge records fair except for estimated daily discharges, which are poor. Flow regulated by Lake of the Ozarks (06925500), 1.3 mi upstream. U.S.G.S. satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximim stage prior to 1943, 43.1 ft in June 1844 (former site and datum), discharge, 164,000 ft^3/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	918	924	2,100	16,100	2,370	e4,500	32,100	24,100	10,800	8,730	11,300	12,600
2	1,110	921	1,340	19,200	5,150	2,310	34,400	31,400	8,710	10,200	18,700	8,300
3	1,100	1,870	2,720	2,290	12,500	10,800	34,200	24,300	e8,000	1,370	16,400	9,020
4	953	1,120	3,890	11,800	13,300	12,500	34,300	31,000	e5,000	905	16,700	9,330
5	958	1,640	1,930	e20,000	12,500	20,100	34,300	31,400	2,890	2,070	2,520	5,840
6	3,640	1,510	3,400	e20,000	7,530	29,100	34,300	28,500	2,290	9,950	1,300	1,560
7	4,070	803	2,140	e19,400	5,660	27,900	32,100	17,000	7,430	15,600	2,400	7,430
8	2,370	813	2,470	14,600	3,800	30,100	32,600	8,690	11,500	16,200	1,560	1,600
9	1,270	541	935	14,700	6,510	32,400	8,790	6,780	4,670	12,900	5,400	1,680
10	929	437	4,400	4,640	4,100	33,600	3,640	10,700	4,590	14,100	4,930	1,760
11	1,240	447	9,000	606	3,900	33,700	1,930	16,600	12,600	12,200	1,340	1,050
12	1,100	989	8,120	9,650	4,430	34,000	3,440	11,100	2,940	13,600	930	2,650
13	692	2,440	3,720	15,400	4,920	34,200	4,980	9,520	2,430	12,700	922	3,570
14	3,100	871	3,180	9,910	2,520	34,200	9,820	3,860	11,800	7,640	924	9,440
15	1,460	446	12,900	9,000	715	34,200	6,490	589	13,600	6,990	942	6,510
16	1,920	431	17,300	5,540	6,690	34,200	9,270	1,100	15,100	4,490	1,150	5,540
17	2,620	425	17,600	1,960	7,300	34,100	7,510	9,000	13,800	4,020	6,110	1,410
18	1,140	2,360	16,600	10,900	4,820	33,200	7,720	18,500	11,000	1,740	8,160	957
19	1,040	1,770	13,900	17,100	2,170	30,400	11,100	18,200	9,290	8,670	5,910	949
20	6,400	472	10,000	22,100	5,130	29,800	2,120	24,600	7,680	10,700	1,360	966
21	4,650	481	1,320	19,400	7,980	32,100	671	21,400	14,000	9,860	1,210	3,190
22	1,610	481	516	22,500	3,120	32,700	837	22,700	15,300	9,740	907	4,750
23	2,760	768	14,100	30,300	6,820	31,300	4,650	19,800	29,800	2,210	12,400	8,220
24	2,750	3,400	16,200	30,800	7,090	30,900	8,440	22,200	15,100	974	14,900	2,210
25	2,210	6,050	7,980	14,800	5,510	33,900	1,780	28,300	10,100	1,020	25,500	4,040
26	965	3,920	15,600	17,200	2,800	33,500	15,100	33,700	2,360	3,650	14,300	1,450
27	935	699	20,800	22,300	6,970	33,500	25,300	28,700	1,760	13,500	16,200	5,420
28	1,910	1,930	8,520	26,400	1,980	25,600	34,300	24,700	3,020	17,200	10,400	3,470
29	1,970	697	14,200	24,100	1,320	32,800	33,800	7,820	8,240	24,600	2,540	1,210
30	2,320	577	18,500	25,200	---	24,400	32,700	8,360	7,260	27,200	6,360	1,100
31	1,150	---	18,500	17,700	---	29,200	---	5,270	---	13,300	9,890	---
MEAN	1,976	1,341	8,835	15,990	5,504	28,230	16,760	17,740	9,102	9,614	7,212	4,241
MAX	6,400	6,050	20,800	30,800	13,300	34,200	34,400	33,700	29,800	27,200	25,500	12,600
MIN	692	425	516	606	715	2,310	671	589	1,760	905	907	949
IN.	0.16	0.11	0.73	1.32	0.42	2.33	1.34	1.46	0.73	0.79	0.59	0.34

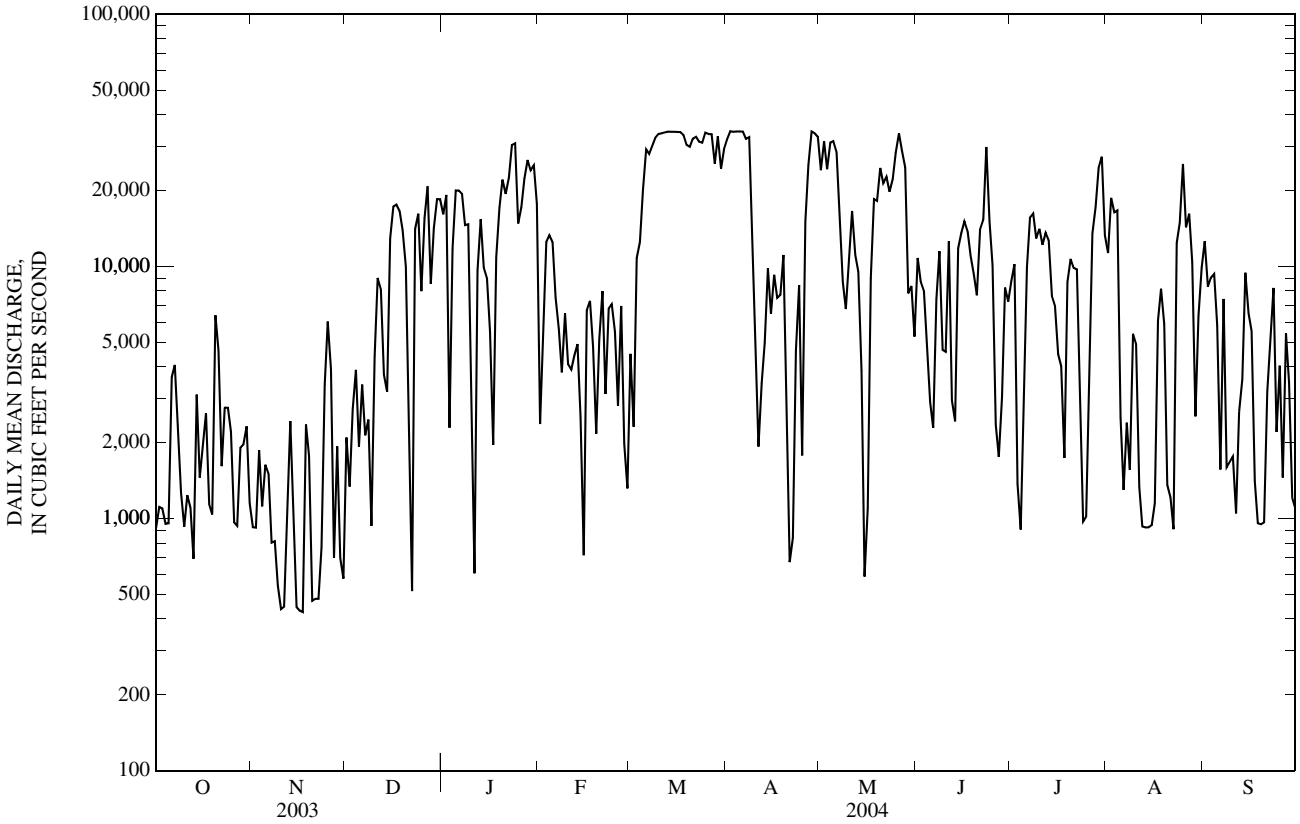
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004[a], BY WATER YEAR (WY)

MEAN	7,036	8,318	8,016	8,023	9,868	13,640	15,450	15,910	15,330	9,553	4,940	5,676
MAX	67,300	45,270	45,050	34,700	34,720	57,300	70,040	92,260	78,160	96,780	26,560	54,540
(WY)	(1987)	(1987)	(1993)	(1993)	(1949)	(1973)	(1973)	(1943)	(1935)	(1951)	(1993)	(1951)
MIN	471	538	542	554	535	359	452	516	515	492	510	486
(WY)	(1957)	(1957)	(2003)	(2001)	(1964)	(1931)	(1931)	(1956)	(1931)	(1931)	(1956)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004[a]	
ANNUAL MEAN	3,781		10,600		10,140	
HIGHEST ANNUAL MEAN					23,360	1973
LOWEST ANNUAL MEAN					1,046	1954
HIGHEST DAILY MEAN	30,600	Jun 11	34,400	Apr 2	212,000	May 19, 1943
LOWEST DAILY MEAN	405	Apr 2	425	Nov 17	235	Apr 23, 1971
ANNUAL SEVEN-DAY MINIMUM	472	Feb 8	791	Nov 6	320	Mar 3, 1931
MAXIMUM PEAK FLOW	---		35,900	May 26	220,000	May 19, 1943
MAXIMUM PEAK STAGE	---		16.39	May 26	48.80	May 19, 1943
INSTANTANEOUS LOW FLOW	---		411	Nov 10,11,16,17	183	Sep 9, 1969
ANNUAL RUNOFF (INCHES)	3.67		10.31		9.84	
10 PERCENT EXCEEDS	10,500		30,200		30,000	
50 PERCENT EXCEEDS	1,650		7,180		3,970	
90 PERCENT EXCEEDS	468		952		504	

e Estimated
[a] Post-regulation period.

06926000 OSAGE RIVER NEAR BAGNELL, MO—Continued



06926000 OSAGE RIVER NEAR BAGNELL—Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 10, 2004 to current year. (See remarks).
DISSOLVED OXYGEN: June 10, 2004 to current year. (See remarks).
SPECIFIC CONDUCTANCE: June 10, 2004 to current year. (See remarks).

INSTRUMENTATION.--Water-quality monitor operated seasonally since June 2004.

REMARKS.--The number of missing days exceeds 20 percent of the year. The monitor was operated from June 10 to Sept. 30.

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	21.5	19.9	20.7	24.1	23.2	23.6	24.3	23.7	24.0
2	---	---	---	21.5	20.3	20.8	24.2	23.4	23.9	24.3	23.7	24.0
3	---	---	---	21.3	20.0	20.5	24.7	23.6	24.2	24.3	23.6	24.0
4	---	---	---	22.3	20.4	21.1	24.7	23.7	24.4	24.3	23.7	24.0
5	---	---	---	21.0	19.4	20.2	25.0	23.8	24.3	24.3	23.7	23.9
6	---	---	---	22.8	20.0	21.1	24.6	22.8	23.6	24.3	23.6	23.9
7	---	---	---	22.5	20.8	22.1	25.1	22.9	23.9	24.3	23.6	24.0
8	---	---	---	22.7	20.8	21.9	24.1	23.1	23.6	24.6	23.3	23.9
9	---	---	---	22.8	21.2	22.0	24.7	23.2	23.8	24.7	23.0	23.7
10	18.5	16.7	17.5	22.8	21.6	22.3	24.6	23.6	24.0	24.9	23.3	23.8
11	19.2	16.9	18.2	23.4	21.5	22.4	24.0	23.2	23.5	25.1	23.2	23.9
12	18.6	17.1	18.0	23.1	21.4	22.6	23.7	22.7	23.2	24.5	23.3	23.9
13	19.4	16.8	17.6	23.6	22.1	22.8	24.3	22.6	23.3	24.2	23.2	23.7
14	19.2	16.8	17.9	23.5	21.7	22.3	23.4	22.8	23.1	24.0	23.5	23.8
15	19.2	17.6	18.5	23.2	21.4	22.3	24.3	22.6	23.3	24.0	23.5	23.8
16	19.8	18.1	18.8	22.9	21.8	22.2	24.3	22.8	23.4	24.7	23.7	24.0
17	20.0	18.2	18.9	23.5	21.7	22.4	24.4	23.2	23.8	24.8	23.3	23.9
18	20.4	17.9	18.9	22.6	21.5	22.0	24.6	23.8	24.2	23.8	23.1	23.4
19	20.3	18.3	19.2	23.5	21.5	22.3	24.4	23.7	24.0	24.6	23.1	23.7
20	19.9	18.7	19.1	24.2	22.1	22.9	23.7	23.2	23.4	24.2	23.1	23.7
21	21.1	18.5	19.9	23.8	22.2	22.8	24.8	23.0	23.6	23.8	22.9	23.3
22	20.7	18.6	20.1	24.0	22.6	23.2	25.2	23.1	23.8	24.1	22.9	23.3
23	21.5	19.9	21.0	23.7	22.4	22.7	24.1	23.3	23.8	23.5	23.0	23.3
24	21.5	19.8	21.0	22.5	21.3	21.8	23.9	23.5	23.8	24.2	23.2	23.5
25	21.5	19.8	20.6	21.9	21.2	21.5	24.1	23.9	24.0	24.0	22.9	23.3
26	20.9	19.2	19.8	23.4	21.6	22.4	24.3	23.8	24.0	24.8	22.9	23.6
27	20.8	18.8	19.3	23.6	22.0	23.0	24.5	24.0	24.2	23.5	22.8	23.2
28	21.0	19.7	20.2	23.7	22.4	23.4	24.3	23.9	24.1	23.4	22.8	23.2
29	21.2	19.0	20.1	23.9	23.0	23.7	25.2	23.8	24.2	23.7	22.4	23.0
30	21.1	19.7	20.3	24.0	23.3	23.8	24.2	23.4	23.9	23.5	22.1	22.7
31	---	---	---	24.2	23.2	23.7	24.3	23.6	23.9	---	---	---
MONTH	21.5	16.7	19.3	24.2	19.4	22.2	25.2	22.6	23.8	25.1	22.1	23.6

06926000 OSAGE RIVER NEAR BAGNELL—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	6.1	2.9	4.7	---	---	---	7.2	4.0	5.6
2	---	---	---	6.0	2.9	4.4	---	---	---	7.9	4.3	5.5
3	---	---	---	6.8	5.9	6.4	5.9	4.3	4.8	7.3	4.8	5.7
4	---	---	---	7.4	6.4	6.8	6.3	4.3	4.8	7.5	4.3	6.1
5	---	---	---	6.9	4.9	6.1	6.6	4.6	5.7	7.5	5.1	6.4
6	---	---	---	6.7	4.0	5.5	6.3	5.6	5.9	7.5	6.6	7.1
7	---	---	---	6.6	3.9	4.9	6.2	4.8	5.7	7.8	4.7	6.5
8	---	---	---	5.8	3.2	4.1	6.6	5.4	5.8	7.7	5.5	6.7
9	---	---	---	5.6	3.8	4.5	6.6	4.9	5.6	7.3	5.7	6.8
10	7.8	4.5	6.0	6.2	3.6	4.4	6.6	5.2	5.8	7.4	5.9	6.8
11	8.6	4.2	6.2	6.0	4.0	4.6	6.4	5.9	6.2	7.4	5.9	6.6
12	7.2	5.0	6.1	6.7	3.4	4.4	6.4	5.8	6.1	7.8	6.0	6.9
13	7.9	5.1	6.8	5.4	3.5	4.1	6.5	5.7	6.0	7.6	4.6	6.3
14	7.6	4.3	6.1	6.1	2.9	4.6	6.1	5.6	5.8	7.2	3.4	5.2
15	7.1	3.4	4.9	6.1	2.3	4.1	6.3	5.6	5.9	6.8	4.2	5.3
16	7.6	3.9	5.3	6.0	3.1	4.5	6.6	5.1	5.7	7.9	5.1	6.3
17	6.9	4.0	5.4	6.2	3.9	5.1	6.4	3.9	5.3	8.0	6.9	7.5
18	8.0	3.5	5.6	6.2	4.1	5.2	6.6	4.0	5.6	6.9	6.3	6.5
19	7.3	2.8	4.7	6.2	2.5	4.4	7.0	5.1	6.1	7.6	6.4	6.9
20	7.1	2.3	4.7	5.9	3.3	4.6	6.5	5.9	6.1	7.9	6.6	7.1
21	6.0	2.6	4.1	6.0	2.8	4.4	6.5	5.0	5.9	8.0	4.9	6.4
22	6.7	3.1	4.2	5.9	3.2	4.0	6.2	5.6	5.8	7.8	4.5	6.4
23	4.0	3.0	3.4	6.1	5.0	5.7	6.0	3.3	4.7	7.7	4.7	6.1
24	5.9	3.1	3.9	6.2	5.7	5.9	6.3	3.2	4.7	8.2	5.6	7.1
25	6.3	3.5	4.3	6.2	5.8	6.0	7.4	3.2	4.9	8.6	5.7	7.2
26	6.6	4.3	6.1	6.8	3.5	5.4	8.2	5.2	6.6	8.4	6.7	7.6
27	6.6	4.0	6.0	6.6	3.8	4.6	8.2	5.3	6.6	8.1	5.6	7.1
28	6.5	4.0	5.1	---	---	---	8.2	5.1	6.4	8.8	5.8	7.4
29	6.5	3.5	4.7	---	---	---	8.0	5.4	6.8	8.8	7.7	8.2
30	6.0	3.5	4.9	---	---	---	7.0	4.7	6.1	8.5	7.6	8.0
31	---	---	---	---	---	---	7.0	4.9	5.8	---	---	---
MONTH	8.6	2.3	5.2	7.4	2.3	4.9	8.2	3.2	5.8	8.8	3.4	6.6

06926000 OSAGE RIVER NEAR BAGNELL—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	282	281	281	285	281	282	284	280	281
2	---	---	---	282	280	281	287	280	282	281	279	281
3	---	---	---	283	281	282	286	285	286	288	279	282
4	---	---	---	283	280	282	287	285	285	289	286	287
5	---	---	---	283	281	282	288	285	287	288	285	287
6	---	---	---	283	279	281	288	287	287	287	285	286
7	---	---	---	285	280	281	287	285	286	291	286	288
8	---	---	---	283	281	282	288	285	286	288	286	287
9	---	---	---	283	281	282	287	284	286	288	283	286
10	266	264	265	282	280	281	287	285	286	289	286	288
11	266	263	265	283	280	281	288	285	287	288	286	287
12	266	265	266	283	281	281	288	286	287	289	286	288
13	269	263	266	282	281	281	289	286	287	290	286	288
14	266	264	265	283	281	282	288	287	287	290	287	289
15	265	264	265	283	281	282	288	286	287	291	286	289
16	283	264	272	284	279	282	288	286	287	291	289	290
17	281	280	280	286	283	284	287	284	285	291	288	290
18	281	279	280	285	282	284	286	284	285	290	288	289
19	282	279	281	283	281	282	287	285	286	290	289	289
20	284	281	282	283	281	282	288	284	286	291	289	290
21	282	280	281	283	281	282	289	286	287	292	290	291
22	281	280	280	283	281	282	289	286	287	291	290	290
23	282	280	281	284	281	282	288	280	285	292	290	291
24	281	279	280	283	281	283	286	281	284	291	290	291
25	284	280	281	284	281	283	286	283	284	291	290	291
26	283	281	282	284	282	283	285	284	285	291	290	291
27	282	281	282	285	282	283	285	283	284	292	290	291
28	282	280	281	286	282	284	286	283	285	292	290	291
29	282	280	281	284	281	282	286	284	285	291	290	291
30	282	281	281	283	280	281	285	283	284	292	291	291
31	---	---	---	284	281	282	283	281	282	---	---	---
MONTH	284	263	276	286	279	282	289	280	285	292	279	288

06926510 OSAGE RIVER BELOW ST. THOMAS, MO

LOCATION.--Lat 38°25'17", long 92°12'30", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.42 N., R.12 W., Cole County, Hydrologic Unit 10290111, on downstream bridge pier of State Highway B, 3.8 mi north of St. Thomas, and at mile 34.5.

DRAINAGE AREA.--14,584 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1, 1996 to current year. August 1931 to Sept. 30, 1996, records collected at site 8.6 mi upstream, published as Osage River near St. Thomas (06926500).

GAGE.--Water-stage recorder. Datum of gage is 525.72 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair. Considerable regulation by Lake of the Ozarks (06925500), 47.2 mi upstream. U.S. Army Corps of Engineers 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	963	1,310	749	16,600	12,500	1,900	30,800	32,500	7,040	7,770	12,800	11,000
2	930	1,040	1,750	19,800	2,490	4,960	34,300	33,500	13,100	11,400	14,900	11,900
3	1,070	994	1,500	16,000	9,230	3,140	34,500	27,300	8,440	7,670	17,000	8,510
4	1,080	1,690	2,680	7,020	14,300	17,600	34,500	30,300	7,890	1,780	18,300	9,150
5	970	2,310	4,200	20,400	13,000	22,600	34,400	31,100	4,450	1,170	14,900	9,280
6	944	2,330	2,000	20,900	10,700	31,300	34,400	30,600	3,040	2,040	2,580	5,750
7	3,800	1,760	4,600	20,900	8,320	31,800	32,800	23,000	2,840	13,500	1,490	1,740
8	3,940	1,170	1,930	14,900	6,420	30,500	32,300	14,000	9,700	16,400	2,180	6,670
9	2,360	950	2,530	15,700	4,590	32,700	24,600	11,200	11,900	15,400	1,610	1,730
10	1,350	885	2,080	15,500	7,360	33,300	6,100	6,820	4,330	14,200	6,210	1,580
11	1,060	671	8,860	3,490	5,770	33,700	3,920	15,000	6,450	13,100	5,280	1,680
12	1,120	626	9,590	1,500	4,160	33,800	3,620	14,100	11,800	13,100	1,570	1,200
13	1,190	1,090	7,200	13,900	5,530	34,200	4,250	12,100	2,900	13,800	1,020	2,480
14	7,190	1,930	4,130	14,300	4,610	34,300	6,430	8,960	3,820	12,500	966	4,160
15	3,130	1,150	6,100	9,650	3,200	34,200	7,880	4,120	14,200	6,890	948	9,480
16	1,550	658	17,100	8,490	2,890	34,200	6,890	1,270	14,900	7,640	950	7,580
17	1,920	601	19,800	4,920	7,830	34,200	9,690	1,550	14,600	4,930	1,090	5,360
18	2,540	1,290	17,800	7,030	7,180	33,500	8,570	14,900	12,100	4,450	6,710	1,610
19	1,360	4,450	17,400	15,800	4,480	32,300	8,630	17,300	10,800	2,140	8,100	1,060
20	1,150	2,260	14,100	20,400	3,920	29,800	10,200	22,700	9,630	10,100	6,190	982
21	6,560	1,100	8,090	21,200	6,420	30,800	2,410	23,500	11,000	12,000	1,660	971
22	4,270	875	2,140	22,100	7,150	32,300	1,120	21,600	13,000	10,300	1,230	3,090
23	1,730	842	10,100	26,700	4,100	31,800	1,290	19,500	23,800	8,050	2,030	5,390
24	2,660	1,090	17,400	31,900	e8,150	30,400	7,650	22,400	22,100	2,240	16,300	8,770
25	2,450	4,520	17,800	22,700	e7,000	33,300	12,700	24,700	15,600	3,350	24,700	2,020
26	2,040	5,800	9,910	15,500	4,910	34,000	5,270	35,400	8,100	1,870	17,300	4,660
27	1,100	3,660	20,900	21,600	4,530	37,200	22,600	34,600	2,330	5,350	16,500	1,590
28	991	1,240	16,700	24,500	5,280	30,600	32,600	34,000	1,920	16,800	15,200	5,990
29	1,660	1,730	10,800	25,100	2,170	34,100	34,000	16,000	3,230	23,200	8,530	3,160
30	1,870	1,090	16,600	24,700	---	29,400	33,500	10,100	9,100	28,800	3,070	1,370
31	2,070	---	20,400	22,700	---	29,900	---	7,780	---	18,600	7,790	---
MEAN	2,162	1,704	9,579	16,960	6,489	28,960	17,400	19,420	9,470	10,020	7,713	4,664
MAX	7,190	5,800	20,900	31,900	14,300	37,200	34,500	35,400	23,800	28,800	24,700	11,900
MIN	930	601	749	1,500	2,170	1,900	1,120	1,270	1,920	1,170	948	971
IN.	0.17	0.13	0.76	1.34	0.48	2.29	1.33	1.54	0.72	0.79	0.61	0.36

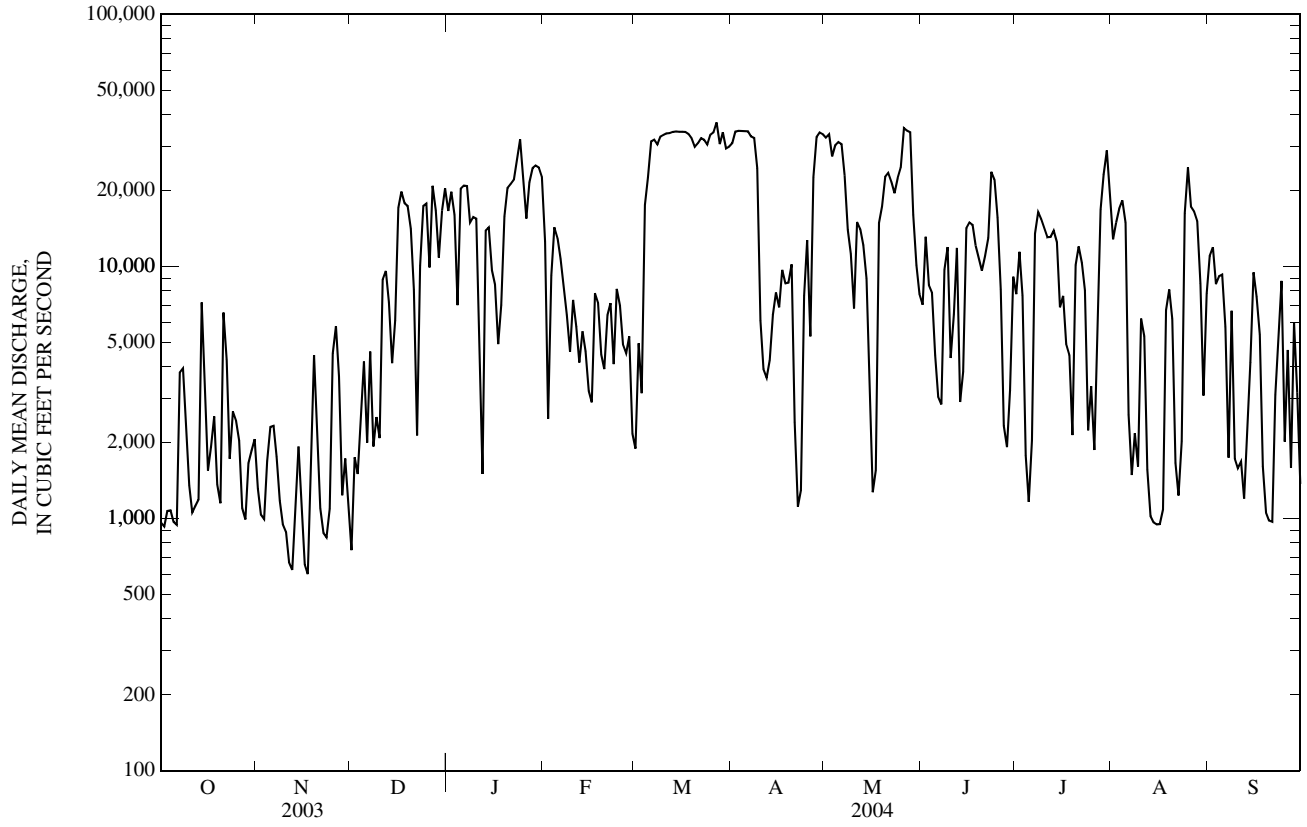
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	7,708	7,896	7,911	7,980	11,590	18,000	14,460	18,100	19,570	10,160	4,781	4,328
MAX	41,410	35,360	16,580	18,890	27,140	35,430	32,900	43,010	37,210	21,200	8,775	14,790
(WY)	(1999)	(1999)	(1999)	(1998)	(1999)	(1997)	(1998)	(1999)	(1999)	(1999)	(1998)	(1998)
MIN	661	629	647	687	2,229	4,305	1,814	1,334	6,089	2,761	2,257	1,263
(WY)	(2001)	(2001)	(2003)	(2001)	(2003)	(2003)	(2000)	(2000)	(2000)	(2003)	(2002)	(2001)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL MEAN	4,232		11,270		11,050	
HIGHEST ANNUAL MEAN					22,740	1999
LOWEST ANNUAL MEAN					3,281	2003
HIGHEST DAILY MEAN	35,000	Jun 11	37,200	Mar 27	63,600	Jul 27, 1998
LOWEST DAILY MEAN	539	Feb 13	601	Nov 17	320	Sep 24, 1999
ANNUAL SEVEN-DAY MINIMUM	577	Jan 1	961	Nov 11	513	Oct 8, 2002
MAXIMUM PEAK FLOW	---		40,600	May 27	74,700	Jul 26, 1998
MAXIMUM PEAK STAGE	---		14.53	May 27	21.86	Jul 26, 1998
INSTANTANEOUS LOW FLOW	---		586	Nov 17	320	Sep 24, 1999
ANNUAL RUNOFF (INCHES)	3.94		10.52		10.30	
10 PERCENT EXCEEDS	11,600		30,900		33,700	
50 PERCENT EXCEEDS	1,910		7,660		4,940	
90 PERCENT EXCEEDS	706		1,160		655	

e Estimated

06926510 OSAGE RIVER BELOW ST. THOMAS, MO—Continued



06926510 OSAGE RIVER BELOW ST. THOMAS, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1981.
WATER TEMPERATURE: October 1974 to September 1981.

REMARKS.--National Stream-Quality Accounting Network station October 1975 to September 1995. Ambient Water-Quality Monitoring Network station October 1995 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 398 microsiemens per centimeter, Jan. 1, 1981; minimum daily, 140 microsiemens per centimeter, Sept. 3, 1981.
WATER TEMPERATURE: Maximum daily, 30.0 °C, July 29, 1977, July 25 and Aug. 11, 1980; minimum daily, 0.0 °C, Jan. 21, 1978.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
24...	1125	Environmental	955	8.1	75	8.1	316	11.6	160	35.6	16.4	2.75
JAN												
13...	1420	Environmental	12,400	10.0	83	8.0	294	6.6	--	--	--	--
13...	1421	Replicate	--	10.5	87	8.0	294	6.6	--	--	--	--
MAR												
08...	1305	Environmental	29,000	11.1	91	7.8	275	6.3	--	--	--	--
MAY												
25...	0930	Blank	--	--	--	--	--	--	--	E.01n	<0.008	<0.16
25...	0955	Environmental	21,900	6.6	72	7.7	275	18.8	140	37.3	9.18	3.54
JUL												
06...	1030	Environmental	2,200	5.7	75	7.6	293	25.8	--	--	--	--
SEP												
20...	1220	Environmental	992	8.8	108	7.5	290	24.6	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
24...	5.14	140	140	171	<1	7.80	<0.2	14.8	194	15	0.31	<0.04	0.31
JAN													
13...	--	118	116	142	<1	--	--	--	--	<10	0.36	<0.04	0.19
13...	--	--	--	--	--	--	--	--	--	10	0.35	<0.04	0.20
MAR													
08...	--	125	125	152	<1	--	--	--	--	38	0.45	<0.04	0.36
MAY													
25...	<0.10	--	--	--	--	<0.20	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
25...	6.07	88	90	110	<1	7.42	<0.2	20.1	150	47	0.58	<0.04	0.58
JUL													
06...	--	113	115	141	<1	--	--	--	--	<10	0.49	<0.04	0.20
SEP													
20...	--	108	110	134	<1	--	--	--	--	17	0.49	<0.04	<0.06

06926510 OSAGE RIVER BELOW ST. THOMAS, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
24...	<0.008	0.02	E.02n	0.05	120	460k	101	Mn	154	0.9	<0.04	<0.04	0.7
JAN													
13...	<0.008	E.01n	<0.04	<0.04	2k	6k	6k	--	--	--	--	--	--
13...	<0.008	E.01n	<0.04	<0.04	6k	6k	6k	--	--	--	--	--	--
MAR													
08...	E.006n	<0.02	<0.04	E.04n	12k	5k	12k	--	--	--	--	--	--
MAY													
25...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.2	<0.04	<0.04	<0.4
25...	E.005n	<0.04d	E.02n	0.07	180	220	605k	2	578	0.9	<0.04	E.03n	1.2
JUL													
06...	E.004n	<0.02	<0.04	0.04	210	200	180	--	--	--	--	--	--
SEP													
20...	<0.008	<0.02	0.04	0.06	12k	5k	4k	--	--	--	--	--	--

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								
24...	E3n	<0.08	0.46	7.9	<0.02	<0.4	<0.6	E1n
JAN								
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
MAR								
08...	--	--	--	--	--	--	--	--
MAY								
25...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	2
25...	E5n	<0.08	1.76	3.9	<0.02	E.4n	Mn	3
JUL								
06...	--	--	--	--	--	--	--	--
SEP								
20...	--	--	--	--	--	--	--	--

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

06927000 MARIES RIVER AT WESTPHALIA, MO

LOCATION.--Lat 38°25'55", long 91°59'19", in SW $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec.35, T.43 N., R.10 W., Osage County, Hydrologic Unit 10290111, on the downstream side of bridge on U.S. Highway 63, 0.8 mi southeast of Westphalia, 1.2 mi downstream from Little Maries Creek, and at mile 9.9.

DRAINAGE AREA.--257 mi^2.

PERIOD OF RECORD.--December 1947 to September 1970, Oct. 1, 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 542.74 ft above National Geodetic Vertical Datum of 1929. Prior to June 8, 1951, nonrecording gage at site 200 ft downstream at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 26, 1998 reached a stage of 24.84 ft from crest-stage gage, discharge, 56,000 ft^3/s, from rating extended above 35,000 ft^3/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	21	16	76	127	e90	98	326	1,990	99	13	322	100
2	18	61	69	118	111	91	243	997	77	16	164	82
3	16	71	65	111	549	88	189	502	65	18	114	68
4	15	74	63	3,380	487	2,540	155	341	55	18	1,110	59
5	13	663	61	1,940	290	3,740	133	230	48	18	988	53
6	11	214	59	588	214	1,000	115	167	50	16	205	47
7	10	132	57	327	e172	497	108	134	54	13	115	40
8	9.4	104	56	243	e139	315	100	113	47	12	86	36
9	9.3	80	59	199	e129	234	92	99	768	11	70	32
10	9.0	68	1,310	167	146	182	86	87	219	10	59	28
11	8.4	60	982	146	205	152	83	79	119	8.9	51	24
12	8.6	53	408	132	352	131	79	72	83	9.1	43	22
13	8.4	45	273	121	269	117	75	71	67	8.3	38	20
14	11	41	217	112	e208	115	72	498	92	7.0	35	18
15	12	37	275	105	e189	114	68	311	77	6.1	32	45
16	13	34	949	100	e174	115	65	176	61	7.0	27	449
17	77	34	595	671	e177	120	62	125	50	6.5	24	57
18	68	582	346	2,390	216	119	59	102	46	9.9	22	42
19	51	1,020	253	746	354	114	55	451	46	28	20	34
20	38	399	193	371	422	105	54	386	41	21	25	28
21	30	236	159	257	292	97	57	196	36	15	21	24
22	24	167	520	206	212	90	56	130	33	17	26	21
23	21	160	3,530	169	175	87	60	103	30	39	478	19
24	18	181	900	148	157	94	687	87	27	224	688	17
25	19	175	433	e132	138	104	1,620	673	23	2,650	1,780	16
26	20	142	290	e122	123	184	477	3,640	20	403	1,980	14
27	17	120	224	e113	113	1,230	255	1,780	17	157	778	13
28	16	105	196	e104	106	933	170	507	18	98	1,140	12
29	16	93	182	e98	100	1,830	134	227	15	73	465	11
30	15	85	161	e94	---	828	169	145	14	1,840	220	e9.7
31	14	---	141	e92	---	497	---	131	---	1,300	136	---
MEAN	20.6	175	423	440	218	515	197	469	79.9	228	363	48.0
MAX	77	1,020	3,530	3,380	549	3,740	1,620	3,640	768	2,650	1,980	449
MIN	8.4	16	56	92	90	87	54	71	14	6.1	20	9.7
IN.	0.09	0.76	1.90	1.97	0.91	2.31	0.85	2.11	0.35	1.02	1.63	0.21

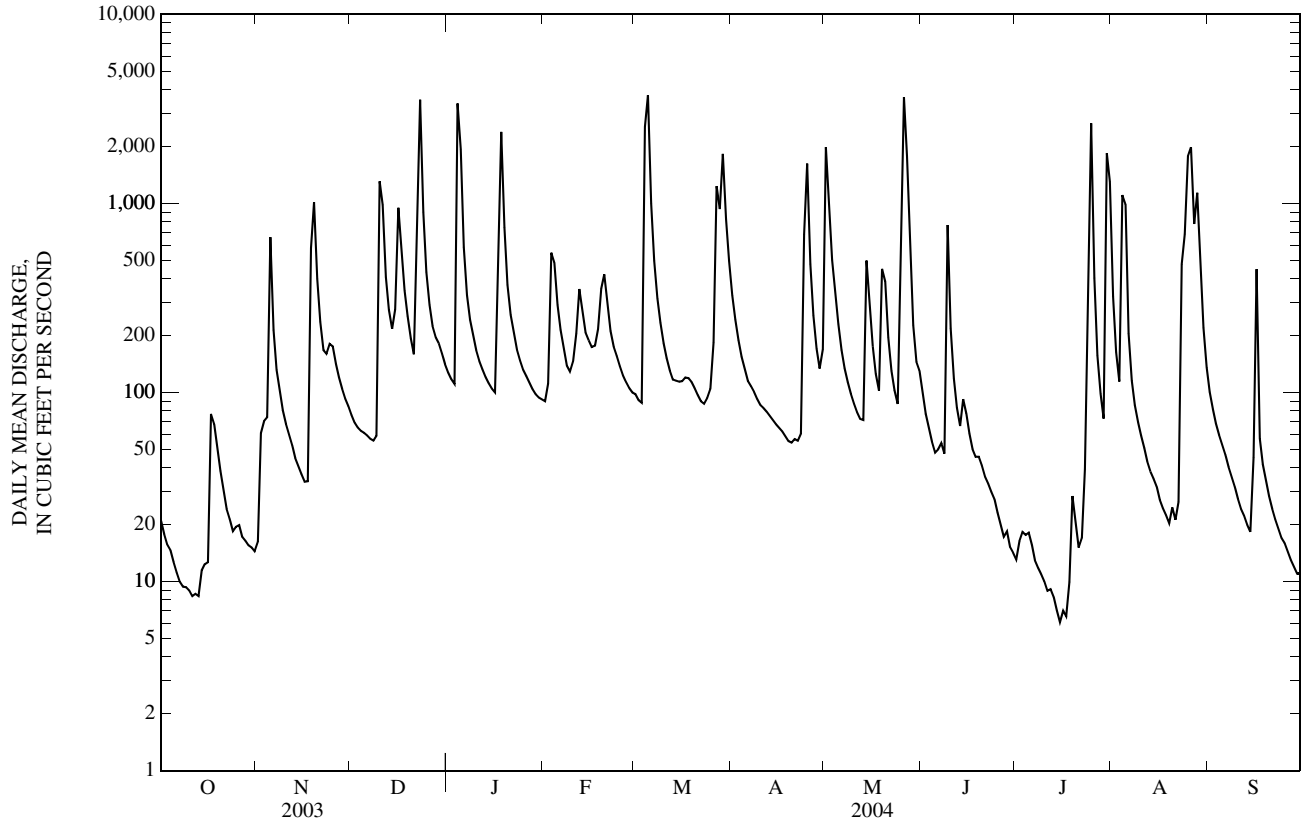
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	113	82.6	140	194	237	364	342	402	349	143	65.2	97.5
MAX	1,034	539	815	987	623	752	997	1,335	1,304	793	363	661
(WY)	(1970)	(1969)	(1968)	(1950)	(1951)	(1962)	(1966)	(1961)	(1949)	(1951)	(2004)	(1965)
MIN	0.24	2.24	4.12	4.27	6.97	9.92	37.4	24.0	8.16	3.99	0.85	0.43
(WY)	(1957)	(1954)	(1954)	(1956)	(1954)	(1954)	(1956)	(1965)	(1952)	(1959)	(1959)	(1953)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	179		266		210	
HIGHEST ANNUAL MEAN					435	1970
HIGHEST DAILY MEAN	9,280	Jun 11	3,740	Mar 5	18,700	Oct 12, 1969
LOWEST DAILY MEAN	0.48	Aug 24	6.1	Jul 15	0.10	Oct 5, 1956
ANNUAL SEVEN-DAY MINIMUM	0.75	Aug 23	7.6	Jul 11	0.10	Oct 5, 1956
MAXIMUM PEAK FLOW	---		7,700	May 26	26,100	Oct 12, 1969
MAXIMUM PEAK STAGE	---		11.01	May 26	20.83	Oct 12, 1969
INSTANTANEOUS LOW FLOW	---		5.1	Jul 15	0.10	Sep 22, 1956
ANNUAL RUNOFF (INCHES)	9.45		14.12		11.11	
10 PERCENT EXCEEDS	376		665		422	
50 PERCENT EXCEEDS	57		100		38	
90 PERCENT EXCEEDS	5.7		16		3.6	

e Estimated

06927000 MARIES RIVER AT WESTPHALIA, MO—Continued



06928000 GASCONADE RIVER NEAR HAZELGREEN, MO

LOCATION.--Lat 37°45'33", long 92°27'06", in SW ¼ SE ¼ SE ¼ sec.15, T.35 N., R.14 W., Laclede County, Hydrologic Unit 10290201 on downstream end of center pier of bridge on south outer road, 400 ft upstream from eastbound bridge of Interstate 44, 1 mi downstream from Osage Fork, 1.5 mi west of Hazelgreen, and at mile 180.

