

MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05495000 FOX RIVER AT WAYLAND, MO

LOCATION.--Lat 40°23'33", long 91°35'52", in NW ¼ sec.31, T.65 N., R.6 W., Clark County, Hydrologic Unit 07110001, on left bank 30 ft downstream from bridge on U.S. Highway 136, 0.8 mi west of Wayland, 5.0 mi downstream from Brush Creek, and at mile 15.2.

DRAINAGE AREA.--400 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Water-discharge records 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	15	7.7	20	110	e33	155	184	110	1,390	24	13	375
2	14	12	19	94	e32	149	144	99	407	25	14	253
3	12	15	17	85	e34	135	118	85	215	27	441	191
4	10	32	16	76	e34	222	102	78	141	29	574	153
5	10	51	16	66	e34	4,810	89	71	102	53	1,320	125
6	9.9	30	16	e58	e35	3,800	82	58	79	41	378	107
7	10	24	17	e50	e36	996	76	51	66	33	161	96
8	7.6	18	17	44	e35	516	71	51	55	31	90	104
9	7.5	14	91	46	e35	338	63	42	55	31	60	85
10	6.8	13	4,800	46	e35	236	57	38	145	29	41	72
11	7.0	12	1,690	50	e35	188	55	44	277	32	32	70
12	7.6	14	439	51	e34	157	52	44	143	484	26	60
13	7.2	12	205	e53	e35	132	51	97	105	813	23	55
14	34	11	161	e53	e33	131	48	71	92	228	21	49
15	44	11	167	e54	e32	168	46	61	696	106	18	124
16	27	10	235	e54	e31	170	45	50	317	65	16	224
17	18	11	195	68	e31	187	45	41	162	47	15	99
18	19	25	169	1,410	e35	354	44	36	93	34	15	60
19	19	47	e126	1,190	e126	620	41	48	142	28	17	47
20	17	31	e108	639	766	332	50	80	87	24	18	49
21	9.7	20	e96	e305	1,780	209	666	54	104	22	21	39
22	9.3	12	e120	e162	e1,660	149	359	45	195	24	21	32
23	7.7	12	247	e127	e1,070	128	166	48	80	29	17	30
24	9.5	63	e155	e99	e687	117	111	58	48	22	21	28
25	13	236	e115	e63	e400	113	102	2,690	39	19	41	28
26	12	94	e85	e53	e276	120	85	1,090	34	19	1,110	26
27	11	53	89	e46	e205	203	71	391	31	17	4,400	24
28	13	36	134	e43	e170	341	62	199	29	16	9,670	22
29	9.1	28	388	e40	e165	537	55	127	27	15	8,940	21
30	7.9	24	286	e38	---	494	65	109	25	14	2,570	21
31	8.0	---	151	e34	---	254	---	2,290	---	14	699	---
MEAN	13.3	32.6	335	171	273	531	107	270	179	77.3	994	89.0
MAX	44	236	4,800	1,410	1,780	4,810	666	2,690	1,390	813	9,670	375
MIN	6.8	7.7	16	34	31	113	41	36	25	14	13	21
IN.	0.04	0.09	0.97	0.49	0.74	1.53	0.30	0.78	0.50	0.22	2.86	0.25

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

MEAN	161	169	137	162	332	434	459	393	391	244	124	169
MAX	1,313	1,375	1,330	1,133	1,433	2,264	2,750	2,795	2,223	3,387	1,509	1,999
(WY)	(1987)	(1929)	(1983)	(1969)	(1982)	(1979)	(1973)	(1996)	(1947)	(1993)	(1970)	(1970)
MIN	0.00	0.01	0.02	0.19	0.42	8.56	2.35	1.39	0.06	0.21	0.02	0.17
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1956)	(1956)	(1956)	(1956)	(1936)	(1936)	(1937)

SUMMARY STATISTICS

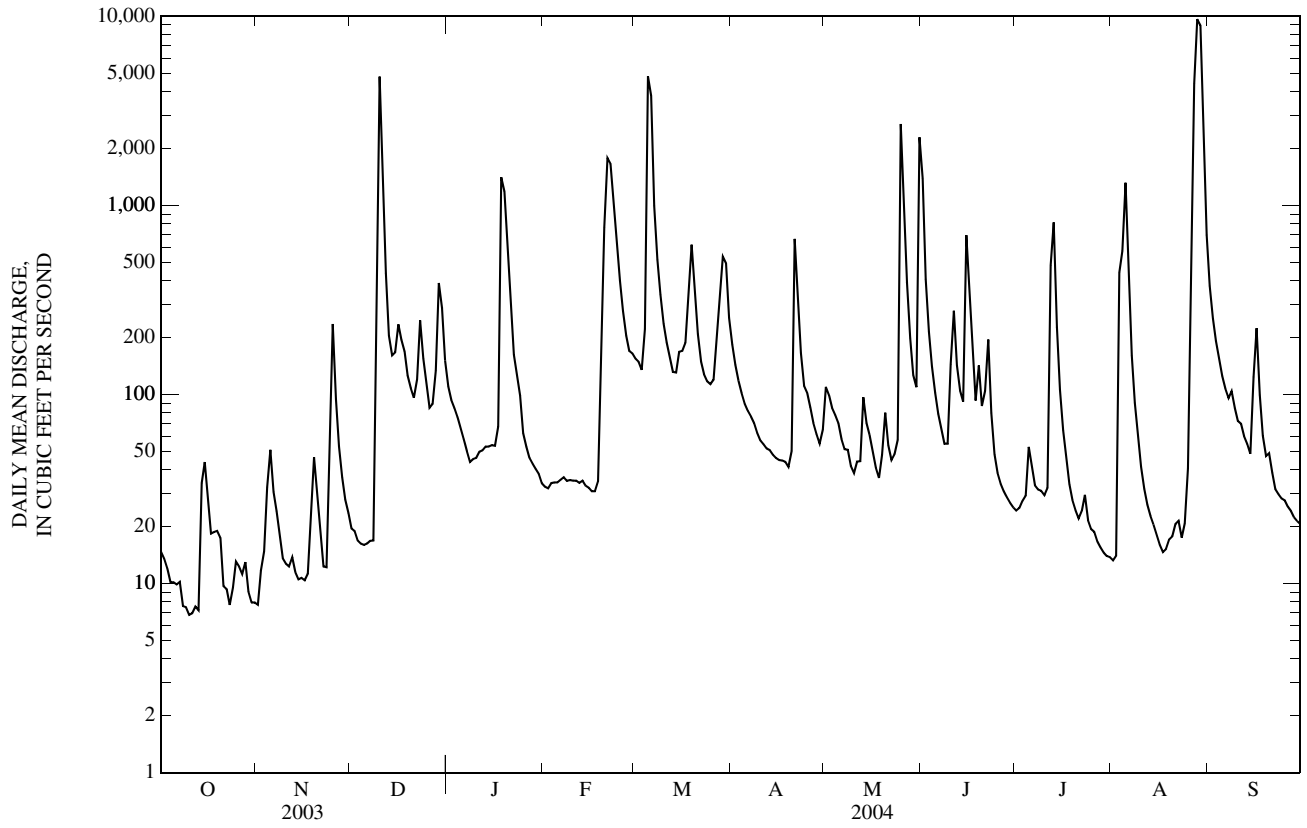
FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1922 - 2004

ANNUAL MEAN	139	258	264
HIGHEST ANNUAL MEAN			927
LOWEST ANNUAL MEAN			17.6
HIGHEST DAILY MEAN	6,520	Jul 10	19,900
LOWEST DAILY MEAN	1.6	Jan 24,25	0.00
ANNUAL SEVEN-DAY MINIMUM	1.8	Jan 22	0.00
MAXIMUM PEAK FLOW	---		10,900
MAXIMUM PEAK STAGE	---		18.37
INSTANTANEOUS LOW FLOW	---		6.0
ANNUAL RUNOFF (INCHES)	4.72		8.77
10 PERCENT EXCEEDS	235		402
50 PERCENT EXCEEDS	24		54
90 PERCENT EXCEEDS	3.8		14

e Estimated



MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05495000 FOX RIVER AT WAYLAND, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1967 to September 1972, November 1999 to current year.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/cm 25 degC (00095)	Temperature, 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...	0850	Environmental	34	9.1	90	8.2	572	13.3	260	77.5	17.3	5.74	
JAN 05...	1400	Environmental	e68	15.9	111	7.8	471	0.4	--	--	--	--	
MAR 03...	0825	Blank	--	--	--	--	--	--	--	--	--	--	
MAR 03...	0900	Environmental	137	12.6	101	7.9	446	5.7	--	--	--	--	
MAY 18...	0845	Environmental	36	7.0	81	8.0	540	21.6	250	71.8	17.6	5.30	
JUL 21...	0920	Environmental	23	6.3	82	7.3	436	27.3	--	--	--	--	
SEP 13...	1315	Environmental	55	8.0	91	7.7	442	20.3	--	--	--	--	
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Carbonate, wat unfltrd, titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat fltrd mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 04...	16.1	191	193	235	<1	13.1	0.2	80.9	362	13	0.47	<0.04	<0.06
JAN 05...	--	137	137	167	<1	--	--	--	--	19	0.67	0.08	1.45
MAR 03...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
MAR 03...	--	125	124	151	<1	--	--	--	--	75d	0.76	0.06	1.14
MAY 18...	17.4	177	177	216	<1	12.8	0.2	76.5	343	23	0.57	E.02n	<0.06
JUL 21...	--	149	151	185	<1	--	--	--	--	36	0.80	<0.04	<0.06
SEP 13...	--	167	168	205	<1	--	--	--	--	17	0.68	<0.04	<0.06
Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L (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 col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Aluminum, water, unfltrd recoverable, μ g/L (01105)	Arsenic water, fltrd, μ g/L (01000)	Cadmium water, fltrd, μ g/L (01025)	Cadmium water, unfltrd, μ g/L (01027)	Copper, water, fltrd, μ g/L (01040)
NOV 04...	<0.008	E.02n	E.02n	0.05	100	130	178	<2	172v	0.8	<0.04	E.02n	1.3
JAN 05...	0.014	<0.02	E.02n	0.10	15k	24k	123	--	--	--	--	--	--
MAR 03...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
MAR 03...	0.018	0.02	0.04	0.18	19k	30k	103	--	--	--	--	--	--
MAY 18...	<0.008	<0.02	<0.04	0.06	130	140k	210	3	217	1.5	<0.04	E.03n	1.5
JUL 21...	<0.008	0.02	0.05	0.13	230	200	310	--	--	--	--	--	--
SEP 13...	<0.008	0.06	0.08	0.15	78	86	88	--	--	--	--	--	--

05495000 FOX RIVER AT WAYLAND, 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...	11	<0.08	0.44v	139	<0.02	0.4	M	E1n
JAN 05...	--	--	--	--	--	--	--	--
MAR 03...	--	--	--	--	--	--	--	--
MAY 18...	11	0.11	0.45	163	<0.02	0.6	M	E1n
JUL 21...	--	--	--	--	--	--	--	--
SEP 13...	--	--	--	--	--	--	--	--

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

MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05496000 WYACONDA RIVER ABOVE CANTON, MO

LOCATION.--Lat 40°08'32", long 91°33'57", in SW ¼ SW ¼ NE ¼ sec.28, T.62 N., R.6 W., Lewis County, Hydrologic Unit 07110001, on left bank on downstream side of bridge on State Highway 16, 1.9 mi upstream from Sugar Creek, 2.5 mi west of Canton, and at mile 16.7.

DRAINAGE AREA.--393 mi².

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 517.41 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1939, nonrecording gage 500 ft downstream at datum 2.00 ft lower; Sept. 25, 1975, to Sept. 17, 1979, nonrecording gage at present site and at datum 2.00 ft lower.

REMARKS.--Records fair except for estimated daily discharges and discharges below 50 ft³/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	13	6.9	18	91	e21	134	137	74	656	34	11	569
2	11	26	16	75	e21	130	117	124	294	34	10	283
3	9.7	90	15	67	e20	106	102	95	159	79	1,210	166
4	9.2	196	17	58	20	286	91	71	111	67	1,140	119
5	8.5	179	16	46	e20	3,120	81	62	84	50	1,690	90
6	7.9	42	15	44	e21	3,900	75	58	72	41	560	73
7	7.2	26	15	43	e21	1,440	72	51	59	33	259	61
8	6.4	18	15	35	e21	531	69	46	46	99	158	58
9	6.3	14	257	34	e21	319	64	41	44	119	117	54
10	8.2	12	5,080	36	e22	242	61	37	217	57	92	48
11	7.8	12	5,590	38	e22	194	58	40	617	282	68	42
12	6.1	10	2,190	40	e22	163	55	39	280	637	54	37
13	6.3	9.2	516	46	e21	132	53	171	131	776	44	34
14	89	8.4	289	e50	e21	137	51	212	86	286	41	31
15	63	8.0	216	e50	e20	158	51	86	80	144	35	33
16	38	7.9	493	47	e20	186	50	58	438	97	32	e800
17	22	308	398	48	e19	177	49	49	180	71	30	244
18	15	668	215	e150	54	264	48	42	108	47	31	94
19	11	190	177	370	117	431	45	39	69	38	30	58
20	9.7	101	98	207	462	284	53	105	51	33	30	42
21	9.6	51	90	e111	1,220	194	919	79	47	27	25	33
22	8.6	33	124	e106	1,370	142	758	53	347	26	24	28
23	7.8	32	574	e67	896	117	250	45	172	29	21	24
24	9.7	34	346	e49	632	116	158	42	73	27	24	22
25	11	52	133	e38	367	122	117	752	52	22	31	20
26	12	64	122	e32	264	122	98	1,270	38	20	187	19
27	10	41	101	e27	189	129	80	374	32	18	2,910	17
28	7.6	30	121	e26	166	155	67	188	29	15	5,470	16
29	7.1	23	269	e25	146	176	58	132	29	13	6,970	15
30	7.3	20	217	e22	---	246	57	121	25	13	7,500	14
31	7.9	---	120	e20	---	179	---	1,290	---	13	2,710	---
MEAN	14.6	77.1	576	67.7	215	453	131	189	154	105	1,017	105
MAX	89	668	5,590	370	1,370	3,900	919	1,290	656	776	7,500	800
MIN	6.1	6.9	15	20	19	106	45	37	25	13	10	14
IN.	0.04	0.22	1.69	0.20	0.59	1.33	0.37	0.55	0.44	0.31	2.98	0.30

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

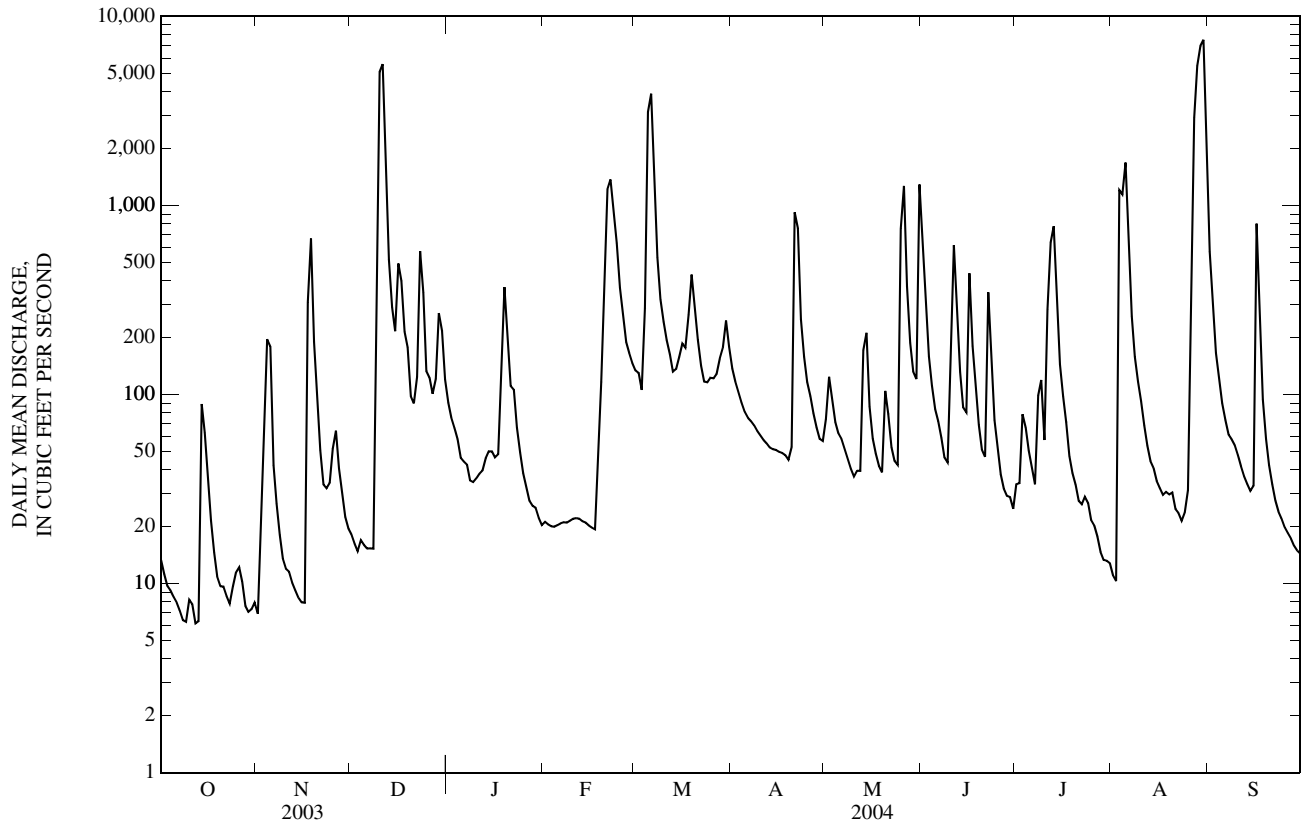
	135	160	156	157	355	405	429	467	368	280	140	155
MEAN	135	160	156	157	355	405	429	467	368	280	140	155
MAX	1,677	1,463	1,399	946	1,529	1,346	1,809	3,196	2,594	2,792	2,242	2,510
(WY)	(1987)	(1986)	(1983)	(1946)	(2001)	(1985)	(1983)	(1996)	(1947)	(1993)	(1970)	(1986)
MIN	0.00	0.00	0.47	0.10	2.05	7.53	3.38	1.69	0.66	0.02	0.00	0.02
(WY)	(1954)	(1954)	(1954)	(1954)	(1989)	(1957)	(1956)	(1934)	(1956)	(1934)	(1934)	(1953)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	168	260	266
HIGHEST ANNUAL MEAN			861
LOWEST ANNUAL MEAN			14.2
HIGHEST DAILY MEAN	5,590	Dec 11	7,500
LOWEST DAILY MEAN	0.56	Jan 11	6.1
ANNUAL SEVEN-DAY MINIMUM	0.70	Jan 9	6.9
MAXIMUM PEAK FLOW	---		8,270
MAXIMUM PEAK STAGE	---		23.53
INSTANTANEOUS LOW FLOW	---		5.7
ANNUAL RUNOFF (INCHES)	5.81		9.02
10 PERCENT EXCEEDS	294		445
50 PERCENT EXCEEDS	23		57
90 PERCENT EXCEEDS	2.2		13

e Estimated

05496000 WYACONDA RIVER ABOVE CANTON, MO—Continued



FABIUS RIVER BASIN

05497000 NORTH FABIUS RIVER AT MONTICELLO, MO

LOCATION.--Lat 40°06'29", long 91°42'52", in SW ¼ SE ¼ sec.6, T.61 N., R.7 W., Lewis County, Hydrologic Unit 07110002, on right bank upstream from bridge on State Highway 16, 1.0 mi south of Monticello, and 19.0 mi upstream from Middle Fabius River.