DRAINAGE AREA.--1,250 mi^2.

PERIOD OF RECORD.--October 1928 to September 1971, October 2000 to current year. Prior to April 1929 monthly discharge only published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 844.75 ft above National Geodetic Vertical Datum of 1929. Prior to March 6, 1956, nonrecording gage at present site and datum. March 6, 1956 to Dec. 17, 1957, nonrecording gage at site 750 ft downstream at present datum and Dec. 18, 1957 to Aug. 20, 1958, nonrecording gage at present site and datum. Aug. 20, 1958 to September 1971, water-stage recorder at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 4-5, 1982 reached a stage of 34.46 ft, discharge 87,000 ft^3/s from rating extended above 74,400 ft^3/s.

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

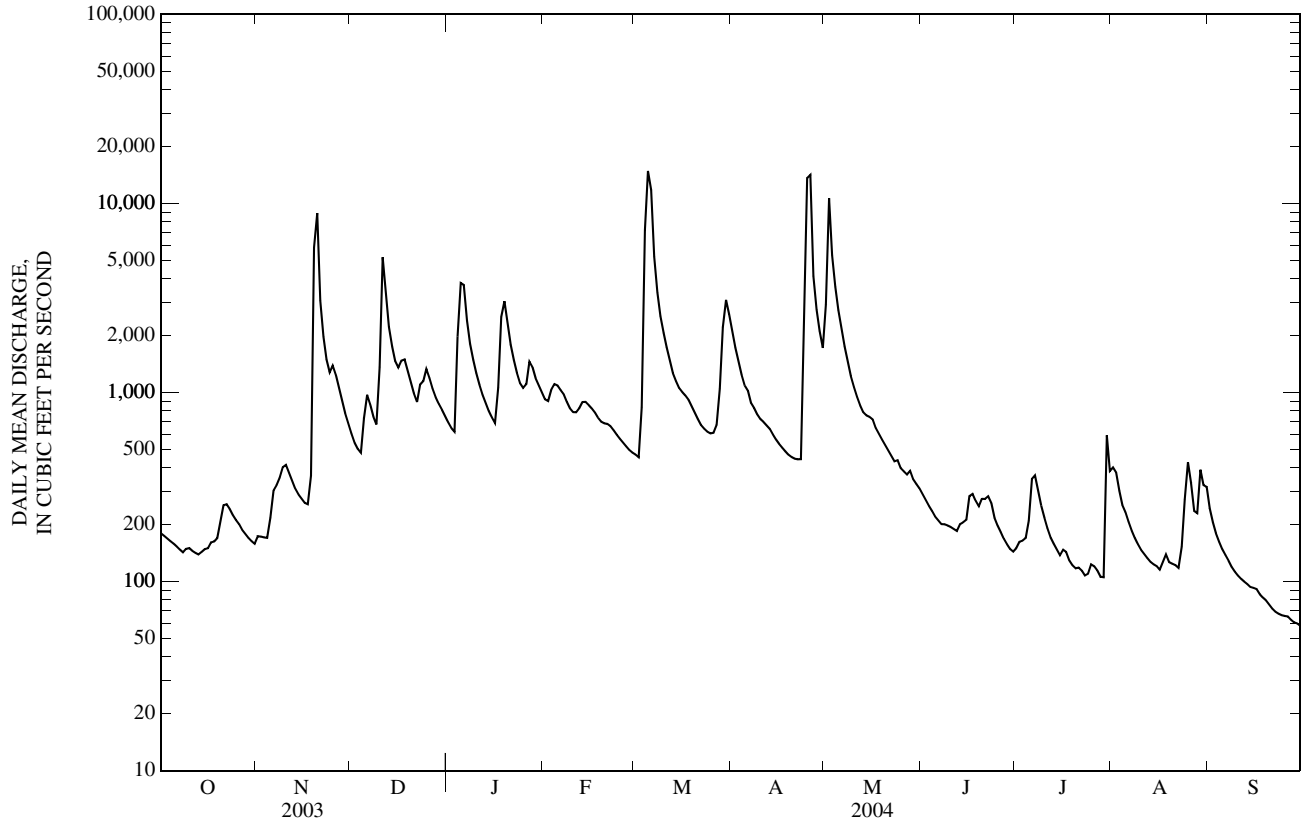
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	174	607	694	920	470	2,110	2,920	289	150	402	244
2	174	173	542	650	902	455	1,730	10,700	270	162	378	206
3	169	171	504	621	1,040	835	1,450	5,310	252	164	302	180
4	164	170	480	1,980	1,110	7,240	1,240	3,610	237	170	254	162
5	159	217	731	3,800	1,090	14,800	1,090	2,720	221	209	233	149
6	153	303	972	3,710	1,030	11,800	1,020	2,160	211	349	207	138
7	148	323	866	2,400	978	5,240	882	1,750	201	364	186	129
8	143	355	746	1,810	895	3,380	826	1,450	201	301	170	120
9	149	403	678	1,490	823	2,530	767	1,220	198	252	157	113
10	150	414	1,360	1,270	788	2,070	723	1,070	194	217	147	108
11	145	376	5,200	1,100	786	1,730	699	949	190	191	140	103
12	142	340	3,340	976	825	1,470	670	853	185	171	133	100
13	139	310	2,220	882	890	1,270	643	786	201	159	127	97
14	144	289	1,750	801	893	1,150	600	756	206	148	123	94
15	148	275	1,470	737	858	1,060	564	743	212	138	121	93
16	150	261	1,360	689	824	1,010	534	720	283	147	115	91
17	161	256	1,470	1,060	783	965	511	648	291	143	127	86
18	163	364	1,500	2,510	736	916	489	603	268	129	139	82
19	170	5,850	1,310	3,040	701	847	469	564	250	122	127	79
20	206	8,890	1,130	2,350	688	782	455	526	274	118	124	76
21	253	3,070	991	1,790	682	724	447	493	274	119	122	72
22	256	1,970	891	1,490	664	673	444	460	282	114	118	69
23	243	1,500	1,100	1,270	631	644	444	432	261	108	153	68
24	225	1,280	1,150	1,120	598	621	1,860	438	218	110	273	66
25	212	1,390	1,330	1,060	569	607	13,600	399	198	123	428	66
26	201	1,240	1,190	1,110	544	613	14,200	383	183	120	334	65
27	188	1,060	1,050	1,450	519	673	4,130	368	169	115	236	63
28	179	906	943	1,360	498	1,050	2,740	385	158	106	230	61
29	170	776	870	1,190	481	2,210	2,110	348	149	105	391	60
30	163	685	810	1,090	---	3,090	1,720	328	144	594	324	58
31	158	---	751	1,000	---	2,600	---	311	---	384	317	---
MEAN	174	1,126	1,268	1,500	784	2,372	1,972	1,432	222	187	214	103
MAX	256	8,890	5,200	3,800	1,110	14,800	14,200	10,700	291	594	428	244
MIN	139	170	480	621	481	455	444	311	144	105	115	58
IN.	0.16	1.01	1.17	1.38	0.68	2.19	1.76	1.32	0.20	0.17	0.20	0.09

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

MEAN	479	644	716	941	1,185	1,575	1,728	1,880	1,086	524	282	359
MAX	4,943	4,273	3,361	4,805	3,209	6,584	10,180	7,340	8,710	5,322	1,467	2,519
(WY)	(1950)	(1952)	(1943)	(1950)	(1938)	(1945)	(1945)	(1943)	(1935)	(1958)	(1946)	(1970)
MIN	31.6	65.8	72.6	68.0	91.2	141	130	202	83.2	41.8	30.8	25.6
(WY)	(1957)	(1954)	(1956)	(1956)	(1964)	(1956)	(1956)	(1932)	(1936)	(1934)	(1936)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	643		948		948	
HIGHEST ANNUAL MEAN					2,236	1950
LOWEST ANNUAL MEAN					123	1954
HIGHEST DAILY MEAN	8,890	Nov 20	14,800	Mar 5	58,800	Mar 12, 1935
LOWEST DAILY MEAN	61	Aug 26	58	Sep 30	19	Sep 20, 1954
ANNUAL SEVEN-DAY MINIMUM	65	Aug 23	63	Sep 24	21	Sep 14, 1954
MAXIMUM PEAK FLOW	---		22,300	Apr 26	76,400	Apr 14, 1945
MAXIMUM PEAK STAGE	---		17.45	Apr 26	29.60	Apr 14, 1945
INSTANTANEOUS LOW FLOW	---		56	Sep 30	18	Aug 1, 1936
ANNUAL RUNOFF (INCHES)	6.99		10.33		10.31	
10 PERCENT EXCEEDS	1,360		1,890		2,000	
50 PERCENT EXCEEDS	399		455		345	
90 PERCENT EXCEEDS	142		122		85	

06928000 GASCONADE RIVER NEAR HAZELGREEN, MO—Continued



06928300 ROUBIDOUX CREEK ABOVE FT. LEONARD WOOD, MO

LOCATION.--Lat 37°36'04", long 92°14'02", in NE ¼ SW ¼ NE ¼ sec.3, T.33 N., R.12 W., Pulaski County, Hydrologic Unit 10290201, on State Highway 17 bridge, 12 mi south of Ft. Leonard Wood.

DRAINAGE AREA.--165 mi^2.

PERIOD OF RECORD.--Dec. 29, 1999 to current year.

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

REMARKS.--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	19	15	80	74	106	42	319	1,040	15	4.9	8.8	6.6
2	19	14	64	70	114	38	251	689	13	5.0	7.4	6.3
3	17	13	62	65	238	167	205	470	11	5.5	6.1	5.5
4	16	13	73	199	230	3,130	173	349	9.8	12	5.5	5.3
5	14	24	102	639	208	2,560	148	268	8.8	25	5.3	5.5
6	13	39	101	357	184	819	131	210	8.4	18	4.5	5.2
7	12	43	89	250	158	491	117	168	7.7	14	3.9	5.0
8	11	49	80	198	135	348	106	138	7.3	12	3.9	4.8
9	14	61	78	164	122	276	93	116	8.5	11	3.7	4.4
10	15	53	904	133	118	224	88	96	7.7	9.7	3.6	4.3
11	14	45	539	111	132	186	85	80	6.8	8.9	3.5	4.1
12	12	38	338	95	156	159	76	70	7.0	8.5	3.9	3.9
13	11	32	258	80	156	139	67	64	9.2	8.4	4.5	3.9
14	14	28	213	69	146	129	60	78	10	7.4	4.6	3.8
15	14	31	183	61	136	115	53	78	8.6	6.6	4.7	3.9
16	14	31	203	55	123	120	48	64	8.1	8.4	4.9	4.1
17	17	34	216	114	112	121	45	53	9.9	10	7.3	3.9
18	22	2,570	189	592	101	113	41	45	9.4	8.9	8.0	4.0
19	33	1,700	161	400	97	100	37	42	14	7.8	7.2	4.0
20	38	602	138	276	98	89	37	38	9.0	6.6	7.4	3.8
21	33	325	120	215	94	78	39	33	6.9	6.0	7.0	3.8
22	29	250	111	178	84	69	37	28	6.5	5.4	6.5	3.6
23	26	210	124	150	76	66	42	27	5.8	5.5	7.8	3.5
24	23	344	171	136	69	66	2,650	36	5.4	6.5	9.4	3.8
25	21	e252	164	137	62	69	1,470	31	5.0	8.4	12	3.7
26	19	207	144	186	56	69	572	26	4.6	8.4	20	3.7
27	18	167	127	183	50	74	371	33	4.2	7.4	13	3.6
28	17	136	118	151	44	261	276	27	3.9	6.4	10	3.4
29	16	113	106	138	42	852	220	23	3.9	6.2	8.9	3.6
30	15	95	93	129	---	585	186	20	4.0	16	8.0	3.5
31	14	---	82	116	---	429	---	17	---	12	7.4	---
MEAN	18.4	251	175	185	119	387	268	144	7.98	9.25	7.05	4.28
MAX	38	2,570	904	639	238	3,130	2,650	1,040	15	25	20	6.6
MIN	11	13	62	55	42	38	37	17	3.9	4.9	3.5	3.4
IN.	0.13	1.70	1.22	1.29	0.78	2.70	1.81	1.00	0.05	0.06	0.05	0.03

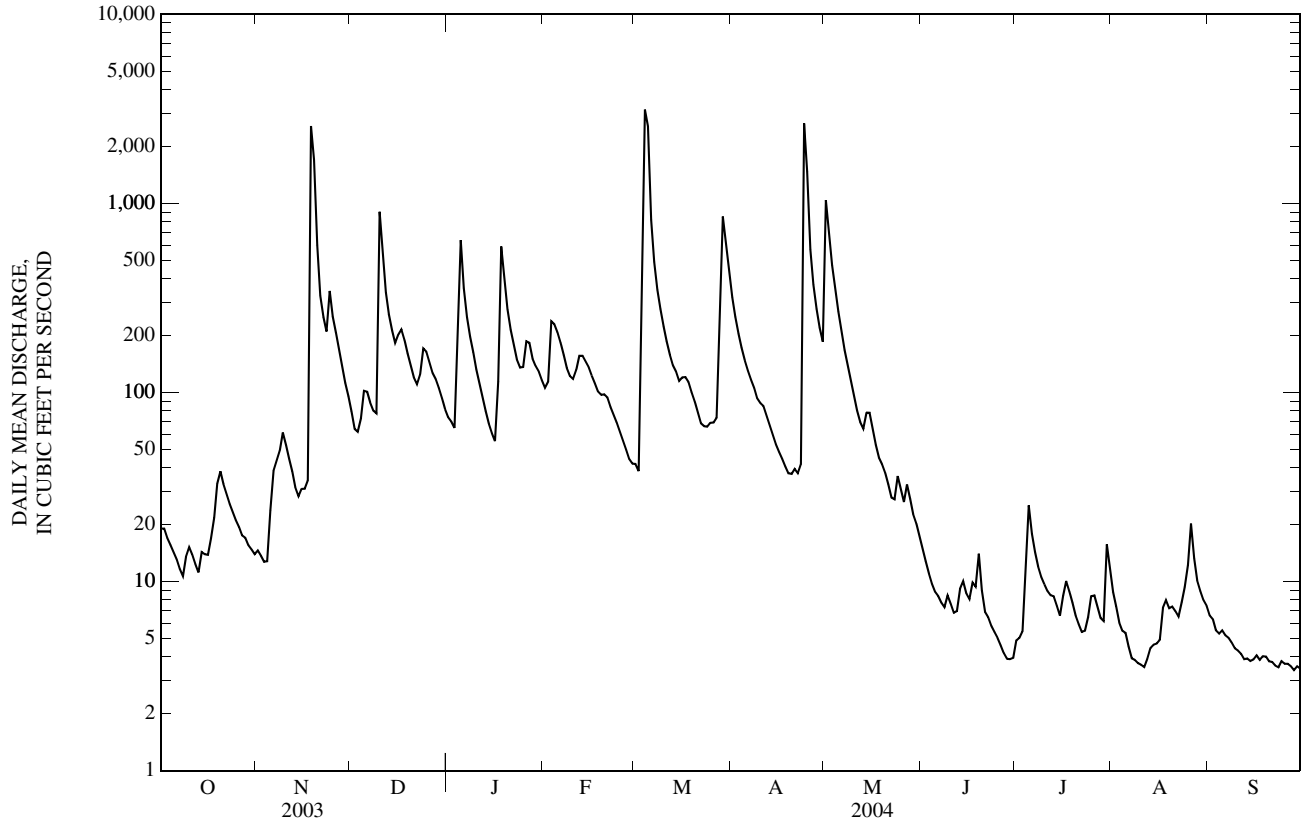
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	8.58	75.9	131	89.5	178	205	144	266	35.7	8.74	5.17	32.5
MAX	18.4	251	298	185	401	423	296	1,027	73.6	10.5	7.05	141
(WY)	(2004)	(2004)	(2002)	(2004)	(2001)	(2002)	(2002)	(2002)	(2001)	(2002)	(2004)	(2003)
MIN	4.60	7.48	8.49	17.2	35.2	43.4	18.0	8.17	7.71	5.14	3.36	2.31
(WY)	(2001)	(2003)	(2001)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2003)	(2003)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL MEAN	93.2		131		115	
HIGHEST ANNUAL MEAN					214	2002
LOWEST ANNUAL MEAN					54.5	2001
HIGHEST DAILY MEAN	2,570	Nov 18	3,130	Mar 4	7,580	May 8, 2002
LOWEST DAILY MEAN	1.0	Aug 25	3.4	Sep 28	1.0	Aug 25, 2003
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 19	3.6	Sep 22	1.3	Aug 29, 2000
MAXIMUM PEAK FLOW	---		6,790	Apr 24	12,900	May 8, 2002
MAXIMUM PEAK STAGE	---		11.11	Apr 24	14.86	May 8, 2002
INSTANTANEOUS LOW FLOW	---		3.2	Sep 22,27,28,30	0.82	Sep 1, 2000
ANNUAL RUNOFF (INCHES)	7.67		10.84		9.48	
10 PERCENT EXCEEDS	207		251		232	
50 PERCENT EXCEEDS	38		42		20	
90 PERCENT EXCEEDS	4.2		4.7		4.2	

e Estimated

06928300 ROUBIDOUX CREEK ABOVE FT. LEONARD WOOD, MO—Continued



06928430 ROUBIDOUX CREEK BELOW FT. LEONARD WOOD, MO

LOCATION.--Lat 37°49'10", long 92°11'40", in SE ¼ SW ¼ SW ¼ sec.24, T.36 N., R.12 W., Pulaski County, Hydrologic Unit 10290201, on right bank 400 ft downstream from Interstate 44 bridge, on Superior Road, 0.9 mi south of Business 44, and 0.6 mi upstream from Roubidoux Spring.

DRAINAGE AREA.--287 mi^2.

PERIOD OF RECORD.--Feb. 23, 2000 to current year.

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

REMARKS.--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	1.4	8.4	5.1	4.1	14	2.2	346	558	3.0	1.6	21	3.7
2	1.0	7.5	4.2	3.8	13	1.8	246	871	2.9	1.4	12	2.7
3	0.90	7.6	4.6	3.5	17	18	178	517	2.6	1.4	6.4	2.5
4	0.94	7.6	3.8	134	141	2,940	130	358	2.4	0.93	6.9	2.2
5	0.70	9.5	3.2	500	129	3,560	91	260	2.0	0.76	7.7	2.0
6	0.83	11	2.6	413	101	1,270	62	180	1.7	1.1	7.0	1.9
7	1.4	7.7	2.2	255	74	591	42	119	1.8	1.1	5.2	1.6
8	1.8	6.5	2.0	170	42	382	29	74	2.9	0.99	4.3	1.6
9	4.3	6.2	2.3	117	37	273	19	44	4.9	1.2	4.0	1.6
10	5.1	6.3	25	76	21	201	14	18	3.2	0.95	3.2	1.2
11	5.4	5.6	627	45	15	145	12	15	3.5	0.61	3.2	0.91
12	5.8	4.7	344	26	13	103	10	8.5	3.3	0.61	2.6	0.69
13	6.0	4.8	222	15	31	71	9.5	7.2	3.8	0.61	2.3	0.74
14	7.6	4.7	152	9.5	38	52	8.2	7.5	3.7	0.46	1.8	0.92
15	7.7	4.9	100	7.2	31	36	7.9	5.8	3.8	0.42	1.5	0.84
16	7.1	5.0	71	6.6	23	27	7.6	4.9	4.5	1.6	1.5	0.67
17	7.2	7.7	82	16	15	21	7.7	4.6	4.5	1.8	1.4	0.49
18	6.0	1,090	94	234	8.9	22	7.3	5.0	3.2	1.3	1.3	0.44
19	5.3	1,860	65	446	5.7	17	6.7	4.7	2.4	1.2	1.3	0.53
20	5.1	695	40	282	5.1	12	6.9	3.9	1.7	1.3	1.6	0.47
21	5.6	367	23	184	4.7	e8.0	7.0	4.0	1.9	0.80	1.4	0.40
22	5.6	219	12	124	3.7	e6.7	6.6	3.3	3.0	0.41	1.2	0.36
23	5.8	137	13	82	3.5	e6.3	6.9	3.2	2.0	0.37	79	0.44
24	6.3	101	9.5	54	3.6	7.3	493	6.1	1.4	1.5	30	0.70
25	6.8	183	9.7	40	3.1	7.5	3,810	11	1.4	5.5	16	0.74
26	5.9	130	31	34	2.9	7.4	764	8.6	1.3	2.3	14	0.66
27	4.8	74	22	55	2.5	12	421	8.0	1.0	1.8	9.0	0.53
28	4.6	39	13	49	2.6	38	278	6.3	1.2	1.3	6.4	0.46
29	4.3	18	6.9	43	2.3	658	192	4.6	1.3	1.2	11	0.40
30	4.7	8.8	4.8	23	---	672	133	4.0	1.1	174	7.1	0.32
31	6.7	---	4.1	20	---	505	---	3.4	---	55	4.8	---
MEAN	4.60	168	64.5	112	27.7	377	245	101	2.58	8.57	8.91	1.09
MAX	7.7	1,860	627	500	141	3,560	3,810	871	4.9	174	79	3.7
MIN	0.70	4.7	2.0	3.5	2.3	1.8	6.6	3.2	1.0	0.37	1.2	0.32
IN.	0.02	0.65	0.26	0.45	0.10	1.51	0.95	0.41	0.01	0.03	0.04	0.00

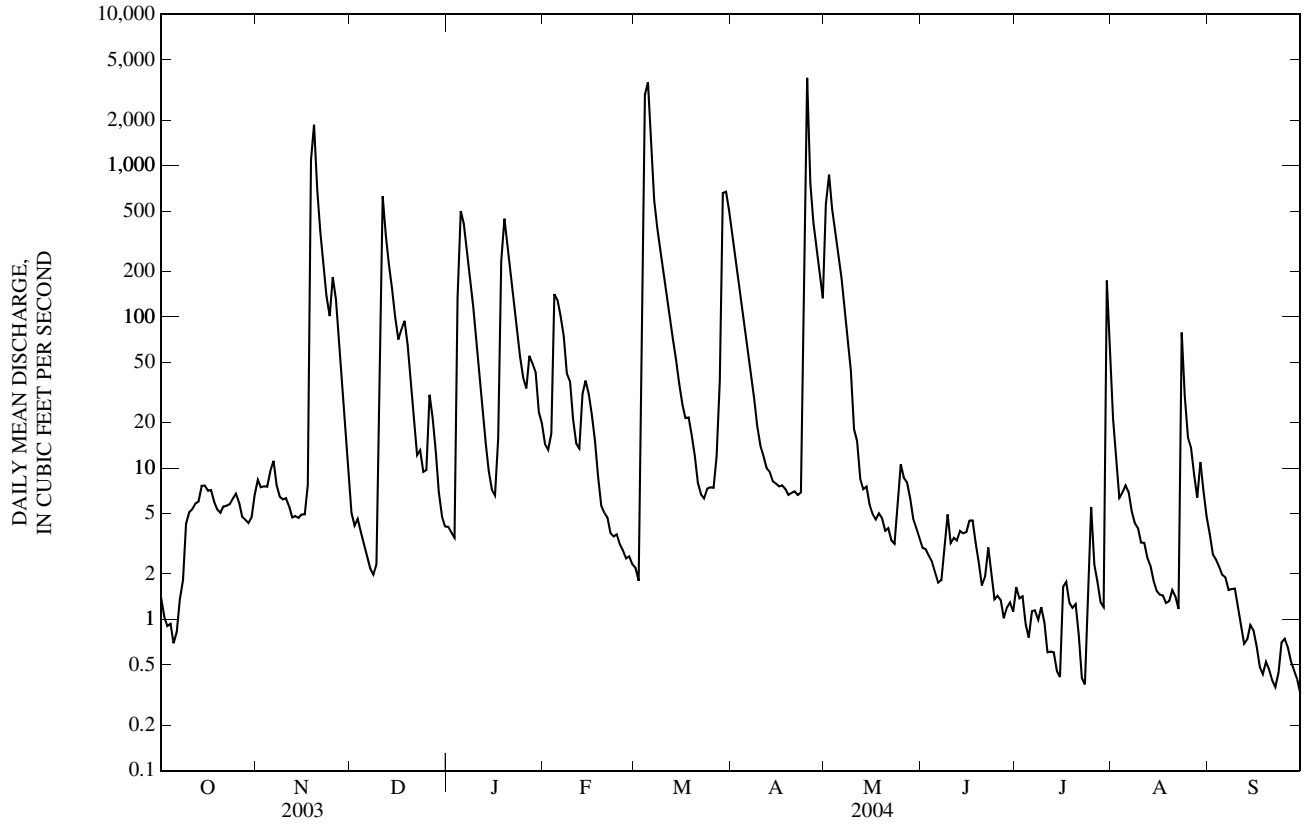
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	2.00	43.0	81.5	44.1	168	170	101	270	21.0	2.17	2.17	11.7
MAX	4.60	168	260	112	350	412	245	1,204	94.5	8.57	8.91	56.8
(WY)	(2004)	(2004)	(2002)	(2004)	(2001)	(2002)	(2004)	(2002)	(2001)	(2004)	(2004)	(2003)
MIN	0.16	0.46	0.52	0.61	15.6	2.55	1.76	0.87	0.70	0.16	0.24	0.19
(WY)	(2003)	(2003)	(2003)	(2001)	(2003)	(2000)	(2000)	(2000)	(2000)	(2003)	(2000)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL MEAN	32.9		93.6		88.1	
HIGHEST ANNUAL MEAN					206	2002
LOWEST ANNUAL MEAN					13.3	2003
HIGHEST DAILY MEAN	1,860	Nov 19	3,810	Apr 25	7,240	May 13, 2002
LOWEST DAILY MEAN	0.01	Jul 24	0.32	Sep 30	0.01	Jul 24, 2003
ANNUAL SEVEN-DAY MINIMUM	0.08	Jul 12	0.45	Sep 17	0.05	Oct 8, 2002
MAXIMUM PEAK FLOW	---		7,110	Apr 25	14,000	May 9, 2002
MAXIMUM PEAK STAGE	---		11.18	Apr 25	14.13	May 9, 2002
INSTANTANEOUS LOW FLOW	---		0.29	Jul 23,Sep 30	0.01	Jul 23-25, 2003
ANNUAL RUNOFF (INCHES)	1.56		4.44		4.17	
10 PERCENT EXCEEDS	68		195		137	
50 PERCENT EXCEEDS	2.3		6.4		1.8	
90 PERCENT EXCEEDS	0.18		1.00		0.24	

e Estimated

06928430 ROUBIDOUX CREEK BELOW FT. LEONARD WOOD, MO—Continued



06928440 ROUBIDOUX SPRING AT WAYNESVILLE, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°49'30", long 92°11'53", in SW $^1/_4$ NW $^1/_4$ NE $^1/_4$ sec.25, T.36 N., R.12 W., Pulaski County, Hydrologic Unit 10290201, from I-44 Exit 159 at Waynesville to Business 44, approximately 1.5 mi to Superior Road, south on Superior Road 0.3 mi to spring.

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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
24...	1305	Environmental	186	6.6	66	7.2	257	14.5	140	27.9	16.8	1.60
JAN												
07...	1535	Environmental	266	11.2	104	7.4	310	11.3	--	--	--	--
MAR												
09...	1352	Environmental	267	8.6	79	7.4	201	14.9	--	--	--	--
09...	1353	Replicate	--	9.0	88	7.3	201	13.8	--	--	--	--
MAY												
26...	1000	Environmental	82	5.2	54	7.3	336	14.9	190	37.9	22.4	1.68
JUL												
08...	1005	Environmental	23	5.0	52	7.2	386	15.6	210	42.4	25.2	1.50
SEP												
21...	1450	Environmental	9.7	7.2	74	7.4	423	15.5	--	--	--	--
21...	1500	Blank	--	--	--	--	--	--	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
24...	1.95	124	128	156	<1	4.14	<0.2	6.3	158	<10	0.24	<0.04	0.87
JAN													
07...	--	158	160	195	<1	--	--	--	--	<10	0.11	<0.04	0.43
MAR													
09...	--	97	96	117	<1	--	--	--	--	<10	0.20	<0.04	0.75
09...	--	--	--	--	--	--	--	--	--	<10	0.22	<0.04	0.77
MAY													
26...	2.51	161	163	198	<1	4.48	<0.2	5.2	190	11	<0.10	<0.04	0.23
JUL													
08...	2.51	190	192	234	<1	4.36	<0.2	5.5	210	<10	E.09n	<0.04	0.38
SEP													
21...	--	204	204	248	<1	--	--	--	--	<10	<0.10	<0.04	0.44
21...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
24...	<0.008	<0.02	<0.04	<0.04	400k	200	880k	3	258	E.1n	<0.04	<0.04	0.7
JAN													
07...	<0.008	<0.02	<0.04	<0.04	10k	66	102	--	--	--	--	--	--
MAR													
09...	<0.008	<0.02	<0.04	E.03n	86	120k	90	--	--	--	--	--	--
09...	<0.008	<0.02	<0.04	E.03n	42	150k	94	--	--	--	--	--	--
MAY													
26...	<0.008	<0.04d	<0.04	<0.04	20k	8k	10k	<2	21	0.3	<0.04	<0.04	E.4n
JUL													
08...	<0.008	<0.02	<0.04	<0.04	43k	16k	27	<2	22	E.1n	<0.04	<0.04	E.3n
SEP													
21...	<0.008	<0.02	<0.04	<0.04	1k	1k	3k	--	--	--	--	--	--
21...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--

06928440 ROUBIDOUX SPRING AT WAYNESVILLE, 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)	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								
24...	7	<0.08	0.30	0.9	<0.02	<0.4	M	E1n
JAN								
07...	--	--	--	--	--	--	--	--
MAR								
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
MAY								
26...	<6	E.05n	<0.06	<0.8	<0.02	<0.4	<0.6	<2
JUL								
08...	<6	<0.08	<0.06	E.6n	<0.02	<0.4	<0.6	<2
SEP								
21...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--

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

06930000 BIG PINEY RIVER NEAR BIG PINEY, MO

LOCATION.--Lat 37°39'56", long 92°03'00", in NE $^1/_4$ SE $^1/_4$ sec. 8, T.34 N., R.10 W., Pulaski County, Hydrologic Unit 10290202, on downstream side of left pier of Ross bridge, 3.0 mi east of Big Piney, 14.8 mi upstream from Spring Creek, and at river mile 22.

DRAINAGE AREA.--560 mi^2.

PERIOD OF RECORD.--October 1921 to Sept. 30, 1982, April 4 1988 to Sept. 30, 1996, Nov. 23, 1999 to current year.

REVISED RECORDS.--WSP 826: 1935. WSP 1176: 1943, 1945. WSP 1340: 1922-23, 1927-28(M), 1933(M), 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 800.99 ft above National Geodetic Vertical Datum of 1929. Prior to July 12, 1961, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 24.54 ft, Dec. 4, 1982, from floodmark, present datum, discharge, 81,200 ft^3/s, determined by indirect measurement of peak flow.

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

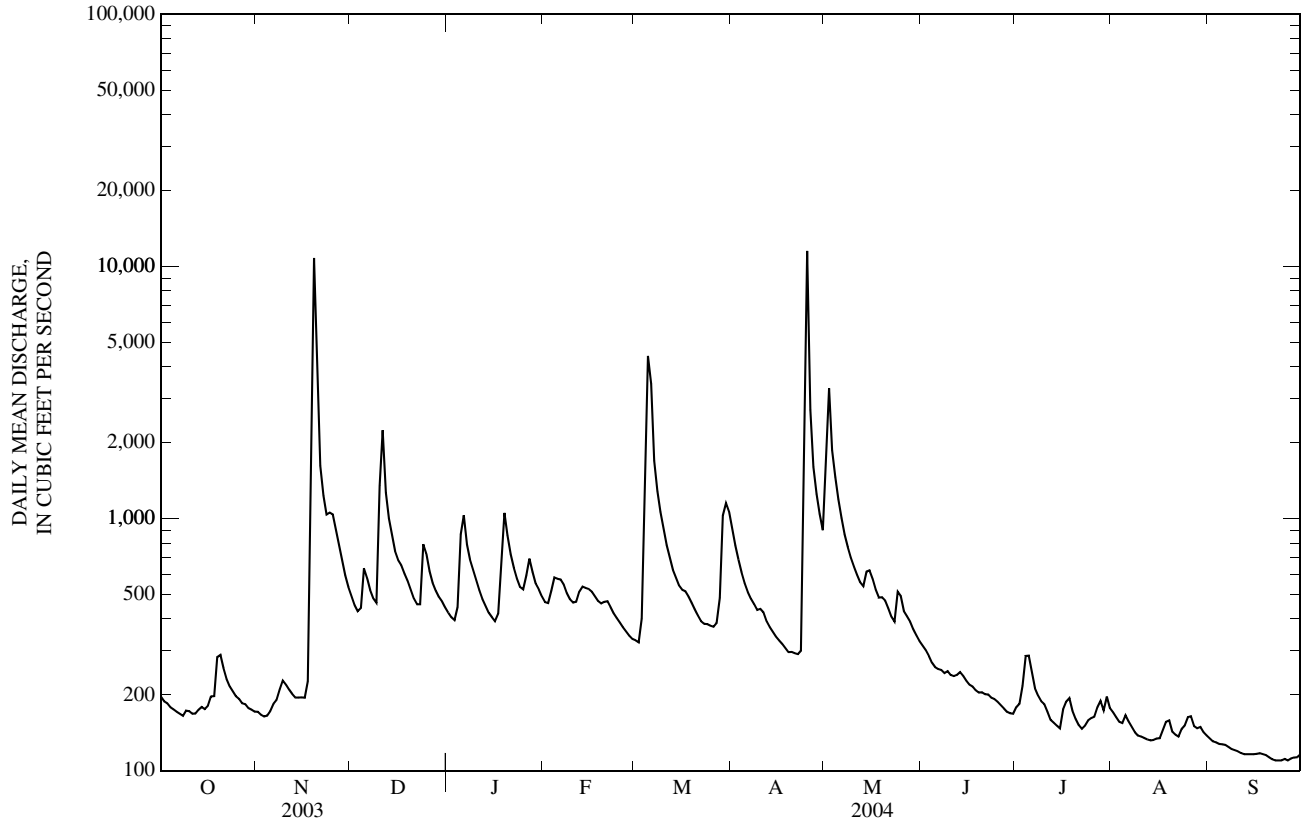
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	171	494	423	466	329	908	1,710	313	178	171	134
2	188	167	453	406	462	323	783	3,290	301	184	163	131
3	185	164	429	395	518	401	686	1,860	285	217	156	130
4	178	165	442	446	584	1,570	613	1,460	268	285	154	128
5	175	172	635	865	577	4,410	553	1,190	257	286	166	127
6	171	184	580	1,030	573	3,420	510	1,000	253	245	157	126
7	168	191	520	788	547	1,690	480	866	251	212	149	124
8	165	210	482	687	506	1,290	457	772	244	198	142	122
9	173	228	463	623	478	1,060	434	701	248	188	138	121
10	172	219	1,350	569	465	906	438	644	240	183	136	119
11	168	210	2,240	518	468	785	425	599	237	172	135	117
12	169	202	1,270	479	513	697	391	558	240	159	133	116
13	174	195	1,000	450	537	627	372	539	246	155	132	116
14	179	195	853	423	530	581	355	616	238	151	132	116
15	176	195	742	406	525	543	340	623	227	147	134	116
16	181	195	683	391	513	522	329	576	219	175	135	117
17	197	226	652	419	491	515	319	523	216	188	145	117
18	198	3,110	604	672	471	490	306	486	209	194	156	116
19	282	10,800	566	1,050	461	464	295	487	204	173	158	115
20	288	4,660	521	857	467	436	296	473	205	160	143	113
21	255	1,620	482	722	470	413	292	441	201	152	139	111
22	231	1,230	457	638	446	391	290	408	201	147	136	110
23	216	1,040	457	580	421	382	299	390	195	151	146	110
24	206	1,060	791	536	403	381	1,640	513	192	158	151	110
25	197	1,040	726	524	386	376	11,500	494	188	162	163	111
26	193	891	619	595	370	372	2,700	429	182	164	164	110
27	185	776	557	693	356	385	1,600	409	177	178	150	112
28	183	679	518	613	343	484	1,250	390	171	189	147	113
29	177	595	490	553	333	1,030	1,040	364	169	173	149	113
30	175	535	469	523	---	1,150	899	344	168	197	142	116
31	171	---	444	491	---	1,070	---	327	---	177	138	---
MEAN	193	1,044	677	592	472	887	1,027	757	225	184	147	118
MAX	288	10,800	2,240	1,050	584	4,410	11,500	3,290	313	286	171	134
MIN	165	164	429	391	333	323	290	327	168	147	132	110
IN.	0.40	2.08	1.39	1.22	0.91	1.83	2.05	1.56	0.45	0.38	0.30	0.23

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

MEAN	264	481	453	548	628	824	981	931	592	285	235	258
MAX	1,261	2,127	1,940	2,554	2,237	2,565	3,637	3,324	4,490	1,969	1,947	1,959
(WY)	(1950)	(1952)	(1943)	(1950)	(1982)	(1945)	(1927)	(1990)	(1983)	(1951)	(1927)	(1993)
MIN	82.3	106	98.5	98.5	127	154	168	132	111	89.3	80.7	72.9
(WY)	(1957)	(1965)	(1956)	(1956)	(1934)	(1981)	(2000)	(2000)	(1934)	(1934)	(2001)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	449		526		540	
HIGHEST ANNUAL MEAN					1,179	1927
LOWEST ANNUAL MEAN					149	1954
HIGHEST DAILY MEAN	10,800	Nov 19	11,500	Apr 25	22,900	Sep 26, 1993
LOWEST DAILY MEAN	104	Aug 27	110	Sep 22-24,26	60	Sep 7, 2001
ANNUAL SEVEN-DAY MINIMUM	107	Aug 23	111	Sep 21	63	Sep 2, 2001
MAXIMUM PEAK FLOW	---		15,800	Apr 25	38,300	May 9, 2002
MAXIMUM PEAK STAGE	---		15.77	Apr 25	20.70	Dec 27, 1942
INSTANTANEOUS LOW FLOW	---		110	Sep 21-27	58	Sep 7,8, 2001
ANNUAL RUNOFF (INCHES)	10.88		12.80		13.11	
10 PERCENT EXCEEDS	845		907		1,060	
50 PERCENT EXCEEDS	276		342		257	
90 PERCENT EXCEEDS	145		136		122	

06930000 BIG PINEY RIVER NEAR BIG PINEY, MO—Continued



06930060 BIG PINEY RIVER BELOW FT. LEONARD WOOD, MO

LOCATION.--Lat 37°45'37", long 92°03'29", in SE ¼ SW ¼ NW ¼ sec.17, T.35 N. R.10 W., Pulaski County, Hydrologic Unit 10290202, on right downstream wingwall of bridge on East Gate Ft. Leonard Wood road, 1.8 mi west of Highway J, 8.5 mi south of Interstate 44.

DRAINAGE AREA.--593 mi^2.

PERIOD OF RECORD.--Dec. 3, 1999 to current year.

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

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

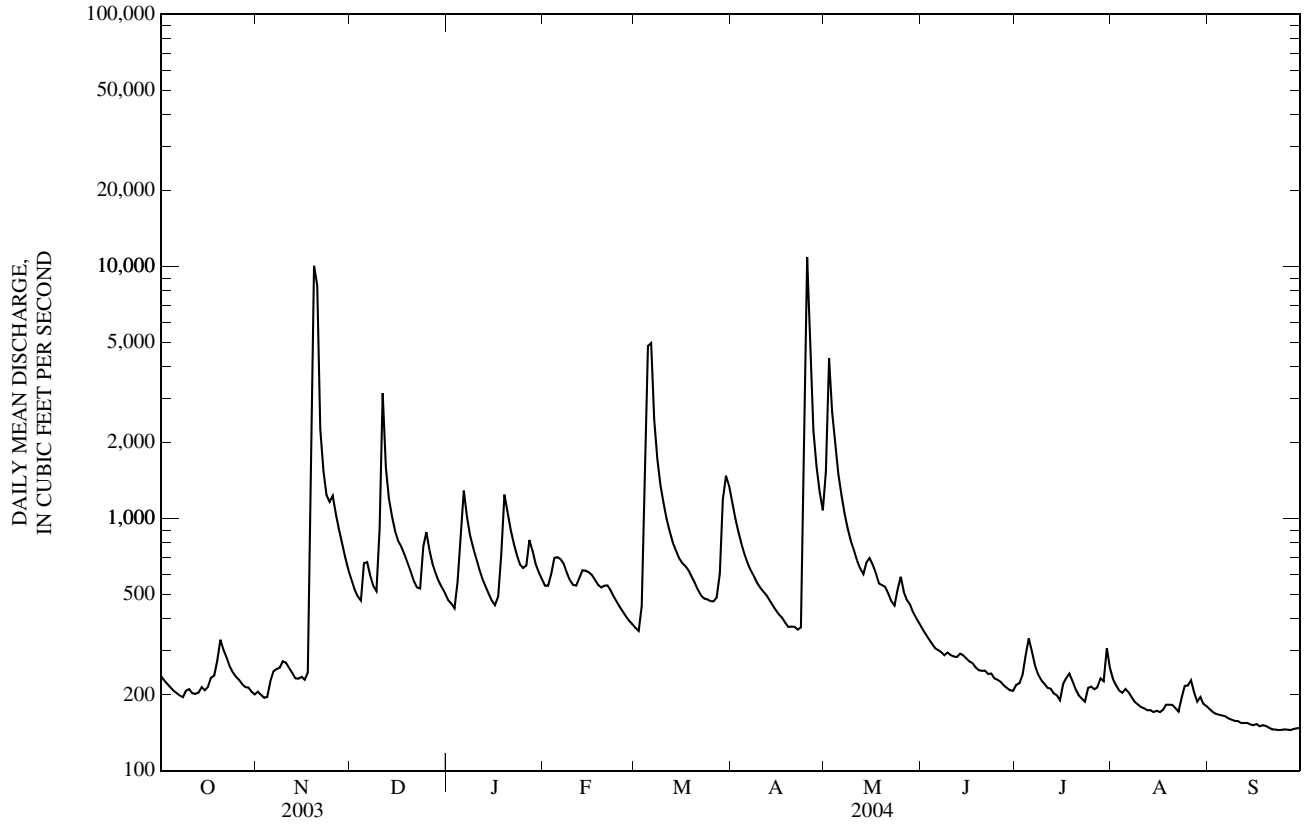
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	206	572	475	541	369	1,160	1,540	363	219	230	175
2	228	200	523	460	541	358	1,000	4,320	348	222	218	171
3	221	195	492	441	605	449	882	2,650	332	239	208	168
4	214	196	473	560	699	1,740	792	1,940	319	288	203	167
5	208	226	664	901	703	4,830	718	1,500	306	334	211	166
6	203	248	671	1,290	691	4,970	661	1,230	301	297	205	164
7	199	253	595	1,010	661	2,470	620	1,040	295	261	195	161
8	195	256	540	859	611	1,710	587	910	287	241	187	159
9	207	271	515	766	569	1,360	555	815	294	229	183	157
10	210	268	915	695	546	1,150	531	749	287	222	179	157
11	203	255	3,150	628	543	993	513	682	283	213	177	155
12	202	244	1,590	575	580	885	495	633	283	211	174	155
13	204	232	1,200	537	623	801	474	602	291	203	174	155
14	214	232	1,010	503	621	744	451	671	287	199	171	153
15	208	236	892	472	613	696	433	697	278	190	173	152
16	215	229	812	453	598	664	416	657	271	220	171	153
17	234	244	772	491	572	649	404	610	267	233	174	150
18	238	2,090	720	719	547	623	385	553	257	243	183	151
19	273	10,100	668	1,240	533	589	371	545	250	227	183	150
20	330	8,400	615	1,070	542	556	373	536	249	211	182	148
21	302	2,260	565	904	543	522	372	505	249	199	177	146
22	281	1,540	533	794	520	495	362	469	242	193	172	145
23	259	1,240	527	716	490	482	370	452	243	188	195	145
24	245	1,160	776	656	467	478	1,170	525	232	213	217	145
25	236	1,230	883	636	445	471	10,900	588	229	215	218	146
26	229	1,040	746	651	427	470	5,440	510	225	210	228	145
27	221	905	660	821	408	484	2,240	475	218	214	204	145
28	214	793	605	745	393	604	1,600	455	213	232	188	147
29	214	701	564	660	381	1,190	1,280	424	209	226	196	147
30	206	625	532	613	---	1,480	1,080	402	207	306	184	148
31	200	---	506	576	---	1,350	---	383	---	256	180	---
MEAN	227	1,202	783	707	552	1,117	1,221	905	270	231	192	154
MAX	330	10,100	3,150	1,290	703	4,970	10,900	4,320	363	334	230	175
MIN	195	195	473	441	381	358	362	383	207	188	171	145
IN.	0.44	2.26	1.52	1.37	1.00	2.17	2.30	1.76	0.51	0.45	0.37	0.29

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

MEAN	165	438	493	366	785	705	645	1,092	282	195	168	243
MAX	227	1,202	783	707	1,798	1,117	1,221	3,628	377	264	224	615
(WY)	(2004)	(2004)	(2004)	(2004)	(2001)	(2004)	(2004)	(2002)	(2002)	(2002)	(2002)	(2003)
MIN	129	158	164	195	269	305	200	160	168	147	121	124
(WY)	(2001)	(2001)	(2001)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2001)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL MEAN	499		630		521	
HIGHEST ANNUAL MEAN					758	2002
LOWEST ANNUAL MEAN					329	2001
HIGHEST DAILY MEAN	10,100	Nov 19	10,900	Apr 25	32,300	May 9, 2002
LOWEST DAILY MEAN	121	Aug 27	145	Sep 22-24,26,27	103	Sep 6, 2001
ANNUAL SEVEN-DAY MINIMUM	127	Aug 22	145	Sep 21	107	Sep 2, 2001
MAXIMUM PEAK FLOW	---		16,400	Apr 25	43,400	May 9, 2002
MAXIMUM PEAK STAGE	---		13.80	Apr 25	18.89	May 9, 2002
INSTANTANEOUS LOW FLOW	---		142	Sep 21,24,28	103	Sep 6, 2001
ANNUAL RUNOFF (INCHES)	11.41		14.46		11.93	
10 PERCENT EXCEEDS	881		1,100		883	
50 PERCENT EXCEEDS	322		406		249	
90 PERCENT EXCEEDS	167		175		138	

06930060 BIG PINEY RIVER BELOW FT. LEONARD WOOD, MO—Continued



06930450 BIG PINEY RIVER AT DEVIL'S ELBOW, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°50'53", long 92°03'44, in NW ¼ SE ¼ NE ¼ sec.18, T.36 N., R.10 W., Pulaski County, Hydrologic Unit 10290202, at bridge on County Highway V at Devil's Elbow.

DRAINAGE AREA.--746 mi^2.

PERIOD OF RECORD.--July 1977 to October 1989, November 1992 to currrent 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
NOV												
25...	0920	Blank	--	--	--	--	--	--	--	0.01	<0.008	<0.16
25...	0945	Environmental	1,330	10.2	90	8.0	261	8.8	140	28.1	16.2	1.72
JAN												
20...	1035	Environmental	1,140	12.1	97	8.1	299	4.6	--	--	--	--
MAR												
10...	0930	Environmental	1,250	10.8	95	7.9	238	9.2	--	--	--	--
MAY												
24...	1455	Environmental	468	10.3	120	7.7	286	22.8	160	32.4	19.6	1.57
JUL												
07...	1445	Environmental	288	9.4	119	7.7	319	25.3	170	34.4	20.7	1.50
SEP												
21...	1140	Environmental	150	10.5	118	7.6	348	20.0	--	--	--	--

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV													
25...	<0.10	--	--	--	--	E.12n	<0.2	<0.2	<10	<10	0.11	<0.04	<0.06
25...	2.28	121	121	148	<1	4.41	<0.2	5.7	151	<10	0.19	<0.04	0.91
JAN													
20...	--	141	140	171	<1	--	--	--	--	<10	0.13	<0.04	0.49
MAR													
10...	--	107	107	130	<1	--	--	--	--	21	0.41	0.04	0.67
MAY													
24...	3.19	156	158	192	<1	5.38	<0.2	3.9	148	<10	0.18	<0.04	0.17
JUL													
07...	3.34	160	160	195	<1	5.32	<0.2	22.3	183	<10	0.19	<0.04	0.24
SEP													
21...	--	171	174	212	<1	--	--	--	--	<10	0.10	<0.04	0.18

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV													
25...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	<2	<0.2	<0.04	<0.04	<0.4
25...	<0.008	E.02n	E.03n	E.02n	64	100	127	3	131	0.3	<0.04	<0.04	0.5
JAN													
20...	<0.008	E.01n	E.02n	<0.04	2k	17k	17k	--	--	--	--	--	--
MAR													
10...	<0.008	0.12	0.13	0.16	28	38	23	--	--	--	--	--	--
MAY													
24...	0.010	<0.04d	E.03n	E.03n	3k	13k	8k	2	52	0.5	<0.04	<0.04	0.5
JUL													
07...	<0.008	0.02	E.04n	0.05	7k	18k	2k	E1n	56	0.4	<0.04	<0.04	0.4
SEP													
21...	<0.008	0.02	E.03n	E.03n	5k	19k	23	--	--	--	--	--	--

06930450 BIG PINEY RIVER AT DEVIL'S ELBOW, 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								
25...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	<2
25...	8	<0.08	0.27	5.1	<0.02	<0.4	M	<2
JAN								
20...	--	--	--	--	--	--	--	--
MAR								
10...	--	--	--	--	--	--	--	--
MAY								
24...	7	E.06n	0.12	7.2	<0.02	<0.4	M	<2
JUL								
07...	E4n	<0.08	0.15	7.9	<0.02	<0.4	Mn	<2
SEP								
21...	--	--	--	--	--	--	--	--

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

06930800 GASCONADE RIVER ABOVE JEROME, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 37°55'12", long 91°58'33", in SW ¼ NW ¼ NE ¼ sec.24, T.37 N., R.10 W., Phelps County, Hydrologic Unit 10290203, at bridge on State Highway D at Jerome, 150 ft upstream from Little Piney Creek, and 0.7 mi upstream from gaging station.

DRAINAGE AREA.--2,570 mi^2.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1978 to September 1981.
WATER TEMPERATURE: March 1978 to September 1981.

REMARKS.--National Stream-Quality Accounting Network station January 1978 to September 1993. Ambient Water-Quality Monitoring Network station November 1993 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 588 microsiemens per centimeter, Sept. 23, 1981; minimum, 133 microsiemens per centimeter, Sept. 1, 1981.
WATER TEMPERATURE: Maximum daily, 34.0 °C, Aug. 11 and 17, 1980; minimum, 0.0 °C on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
OCT												
29...	1045	Environmental	665	9.0	86	8.4	359	12.2	--	--	--	--
29...	1046	Replicate	--	9.1	88	8.4	359	12.2	--	--	--	--
NOV												
21...	1010	Environmental	13,600	8.9	86	7.9	228	12.2	120	24.8	13.7	4.05
DEC												
22...	0945	Environmental	2,410	11.2	94	8.1	340	7.0	--	--	--	--
JAN												
20...	1315	Environmental	5,910	11.8	93	8.1	284	4.3	150	30.6	17.6	1.96
FEB												
04...	0920	Environmental	2,730	12.3	94	7.9	322	3.6	--	--	--	--
MAR												
10...	1145	Environmental	5,690	11.2	100	7.9	259	9.7	--	--	--	--
APR												
20...	1220	Environmental	1,410	8.7	97	8.0	328	19.3	--	--	--	--
MAY												
19...	1120	Environmental	1,680	8.0	91	7.9	312	20.3	170	33.4	19.9	1.62
JUN												
14...	1020	Environmental	864	6.4	78	7.8	330	23.3	--	--	--	--
JUL												
08...	1245	Environmental	787	7.5	94	7.8	342	25.2	180	35.1	22.0	1.65
SEP												
21...	1300	Environmental	481	8.9	101	7.6	347	20.4	--	--	--	--

06930800 GASCONADE RIVER ABOVE JEROME, MO—Continued

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

Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
OCT													
29...	--	181	180	214	3	--	--	--	--	<10	0.12	<0.04	E.05n
29...	--	--	--	--	--	--	--	--	--	<10	E.08n	<0.04	E.05n
NOV													
21...	2.31	106	105	128	<1	4.76	<0.2	5.4	138	154d	1.2	E.03n	0.94
DEC													
22...	--	158	159	194	<1	--	--	--	--	<10	0.16	<0.04	1.02
JAN													
20...	2.82	135	131	160	<1	6.20	<0.2	6.6	157	31	0.40	<0.04	0.73
FEB													
04...	--	150	148	180	<1	--	--	--	--	21	0.21	<0.04	0.80
MAR													
10...	--	126	127	154	<1	--	--	--	--	12	0.32	<0.04	1.02
APR													
20...	--	162	162	198	<1	--	--	--	--	<10	0.17	<0.04	0.12
MAY													
19...	2.80	148	148	181	<1	5.76	<0.2	5.2	162	<10	0.19	<0.04	0.23
JUN													
14...	--	160	158	193	<1	--	--	--	--	<10	0.17	<0.04	0.28
JUL													
08...	3.32	162	161	197	<1	5.78	<0.2	4.4	181	<10	0.17	<0.04	0.12
SEP													
21...	--	169	172	210	<1	--	--	--	--	<10	0.14	<0.04	0.06

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recoverable, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT													
29...	<0.008	<0.02	<0.04	<0.04	<1b	4k	2k	--	--	--	--	--	--
29...	<0.008	<0.02	<0.04	<0.04	<1b	7k	3k	--	--	--	--	--	--
NOV													
21...	E.006n	0.08	0.12	0.30	3,900	5,100	4,500	7	1,790d	0.6	<0.04	0.07	1.1
DEC													
22...	<0.008	E.01n	<0.04	E.03n	5k	21	10k	--	--	--	--	--	--
JAN													
20...	<0.008	0.03	0.04	0.07	140	340	386	11	395	0.3	<0.04	<0.04	0.8
FEB													
04...	<0.008	<0.02	<0.04	E.02n	7k	13k	22	--	--	--	--	--	--
MAR													
10...	E.004n	<0.02	E.02n	0.05	42	62	48	--	--	--	--	--	--
APR													
20...	<0.008	<0.02	<0.04	<0.04	<1b	4k	2k	--	--	--	--	--	--
MAY													
19...	E.004n	<0.02	<0.04	<0.04	64	18k	16k	2	58	0.3	<0.04	<0.04	0.5
JUN													
14...	<0.008	<0.02	E.02n	E.02n	8k	13k	4k	--	--	--	--	--	--
JUL													
08...	<0.008	<0.02	E.03n	E.03n	35	18k	430	E1n	45	0.5	<0.04	<0.04	0.4
SEP													
21...	<0.008	<0.02	<0.04	<0.04	5k	5k	6k	--	--	--	--	--	--

06930800 GASCONADE RIVER ABOVE JEROME, 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)	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								
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
NOV								
21...	38	<0.08	4.53	2.5	E.01n	<0.4	1	8
DEC								
22...	--	--	--	--	--	--	--	--
JAN								
20...	18	0.12	0.96	4.6	<0.02	E.3n	1	E2n
FEB								
04...	--	--	--	--	--	--	--	--
MAR								
10...	--	--	--	--	--	--	--	--
APR								
20...	--	--	--	--	--	--	--	--
MAY								
19...	<6	E.08n	0.25	7.6	<0.02	<0.4	M	<2
JUN								
14...	--	--	--	--	--	--	--	--
JUL								
08...	<6	<0.08	0.11	10.3	<0.02	<0.4	Mn	<2
SEP								
21...	--	--	--	--	--	--	--	--

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

06932000 LITTLE PINEY CREEK AT NEWBURG, MO

LOCATION.--Lat 37°54'34", long 91°54'12", in NW ¼ SW ¼ SE ¼ sec.22, T.37 N., R.9 W., Phelps County, Hydrologic Unit 10290203, on downstream side of bridge pier on State Highway P and T at Newburg, and 2 mi upstream from Mill Creek.

DRAINAGE AREA.--200 mi^2.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 693.40 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1951, all gages at datum 3.0 ft higher. Prior to Nov. 21, 1963, nonrecording gage at site 100 ft downstream; Nov. 21, 1963 to May 9, 1966, nonrecording gage at present site.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 16.7 ft, Aug. 20, 1915, from floodmark, present datum; discharge, 30,000 ft^3/s, from rating curve based on discharge measurements made in 1935 and extended above 25,000 ft^3/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	50	61	154	138	113	84	399	338	123	76	135	103
2	46	60	145	136	214	81	352	382	114	76	105	98
3	45	56	146	135	231	542	317	352	109	78	92	93
4	46	59	139	938	186	1,680	290	309	105	74	167	87
5	45	78	133	501	174	1,690	264	261	102	71	184	84
6	43	84	126	331	159	693	241	242	128	69	109	80
7	40	81	122	260	143	480	225	202	108	67	89	76
8	42	72	120	225	128	372	210	183	105	66	79	72
9	55	66	125	196	129	313	194	169	147	65	74	70
10	53	63	461	170	136	266	189	159	130	64	69	68
11	48	62	333	154	140	230	185	147	111	63	67	66
12	46	61	267	143	140	200	167	140	104	62	65	66
13	45	56	234	142	131	183	155	149	106	63	60	67
14	50	58	211	142	127	175	145	181	98	64	57	65
15	46	59	199	137	124	164	136	157	96	63	56	65
16	45	55	201	134	115	167	130	142	110	145	55	64
17	58	141	187	330	111	156	122	131	142	89	59	62
18	51	2,090	178	480	108	148	114	124	136	74	56	e60
19	49	1,130	167	339	114	142	109	127	121	69	54	e56
20	47	493	157	269	123	139	106	124	107	67	57	54
21	46	329	152	230	116	129	106	118	103	65	55	54
22	48	284	151	205	107	123	100	115	99	62	53	53
23	52	299	209	183	102	130	178	114	92	62	277	53
24	54	288	205	174	96	130	775	113	86	82	178	53
25	54	253	188	177	92	124	702	153	82	115	307	53
26	54	225	177	160	89	475	387	250	80	92	269	52
27	53	201	169	145	86	488	306	179	77	83	155	51
28	55	179	165	134	84	651	261	155	76	79	e131	52
29	55	165	158	128	83	610	225	140	75	80	e123	51
30	53	158	150	121	---	535	201	133	74	768	e117	51
31	52	---	142	114	---	457	---	139	---	210	e111	---
MEAN	49.2	242	183	228	128	379	243	182	105	102	112	66.0
MAX	58	2,090	461	938	231	1,690	775	382	147	768	307	103
MIN	40	55	120	114	83	81	100	113	74	62	53	51
IN.	0.28	1.35	1.05	1.32	0.69	2.19	1.36	1.05	0.59	0.59	0.64	0.37

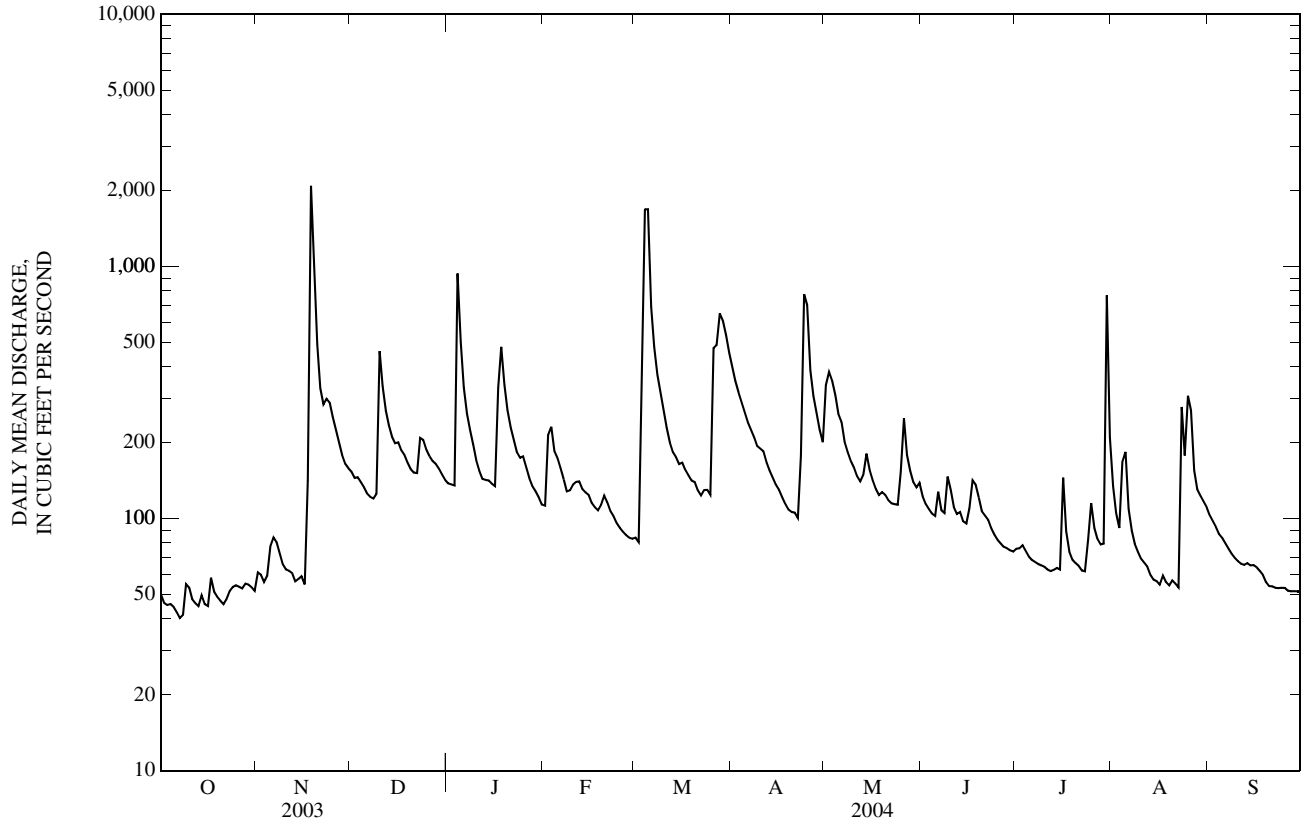
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

MEAN	96.2	138	151	151	177	236	268	275	199	106	82.2	86.5
MAX	913	694	1,300	770	678	822	1,335	1,346	1,545	684	493	706
(WY)	(1950)	(1994)	(1983)	(1950)	(1985)	(1945)	(1945)	(2002)	(1935)	(1998)	(1946)	(1993)
MIN	26.9	33.1	35.7	34.9	35.6	42.8	42.0	43.7	32.2	27.6	27.6	28.1
(WY)	(1957)	(1957)	(1956)	(1956)	(1934)	(1956)	(1956)	(1932)	(1934)	(1934)	(1936)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1929 - 2004	
ANNUAL MEAN	130		168		163	
HIGHEST ANNUAL MEAN					391	1985
LOWEST ANNUAL MEAN					47.0	1954
HIGHEST DAILY MEAN	2,090	Nov 18	2,090	Nov 18	19,600	Dec 3, 1982
LOWEST DAILY MEAN	37	Feb 5,8	40	Oct 7	24	1936,1954,1956
ANNUAL SEVEN-DAY MINIMUM	39	Feb 4	44	Oct 2	24	Aug 22, 1936
MAXIMUM PEAK FLOW	---		3,740	Nov 18	32,500	Aug 14, 1946
MAXIMUM PEAK STAGE	---		8.17	Nov 18	16.60	Jun 17, 1985
INSTANTANEOUS LOW FLOW	---		39	Oct 7,8	24	Several Years
ANNUAL RUNOFF (INCHES)	8.85		11.47		11.10	
10 PERCENT EXCEEDS	221		308		285	
50 PERCENT EXCEEDS	81		123		87	
90 PERCENT EXCEEDS	43		54		43	

e Estimated

06932000 LITTLE PINEY CREEK AT NEWBURG, MO—Continued



06933500 GASCONADE RIVER AT JEROME, MO

LOCATION.--Lat 37°55'48", long 91°58'38", in NE ¼ NE ¼ SE ¼ sec.13, T.37 N., R.10 W., Phelps County, Hydrologic Unit 10290203, on left bank at Jerome, 0.5 mi downstream from Little Piney Creek, and at mile 107.

DRAINAGE AREA.--2,840 mi^2.

PERIOD OF RECORD.--April 1903 to July 1906, January 1923 to current year. April 1903 to July 1906 published as "at Arlington". October to December 1922 monthly discharge only, published in WSP 1310. Gage-height records collected intermittently in the vicinity 1885-1926 and at same site since 1938 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 172: 1904. WSP 566: Drainage area. WSP 1340: 1903-04, 1928(M).

GAGE.--Water-stage recorder. Datum of gage is 657.64 ft above National Geodetic Vertical Datum of 1929. Prior to July 26, 1904, nonrecording gage at site 0.8 mi downstream at different datum; July 26, 1904, to July 21, 1906, nonrecording gage at site 0.5 mi upstream from present site at datum about 0.85 ft higher than present gage; Jan. 3, 1923, to Sept. 29, 1928, nonrecording gage at site 400 ft downstream from present site at datum 0.14 ft lower than present datum; Sept. 30, 1928, to Jan. 17, 1939, nonrecording gage at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 6, 1897, reached a stage of about 29.0 ft, discharge, 120,000 ft^3/s. A stage of 28.6 ft was reached on Aug. 20 and 22, 1915, discharge, 114,000 ft^3/s.

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

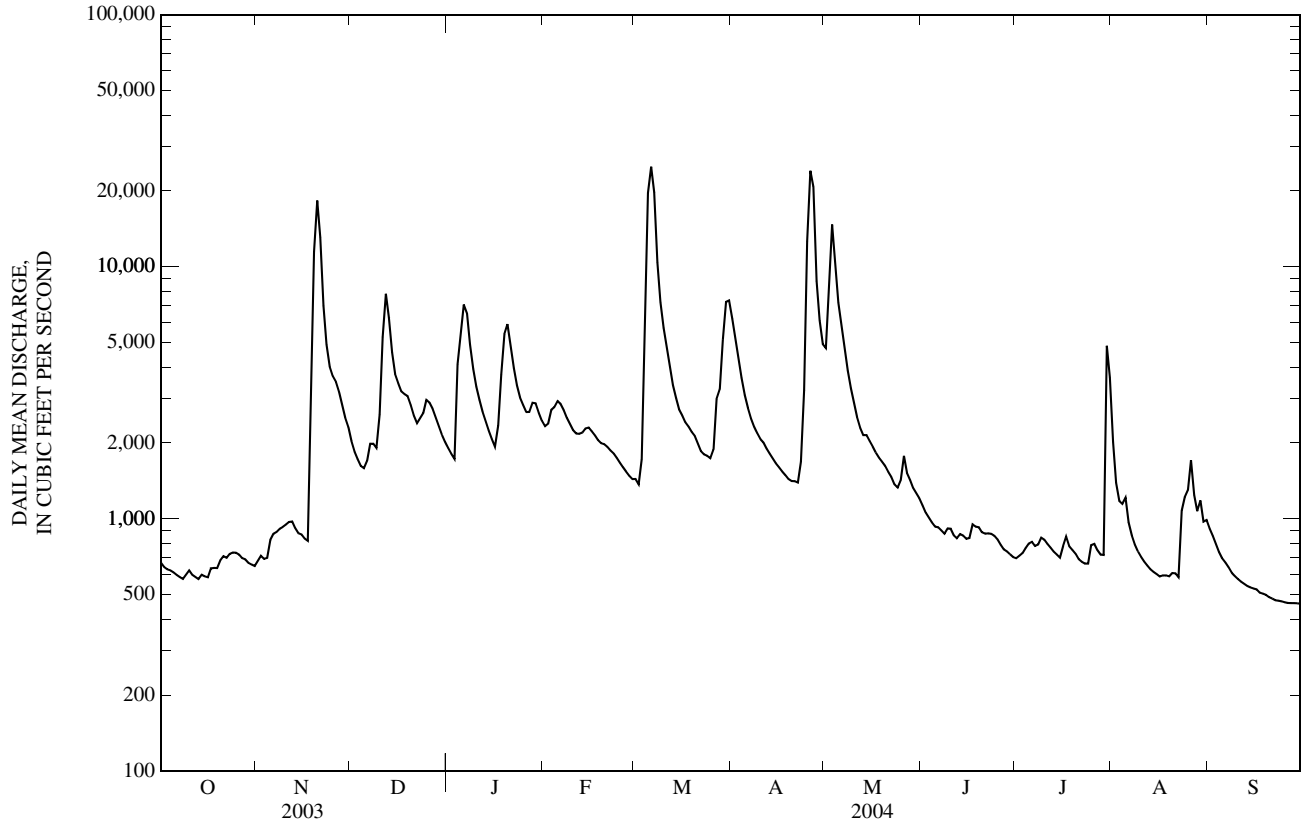
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	670	683	2,040	1,910	2,330	1,440	6,220	4,760	1,130	698	2,020	916
2	644	714	1,850	1,810	2,390	1,370	5,190	9,270	1,060	714	1,390	856
3	631	694	1,730	1,730	2,710	1,720	4,290	14,700	1,010	732	1,180	798
4	625	699	1,620	4,110	2,780	7,450	3,620	10,100	969	767	1,150	738
5	613	825	1,590	5,330	2,930	19,600	3,100	7,200	932	798	1,210	698
6	600	874	1,700	7,090	2,860	24,900	2,760	5,760	927	812	969	672
7	588	888	1,990	6,540	2,700	19,700	2,510	4,710	900	781	862	643
8	578	914	1,990	4,910	2,520	10,400	2,320	3,870	874	792	792	613
9	600	929	1,910	3,930	2,380	7,240	2,190	3,310	917	843	742	594
10	625	950	2,600	3,350	2,250	5,720	2,070	2,890	914	827	707	578
11	600	972	5,260	2,960	2,180	4,770	2,010	2,540	861	796	677	564
12	588	977	7,810	2,670	2,180	3,980	1,900	2,300	837	768	654	553
13	577	918	6,270	2,440	2,200	3,400	1,810	2,150	870	742	631	542
14	600	877	4,570	2,240	2,280	3,010	1,730	2,150	859	722	616	535
15	591	867	3,750	2,070	2,300	2,720	1,660	2,040	835	702	604	529
16	586	835	3,450	1,940	2,230	2,570	1,600	1,930	840	781	591	526
17	636	818	3,200	2,350	2,140	2,420	1,540	1,830	951	851	597	510
18	639	3,480	3,130	3,740	2,060	2,320	1,490	1,750	932	778	597	505
19	638	11,500	3,070	5,420	1,990	2,220	1,440	1,690	926	753	591	499
20	686	18,300	2,830	5,920	1,980	2,130	1,410	1,620	885	727	610	489
21	711	13,100	2,570	4,880	1,930	1,990	1,410	1,540	874	693	608	483
22	701	7,010	2,400	3,960	1,870	1,860	1,390	1,460	877	676	587	476
23	726	4,920	2,510	3,390	1,820	1,800	1,680	1,370	872	665	1,080	474
24	736	4,020	2,630	3,030	1,750	1,780	3,240	1,330	856	665	1,220	471
25	734	3,690	2,960	2,830	1,670	1,740	12,600	1,420	829	787	1,300	467
26	722	3,500	2,890	2,650	1,600	1,890	24,000	1,780	789	795	1,710	464
27	699	3,200	2,740	2,660	1,540	2,990	20,700	1,520	757	752	1,240	463
28	691	2,820	2,530	2,890	1,480	3,270	8,780	1,430	743	722	1,070	463
29	670	2,520	2,340	2,880	1,440	5,130	6,130	1,330	724	719	1,180	463
30	659	2,310	2,150	2,630	---	7,250	4,930	1,260	705	4,860	975	461
31	651	---	2,020	2,450	---	7,350	---	1,200	---	3,640	990	---
MEAN	646	3,160	2,906	3,442	2,155	5,359	4,524	3,297	882	979	940	568
MAX	736	18,300	7,810	7,090	2,930	24,900	24,000	14,700	1,130	4,860	2,020	916
MIN	577	683	1,590	1,730	1,440	1,370	1,390	1,200	705	665	587	461
IN.	0.26	1.24	1.18	1.40	0.82	2.18	1.78	1.34	0.35	0.40	0.38	0.22

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

MEAN	1,353	2,296	2,458	2,406	2,986	4,038	4,589	4,401	2,975	1,509	1,154	1,253
MAX	10,390	10,400	17,740	10,980	11,540	13,110	20,450	15,390	18,500	10,730	9,244	12,580
(WY)	(1950)	(1994)	(1983)	(1950)	(1985)	(1945)	(1945)	(1990)	(1935)	(1951)	(1927)	(1993)
MIN	289	368	392	368	491	597	504	532	518	339	324	293
(WY)	(1957)	(1957)	(1956)	(1956)	(1964)	(1956)	(1956)	(2000)	(1934)	(1934)	(1936)	(1956)

06933500 GASCONADE RIVER AT JEROME, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	1,728		2,408		2,605	
HIGHEST ANNUAL MEAN					6,491	1985
LOWEST ANNUAL MEAN					544	1954
HIGHEST DAILY MEAN	18,300	Nov 20	24,900	Mar 6	121,000	Dec 5, 1982
LOWEST DAILY MEAN	406	Aug 28	461	Sep 30	259	Sep 21, 1956
ANNUAL SEVEN-DAY MINIMUM	421	Aug 23	465	Sep 24	266	Sep 16, 1956
MAXIMUM PEAK FLOW	---		27,300	Apr 26	136,000	Dec 5, 1982
MAXIMUM PEAK STAGE	---		14.11	Apr 26	31.34	Dec 5, 1982
INSTANTANEOUS LOW FLOW	---		458	Sep 29,30	254	Sep 21, 1956
ANNUAL RUNOFF (INCHES)	8.26		11.54		12.47	
10 PERCENT EXCEEDS	3,380		4,910		5,450	
50 PERCENT EXCEEDS	1,250		1,500		1,230	
90 PERCENT EXCEEDS	560		600		514	



06934000 GASCONADE RIVER NEAR RICH FOUNTAIN, MO

LOCATION.--Lat 38°23'20", long 91°49'12", in SE $^1/_4$ sec.16, T.41 N., R.8 W., Osage County, Hydrologic Unit 10290203, on downstream side of State Highway 89 bridge, 100 ft downstream from Brush Creek Slough, 800 ft upstream from Swan Creek, and 4 mi east of Rich Fountain.

DRAINAGE AREA.--3,180 mi^2 (by U.S. Army Corps of Engineers).

PERIOD OF RECORD.--Nov. 1, 1921 to Sept. 30, 1959, Oct. 1, 1986 to current year. Annual peaks only for water years 1959 to 1986.