DRAINAGE AREA.--452 mi².

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 540.73 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1930, nonrecording gage at site 400 ft downstream at datum 0.03 ft lower; Nov. 22, 1930, to Nov. 28, 1967, nonrecording gage at present site and datum.

REMARKS.--Records fair 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	21	12	20	79	e38	103	178	95	731	47	23	471
2	19	21	18	66	e37	98	146	132	268	45	97	322
3	17	34	16	57	e35	85	126	108	171	54	5,300	238
4	17	38	16	50	e34	207	112	87	131	60	3,640	181
5	17	39	18	47	e34	4,480	101	85	104	76	2,310	146
6	16	23	17	e46	e34	2,680	93	75	89	56	564	124
7	15	18	16	45	e34	770	87	65	78	50	286	115
8	15	15	16	41	e34	395	82	58	73	60	181	123
9	16	14	135	40	e33	285	76	51	70	70	131	97
10	13	13	4,910	42	e32	224	72	45	211	60	95	83
11	10	13	2,840	41	e32	188	68	48	366	57	76	74
12	12	13	622	42	e32	162	64	51	304	1,350	66	68
13	12	13	303	42	e32	144	61	296	176	1,080	55	63
14	50	13	200	40	e30	140	58	170	139	317	47	57
15	43	13	176	41	e30	149	56	81	115	160	43	57
16	27	15	318	43	e29	161	55	62	508	102	39	381
17	19	97	224	47	e29	166	65	50	201	76	35	213
18	13	146	146	81	e35	273	61	44	127	61	40	105
19	11	164	124	144	e92	439	52	55	104	53	49	72
20	10	76	85	96	116	258	58	140	87	46	39	58
21	10	45	84	116	1,110	188	1,340	82	87	42	34	51
22	10	33	96	143	600	149	690	61	125	39	30	47
23	10	31	421	102	377	128	245	54	125	38	29	44
24	9.7	41	230	86	297	121	157	54	82	35	28	41
25	13	38	125	73	221	116	127	93	72	34	72	39
26	12	41	e105	65	165	121	108	608	60	31	393	37
27	10	39	83	e57	129	188	92	221	55	28	2,710	36
28	11	30	102	e51	114	212	78	125	52	27	7,600	35
29	12	24	169	e47	107	279	69	91	51	25	9,050	32
30	12	22	151	e44	---	351	71	97	47	24	2,910	32
31	12	---	103	e39	---	216	---	1,850	---	24	814	---
MEAN	16.0	37.8	384	63.0	135	435	155	166	160	136	1,187	115
MAX	50	164	4,910	144	1,110	4,480	1,340	1,850	731	1,350	9,050	471
MIN	9.7	12	16	39	29	85	52	44	47	24	23	32
IN.	0.04	0.09	0.98	0.16	0.32	1.11	0.38	0.42	0.40	0.35	3.03	0.28

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

MEAN	179	189	169	189	352	451	517	470	415	293	140	177
MAX	1,496	1,347	1,521	1,679	1,346	2,336	3,171	2,941	3,148	3,320	2,149	1,966
(WY)	(1987)	(1929)	(1983)	(1974)	(1937)	(1979)	(1973)	(1996)	(1947)	(1993)	(1970)	(1970)
MIN	0.01	1.06	0.73	0.14	2.43	7.91	7.15	1.71	0.07	0.00	0.00	0.51
(WY)	(1957)	(1957)	(1957)	(1940)	(1989)	(1956)	(1956)	(1934)	(1934)	(1934)	(1934)	(1953)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

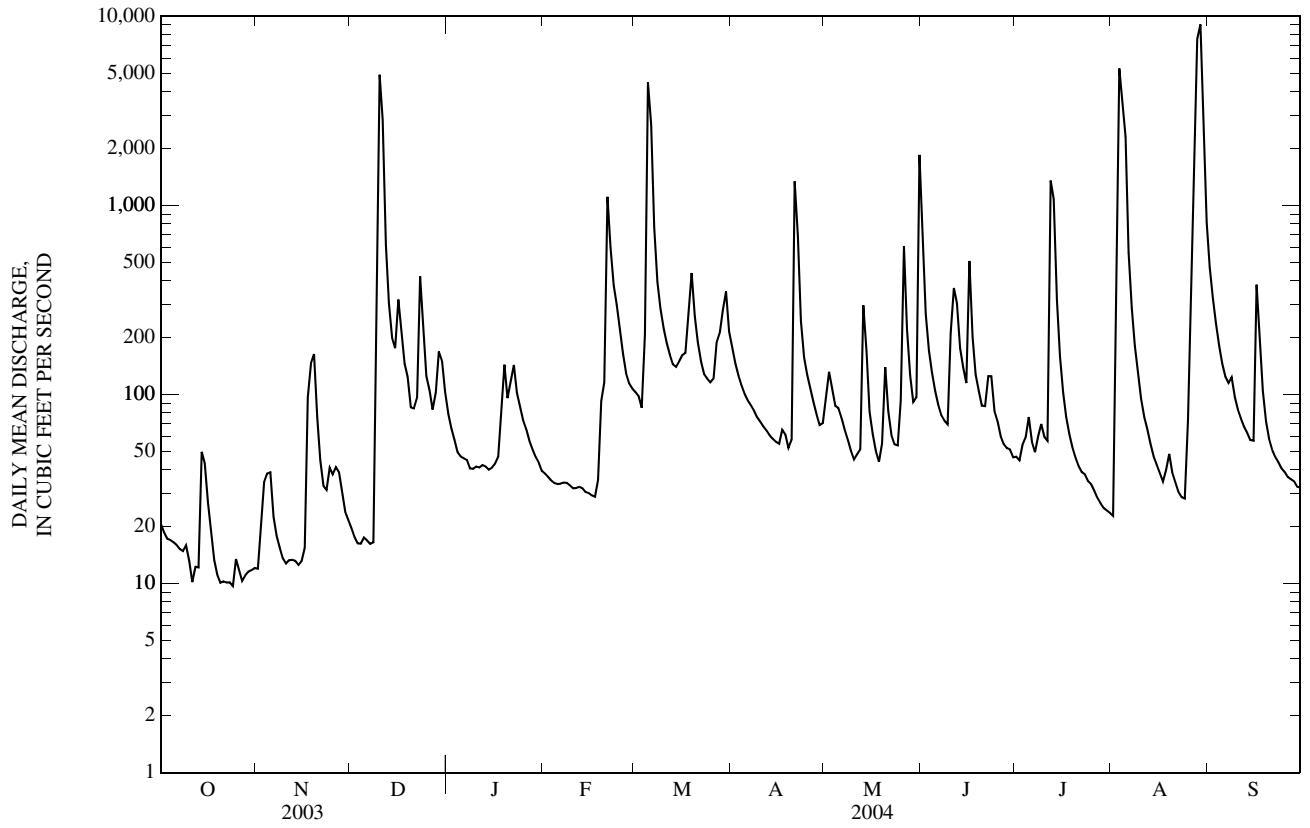
FOR 2004 WATER YEAR

WATER YEARS 1922 - 2004

ANNUAL MEAN	116	251	295
HIGHEST ANNUAL MEAN			923
LOWEST ANNUAL MEAN			18.0
HIGHEST DAILY MEAN	4,910	Dec 10	17,900
LOWEST DAILY MEAN	2.3	Jan 26-28,30, Feb 9,10	0.00
ANNUAL SEVEN-DAY MINIMUM	2.4	Jan 24	0.00
MAXIMUM PEAK FLOW	---	10,200	20,700
MAXIMUM PEAK STAGE	---	24.98	33.03
INSTANTANEOUS LOW FLOW	---	8.1	0.00
ANNUAL RUNOFF (INCHES)	3.49	7.56	8.86
10 PERCENT EXCEEDS	170	317	565
50 PERCENT EXCEEDS	22	67	46
90 PERCENT EXCEEDS	3.8	17	4.3

e Estimated

05497000 NORTH FABIUS RIVER AT MONTICELLO, MO—Continued



05498000 MIDDLE FABIUS RIVER NEAR MONTICELLO, MO

LOCATION.--Lat 40°05'37", long 91°44'08", in SE ¼ sec.12, T.61 N., R.8 W., Lewis County, Hydrologic Unit 07110002, on left on downstream side of bridge pier on State Highway 16, 2.5 mi southwest of Monticello, 8.0 mi downstream from Radish Branch, and 17 mi upstream from mouth.

DRAINAGE AREA.--393 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 540.46 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1967, nonrecording gage at present site and datum.

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

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

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	20	10	24	111	26	103	160	84	1,360	17	12	266
2	16	33	21	97	28	98	133	291	281	17	14	164
3	14	68	20	86	29	92	115	180	145	27	1,870	120
4	12	74	20	79	29	424	101	117	95	87	3,210	96
5	10	77	21	72	30	2,970	90	98	69	52	2,800	80
6	9.7	30	21	e66	31	3,700	83	88	55	30	691	68
7	9.1	20	20	e60	30	1,610	79	74	45	22	213	58
8	8.6	16	20	e54	29	456	75	63	37	22	124	53
9	8.4	15	414	e51	30	290	71	53	35	20	86	60
10	8.8	13	5,380	e51	31	219	68	45	411	17	65	49
11	8.7	13	5,280	e48	31	180	65	54	312	30	50	42
12	8.3	13	1,080	e50	31	151	60	65	305	128	41	36
13	8.8	11	329	e51	30	132	57	306	195	861	34	33
14	150	9.9	245	e50	29	125	55	151	107	262	29	30
15	100	10	198	e48	28	124	54	65	115	115	25	29
16	95	11	441	e49	27	157	54	48	374	69	22	165
17	56	250	307	e50	27	173	53	47	550	48	21	209
18	32	456	224	e59	31	288	52	38	231	36	88	84
19	22	482	188	253	95	419	50	34	124	28	66	53
20	17	225	148	130	641	280	62	309	78	24	31	38
21	13	112	128	125	1,120	191	1,500	142	70	21	23	29
22	12	72	131	111	859	150	1,530	85	137	19	22	24
23	10	58	610	74	504	123	361	62	266	18	19	22
24	9.2	65	496	e51	372	117	197	51	108	17	20	20
25	10	62	210	e41	271	115	147	61	67	17	353	19
26	13	72	150	e36	212	139	120	455	46	16	1,020	18
27	11	49	135	e33	131	277	101	258	32	15	2,540	17
28	12	36	145	e29	121	242	85	119	25	14	4,200	15
29	11	30	244	29	108	252	72	77	21	13	4,060	14
30	12	27	244	26	---	300	73	135	18	13	3,640	14
31	11	---	153	25	---	219	---	1,860	---	13	809	---
MEAN	23.8	80.7	550	67.6	171	455	191	178	190	67.4	845	64.2
MAX	150	482	5,380	253	1,120	3,700	1,530	1,860	1,360	861	4,200	266
MIN	8.3	9.9	20	25	26	92	50	34	18	13	12	14
IN.	0.07	0.23	1.61	0.20	0.47	1.34	0.54	0.52	0.54	0.20	2.48	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

MEAN	155	170	161	195	329	445	490	491	309	297	125	149
MAX	1,368	1,481	1,418	1,179	1,359	1,521	2,719	2,776	2,582	3,038	1,758	1,815
(WY)	(1987)	(1986)	(1983)	(1969)	(1969)	(1979)	(1973)	(1996)	(1947)	(1993)	(1970)	(1970)
MIN	0.00	0.00	0.11	0.31	1.23	6.32	3.83	1.48	1.04	0.78	0.56	0.09
(WY)	(1954)	(1954)	(1957)	(1957)	(1957)	(1957)	(1956)	(1989)	(1956)	(1988)	(1988)	(1953)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

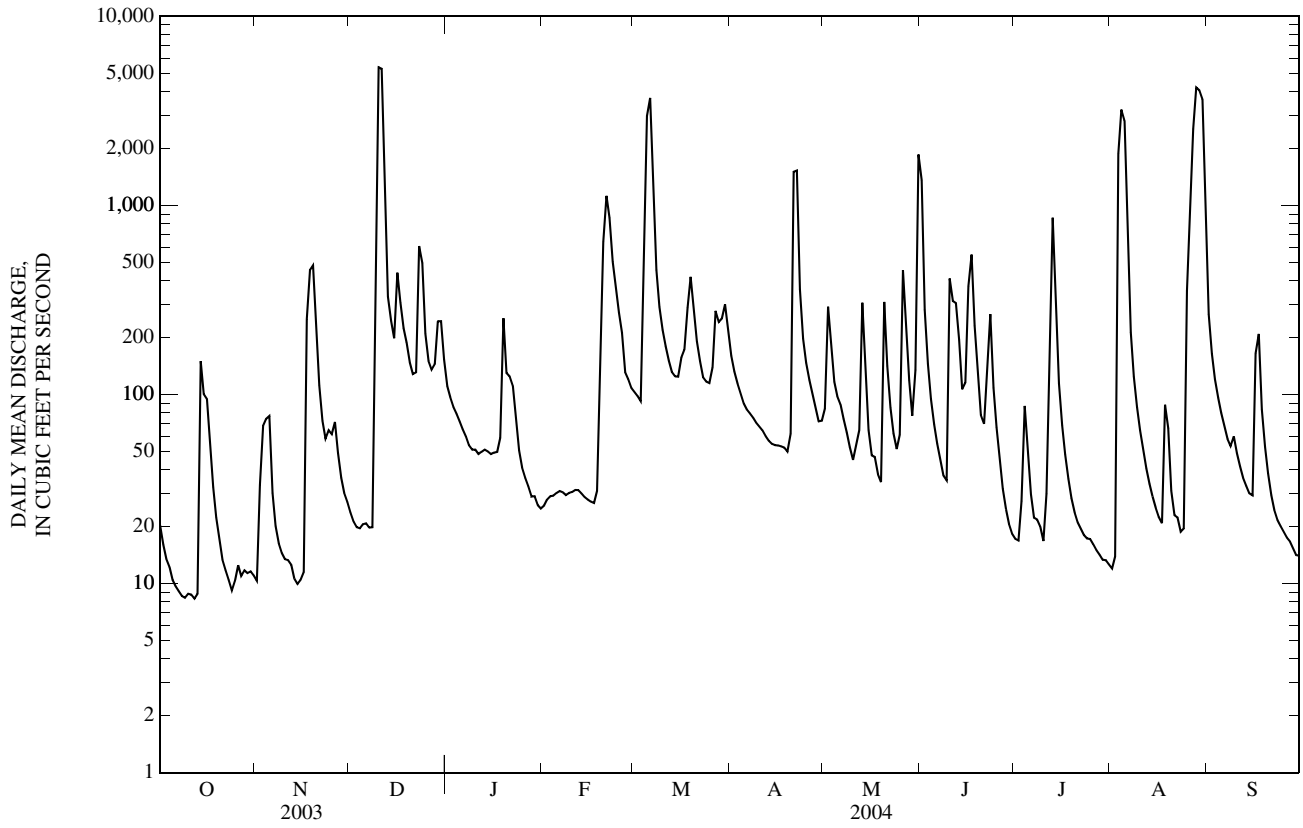
FOR 2004 WATER YEAR

WATER YEARS 1946 - 2004

ANNUAL MEAN	159	242	276
HIGHEST ANNUAL MEAN			837
LOWEST ANNUAL MEAN			18.7
HIGHEST DAILY MEAN	5,380	Dec 10	16,500
LOWEST DAILY MEAN	1.8	Jan 15,28	0.00
ANNUAL SEVEN-DAY MINIMUM	2.0	Feb 6	0.00
MAXIMUM PEAK FLOW	---		17,700
MAXIMUM PEAK STAGE	---		27.14
INSTANTANEOUS LOW FLOW	---		0.00
ANNUAL RUNOFF (INCHES)	5.50		9.54
10 PERCENT EXCEEDS	314		568
50 PERCENT EXCEEDS	20		38
90 PERCENT EXCEEDS	2.4		2.8

e Estimated

05498000 MIDDLE FABIUS RIVER NEAR MONTICELLO, MO—Continued



05499900 TROUBLESOME CREEK NEAR EWING, MO
(Ambient Water-Quality Monitoring Network)

LOCATION.--Lat 36°59'52", long 91°50'37", in NE ¼ NE ¼ SE ¼ sec.13, T.60 N., R.9 W., Lewis County, Hydrologic Unit 07110003, approximately 2.0 mi west of Ewing on U.S. Highway 156.