GAGE.--Water-stage recorder. Datum of gage 553.70 ft above National Geodetic Vertical Datum of 1929. From Oct. 10, 1921, to Sept. 13, 1932, chain gage on former bridge, 50 ft downstream; Sept. 14, 1932, to Mar. 9, 1934, wire-weight gage on former bridge; Mar. 10, 1934, to Aug. 26, 1956, water-stage recorder on former bridge; Aug. 26, 1956, to May 11, 1966, gage readings were obtained by measuring from a reference point on present bridge; May 11, 1966, to Oct. 31, 1986, Type-A wire-weight gage on present bridge. All gages have been maintained at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. U.S. Army Corps of Engineers 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	743	741	2,330	2,200	2,490	1,660	7,050	6,180	1,570	775	3,620	1,110
2	734	817	2,140	2,100	2,460	1,590	5,840	6,200	1,420	781	2,290	1,060
3	708	781	2,010	2,020	3,060	1,570	4,870	12,200	1,310	792	1,710	988
4	693	828	1,910	6,150	3,050	5,910	4,180	14,600	1,240	798	2,660	957
5	684	1,240	1,810	7,530	3,050	16,100	3,660	9,070	1,170	820	3,160	881
6	666	1,130	1,770	6,240	3,080	22,400	3,260	6,650	1,670	852	1,650	830
7	648	1,120	1,870	7,070	2,950	25,800	2,970	5,320	1,550	845	1,240	768
8	634	1,040	2,080	5,980	2,760	18,800	2,740	4,420	1,180	812	1,090	713
9	633	1,030	2,080	4,640	2,610	9,350	2,560	3,810	1,240	827	958	690
10	654	1,030	3,320	3,880	2,530	6,680	2,410	3,350	1,310	881	876	e670
11	674	1,050	e4,640	3,390	2,530	5,350	2,320	3,000	1,210	855	825	e658
12	649	1,060	e6,650	3,040	2,510	4,520	2,220	2,730	1,080	819	783	e644
13	629	1,060	7,710	2,760	2,420	3,940	2,110	2,960	1,150	788	758	e629
14	639	1,010	5,530	2,530	2,430	3,540	2,030	3,120	1,130	745	733	e615
15	638	967	4,460	2,360	2,480	3,210	1,950	2,710	1,050	711	697	604
16	641	946	4,240	2,220	2,450	3,010	1,870	2,460	1,010	713	685	815
17	759	927	3,750	2,970	2,380	2,850	1,810	2,320	1,010	999	668	572
18	700	1,700	3,400	4,810	2,340	2,730	1,740	2,230	1,140	876	672	557
19	703	6,330	3,270	4,640	2,330	2,610	1,650	3,300	1,090	783	656	553
20	694	13,000	3,150	5,800	2,340	2,480	1,600	2,490	1,060	757	679	542
21	713	17,700	2,900	5,560	2,260	2,350	1,580	2,130	1,010	729	699	535
22	756	11,400	2,950	4,610	2,170	2,220	1,550	1,960	991	692	702	531
23	739	6,060	4,290	3,890	2,100	2,110	1,730	1,820	987	664	785	524
24	750	4,780	3,260	3,420	2,040	2,080	2,720	1,700	973	1,540	1,760	519
25	774	4,020	3,100	3,170	1,960	2,060	6,580	2,650	941	2,550	2,090	516
26	765	3,740	3,170	2,960	1,880	2,250	16,900	5,110	905	1,080	3,890	513
27	751	3,510	3,070	2,750	1,820	4,620	24,100	3,530	862	881	3,210	507
28	730	3,190	2,890	2,770	1,750	4,130	18,800	2,390	837	787	2,440	501
29	713	2,850	2,680	2,960	1,690	6,650	7,670	2,030	805	739	1,680	497
30	695	2,570	2,480	2,860	---	6,660	5,680	1,850	788	8,690	1,530	496
31	676	---	2,320	2,650	---	7,660	---	1,730	---	7,900	1,180	---
MEAN	696	3,254	3,265	3,869	2,411	6,029	4,872	4,065	1,123	1,370	1,496	666
MAX	774	17,700	7,710	7,530	3,080	25,800	24,100	14,600	1,670	8,690	3,890	1,110
MIN	629	741	1,770	2,020	1,690	1,570	1,550	1,700	788	664	656	496
IN.	0.25	1.14	1.18	1.40	0.82	2.19	1.71	1.47	0.39	0.50	0.54	0.23

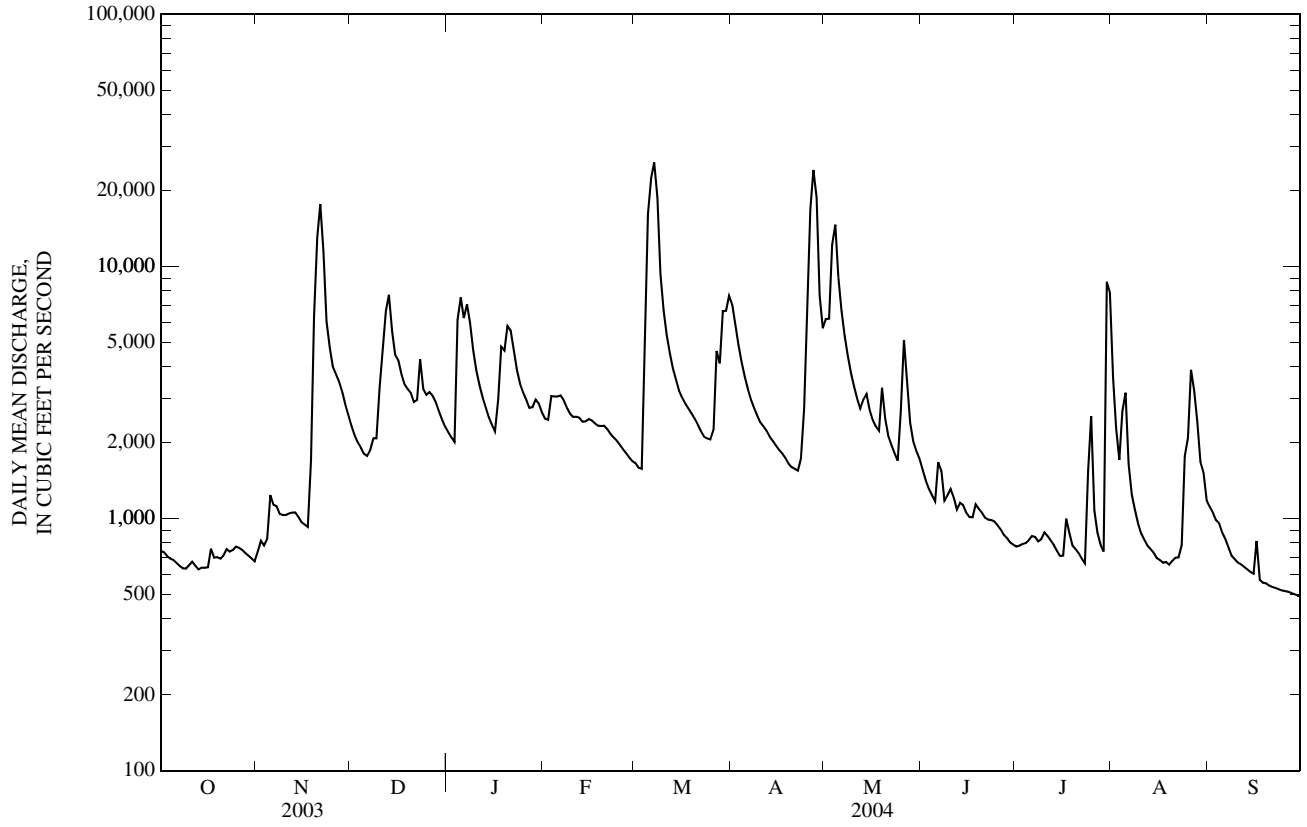
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	1,601	2,431	2,490	2,837	3,259	4,542	5,512	5,353	3,666	1,762	1,333	1,378
MAX	12,060	12,230	12,750	12,700	7,637	14,640	22,720	18,300	19,810	12,630	9,365	15,330
(WY)	(1950)	(1994)	(1988)	(1950)	(1949)	(1945)	(1945)	(1990)	(1935)	(1951)	(1927)	(1993)
MIN	288	394	403	374	558	620	531	670	647	385	334	295
(WY)	(1957)	(1957)	(1956)	(1956)	(1954)	(1956)	(1956)	(2000)	(1934)	(1954)	(1936)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	1,936		2,765		3,009	
HIGHEST ANNUAL MEAN					6,560	1927
LOWEST ANNUAL MEAN					629	1954
HIGHEST DAILY MEAN	17,700	Nov 21	25,800	Mar 7	101,000	Sep 28, 1993
LOWEST DAILY MEAN	434	Aug 26,27	496	Sep 30	275	Sep 19, 1954
ANNUAL SEVEN-DAY MINIMUM	447	Aug 24	507	Sep 24	279	Oct 6, 1956
MAXIMUM PEAK FLOW	---		26,600	Mar 7	134,000	Dec 6, 1982
MAXIMUM PEAK STAGE	---		15.48	Mar 7	33.27	Dec 6, 1982
INSTANTANEOUS LOW FLOW	---		492	Sep 29,30	275	Sep 19, 1954
ANNUAL RUNOFF (INCHES)	8.26		11.84		12.86	
10 PERCENT EXCEEDS	3,590		5,860		6,340	
50 PERCENT EXCEEDS	1,530		1,930		1,460	
90 PERCENT EXCEEDS	580		678		563	

e Estimated

06934000 GASCONADE RIVER NEAR RICH FOUNTAIN, MO—Continued



06934500 MISSOURI RIVER AT HERMANN, MO

LOCATION.--Lat 38°42'35", long 91°26'19", in SW $^1/_4$ sec.25, T.46 N., R.5 W., Montgomery County, Hydrologic Unit 10300200, on downstream side of third pier from right abutment of bridge on State Highway 19 at Hermann, and at mile 97.9.

DRAINAGE AREA.--522,500 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only published in WSP 1310. Gage-height records 1873-99 collected at site 480 ft downstream are contained in reports of Missouri River Commission; since 1900 in reports of 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 and nonrecording gage. Datum of gage is 481.56 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 26, 1930, nonrecording gage at site 480 ft downstream at datum 0.07 ft lower; Sept. 26, 1930, to Mar. 27, 1932, nonrecording gage; Mar. 28, 1932, to June 12, 1945, water-stage recorder; June 13, 1945, to Apr. 2, 1946, May 13 to Sept. 30, 1978, nonrecording gage at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1844 reached a stage of 35.5 ft, discharge, about 700,000 ft^3/s, computed by the U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38,500	37,600	33,600	59,300	48,700	41,300	129,000	91,800	115,000	72,500	78,300	137,000
2	37,600	37,700	31,300	52,000	40,700	40,500	122,000	94,500	149,000	73,100	69,100	124,000
3	37,100	37,300	29,500	50,800	33,500	42,000	110,000	94,500	159,000	75,000	69,300	105,000
4	37,100	37,400	28,900	52,500	37,500	51,300	101,000	93,300	137,000	72,600	68,500	87,000
5	37,300	41,200	28,600	65,700	42,500	117,000	95,100	91,800	118,000	73,500	86,600	73,500
6	37,000	41,600	29,700	63,900	40,900	170,000	91,200	85,700	100,000	83,400	92,600	64,200
7	36,600	40,900	28,900	58,900	37,600	210,000	87,800	80,100	87,900	99,300	85,000	57,000
8	38,000	42,900	29,800	55,600	33,800	195,000	83,600	69,500	83,000	111,000	71,700	52,500
9	39,500	47,600	29,800	49,000	32,800	167,000	80,500	60,300	85,500	109,000	65,600	57,400
10	38,200	47,700	32,500	47,200	32,100	136,000	67,300	57,100	82,000	98,800	64,700	56,300
11	37,100	44,600	55,000	44,300	34,300	118,000	54,500	54,500	77,900	90,700	61,800	52,200
12	36,300	42,200	78,000	34,800	34,400	108,000	50,300	59,400	89,300	83,300	56,200	49,500
13	36,200	40,600	75,300	31,200	33,800	103,000	48,500	57,600	94,200	86,800	51,100	47,400
14	36,700	39,800	62,200	38,500	33,400	102,000	48,600	59,400	89,900	102,000	47,900	45,900
15	40,800	39,900	47,700	39,300	33,100	99,700	50,200	57,400	101,000	109,000	46,000	46,800
16	39,400	39,800	46,600	35,200	31,500	94,600	50,300	54,100	129,000	99,300	44,600	54,200
17	40,000	39,000	58,700	35,400	31,100	89,600	49,500	53,500	151,000	87,700	43,600	51,000
18	41,100	43,500	59,300	52,200	35,200	86,200	50,700	54,300	149,000	85,900	42,700	48,300
19	41,200	55,400	54,400	61,300	38,100	83,500	50,000	74,300	139,000	96,600	46,600	44,900
20	40,600	65,400	49,200	62,300	41,000	79,400	50,900	97,900	132,000	96,200	49,000	43,500
21	39,800	62,800	45,700	61,500	41,300	76,200	51,200	117,000	120,000	89,700	46,300	54,400
22	42,600	58,500	41,400	56,900	42,700	75,700	45,900	135,000	114,000	84,500	42,500	65,000
23	41,800	51,700	63,000	55,000	43,600	74,800	45,400	115,000	108,000	79,400	41,800	65,500
24	39,400	47,800	73,500	57,600	45,300	72,900	49,700	97,600	110,000	69,900	48,700	62,700
25	38,300	45,900	66,600	60,000	47,800	71,700	63,800	93,900	100,000	69,800	65,500	58,800
26	38,700	46,300	58,600	51,200	45,300	86,400	65,000	123,000	93,100	75,100	90,800	52,100
27	38,300	47,100	51,000	46,100	43,600	136,000	67,500	187,000	84,100	87,400	111,000	53,200
28	37,500	43,300	54,500	49,500	43,800	122,000	85,400	195,000	76,800	92,400	127,000	51,700
29	36,800	38,700	48,300	51,800	44,200	110,000	89,400	170,000	71,700	86,500	132,000	51,900
30	36,700	35,700	47,700	51,800	---	124,000	83,700	135,000	70,600	86,300	159,000	49,200
31	37,300	---	56,200	51,500	---	130,000	---	117,000	---	94,800	152,000	---
MEAN	38,500	44,660	48,240	51,040	38,740	103,700	70,600	94,400	107,200	87,790	72,820	62,070
MAX	42,600	65,400	78,000	65,700	48,700	210,000	129,000	195,000	159,000	111,000	159,000	137,000
MIN	36,200	35,700	28,600	31,200	31,100	40,500	45,400	53,500	70,600	69,800	41,800	43,500
IN.	0.08	0.10	0.11	0.11	0.08	0.23	0.15	0.21	0.23	0.19	0.16	0.13

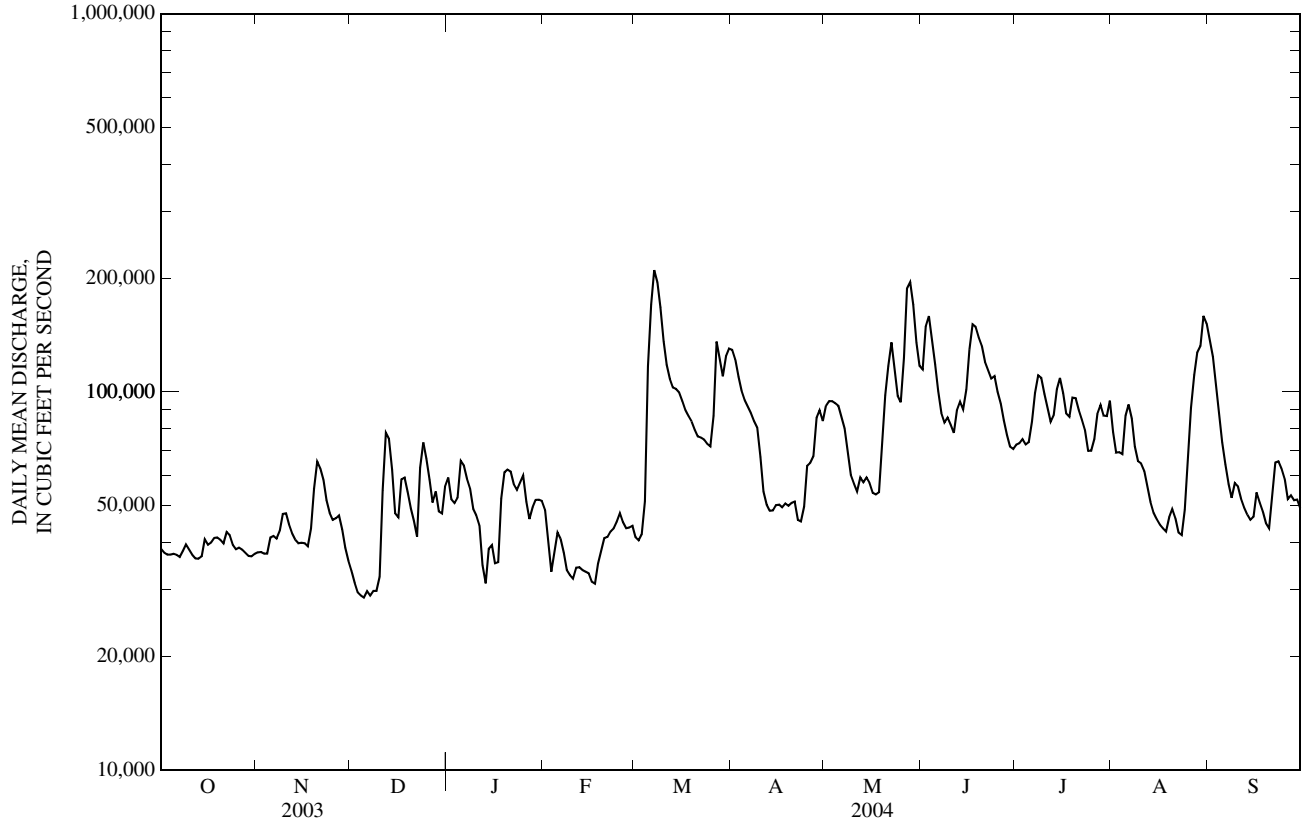
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004[a], BY WATER YEAR (WY)

MEAN	77,790	77,870	62,340	50,440	67,470	96,400	119,400	122,100	119,900	99,690	74,000	75,720
MAX	286,700	174,800	178,900	129,000	136,800	267,500	333,400	313,000	282,300	376,300	306,600	243,500
(WY)	(1987)	(1999)	(1983)	(1973)	(1982)	(1973)	(1973)	(1995)	(1995)	(1993)	(1993)	(1993)
MIN	36,680	29,400	17,060	17,350	19,250	22,810	45,800	47,710	46,150	44,010	37,920	37,800
(WY)	(1964)	(1991)	(1964)	(1963)	(1964)	(1964)	(1963)	(1989)	(1988)	(1988)	(2003)	(1963)

06934500 MISSOURI RIVER AT HERMANN, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1958 - 2004[a]	
ANNUAL MEAN	46,770		68,450		86,070	
HIGHEST ANNUAL MEAN					181,800	1993
LOWEST ANNUAL MEAN					44,980	1963
HIGHEST DAILY MEAN	155,000	May 11	210,000	Mar 7	739,000	Jul 31, 1993
LOWEST DAILY MEAN	23,300	Jan 24	28,600	Dec 5	6,210	Dec 23, 1963
ANNUAL SEVEN-DAY MINIMUM	24,000	Jan 19	29,300	Dec 3	7,400	Dec 20, 1963
MAXIMUM PEAK FLOW	---		214,000	Mar 7	750,000	Jul 31, 1993
MAXIMUM PEAK STAGE	---		23.00	Mar 7	36.97	Jul 31, 1993
INSTANTANEOUS LOW FLOW	---		28,400	Dec 5,7,8	602	Dec 23, 1963
ANNUAL RUNOFF (INCHES)	1.22		1.78		2.24	
10 PERCENT EXCEEDS	68,900		117,000		161,000	
50 PERCENT EXCEEDS	41,300		56,600		66,600	
90 PERCENT EXCEEDS	26,600		37,100		36,300	

[a] Post-regulation period.



06934500 MISSOURI RIVER AT HERMANN, MO—Continued
(National Stream-Quality Accounting Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1996.
WATER TEMPERATURE: October 1974 to September 1996.
DISSOLVED OXYGEN: June 1984 to September 1984, April 1985 to September 1985, April 1986 to September 1986.

INSTRUMENTATION.--Water-quality monitor, June 1984 to September 1984, April 1985 to September 1985, April 1986 to September 1986.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: (water years 1976 to 1996): Maximum daily, 2,150 microsiemens per centimeter, Dec. 9, 1978; minimum daily, 205 microsiemens per centimeter, Apr. 16, 1979.
WATER TEMPERATURE: (water years 1976 to 1996): Maximum daily, 32.5 °C, July 31, 1987; minimum daily, 0.0 °C on many days during winter period.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	UV absorbance, 254 nm, wat flt units /cm (50624)	UV absorbance, 280 nm, wat flt units /cm (61726)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)
OCT												
23...	1030	Environmental	42,000	27	0.066	0.047	8.7	93	8.4	675	17.6	230
DEC												
17...	1140	Environmental	58,500	63	0.112	0.082	12.7	97	8.1	486	3.5	190
17...	1148	Blank	--	--	--	--	--	--	--	--	--	--
FEB												
17...	1145	Environmental	30,500	11	0.067	0.047	13.4	98	7.9	695	2.4	260
24...	1000	Environmental	44,900	72	0.091	0.066	11.9	93	8.0	607	4.6	220
MAR												
09...	1020	Environmental	166,000	520d	0.167	0.126	9.9	83	7.8	333	7.4	130
23...	1010	Environmental	75,100	56	0.121	0.090	11.6	103	7.9	461	9.5	190
APR												
15...	0915	Environmental	50,100	46	0.085	0.061	11.2	110	8.3	634	13.9	240
30...	1040	Environmental	82,600	36	0.098	0.071	11.2	118	8.3	455	17.1	190
30...	1048	Blank	--	--	<0.004	<0.004	--	--	--	--	--	--
MAY												
11...	0950	Environmental	53,400	29	0.083	0.060	9.4	109	8.4	618	21.8	240
20...	1045	Environmental	98,600	110	0.125	0.093	8.2	94	8.0	510	21.1	190
28...	1050	Environmental	195,000	1,000d	0.152	0.114	4.5	53	7.7	459	21.7	180
JUN												
15...	1005	Environmental	96,500	240	0.135	0.099	7.1	89	7.6	553	25.7	210
JUL												
13...	1020	Environmental	84,300	220	0.103	0.075	6.4	83	7.9	536	27.6	190
AUG												
10...	1010	Environmental	64,600	120	0.116	0.085	6.5	82	8.1	596	26.6	210
10...	1018	Blank	--	--	<0.004	<0.004	--	--	--	--	--	--
SEP												
21...	0900	Environmental	52,200	30	0.076	0.054	8.7	102	8.4	710	22.7	250

06934500 MISSOURI RIVER AT HERMANN, MO—Continued

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

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT													
23...	55.4	21.1	6.10	64.1	162	164	183	8	23.1	0.5	6.73	147	429
DEC													
17...	49.4	16.6	4.71	32.4	140	141	171	<1	25.0	0.3	9.17	75.0	316
17...	0.02	<0.008	--	<0.10	--	--	--	--	--	--	<0.04	--	--
FEB													
17...	66.8	22.8	5.66	59.1	175	176	215	<1	34.7	0.4	10.7	124	442
24...	58.2	18.9	5.14	43.7	160	162	198	<1	34.5	0.4	9.93	105	402
MAR													
09...	35.5	9.28	4.66	15.1	95	95	116	<1	14.9	0.2	8.43	36.3	218
23...	51.4	14.6	5.75	21.3	140	141	172	<1	17.4	0.2	9.10	61.9	304
APR													
15...	63.5	20.6	5.80	40.8	170	168	198	4	22.7	0.4	9.90	113	407
30...	48.9	15.9	4.86	35.7	145	147	157	11	17.6	0.3	5.98	89.0	325
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	59.5	20.9	5.67	45.4	166	167	186	8	21.4	0.5	6.40	119	405
20...	48.4	16.8	5.31	37.8	140	139	170	<1	18.9	0.4	7.22	93.0	321
28...	47.2	13.8	5.59	29.8	120	122	149	<1	13.0	0.4	9.01	72.9	280
JUN													
15...	55.4	17.4	6.08	33.0	130	130	159	<1	17.1	0.4	11.4	91.4	339
JUL													
13...	49.8	15.7	5.46	34.4	140	141	172	<1	16.1	0.4	9.53	92.1	336
AUG													
10...	53.8	17.7	5.70	39.3	150	148	181	<1	17.9	0.4	9.35	110	362
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	63.4	22.2	5.92	61.6	170	167	185	10	23.3	0.5	6.87	145	433

Date	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)
OCT													
23...	0.21	0.59	<0.04	0.22	<0.008	0.060	0.46	0.073	0.191	3.3	<0.1	3.3	2.8
DEC													
17...	0.45	0.73	0.10	0.96	0.008	0.075	0.34	0.091	0.26o	3.1	<0.1	3.1	4.0
17...	--	--	<0.010	<0.016	<0.002	<0.006	--	--	--	--	--	--	--
FEB													
17...	0.36	0.53	0.09	0.94	0.009	0.057	0.17	0.074	0.132	1.5	<0.1	1.4	3.2
24...	0.44	0.89	0.09	0.95	0.016	0.068	0.45	0.080	0.25o	3.8	0.2	3.6	4.0
MAR													
09...	0.60	2.7	0.11	1.44	0.022	0.044	1.11	0.061	1.07o	9.0	<0.1	8.9	6.1
23...	0.32	0.73	<0.04	1.79	0.021	0.074	0.32	0.085	0.23o	3.3	<0.1	3.3	4.7
APR													
15...	0.25	0.80	E.04n	3.27	0.021	0.099	0.41	0.115	0.24o	2.6	<0.1	2.6	3.6
30...	0.27	0.83	<0.04	0.60	E.007n	0.042	0.35	0.058	0.180	2.6	<0.1	2.6	3.5n
30...	--	--	--	--	--	--	<0.02	--	--	<0.1	<0.1	<0.1	E.2n
MAY													
11...	0.26	0.86	<0.04	1.22	0.012	0.062	0.50	0.071	0.21o	3.3	<0.1	3.3	3.4
20...	0.35	1.3	<0.04	1.24	0.030	0.077	0.83	0.097	0.46o	8.6	<0.1	8.5	4.5
28...	0.42	4.1	<0.04	2.04	0.029	0.070	2.72	0.091	1.68o	26.0	0.7	25.3	4.8
JUN													
15...	0.38	1.5	<0.04	2.80	E.005n	0.134	0.59	0.140	0.61o	6.3	0.2	6.1	5.0
JUL													
13...	0.25	1.2	<0.04	1.60	<0.008	0.112	1.00	0.131	0.44o	7.3	<0.1	7.3	3.8
AUG													
10...	0.28	0.92	<0.04	0.96	E.004n	0.120	0.52	0.136	0.32o	4.8	<0.1	4.8	3.6
10...	--	--	--	--	--	--	0.07	--	--	<0.1	<0.1	<0.1	E.2n
SEP													
21...	0.24	0.86	<0.04	0.14	<0.008	0.070	0.41	0.085	0.20o	3.1	<0.1	3.1	3.2

06934500 MISSOURI RIVER AT HERMANN, MO—Continued

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

Date	Pheophytin a, phytoplankton, ug/L (62360)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Aluminum, water, fltrd, µg/L (01106)	Antimony, water, fltrd, µg/L (01095)	Arsenic water, fltrd, µg/L (01000)	Barium, water, fltrd, µg/L (01005)	Beryllium, water, fltrd, µg/L (01010)	Boron, water, fltrd, µg/L (01020)	Cadmium water, fltrd, µg/L (01025)	Chromium, water, fltrd, µg/L (01030)
OCT													
23...	16.6	18k	46	14k	40.6	3	0.39	3.1	75	<0.06	122	E.03n	<0.8
DEC													
17...	3.4	330k	680	423	9.7	--	--	1.6	--	--	66	--	--
17...	--	--	--	--	--	<2	<0.20	<0.2	<0.2	<0.06	<8	<0.04	<0.8
FEB													
17...	E1.1	13k	31	40	E10.2	--	--	1.7	--	--	101	--	--
24...	E3.7	120	390	166	E15.1	--	--	1.7	--	--	91	--	--
MAR													
09...	19.4	320k	3,000	920k	17.9	2	0.24	1.2	77	<0.06	34	<0.04	<0.8
23...	3.8	20k	17k	29k	13.2	--	--	1.7	--	--	39	--	--
APR													
15...	14.7	22k	31	8k	37.4	--	--	3.1	--	--	81	--	--
30...	16.0	32k	40k	44k	46.3	--	--	2.0	--	--	70	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	22.9	11k	12k	6k	69.1	3	0.36	3.0	98	<0.06	89	E.02n	<0.8
20...	14.2	1,600	1,300	5,080	12.1	--	--	2.0	--	--	79	--	--
28...	30.5	2,000	2,200	2,700	17.6	--	--	1.9	--	--	68	--	--
JUN													
15...	11.9	780	540	400	7.8	3	0.43	2.9	119	<0.06	68	<0.04	<0.8
JUL													
13...	12.2	180k	240k	160k	E7.1	--	--	3.0	--	--	73	--	--
AUG													
10...	15.7	230	270k	77k	15.4	27	0.43	3.0	110	<0.06	92	E.03n	<0.8
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	E24.3	44	42	20k	E59.9	--	--	3.1	--	--	118	--	--

Date	Cobalt water, fltrd, µg/L (01035)	Copper, water, fltrd, µg/L (01040)	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lithium water, fltrd, µg/L (01130)	Manganese, water, fltrd, µg/L (01056)	Molybdenum, water, fltrd, µg/L (01060)	Nickel, water, fltrd, µg/L (01065)	Selenium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Strontium, water, fltrd, µg/L (01080)	Vanadium, water, fltrd, µg/L (01085)	Zinc, water, fltrd, µg/L (01090)
OCT													
23...	0.254	2.7	<6	<0.08	47.1	0.7	4.0	2.73	1.9	<0.2	513	3.4	1
DEC													
17...	--	--	11	--	20.1	--	--	--	1.0	--	293	2.1	--
17...	0.018	<0.4	<6	E.06n	<0.6	0.2	<0.4	<0.06	<0.4	<0.2	<0.40	0.1	<0.6
FEB													
17...	--	--	E4n	--	31.7	--	--	--	1.3	--	433	1.6	--
24...	--	--	7	--	28.8	--	--	--	1.4	--	386	1.5	--
MAR													
09...	0.200	1.8	12	E.04n	6.6	1.8	1.5	2.87	1.1	<0.2	185	2.0	Mn
23...	--	--	E6n	--	11.9	--	--	--	1.5	--	242	2.5	--
APR													
15...	--	--	<6	--	25.3	--	--	--	2.5	--	402	3.7	--
30...	--	--	E5n	--	20.7	--	--	--	1.5	--	311	2.6	--
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	0.272	1.9	<6	<0.08	28.9	0.7	3.2	1.46	2.1	<0.2	404	5.2	Mn
20...	--	--	E4n	--	22.5	--	--	--	1.2	--	332	3.1	--
28...	--	--	E5n	--	17.5	--	--	--	1.3	--	289	3.6	--
JUN													
15...	0.197	2.5	<6	<0.08	20.0	0.4	3.2	2.06	2.0	<0.2	321	4.0	M
JUL													
13...	--	--	<6	--	21.0	--	--	--	1.8	--	340	4.5	--
AUG													
10...	0.226	2.4	34	E.05n	25.1	3.8	3.7	2.81	1.7	<0.2	353	4.3	1.0
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	--	--	<6	--	40.7	--	--	--	1.6	--	474	4.0	--

06934500 MISSOURI RIVER AT HERMANN, MO—Continued

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

Date	2,6-Diethylaniline water fltrd 0.7µ GF µg/L (82660)	CIAT, water, fltrd, µg/L (04040)	Acetochlor, water, fltrd, µg/L (49260)	Alachlor, water, fltrd, µg/L (46342)	alpha-HCH, water, fltrd, µg/L (34253)	Atrazine, water, fltrd, µg/L (39632)	Azinphos-methyl, water, fltrd 0.7µ GF µg/L (82686)	Benfluralin, water, fltrd 0.7µ GF µg/L (82673)	Butylate, water, fltrd, µg/L (04028)	Carbaryl, water, fltrd 0.7µ GF µg/L (82680)	Carbofuran, water, fltrd 0.7µ GF µg/L (82674)	Chlorpyrifos water, fltrd, µg/L (38933)	cis-Permethrin water fltrd 0.7µ GF µg/L (82687)
OCT													
23...	<0.006	E.021	0.007	<0.004	<0.005	0.123	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
DEC													
17...	<0.006	E.027	0.017	0.007	<0.005	0.168	<0.050	<0.010	<0.002	E.006t	<0.020	<0.005	<0.006
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	<0.006	E.017	0.012	<0.004	<0.005	0.264	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
24...	<0.006	E.031	0.018	<0.010	<0.005	0.241	<0.050	<0.010	<0.002	E.006t	<0.020	<0.005	<0.006
MAR													
09...	<0.006	E.036	0.012	<0.004	<0.005	0.135	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
23...	<0.006	E.027	0.023	<0.004	<0.005	0.235	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
APR													
15...	<0.006	E.011	0.025	0.011	<0.005	0.197	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
30...	<0.006	E.014	0.034	<0.010	<0.005	0.432	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<0.006	E.021	0.081	0.013	<0.005	0.757	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
20...	<0.006	E.058	0.253	0.073	<0.005	2.50	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
28...	<0.006	E.099	0.380	0.067	<0.005	4.57	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
JUN													
15...	<0.006	E.096	0.149	0.053	<0.005	1.48	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
JUL													
13...	<0.006	E.044	0.029	0.017	<0.005	0.769	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
AUG													
10...	<0.006	E.018	0.011	0.010	<0.005	0.211	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	<0.006	E.013	0.009	<0.004	<0.005	0.150	<0.050	<0.010	<0.002	<0.041	<0.020	<0.005	<0.006

Date	Cyanazine, water, fltrd, µg/L (04041)	DCPA, water fltrd 0.7µ GF µg/L (82682)	Diazinon, water, fltrd, µg/L (39572)	Dieldrin, water, fltrd, µg/L (39381)	Disulfoton, water, fltrd 0.7µ GF µg/L (82677)	EPTC, water, fltrd 0.7µ GF µg/L (82668)	Ethalfluralin, water, fltrd 0.7µ GF µg/L (82663)	Ethoprop, water, fltrd 0.7µ GF µg/L (82672)	Fonofos water, fltrd, µg/L (04095)	Lindane water, fltrd, µg/L (39341)	Linuron water fltrd 0.7µ GF µg/L (82666)	Malathion, water, fltrd, µg/L (39532)	Methyl parathion, water, fltrd 0.7µ GF µg/L (82667)
OCT													
23...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
DEC													
17...	<0.018	0.004	E.004n	<0.005	<0.02	0.003	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
24...	<0.018	<0.003	0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
MAR													
09...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.020
23...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
APR													
15...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
30...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
20...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
28...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
JUN													
15...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
JUL													
13...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
AUG													
10...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003	<0.004	<0.035	<0.027	<0.006

06934500 MISSOURI RIVER AT HERMANN, MO—Continued

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

Date	Metolachlor, water, fltrd, µg/L (39415)	Metribuzin, water, fltrd, µg/L (82630)	Molinate, water, fltrd 0.7µ GF µg/L (82671)	Napropamide, water, fltrd 0.7µ GF µg/L (82684)	p,p-' DDE, water, fltrd, µg/L (34653)	Parathion, water, fltrd, µg/L (39542)	Pebulate, water, fltrd 0.7µ GF µg/L (82669)	Pendimethalin, water, fltrd 0.7µ GF µg/L (82683)	Phorate water fltrd 0.7µ GF µg/L (82664)	Prometon, water, fltrd, µg/L (04037)	Pronamide, water, fltrd 0.7µ GF µg/L (82676)	Propachlor, water, fltrd, µg/L (04024)	Propanil, water, fltrd 0.7µ GF µg/L (82679)
OCT													
23...	0.047	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	<0.01	<0.004	<0.010	<0.011
DEC													
17...	0.035	0.009	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	0.093	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
24...	0.058	<0.010	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
MAR													
09...	0.041	0.008	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
23...	0.137	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
APR													
15...	0.045	<0.006	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
30...	0.054	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	0.098	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
20...	0.230	0.007	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
28...	0.754	0.022	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
JUN													
15...	0.446	<0.010	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
JUL													
13...	0.132	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	0.02	<0.004	<0.010	<0.011
AUG													
10...	0.082	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	0.039	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011	E.01n	<0.004	<0.010	<0.011

06934500 MISSOURI RIVER AT HERMANN, MO—Continued

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

Date	Propar-gite, water, fltrd 0.7µ GF µg/L (82685)	Sima-zine, water, fltrd, µg/L (04035)	Tebu-thiuron water fltrd 0.7µ GF µg/L (82670)	Terba-cil, water, fltrd 0.7µ GF µg/L (82665)	Terbu-fos, water, fltrd 0.7µ GF µg/L (82675)	Thio-bencarb water fltrd 0.7µ GF µg/L (82681)	Tri-allate, water, fltrd 0.7µ GF µg/L (82678)	Tri-flur-alin, water, fltrd 0.7µ GF µg/L (82661)	Uranium natural water, fltrd, µg/L (22703)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)
OCT											
23...	<0.02	0.012	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	3.29	40	67
DEC											
17...	<0.02	0.200	E.01t	<0.034	<0.02	<0.005	<0.002	E.006n	--	67	2,430
17...	--	--	--	--	--	--	--	--	<0.04	--	--
FEB											
17...	<0.02	0.021	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
24...	<0.02	0.082	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
MAR											
09...	<0.02	0.043	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	1.63	--r	--r
23...	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
APR											
15...	<0.02	0.016	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
30...	<0.02	0.029	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	--r	--r
30...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	<0.02	0.020	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	4.03	--r	--r
20...	<0.02	0.032	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	91	338
28...	<0.02	0.051	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	87	2,180
JUN											
15...	<0.02	0.024	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	3.43	88	539
JUL											
13...	<0.02	0.015	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	91	390
AUG											
10...	<0.02	0.009	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	3.25	96	539
10...	--	--	--	--	--	--	--	--	--	--	--
SEP											
21...	<0.02	<0.010	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009	--	50	191

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
o -- Result determined by alternate method
t -- Below the long-term MDL

Null value qualifier codes used in this table:
r -- Sample ruined in preparation

06935755 BONHOMME CREEK NEAR ELLISVILLE, MO

LOCATION.--Lat 38°36'35", long 90°40'21", St. Louis County, Hydrologic Unit 10300200, on right downstream side of Rieger Road bridge, 0.14 mi southwest of State Road 109, 1.56 mi north of State Road 100 (Manchester Road), 1.25 mi west of St. Louis County Highway C, and 9.55 mi upstream of Missouri River.

DRAINAGE AREA.--4.44 mi^2.

PERIOD OF RECORD.--September 1997 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 568.56 ft above National Geodetic Vertical Datum of 1929. Prior to September 1997, at datum of 570.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair except discharges below 0.5 ft^3/s and above 500 ft^3/s, which are poor. U.S.G.S. satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1973 reached a stage of 8.64 ft, former datum, discharge, 2,640 ft^3/s.