DRAINAGE AREA.--2.88 mi².

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, std units (00400)	Specific conductance, wat unfltrd, µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd, mg/L as CaCO ₃ (00900)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
NOV 03...	1530	Environmental	67	8.3	80	7.7	341	12.3	120	35.1	8.04	11.4	
JAN 06...	1025	Environmental	6.8	13.4	92	6.9	200	0.1	--	--	--	--	
MAR 02...	1540	Environmental	12	11.3	97	7.7	344	7.7	--	--	--	--	
MAY 18...	1115	Environmental	5.1	4.7	53	7.5	401	19.6	160	45.2	10.7	7.45	
JUL 21...	1115	Environmental	2.0	5.5	69	7.0	293	25.2	--	--	--	--	
SEP 13...	1530	Environmental	16	5.8	66	7.1	253	20.7	--	--	--	--	
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., field, mg/L (00450)	Carbonate, wat unfltrd, titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC, wat fltrd, mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd, mg/L as N (00625)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)
NOV 03...	11.2	92	93	113	<1	17.6	0.2	29.1	213	49	1.4	0.05	1.91
JAN 06...	--	97	97	118	<1	--	--	--	--	20	0.84	0.11	0.98
MAR 02...	--	93	92	113	<1	--	--	--	--	18	0.86	E.02n	0.58
MAY 18...	17.3	116	117	143	<1	20.7	0.2	35.7	267	24	1.2	0.09	2.36
JUL 21...	--	122	124	151	<1	--	--	--	--	56	1.9	0.58	0.41
SEP 13...	--	93	92	112	<1	--	--	--	--	11	0.86	<0.04	0.29
Date	Nitrite, water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	E coli, m-TEC MF, col/100 mL (31633)	Fecal coliform, M-FC, 0.7µ MF col/100 mL (31625)	Fecal streptococci, KF, MF, col/100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd, recoverable, µg/L (01105)	Arsenic, water, fltrd, µg/L (01000)	Cadmium, water, fltrd, µg/L (01025)	Cadmium, water, unfltrd, µg/L (01027)	Copper, water, fltrd, µg/L (01040)
NOV 03...	0.021	0.15	0.21	0.32	9,400k	10,000k	14,300k	5	922	1.5	<0.04	E.03n	3.0
JAN 06...	0.017	0.03	0.05	0.15	13k	20k	40	--	--	--	--	--	--
MAR 02...	0.009	<0.02	E.02n	0.13	8k	28k	48	--	--	--	--	--	--
MAY 18...	0.116	E.02n	0.04	0.15	210	180	370	2	416	1.8	<0.04	E.02n	1.9
JUL 21...	0.089	<0.02	0.07	0.19	390	530	620	--	--	--	--	--	--
SEP 13...	0.010	E.01n	E.04n	0.16	200	320	260	--	--	--	--	--	--

05499900 TROUBLESOME CREEK NEAR EWING, 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 03...	11	E.06n	1.31	73.3	E.01n	0.5	2	5
JAN 06...	--	--	--	--	--	--	--	--
MAR 02...	--	--	--	--	--	--	--	--
MAY 18...	23	<0.08	0.76	224	<0.02	0.4	M	2
JUL 21...	--	--	--	--	--	--	--	--
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:

- k -- Counts outside acceptable range
- n -- Below the LRL and above the LT-MDL

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO

LOCATION.--Lat 39°53'48", long 91°34'49", in SW 1/4 NW 1/4 sec.21, T.59 N., R.6 W., Marion County, Hydrologic Unit 07110003, on right bank at downstream side of county highway bridge, 4.5 mi southwest of Taylor, 5.0 mi downstream from Grassy Creek, and 5.3 mi upstream from confluence with North Fabius River.

DRAINAGE AREA.--620 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 825: 1936.

GAGE.--Water-stage recorder. Datum of gage is 482.91 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to May 14, 1936, nonrecording gage at bridge 4.0 mi downstream at datum 21.94 ft lower; May 14, 1936, to Dec. 2, 1940, nonrecording gage at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1928 reached a stage of 18.49 ft, from floodmarks, at present site and 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	51	21	67	253	e46	168	239	193	2,320	60	15	964
2	40	20	59	205	e49	160	191	201	960	66	16	631
3	34	134	53	180	e50	151	160	339	368	112	20	430
4	30	545	51	165	e50	513	141	263	221	80	144	304
5	25	1,390	50	148	e49	4,310	126	189	145	77	349	223
6	21	423	48	e122	e46	4,630	114	148	107	72	285	167
7	19	201	45	e110	e46	2,910	107	125	80	57	320	128
8	16	128	44	104	e45	851	101	104	62	61	142	102
9	17	90	46	95	e46	514	95	87	55	51	81	84
10	15	69	5,900	e90	e45	375	90	72	768	43	55	71
11	13	58	8,180	e88	e43	295	86	288	2,040	497	38	58
12	12	50	7,800	e86	e42	243	81	310	759	2,090	29	50
13	10	41	3,240	e85	e43	210	75	126	434	686	23	45
14	94	34	1,150	e81	e41	196	71	135	243	586	21	41
15	480	33	746	e78	e40	185	69	132	279	369	18	69
16	296	32	1,610	e75	e38	180	67	95	264	187	15	379
17	151	37	1,300	e83	e39	200	67	78	127	115	15	110
18	117	3,070	739	e1,650	e59	225	66	61	259	79	112	190
19	80	2,180	578	e1,060	e403	238	63	51	276	60	394	179
20	58	1,190	463	e696	e2,650	247	74	45	127	47	155	105
21	43	552	359	e418	e2,230	218	676	41	93	38	156	70
22	35	313	318	e235	1,220	175	2,310	39	322	32	138	53
23	29	224	466	e188	744	153	937	77	210	29	67	44
24	24	196	1,310	e156	546	141	410	57	174	26	48	37
25	28	165	725	e116	403	134	273	679	840	26	731	31
26	29	144	384	e85	307	170	216	242	666	23	3,500	27
27	27	147	285	e72	241	272	176	117	230	21	7,240	24
28	30	113	272	e68	200	234	146	86	181	19	10,100	21
29	29	90	364	e61	182	321	123	109	116	18	7,140	18
30	27	77	443	e54	---	293	127	496	78	19	4,160	18
31	22	---	353	e47	---	301	---	1,330	---	17	1,710	---
MEAN	61.4	392	1,208	224	343	620	249	204	427	183	1,201	156
MAX	480	3,070	8,180	1,650	2,650	4,630	2,310	1,330	2,320	2,090	10,100	964
MIN	10	20	44	47	38	134	63	39	55	17	15	18
IN.	0.11	0.71	2.25	0.42	0.60	1.15	0.45	0.38	0.77	0.34	2.23	0.28

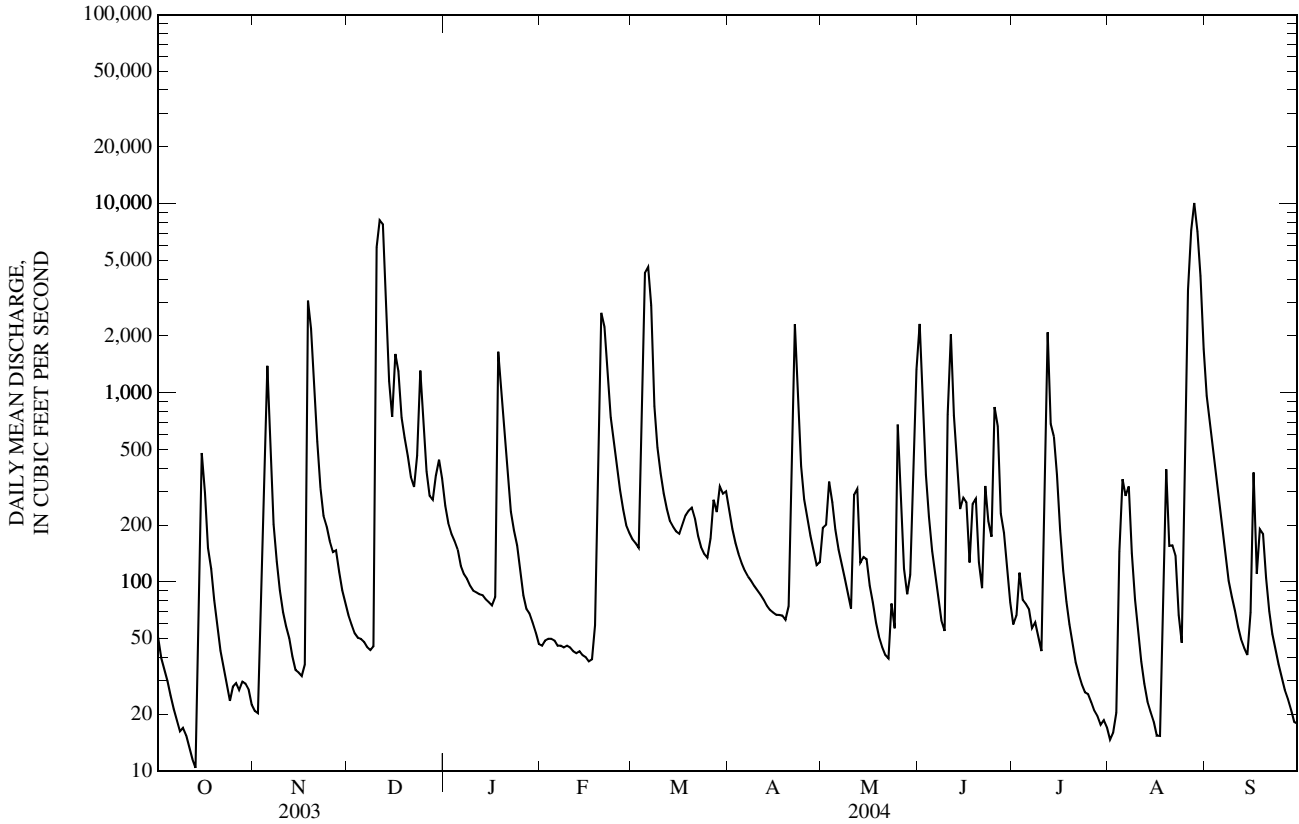
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

MEAN	254	288	260	293	527	690	757	776	492	376	180	193
MAX	2,690	3,103	2,137	2,000	2,340	2,659	3,989	4,078	3,891	3,647	2,335	2,841
(WY)	(1987)	(1986)	(1983)	(1965)	(1982)	(1973)	(1973)	(1995)	(1947)	(1993)	(1970)	(1970)
MIN	0.00	0.00	1.52	2.12	4.78	15.0	13.4	7.56	5.68	0.71	0.00	0.39
(WY)	(1957)	(1957)	(1964)	(1954)	(1989)	(1956)	(1989)	(1989)	(1977)	(1988)	(1936)	(1953)

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1935 - 2004	
ANNUAL MEAN	278		441		417	
HIGHEST ANNUAL MEAN					1,147	1993
LOWEST ANNUAL MEAN					27.4	1989
HIGHEST DAILY MEAN	8,180	Dec 11	10,100	Aug 28	18,800	Jun 8, 1947
LOWEST DAILY MEAN	2.3	Aug 27	10	Oct 13	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	3.0	Aug 22	15	Oct 7	0.00	Several Years
MAXIMUM PEAK FLOW	---		11,100	Aug 27	19,700	Jun 8, 1947
MAXIMUM PEAK STAGE	---		13.44	Aug 27	19.50	Jun 8, 1947
INSTANTANEOUS LOW FLOW	---		9.9	Oct 13	0.00	Several Years
ANNUAL RUNOFF (INCHES)	6.09		9.68		9.13	
10 PERCENT EXCEEDS	630		790		962	
50 PERCENT EXCEEDS	38		117		60	
90 PERCENT EXCEEDS	4.5		28		4.4	

e Estimated



05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
OCT 21...	0830	Blank	--	--	--	--	--	--	--	--	--	--	
21...	0900	Environmental	44	7.6	76	7.3	282	14.9	--	--	--	--	
NOV 03...	1330	Environmental	173	10.6	104	8.1	360	13.6	150	45.8	9.36	8.42	
DEC 16...	1410	Environmental	2,000	13.7	101	7.3	214	1.9	--	--	--	--	
JAN 06...	0850	Environmental	e122	15.4	--	7.8	M	0.5	190	57.7	11.2	5.16	
FEB 03...	1230	Environmental	e50	14.5	102	7.4	535	0.4	--	--	--	--	
03...	1231	Replicate	--	14.3	101	7.4	537	0.4	--	--	--	--	
MAR 02...	1410	Environmental	161	12.1	104	7.8	360	8.2	--	--	--	--	
APR 05...	1230	Environmental	124	12.3	118	8.6	423	13.0	--	--	--	--	
MAY 18...	1330	Environmental	60	9.1	107	8.1	437	22.6	190	57.7	12.0	5.59	
JUN 21...	1300	Environmental	75	8.1	93	7.9	311	20.9	--	--	--	--	
JUL 21...	1300	Blank	--	--	--	--	--	--	--	E.01n	<0.008	<0.16	
21...	1330	Environmental	36	9.3	126	7.3	339	29.3	140	44.1	7.72	7.06	
AUG 17...	0830	Environmental	15	8.2	96	7.9	323	22.7	--	--	--	--	
SEP 14...	0830	Environmental	42	6.6	78	7.7	391	22.1	--	--	--	--	
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd, titr., mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd, titr., mg/L (00450)	Carbonate, wat unfltrd, titr., mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat 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...	--	--	--	--	--	--	--	--	--	<10	<0.10	<0.04	<0.06
21...	--	92	92	113	<1	--	--	--	--	<10	0.78	E.02n	0.78
NOV 03...	9.78	131	131	159	<1	13.0	0.2	28.1	216	26	0.77	<0.04	<0.06
DEC 16...	--	63	64	78	<1	--	--	--	--	171d	1.5	0.14	1.12
JAN 06...	12.7	125	126	154	<1	14.8	<0.2	51.9	251	17	0.71	0.07	1.06
FEB 03...	--	168	168	205	<1	--	--	--	--	<10	0.49	0.05	0.87
03...	--	--	--	--	--	--	--	--	--	10	0.47	0.05	0.84
MAR 02...	--	104	104	127	<1	--	--	--	--	18	0.62	E.04n	0.86
APR 05...	--	134	133	146	8	--	--	--	--	<20d	0.68	<0.04	<0.06
MAY 18...	14.1	144	145	177	<1	15.3	0.2	48.4	278	14	0.78	E.02n	0.56
JUN 21...	--	103	103	126	<1	--	--	--	--	40d	1.2	<0.04	1.00
JUL 21...	<0.10	--	--	--	--	0.85	<0.2	<0.2	<10	<10	<0.10	<0.04	<0.06
21...	9.41	116	118	144	<1	12.9	0.2	24.5	207	22	0.87	<0.04	0.09
AUG 17...	--	112	111	136	<1	--	--	--	--	21	0.81	<0.04	0.18
SEP 14...	--	147	148	181	<1	--	--	--	--	<10	0.71	0.09	0.68

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC col/100 mL (31625)	Fecal streptococci KF col/100 mL (31673)	Aluminum, water, fltrd, µg/L (01106)	Aluminum, water, unfltrd recover-able, µg/L (01105)	Arsenic water, fltrd, µg/L (01000)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd, µg/L (01027)	Copper, water, fltrd, µg/L (01040)
OCT 21...	<0.008	<0.02	<0.04	<0.04	--	--	--	--	--	--	--	--	--
21...	0.018	0.20	0.25	0.28	100	120	74	--	--	--	--	--	--
NOV 03...	<0.008	0.03	0.04	0.13	140	210	180	2	280	1.3	<0.04	E.02n	1.7
DEC 16...	0.008	0.04	0.13	0.42	600	2,500	8,500	--	--	--	--	--	--
JAN 06...	0.012	<0.02	E.02n	0.14	17k	25k	92	3	756	0.6	<0.04	E.03n	2.3
FEB 03...	0.013	<0.02	<0.04	E.04n	1k	6k	18k	--	--	--	--	--	--
03...	<0.008	<0.02	<0.04	E.03n	2k	5k	17k	--	--	--	--	--	--
MAR 02...	0.013	0.02	0.04	0.10	6k	4k	25k	--	--	--	--	--	--
APR 05...	<0.008	<0.02	<0.04	0.05	2k	17k	15k	--	--	--	--	--	--
MAY 18...	0.018	0.02	E.04n	0.09	88	84	90	3	147	2.0	<0.04	E.02n	1.6
JUN 21...	0.012	0.04	0.07	0.19	230	240	192	--	--	--	--	--	--
JUL 21...	<0.008	<0.02	<0.04	<0.04	--	--	--	<2	E1n	<0.2	<0.04	<0.04	<0.4
21...	<0.008	<0.02	E.03n	0.10	96	110	70	3	287	1.9	<0.04	E.03n	1.8
AUG 17...	<0.008	<0.02	E.03n	0.08	23k	28k	98	--	--	--	--	--	--
SEP 14...	0.095	E.01n	E.03n	0.07	82	110	78	--	--	--	--	--	--

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...	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--
NOV 03...	38	<0.08	0.79v	55.3	0.03	0.4	2	3
DEC 16...	--	--	--	--	--	--	--	--
JAN 06...	11	<0.08	0.83	265	<0.02	0.8	2	3
FEB 03...	--	--	--	--	--	--	--	--
03...	--	--	--	--	--	--	--	--
MAR 02...	--	--	--	--	--	--	--	--
APR 05...	--	--	--	--	--	--	--	--
MAY 18...	8	<0.08	0.64	60.0	<0.02	0.6	M	<2
JUN 21...	--	--	--	--	--	--	--	--
JUL 21...	<6	<0.08	<0.06	<0.8	<0.02	<0.4	<0.6	<2
21...	E6n	<0.08	0.62	10.7	<0.02	0.5	<0.6	E2n
AUG 17...	--	--	--	--	--	--	--	--
SEP 14...	--	--	--	--	--	--	--	--

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

Value qualifier codes used in this table:
 e -- Estimated discharge value
 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

MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05501000 NORTH RIVER AT PALMYRA, MO

LOCATION.--Lat 39°49'05", long 91°31'04", in SE 1/4 SW 1/4 sec.13, T.58 N., R.6 W., Marion County, Hydrologic Unit 07110004, on right bank 100 ft upstream from City Waterworks Dam, 1,000 ft upstream from upstream bridge on dual U.S. Highways 24 and 61, 0.5 mi north of Palmyra, and 7.0 mi upstream from mouth.

DRAINAGE AREA.--373 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 464.81 ft above National Geodetic Vertical Datum of 1929 (levels by the U.S. Army Corps of Engineers). Prior to Oct. 1, 1945, nonrecording gage at bridge 1,000 ft downstream; Oct. 1, 1945, to June 22, 1951, nonrecording gage at present site and datum.

REMARKS.--Records poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage prior to 1934, about 28.0 ft, from floodmarks, date unknown, at site 1,000 ft downstream, at present 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	13	20	24	100	e23	109	108	125	e425	14	4.7	215
2	10	21	21	87	e32	105	90	140	e237	15	5.7	158
3	8.6	21	19	e75	e40	103	79	106	e129	52	7.1	125
4	7.2	198	19	e67	e32	723	70	84	e76	128	28	105
5	5.8	620	19	e57	e30	4,070	62	73	e48	186	284	91
6	4.4	199	19	50	e28	1,310	55	56	e32	77	112	78
7	3.5	104	18	53	e26	507	54	45	e23	93	62	68
8	3.1	67	17	46	e25	255	49	40	e18	66	32	60
9	4.1	46	18	43	e24	191	44	35	20	35	19	54
10	5.7	34	6,040	39	e23	147	46	32	711	23	13	48
11	5.0	28	3,080	41	e22	114	40	27	1,510	551	8.8	44
12	4.8	23	1,120	39	e21	96	38	37	329	322	6.8	40
13	5.7	20	355	37	e20	87	37	51	149	128	4.7	36
14	7.6	16	242	36	e31	87	34	42	117	70	3.9	35
15	7.4	13	195	36	e29	87	33	38	397	53	3.5	46
16	91	11	1,080	37	28	84	31	30	297	39	2.6	706
17	67	13	602	39	30	87	31	24	104	30	2.2	139
18	36	1,390	323	45	35	90	29	22	59	24	4.1	79
19	23	1,080	270	e60	373	91	28	20	43	20	12	56
20	14	468	227	e46	1,390	80	38	19	33	17	8.2	43
21	13	183	176	e39	709	71	542	18	30	14	9.1	36
22	13	110	145	e35	404	62	503	15	39	12	7.4	31
23	11	86	274	e31	293	58	197	16	39	10	13	29
24	9.6	75	366	e29	231	58	122	14	34	9.7	12	25
25	21	64	220	e28	195	58	98	2,890	67	11	1,530	23
26	22	54	146	e26	167	250	86	413	136	8.4	3,040	20
27	19	45	120	e25	141	347	69	176	85	6.8	8,500	19
28	35	39	112	e24	127	189	61	105	41	6.1	16,700	17
29	30	33	158	e23	111	246	55	70	24	5.4	2,930	18
30	26	29	168	e22	---	179	60	64	16	6.6	871	17
31	23	---	126	e21	---	138	---	697	---	5.8	342	---
MEAN	17.7	170	507	43.1	160	329	93.0	178	176	65.8	1,115	82.0
MAX	91	1,390	6,040	100	1,390	4,070	542	2,890	1,510	551	16,700	706
MIN	3.1	11	17	21	20	58	28	14	16	5.4	2.2	17
IN.	0.05	0.51	1.57	0.13	0.46	1.01	0.28	0.55	0.53	0.20	3.45	0.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2004, BY WATER YEAR (WY)

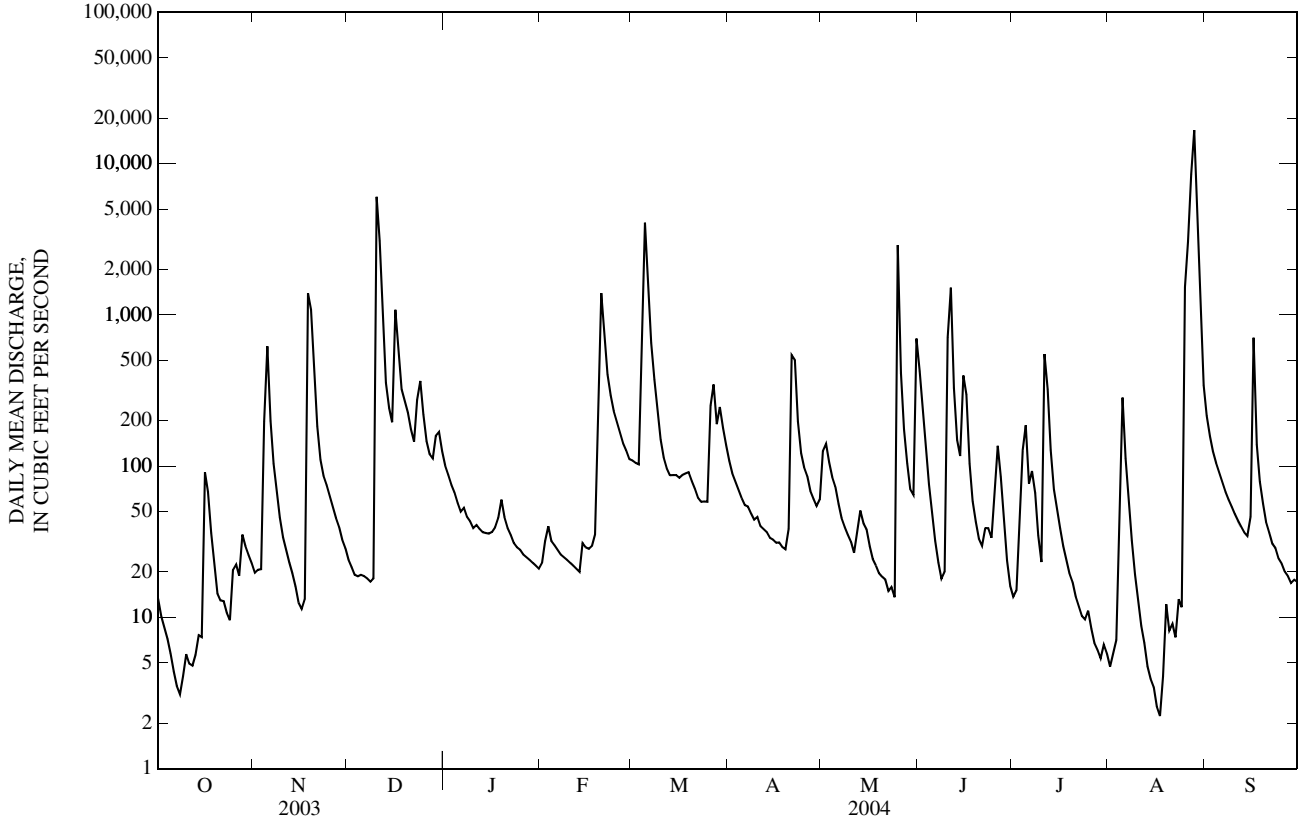
MEAN	144	173	168	179	316	432	477	494	307	235	117	120
MAX	1,742	2,639	1,832	991	1,720	2,783	2,691	2,322	2,296	2,100	1,357	1,351
(WY)	(1987)	(1986)	(1983)	(1969)	(1982)	(1973)	(1973)	(2002)	(1947)	(1993)	(1970)	(1970)
MIN	0.00	0.00	0.23	0.66	0.92	6.54	24.8	15.5	4.77	0.52	0.00	0.17
(WY)	(1957)	(1957)	(1957)	(1954)	(1954)	(1956)	(2000)	(1989)	(1936)	(1936)	(1936)	(1940)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1935 - 2004	
ANNUAL MEAN	110		247		260	
HIGHEST ANNUAL MEAN					748	
LOWEST ANNUAL MEAN					22.1	
HIGHEST DAILY MEAN	6,040	Dec 10	16,700	Aug 28	32,600	Apr 21, 1973
LOWEST DAILY MEAN	0.86	Aug 26	2.2	Aug 17	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 21	4.0	Aug 12	0.00	Several Years
MAXIMUM PEAK FLOW	---		19,400	Aug 28	57,400	Apr 21, 1973
MAXIMUM PEAK STAGE	---		24.06	Aug 28	29.70	Apr 21, 1973
INSTANTANEOUS LOW FLOW	---		2.1	Aug 16-18	0.00	Several Years
ANNUAL RUNOFF (INCHES)	4.02		9.03		9.48	
10 PERCENT EXCEEDS	227		358		454	
50 PERCENT EXCEEDS	21		43		38	
90 PERCENT EXCEEDS	3.1		10		3.4	

e Estimated

05501000 NORTH RIVER AT PALMYRA, MO—Continued



MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05502000 BEAR CREEK AT HANNIBAL, MO

LOCATION.--Lat 39°40'43", long 91°24'39", in SE ¼ NW ¼ sec.1, T.56 N., R.5 W., Ralls County, Hydrologic Unit 07110004, at bridge on Industrial Drive, on right downstream bank, and 4.65 mi upstream from mouth.

DRAINAGE AREA.--31.0 mi².

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

REVISED RECORDS.--WSP 1115: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 508.91 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 26, 1948, nonrecording gage; Mar. 26, 1948, to Sept. 30, 1953, water-stage recorder at datum 2.00 ft higher; Oct. 1, 1953, to Oct. 30, 1961, at present datum; Oct. 31, 1961, to Sept. 5, 1972, water-stage recorder 400 ft downstream at present datum; Sept. 6, 1972, to July 2, 1986, water-stage recorder 525 ft upstream at present datum.

REMARKS.--Records fair. Flow partially regulated by Bear Creek flood control reservoir, 1.0 mi upstream, since Aug. 7, 1961. U.S.G.S. satellite telemeter at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.0	4.5	9.4	6.7	7.0	8.4	8.1	6.7	0.85	1.3	431
2	3.1	3.3	4.2	8.9	8.2	6.0	7.5	5.9	4.1	2.3	1.6	402
3	2.9	4.0	4.3	8.5	7.1	5.9	6.9	5.2	3.4	19	1.6	365
4	2.9	15	4.6	16	5.1	63	6.4	4.9	3.0	18	2.6	47
5	2.6	14	4.9	16	5.5	149	6.3	4.7	2.8	3.2	3.5	6.4
6	2.4	6.3	4.5	12	5.7	231	6.2	4.2	2.8	14	2.0	5.3
7	2.2	4.8	4.4	7.9	4.8	168	6.2	3.8	2.5	7.4	1.3	4.5
8	2.1	4.0	4.4	8.2	4.4	19	6.5	3.6	2.2	3.1	1.0	3.9
9	2.7	3.7	8.9	7.9	5.0	14	5.6	3.4	2.8	2.3	0.98	3.6
10	3.0	3.6	93	7.9	4.8	12	5.5	3.1	4.1	4.5	0.79	3.5
11	2.5	3.7	25	7.4	5.0	10	5.4	4.3	4.0	30	0.66	3.3
12	2.5	3.5	117	7.4	5.4	9.0	5.3	5.7	2.8	22	0.11	3.2
13	2.6	3.1	191	7.1	4.6	8.5	5.0	6.0	2.2	3.7	0.14	3.0
14	4.8	3.1	189	7.0	4.9	9.9	4.9	8.0	2.0	2.5	0.19	2.8
15	4.7	3.3	118	6.7	5.1	8.5	4.9	5.8	1.8	2.0	0.06	5.3
16	3.4	3.4	114	6.6	4.6	9.2	4.8	4.5	1.7	1.7	0.02	12
17	2.7	4.8	31	10	4.7	9.3	4.7	3.6	1.6	1.5	0.01	4.8
18	2.4	49	21	13	21	8.5	4.5	4.0	1.6	1.2	0.00	3.5
19	2.3	7.7	16	7.5	41	7.4	4.2	3.8	1.6	0.98	0.01	3.0
20	2.1	5.6	12	6.1	31	7.0	10	3.4	1.5	0.91	0.38	3.0
21	2.1	46	11	6.2	25	6.2	16	3.1	1.8	1.2	0.41	2.5
22	2.0	129	14	6.3	23	6.1	7.5	2.7	1.8	1.3	0.26	2.8
23	2.1	68	59	5.8	21	6.4	5.9	3.0	1.6	1.3	0.22	2.6
24	2.0	9.9	32	5.8	56	6.7	7.3	4.8	1.2	1.3	0.84	2.5
25	13	7.3	14	7.8	12	6.8	11	53	2.1	1.3	17	2.5
26	6.1	6.5	12	5.5	8.2	12	6.6	e8.0	1.5	1.2	203	2.4
27	4.3	6.0	11	5.1	7.3	16	5.3	e6.0	1.2	1.0	311	2.3
28	4.2	5.4	22	5.0	6.8	18	4.8	4.6	1.2	0.88	40	2.2
29	3.5	5.1	16	5.1	6.7	19	4.0	3.9	1.1	0.77	10	2.1
30	3.2	5.0	11	7.0	---	11	7.3	8.9	0.98	1.7	192	2.2
31	3.0	---	9.9	9.5	---	9.4	---	46	---	1.6	451	---
MEAN	3.32	14.6	38.2	8.08	12.1	28.4	6.50	7.74	2.32	4.99	40.1	44.7
MAX	13	129	191	16	56	231	16	53	6.7	30	451	431
MIN	2.0	3.0	4.2	5.0	4.4	5.9	4.0	2.7	0.98	0.77	0.00	2.1
IN.	0.12	0.52	1.42	0.30	0.42	1.06	0.23	0.29	0.08	0.19	1.49	1.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004^a, BY WATER YEAR (WY)