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

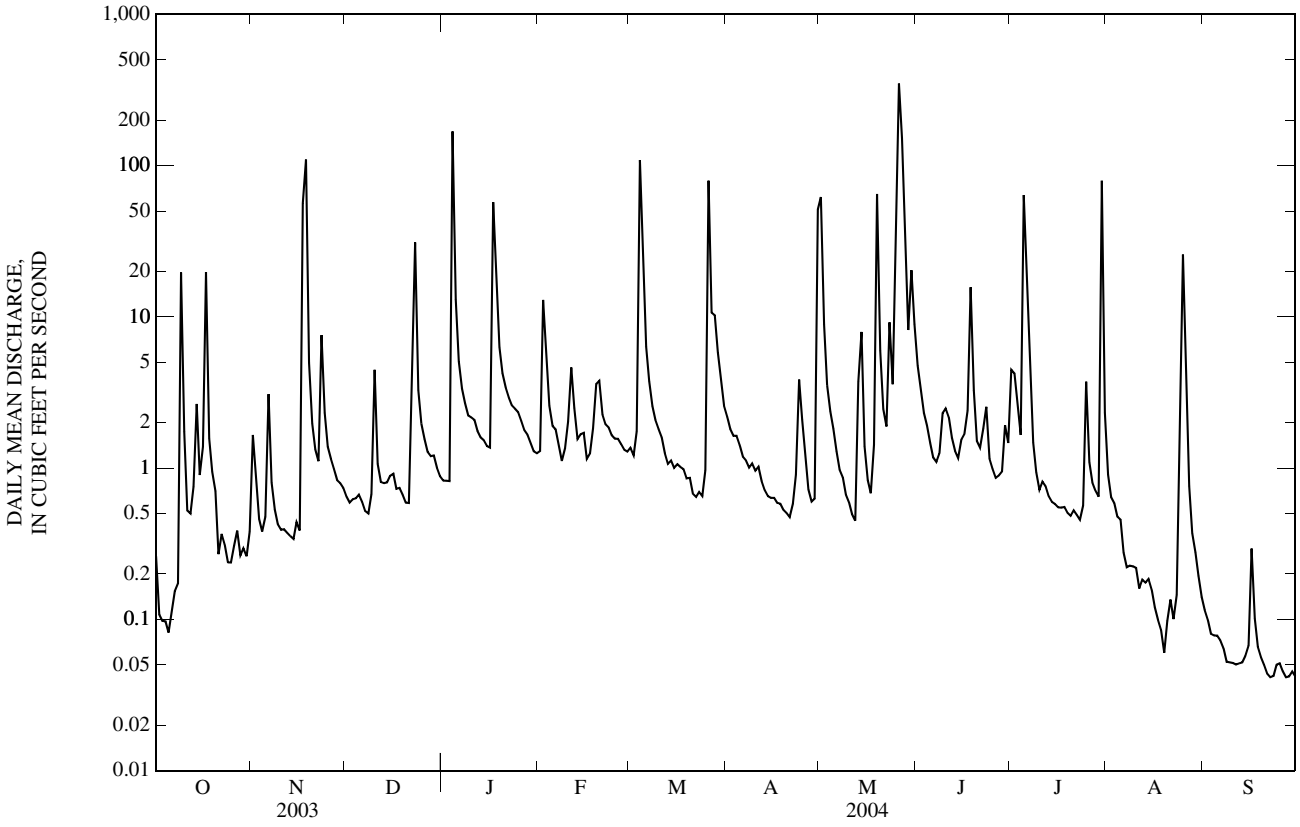
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.26	1.7	0.65	0.83	1.3	1.4	2.2	62	4.8	4.5	0.90	0.12
2	0.11	0.84	0.59	0.83	13	1.2	1.8	8.9	3.3	4.2	0.64	0.10
3	0.10	0.46	0.62	0.82	5.8	1.8	1.6	3.5	2.3	2.7	0.59	0.08
4	0.10	0.38	0.63	168	2.6	109	1.6	2.4	1.9	1.7	0.48	0.08
5	0.08	0.48	0.67	13	1.9	31	1.4	1.8	1.5	64	0.46	0.08
6	0.11	3.1	0.60	5.1	1.8	6.4	1.2	1.3	1.2	14	0.28	0.07
7	0.15	0.80	0.52	3.4	1.4	3.8	1.1	0.98	1.1	4.3	0.22	0.06
8	0.17	0.53	0.50	2.7	1.1	2.6	1.0	0.87	1.3	1.5	0.23	0.05
9	20	0.43	0.67	2.2	1.4	2.1	1.1	0.67	2.3	0.94	0.22	0.05
10	1.7	0.39	4.5	2.2	2.0	1.8	0.96	0.59	2.5	0.72	0.22	0.05
11	0.52	0.39	1.1	2.1	4.6	1.6	1.0	0.50	2.2	0.81	0.16	0.05
12	0.50	0.37	0.81	1.8	2.5	1.3	0.82	0.45	1.6	0.76	0.18	0.05
13	0.75	0.36	0.80	1.6	1.6	1.1	0.71	3.7	1.3	0.65	0.17	0.05
14	2.7	0.34	0.81	1.5	1.7	1.1	0.65	7.9	1.2	0.60	0.19	0.06
15	0.90	0.44	0.89	1.4	1.7	1.0	0.64	1.4	1.5	0.58	0.16	0.07
16	1.4	0.39	0.92	1.4	1.2	1.1	0.64	0.83	1.7	0.55	0.12	0.29
17	20	56	0.73	57	1.3	1.0	0.59	0.68	2.4	0.55	0.10	0.10
18	1.6	110	0.74	19	1.8	0.98	0.58	1.4	16	0.55	0.09	0.07
19	0.94	5.0	0.67	6.3	3.6	0.86	0.53	65	3.3	0.51	0.06	0.06
20	0.71	2.0	0.59	4.2	3.8	0.86	0.50	6.0	1.5	0.48	0.10	0.05
21	0.27	1.3	0.59	3.4	2.3	0.68	0.47	2.5	1.4	0.53	0.14	0.04
22	0.37	1.1	8.1	2.9	2.0	0.65	0.58	1.9	1.8	0.49	0.10	0.04
23	0.31	7.6	31	2.6	1.9	0.70	0.91	9.2	2.5	0.46	0.15	0.04
24	0.24	2.3	3.3	2.5	1.7	0.65	3.9	3.6	1.2	0.57	2.4	0.05
25	0.24	1.4	2.0	2.3	1.6	0.97	2.1	56	0.99	3.7	26	0.05
26	0.31	1.2	1.6	2.0	1.6	79	1.3	349	0.86	1.1	2.9	0.05
27	0.39	0.99	1.3	1.8	1.4	11	0.72	152	0.89	0.80	0.76	0.04
28	0.26	0.83	1.2	1.7	1.3	10	0.60	30	0.95	0.71	0.37	0.04
29	0.30	0.80	1.2	1.5	1.3	5.8	0.63	8.2	1.9	0.65	0.28	0.05
30	0.26	0.74	1.0	1.3	---	3.8	51	20	1.5	79	0.19	0.04
31	0.38	---	0.88	1.3	---	2.6	---	8.9	---	2.3	0.14	---
MEAN	1.81	6.76	2.26	10.3	2.46	9.29	2.76	26.2	2.30	6.29	1.26	0.07
MAX	20	110	31	168	13	109	51	349	16	79	26	0.29
MIN	0.08	0.34	0.50	0.82	1.1	0.65	0.47	0.45	0.86	0.46	0.06	0.04
IN.	0.47	1.70	0.59	2.67	0.60	2.41	0.69	6.80	0.58	1.63	0.33	0.02

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

MEAN	1.41	2.00	1.88	4.63	4.30	6.05	2.96	8.64	5.38	2.03	0.55	0.78
MAX	3.21	6.76	5.87	11.2	11.2	13.2	4.47	26.2	13.7	6.29	1.26	3.00
(WY)	(2002)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(2004)	(2003)
MIN	0.22	0.13	0.36	0.13	1.58	1.03	0.39	1.29	0.71	0.26	0.09	0.01
(WY)	(2000)	(2000)	(2001)	(2000)	(2003)	(2000)	(2000)	(1999)	(1999)	(2001)	(2003)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	3.24		6.03		3.39	
HIGHEST ANNUAL MEAN					6.03	2004
LOWEST ANNUAL MEAN					1.11	2001
HIGHEST DAILY MEAN	110	Nov 18	349	May 26	349	May 26, 2004
LOWEST DAILY MEAN	0.00	Aug 26,28	0.04	Sep 21-23,27,28,30	0.00	1999,2001-2003
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 22	0.04	Sep 21	0.00	Sep 6, 1999
MAXIMUM PEAK FLOW	---		Unknown	May 26	Unknown	May 26, 2004
MAXIMUM PEAK STAGE	---		9.93	May 26	9.93	May 26, 2004
INSTANTANEOUS LOW FLOW	---		0.03	Sep 26	0.00	1999,2001-2003
ANNUAL RUNOFF (INCHES)	9.90		18.49		10.37	
10 PERCENT EXCEEDS	4.7		6.3		4.6	
50 PERCENT EXCEEDS	0.79		1.0		0.58	
90 PERCENT EXCEEDS	0.05		0.11		0.09	

06935755 BONHOMME CREEK NEAR ELLISVILLE, MO—Continued



06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, MO

LOCATION.--Lat 38°39'28", long 90°37'09", St. Louis County, Hydrologic Unit 10300200, on right downstream wingwall of Highway CC Bridge, 0.96 mi south of U.S. Highway 40, 3.3 mi west of State Highway 340, 1.48 mi east of County Highway C, and 1.48 mi upstream from Missouri River.

DRAINAGE AREA.--11.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1997 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 449.19 ft above National Geodetic Vertical Datum of 1929. Prior to June 1997, at datum 450.00 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 20.10 ft, former datum, discharge 5,620 ft^3/s.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	11	e3.1	4.7	4.6	6.0	11	183	17	4.7	4.2	3.2
2	1.2	6.8	e2.8	4.4	32	e5.4	9.9	39	13	6.7	3.2	2.8
3	0.95	3.8	2.9	4.4	e22	6.6	8.9	18	10	9.6	3.1	2.5
4	0.96	3.6	2.8	529	e9.2	274	8.3	14	9.0	5.6	4.2	2.2
5	0.89	6.2	2.9	90	5.5	110	7.7	13	8.3	91	3.4	2.1
6	0.80	12	3.1	e28	5.1	28	7.4	11	7.6	234	2.7	2.0
7	0.76	5.5	2.7	e12	4.6	16	6.9	9.3	7.6	13	2.2	1.9
8	0.68	4.0	2.9	8.9	3.9	9.2	6.6	8.4	6.8	6.5	2.1	1.8
9	47	e3.5	8.7	7.8	4.2	8.0	6.1	7.8	7.2	4.4	2.2	1.8
10	8.8	e3.1	21	6.7	6.0	6.7	5.7	7.3	7.8	3.7	2.2	1.7
11	4.0	e3.3	7.3	6.2	14	6.0	6.2	7.0	6.9	3.4	e1.9	1.6
12	2.8	e3.0	5.4	5.9	22	5.2	5.9	6.9	6.1	3.3	2.1	1.5
13	3.3	e2.6	5.0	5.3	5.7	4.5	5.6	15	5.8	3.3	2.0	1.5
14	6.3	e2.4	5.2	5.1	5.2	4.7	e5.2	45	5.9	3.2	e1.9	1.4
15	4.3	e3.0	5.2	5.0	5.3	4.2	e4.8	13	5.4	3.1	e1.8	1.4
16	4.2	e2.7	5.9	4.9	4.6	4.2	e4.6	8.5	5.8	2.9	e1.8	2.1
17	43	22	4.8	142	4.5	3.8	e4.3	7.4	5.9	2.8	e1.7	e1.5
18	5.4	365	4.5	90	5.3	3.7	e4.0	9.1	40	2.8	e1.5	e1.3
19	3.8	62	4.4	40	11	3.2	e3.8	229	13	2.7	e1.4	e1.2
20	3.3	11	4.3	22	30	3.2	e3.7	39	6.1	2.6	3.7	e1.1
21	3.1	6.6	4.1	11	14	3.3	e3.6	13	5.7	2.6	3.2	e1.1
22	e2.9	5.3	15	8.1	6.3	3.3	e3.5	9.6	6.7	2.6	3.1	e1.1
23	e2.7	33	197	e7.0	6.0	3.3	3.9	8.5	5.7	2.7	3.5	e1.0
24	e2.6	13	35	e6.5	5.8	3.6	9.1	18	5.6	2.7	6.4	e1.1
25	e2.5	6.0	11	e6.2	5.3	5.3	6.9	132	4.4	8.0	79	e1.1
26	4.0	5.1	8.1	e6.0	5.1	391	3.3	515	4.1	4.3	57	e0.96
27	3.8	4.8	6.9	e5.7	4.8	101	3.1	386	4.0	3.1	19	e0.87
28	4.9	e4.4	6.2	e5.5	4.5	45	2.9	164	4.1	2.7	6.4	e0.77
29	e3.3	e3.9	6.2	e5.4	4.5	30	3.0	26	4.0	2.8	5.2	0.53
30	e3.0	e3.5	5.4	e5.0	---	17	98	70	4.6	186	4.3	0.69
31	e2.5	---	5.0	e4.7	---	13	---	48	---	8.0	3.6	---
MEAN	5.78	20.7	13.1	35.3	9.00	36.4	8.80	67.1	8.14	20.5	7.74	1.53
MAX	47	365	197	529	32	391	98	515	40	234	79	3.2
MIN	0.68	2.4	2.7	4.4	3.9	3.2	2.9	6.9	4.0	2.6	1.4	0.53
IN.	0.59	2.05	1.33	3.60	0.86	3.71	0.87	6.85	0.80	2.09	0.79	0.15

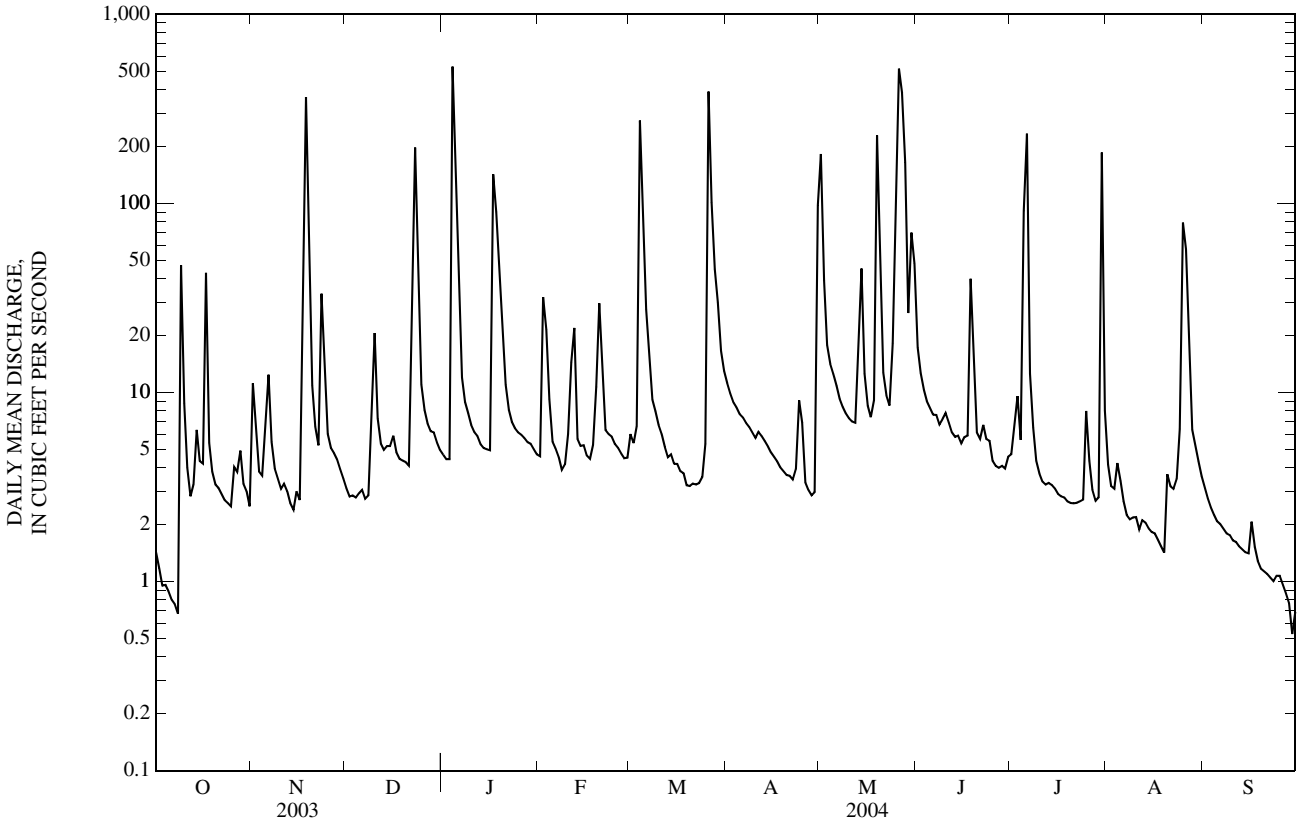
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	3.90	5.77	6.19	12.9	14.6	18.2	9.01	25.3	15.4	5.96	2.71	2.77
MAX	8.87	20.7	13.1	35.3	36.6	40.9	14.5	67.1	28.9	20.5	7.74	7.16
(WY)	(2003)	(2004)	(2004)	(2004)	(1999)	(1998)	(1998)	(2004)	(2000)	(2004)	(2004)	(2003)
MIN	0.79	0.96	0.63	0.96	5.44	3.09	1.72	4.13	3.31	1.08	0.95	0.69
(WY)	(2000)	(2000)	(2001)	(2000)	(2003)	(2000)	(2000)	(2001)	(1999)	(1997)	(2003)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	10.0		19.7		10.3	
HIGHEST ANNUAL MEAN					19.7	2004
LOWEST ANNUAL MEAN					3.54	2001
HIGHEST DAILY MEAN	365	Nov 18	529	Jan 4	932	May 7, 2000
LOWEST DAILY MEAN	0.29	Aug 24	0.53	Sep 29	0.14	Oct 4, 2001
ANNUAL SEVEN-DAY MINIMUM	0.33	Aug 22	0.86	Sep 24	0.22	Sep 14, 2000
MAXIMUM PEAK FLOW	---		Unknown	May 26	Unknown	Jun 24, 2000
MAXIMUM PEAK STAGE	---		18.44	May 26	19.62	Jun 24, 2000
INSTANTANEOUS LOW FLOW	---		0.53	Sep 29	0.14	Oct 3-5 2001
ANNUAL RUNOFF (INCHES)	12.05		23.70		12.35	
10 PERCENT EXCEEDS	15		31		14	
50 PERCENT EXCEEDS	4.0		5.1		2.7	
90 PERCENT EXCEEDS	0.79		1.9		0.64	

e Estimated

06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, MO—Continued



06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, 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 unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT												
17...	0053	Environmental	54	6.5	8.4	82	7.7	431	13.7	190	57.0	11.0
17...	0054	Blank	--	--	--	--	--	--	--	--	0.03	<0.03
DEC												
16...	1350	Environmental	6.0	13	13.1	102	7.5	931	4.2	240	75.0	14.0
FEB												
09...	1045	Environmental	3.6	9.2	13.6	97	7.6	468	1.2	270	83.3	15.2
09...	1046	Replicate	--	--	--	--	--	--	--	270	83.0	15.0
MAR												
04...	1059	Environmental	151	5.2	9.0	80	7.7	503	9.2	160	48.0	9.80
MAY												
24...	1315	Environmental	8.3	13	7.1	82	7.3	448	21.1	160	51.0	8.80
AUG												
02...	1345	Blank	--	--	--	--	--	--	--	--	<0.01	<0.008
02...	1415	Environmental	3.1	8.6	7.5	90	7.5	461	23.9	200	61.3	10.7

Date	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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													
17...	157	159	194	<1	--	116	1.3	--	0.04	--	0.530	--	0.01
17...	--	--	--	--	--	<1	<0.20	--	<0.01	--	<0.020	--	<0.01
DEC													
16...	187	187	228	<1	150	<1	0.20	--	0.03	--	0.700	--	<0.01
FEB													
09...	186	185	226	<1	--	5	<0.20	--	0.03	--	0.740	--	<0.01
09...	--	--	--	--	<0.10	4	0.20	--	0.04	--	0.740	--	<0.01
MAR													
04...	136	135	165	<1	--	528	1.2	--	0.08	--	0.310	--	0.02
MAY													
24...	136	136	166	<1	--	76	0.60	--	0.05	--	0.790	--	0.02
AUG													
02...	--	--	--	--	--	<10	<0.10	<0.04	--	<0.06	--	<0.008	--
02...	155	155	189	<1	--	11	0.30	E.03n	--	0.76	--	E.006n	--

06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, MO—Continued

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

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Ortho-phos-phate, water, unfltrd mg/L as P (70507)	Phos-phorus, water, unfltrd mg/L (00665)	COD, high level, water, unfltrd mg/L (00340)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal strep-tococci KF MF, col/ 100 mL (31673)	Alum-inum, water, fltrd, µg/L (01106)	Arsenic water, fltrd, µg/L (01000)	Beryll-ium, water, fltrd, µg/L (01010)	Cadmium water, fltrd, µg/L (01025)	Chrom-ium, water, fltrd, µg/L (01030)	Copper, water, fltrd, µg/L (01040)
OCT													
17...	--	0.210	0.36	15	9,400	26,000	8,170	<3	2	<1	<1.0	4.1	2.5
17...	--	<0.010	<0.02	<5	--	--	--	<3	<1	<1	<1.0	<1.0	<1.0
DEC													
16...	--	0.020	0.05	6	40k	110	124	<3	<1	<1	<1.0	2.3	1.1
FEB													
09...	--	0.010	0.05	6	7k	8k	10k	<3	1	M	M	2.2	0.7
09...	--	0.020	0.05	8	<2b	8k	38k	<3	<1	<1	<1.0	2.5	<1.0
MAR													
04...	--	0.100	0.44	15	2,800k	1,700k	4,200	8	2	<1	<1.0	<1.0	1.2
MAY													
24...	--	0.080	0.17	12	>800a	>600a	>1,000a	3	<1	<1	<1.0	<1.0	1.0
AUG													
02...	<0.02	--	<0.04	<10	--	--	--	<2	<0.2	<0.06	<0.04	<0.8	<0.4
02...	0.03	--	0.07	<10	380	530	480	2	1.1	<0.06	<0.04	<0.8	1.2

Date	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover -able, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Selen-ium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Di-phenyl-hydra-zine, water, unfltrd µg/L (82626)	2,4,6-Tri-chloro-phenol, water, unfltrd µg/L (34621)	2,4-Di-chloro-phenol, water, unfltrd µg/L (34601)	2,4-Di-methyl-phenol, water, unfltrd µg/L (34606)
OCT													
17...	22	<1	95	<0.1	3.3	<1	<1.0	4	<7	<1	<3	<2	<2.0
17...	<2	<1	<1	<0.1	<1.0	<1	<1.0	<2	<7	<1	<3	Mt	<2.0
DEC													
16...	6	<1	271	<0.1	2.0	<1	<1.0	<2	--	--	--	--	--
FEB													
09...	7	M	306	<0.1	2.8	<1	M	1	--	--	--	--	--
09...	8	<1	306	<0.1	2.7	<1	<1.0	<2	--	--	--	--	--
MAR													
04...	17	<1	139	<0.1	1.3	3	<1.0	7	<7	<2	<1	<2	<2.0
MAY													
24...	4	<1	112	<0.1	1.4	<1	<1.0	<2	--	--	--	--	--
AUG													
02...	<6	0.18	<0.8	<0.02	<0.06	<0.4	<0.2	<0.6	--	--	--	--	--
02...	<6	0.09	118	<0.02	1.55	0.4	<0.2	<0.6	--	--	--	--	--

Date	2,4-Di-nitro-phenol, water, unfltrd µg/L (34616)	2,4-Di-nitro-toluene water unfltrd µg/L (34611)	2,6-Di-nitro-toluene water unfltrd µg/L (34626)	2-Chloro-naphth-alene, water, unfltrd µg/L (34581)	2-chloro-phenol, water, unfltrd µg/L (34586)	2-Methyl-4,6-di-nitro-phenol, wat unf µg/L (34657)	2-nitro-phenol, water unfltrd µg/L (34591)	3,3-Di' chloro-benzi-dine, water, unfltrd µg/L (34631)	4-Bromo-phenyl phenyl ether, wat unf µg/L (34636)	4-Chloro-3-methyl-phenol, wat unf µg/L (34452)	4-Chloro-phenyl phenyl ether, wat unf µg/L (34641)	4-Nitro-phenol, water, unfltrd µg/L (34646)	9H-Fluor-ene, water, unfltrd µg/L (34381)
OCT													
17...	<3	<3	<2	<2	<2	<2m	<1	<0.9m	<2	<3	<2	<4m	<2
17...	<3	<3	<2	<2	<2	<2m	<1	<0.9m	<2	<3	<2	<4m	<2
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<3	<1	<2	<1	<1	<2m	<1	<0.9m	<2	<2	<1	<2m	Mt
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, MO—Continued

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

Date	Acenaphthene, water, unfltrd µg/L (34205)	Acenaphthylene, water, unfltrd µg/L (34200)	Aldrin, water, unfltrd µg/L (39330)	alpha-Endosulfan, water, unfltrd µg/L (39388)	Anthracene, water, unfltrd µg/L (34220)	Benzidine, water, unfltrd µg/L (39120)	Benzo[a]anthracene, water, unfltrd µg/L (34526)	Benzo[a]pyrene, water, unfltrd µg/L (34247)	Benzo[b]fluoranthene water unfltrd µg/L (34230)	Benzo[g,h,i]perylene, water, unfltrd µg/L (34521)	Benzo[k]fluoranthene water unfltrd µg/L (34242)	Benzyl n-butyl phthalate, water, unfltrd µg/L (34292)	Bis(2-chloroethoxy) methane water unfltrd µg/L (34278)
OCT													
17...	<2	<2	<0.001	<0.002	<2	<1,000m	<2	<1	<2	<2	<1	<2	<3
17...	<2	<2	<0.001	<0.002	<2	<1,000m	<2	<1	<2	<2	<1	<2	<3
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	M	<2	<0.001	<0.002	Mt	<1,000m	<2	Mt	Mt	Mt	Mt	Mn	<1
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Bis(2-chloroethyl) ether, water, unfltrd µg/L (34273)	Bis(2-chloroisopropyl) ether, wat unf µg/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf µg/L (39100)	Carbophenothion, water, unfltrd µg/L (39786)	Chlordane, technical, water, unfltrd µg/L (39350)	Chlorpyrifos water unfltrd µg/L (38932)	Chrysene, water, unfltrd µg/L (34320)	Diazinon, water, unfltrd µg/L (39570)	Dibenzo[a,h]anthracene, wat unf µg/L (34556)	Dieldrin, water, unfltrd µg/L (39380)	Diethyl phthalate, water, unfltrd µg/L (34336)	Dimethyl phthalate, water, unfltrd µg/L (34341)	Di-n-butyl phthalate, water, unfltrd µg/L (39110)
OCT													
17...	<2	<2	<2	<0.02	<0.1	<0.01	<3	<0.02	<1	<0.002	Mt	Mt	E1n
17...	<2	<2	<2	<0.02	<0.1	<0.01	<3	<0.02	<1	<0.002	Mt	Mt	Mn
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<1	<1	<2	<0.02	<0.1	<0.01	Mt	<0.02	<2	<0.002	Mt	Mt	E2n
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Di-n-octyl phthalate, water, unfltrd µg/L (34596)	Disulfoton, water, unfltrd µg/L (39011)	Endrin, water, unfltrd µg/L (39390)	Ethion, water, unfltrd µg/L (39398)	Fluoranthene water unfltrd µg/L (34376)	Fonofos water unfltrd µg/L (82614)	Heptachlor epoxide water unfltrd µg/L (39420)	Heptachlor, water, unfltrd µg/L (39410)	Hexachlorobenzene water unfltrd µg/L (39700)	Hexachlorocyclopentadiene, wat unf µg/L (34386)	Indeno[1,2,3-cd]pyrene, water, unfltrd µg/L (34403)	Isophorone water unfltrd µg/L (34408)	Lindane water, unfltrd µg/L (39340)
OCT													
17...	<2	<0.10	<0.002	<0.01	<2	<0.01	<0.001	<0.001	<2	<1m	<3	<2	<0.0020
17...	<2	<0.10	<0.002	<0.01	Mt	<0.01	<0.001	<0.001	<2	<1m	<3	Mt	<0.0020
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<2	<0.10	<0.002	<0.01	Mt	<0.01	<0.001	<0.001	<1	<1m	Mt	Mt	<0.0020
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, MO—Continued

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

Date	Malathion, water, unfltrd µg/L (39530)	Methyl parathion, water, unfltrd µg/L (39600)	Mirex, water, unfltrd µg/L (39755)	Nitrobenzene water unfltrd µg/L (34447)	N-NItroso-dimethylamine, wat unf µg/L (34438)	N-NItroso-di-n-propylamine, wat unf µg/L (34428)	N-NItroso-diphenylamine, wat unf µg/L (34433)	p,p'-DDD, water, unfltrd µg/L (39360)	p,p'-DDE, water, unfltrd µg/L (39365)	p,p'-DDT, water, unfltrd µg/L (39370)	p,p'-Methoxychlor, water, unfltrd µg/L (39480)	Parathion, water, unfltrd µg/L (39540)	PCBs, water, unfltrd µg/L (39516)
OCT													
17...	<0.10	<0.01	<0.001	<1	<3	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
17...	<0.10	<0.01	<0.001	<1	<3	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<0.10	<0.01	<0.001	<1	<2	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Pentachlorophenol, water, unfltrd µg/L (39032)	Phenanthrene, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxaphene, water, unfltrd µg/L (39400)	Tribuphos, water, unfltrd µg/L (39040)	1,2,4-Trichlorobenzene water unfltrd µg/L (34551)	1,2-Dichlorobenzene water unfltrd µg/L (34536)	1,3-Dichlorobenzene water unfltrd µg/L (34566)	1,4-Dichlorobenzene water unfltrd µg/L (34571)	Hexachlorobutadiene, water, unfltrd µg/L (39702)	Hexachloroethane, water, unfltrd µg/L (34396)
OCT													
17...	<2m	<2	E.3t	<0.02	<2	<1	<0.02	<2	<2	<2	<1	<1m	<2m
17...	Mmt	<2	<3.4	<0.02	Mt	<1	<0.02	<2	<2	Mt	<1	<1m	<2m
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	Mmt	Mt	E.2t	<0.02	Mt	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935770 BONHOMME CREEK NEAR CLARKSON VALLEY, MO—Continued

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

Date	Naphthalene, water, unfltrd µg/L (34696)
OCT	
17...	<2
17...	<2
DEC	
16...	--
FEB	
09...	--
09...	--
MAR	
04...	<2
MAY	
24...	--
AUG	
02...	--
02...	--

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

06935830 CAULKS CREEK AT CHESTERFIELD, MO

LOCATION.--Lat 38°39'17", long 90°35'42", St. Louis County, Hydrologic Unit 10300200, on downstream side of middle pier of Highway CC bridge, 2.0 mi west of State Highway 340, 1.1 mi south of U.S. Route 40, and 1.09 mi upstream of Bonhomme Creek.

DRAINAGE AREA.--17.1 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 453.98 ft above National Geodetic Vertical Datum of 1929. Prior to July 1996, at datum 450.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good except for estimated daily discharges and discharges above 1,100 ft^3/s, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 11, 1979 reached a stage of 19.97 ft, former datum, discharge 7,940 ft^3/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	11	13	9.8	9.8	e9.4	9.6	16	172	42	9.7	21	7.8
2	8.8	14	9.2	9.7	e39	9.2	14	49	29	13	13	7.1
3	8.3	9.1	9.2	9.5	e98	9.2	12	26	22	36	11	7.0
4	8.3	8.1	9.6	732	e52	224	11	18	20	22	10	6.9
5	7.9	9.7	9.7	79	e24	123	10	17	21	197	12	6.7
6	7.4	26	9.6	35	e17	46	10	14	24	171	9.0	6.6
7	7.1	12	8.9	23	e15	26	10	13	23	29	8.3	6.5
8	6.8	9.1	8.9	18	e13	18	9.7	12	25	17	7.8	6.3
9	79	8.5	9.5	15	12	15	9.0	11	29	13	7.6	6.3
10	29	8.1	24	13	14	13	8.8	11	29	11	7.2	6.1
11	12	8.0	13	12	19	12	9.5	10	22	11	6.6	6.0
12	9.7	7.6	9.9	12	21	11	8.7	10	15	10	6.5	6.1
13	8.9	7.0	9.5	11	14	9.9	8.3	45	13	9.6	6.2	6.0
14	18	6.9	9.7	11	13	10	8.1	89	12	9.0	6.1	6.2
15	14	7.8	9.6	10	13	9.6	8.1	33	12	8.6	5.9	6.1
16	9.1	7.5	10	10	11	10	8.1	18	12	8.5	5.9	12
17	84	248	9.3	131	11	9.7	8.0	14	11	8.5	6.1	8.2
18	18	745	9.1	84	12	9.6	7.8	25	93	8.1	6.2	7.0
19	12	80	8.9	35	17	8.5	7.8	363	43	8.1	6.1	6.5
20	9.4	37	8.6	22	20	8.5	7.7	53	18	8.0	12	6.4
21	8.7	23	8.4	18	14	8.1	7.9	28	14	7.9	9.1	6.3
22	8.4	16	13	16	12	7.9	7.6	19	16	7.9	6.9	6.3
23	8.1	27	135	14	11	7.7	8.8	16	12	7.7	9.2	6.3
24	7.6	28	30	14	11	7.6	18	27	11	7.5	16	6.2
25	7.3	15	17	13	10	9.0	20	174	11	30	96	6.1
26	8.7	13	13	13	9.8	405	9.7	807	10	15	52	6.2
27	7.8	11	11	12	9.5	71	8.4	718	10	9.9	21	5.9
28	8.4	11	11	11	9.5	43	8.0	165	10	8.6	13	5.8
29	8.2	10	12	11	9.3	39	7.6	66	10	8.1	10	5.6
30	7.6	10	11	11	---	25	148	86	9.7	575	8.9	5.6
31	6.8	---	10	e10	---	19	---	66	---	45	8.1	---
MEAN	14.7	47.9	15.4	46.0	18.6	39.8	14.6	102	21.0	42.9	13.7	6.60
MAX	84	745	135	732	98	405	148	807	93	575	96	12
MIN	6.8	6.9	8.4	9.5	9.3	7.6	7.6	10	9.7	7.5	5.9	5.6
IN.	0.99	3.12	1.04	3.10	1.18	2.68	0.95	6.91	1.37	2.89	0.92	0.43

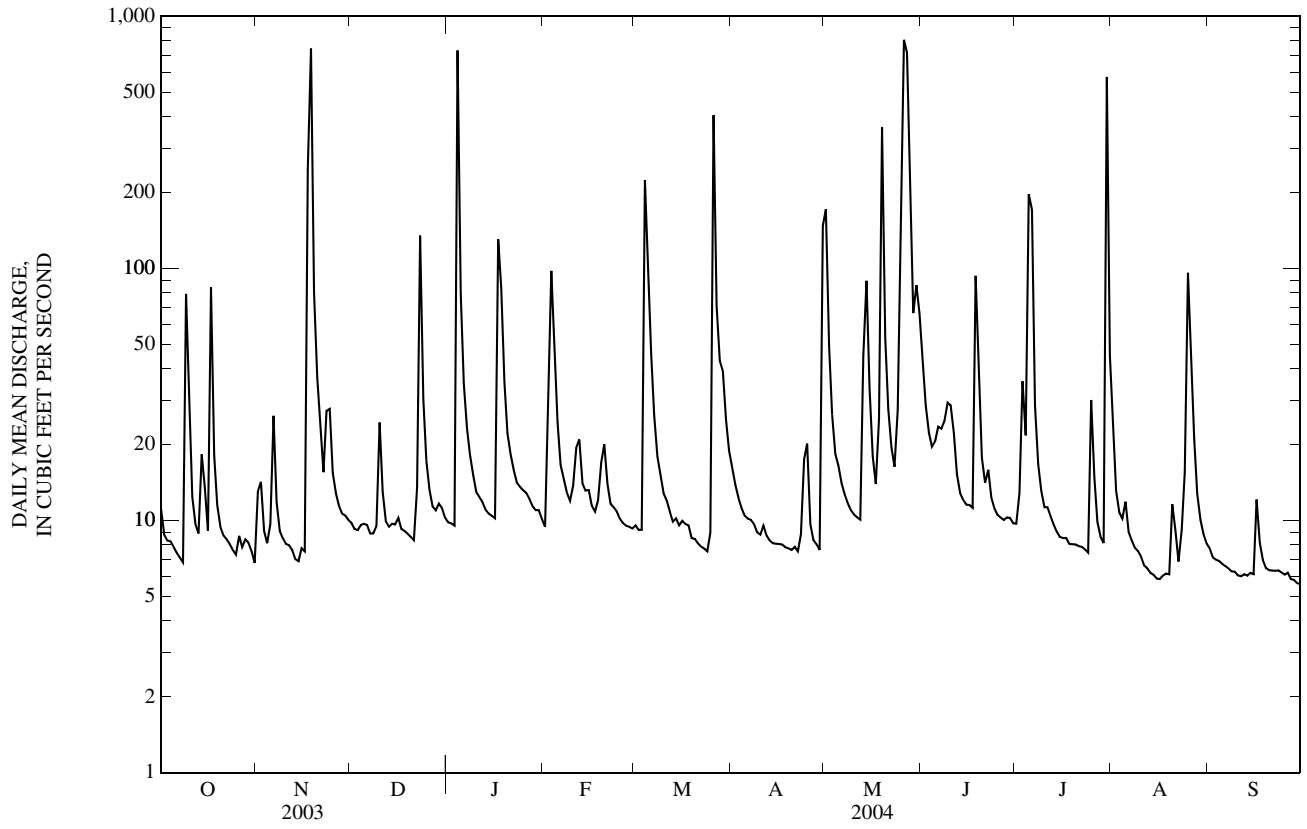
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	15.1	22.9	13.1	22.2	34.7	30.8	18.8	44.0	37.4	18.2	11.9	12.9
MAX	28.9	62.0	27.7	46.0	72.6	78.1	29.2	102	59.3	42.9	20.2	36.7
(WY)	(2003)	(1997)	(2002)	(2004)	(1999)	(1998)	(1998)	(2004)	(1998)	(2004)	(1996)	(2003)
MIN	8.15	6.33	5.76	5.33	11.5	9.70	6.64	12.5	8.40	7.52	7.11	4.33
(WY)	(2000)	(2000)	(1999)	(2000)	(2003)	(2000)	(2000)	(1999)	(1999)	(2002)	(2002)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL MEAN	23.5		32.1		23.2	
HIGHEST ANNUAL MEAN					32.1	2004
LOWEST ANNUAL MEAN					13.2	2001
HIGHEST DAILY MEAN	815	Jun 26	807	May 26	1,920	May 7, 2000
LOWEST DAILY MEAN	5.1	Feb 6,12	5.6	Sep 29,30	1.9	Sep 1, 2001
ANNUAL SEVEN-DAY MINIMUM	5.3	Feb 6	5.9	Sep 24	3.7	Sep 21, 1999
MAXIMUM PEAK FLOW	---		Unknown	May 26	Unknown	Jun 24, 2000
MAXIMUM PEAK STAGE	---		13.58	May 26	14.95	Jun 24, 2000
INSTANTANEOUS LOW FLOW	---		5.5	Sep 29,30	0.61[a]	Sep 4, 2001
ANNUAL RUNOFF (INCHES)	18.69		25.59		18.46	
10 PERCENT EXCEEDS	35		45		35	
50 PERCENT EXCEEDS	10		11		9.2	
90 PERCENT EXCEEDS	6.7		6.9		5.3	

e Estimated
[a] Occurred during period of construction upstream. Verified by field visit.