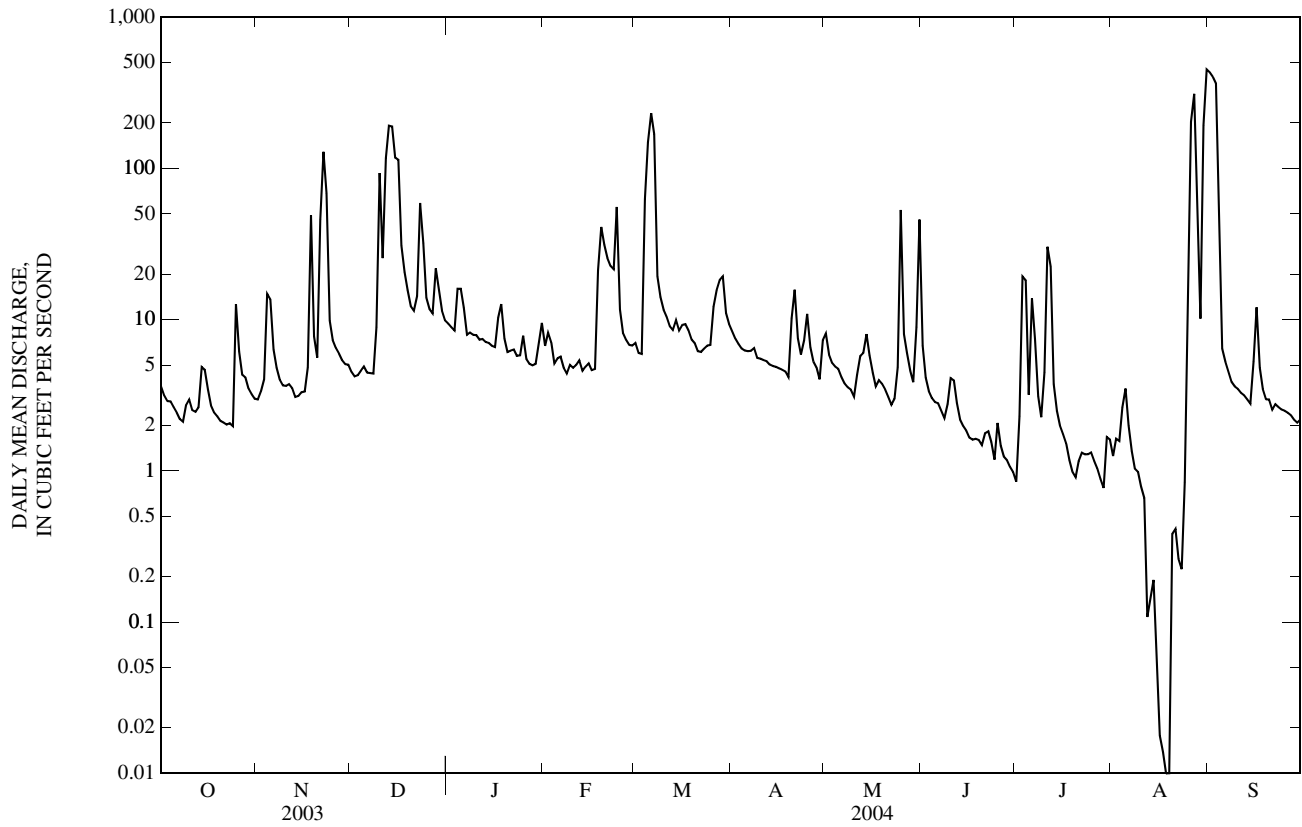
MEAN	13.3	19.1	18.2	15.2	31.3	36.7	37.2	39.1	21.3	18.2	14.7	15.0
MAX	116	225	155	84.0	136	125	193	183	76.5	193	141	190
(WY)	(1970)	(1986)	(1983)	(1969)	(1997)	(1973)	(1973)	(2002)	(1982)	(1981)	(1993)	(1970)
MIN	0.02	0.15	0.11	0.27	0.85	2.86	2.94	2.25	0.58	0.03	0.15	0.01
(WY)	(1964)	(1964)	(1964)	(1977)	(1964)	(1981)	(2000)	(2000)	(1963)	(1977)	(1962)	(1988)

05502000 BEAR CREEK AT HANNIBAL, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004 ^a	
ANNUAL MEAN	12.6		17.6		23.2	
HIGHEST ANNUAL MEAN					57.9	
LOWEST ANNUAL MEAN					5.33	
HIGHEST DAILY MEAN	191	Dec 13	451	Aug 31	1,470	Sep 25, 1970
LOWEST DAILY MEAN	0.00	Aug 18-27	0.00	Aug 18	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 18	0.06	Aug 13	0.00	Several Years
MAXIMUM PEAK FLOW	---		1,840	Aug 27	3,120	Sep 23, 1970
MAXIMUM PEAK STAGE	---		9.96	Aug 27	9.96	Aug 27, 2004
INSTANTANEOUS LOW FLOW	---		0.00	Aug 15-20	0.00	Several Years
ANNUAL RUNOFF (INCHES)	5.53		7.74		10.18	
10 PERCENT EXCEEDS	33		22		51	
50 PERCENT EXCEEDS	3.8		4.9		4.5	
90 PERCENT EXCEEDS	0.90		1.3		0.60	

e Estimated

^a Post-regulation period.



05502300 NORTH FORK SALT RIVER AT HAGERS GROVE, MO

LOCATION.--Lat 39°49'48", long 92°13'50", in NE ¼ SW ¼ sec.15, T.58 N., R.12 W., Shelby County, Hydrologic Unit 07110005, at bridge on State Highway 151, 200 ft downstream from old channel carrying Bear Creek, 0.25 mi west of Hagers Grove, 2.5 mi upstream from Ten Mile Creek, and at mile 143.8.

DRAINAGE AREA.--365 mi².

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

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

REMARKS.--Records fair except for estimated daily discharges and discharges below 10 ft³/s, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1947 reached a stage of 19.7 ft, discharge 26,900 ft³/s, according to information furnished 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	12	5.2	13	124	e20	e82	102	448	541	30	6.9	125
2	10	23	10	e98	e19	e86	82	375	196	34	13	85
3	8.8	48	9.8	e81	e18	e74	68	169	119	271	17	63
4	7.4	24	9.9	e68	e17	e200	58	108	83	382	834	51
5	6.7	20	11	e60	e16	e4,000	51	84	65	193	518	42
6	6.7	13	10	e54	e15	e1,500	44	69	54	99	165	37
7	6.1	8.6	9.7	e49	e15	e775	39	57	47	120	74	31
8	5.2	9.3	9.8	e43	e17	e260	37	48	40	81	47	38
9	4.2	9.2	523	e41	24	e180	34	40	38	69	32	32
10	4.3	9.1	8,560	e39	e34	e126	32	35	175	47	23	26
11	3.2	8.3	3,160	e40	e49	e117	30	41	358	91	18	e21
12	2.7	7.5	515	43	e67	e93	28	38	260	605	15	e17
13	2.6	5.6	288	e42	e46	e80	26	36	117	493	13	e15
14	183	5.4	243	e41	e31	e84	24	33	88	133	11	e14
15	97	6.0	229	e43	e23	e93	23	34	108	65	9.3	e13
16	80	6.0	527	e51	e20	116	23	33	135	44	8.5	194
17	43	134	310	e61	e18	146	22	27	136	33	30	120
18	26	1,080	286	e93	e38	194	22	24	149	25	39	53
19	17	471	299	e171	190	158	21	25	79	20	12	33
20	9.8	175	220	e116	e1,200	113	35	93	55	17	100	e24
21	5.4	85	180	e79	e700	85	1,890	54	46	14	56	e20
22	3.4	55	187	e54	e340	67	609	39	79	12	25	e17
23	4.9	47	1,170	e37	e277	60	212	35	91	11	16	e15
24	3.8	109	521	e41	e213	61	133	49	60	12	41	e14
25	10	104	220	e36	e164	61	108	1,210	237	11	2,180	e12
26	5.3	60	184	e31	e118	73	93	259	137	9.5	1,870	e12
27	4.7	39	156	e28	e95	172	72	132	64	8.7	880	e11
28	5.2	29	272	e26	e86	154	54	74	45	8.0	4,220	e10
29	3.7	22	542	e24	e80	325	46	48	36	7.8	1,690	9.5
30	5.8	19	247	e22	---	244	58	214	31	8.2	441	8.6
31	5.2	---	161	e21	---	140	---	2,000	---	8.2	207	---
MEAN	19.1	87.9	616	56.7	136	320	136	191	122	95.6	439	38.8
MAX	183	1,080	8,560	171	1,200	4,000	1,890	2,000	541	605	4,220	194
MIN	2.6	5.2	9.7	21	15	60	21	24	31	7.8	6.9	8.6
IN.	0.06	0.27	1.94	0.18	0.40	1.01	0.42	0.60	0.37	0.30	1.39	0.12

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

MEAN	166	261	200	120	332	401	440	618	267	353	97.1	103
MAX	1,201	1,426	1,319	576	1,599	1,177	2,036	2,631	1,074	3,033	441	937
(WY)	(1987)	(1986)	(1983)	(1999)	(1982)	(1979)	(1983)	(1995)	(1984)	(1993)	(1982)	(1993)
MIN	2.02	4.40	2.20	1.13	5.18	22.5	8.20	10.4	3.55	4.01	3.90	3.41
(WY)	(1989)	(1976)	(1977)	(1977)	(1989)	(1989)	(1989)	(1980)	(1988)	(1988)	(1984)	(1988)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

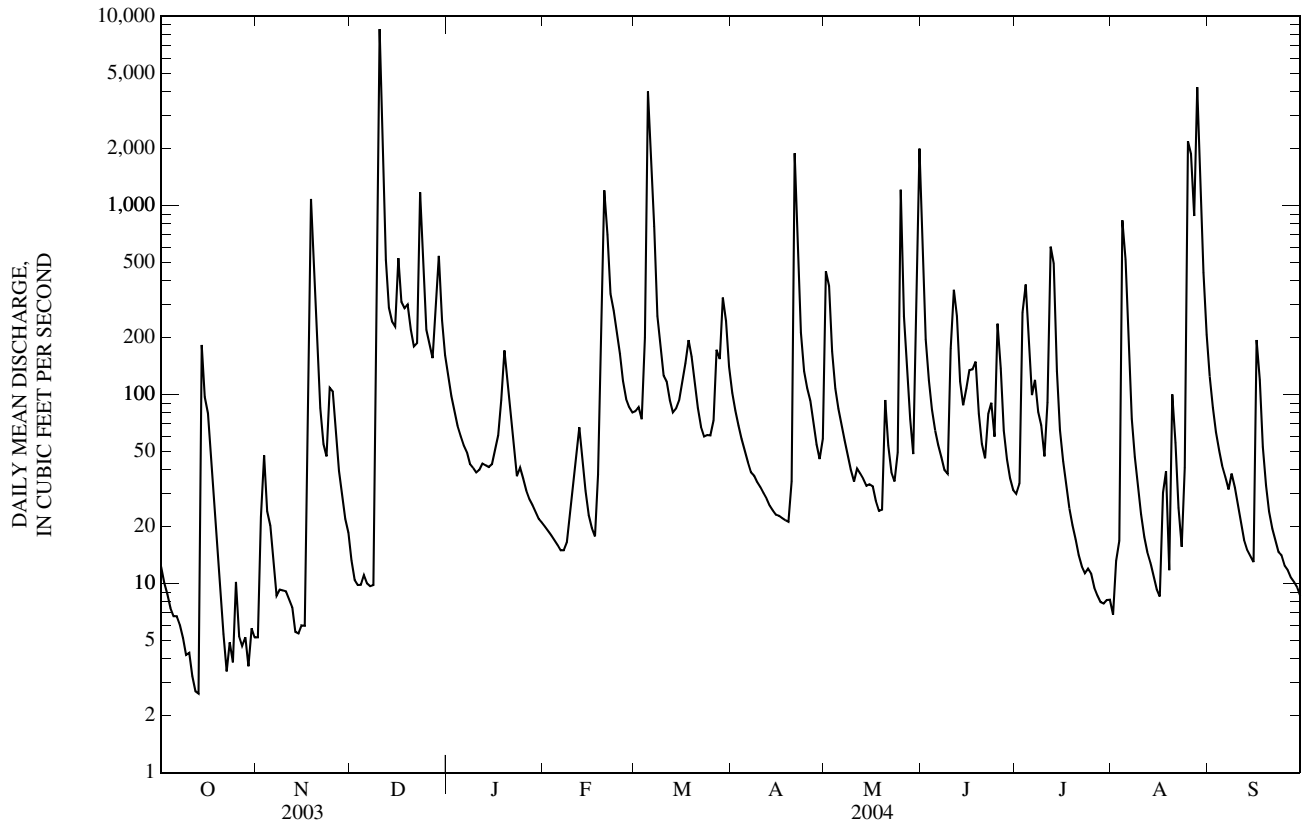
WATER YEARS 1974 - 2004

ANNUAL MEAN	124	189	280
HIGHEST ANNUAL MEAN			767
LOWEST ANNUAL MEAN			30.1
HIGHEST DAILY MEAN	8,560	Dec 10	25,000
LOWEST DAILY MEAN	0.70	Aug 22	0.18
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 20	0.44
MAXIMUM PEAK FLOW	---		42,000 ^a
MAXIMUM PEAK STAGE	---		20.91
INSTANTANEOUS LOW FLOW	---		0.10
ANNUAL RUNOFF (INCHES)	4.63		10.42
10 PERCENT EXCEEDS	224		488
50 PERCENT EXCEEDS	16		30
90 PERCENT EXCEEDS	3.8		4.2

e Estimated

^a Discharge determined by indirect measurement of peak flow.

05502300 NORTH FORK SALT RIVER AT HAGERS GROVE, MO—Continued



05502500 NORTH FORK SALT RIVER NEAR SHELBYNA, MO

LOCATION.--Lat 39°44'29", long 92°02'28", in SW ¼ NE ¼ sec.17, T.57 N., R.10 W., Shelby County, Hydrologic Unit 07110005, on right bank near downstream end of bridge on State Highway 15, 3.0 mi north of Shelbina, 15.0 mi upstream from Black Creek, and at mile 122.3.

DRAINAGE AREA.--481 mi².

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

GAGE.--Water-stage recorder and crest-stage gage with concrete control since Mar. 25, 1988. Datum of gage is 664.58 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 1, 1934, nonrecording gage at site 100 ft downstream at present datum; Mar. 1, 1934, to Nov. 2, 1962, water-stage recorder at site 175 ft downstream at present datum; Nov. 3, 1962, to Sept. 30, 1972, water-stage recorder at site 100 ft upstream at present datum; Oct. 1, 1972, to Sept. 30, 1979, gage-height records collected by U.S. Army Corps of Engineers, St. Louis District, at site 100 ft downstream; Oct. 1, 1979, to Sept. 1981, gage-height data collected by the U.S. Geological Survey at site 100 ft downstream.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water is pumped from river at the gage by the city of Shelbina. U. S. Army Corps of Engineers satellite telemeter at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	59	30	142	e24	105	152	316	921	23	26	254
2	18	57	25	e112	e23	110	115	568	274	35	42	136
3	16	96	21	e93	22	98	93	284	121	329	48	86
4	16	222	21	e77	e21	606	77	152	72	474	1,600	63
5	17	189	24	e68	e20	4,640	66	109	51	329	1,740	50
6	16	44	23	e61	e19	5,220	60	86	41	279	481	44
7	17	24	22	56	e18	1,010	58	70	35	451	169	37
8	20	20	23	48	e17	417	56	56	30	153	81	33
9	26	22	54	47	e17	271	52	46	27	125	49	37
10	e21	20	5,160	45	e19	190	50	37	838	73	34	31
11	e19	e19	8,270	47	e28	147	47	34	763	66	26	26
12	e17	e18	3,750	51	e40	116	45	44	477	750	21	23
13	e15	e17	566	e50	e70	96	43	39	202	772	20	22
14	110	e16	343	e49	e47	97	41	37	111	284	19	20
15	163	e16	265	51	e36	103	40	33	256	121	17	123
16	81	34	849	60	e29	129	39	33	243	70	15	253
17	53	46	510	71	e24	156	37	31	126	51	14	173
18	33	1,440	387	e110	48	216	35	27	200	39	50	77
19	24	1,200	378	e200	403	209	33	24	118	33	24	42
20	19	416	273	e140	1,180	156	e30	63	61	31	34	31
21	19	190	205	e98	1,340	111	e2,470	65	45	28	122	25
22	16	105	195	e66	539	85	1,080	37	40	27	40	22
23	17	76	961	e44	382	73	372	31	97	25	24	22
24	19	95	e602	e49	303	74	202	38	64	24	22	23
25	32	135	298	e44	225	75	148	1,410	133	27	1,320	22
26	43	99	202	e39	165	79	122	540	223	23	4,440	23
27	e22	66	170	e35	129	226	96	239	78	21	2,850	23
28	e24	49	241	e32	114	269	73	107	47	21	5,390	22
29	e21	37	606	e30	104	380	59	62	32	22	5,980	20
30	e20	34	351	e28	---	415	73	76	25	26	1,740	20
31	e19	---	198	e26	---	233	---	2,000	---	25	485	---
MEAN	31.3	162	807	66.7	186	520	195	216	192	153	868	59.4
MAX	163	1,440	8,270	200	1,340	5,220	2,470	2,000	921	772	5,980	254
MIN	15	16	21	26	17	73	30	24	25	21	14	20
IN.	0.08	0.38	1.94	0.16	0.42	1.25	0.45	0.52	0.44	0.37	2.08	0.14

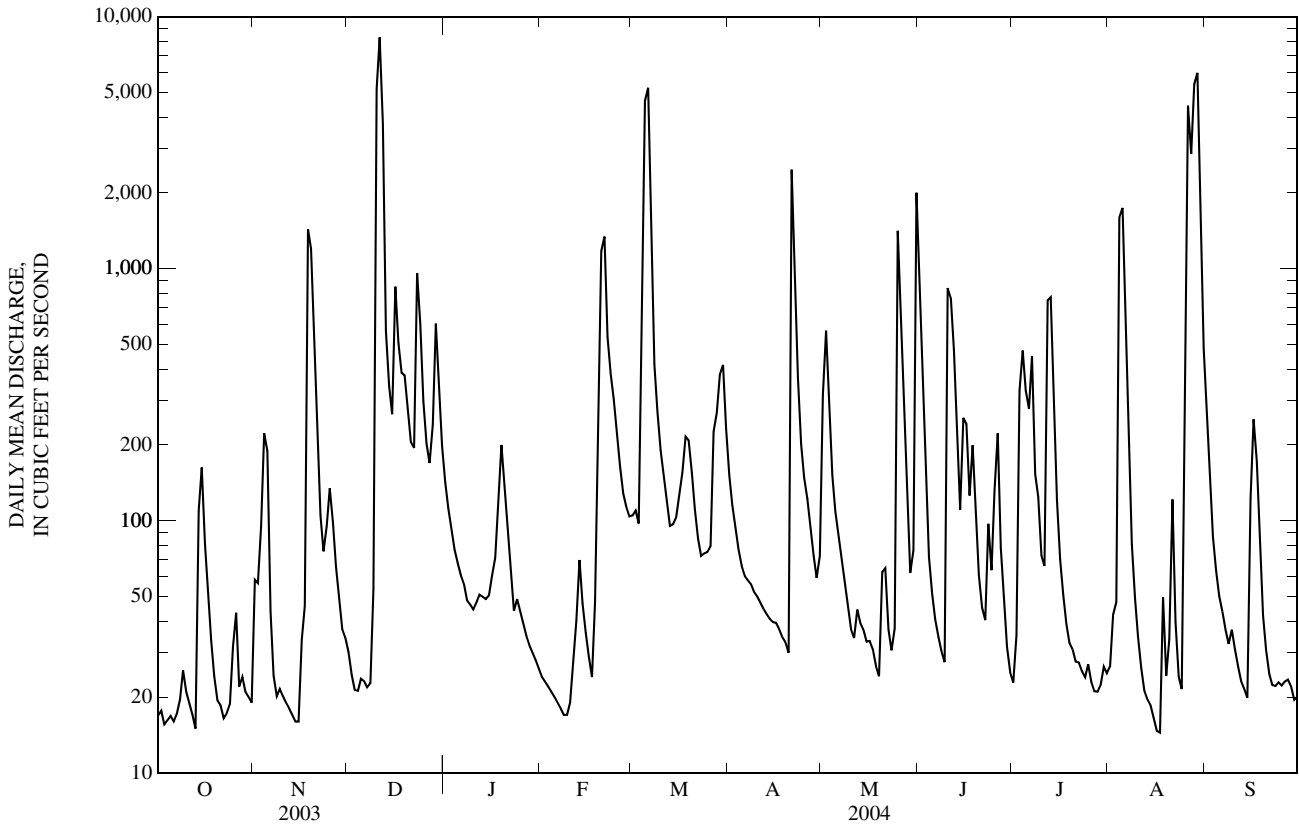
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	139	170	155	207	372	445	527	558	426	326	130	155
MAX	1,208	1,327	835	1,319	1,475	1,417	1,944	3,559	4,171	4,119	1,214	1,831
(WY)	(1999)	(1993)	(1972)	(1965)	(1997)	(1948)	(1944)	(2002)	(1947)	(1993)	(1970)	(1970)
MIN	0.00	0.00	0.00	0.01	1.80	6.41	7.24	12.2	2.93	0.00	0.00	0.00
(WY)	(1953)	(1954)	(1954)	(1954)	(1934)	(1956)	(1989)	(2000)	(1988)	(1934)	(1936)	(1953)

05502500 NORTH FORK SALT RIVER NEAR SHELBYNA, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	160		290		303	
HIGHEST ANNUAL MEAN					1,037	1993
LOWEST ANNUAL MEAN					36.2	1989
HIGHEST DAILY MEAN	8,270	Dec 11	8,270	Dec 11	20,500	May 14, 2002
LOWEST DAILY MEAN	2.0	Aug 24	14	Aug 17	0.00	Many Years
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 18	17	Oct 1	0.00	Many Years
MAXIMUM PEAK FLOW	---		8,930	Dec 11	24,600	May 13, 2002
MAXIMUM PEAK STAGE	---		18.67	Dec 11	27.40	Jun 7, 1947
INSTANTANEOUS LOW FLOW	---		14	Oct 3, Aug 16, 17	0.00	Many Years
ANNUAL RUNOFF (INCHES)	4.51		8.21		8.56	
10 PERCENT EXCEEDS	286		519		656	
50 PERCENT EXCEEDS	21		58		32	
90 PERCENT EXCEEDS	5.8		20		2.2	

e Estimated



SALT RIVER BASIN

05503800 CROOKED CREEK NEAR PARIS, MO

LOCATION.--Lat 39°35'05", long 91°59'37", NE ¼ NW ¼ SW ¼ sec.2, T.55 N., R.10 W., Monroe County, Hydrologic Unit 07110005, on right bank downstream from county road bridge, 7.0 mi north of Paris, 1.4 mi north of State Route 15, and at mile 8.9.

DRAINAGE AREA.--80.0 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 650.00 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 8, 1967, wire-weight gage and Nov. 9, 1967, to Sept. 30, 1979, recording gage at datum 50 ft lower.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 21, 1973 reached a stage of 15.53 ft; discharge, 12,100 ft³/s, according to information furnished 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	2.3	1.9	3.0	11	2.5	10	24	15	28	1.2	0.57	13
2	1.6	1.6	2.7	9.3	3.1	10	20	21	17	1.3	0.69	8.7
3	1.2	1.3	2.6	8.6	3.4	10	17	12	11	30	0.74	6.3
4	1.1	1.2	2.6	8.7	3.1	224	14	8.3	8.3	92	416	5.0
5	0.98	336	2.8	8.0	3.1	781	13	6.7	6.6	28	860	4.1
6	1.2	57	2.6	6.7	3.1	178	11	5.8	4.8	23	137	3.5
7	0.91	16	2.5	5.5	3.0	37	11	5.3	4.2	47	17	2.9
8	0.81	7.9	2.5	5.2	2.8	21	11	4.9	4.2	27	8.2	2.5
9	0.83	4.7	5.9	5.3	2.9	15	9.8	4.4	3.9	8.6	5.2	2.3
10	0.99	3.9	1,240	5.0	3.0	12	9.6	3.9	165	4.5	3.6	2.2
11	0.95	3.4	1,190	5.0	3.0	10	8.4	3.3	402	3.4	2.7	2.0
12	0.90	2.8	69	5.3	3.2	8.8	7.5	4.0	46	65	2.1	2.0
13	0.82	2.3	31	5.2	2.9	7.8	6.8	3.8	23	90	1.7	2.1
14	1.1	2.5	20	5.1	2.9	8.1	6.3	3.5	14	15	1.5	2.0
15	1.3	2.4	25	5.1	3.2	7.7	5.9	3.0	8.4	5.8	1.3	20
16	1.2	2.6	297	4.9	3.2	8.6	5.5	2.8	6.4	3.2	1.2	166
17	1.1	12	124	6.3	3.2	9.4	5.2	2.5	4.9	2.2	1.1	38
18	1.6	386	39	7.7	17	9.9	4.8	2.1	4.9	1.6	1.2	10
19	0.78	307	41	6.7	177	9.2	4.5	2.1	4.1	1.3	1.0	5.3
20	1.0	41	34	5.5	215	8.2	12	2.2	3.4	1.2	1.6	3.4
21	1.2	17	17	4.9	75	6.9	208	2.2	3.0	1.2	1.4	2.7
22	1.1	10	14	4.8	36	6.1	60	2.0	2.8	1.1	1.5	2.1
23	1.00	8.0	30	4.1	26	5.8	27	1.9	2.4	0.99	1.4	1.9
24	0.85	7.1	53	4.3	23	6.0	16	2.0	2.3	0.98	1.3	1.7
25	1.1	5.5	21	4.1	19	6.0	14	12	2.3	1.1	35	1.5
26	0.98	4.6	14	3.9	15	28	12	8.9	2.1	0.90	522	1.4
27	0.97	4.3	11	3.7	13	108	8.9	48	1.9	0.63	398	1.4
28	3.1	3.8	13	3.2	11	58	7.1	119	1.7	0.49	2,800	1.4
29	4.2	3.3	36	3.0	9.7	73	5.9	16	1.5	0.83	1,750	1.3
30	2.8	3.2	23	2.6	---	53	6.6	50	1.3	0.82	73	1.3
31	2.3	---	14	2.4	---	33	---	128	---	0.67	25	---
MEAN	1.36	42.0	109	5.52	23.7	57.1	19.1	16.3	26.4	14.9	228	10.6
MAX	4.2	386	1,240	11	215	781	208	128	402	92	2,800	166
MIN	0.78	1.2	2.5	2.4	2.5	5.8	4.5	1.9	1.3	0.49	0.57	1.3
IN.	0.02	0.59	1.57	0.08	0.32	0.82	0.27	0.24	0.37	0.21	3.29	0.15

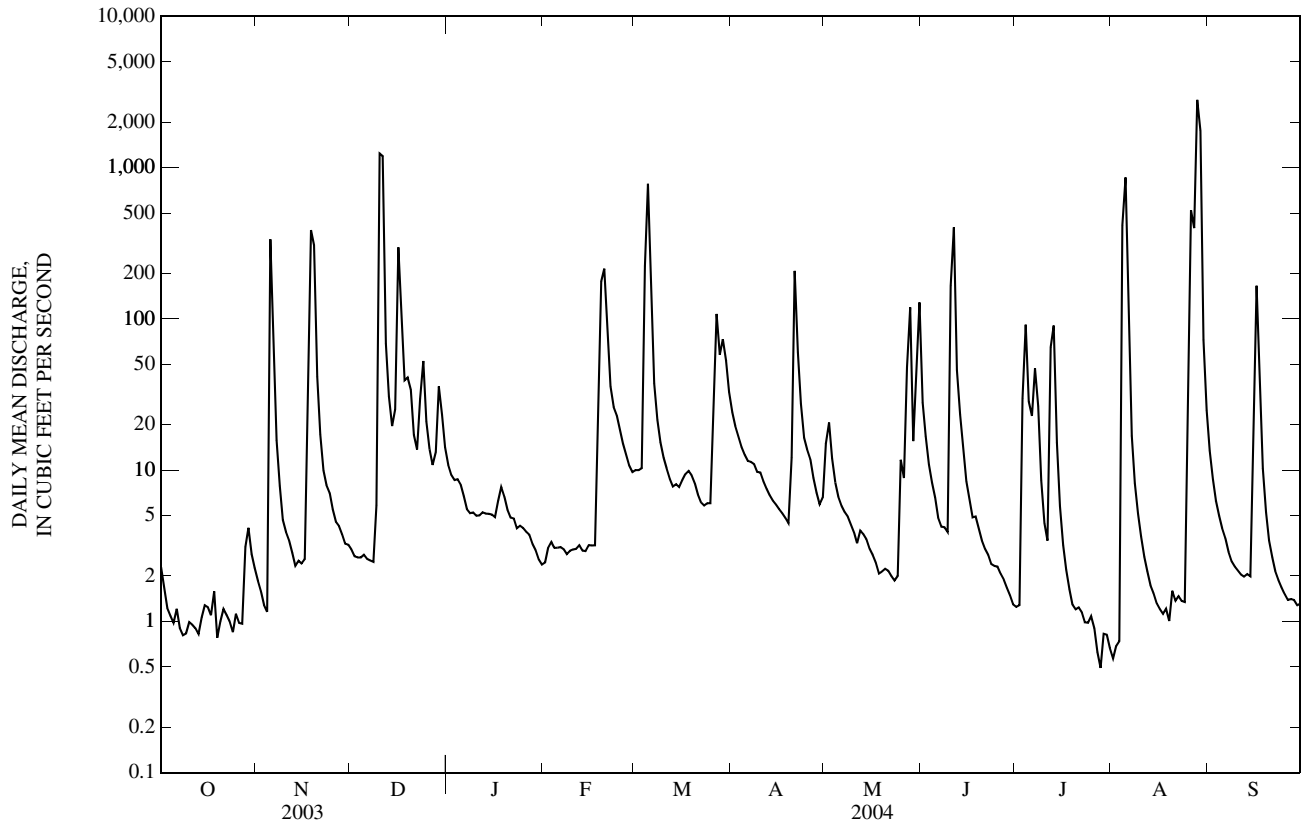
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	23.6	55.7	51.2	31.0	76.5	77.3	85.0	141	68.7	70.4	30.4	35.7
MAX	321	550	247	162	359	244	319	669	250	554	228	510
(WY)	(1987)	(1986)	(1983)	(1999)	(1985)	(1998)	(1983)	(1995)	(1998)	(1993)	(2004)	(1993)
MIN	0.00	0.00	0.00	0.00	0.00	0.07	0.16	1.53	0.03	0.00	0.00	0.00
(WY)	(1980)	(1981)	(1989)	(1989)	(1989)	(1989)	(1989)	(1988)	(1988)	(1988)	(1988)	(1983)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1980 - 2004
ANNUAL MEAN	26.7	46.6	62.1
HIGHEST ANNUAL MEAN			179
LOWEST ANNUAL MEAN			7.38
HIGHEST DAILY MEAN	1,240	Dec 10	2,800
LOWEST DAILY MEAN	0.00	Jul 27, Aug 1-4, 11-30	0.49
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 12	0.67
MAXIMUM PEAK FLOW	---		3,210
MAXIMUM PEAK STAGE	---		9.79
INSTANTANEOUS LOW FLOW	---		0.42
ANNUAL RUNOFF (INCHES)	4.54		7.92
10 PERCENT EXCEEDS	39		54
50 PERCENT EXCEEDS	2.4		5.0
90 PERCENT EXCEEDS	0.02		1.2

05503800 CROOKED CREEK NEAR PARIS, MO—Continued



05504800 SOUTH FORK SALT RIVER ABOVE SANTA FE, MO

LOCATION.--Lat 39°19'34", long 91°50'02", in SE 1/4 SE 1/4 sec.31, T.53 N., R.8 W., Audrain County, Hydrologic Unit 07110006, on left bank near downstream side of bridge on county road ZZ, 3.6 mi southwest of Santa Fe, 1.0 mi upstream from Littleby Creek, and at mile 104.2 above mouth of Salt River.

DRAINAGE AREA.--233 mi².

PERIOD OF RECORD.--February 1940 to Oct. 22, 2002, May 14, 2003 to current year. Published as "near Santa Fe" (05504900) October 1968 to September 1975 and as "at Santa Fe" (05505000) February 1940 to September 1968 and October 1975 to September 1986.

GAGE.--Water-stage recorder. Datum of gage is 644.87 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 5, 1940, nonrecording gage; Feb. 5, 1940, to Sept. 30, 1968, and Oct. 1, 1975 to Sept. 30, 1986, water-stage recorder 8.0 mi downstream at datum 613.05; Oct. 1, 1968, to Sept. 30, 1975, water-stage recorder, 1.0 mi downstream at datum 5.78 ft lower.

REMARKS.--No estimated daily discharges. Records fair. 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	14	4.9	11	42	18	27	140	544	50	3.2	4.1	77
2	11	3.4	9.3	39	21	26	104	389	40	3.4	3.5	57
3	8.8	2.9	8.7	38	27	35	82	168	29	3.3	2.0	42
4	7.5	4.5	8.2	638	30	1,390	68	95	24	10	53	35
5	6.7	19	7.9	837	29	4,090	58	71	21	19	205	28
6	5.9	25	7.2	191	26	1,460	50	56	17	103	65	24
7	5.2	12	7.2	259	25	297	45	43	15	379	29	21
8	4.6	8.5	6.7	112	23	173	41	32	15	106	17	17
9	5.1	7.6	15	47	21	119	36	25	16	47	12	14
10	4.7	5.7	2,020	41	22	90	33	20	15	28	7.9	14
11	4.1	4.8	1,490	35	20	73	30	20	23	19	5.7	12
12	4.0	4.1	234	31	23	61	28	21	24	15	3.3	11
13	5.3	6.2	118	31	25	53	26	21	17	18	2.5	8.6
14	5.5	5.1	76	29	26	53	23	24	13	22	2.2	7.0
15	13	5.7	80	27	30	54	21	26	12	16	2.8	351
16	10	7.4	895	26	37	55	20	23	72	11	2.6	2,170
17	6.5	8.2	474	207	39	52	19	19	51	6.2	1.9	459
18	4.5	517	143	1,720	92	55	17	17	28	4.6	0.78	135
19	4.3	1,400	93	377	888	55	16	396	20	3.8	0.28	77
20	6.0	228	74	220	1,150	50	27	833	16	3.0	0.57	51
21	9.7	87	55	145	492	39	569	168	12	2.6	6.0	40
22	8.7	53	53	67	198	34	300	89	11	1.5	13	30
23	6.4	41	1,390	61	115	31	113	65	9.1	0.46	7.5	24
24	4.7	44	709	45	98	71	75	48	7.8	0.14	6.4	19
25	6.4	39	173	40	79	106	209	48	7.7	1.0	176	15
26	12	34	96	35	58	447	151	605	6.6	1.1	6,290	13
27	15	26	72	33	46	2,570	79	495	5.2	4.9	4,830	11
28	8.9	19	65	31	44	623	52	588	4.7	2.8	1,620	9.0
29	6.7	15	82	24	39	758	38	205	4.6	0.94	647	8.2
30	4.5	13	81	21	---	427	44	97	3.5	1.5	207	7.5
31	4.4	---	55	19	---	219	---	65	---	2.8	115	---
MEAN	7.23	88.4	278	176	129	438	83.8	171	19.7	27.1	463	126
MAX	15	1,400	2,020	1,720	1,150	4,090	569	833	72	379	6,290	2,170
MIN	4.0	2.9	6.7	19	18	26	16	17	3.5	0.14	0.28	7.0
IN.	0.04	0.42	1.37	0.87	0.60	2.17	0.40	0.85	0.09	0.13	2.29	0.60