06935830 CAULKS CREEK AT CHESTERFIELD, MO—Continued



06935830 CAULKS CREEK AT CHESTERFIELD, MO—Continued
(Metropolitan St. Louis Sewer District Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2002 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 unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT												
17...	0159	Environmental	262	7.1	8.4	82	7.6	577	14.0	180	54.0	10.0
DEC												
16...	1220	Environmental	10	13	10.0	90	7.5	2,940	9.6	390	122	21.0
FEB												
09...	1205	Environmental	11	24	11.3	98	7.2	2,340	8.4	370	115	19.0
MAR												
04...	1202	Environmental	498	12	9.6	88	7.3	685	10.3	160	49.0	9.90
MAY												
24...	1410	Environmental	24	16	8.9	99	7.3	724	19.1	200	63.0	11.0
AUG												
02...	1245	Environmental	13	59	6.6	71	6.9	672	18.1	360	111	19.7

Date	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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													
17...	136	137	167	<1	--	292	1.3	--	0.04	--	1.40	--	0.01
DEC													
16...	203	202	246	<1	760	<1	0.20	--	0.02	--	1.90	--	<0.01
FEB													
09...	205	206	252	<1	540	5	0.20	--	0.01	--	1.70	--	<0.01
MAR													
04...	126	130	158	<1	--	2,350	3.0	--	0.09	--	1.40	--	0.03
MAY													
24...	155	158	193	<1	--	29	0.50	--	0.02	--	1.80	--	<0.01
AUG													
02...	253	256	312	<1	--	11	0.14	<0.04	--	1.75	--	<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, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	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													
17...	--	0.210	0.56	15	4,800	10,000	26,000	<3	1	<1	<1.0	4.5	2.1
DEC													
16...	--	0.060	0.07	6	40k	100	30k	<3	1	<1	<1.0	2.8	2.9
FEB													
09...	--	0.040	0.06	7	12k	18k	10k	<3	2	<1	<1.0	3.2	1.8
MAR													
04...	--	0.140	1.30	17	1,500k	1,000k	3,500k	5	1	<1	<1.0	<1.0	<1.0
MAY													
24...	--	0.080	0.13	10	1,200	1,700k	1,560	<3	<1	<1	<1.0	<1.0	<1.0
AUG													
02...	0.04	--	0.08	20	170	440	400	Mn	0.5	<0.06	E.04n	E.7n	1.3

06935830 CAULKS CREEK AT CHESTERFIELD, 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)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recoverable, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Selenium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd µg/L (82626)	2,4,6-Trichlorophenol, water, unfltrd µg/L (34621)	2,4-Dichlorophenol, water, unfltrd µg/L (34601)	2,4-Dimethylphenol, water, unfltrd µg/L (34606)
OCT 17...	12	<1	43	<0.1	2.6	<1	<1.0	2	<7	<1	<3	<2	<2.0
DEC 16...	5	<1	126	<0.1	3.0	<1	<1.0	<2	--	--	--	--	--
FEB 09...	3	<1	99	<0.1	3.3	<1	<1.0	<2	--	--	--	--	--
MAR 04...	10	<1	67	<0.1	1.9	3	<1.0	3	E3n	<2	<1	Mt	<2.0
MAY 24...	3	<1	56	<0.1	1.2	<1	<1.0	<2	--	--	--	--	--
AUG 02...	E6n	0.13	21.2	<0.02	1.87	1.2	<0.2	2	--	--	--	--	--

Date	2,4-Dinitrophenol, water, unfltrd µg/L (34616)	2,4-Dinitrotoluene water unfltrd µg/L (34611)	2,6-Dinitrotoluene water unfltrd µg/L (34626)	2-Chloronaphthalene, water, unfltrd µg/L (34581)	2-chlorophenol, water, unfltrd µg/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf µg/L (34657)	2-nitrophenol, water unfltrd µg/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd µg/L (34631)	4-Bromophenyl phenyl ether, wat unf µg/L (34636)	4-Chloro-3-methylphenol, wat unf µg/L (34452)	4-Chlorophenyl phenyl ether, wat unf µg/L (34641)	4-Nitrophenol, water, unfltrd µg/L (34646)	9H-Fluorene, water, unfltrd µg/L (34381)
OCT 17...	<3	<3	<2	<2	<2	<2m	<1	<0.9m	<2	<3	<2	<4m	<2
DEC 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	<3	<1	<2	<1	<1	<2m	<1	<0.9m	<2	<2	<1	E1mt	Mt
MAY 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Acenaphthene, water, unfltrd µg/L (34205)	Acenaphthylene, water, unfltrd µg/L (34200)	Aldrin, water, unfltrd µg/L (39330)	alpha-Endosulfan, water, unfltrd µg/L (39388)	Anthracene, water, unfltrd µg/L (34220)	Benzidine, water, unfltrd µg/L (39120)	Benzo[a]anthracene, water, unfltrd µg/L (34526)	Benzo[a]pyrene, water, unfltrd µg/L (34247)	Benzo[b]fluoranthene water unfltrd µg/L (34230)	Benzo[g,h,i]perylene, water, unfltrd µg/L (34521)	Benzo[k]fluoranthene water unfltrd µg/L (34242)	Benzyl n-butyl phthalate, water, unfltrd µg/L (34292)	Bis(2-chloroethoxy) methane water unfltrd µg/L (34278)
OCT 17...	<2	<2	<0.001	<0.002	<2	<1,000m	<2	<1	<2	<2	<1	<2	<3
DEC 16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	Mt	Mt	Mt	Mt	Mt	Mt	<1
MAY 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935830 CAULKS CREEK AT CHESTERFIELD, MO—Continued

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

Date	Bis(2-chloroethyl) ether, water, unfltrd µg/L (34273)	Bis(2-chloroisopropyl) ether, wat unf µg/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf µg/L (39100)	Carbophenothion, water, unfltrd µg/L (39786)	Chlordane, technical, water, unfltrd µg/L (39350)	Chlorpyrifos water unfltrd µg/L (38932)	Chrysene, water, unfltrd µg/L (34320)	Diazinon, water, unfltrd µg/L (39570)	Dibenzo-[a,h]-anthracene, wat unf µg/L (34556)	Dieldrin, water, unfltrd µg/L (39380)	Diethyl phthalate, water, unfltrd µg/L (34336)	Dimethyl phthalate, water, unfltrd µg/L (34341)	Di-n-butyl phthalate, water, unfltrd µg/L (39110)
OCT													
17...	<2	<2	E3	<0.02	<0.1	<0.01	Mt	<0.02	<1	<0.002	Mt	<1	Mt
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<1	<1	Mt	<0.02	<0.1	<0.01	Mt	<0.02	<2	<0.002	Mt	Mt	E1n
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Di-n-octyl phthalate, water, unfltrd µg/L (34596)	Disulfoton, water, unfltrd µg/L (39011)	Endrin, water, unfltrd µg/L (39390)	Ethion, water, unfltrd µg/L (39398)	Fluoranthene water unfltrd µg/L (34376)	Fonofos water unfltrd µg/L (82614)	Heptachlor epoxide water unfltrd µg/L (39420)	Heptachlor, water, unfltrd µg/L (39410)	Hexachlorobenzene water unfltrd µg/L (39700)	Hexachlorocyclopentadiene, wat unf µg/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd µg/L (34403)	Isophorone water unfltrd µg/L (34408)	Lindane water, unfltrd µg/L (39340)
OCT													
17...	<2	<0.10	<0.002	<0.01	Mt	<0.01	<0.001	<0.001	<2	<1m	<3	<2	<0.0020
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<2	<0.10	<0.002	<0.01	Mt	<0.01	<0.001	<0.001	<1	<1m	Mt	Mt	<0.0020
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Malathion, water, unfltrd µg/L (39530)	Methyl parathion, water, unfltrd µg/L (39600)	Mirex, water, unfltrd µg/L (39755)	Nitrobenzene water unfltrd µg/L (34447)	N-NItroso-dimethylamine, wat unf µg/L (34438)	N-NItroso-di-n-propylamine, wat unf µg/L (34428)	N-NItroso-diphenylamine, wat unf µg/L (34433)	p,p'-DDD, water, unfltrd µg/L (39360)	p,p'-DDE, water, unfltrd µg/L (39365)	p,p'-DDT, water, unfltrd µg/L (39370)	p,p'-Methoxychlor, water, unfltrd µg/L (39480)	Parathion, water, unfltrd µg/L (39540)	PCBs, water, unfltrd µg/L (39516)
OCT													
17...	<0.10	<0.01	<0.001	<1	<3	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<0.10	<0.01	<0.001	<1	<2	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935830 CAULKS CREEK AT CHESTERFIELD, MO—Continued

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

Date	Pentachlorophenol, water, unfltrd µg/L (39032)	Phenanthrene, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxaphene, water, unfltrd µg/L (39400)	Tribuphos, water, unfltrd µg/L (39040)	1,2,4-Trichlorobenzene water unfltrd µg/L (34551)	1,2-Dichlorobenzene water unfltrd µg/L (34536)	1,3-Dichlorobenzene water unfltrd µg/L (34566)	1,4-Dichlorobenzene water unfltrd µg/L (34571)	Hexachlorobutadiene, water, unfltrd µg/L (39702)	Hexachloroethane, water, unfltrd µg/L (34396)
OCT													
17...	<2m	<2	<3.4	<0.02	Mt	<1	<0.02	<2	<2	<2	<1	<1m	<2m
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<2m	Mt	E.7t	<0.02	Mt	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphthalene, water, unfltrd µg/L (34696)
OCT	
17...	<2
DEC	
16...	--
FEB	
09...	--
MAR	
04...	<2
MAY	
24...	--
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

06935850 CREVE COEUR CREEK AT CHESTERFIELD, MO

LOCATION.--Lat 38°38'47", long 90°31'37", in SW ¼ NW ¼ NW ¼ sec.13, T.45 N., R.4 E., St. Louis County, Hydrologic Unit 10300200, on left downstream abutment of Highway 40 bridge, 3.71 mi north of State Highway 100 (Manchester Road), 0.75 mi west of State Highway 141, and 10.33 mi upstream of Missouri River.

DRAINAGE AREA.--5.62 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 495.20 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges and discharges below 1 ft^3/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	1.0	e9.5	0.48	0.60	0.91	2.7	1.3	56	5.4	0.66	1.4	0.54
2	0.35	e3.3	0.58	0.83	33	1.5	1.2	5.2	2.1	4.6	1.2	0.43
3	0.52	e1.0	0.62	1.2	10	5.5	1.1	1.6	1.8	9.9	0.92	0.35
4	0.77	e0.72	1.3	237	3.2	72	0.86	1.2	1.5	1.7	4.5	0.35
5	0.58	8.9	1.4	7.8	2.5	30	0.79	1.6	1.5	104	3.4	0.50
6	0.39	15	0.86	2.6	2.1	4.7	0.76	1.1	1.4	61	0.90	0.48
7	0.35	1.8	0.56	1.7	1.6	2.7	0.81	0.82	1.6	4.1	0.73	0.43
8	e0.33	1.1	0.73	1.7	1.2	1.5	0.78	0.77	1.1	1.9	0.53	0.36
9	e64	0.83	2.6	1.5	3.3	1.3	0.70	0.77	3.6	1.2	0.60	0.33
10	e2.7	0.72	12	1.2	5.3	0.93	1.2	0.88	4.7	1.0	0.60	0.30
11	e0.93	0.89	0.88	1.3	8.9	0.83	1.7	0.81	1.7	1.6	0.56	0.30
12	e0.51	1.2	0.45	1.5	4.4	0.76	0.75	0.79	1.2	1.2	0.56	0.31
13	e0.46	0.87	0.48	1.3	2.4	0.85	0.65	43	0.90	1.0	1.7	0.31
14	e5.2	1.00	0.82	1.3	2.6	1.3	0.63	68	0.82	0.96	0.57	0.31
15	e0.79	3.5	1.0	1.9	2.3	0.82	0.62	5.1	0.79	1.0	0.55	0.41
16	e0.96	1.4	1.4	2.4	1.8	1.8	0.72	1.9	0.92	1.1	0.52	4.9
17	e39	103	0.75	69	1.8	1.2	0.68	1.4	0.87	1.1	0.52	0.42
18	e2.4	278	1.1	14	3.4	1.4	0.66	12	50	1.0	0.52	0.30
19	e1.2	8.9	0.98	2.9	5.3	0.80	0.65	137	4.8	1.0	0.58	0.23
20	e0.87	3.3	0.71	1.9	7.0	0.80	0.67	5.9	1.0	0.97	7.9	0.23
21	e0.75	2.0	0.92	1.5	2.3	0.69	1.2	2.4	0.87	0.90	1.2	0.20
22	e0.71	1.6	4.1	1.3	1.5	0.77	1.0	1.6	1.1	0.80	0.57	0.21
23	e0.68	15	49	1.2	1.6	1.0	2.1	1.7	0.75	0.81	9.0	0.19
24	e0.66	3.6	1.7	1.2	1.3	0.97	11	2.1	0.69	0.99	8.7	0.19
25	e0.61	1.3	0.78	1.5	1.2	4.9	2.7	71	0.59	14	61	0.16
26	e2.4	0.90	0.59	1.4	1.2	187	0.88	153	0.57	1.7	14	0.15
27	e0.96	0.86	0.55	1.3	1.2	12	0.76	167	0.58	1.0	3.2	0.16
28	e2.5	0.67	0.82	1.1	1.3	14	0.65	26	0.75	0.96	1.0	0.17
29	e1.3	0.57	1.7	1.2	1.6	5.3	0.67	4.5	0.68	0.94	0.74	0.16
30	e0.69	0.49	0.87	0.79	---	2.3	60	29	0.65	212	0.66	0.17
31	e0.57	---	0.69	0.73	---	1.5	---	8.1	---	5.0	0.63	---
MEAN	4.36	15.7	2.95	11.8	4.01	11.7	3.27	26.2	3.16	14.2	4.18	0.45
MAX	64	278	49	237	33	187	60	167	50	212	61	4.9
MIN	0.33	0.49	0.45	0.60	0.91	0.69	0.62	0.77	0.57	0.66	0.52	0.15
IN.	0.89	3.12	0.61	2.43	0.77	2.41	0.65	5.38	0.63	2.91	0.86	0.09

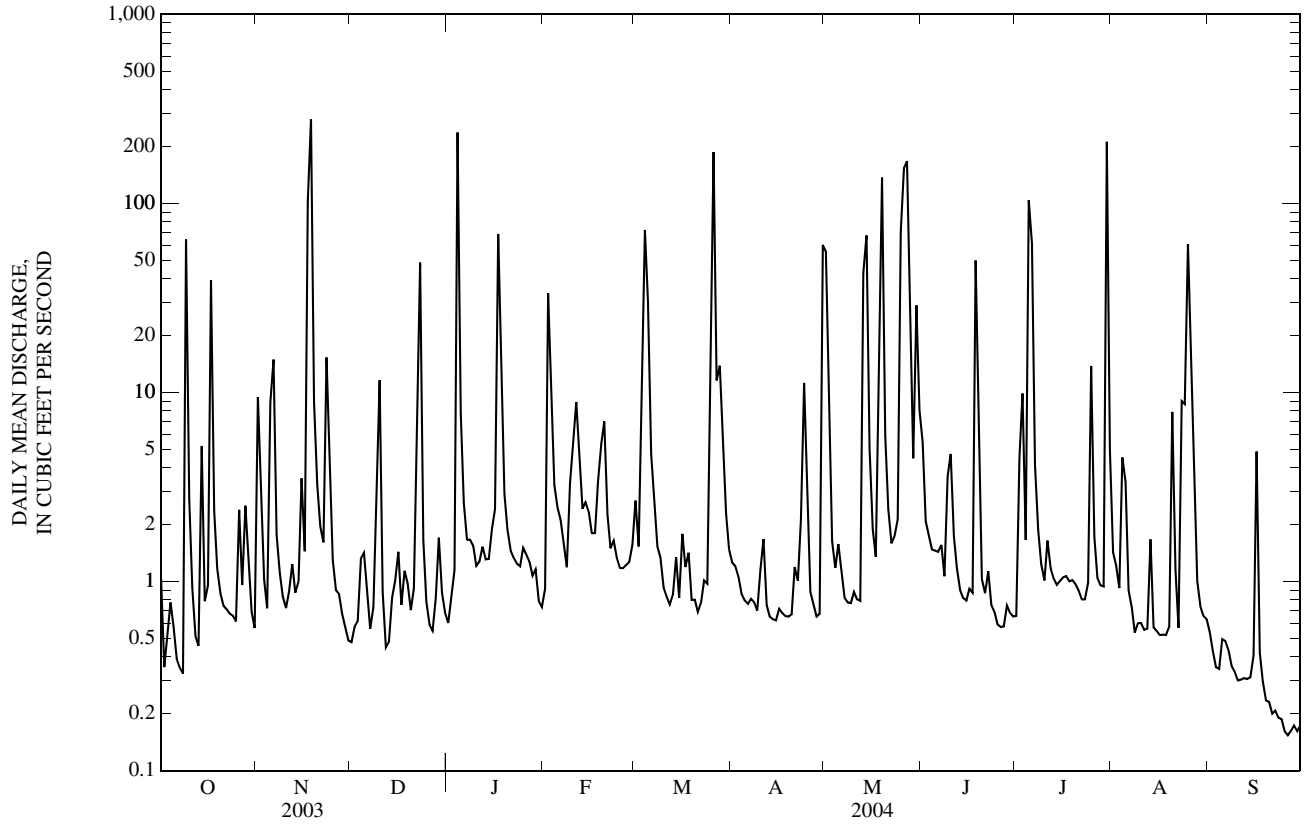
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	5.14	6.23	3.67	5.92	6.98	8.15	5.67	14.0	12.3	5.71	2.71	3.22
MAX	9.55	15.7	10.3	11.8	14.9	15.5	8.84	26.2	20.5	14.2	5.45	15.1
(WY)	(2003)	(2004)	(2002)	(2004)	(1998)	(1998)	(1999)	(2004)	(2000)	(2004)	(1998)	(2003)
MIN	2.14	0.77	0.93	0.85	3.38	3.49	1.62	4.36	3.13	0.54	0.44	0.33
(WY)	(1998)	(2000)	(2001)	(2000)	(2003)	(2000)	(2000)	(1998)	(1999)	(2002)	(2001)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	7.47		8.56		6.70	
HIGHEST ANNUAL MEAN					8.56	2004
LOWEST ANNUAL MEAN					4.54	2001
HIGHEST DAILY MEAN	278	Nov 18	278	Nov 18	480	May 7, 2000
LOWEST DAILY MEAN	0.07	Aug 27	0.15	Sep 26	0.02	Sep 17, 1999
ANNUAL SEVEN-DAY MINIMUM	0.15	Aug 21	0.17	Sep 24	0.05	Sep 28, 2001
MAXIMUM PEAK FLOW	---		1,320	May 27	1,890	Jun 24, 2000
MAXIMUM PEAK STAGE	---		13.93	May 27	15.88	Jun 24, 2000
INSTANTANEOUS LOW FLOW	---		0.13	Sep 25,26,29,30	0.02	Sep 24, 1999
ANNUAL RUNOFF (INCHES)	18.05		20.74		16.20	
10 PERCENT EXCEEDS	13		10		12	
50 PERCENT EXCEEDS	1.1		1.1		1.2	
90 PERCENT EXCEEDS	0.36		0.50		0.31	

e Estimated

06935850 CREVE COEUR CREEK AT CHESTERFIELD, MO—Continued



06935890 CREVE COEUR CREEK NEAR CREVE COEUR, MO

LOCATION.--Lat 38°40'58", long 90°29'20", St. Louis County, Hydrologic Unit 10300200, 200 ft downstream of Highway 340 bridge, 2.10 mi west of Interstate 270, 2.95 mi north U.S. Route 40, and 5.80 mi upstream of Missouri River.

DRAINAGE AREA.--22.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1997 to current year. Annual peaks only for 1972-1974 water years published in WRD MO 1974.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 449.43 ft above National Geodetic Vertical Datum of 1929. Prior to June 1997, at datum 451.10 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 11, 1979 reached a stage of 14.78 ft, former datum, discharge 4,820 ft^3/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	11	38	5.0	6.8	e10	9.7	16	230	31	4.2	9.4	5.4
2	4.6	15	4.8	6.8	e143	8.3	14	31	15	15	6.6	4.9
3	3.7	5.2	5.2	7.5	50	13	13	15	14	38	5.8	4.5
4	4.8	3.9	9.4	933	18	275	12	11	11	12	28	4.4
5	3.4	14	9.8	49	13	148	11	12	9.4	411	23	4.3
6	3.1	55	7.6	17	13	26	11	9.5	8.8	507	5.6	4.5
7	3.0	8.2	5.8	12	9.9	17	11	8.2	11	19	4.8	4.2
8	2.8	5.2	5.3	11	8.3	13	10	7.9	8.1	10	4.2	3.7
9	285	3.7	12	10	13	12	9.7	7.4	17	7.4	4.3	3.6
10	26	3.6	86	8.7	21	11	9.6	7.3	20	6.4	3.7	3.6
11	7.3	3.9	13	8.1	32	10	16	7.1	15	9.3	3.5	3.5
12	4.6	3.3	8.1	8.0	22	9.5	9.9	6.5	12	6.7	3.4	3.5
13	4.4	3.1	7.3	7.5	12	8.8	9.7	180	9.4	5.5	3.5	4.2
14	34	3.4	10	7.3	12	11	8.4	330	7.8	4.9	4.0	3.8
15	6.3	13	9.4	6.7	12	8.9	8.1	28	7.3	4.6	3.2	3.6
16	7.8	4.9	10	6.6	9.7	12	8.0	15	21	4.6	3.1	12
17	174	176	7.4	249	9.5	9.7	8.1	10	9.4	8.2	3.1	4.5
18	10	1,430	7.9	78	13	11	7.2	36	98	4.7	3.1	3.2
19	6.1	60	7.7	18	19	8.4	7.0	531	29	4.3	3.1	2.9
20	4.7	19	6.2	13	23	8.0	7.0	34	8.7	4.0	32	2.8
21	4.5	12	5.9	11	13	7.1	8.0	17	7.2	3.9	8.0	2.7
22	4.4	9.5	8.9	11	11	7.0	7.5	11	8.0	3.8	4.1	2.8
23	4.2	64	207	9.2	10	6.9	12	9.4	6.9	3.2	34	3.0
24	3.8	26	19	9.0	9.9	7.2	51	12	4.9	3.8	26	3.0
25	5.7	10	11	10	9.9	23	27	508	4.5	56	209	3.1
26	11	8.4	9.2	11	8.7	889	9.4	480	4.3	8.5	115	3.3
27	4.3	7.4	8.2	9.7	8.2	69	7.6	556	4.3	4.8	17	2.7
28	11	6.3	8.1	8.3	8.0	77	7.1	357	7.1	4.3	8.5	2.7
29	6.4	5.6	16	8.1	8.0	42	6.5	31	5.2	4.1	7.1	2.6
30	4.1	5.3	8.9	e7.3	---	22	213	105	4.2	885	6.2	2.7
31	3.3	---	7.3	e6.9	---	17	---	48	---	27	5.5	---
MEAN	21.6	67.4	17.7	50.5	19.0	58.0	18.5	118	14.0	67.5	19.3	3.86
MAX	285	1,430	207	933	143	889	213	556	98	885	209	12
MIN	2.8	3.1	4.8	6.6	8.0	6.9	6.5	6.5	4.2	3.2	3.1	2.6
IN.	1.13	3.42	0.93	2.65	0.93	3.04	0.94	6.17	0.71	3.54	1.01	0.20

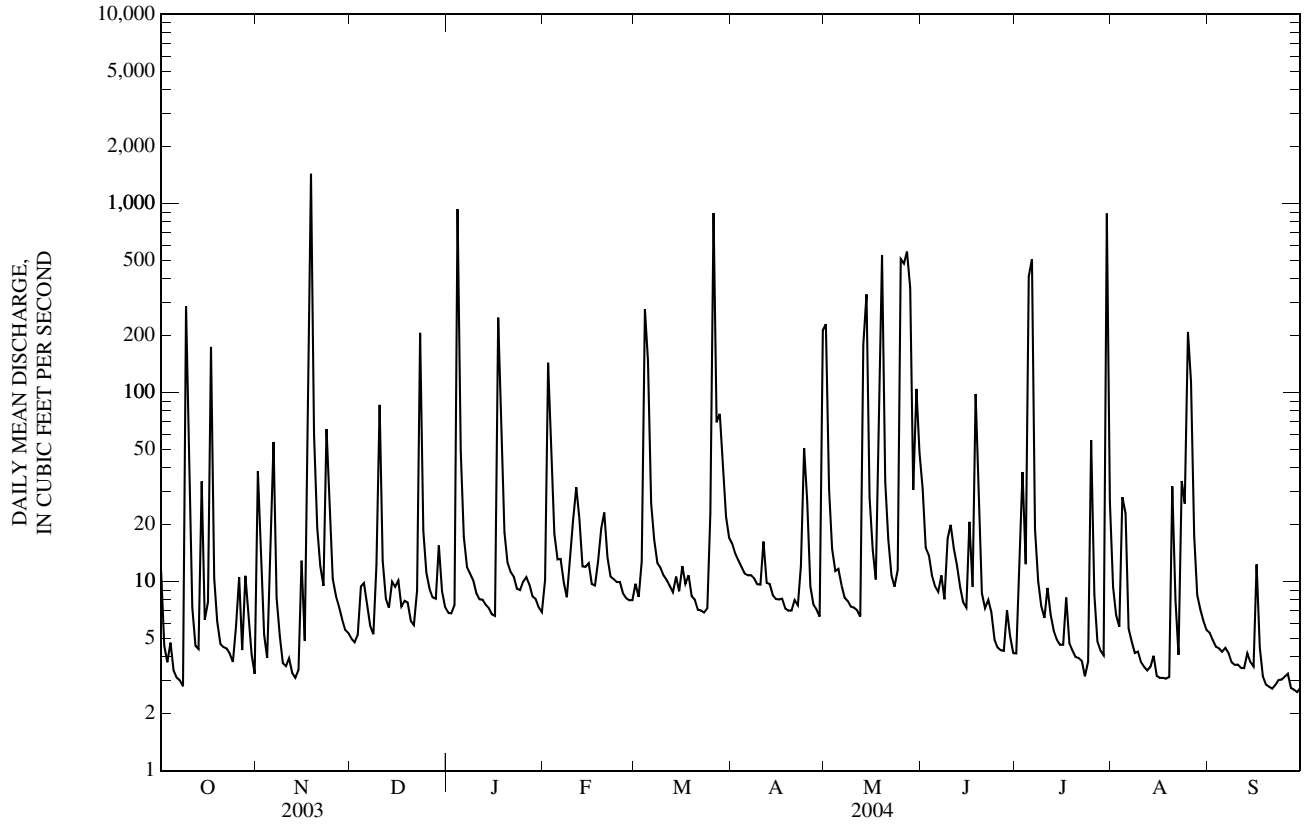
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	17.8	21.7	13.8	28.2	33.8	39.6	24.4	58.8	60.5	21.0	12.0	13.8
MAX	36.2	67.4	35.3	70.8	77.7	102	48.2	118	103	67.5	28.6	63.6
(WY)	(2003)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(2003)	(2004)	(1998)	(2003)
MIN	6.51	4.16	5.43	3.40	10.3	9.31	6.56	20.3	14.0	4.05	1.70	1.16
(WY)	(1998)	(2000)	(1999)	(2000)	(2002)	(2000)	(2000)	(1998)	(2004)	(1997)	(2001)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	34.3		39.8		29.0	
HIGHEST ANNUAL MEAN					39.8	2004
LOWEST ANNUAL MEAN					13.5	2001
HIGHEST DAILY MEAN	1,430	Nov 18	1,430	Nov 18	2,050	Jun 24, 2000
LOWEST DAILY MEAN	1.4	Aug 27	2.6	Sep 29	0.20	Sep 17, 1999
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 22	2.9	Sep 24	0.30	Sep 15, 1999
MAXIMUM PEAK FLOW	---		3,730	Mar 26	6,560	Jun 24, 2000
MAXIMUM PEAK STAGE	---		14.25	Mar 26	16.43	Jun 24, 2000
INSTANTANEOUS LOW FLOW	---		2.4	Oct 8,Sep 27-29	0.16	Sep 17, 1999
ANNUAL RUNOFF (INCHES)	21.18		24.66		17.91	
10 PERCENT EXCEEDS	57		50		40	
50 PERCENT EXCEEDS	7.4		8.7		6.0	
90 PERCENT EXCEEDS	2.7		3.7		2.1	

e Estimated

06935890 CREVE COEUR CREEK NEAR CREVE COEUR, MO—Continued



06935890 CREVE COEUR CREEK NEAR CREVE COEUR, 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)	Specif. conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT												
09...	1143	Environmental	353	12	6.7	71	7.2	217	17.5	150	43.0	9.90
DEC												
16...	1605	Environmental	9	12	11.9	93	7.6	3,340	3.8	410	120	27.0
FEB												
18...	1330	Environmental	11	4.2	15.3	117	8.0	1,600	3.5	350	98.0	25.0
MAR												
04...	1012	Environmental	104	4.5	8.7	77	7.7	1,420	9.1	170	49.0	12.0
MAY												
24...	1515	Environmental	12	16	6.0	73	7.4	963	23.4	290	82.0	21.0
24...	1516	Replicate	--	--	6.0	73	7.5	964	23.4	310	88.0	22.0
AUG												
04...	1530	Environmental	5.2	13	6.0	77	7.4	711	26.1	270	76.0	18.3

Date	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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...	106	108	132	<1	--	654	1.8	--	0.05	--	0.660	--	0.03
DEC													
16...	223	226	276	<1	860	<1	1.1	--	0.25	--	0.720	--	0.02
FEB													
18...	200	199	243	<1	320	17	0.50	--	0.07	--	0.430	--	<0.01
MAR													
04...	116	115	141	<1	--	1,020	1.8	--	0.11	--	0.680	--	0.03
MAY													
24...	221	221	270	<1	--	37	0.90	--	0.11	--	0.970	--	0.08
24...	--	--	--	--	--	22	0.70	--	0.10	--	0.970	--	0.08
AUG													
04...	182	182	222	<1	--	16	0.55	<0.04	--	0.71	--	0.030	--

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 0.7µ MF 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													
09...	--	0.200	0.72	18	65,000	36,000	55,000	3	2	<1	<1.0	3.1	2.6
DEC													
16...	--	0.040	0.10	18	510k	1,000k	1,060	<3	2	<1	<1.0	2.9	3.8
FEB													
18...	--	0.030	0.10	20	37k	57k	77k	<3	2	<1	<1.0	1.3	1.9
MAR													
04...	--	0.100	0.54	16	7,600k	5,000k	2,000k	6	1	<1	<1.0	<1.0	1.9
MAY													
24...	--	0.090	0.17	17	280	310k	353	<3	2	<1	<1.0	<1.0	<1.0
24...	--	0.090	0.16	14	280	480	380	<3	3	<1	<1.0	<1.0	1.2
AUG													
04...	0.04	--	0.14	10	430	530	390	2	2.6	<0.06	E.03n	<0.8	2.0

06935890 CREVE COEUR CREEK NEAR CREVE COEUR, 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)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recoverable, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Selenium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd µg/L (82626)	2,4,6-Trichlorophenol, water, unfltrd µg/L (34621)	2,4-Dichlorophenol, water, unfltrd µg/L (34601)	2,4-Dimethylphenol, water, unfltrd µg/L (34606)
OCT													
09...	17	<1	100	<0.1	2.8	<1	<1.0	4	7	<1	<3	Mt	<2.0
DEC													
16...	13	<1	603	<0.1	3.6	1	<1.0	3	--	--	--	--	--
FEB													
18...	11	<1	569	<0.1	4.5	1	<1.0	2	--	--	--	--	--
MAR													
04...	16	<1	125	<0.1	1.6	2	<1.0	5	<7	<2	<1	<2	<2.0
MAY													
24...	6	<1	232	<0.1	2.1	<1	<1.0	<2	--	--	--	--	--
24...	6	<1	255	<0.1	2.2	<1	<1.0	<2	--	--	--	--	--
AUG													
04...	E5n	0.08	198	<0.02	2.21	0.9	<0.2	M	--	--	--	--	--

Date	2,4-Dinitrophenol, water, unfltrd µg/L (34616)	2,4-Dinitrotoluene water unfltrd µg/L (34611)	2,6-Dinitrotoluene water unfltrd µg/L (34626)	2-Chloronaphthalene, water, unfltrd µg/L (34581)	2-chlorophenol, water, unfltrd µg/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf µg/L (34657)	2-nitrophenol, water unfltrd µg/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd µg/L (34631)	4-Bromophenyl phenyl ether, wat unf µg/L (34636)	4-Chloro-3-methylphenol, wat unf µg/L (34452)	4-Chlorophenyl phenyl ether, wat unf µg/L (34641)	4-Nitrophenol, water, unfltrd µg/L (34646)	9H-Fluorene, water, unfltrd µg/L (34381)
OCT													
09...	<3	<3	<2	<2	<2	<2m	Mt	<0.9m	<2	<3	<2	E1m	Mt
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<3	<1	<2	<1	<1	<2m	<1	<0.9m	<2	<2	<1	E1mt	Mt
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Acenaphthene, water, unfltrd µg/L (34205)	Acenaphthylene, water, unfltrd µg/L (34200)	Aldrin, water, unfltrd µg/L (39330)	alpha-Endosulfan, water, unfltrd µg/L (39388)	Anthracene, water, unfltrd µg/L (34220)	Benzidine, water, unfltrd µg/L (39120)	Benzo[a]anthracene, water, unfltrd µg/L (34526)	Benzo[a]pyrene, water, unfltrd µg/L (34247)	Benzo[b]fluoranthene water unfltrd µg/L (34230)	Benzo[g,h,i]perylene, water, unfltrd µg/L (34521)	Benzo[k]fluoranthene water unfltrd µg/L (34242)	Benzyl n-butyl phthalate, water, unfltrd µg/L (34292)	Bis(2-chloroethoxy) methane water unfltrd µg/L (34278)
OCT													
09...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	Mt	Mn	E1n	Mt	Mt	Mt	<3
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	Mt	Mt	Mt	Mt	Mt	Mn	<1
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935890 CREVE COEUR CREEK NEAR CREVE COEUR, MO—Continued

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

Date	Bis(2-chloroethyl) ether, water, unfltrd µg/L (34273)	Bis(2-chloroisopropyl) ether, wat unf µg/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf µg/L (39100)	Carbophenothion, water, unfltrd µg/L (39786)	Chlordane, technical, water, unfltrd µg/L (39350)	Chlorpyrifos water unfltrd µg/L (38932)	Chrysene, water, unfltrd µg/L (34320)	Diazinon, water, unfltrd µg/L (39570)	Dibenzo-[a,h]-anthracene, wat unf µg/L (34556)	Dieldrin, water, unfltrd µg/L (39380)	Diethyl phthalate, water, unfltrd µg/L (34336)	Dimethyl phthalate, water, unfltrd µg/L (34341)	Di-n-butyl phthalate, water, unfltrd µg/L (39110)
OCT													
09...	<2	<2	E2n	<0.02	<0.1	<0.01	Mt	E.01n	Mt	<0.002	E2n	Mn	Mt
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<1	<1	Mt	<0.02	<0.1	<0.01	Mt	E.01	Mt	<0.002	Mt	Mt	E1n
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Di-n-octyl phthalate, water, unfltrd µg/L (34596)	Disulfoton, water, unfltrd µg/L (39011)	Endrin, water, unfltrd µg/L (39390)	Ethion, water, unfltrd µg/L (39398)	Fluoranthene water unfltrd µg/L (34376)	Fonofos water unfltrd µg/L (82614)	Heptachlor epoxide water unfltrd µg/L (39420)	Heptachlor, water, unfltrd µg/L (39410)	Hexachlorobenzene water unfltrd µg/L (39700)	Hexachlorocyclopentadiene, wat unf µg/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd µg/L (34403)	Isophorone water unfltrd µg/L (34408)	Lindane water, unfltrd µg/L (39340)
OCT													
09...	<2	<0.10	<0.002	<0.01	E2n	<0.01	<0.001	<0.001	<2	<1m	Mt	Mt	<0.0020
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	Mt	<0.10	<0.002	<0.01	E1	<0.01	<0.001	<0.001	<1	<1m	Mt	Mt	<0.0020
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Malathion, water, unfltrd µg/L (39530)	Methyl parathion, water, unfltrd µg/L (39600)	Mirex, water, unfltrd µg/L (39755)	Nitrobenzene water unfltrd µg/L (34447)	N-NItroso-dimethylamine, wat unf µg/L (34438)	N-NItroso-di-n-propylamine, wat unf µg/L (34428)	N-NItroso-diphenylamine, wat unf µg/L (34433)	p,p'-DDD, water, unfltrd µg/L (39360)	p,p'-DDE, water, unfltrd µg/L (39365)	p,p'-DDT, water, unfltrd µg/L (39370)	p,p'-Methoxychlor, water, unfltrd µg/L (39480)	Parathion, water, unfltrd µg/L (39540)	PCBs, water, unfltrd µg/L (39516)
OCT													
09...	E.12	<0.01	<0.001	<1	<3	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<0.10	<0.01	<0.001	<1	<2	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935890 CREVE COEUR CREEK NEAR CREVE COEUR, MO—Continued

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

Date	Pentachlorophenol, water, unfltrd µg/L (39032)	Phenanthrene, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxaphene, water, unfltrd µg/L (39400)	Tribuphos, water, unfltrd µg/L (39040)	1,2,4-Trichlorobenzene water unfltrd µg/L (34551)	1,2-Dichlorobenzene water unfltrd µg/L (34536)	1,3-Dichlorobenzene water unfltrd µg/L (34566)	1,4-Dichlorobenzene water unfltrd µg/L (34571)	Hexachlorobutadiene, water, unfltrd µg/L (39702)	Hexachloroethane, water, unfltrd µg/L (34396)
OCT													
09...	Mmt	Mt	E.3t	<0.02	E1n	<1	E.01n	<2	<2	<2	<1	<1m	<2m
DEC													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	Mmt	Mn	E.2t	<0.02	E1n	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphthalene, water, unfltrd µg/L (34696)
OCT	
09...	Mt
DEC	
16...	--
FEB	
18...	--
MAR	
04...	Mt
MAY	
24...	--
24...	--
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

06935955 FEE FEE CREEK NEAR BRIDGETON, MO

LOCATION.--Lat 38°43'41", long 90°26'51", St. Louis County, Hydrologic Unit 10300200, on left abutment of old bridge at McKelvey Road, 0.17 mi west of Interstate 270, 0.92 mi north of Dorsett Road, and 0.65 mi upstream of Creve Coeur Creek.