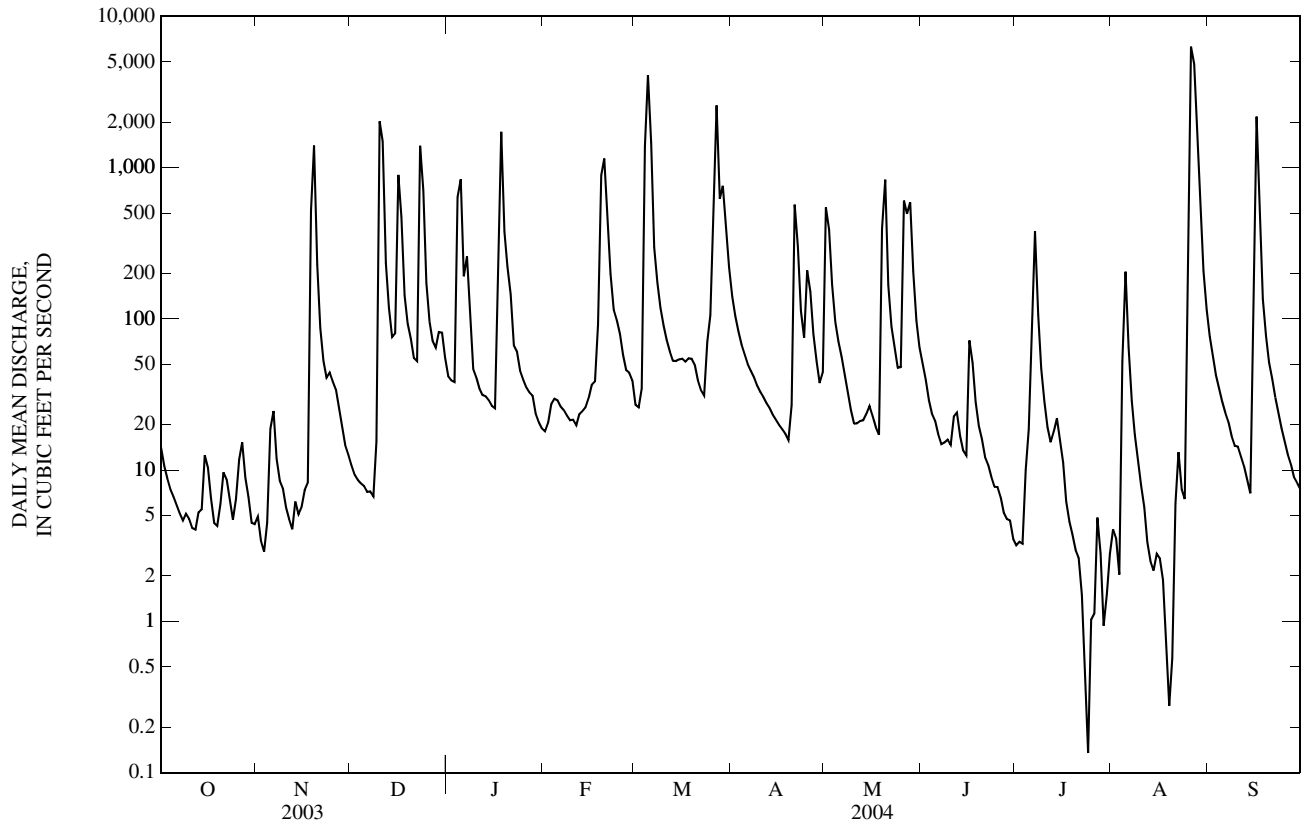
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	121	126	129	140	225	303	330	310	240	196	61.8	127
MAX	1,646	1,378	1,447	792	1,031	1,715	1,734	2,238	1,307	2,415	544	1,830
(WY)	(1942)	(1986)	(1983)	(1974)	(1985)	(1973)	(1944)	(1943)	(1942)	(1969)	(1982)	(1993)
MIN	0.01	0.36	0.58	1.18	1.91	2.74	3.42	5.92	3.28	1.31	0.46	0.22
(WY)	(1954)	(1954)	(1964)	(1963)	(1954)	(1954)	(2000)	(1980)	(1988)	(1944)	(1964)	(1960)

SUMMARY STATISTICS

	FOR 2004 WATER YEAR	FOR PERIOD OF RECORD
ANNUAL MEAN	169	192
HIGHEST ANNUAL MEAN		509
LOWEST ANNUAL MEAN		10.7
HIGHEST DAILY MEAN	6,290	Aug 26
LOWEST DAILY MEAN	0.14	Jul 24
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 20
MAXIMUM PEAK FLOW	7,730	Aug 26
MAXIMUM PEAK STAGE	19.54	Aug 26
INSTANTANEOUS LOW FLOW	0.04	Jul 24
ANNUAL RUNOFF (INCHES)	9.85	11.21
10 PERCENT EXCEEDS	382	317
50 PERCENT EXCEEDS	27	16
90 PERCENT EXCEEDS	4.5	1.6

05504800 SOUTH FORK SALT RIVER ABOVE SANTA FE, MO—Continued



05506100 LONG BRANCH NEAR SANTA FE, MO

LOCATION.--Lat 39°21'21", long 91°50'03", in NE ¼ SE ¼ SE ¼ sec. 19, T.53 N., R.8 W., Monroe County, Hydrologic Unit 07110006, on left bank on west side of concrete ford on County Road 614, 2 mi southwest of Santa Fe.

DRAINAGE AREA.--180 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges and discharges below 10 ft³/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	2.9	1.7	8.0	37	e11	24	65	33	179	0.29	0.50	45
2	2.5	1.2	7.1	30	e10	22	50	36	56	0.30	0.69	30
3	1.8	0.79	6.3	26	16	20	41	34	29	0.48	0.71	21
4	1.6	0.91	6.0	220	13	1,450	35	25	22	0.41	148	16
5	1.4	13	5.9	260	12	3,140	31	19	16	3.7	390	11
6	1.2	9.7	5.4	87	e14	1,190	27	14	11	201	237	8.6
7	0.87	9.4	5.3	73	e12	243	24	10	8.1	394	58	7.4
8	0.81	11	4.6	46	e11	83	23	6.6	5.9	183	25	5.9
9	0.60	5.7	8.8	30	e10	57	20	4.3	5.9	58	13	4.4
10	0.50	4.9	2,690	28	9.5	44	20	3.3	6.2	27	7.9	3.3
11	0.74	4.8	1,390	20	9.8	37	19	4.0	5.1	16	4.9	2.6
12	0.94	3.9	587	18	12	32	17	3.5	4.3	11	3.4	2.5
13	0.77	2.1	116	16	11	28	16	2.6	3.6	6.9	2.4	2.3
14	1.1	1.4	67	15	12	28	15	4.9	3.0	4.6	2.0	2.1
15	0.77	1.6	76	14	17	26	14	3.3	2.8	3.8	1.5	213
16	0.81	1.6	792	14	20	26	14	2.1	41	3.2	1.3	777
17	0.52	2.2	478	155	22	27	13	1.5	54	3.0	1.3	160
18	0.59	776	180	759	111	27	13	1.3	30	2.5	1.3	51
19	0.41	867	84	259	554	26	11	53	18	2.1	1.0	27
20	0.45	307	69	99	475	24	24	154	13	1.9	1.5	17
21	0.35	100	54	77	182	22	64	83	11	1.4	1.3	12
22	0.21	51	49	45	107	19	41	39	9.5	1.1	0.90	8.8
23	0.18	36	801	41	76	18	33	27	7.9	0.76	1.0	6.2
24	0.17	27	463	28	64	19	27	18	4.4	0.60	5.6	3.7
25	0.95	20	166	23	54	29	29	19	2.8	0.58	51	3.0
26	1.2	17	70	20	44	460	20	47	1.8	0.41	3,880	2.5
27	0.75	16	49	17	36	1,910	16	130	1.2	0.31	2,880	1.9
28	0.82	14	45	e15	30	870	12	255	0.84	0.38	4,520	1.3
29	4.4	12	45	e14	26	376	9.2	116	0.57	0.46	2,440	1.1
30	3.0	9.6	47	e13	---	189	13	46	0.39	0.65	928	0.82
31	2.3	---	45	e12	---	99	---	229	---	0.54	94	---
MEAN	1.15	77.6	272	81.0	68.3	341	25.2	45.9	18.5	30.0	507	48.3
MAX	4.4	867	2,690	759	554	3,140	65	255	179	394	4,520	777
MIN	0.17	0.79	4.6	12	9.5	18	9.2	1.3	0.39	0.29	0.50	0.82
IN.	0.01	0.48	1.74	0.52	0.41	2.18	0.16	0.29	0.11	0.19	3.25	0.30

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

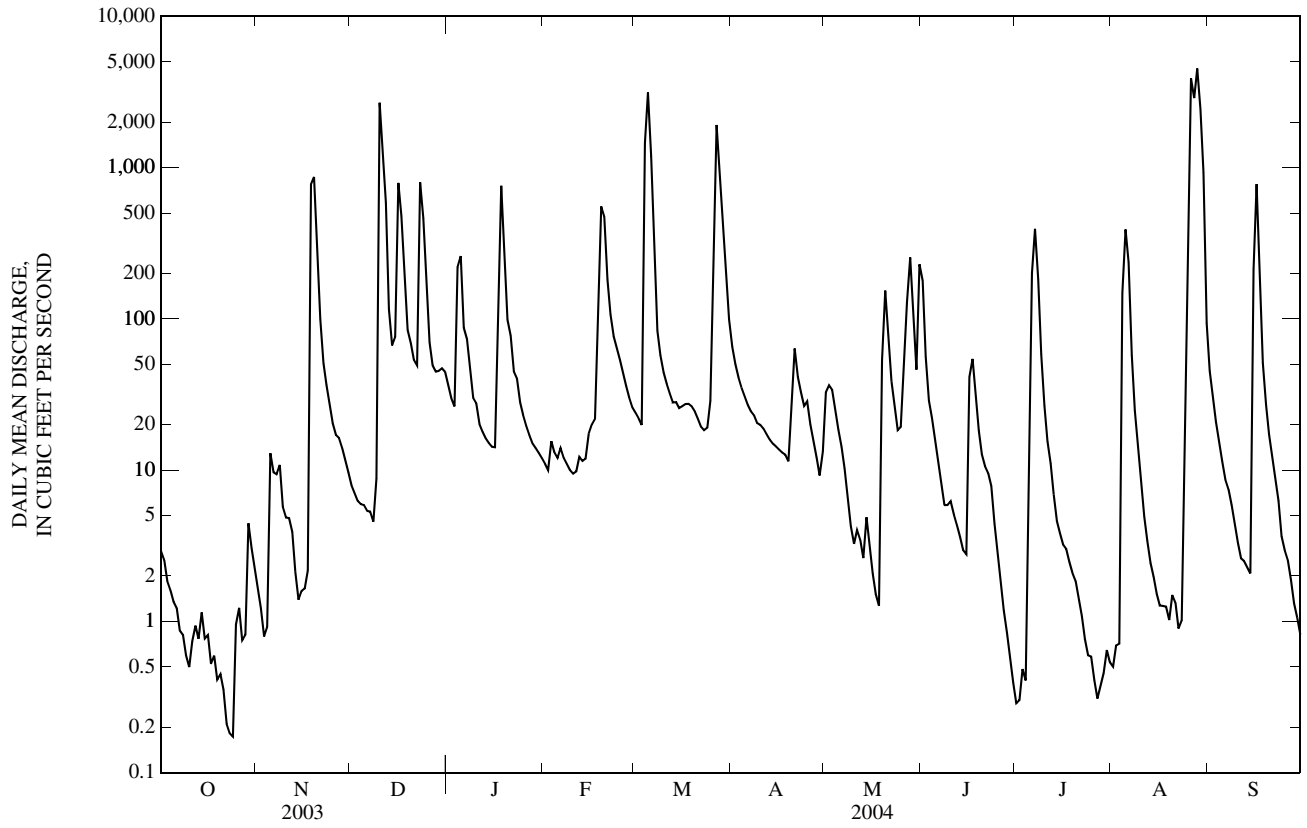
	35.6	41.7	38.8	154	273	154	208	341	182	128	103	37.2
MEAN	35.6	41.7	38.8	154	273	154	208	341	182	128	103	37.2
MAX	266	246	272	534	1,053	487	636	1,062	514	943	507	255
(WY)	(1999)	(1999)	(2004)	(1999)	(1997)	(1998)	(1999)	(1995)	(1998)	(1998)	(2004)	(2003)
MIN	0.01	0.00	0.61	0.11	17.6	13.1	1.25	16.4	18.5	4.23	0.04	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(1996)	(2000)	(2000)	(2000)	(2004)	(2002)	(1999)	(1999)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1995 - 2004
ANNUAL MEAN	112	127	134
HIGHEST ANNUAL MEAN			237
LOWEST ANNUAL MEAN			35.8
HIGHEST DAILY MEAN	3,760	May 10	12,400
LOWEST DAILY MEAN	0.00	Jul 26-Aug 30	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 26	0.00
MAXIMUM PEAK FLOW	---		16,700
MAXIMUM PEAK STAGE	---		22.43
INSTANTANEOUS LOW FLOW	---		0.00
ANNUAL RUNOFF (INCHES)	8.44		10.14
10 PERCENT EXCEEDS	168		183
50 PERCENT EXCEEDS	8.0		9.6
90 PERCENT EXCEEDS	0.01		0.08

e Estimated

05506100 LONG BRANCH NEAR SANTA FE, MO—Continued



05506350 MIDDLE FORK SALT RIVER NEAR HOLLIDAY, MO

LOCATION.--Lat 39°31'27", long 92°07'40", in NE ¼ SW ¼ NW ¼ sec. 27, T. 55 N., R. 11 W., Monroe County, Hydrologic Unit 07110006, on right bank, downstream side of Highway A bridge, approximately 2.1 mi north of Holliday.

DRAINAGE AREA.--313 mi².

PERIOD OF RECORD.--Dec. 17, 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 651.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for period Oct. 3-16 and 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	12	13	24	113	7.4	59	176	187	809	17	9.5	248
2	9.1	12	20	93	8.4	57	135	216	202	21	10	122
3	8.2	15	18	84	9.3	62	110	149	99	64	10	88
4	7.3	21	16	84	8.6	665	92	97	68	179	1,240	69
5	6.7	845	17	81	8.5	2,420	79	70	51	257	2,020	56
6	7.3	194	16	e69	9.1	2,060	70	56	41	267	1,770	46
7	6.9	98	15	e55	9.3	1,230	63	46	34	413	917	39
8	7.6	66	14	43	9.0	265	69	38	29	218	114	33
9	13	47	31	40	9.6	168	78	31	25	156	63	28
10	12	35	3,780	e39	11	131	62	25	897	110	43	24
11	11	27	3,500	35	11	111	53	23	2,300	73	31	21
12	12	22	3,330	35	14	96	47	261	810	111	24	18
13	10	16	1,940	33	14	87	43	166	248	711	20	16
14	9.2	12	251	e31	13	86	39	65	143	236	18	15
15	8.2	10	209	e30	22	83	37	51	780	82	16	384
16	25	9.1	881	e33	26	92	35	38	769	64	14	2,200
17	57	24	654	79	29	104	34	26	173	41	13	440
18	28	1,400	299	e120	117	121	32	21	95	26	12	129
19	16	1,690	236	e90	314	128	30	19	85	21	11	83
20	11	716	201	69	583	112	60	17	63	19	11	59
21	8.7	227	172	51	501	92	541	15	54	16	11	44
22	7.2	130	127	44	246	80	547	13	40	14	12	35
23	7.7	96	170	33	171	72	334	14	32	12	18	29
24	9.1	76	233	33	132	69	164	14	29	12	32	25
25	18	69	218	27	112	71	118	68	25	11	496	23
26	41	108	133	24	95	2,390	91	810	23	11	1,880	22
27	23	70	105	20	82	4,780	74	2,010	53	10	1,560	20
28	18	48	142	17	73	3,860	60	3,360	60	10	6,110	18
29	22	37	262	12	67	1,190	53	580	33	11	6,290	17
30	23	29	216	9.6	---	489	62	410	22	10	5,230	16
31	18	---	154	8.0	---	262	---	751	---	9.6	2,400	---
MEAN	15.3	205	561	49.5	93.5	693	113	311	270	104	981	146
MAX	57	1,690	3,780	120	583	4,780	547	3,360	2,300	711	6,290	2,200
MIN	6.7	9.1	14	8.0	7.4	57	30	13	22	9.6	9.5	15
IN.	0.06	0.73	2.07	0.18	0.32	2.55	0.40	1.15	0.96	0.38	3.61	0.52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

MEAN	27.4	60.0	118	203	321	295	290	609	303	91.3	188	75.4
MAX	93.2	205	561	611	1,136	693	771	2,021	978	237	981	243
(WY)	(2002)	(2004)	(2004)	(1999)	(2001)	(2004)	(1999)	(2002)	(2001)	(1999)	(2004)	(2003)
MIN	5.57	1.12	4.47	2.12	29.7	34.4	3.89	21.9	72.3	33.7	2.64	2.82
(WY)	(2003)	(2000)	(2003)	(2000)	(2000)	(2003)	(2000)	(2000)	(1999)	(2003)	(1999)	(2002)