DRAINAGE AREA.--11.7 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 451.99 ft above National Geodetic Vertical Datum of 1929. Prior to 1996 datum of gage 450.00 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 21.62 ft, former datum, discharge 3,810 ft^3/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	4.0	44	2.1	2.2	e7.3	4.6	6.1	80	e10	1.5	e2.2	e2.4
2	1.7	4.8	2.1	3.2	e145	3.6	5.5	12	e5.9	11	e1.6	e1.8
3	2.0	1.8	3.7	3.3	e32	12	5.1	6.4	e5.3	20	e3.8	e1.6
4	2.0	1.5	8.2	475	e6.9	148	4.8	4.6	e4.8	3.6	e50	e1.5
5	1.3	14	12	e12	12	57	4.5	4.2	e4.4	258	e8.2	e1.4
6	1.3	36	3.4	e5.5	6.8	9.9	4.5	4.0	e4.2	52	e1.7	e1.4
7	1.1	3.2	2.0	e4.2	4.8	6.7	4.8	3.8	e4.7	5.3	e1.7	e1.4
8	1.2	2.1	1.7	e2.8	4.5	5.5	4.8	3.6	3.0	3.7	e1.5	e1.2
9	147	1.7	9.7	e2.4	16	5.5	4.6	3.4	14	3.3	e1.4	e1.1
10	7.0	1.7	60	e2.3	14	4.8	8.1	4.8	6.3	3.0	e1.3	1.0
11	2.6	1.7	4.1	e2.1	19	4.6	8.7	7.1	4.2	e7.3	e1.2	0.90
12	2.5	1.6	2.8	e2.3	9.0	4.2	4.9	4.2	3.6	e1.8	e1.2	0.96
13	1.9	1.7	2.9	e2.4	5.2	4.0	5.2	129	3.5	e1.7	e1.3	0.90
14	23	4.0	5.0	e3.2	5.1	7.5	4.6	102	3.0	e1.6	e1.3	0.95
15	2.3	15	5.2	e2.9	4.9	4.1	4.6	9.8	2.6	e1.5	e1.2	1.7
16	26	2.0	4.0	e6.0	4.4	6.4	5.1	5.4	37	e1.4	e1.2	5.0
17	68	191	2.3	e181	4.4	5.3	4.8	4.6	4.2	e3.9	e1.2	1.4
18	3.5	549	4.4	e77	5.9	4.8	4.7	14	16	e1.6	e1.3	0.98
19	2.3	20	2.7	e3.4	8.3	3.7	4.6	196	5.3	e1.5	e2.7	0.95
20	2.1	7.9	2.1	e3.7	8.3	3.7	4.9	9.8	2.6	e1.4	e16	0.95
21	2.3	5.1	2.0	e3.2	5.2	3.3	13	5.8	4.2	e1.3	e3.3	0.91
22	1.9	3.5	20	e2.6	4.3	3.3	12	3.9	2.9	e4.2	e2.3	0.94
23	1.6	59	93	e2.4	4.2	4.3	15	3.7	2.3	e1.5	e9.9	1.0
24	2.0	10	5.4	e2.8	4.2	4.3	58	3.5	2.3	e1.3	e20	2.4
25	8.9	4.5	3.4	e4.0	3.9	28	11	178	1.8	e26	e138	0.93
26	4.4	3.4	2.8	e6.7	3.6	e394	4.0	177	1.6	e2.2	e20	0.89
27	1.8	2.8	2.4	e3.6	3.4	e30	3.2	e570	1.6	e1.6	e12	0.83
28	9.8	2.5	4.5	e3.7	3.3	e48	2.8	e39	1.9	e1.5	e3.3	0.66
29	2.3	2.3	11	e2.2	3.5	e26	3.2	e7.9	1.6	e1.4	e2.6	0.61
30	1.8	2.1	2.7	e2.2	---	e15	88	e147	1.5	e252	e2.3	0.60
31	2.0	---	2.3	e3.9	---	6.5	---	e20	---	e4.7	e2.2	---
MEAN	11.0	33.3	9.35	26.9	12.4	28.0	10.5	56.9	5.54	22.0	10.3	1.31
MAX	147	549	93	475	145	394	88	570	37	258	138	5.0
MIN	1.1	1.5	1.7	2.1	3.3	3.3	2.8	3.4	1.5	1.3	1.2	0.60
IN.	1.09	3.18	0.92	2.65	1.14	2.76	1.00	5.61	0.53	2.17	1.01	0.12

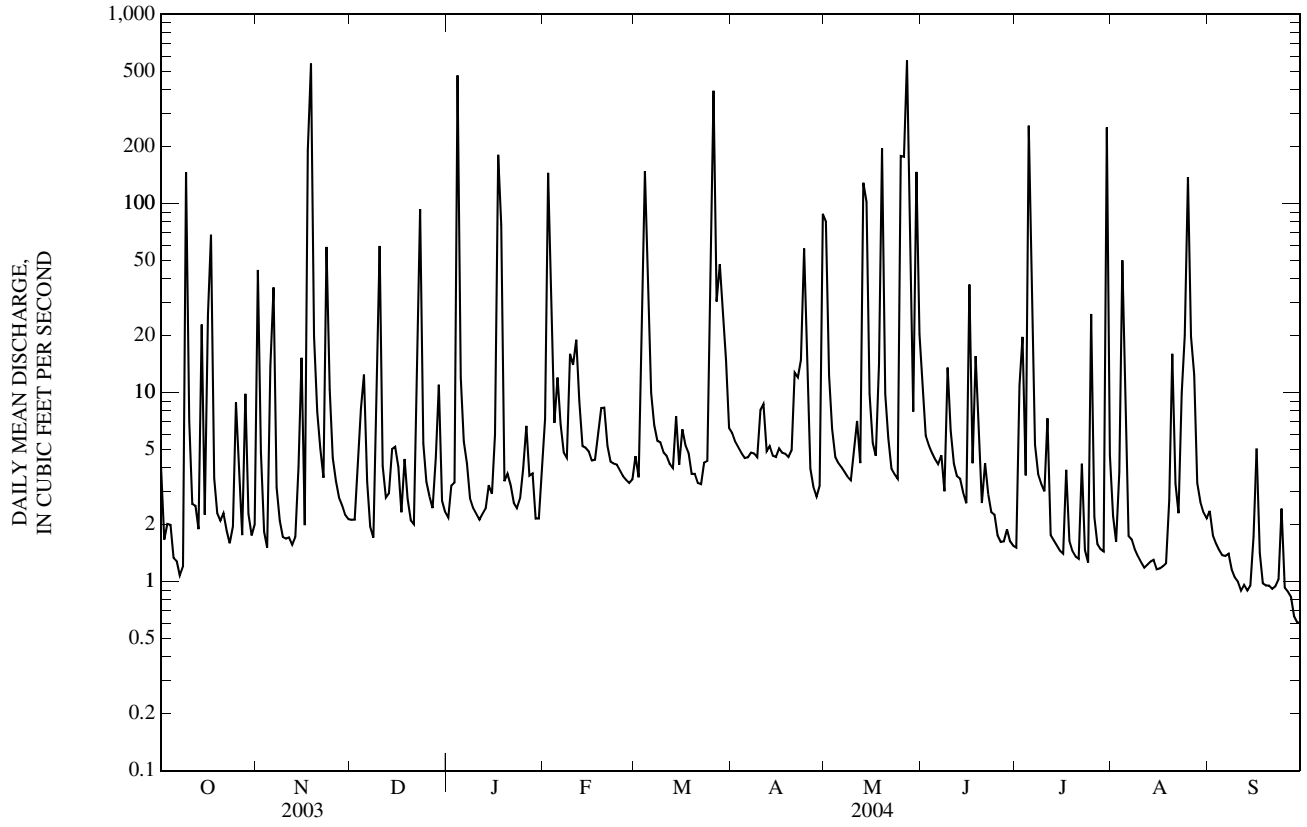
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	11.1	17.0	7.74	15.4	19.1	18.1	15.5	25.0	24.3	10.9	9.16	8.98
MAX	20.2	49.1	17.4	26.9	39.6	34.2	26.6	56.9	51.4	22.0	15.7	25.7
(WY)	(2002)	(1997)	(2002)	(2004)	(1997)	(1998)	(1998)	(2004)	(2003)	(2004)	(1997)	(2003)
MIN	1.86	1.47	3.09	2.99	5.15	6.58	5.30	9.41	5.54	2.83	2.53	1.31
(WY)	(2000)	(2000)	(1999)	(2000)	(2002)	(2000)	(2000)	(1999)	(2004)	(2000)	(2001)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL MEAN	17.5		19.1		15.0	
HIGHEST ANNUAL MEAN					19.1	2004
LOWEST ANNUAL MEAN					8.31	2000
HIGHEST DAILY MEAN	549	Nov 18	570	May 27	665	Feb 7, 1999
LOWEST DAILY MEAN	0.50	Aug 10	0.60	Sep 30	0.28	Sep 22, 1999
ANNUAL SEVEN-DAY MINIMUM	0.79	Aug 20	0.99	Sep 24	0.30	Sep 21, 1999
MAXIMUM PEAK FLOW	---		3,250[a]	May 27	3,730[b]	Jun 26, 2003
MAXIMUM PEAK STAGE	---		17.15	May 27	18.30	Jun 26, 2003
INSTANTANEOUS LOW FLOW	---		0.59	Sep 29,30	0.26	Aug 11, 2003
ANNUAL RUNOFF (INCHES)	20.28		22.19		17.46	
10 PERCENT EXCEEDS	35		29		29	
50 PERCENT EXCEEDS	3.1		3.9		2.8	
90 PERCENT EXCEEDS	1.4		1.4		0.94	

e Estimated
[a] From rating extended above 1,130 ft^3/s on basis of indirect measurement.
[b] Discharge determined by indirect measurement of peak flow.

06935955 FEE FEE CREEK NEAR BRIDGETON, MO—Continued



06935955 FEE FEE CREEK NEAR BRIDGETON, 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 unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT												
09...	1007	Environmental	69	10	7.5	81	7.5	162	18.3	290	80.0	23.0
DEC												
17...	1300	Environmental	2.2	7.2	12.8	97	7.8	5,200	2.5	510	146	36.0
17...	1310	Replicate	--	--	12.4	94	7.8	5,170	2.5	540	152	38.0
FEB												
17...	1525	Environmental	4	5.5	18.2	143	7.9	2,210	4.9	430	118	34.0
MAR												
04...	0648	Environmental	51	4.9	10.1	91	7.7	833	9.5	230	65.0	17.0
MAY												
18...	0800	Environmental	3.9	15	4.2	47	7.4	1,270	20.1	360	98.0	27.0
AUG												
04...	1415	Environmental	2.1	13	5.2	66	7.5	994	26.1	330	92.4	24.4

Date	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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...	156	156	191	<1	--	584	1.8	--	0.17	--	0.570	--	0.05
DEC													
17...	211	212	258	<1	1,470	4	0.50	--	0.06	--	0.970	--	0.03
17...	--	--	--	--	1,460	2	0.50	--	0.06	--	0.970	--	0.03
FEB													
17...	227	229	279	<1	490	4	0.50	--	0.05	--	0.750	--	0.02
MAR													
04...	126	129	157	<1	--	119	1.0	--	0.07	--	0.920	--	0.05
MAY													
18...	213	215	263	<1	--	16	0.70	--	0.17	--	0.850	--	0.04
AUG													
04...	183	184	225	<1	--	12d	0.49	E.03n	--	0.58	--	0.016	--

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 0.7µ MF 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													
09...	--	0.150	0.69	26	63,000	76,000k	71,000	<3	4	<1	<1.0	4.1	2.5
DEC													
17...	--	0.030	0.09	18	57k	160	92	3	3	<1	<1.0	2.6	5.8
17...	--	0.030	0.09	20	36k	150	88	<3	2	<1	<1.0	2.6	6.1
FEB													
17...	--	0.030	0.08	12	4k	50k	20k	6	2	<1	<1.0	<1.0	2.6
MAR													
04...	--	0.040	0.19	33	500k	4,000k	9,200k	285	2	<1	<1.0	1.8	4.5
MAY													
18...	--	0.060	0.13	22	2,200k	2,700k	860	<3	2	<1	<1.0	<1.0	1.2
AUG													
04...	0.07	--	0.13	20	170k	1,300k	640	3	3.3	<0.06	0.09	E.5n	2.4

06935955 FEE FEE CREEK NEAR BRIDGETON, 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)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recoverable, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Selenium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd µg/L (82626)	2,4,6-Trichlorophenol, water, unfltrd µg/L (34621)	2,4-Dichlorophenol, water, unfltrd µg/L (34601)	2,4-Dimethylphenol, water, unfltrd µg/L (34606)
OCT													
09...	11	<1	324	<0.1	6.0	2	<1.0	7	E5n	--r	--r	--r	--r
DEC													
17...	21	<1	902	<0.1	4.5	2	<1.0	13	--	--	--	--	--
17...	23	<1	938	<0.1	4.4	1	<1.0	11	--	--	--	--	--
FEB													
17...	13	<1	867	<0.1	6.8	2	<1.0	11	--	--	--	--	--
MAR													
04...	407	2	361	<0.1	3.4	4	<1.0	22	E7n	<2	<1	Mt	<2.0
MAY													
18...	15	<1	303	<0.1	3.8	<1	<1.0	6	--	--	--	--	--
AUG													
04...	22	0.22	184	<0.02	3.44	1.5	<0.2	3	--	--	--	--	--

Date	2,4-Dinitrophenol, water, unfltrd µg/L (34616)	2,4-Dinitrotoluene water unfltrd µg/L (34611)	2,6-Dinitrotoluene water unfltrd µg/L (34626)	2-Chloronaphthalene, water, unfltrd µg/L (34581)	2-chlorophenol, water, unfltrd µg/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf µg/L (34657)	2-nitrophenol, water unfltrd µg/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd µg/L (34631)	4-Bromophenyl phenyl ether, wat unf µg/L (34636)	4-Chloro-3-methylphenol, wat unf µg/L (34452)	4-Chlorophenyl phenyl ether, wat unf µg/L (34641)	4-Nitrophenol, water, unfltrd µg/L (34646)	9H-Fluorene, water, unfltrd µg/L (34381)
OCT													
09...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<3	<1	<2	<1	Mt	<2m	<1	<0.9m	<2	<2	<1	E2mn	Mt
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Acenaphthene, water, unfltrd µg/L (34205)	Acenaphthylene, water, unfltrd µg/L (34200)	Aldrin, water, unfltrd µg/L (39330)	alpha-Endosulfan, water, unfltrd µg/L (39388)	Anthracene, water, unfltrd µg/L (34220)	Benzidine, water, unfltrd µg/L (39120)	Benzo[a]anthracene, water, unfltrd µg/L (34526)	Benzo[a]pyrene, water, unfltrd µg/L (34247)	Benzo[b]fluoranthene water unfltrd µg/L (34230)	Benzo[g,h,i]perylene, water, unfltrd µg/L (34521)	Benzo[k]fluoranthene water unfltrd µg/L (34242)	Benzyl n-butyl phthalate, water, unfltrd µg/L (34292)	Bis(2-chloroethoxy) methane water unfltrd µg/L (34278)
OCT													
09...	--r	--r	0.016	<0.002	--r	--r	--r	--r	--r	--r	--r	--r	--r
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	Mt	Mt	0.011	<0.002	Mt	<1,000m	Mn	E2	3	E2	E1n	Mn	<1
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935955 FEE FEE CREEK NEAR BRIDGETON, MO—Continued

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

Date	Bis(2-chloroethyl) ether, water, unfltrd µg/L (34273)	Bis(2-chloroisopropyl) ether, wat unf µg/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf µg/L (39100)	Carbophenothion, water, unfltrd µg/L (39786)	Chlordane, technical, water, unfltrd µg/L (39350)	Chlorpyrifos water unfltrd µg/L (38932)	Chrysene, water, unfltrd µg/L (34320)	Diazinon, water, unfltrd µg/L (39570)	Dibenzo-[a,h]-anthracene, wat unf µg/L (34556)	Dieldrin, water, unfltrd µg/L (39380)	Diethyl phthalate, water, unfltrd µg/L (34336)	Dimethyl phthalate, water, unfltrd µg/L (34341)	Di-n-butyl phthalate, water, unfltrd µg/L (39110)
OCT													
09...	--r	--r	--r	<0.02	E.1b	<0.01	--r	E.01	--r	0.019	--r	--r	--r
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<1	<1	E1n	<0.02	<0.1	<0.01	E2	0.04	Mt	0.008	E1n	Mn	Mn
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Di-n-octyl phthalate, water, unfltrd µg/L (34596)	Disulfoton, water, unfltrd µg/L (39011)	Endrin, water, unfltrd µg/L (39390)	Ethion, water, unfltrd µg/L (39398)	Fluoranthene water unfltrd µg/L (34376)	Fonofos water unfltrd µg/L (82614)	Heptachlor epoxide water unfltrd µg/L (39420)	Heptachlor, water, unfltrd µg/L (39410)	Hexachlorobenzene water unfltrd µg/L (39700)	Hexachlorocyclopentadiene, wat unf µg/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd µg/L (34403)	Isophorone water unfltrd µg/L (34408)	Lindane water, unfltrd µg/L (39340)
OCT													
09...	--r	<0.10	<0.002	<0.01	--r	<0.01	<0.001	<0.001	--r	--r	--r	--r	0.0024
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	E1n	<0.10	<0.002	<0.01	7	<0.01	<0.001	<0.001	<1	<1m	E2	Mt	0.0210
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Malathion, water, unfltrd µg/L (39530)	Methyl parathion, water, unfltrd µg/L (39600)	Mirex, water, unfltrd µg/L (39755)	Nitrobenzene water unfltrd µg/L (34447)	N-NItroso-dimethylamine, wat unf µg/L (34438)	N-NItroso-di-n-propylamine, wat unf µg/L (34428)	N-NItroso-diphenylamine, wat unf µg/L (34433)	p,p'-DDD, water, unfltrd µg/L (39360)	p,p'-DDE, water, unfltrd µg/L (39365)	p,p'-DDT, water, unfltrd µg/L (39370)	p,p'-Methoxychlor, water, unfltrd µg/L (39480)	Parathion, water, unfltrd µg/L (39540)	PCBs, water, unfltrd µg/L (39516)
OCT													
09...	E.19	<0.01	<0.001	--r	--r	--r	--r	0.056	0.013	0.056	<0.003	<0.01	<0.1
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<0.10	<0.01	<0.001	<1	<2	<2	<2m	0.006	0.004	<0.002	<0.003	<0.01	<0.1
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935955 FEE FEE CREEK NEAR BRIDGETON, 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...	--r	--r	--r	<0.02	--r	<1	0.02	--r	--r	--r	--r	--r	--r
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	E2m	3	E.3t	<0.02	5	<1	<0.02	<1	<2	M	<1	<1m	<2m
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Null value qualifier codes used in this table:
r -- Sample ruined in preparation

06935965 MISSOURI RIVER AT ST. CHARLES, MO

LOCATION.--Lat 38°47'20", long 90°28'15", SE $^1/_4$ sec. 29, T.47 N., R.5 E., St. Louis County, Hydrologic Unit 10300200, on right bank approximately 0.25 mi downstream from State Highway A, on the St. Charles Sand Company property, and at mile 27.9.

DRAINAGE AREA.--524,000 mi^2. The 3,959 mi^2 in Great Divide basin are not included.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1, 2000 to current year. April 15, 1932 to October 1944 recording gage; Feb. 16, 1984 to Sept. 30, 1997 stage only operated by U.S.G.S.; Oct. 1, 1997 to April 1, 2000, stage only operated by U.S. Army Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage 413.472 ft above North American Vertical Datum of 1988. Prior to March 4, 1994 datum of gage was 413.585 ft above National Geodetic Vertical Datum of 1929.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 2-3, 1993 reached a stage of 40.04 ft. by levels of good highwater mark.

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

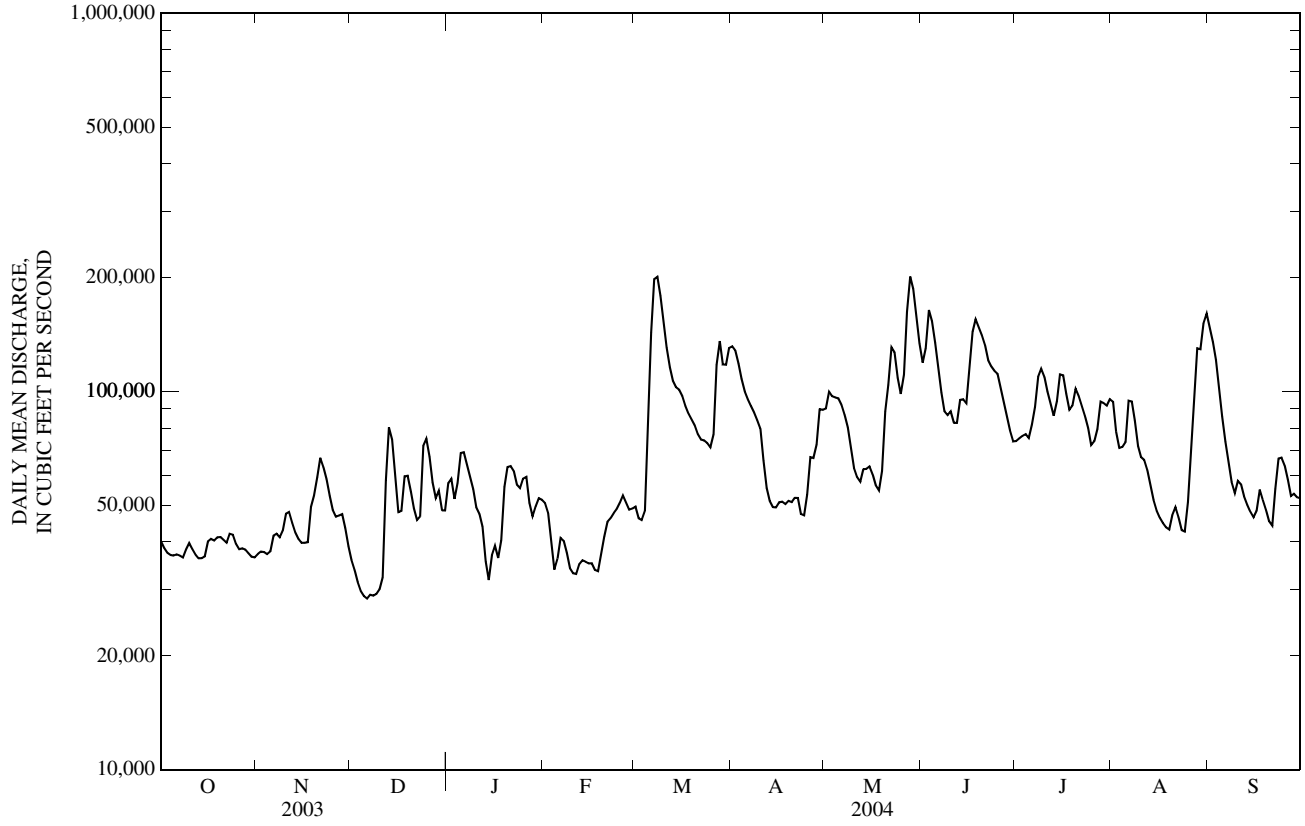
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40,100	37,200	35,900	57,200	50,700	49,600	132,000	90,100	119,000	73,900	94,000	148,000
2	38,500	37,700	33,700	58,800	47,800	46,200	128,000	99,900	130,000	75,200	78,300	135,000
3	37,500	37,600	31,400	52,000	40,400	45,700	119,000	97,200	164,000	76,300	70,900	121,000
4	37,000	37,100	29,600	57,200	33,800	48,300	108,000	96,400	154,000	77,100	71,400	102,000
5	36,800	37,800	28,800	68,700	36,100	80,900	100,000	96,000	135,000	75,300	73,600	85,700
6	37,100	41,600	28,300	69,100	41,000	143,000	95,300	92,200	116,000	81,900	94,600	73,700
7	36,800	42,100	29,000	64,000	40,200	198,000	91,600	86,900	99,400	91,000	94,100	64,600
8	36,400	41,200	28,800	59,500	37,500	201,000	88,000	80,400	88,700	109,000	83,800	57,600
9	38,200	42,900	29,200	55,200	34,100	179,000	84,000	70,800	86,600	115,000	71,800	53,900
10	39,700	47,500	30,000	49,400	33,100	154,000	79,700	62,700	88,500	109,000	67,000	58,000
11	38,300	48,000	32,200	47,500	32,900	131,000	65,800	59,400	82,700	99,900	65,900	56,800
12	37,100	44,900	58,200	43,900	34,900	116,000	55,600	57,700	82,600	92,500	62,000	52,800
13	36,200	42,400	80,400	35,500	35,800	107,000	51,400	62,300	95,000	86,300	56,600	50,100
14	36,300	40,700	74,600	31,700	35,500	103,000	49,500	62,400	95,400	94,300	51,700	48,100
15	36,700	39,800	60,000	36,900	35,100	101,000	49,400	63,400	93,100	111,000	48,400	46,500
16	40,100	39,800	48,000	39,100	35,100	97,200	50,900	60,300	115,000	110,000	46,400	48,300
17	40,800	40,000	48,300	36,300	33,700	91,700	51,100	56,500	144,000	98,800	44,900	55,000
18	40,300	49,500	59,700	40,400	33,500	87,300	50,400	54,700	155,000	89,400	43,800	51,700
19	41,200	53,100	59,900	55,900	37,200	84,400	51,400	61,600	148,000	91,700	43,200	48,600
20	41,200	59,300	54,500	63,100	41,400	81,300	51,000	88,500	141,000	102,000	47,100	45,400
21	40,500	66,800	49,100	63,500	45,200	77,100	52,300	104,000	133,000	97,500	49,500	44,200
22	39,800	63,000	45,700	61,500	46,200	74,600	52,300	131,000	121,000	91,600	46,500	55,300
23	42,000	58,700	46,700	56,800	47,700	74,200	47,500	127,000	116,000	86,300	43,000	66,500
24	41,800	53,000	71,800	55,600	48,900	73,100	47,000	109,000	113,000	80,100	42,600	66,800
25	39,600	48,700	75,000	58,900	50,800	71,200	53,400	98,500	111,000	72,100	51,100	63,600
26	38,300	46,600	67,200	59,500	53,100	77,100	67,000	111,000	102,000	73,900	74,200	58,600
27	38,500	47,000	57,500	50,800	50,800	118,000	66,700	162,000	94,000	79,600	102,000	52,900
28	38,200	47,400	52,200	46,700	48,700	136,000	72,400	201,000	85,900	94,000	130,000	53,600
29	37,400	43,600	54,600	49,600	49,000	118,000	89,800	187,000	78,900	93,200	129,000	52,500
30	36,600	39,000	48,500	52,200	---	118,000	89,500	158,000	73,900	91,800	151,000	52,200
31	36,400	---	48,400	51,800	---	130,000	---	134,000	---	95,400	161,000	---
MEAN	38,560	45,800	48,300	52,530	41,040	103,600	73,000	97,480	112,100	90,810	73,850	65,630
MAX	42,000	66,800	80,400	69,100	53,100	201,000	132,000	201,000	164,000	115,000	161,000	148,000
MIN	36,200	37,100	28,300	31,700	32,900	45,700	47,000	54,700	73,900	72,100	42,600	44,200
IN.	0.08	0.10	0.11	0.12	0.08	0.23	0.16	0.21	0.24	0.20	0.16	0.14

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

MEAN	47,620	45,800	38,990	36,030	53,260	79,720	72,420	111,700	113,300	75,210	56,420	53,580
MAX	60,810	50,230	48,300	52,530	84,820	129,000	121,100	196,100	202,100	104,600	73,850	65,630
(WY)	(2002)	(2001)	(2004)	(2004)	(2001)	(2001)	(2001)	(2002)	(2001)	(2001)	(2004)	(2004)
MIN	38,560	40,760	29,200	25,290	28,700	39,360	47,530	59,440	66,550	51,100	38,210	43,620
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2000)	(2003)	(2002)	(2003)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL MEAN	47,480		70,340		67,730	
HIGHEST ANNUAL MEAN					87,470	2001
LOWEST ANNUAL MEAN					45,820	2003
HIGHEST DAILY MEAN	152,000	May 12	201,000	Mar 8,May 28	347,000	May 15, 2002
LOWEST DAILY MEAN	22,900	Jan 26	28,300	Dec 6	22,900	Jan 26, 2003
ANNUAL SEVEN-DAY MINIMUM	23,600	Jan 24	29,100	Dec 4	23,600	Jan 24, 2003
MAXIMUM PEAK FLOW	---		211,000	Mar 7	350,000	May 15, 2002
MAXIMUM PEAK STAGE	---		24.89	Mar 7	31.69	May 15, 2002
INSTANTANEOUS LOW FLOW	---		28,200	Dec 6	22,500	Jan 26, 2003
ANNUAL RUNOFF (INCHES)	1.23		1.83		1.76	
10 PERCENT EXCEEDS	69,300		118,000		127,000	
50 PERCENT EXCEEDS	42,000		58,400		50,900	
90 PERCENT EXCEEDS	26,300		37,100		32,700	

06935965 MISSOURI RIVER AT ST. CHARLES, MO—Continued



06935980 COWMIRE CREEK AT BRIDGETON, MO

LOCATION.--Lat 38°45'51", long 90°25'58", St. Louis County, Hydrologic Unit 10300200, on left bank of bridge at Kirchner Brick Co., 1.11 mi west of Interstate 70 and 270 interchange, 1.7 mi south of State Highway 370, 0.16 mi north of County Highway A (St Charles Rock Road), and 6.29 mi upstream of the Missouri River.

DRAINAGE AREA.--3.74 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 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 464.46 ft above National Geodetic Vertical Datum of 1929. Prior to May 1997, at datum 464.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records fair except for estimated daily discharges and discharges below 0.5 ft^3/s and above 300 ft^3/s, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 11, 1979 reached a stage of 13.86 ft, former datum, discharge, 2,500 ft^3/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	0.90	26	0.65	0.82	e1.5	1.2	1.3	17	2.5	0.77	0.87	1.6
2	0.51	0.86	0.62	0.84	19	1.0	1.2	1.8	1.5	3.4	0.67	0.96
3	0.59	0.42	1.1	0.84	4.4	3.5	1.1	1.2	1.3	2.3	1.8	0.86
4	0.51	0.60	1.3	178	e1.9	39	1.1	1.00	1.2	0.88	40	0.77
5	0.40	13	1.7	3.7	e1.8	7.2	1.0	0.95	1.1	45	1.8	0.75
6	0.33	17	0.62	2.5	e1.7	1.8	1.0	0.90	1.1	12	0.84	0.72
7	0.32	0.46	0.58	1.6	e1.5	1.4	1.1	0.85	1.2	1.2	0.75	0.71
8	0.28	0.34	0.58	1.3	e1.3	1.3	0.98	0.77	1.0	1.0	0.69	0.56
9	37	0.32	2.6	1.4	e2.2	1.2	1.0	0.85	4.4	0.94	0.63	0.53
10	1.2	0.76	15	1.1	4.2	1.2	1.8	0.77	2.8	0.78	0.65	0.52
11	0.58	0.53	0.88	1.0	5.0	1.1	1.2	0.71	1.2	2.7	0.58	0.36
12	0.73	0.32	0.69	1.1	2.2	0.98	0.95	0.75	1.0	0.78	0.61	0.36
13	0.41	0.32	0.98	0.94	2.1	0.94	0.87	22	1.1	0.69	0.63	0.42
14	9.4	2.3	1.2	1.2	1.5	1.5	0.85	20	0.98	0.68	0.59	0.43
15	0.78	8.5	1.3	0.92	1.4	0.98	0.88	1.5	0.96	0.69	0.58	1.0
16	20	0.40	1.0	1.4	1.3	1.5	0.91	1.1	17	0.66	0.60	2.7
17	22	90	0.65	35	1.5	1.2	0.87	0.99	1.1	0.97	0.65	0.42
18	0.61	102	0.91	3.7	1.6	0.99	0.82	3.6	1.9	0.62	0.68	0.38
19	0.45	2.7	0.64	1.9	2.1	0.87	0.83	60	1.1	0.61	0.92	0.41
20	0.38	2.1	0.59	1.8	1.8	0.86	0.86	1.8	0.98	0.61	4.6	0.43
21	0.36	2.3	0.58	e1.7	1.4	0.79	1.1	1.4	1.3	0.62	0.72	0.42
22	0.53	1.2	25	e1.6	1.3	0.80	1.8	1.2	0.91	1.8	0.59	0.42
23	0.49	16	25	e1.4	1.5	1.1	1.3	1.1	0.86	0.82	5.0	0.39
24	0.36	1.8	1.4	e1.2	1.3	0.87	10	0.98	0.83	0.66	6.6	0.45
25	5.2	1.2	1.00	e1.4	1.2	6.4	1.5	26	0.80	7.8	63	0.40
26	0.72	1.00	0.88	e1.4	1.2	104	0.98	40	0.79	0.84	8.5	0.43
27	0.48	0.89	0.82	e1.2	1.1	3.7	0.88	133	0.79	0.72	14	0.63
28	5.7	0.77	1.2	e1.1	1.1	13	0.82	5.5	0.84	0.70	2.0	0.33
29	0.44	0.74	2.2	e1.1	1.2	2.4	0.90	1.7	0.78	0.70	1.5	0.26
30	0.37	0.70	0.87	e1.0	---	1.7	22	98	0.73	70	1.4	0.25
31	0.53	---	0.82	e1.1	---	1.4	---	5.3	---	1.5	1.3	---
MEAN	3.63	9.85	3.01	8.23	2.46	6.64	2.06	14.6	1.80	5.27	5.28	0.63
MAX	37	102	25	178	19	104	22	133	17	70	63	2.7
MIN	0.28	0.32	0.58	0.82	1.1	0.79	0.82	0.71	0.73	0.61	0.58	0.25
IN.	1.12	2.94	0.93	2.54	0.71	2.05	0.62	4.50	0.54	1.63	1.63	0.19

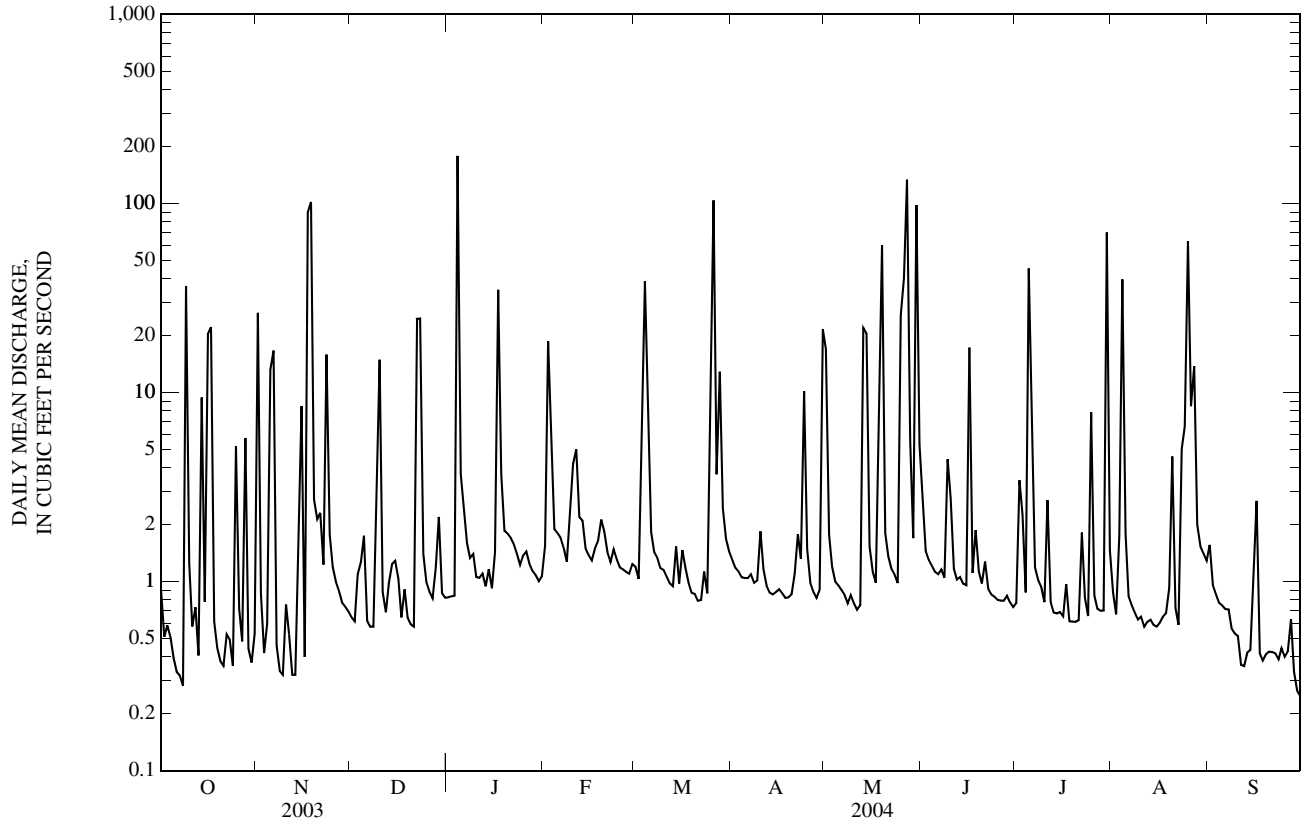
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	3.41	3.42	2.34	4.27	4.69	4.60	5.71	7.66	8.68	4.30	3.28	2.47
MAX	6.78	9.85	4.75	8.86	11.3	9.35	12.9	14.6	19.8	10.4	7.23	5.78
(WY)	(2003)	(2004)	(2002)	(1999)	(1999)	(1998)	(1998)	(2004)	(2003)	(1998)	(2002)	(2003)
MIN	1.44	0.84	0.75	0.84	1.46	1.57	1.66	2.45	1.80	0.73	1.14	0.57
(WY)	(1998)	(2000)	(1999)	(2000)	(2002)	(2001)	(2000)	(2001)	(2004)	(2002)	(1999)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	5.60		5.32		4.67	
HIGHEST ANNUAL MEAN					5.91	2002
LOWEST ANNUAL MEAN					2.63	2001
HIGHEST DAILY MEAN	211	Jun 10	178	Jan 4	240	Feb 7, 1999
LOWEST DAILY MEAN	0.25	Aug 23	0.25	Sep 30	0.05	Aug 19, 2001
ANNUAL SEVEN-DAY MINIMUM	0.29	Aug 19	0.39	Sep 24	0.07	Oct 27, 1999
MAXIMUM PEAK FLOW	---		2,140[a]	May 27	3,490[b]	Jun 10, 2003
MAXIMUM PEAK STAGE	---		13.14	May 27	16.04	Jun 10, 2003
INSTANTANEOUS LOW FLOW	---		0.22	Sep 29,30	0.04	Sep 6, 2001
ANNUAL RUNOFF (INCHES)	20.32		19.38		16.95	
10 PERCENT EXCEEDS	13		8.8		7.7	
50 PERCENT EXCEEDS	0.90		1.0		0.80	
90 PERCENT EXCEEDS	0.42		0.49		0.20	

e Estimated
[a] From rating extended above 100 ft^3/s on basis on indirect measurement.
[b] Discharge determined by indirect measurement of peak flow.

06935980 COWMIRE CREEK AT BRIDGETON, MO—Continued



06935980 COWMIRE CREEK AT BRIDGETON, 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 unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT												
09...	1019	Environmental	28	5.8	7.1	77	7.6	214	18.6	260	61.0	27.0
DEC												
17...	1045	Environmental	0.63	7.8	11.6	86	7.8	3,570	2.0	520	132	47.0
FEB												
18...	1140	Environmental	1.3	6.3	14.1	105	7.8	1,900	2.7	480	117	45.0
MAR												
04...	0850	Environmental	36	6.6	10.5	95	7.5	590	9.6	160	45.0	12.0
MAY												
18...	1120	Environmental	0.91	16	2.5	29	7.5	1,480	20.4	480	113	48.0
AUG												
04...	1315	Environmental	0.79	21	3.3	42	7.2	995	25.5	340	84.0	32.8

Date	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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...	131	132	161	<1	--	207	1.8	--	0.17	--	0.820	--	0.06
DEC													
17...	255	255	311	<1	910	<1	0.50	--	0.12	--	0.950	--	0.02
FEB													
18...	215	214	261	<1	400	15	0.50	--	0.10	--	0.780	--	0.02
MAR													
04...	117	115	140	<1	--	605	1.7	--	0.09	--	0.590	--	0.04
MAY													
18...	282	286	347	<1	--	5	0.60	--	0.10	--	0.270	--	0.06
AUG													
04...	186	187	228	<1	--	<12d	1.3	0.36	--	1.50	--	0.240	--

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 0.7µ MF 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													
09...	--	0.070	0.38	42	29,000	40,000k	54,000k	5	2	<1	<1.0	3.9	4.2
DEC													
17...	--	0.050	0.11	13	24k	120	108	<3	2	<1	<1.0	2.8	3.7
FEB													
18...	--	0.060	0.10	9	520	800	437k	<3	2	<1	<1.0	1.9	1.8
MAR													
04...	--	0.070	0.57	22	3,600k	12,000	15,000	821	1	<1	<1.0	4.9	11.0
MAY													
18...	--	0.090	0.14	17	1,500	1,900k	480	<3	2	<1	<1.0	<1.0	1.0
AUG													
04...	0.13	--	0.24	20	1,600	5,700k	770	6	3.3	<0.06	0.15	E.8n	4.0

06935980 COWMIRE CREEK AT BRIDGETON, 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)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recoverable, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Selenium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd µg/L (82626)	2,4,6-Trichlorophenol, water, unfltrd µg/L (34621)	2,4-Dichlorophenol, water, unfltrd µg/L (34601)	2,4-Dimethylphenol, water, unfltrd µg/L (34606)
OCT 09...	14	<1	148	<0.1	3.8	1	<1.0	15	<7	<1	<3	Mt	<2.0
DEC 17...	13	<1	687	<0.1	4.1	2	<1.0	5	--	--	--	--	--
FEB 18...	8	<1	816	<0.1	5.1	2	<1.0	4	--	--	--	--	--
MAR 04...	1,310	7	300	<0.1	3.6	2	<1.0	45	8	<2	<1	Mt	<2.0
MAY 18...	20	<1	343	<0.1	2.8	<1	<1.0	4	--	--	--	--	--
AUG 04...	78	0.16	376	<0.02	3.36	1.5	<0.2	6	--	--	--	--	--

Date	2,4-Dinitrophenol, water, unfltrd µg/L (34616)	2,4-Dinitrotoluene water unfltrd µg/L (34611)	2,6-Dinitrotoluene water unfltrd µg/L (34626)	2-Chloronaphthalene, water, unfltrd µg/L (34581)	2-chlorophenol, water, unfltrd µg/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf µg/L (34657)	2-nitrophenol, water unfltrd µg/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd µg/L (34631)	4-Bromophenyl phenyl ether, wat unf µg/L (34636)	4-Chloro-3-methylphenol, wat unf µg/L (34452)	4-Chlorophenyl phenyl ether, wat unf µg/L (34641)	4-Nitrophenol, water, unfltrd µg/L (34646)	9H-Fluorene, water, unfltrd µg/L (34381)
OCT 09...	<3	<3	<2	<2	<2	<2m	Mt	<0.9m	<2	<3	<2	E3m	Mt
DEC 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	<3	<1	<2	<1	<1	<2m	<1	<0.9m	<2	<2	<1	E2mn	Mt
MAY 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Acenaphthene, water, unfltrd µg/L (34205)	Acenaphthylene, water, unfltrd µg/L (34200)	Aldrin, water, unfltrd µg/L (39330)	alpha-Endosulfan, water, unfltrd µg/L (39388)	Anthracene, water, unfltrd µg/L (34220)	Benzidine, water, unfltrd µg/L (39120)	Benzo[a]anthracene, water, unfltrd µg/L (34526)	Benzo[a]pyrene, water, unfltrd µg/L (34247)	Benzo[b]fluoranthene water unfltrd µg/L (34230)	Benzo[g,h,i]perylene, water, unfltrd µg/L (34521)	Benzo[k]fluoranthene water unfltrd µg/L (34242)	Benzyl n-butyl phthalate, water, unfltrd µg/L (34292)	Bis(2-chloroethoxy) methane water unfltrd µg/L (34278)
OCT 09...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	Mt	E1n	E2	Mn	Mn	E1n	<3
DEC 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	E2	3	5	E3	E2	E1n	<1
MAY 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935980 COWMIRE CREEK AT BRIDGETON, MO—Continued

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

Date	Bis(2-chloroethyl) ether, water, unfltrd µg/L (34273)	Bis(2-chloroisopropyl) ether, wat unf µg/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf µg/L (39100)	Carbophenothion, water, unfltrd µg/L (39786)	Chlordane, technical, water, unfltrd µg/L (39350)	Chlorpyrifos water unfltrd µg/L (38932)	Chrysene, water, unfltrd µg/L (34320)	Diazinon, water, unfltrd µg/L (39570)	Dibenzo-[a,h]-anthracene, wat unf µg/L (34556)	Dieldrin, water, unfltrd µg/L (39380)	Diethyl phthalate, water, unfltrd µg/L (34336)	Dimethyl phthalate, water, unfltrd µg/L (34341)	Di-n-butyl phthalate, water, unfltrd µg/L (39110)
OCT													
09...	<2	<2	E4	<0.02	<0.1	<0.01	E2n	E.02n	Mt	<0.002	E2n	Mt	Mt
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<1	<1	E3	<0.02	<0.1	<0.01	4	<0.02	Mt	<0.002	E1n	<1	E1n
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Di-n-octyl phthalate, water, unfltrd µg/L (34596)	Disulfoton, water, unfltrd µg/L (39011)	Endrin, water, unfltrd µg/L (39390)	Ethion, water, unfltrd µg/L (39398)	Fluoranthene water unfltrd µg/L (34376)	Fonofos water unfltrd µg/L (82614)	Heptachlor epoxide water unfltrd µg/L (39420)	Heptachlor, water, unfltrd µg/L (39410)	Hexachlorobenzene water unfltrd µg/L (39700)	Hexachlorocyclopentadiene, wat unf µg/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd µg/L (34403)	Isophorone water unfltrd µg/L (34408)	Lindane water, unfltrd µg/L (39340)
OCT													
09...	E1n	<0.10	<0.002	<0.01	3	<0.01	<0.001	<0.001	<2	<1m	Mt	E1n	<0.0020
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<2	<0.10	<0.002	<0.01	10	<0.01	<0.001	<0.001	<1	<1m	3	Mt	<0.0020
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Malathion, water, unfltrd µg/L (39530)	Methyl parathion, water, unfltrd µg/L (39600)	Mirex, water, unfltrd µg/L (39755)	Nitrobenzene water unfltrd µg/L (34447)	N-NItroso-di-methylamine, wat unf µg/L (34438)	N-NItroso-di-n-propylamine, wat unf µg/L (34428)	N-NItroso-di-phenylamine, wat unf µg/L (34433)	p,p'-DDD, water, unfltrd µg/L (39360)	p,p'-DDE, water, unfltrd µg/L (39365)	p,p'-DDT, water, unfltrd µg/L (39370)	p,p'-Methoxychlor, water, unfltrd µg/L (39480)	Parathion, water, unfltrd µg/L (39540)	PCBs, water, unfltrd µg/L (39516)
OCT													
09...	E.87	<0.01	<0.001	<1	<3	<2	Mmt	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<0.10	<0.01	<0.001	<1	<2	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06935980 COWMIRE CREEK AT BRIDGETON, MO—Continued

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

Date	Pentachlorophenol, water, unfltrd µg/L (39032)	Phenanthrene, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Phorate water unfltrd µg/L (39023)	Pyrene, water, unfltrd µg/L (34469)	Toxaphene, water, unfltrd µg/L (39400)	Tribuphos, water, unfltrd µg/L (39040)	1,2,4-Trichlorobenzene water unfltrd µg/L (34551)	1,2-Dichlorobenzene water unfltrd µg/L (34536)	1,3-Dichlorobenzene water unfltrd µg/L (34566)	1,4-Dichlorobenzene water unfltrd µg/L (34571)	Hexachlorobutadiene, water, unfltrd µg/L (39702)	Hexachloroethane, water, unfltrd µg/L (34396)
OCT													
09...	Mmt	E1n	E.3t	<0.02	2	<1	0.09	<2	<2	Mt	Mt	<1m	<2m
DEC													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	E2mn	5	E.2t	<0.02	8	<1	<0.02	<1	<2	Mt	<1	<1m	<2m
MAY													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphthalene, water, unfltrd µg/L (34696)
OCT	
09...	Mt
DEC	
17...	--
FEB	
18...	--
MAR	
04...	Mt
MAY	
18...	--
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:
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

06935997 MILL CREEK NEAR FLORISSANT, MO

LOCATION.--Lat 38°50'54", long 90°17'10", St. Louis County, Hydrologic Unit 10300200, on right downstream wingwall of Old Jamestown Road bridge, 2.50 mi west of U.S. 367 and 67 (Lewis and Clark Blvd.), 2.08 mi north of U.S. Route 67 (Lindbergh Blvd.), and 1.70 mi upstream of the Missouri River.

DRAINAGE AREA.--2.12 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 432.34 ft above National Geodetic Vertical Datum of 1929.

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	e0.45	0.43	0.46	0.25	1.2	1.2	1.4	3.7	2.0	0.31	0.52	0.31
2	e0.28	1.3	0.45	0.32	3.9	1.2	1.3	1.5	1.3	0.84	0.42	0.29
3	e0.22	e0.41	0.49	0.30	e2.0	1.4	1.3	1.0	1.1	1.3	0.47	0.27
4	e0.29	e0.29	0.59	131	0.97	11	1.3	0.87	0.99	0.62	2.1	0.26
5	e0.21	1.0	0.68	2.5	1.3	4.3	1.4	0.76	0.90	1.5	0.86	0.26
6	e0.31	1.3	0.50	e1.3	1.1	2.4	1.3	0.68	0.84	2.4	0.54	0.27
7	0.25	0.50	0.41	1.1	1.0	2.1	1.3	0.57	0.83	0.73	0.41	0.22
8	0.17	0.33	0.36	1.0	0.97	2.2	1.2	0.58	0.80	0.56	0.37	0.20
9	3.8	0.28	0.57	0.98	1.3	2.0	1.1	0.51	1.3	0.43	0.36	0.18
10	0.78	0.23	1.8	0.91	1.6	1.9	1.2	0.48	1.2	0.36	0.34	0.18
11	0.55	0.26	0.44	0.91	2.2	1.8	1.2	0.47	0.94	0.38	0.27	0.19
12	0.39	0.23	0.32	0.87	1.4	1.7	1.1	0.43	1.6	0.29	0.25	0.17
13	0.36	0.22	0.37	0.84	1.2	1.7	1.0	1.7	0.70	0.30	0.24	0.18
14	1.5	0.24	0.44	0.88	1.3	1.9	1.0	7.0	0.57	0.28	0.22	0.17
15	0.71	0.55	0.49	0.89	1.3	1.7	1.1	1.1	0.63	0.25	0.22	0.22
16	1.4	0.27	0.47	0.91	1.1	1.8	1.2	0.82	1.8	0.28	0.21	0.56
17	2.9	8.5	0.29	5.8	2.3	1.7	1.2	0.75	0.93	0.26	0.21	0.21
18	0.78	33	0.36	2.6	1.6	1.6	1.1	1.3	2.6	0.22	0.21	0.21
19	0.57	1.5	0.25	1.6	1.8	1.6	0.88	8.3	0.94	0.20	0.21	0.21
20	e0.38	0.62	0.20	e1.1	1.5	1.6	0.83	1.2	0.68	0.18	1.2	0.20
21	e0.34	0.47	0.27	e0.98	1.2	1.4	1.2	0.93	0.88	0.20	0.33	0.20
22	e0.35	0.47	1.0	e0.87	1.1	1.3	0.96	0.78	0.88	0.24	0.22	0.18
23	e0.32	1.8	3.4	e0.76	1.6	1.4	0.92	0.75	0.64	0.19	0.63	0.17
24	0.43	0.83	0.60	e0.91	1.3	1.6	2.0	0.68	0.56	0.17	1.4	0.17
25	0.87	0.57	0.42	e0.94	1.2	2.9	1.2	2.0	0.51	1.1	8.2	0.18
26	0.53	0.54	0.39	e1.1	1.3	8.2	0.88	30	0.48	0.37	2.3	0.16
27	0.36	0.51	0.46	e0.99	1.4	2.3	0.69	18	0.41	0.25	0.93	0.15
28	0.33	0.50	0.50	e0.86	1.4	2.4	0.74	3.6	0.41	0.19	0.58	0.15
29	1.0	0.50	0.67	e0.81	1.2	1.9	0.70	1.9	0.35	0.16	0.53	0.16
30	0.88	0.52	0.29	e0.62	---	1.6	2.8	23	0.35	6.2	0.42	0.18
31	0.50	---	0.24	e0.77	---	1.5	---	3.4	---	0.73	0.33	---
MEAN	0.72	1.94	0.59	5.34	1.47	2.36	1.18	3.83	0.94	0.69	0.82	0.22
MAX	3.8	33	3.4	131	3.9	11	2.8	30	2.6	6.2	8.2	0.56
MIN	0.17	0.22	0.20	0.25	0.97	1.2	0.69	0.43	0.35	0.16	0.21	0.15
IN.	0.39	1.02	0.32	2.91	0.75	1.29	0.62	2.08	0.49	0.38	0.45	0.11

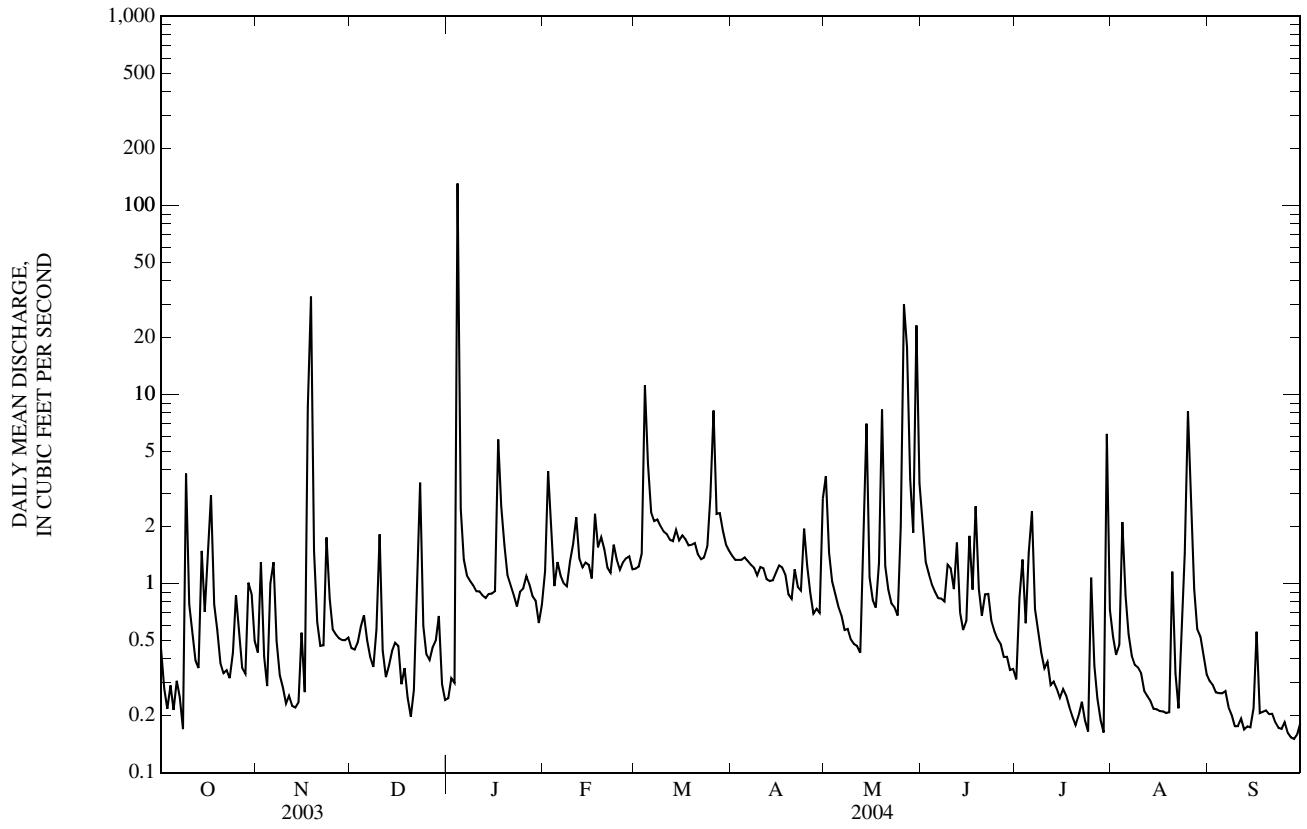
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	1.08	1.06	0.72	1.96	2.17	1.82	2.15	4.41	2.90	1.18	0.96	0.71
MAX	3.05	2.34	1.83	5.34	6.73	4.56	5.02	11.3	5.92	3.28	1.72	1.11
(WY)	(2001)	(2002)	(2002)	(2004)	(1999)	(1998)	(1998)	(2002)	(1998)	(1998)	(1998)	(2002)
MIN	0.24	0.32	0.42	0.30	1.03	0.57	0.52	0.46	0.72	0.47	0.34	0.22
(WY)	(1998)	(2000)	(2001)	(2000)	(2003)	(2000)	(2000)	(2001)	(2001)	(2002)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	1.42		1.68		1.76	
HIGHEST ANNUAL MEAN					2.65	1998
LOWEST ANNUAL MEAN					1.18	2001
HIGHEST DAILY MEAN	72	Jun 26	131	Jan 4	215	Jun 11, 1999
LOWEST DAILY MEAN	0.14	Aug 10,11	0.15	Sep 27,28	0.03	Aug 1,6-8, 2001
ANNUAL SEVEN-DAY MINIMUM	0.16	Aug 7	0.16	Sep 23	0.05	Jul 26, 2001
MAXIMUM PEAK FLOW	---		1,420[a]	Jan 4	Unknown	Jun 11, 1999
MAXIMUM PEAK STAGE	---		7.70	Jan 4	10.53	Jun 11, 1999
INSTANTANEOUS LOW FLOW	---		0.13	Sep 26-28	0.02	Aug 6,8, 2001
ANNUAL RUNOFF (INCHES)	9.10		10.81		11.27	
10 PERCENT EXCEEDS	2.5		2.0		2.4	
50 PERCENT EXCEEDS	0.57		0.77		0.50	
90 PERCENT EXCEEDS	0.23		0.22		0.17	

e Estimated
[a] From rating extended above 80.2 ft^3/s on basis of indirect measurement.

06935997 MILL CREEK NEAR FLORISSANT, MO—Continued



06936475 COLDWATER CREEK NEAR BLACK JACK, MO

LOCATION.--Lat 38°49'05", long 90°15'04", in NE ¼ SE ¼ NW ¼ sec.17, T.47 N., R.7 E., St. Louis County, Hydrologic Unit 10300200, on right downstream abutment of Old Jamestown Road bridge, 0.36 mi south of U.S. Route 67 (Lindbergh Blvd.), 1.1 mi west of Highway 367 (Lewis and Clark Blvd.), and 3.8 mi upstream of the Missouri River.

DRAINAGE AREA.--40.4 mi^2.

WATER-DISCHARGE RECORDS

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

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

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 5 ft^3/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	18	111	7.4	9.9	e13	11	22	228	82	6.4	15	5.7
2	5.1	23	7.1	12	e234	9.1	20	41	29	16	16	5.2
3	3.4	8.4	7.0	11	e77	23	17	27	21	81	47	4.6
4	4.3	6.9	23	1,650	19	367	15	15	17	20	178	4.6
5	3.8	51	31	65	e18	212	14	13	14	223	67	4.0
6	3.2	68	11	26	e17	38	14	11	12	166	9.2	3.7
7	3.3	10	7.3	22	e14	27	14	10	11	15	6.1	3.7
8	2.8	6.1	7.3	19	e12	23	13	8.6	10	10	6.0	3.9
9	336	4.7	26	17	e25	20	12	7.6	43	8.3	5.1	4.3
10	29	3.9	171	13	e27	17	13	13	34	6.5	7.0	4.3
11	9.4	3.6	18	11	37	16	29	16	18	29	5.0	3.9
12	11	5.7	11	12	25	15	12	9.5	13	8.0	4.2	3.3
13	5.9	4.7	9.9	9.9	14	13	11	328	13	5.9	4.4	3.2
14	62	3.9	19	8.9	16	23	11	384	9.0	5.9	3.6	6.2
15	9.5	46	16	8.2	14	14	11	34	15	6.5	3.3	3.3
16	13	8.1	16	7.8	12	18	10	19	104	5.5	3.9	31
17	210	157	10	295	12	16	11	16	31	4.7	4.2	6.0
18	12	1,550	12	92	16	15	10	37	83	3.7	4.3	4.1
19	7.7	67	12	23	20	12	9.2	424	26	3.5	3.7	3.5
20	5.6	25	8.4	18	21	11	9.5	33	8.9	4.5	74	2.5
21	6.0	18	8.2	15	14	10	18	20	15	6.7	14	2.3
22	7.1	14	23	13	11	9.2	15	17	35	7.0	5.3	2.3
23	5.8	136	333	12	14	11	27	14	9.0	5.4	46	2.8
24	5.0	39	27	11	13	15	128	12	7.0	4.6	61	3.1
25	14	15	17	13	9.7	98	66	201	6.4	91	260	2.9
26	22	12	14	e15	11	623	14	627	5.7	11	190	2.5
27	6.2	10	12	e14	9.6	72	11	737	5.2	5.1	33	5.9
28	27	8.6	15	e12	8.3	89	11	576	4.9	4.4	19	5.5
29	9.4	7.8	47	e11	8.4	52	10	42	5.5	4.3	12	3.0
30	4.9	7.0	14	e9.6	---	31	170	630	6.8	720	7.9	2.8
31	3.9	---	11	e12	---	25	---	140	---	27	6.9	---
MEAN	27.9	81.0	30.7	79.6	25.6	62.4	24.9	151	23.1	48.9	36.2	4.80
MAX	336	1,550	333	1,650	234	623	170	737	104	720	260	31
MIN	2.8	3.6	7.0	7.8	8.3	9.1	9.2	7.6	4.9	3.5	3.3	2.3
IN.	0.80	2.24	0.88	2.27	0.68	1.78	0.69	4.32	0.64	1.40	1.03	0.13

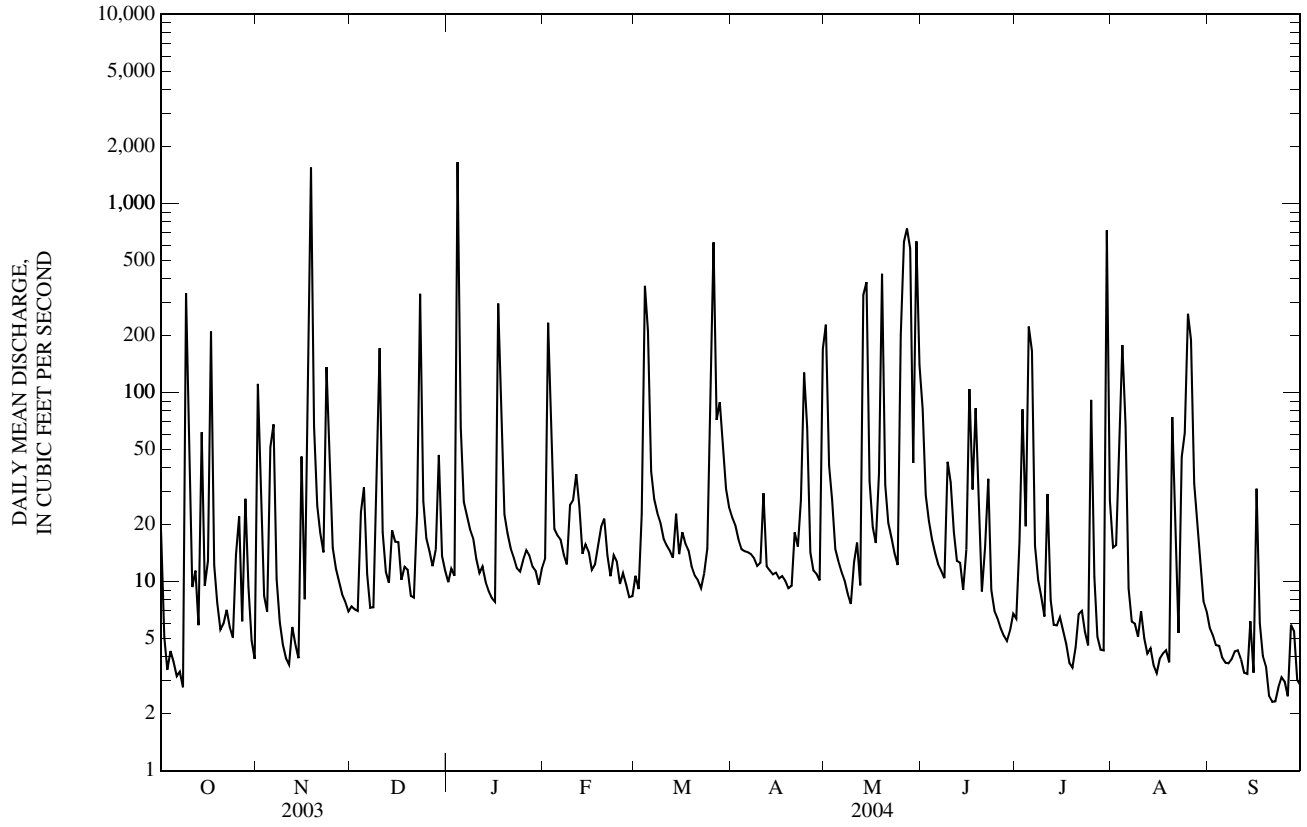
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

MEAN	31.6	40.0	22.4	40.9	60.6	48.1	48.8	84.7	89.1	40.5	28.5	21.6
MAX	60.6	95.6	57.6	79.6	173	118	82.3	185	201	109	44.5	46.3
(WY)	(2002)	(1997)	(2002)	(2004)	(1999)	(1998)	(1998)	(2002)	(2003)	(1998)	(1998)	(2003)
MIN	14.8	7.37	8.59	8.25	18.6	14.9	17.3	27.0	23.1	10.6	16.1	4.80
(WY)	(2000)	(2000)	(1999)	(2000)	(2002)	(2000)	(2000)	(2001)	(2004)	(2002)	(2003)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL MEAN	50.4		50.0		46.3	
HIGHEST ANNUAL MEAN					59.7	2002
LOWEST ANNUAL MEAN					30.3	2001
HIGHEST DAILY MEAN	2,450	Jun 26	1,650	Jan 4	4,030	Feb 7, 1999
LOWEST DAILY MEAN	2.1	Aug 20	2.3	Sep 21,22	1.2	Oct 16, 2002
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 16	2.6	Sep 20	1.8	Sep 4, 2002
MAXIMUM PEAK FLOW	---		5,800[a]	Jan 4	7,670[b]	Jun 26, 2003
MAXIMUM PEAK STAGE	---		10.90	Jan 4	12.59	Jun 26, 2003
INSTANTANEOUS LOW FLOW	---		2.2	Sep 20-22,27	0.75	Sep 29, 1997
ANNUAL RUNOFF (INCHES)	16.93		16.86		15.58	
10 PERCENT EXCEEDS	108		90		86	
50 PERCENT EXCEEDS	12		12		9.2	
90 PERCENT EXCEEDS	3.9		4.3		3.2	

e Estimated
[a] From rating extended baove 1,250 ft^3/s, on basis of indirect measurement.
[b] Discharge determined by indirect measurement of peak flow.

06936475 COLDWATER CREEK NEAR BLACK JACK, MO—Continued



06936475 COLDWATER CREEK NEAR BLACK JACK, 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 unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as $CaCO_3$ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)
OCT												
09...	1612	Environmental	1,510	2.9	6.4	70	7.5	202	18.6	64	18.0	4.70
DEC												
03...	1600	Environmental	7.2	5.6	10.6	84	7.8	810	4.8	340	84.0	31.0
FEB												
09...	1315	Environmental	9.6	15	9.2	67	7.8	4,190u	0.7	440	114	37.0
MAR												
04...	1331	Environmental	1,420	5.9	10.7	96	7.4	486	9.4	71	20.0	5.20
MAY												
24...	1125	Environmental	12	13	4.9	60	7.5	972	24.2	310	76.0	29.0
AUG												
04...	1115	Environmental	12	13	4.2	54	7.0	363	26.1	120	31.5	10.4

Date	ANC, wat unf fixed end pt, field, mg/L as $CaCO_3$ (00410)	ANC, wat unf incrm. titr., field, mg/L as $CaCO_3$ (00419)	Bicarbonate, wat unf incrm. titr., field, mg/L (00450)	Carbonate, wat unf incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	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...	49	48	58	<1	--	1,290	2.8	--	0.08	--	0.740	--	0.06
DEC													
03...	195	197	240	<1	110	7	0.40	--	0.07	--	1.10	--	<0.01
FEB													
09...	--u	--u	--u	--u	2,370	29	30	--	2.80	--	<0.020	--	0.01
MAR													
04...	84	87	106	<1	--	1,930	5.0	--	0.40	--	0.030	--	0.04
MAY													
24...	205	204	249	<1	--	36	0.80	--	0.11	--	1.20	--	0.09
AUG													
04...	74	75	92	<1	--	--o	0.94	0.07	--	1.03	--	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, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7µ MF col/ 100 mL (31625)	Fecal streptococci KF MF, col/ 100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	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													
09...	--	0.240	1.20	18	20,000	15,000k	22,000	5	2	<1	<1.0	1.1	1.6
DEC													
03...	--	0.120	0.12	7	10k	32k	42	<3	2	<1	<1.0	3.2	1.7
FEB													
09...	--	0.030	0.14	816	21	27	29	<3	5	<1	<1.0	4.0	8.9
MAR													
04...	--	0.190	2.20	38	3,800	4,400	8,330	6	2	<1	<1.0	<1.0	1.4
MAY													
24...	--	0.130	0.20	21	860k	860k	530	<3	3	<1	<1.0	<1.0	1.3
AUG													
04...	0.05	--	0.18	20	1,100k	1,170k	1,720k	3	1.8	<0.06	0.05	E.8n	2.1

06936475 COLDWATER CREEK NEAR BLACK JACK, 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)	Manganese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recoverable, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Selenium, water, fltrd, µg/L (01145)	Silver, water, fltrd, µg/L (01075)	Zinc, water, fltrd, µg/L (01090)	Oil and grease, water, unfltrd freon extract mg/L (00556)	1,2-Diphenylhydrazine, water, unfltrd µg/L (82626)	2,4,6-Trichlorophenol, water, unfltrd µg/L (34621)	2,4-Dichlorophenol, water, unfltrd µg/L (34601)	2,4-Dimethylphenol, water, unfltrd µg/L (34606)
OCT 09...	28	<1	86	<0.1	1.6	<1	<1.0	4	E3n	<1	<3	Mt	<2.0
DEC 03...	8	<1	118	<0.1	3.9	3	<1.0	4	--	--	--	--	--
FEB 09...	14	<1	1,030	<0.1	4.6	<1	<1.0	25	--	--	--	--	--
MAR 04...	22	<1	139	<0.1	1.5	2	<1.0	6	<7	<2	<1	Mt	<2.0
MAY 24...	5	<1	210	<0.1	3.3	1	<1.0	3	--	--	--	--	--
AUG 04...	E4n	0.11	40.2	<0.02	2.15	1.3	<0.2	3	--	--	--	--	--

Date	2,4-Dinitrophenol, water, unfltrd µg/L (34616)	2,4-Dinitrotoluene water unfltrd µg/L (34611)	2,6-Dinitrotoluene water unfltrd µg/L (34626)	2-Chloronaphthalene, water, unfltrd µg/L (34581)	2-chlorophenol, water, unfltrd µg/L (34586)	2-Methyl-4,6-dinitrophenol, wat unf µg/L (34657)	2-nitrophenol, water unfltrd µg/L (34591)	3,3-Di'chlorobenzidine, water, unfltrd µg/L (34631)	4-Bromophenyl phenyl ether, wat unf µg/L (34636)	4-Chloro-3-methylphenol, wat unf µg/L (34452)	4-Chlorophenyl phenyl ether, wat unf µg/L (34641)	4-Nitrophenol, water, unfltrd µg/L (34646)	9H-Fluorene, water, unfltrd µg/L (34381)
OCT 09...	<3	<3	<2	<2	<2	<2m	<1	<0.9m	<2	<3	<2	E2m	Mt
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	<3	<1	<2	<1	<1	<2m	<1	<0.9m	<2	<2	<1	E2mn	Mt
MAY 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Acenaphthene, water, unfltrd µg/L (34205)	Acenaphthylene, water, unfltrd µg/L (34200)	Aldrin, water, unfltrd µg/L (39330)	alpha-Endosulfan, water, unfltrd µg/L (39388)	Anthracene, water, unfltrd µg/L (34220)	Benzidine, water, unfltrd µg/L (39120)	Benzo-[a]-anthracene, water, unfltrd µg/L (34526)	Benzo-[a]-pyrene, water, unfltrd µg/L (34247)	Benzo-[b]-fluoranthene water unfltrd µg/L (34230)	Benzo-[g,h,i]-perylene, water, unfltrd µg/L (34521)	Benzo-[k]-fluoranthene water unfltrd µg/L (34242)	Benzyl n-butyl phthalate, water, unfltrd µg/L (34292)	Bis(2-chloroethoxy) methane water unfltrd µg/L (34278)
OCT 09...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	Mt	E1	E2	Mn	Mn	<2	<3
DEC 03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 04...	Mt	Mt	<0.001	<0.002	Mt	<1,000m	3	4	5	3	E2	E1n	<1
MAY 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06936475 COLDWATER CREEK NEAR BLACK JACK, MO—Continued

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

Date	Bis(2-chloroethyl) ether, water, unfltrd µg/L (34273)	Bis(2-chloroisopropyl) ether, wat unf µg/L (34283)	Bis(2-ethylhexyl) phthalate, wat unf µg/L (39100)	Carbophenothion, water, unfltrd µg/L (39786)	Chlordane, technical, water, unfltrd µg/L (39350)	Chlorpyrifos water unfltrd µg/L (38932)	Chrysene, water, unfltrd µg/L (34320)	Diazinon, water, unfltrd µg/L (39570)	Dibenzo-[a,h]-anthracene, wat unf µg/L (34556)	Dieldrin, water, unfltrd µg/L (39380)	Diethyl phthalate, water, unfltrd µg/L (34336)	Dimethyl phthalate, water, unfltrd µg/L (34341)	Di-n-butyl phthalate, water, unfltrd µg/L (39110)
OCT													
09...	<2	<2	E2n	<0.02	<0.1	<0.01	E2n	0.03	Mt	<0.002	Mt	Mt	E1n
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<1	<1	E3	<0.02	<0.1	<0.01	4	0.03	E1n	0.003	Mt	Mt	E2
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Di-n-octyl phthalate, water, unfltrd µg/L (34596)	Disulfoton, water, unfltrd µg/L (39011)	Endrin, water, unfltrd µg/L (39390)	Ethion, water, unfltrd µg/L (39398)	Fluoranthene water unfltrd µg/L (34376)	Fonofos water unfltrd µg/L (82614)	Heptachlor epoxide water unfltrd µg/L (39420)	Heptachlor, water, unfltrd µg/L (39410)	Hexachlorobenzene water unfltrd µg/L (39700)	Hexachlorocyclopentadiene, wat unf µg/L (34386)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd µg/L (34403)	Isophorone water unfltrd µg/L (34408)	Lindane water, unfltrd µg/L (39340)
OCT													
09...	<2	<0.10	<0.002	<0.01	3	<0.01	<0.001	<0.001	<2	<1m	Mt	Mt	<0.0020
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<2	<0.10	<0.002	<0.01	10	<0.01	<0.001	<0.001	<1	<1m	3	Mt	<0.0020
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Malathion, water, unfltrd µg/L (39530)	Methyl parathion, water, unfltrd µg/L (39600)	Mirex, water, unfltrd µg/L (39755)	Nitrobenzene water unfltrd µg/L (34447)	N-NItroso-di-methylamine, wat unf µg/L (34438)	N-NItroso-di-n-propylamine, wat unf µg/L (34428)	N-NItroso-di-phenylamine, wat unf µg/L (34433)	p,p'-DDD, water, unfltrd µg/L (39360)	p,p'-DDE, water, unfltrd µg/L (39365)	p,p'-DDT, water, unfltrd µg/L (39370)	p,p'-Methoxychlor, water, unfltrd µg/L (39480)	Parathion, water, unfltrd µg/L (39540)	PCBs, water, unfltrd µg/L (39516)
OCT													
09...	E.27	<0.01	<0.001	<1	<3	<2	<2m	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	<0.10	<0.01	<0.001	<1	<2	<2	Mmt	<0.002	<0.002	<0.002	<0.003	<0.01	<0.1
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

06936475 COLDWATER CREEK NEAR BLACK JACK, 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	E1n	<3.4	<0.02	3	<1	<0.02	<2	<2	<2	<1	<1m	<2m
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
04...	E2mn	5	E.9n	<0.02	8	<1	<0.02	<1	<2	<1	<1	<1m	<2m
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	Naphth-alene, water, unfltrd µg/L (34696)
OCT	
09...	Mt
DEC	
03...	--
FEB	
09...	--
MAR	
04...	Mt
MAY	
24...	--
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
u -- Value reported not confirmable due to interference

Null value qualifier codes used in this table:
o -- Insufficient amount of water
u -- Unable to determine-matrix interference

06936530 SPANISH LAKE TRIBUTARY NEAR BLACK JACK, MO

LOCATION.--Lat 38°48'03", long 90°12'59", in SE ¼ SE ¼ NW ¼ sec.22, T.47 N., R.7 E., St. Louis County, Hydrologic Unit 10300200, on left downstream wingwall of Bellefontaine Ave. bridge, 2.14 mi north of Interstate 270, 0.65 mi east of Highway 367 (Lewis and Clark Blvd.), and 1.9 mi upstream of the Missouri River.

DRAINAGE AREA.--0.25 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 502.33 ft above National Geodetic Vertical Datum of 1929.

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	0.04	1.7	0.07	0.16	e0.30	0.21	0.25	3.0	0.60	0.01	0.11	0.02
2	0.01	0.18	0.07	0.16	e3.2	0.19	0.23	0.59	0.23	1.1	0.06	0.01
3	0.00	0.08	0.09	0.14	e1.5	0.38	0.20	0.33	0.16	1.6	0.14	0.00
4	0.01	0.05	0.18	17	e0.27	5.2	0.17	0.21	0.14	0.16	0.97	0.00
5	0.00	0.34	0.22	0.67	e0.23	3.9	0.16	0.16	0.11	1.3	0.17	0.00
6	0.00	0.59	0.11	e0.35	e0.23	0.46	0.16	0.12	0.10	2.5	0.06	0.00
7	0.00	0.11	0.10	e0.24	e0.20	0.33	0.15	0.09	0.09	0.14	0.05	0.00
8	0.00	0.07	0.10	e0.23	e0.18	0.29	0.14	0.08	0.08	0.09	0.04	0.00
9	4.2	0.06	0.30	e0.20	e0.31	0.26	0.13	0.06	0.37	0.06	0.03	0.00
10	0.21	0.05	0.63	e0.24	0.49	0.24	0.19	0.06	0.95	0.05	0.03	0.00
11	0.07	0.05	0.13	e0.22	0.74	0.23	0.21	0.36	0.19	0.07	0.01	0.00
12	0.04	0.04	0.10	e0.23	0.37	0.21	0.14	0.14	0.16	0.03	0.01	0.00
13	0.02	0.03	0.10	e0.21	0.32	0.21	0.13	6.8	0.10	0.03	0.01	0.00
14	0.62	0.03	0.14	e0.18	0.32	0.26	0.12	7.7	0.07	0.02	0.01	0.00
15	0.12	0.45	0.18	e0.18	0.29	0.21	0.11	0.46	0.06	0.01	0.00	0.00
16	0.50	0.08	0.16	e0.17	0.29	0.27	0.10	0.22	0.45	0.01	0.00	0.08
17	2.0	5.5	0.11	3.6	0.27	0.21	0.09	0.16	0.14	0.01	0.00	0.01
18	0.21	21	0.14	0.85	0.35	0.21	0.08	0.14	1.1	0.00	0.00	0.00
19	0.10	0.47	0.11	e0.43	0.46	0.18	0.07	3.6	0.17	0.00	0.00	0.00
20	0.07	0.15	0.10	e0.34	0.43	0.24	0.08	0.32	0.09	0.00	0.20	0.00
21	0.06	0.11	0.10	e0.30	0.28	0.19	0.12	0.18	0.22	0.00	0.05	0.00
22	0.05	0.10	0.53	e0.28	0.26	0.18	0.12	0.10	0.18	0.00	0.02	0.00
23	0.05	1.6	3.0	e0.25	0.30	0.20	0.20	0.09	0.08	0.02	0.25	0.00
24	0.05	0.24	0.22	e0.26	0.27	0.19	6.2	0.07	0.05	0.00	0.28	0.00
25	0.09	0.14	0.15	e0.28	0.24	0.72	1.4	2.9	0.04	0.79	2.6	0.00
26	0.15	0.13	0.14	e0.31	0.21	6.6	0.29	9.7	0.03	0.04	0.89	0.00
27	0.12	0.12	0.14	e0.30	0.20	0.86	0.21	15	0.02	0.01	0.11	0.00
28	0.24	0.10	0.19	e0.26	0.18	2.4	0.19	2.7	0.02	0.00	0.07	0.00
29	0.14	0.08	0.57	e0.24	0.20	1.1	0.13	0.33	0.01	0.00	0.06	0.00
30	0.06	0.08	0.19	e0.20	---	0.49	1.9	6.7	0.01	9.7	0.04	0.00
31	0.04	---	0.17	e0.20	---	0.31	---	1.3	---	0.30	0.04	---
MEAN	0.30	1.12	0.28	0.93	0.44	0.87	0.46	2.05	0.20	0.58	0.20	0.00
MAX	4.2	21	3.0	17	3.2	6.6	6.2	15	1.1	9.7	2.6	0.08
MIN	0.00	0.03	0.07	0.14	0.18	0.18	0.07	0.06	0.01	0.00	0.00	0.00
IN.	1.38	5.02	1.27	4.27	1.92	4.01	2.03	9.47	0.90	2.69	0.94	0.02

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

MEAN	0.24	0.36	0.28	0.46	0.56	0.60	0.49	0.96	0.61	0.52	0.16	0.15
MAX	0.45	1.12	0.70	0.93	1.81	1.28	0.74	2.05	1.51	1.25	0.26	0.62
(WY)	(2001)	(2004)	(2002)	(2004)	(1999)	(1998)	(1998)	(2004)	(2003)	(1998)	(1998)	(2003)
MIN	0.06	0.02	0.13	0.13	0.18	0.23	0.12	0.14	0.18	0.00	0.07	0.00
(WY)	(2000)	(2000)	(1999)	(2003)	(2002)	(2001)	(2000)	(2001)	(2001)	(2002)	(2003)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL MEAN	0.52		0.62		0.45	
HIGHEST ANNUAL MEAN					0.62	2004
LOWEST ANNUAL MEAN					0.28	2001
HIGHEST DAILY MEAN	21	Nov 18	21	Nov 18	31	Jul 30, 1998
LOWEST DAILY MEAN	0.00	Many Days	0.00	Many Days	0.00	Each Year
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 8, Sep 16	0.00	Sep 3,18	0.00	At Times
MAXIMUM PEAK FLOW	---		253	May 27	710	Jul 30, 1998
MAXIMUM PEAK STAGE	---		4.26	May 27	5.39	Jul 30, 1998
INSTANTANEOUS LOW FLOW	---		0.00	Many Days	0.00	Each Year
ANNUAL RUNOFF (INCHES)	28.48		33.91		24.49	
10 PERCENT EXCEEDS	1.0		1.0		0.87	
50 PERCENT EXCEEDS	0.12		0.16		0.10	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

06936530 SPANISH LAKE TRIBUTARY NEAR BLACK JACK, MO—Continued