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

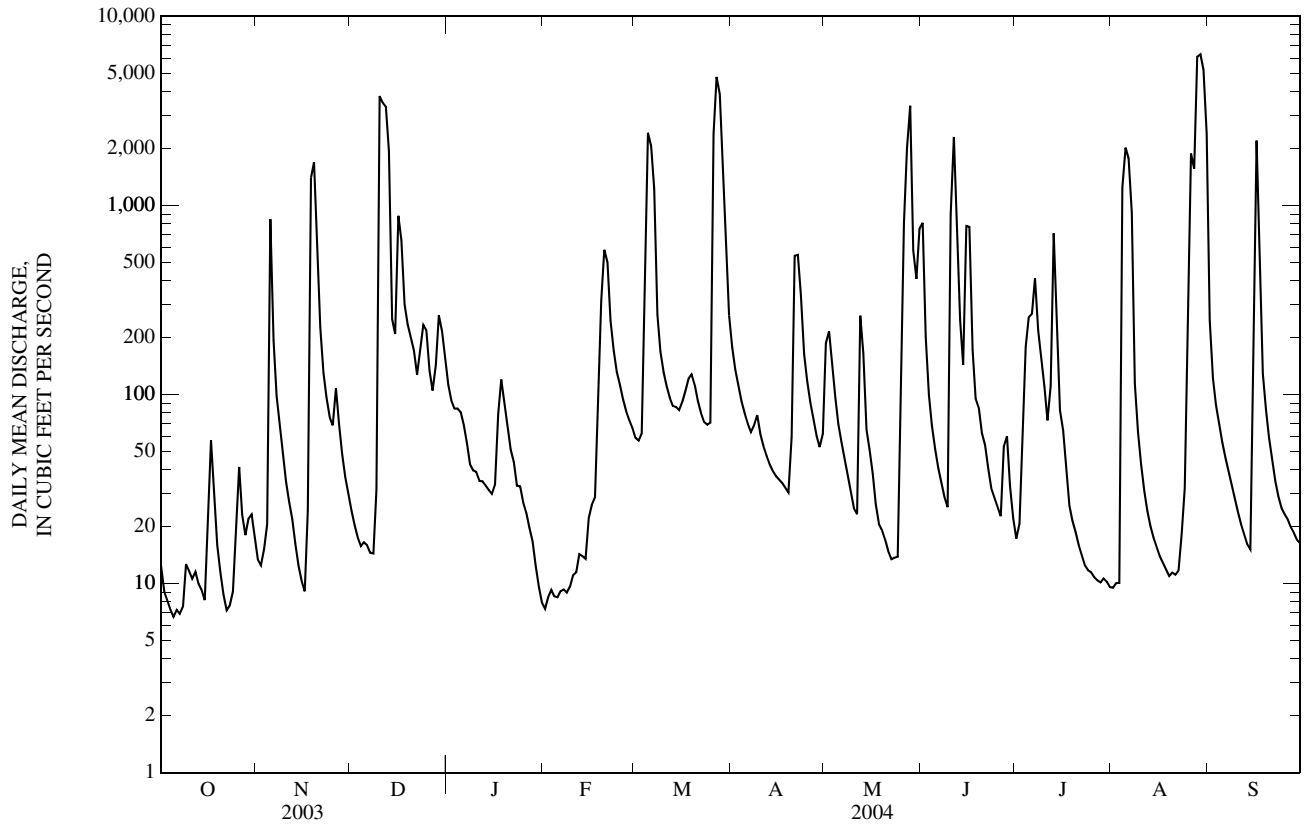
FOR 2004 WATER YEAR

WATER YEARS 1999 - 2004

ANNUAL MEAN	152	297	199
HIGHEST ANNUAL MEAN			297
LOWEST ANNUAL MEAN			44.5
HIGHEST DAILY MEAN	3,780	Dec 10	6,290
LOWEST DAILY MEAN	2.2	Feb 10,11	6.7
ANNUAL SEVEN-DAY MINIMUM	2.4	Feb 7	7.6
MAXIMUM PEAK FLOW	---		6,780
MAXIMUM PEAK STAGE	---		20.14
INSTANTANEOUS LOW FLOW	---		5.9
ANNUAL RUNOFF (INCHES)	6.60		12.94
10 PERCENT EXCEEDS	289		726
50 PERCENT EXCEEDS	21		53
90 PERCENT EXCEEDS	3.3		11

e Estimated

05506350 MIDDLE FORK SALT RIVER NEAR HOLLIDAY, MO—Continued



05506800 ELK FORK SALT RIVER NEAR MADISON, MO

LOCATION.--Lat 39°26'05", long 92°10'04", in SE ¼ NE ¼ SW ¼ sec.29, T.54 N., R.11 W., Monroe County, Hydrologic Unit 07110006, on downstream side and 25 ft to the left of bridge on State Highway AA, 500 ft downstream from Allen Creek, 3.5 mi southeast of Madison, and at mile 29.8.

DRAINAGE AREA.--200 mi².

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 690.16 ft above National Geodetic Vertical Datum of 1929 (Missouri State Highway and Transportation Commission bench mark).

REMARKS.--Records fair except discharges below 10 ft³/s, which are poor. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 9, 1967, reached a stage of 31.25 ft, from floodmark, discharge 33,300 ft³/s, by contracted-opening method. Flood in 1871 reached nearly the same stage, from information by local resident.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	4.1	19	67	11	38	114	145	147	6.7	6.2	89
2	8.2	3.6	16	60	14	37	87	116	71	7.2	6.1	60
3	6.9	3.5	14	54	17	30	68	61	43	36	5.8	42
4	6.2	5.4	15	62	16	966	56	40	25	121	967	32
5	5.7	68	e15	169	16	3,380	47	30	18	61	826	25
6	5.5	61	e14	93	16	532	42	25	15	489	132	21
7	5.2	23	e15	62	15	196	38	20	13	923	51	19
8	5.1	13	14	43	13	117	36	17	11	155	28	18
9	9.5	10	37	40	14	82	32	15	9.8	66	19	16
10	23	6.8	3,760	38	14	61	30	13	157	37	15	14
11	27	6.2	2,220	36	15	49	28	14	478	24	12	13
12	4.7	5.3	254	36	21	40	25	17	85	18	10	12
13	4.0	4.5	154	33	25	35	21	31	46	25	9.0	12
14	3.9	4.2	110	31	26	36	20	24	28	20	7.9	13
15	6.5	4.7	153	29	43	36	19	17	619	13	6.9	56
16	14	4.7	1,480	30	51	42	18	13	294	11	6.1	1,350
17	8.5	57	421	200	52	55	17	11	77	18	5.3	450
18	4.2	1,760	177	629	145	57	17	10	39	42	5.3	74
19	2.8	1,120	159	190	341	47	15	236	104	20	5.6	42
20	3.0	215	125	129	354	41	33	281	69	13	6.6	28
21	2.8	113	86	55	207	32	300	76	31	11	6.2	19
22	2.5	78	94	39	114	26	156	34	21	8.9	7.5	14
23	3.5	69	888	34	86	23	85	26	15	7.8	7.6	13
24	5.6	61	349	31	73	25	53	23	13	7.3	8.5	12
25	12	55	141	26	60	35	43	185	12	7.3	279	13
26	42	47	94	22	47	2,510	36	170	11	7.5	2,340	13
27	20	36	78	18	39	5,550	28	238	10	6.6	950	12
28	9.8	29	138	15	34	620	24	419	9.3	5.6	5,360	11
29	7.3	23	241	13	32	689	20	137	8.3	5.2	6,200	10
30	6.4	22	126	12	---	257	67	313	7.5	5.6	436	10
31	4.8	---	84	11	---	156	---	640	---	5.5	152	---
MEAN	9.05	130	371	74.4	65.9	510	52.5	110	82.9	70.5	577	83.8
MAX	42	1,760	3,760	629	354	5,550	300	640	619	923	6,200	1,350
MIN	2.5	3.5	14	11	11	23	15	10	7.5	5.2	5.3	10
IN.	0.05	0.73	2.14	0.43	0.36	2.94	0.29	0.63	0.46	0.41	3.33	0.47

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

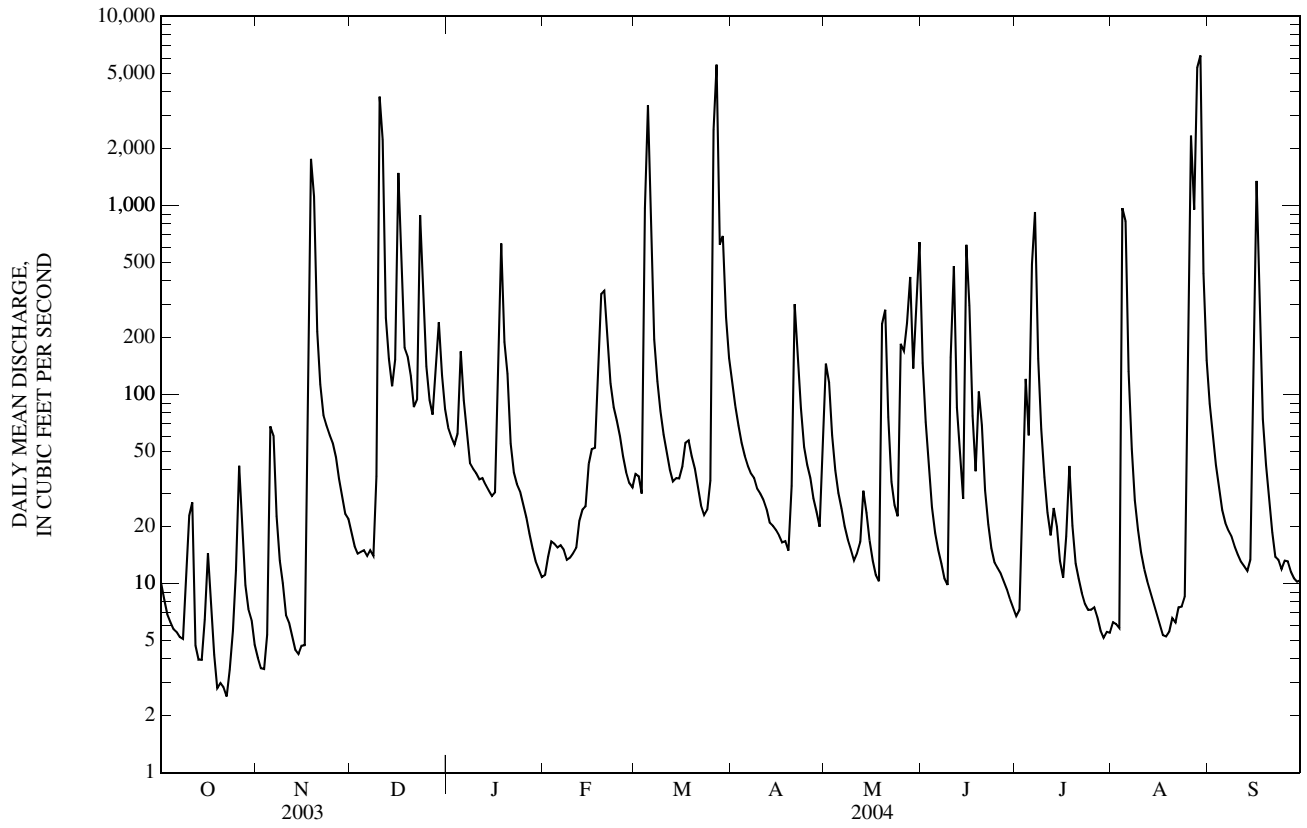
MEAN	95.1	124	132	120	203	263	318	275	194	151	62.5	114
MAX	1,077	1,248	750	533	935	1,154	1,651	1,554	1,005	1,409	577	1,381
(WY)	(1987)	(1986)	(1983)	(1974)	(1985)	(1973)	(1973)	(1995)	(1969)	(1981)	(2004)	(1993)
MIN	0.25	1.24	0.94	0.95	2.07	3.02	4.76	10.0	1.61	1.06	0.82	0.63
(WY)	(1981)	(1981)	(1989)	(1977)	(1989)	(1981)	(2000)	(1992)	(1988)	(1988)	(1980)	(1988)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1969 - 2004
ANNUAL MEAN	148	180	171
HIGHEST ANNUAL MEAN			380
LOWEST ANNUAL MEAN			23.6
HIGHEST DAILY MEAN	5,170	Sep 1	6,200
LOWEST DAILY MEAN	2.0	Aug 20	2.5
ANNUAL SEVEN-DAY MINIMUM	2.5	Aug 15	3.5
MAXIMUM PEAK FLOW	---		8,130
MAXIMUM PEAK STAGE	---		20.85
INSTANTANEOUS LOW FLOW	---		1.9
ANNUAL RUNOFF (INCHES)	10.05		12.23
10 PERCENT EXCEEDS	203		285
50 PERCENT EXCEEDS	15		28
90 PERCENT EXCEEDS	3.9		6.2

e Estimated

05506800 ELK FORK SALT RIVER NEAR MADISON, MO—Continued



SALT RIVER BASIN

05507600 LICK CREEK AT PERRY, MO

LOCATION.--Lat 39°25'53", long 91°40'34", near center of NW ¼ SW ¼ sec.27, T.54 N., R.7 W., Ralls County, Hydrologic Unit 07110007, on right bank and downstream side of State Highway 154 bridge. 0.1 mi west of Perry, and at mile 11.9.

DRAINAGE AREA.--104 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 625.00 ft above National Geodetic Vertical Datum of 1929. Prior to November 1967, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 12, 1969, reached a stage of 26.24 ft, as determined 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	1.6	0.56	2.7	14	3.8	14	24	41	17	0.58	0.22	14
2	1.1	0.74	2.1	11	4.9	12	17	71	9.5	1.2	0.30	9.3
3	0.92	0.54	2.0	10	5.7	11	14	41	6.1	6.6	0.32	5.3
4	0.86	3.6	1.9	716	4.8	1,710	11	25	4.5	19	3.5	4.0
5	0.79	38	2.0	236	4.8	1,960	10	15	3.3	12	4.2	3.1
6	0.68	6.9	1.8	53	5.3	170	10	10	2.4	209	2.3	2.4
7	0.65	3.5	1.7	35	4.7	64	9.9	7.8	1.9	78	1.3	1.8
8	0.60	1.7	1.7	17	4.0	38	9.2	6.1	1.5	24	0.86	1.6
9	0.60	0.92	3.0	13	4.0	27	8.1	4.6	1.4	15	0.61	1.5
10	0.51	0.99	1,580	11	4.1	20	7.6	3.9	1.5	8.6	0.48	1.2
11	0.45	0.87	198	10	4.2	16	7.0	20	1.3	3.4	0.42	0.92
12	0.49	0.75	52	10	5.2	12	6.3	56	1.1	2.3	0.40	0.83
13	0.42	0.90	29	9.3	4.5	11	5.7	32	0.91	1.4	0.29	0.60
14	0.70	0.83	18	8.7	4.3	12	5.5	34	0.74	0.94	0.26	0.49
15	1.1	0.84	36	8.1	6.5	11	5.4	47	0.56	0.57	0.23	574
16	1.3	0.84	374	7.9	6.1	12	5.6	20	0.55	0.41	0.21	2,200
17	0.88	1.4	96	119	6.1	12	5.4	11	0.54	0.35	0.18	84
18	0.87	408	44	442	75	12	5.0	7.8	1.1	0.25	0.15	30
19	0.88	179	36	69	418	10	4.8	33	1.1	0.29	0.12	15
20	0.85	42	26	48	406	9.7	10	32	1.1	0.25	0.19	8.6
21	0.70	20	18	17	151	8.4	118	17	0.68	0.19	0.18	5.3
22	0.57	11	41	13	69	7.5	50	8.3	0.51	0.18	0.20	4.4
23	0.62	15	716	9.3	60	7.0	25	6.7	0.46	0.14	0.25	3.2
24	0.48	15	129	8.9	62	7.0	24	5.5	0.37	0.16	0.59	2.5
25	0.90	8.1	43	8.2	46	7.5	102	52	0.34	0.19	963	2.3
26	0.54	5.7	26	7.3	30	65	46	94	0.32	0.23	3,110	2.0
27	0.84	4.6	18	6.8	21	104	22	428	0.26	0.20	850	1.8
28	1.0	4.1	27	5.5	16	74	13	725	0.22	0.17	287	1.6
29	0.78	3.7	38	5.0	15	123	9.3	96	0.18	0.13	106	1.5
30	0.71	3.4	30	4.2	---	56	8.9	37	0.14	0.18	38	1.4
31	0.66	---	19	3.8	---	36	---	21	---	0.21	21	---
MEAN	0.78	26.1	117	62.5	50.1	150	20.0	64.8	2.05	12.5	174	99.5
MAX	1.6	408	1,580	716	418	1,960	118	725	17	209	3,110	2,200
MIN	0.42	0.54	1.7	3.8	3.8	7.0	4.8	3.9	0.14	0.13	0.12	0.49
IN.	0.01	0.28	1.29	0.69	0.52	1.66	0.21	0.72	0.02	0.14	1.93	1.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	13.0	74.0	67.2	51.2	111	86.3	110	136	71.9	76.0	32.9	43.8
MAX	95.9	652	442	190	441	340	541	532	300	482	174	748
(WY)	(1987)	(1986)	(1983)	(2001)	(1997)	(1984)	(1994)	(2002)	(1998)	(1981)	(2004)	(1993)
MIN	0.00	0.00	0.05	0.00	1.67	0.41	2.15	1.27	0.03	0.03	0.00	0.00
(WY)	(1989)	(2000)	(1980)	(1980)	(1981)	(1981)	(2000)	(1988)	(1988)	(1994)	(1994)	(1999)

SUMMARY STATISTICS

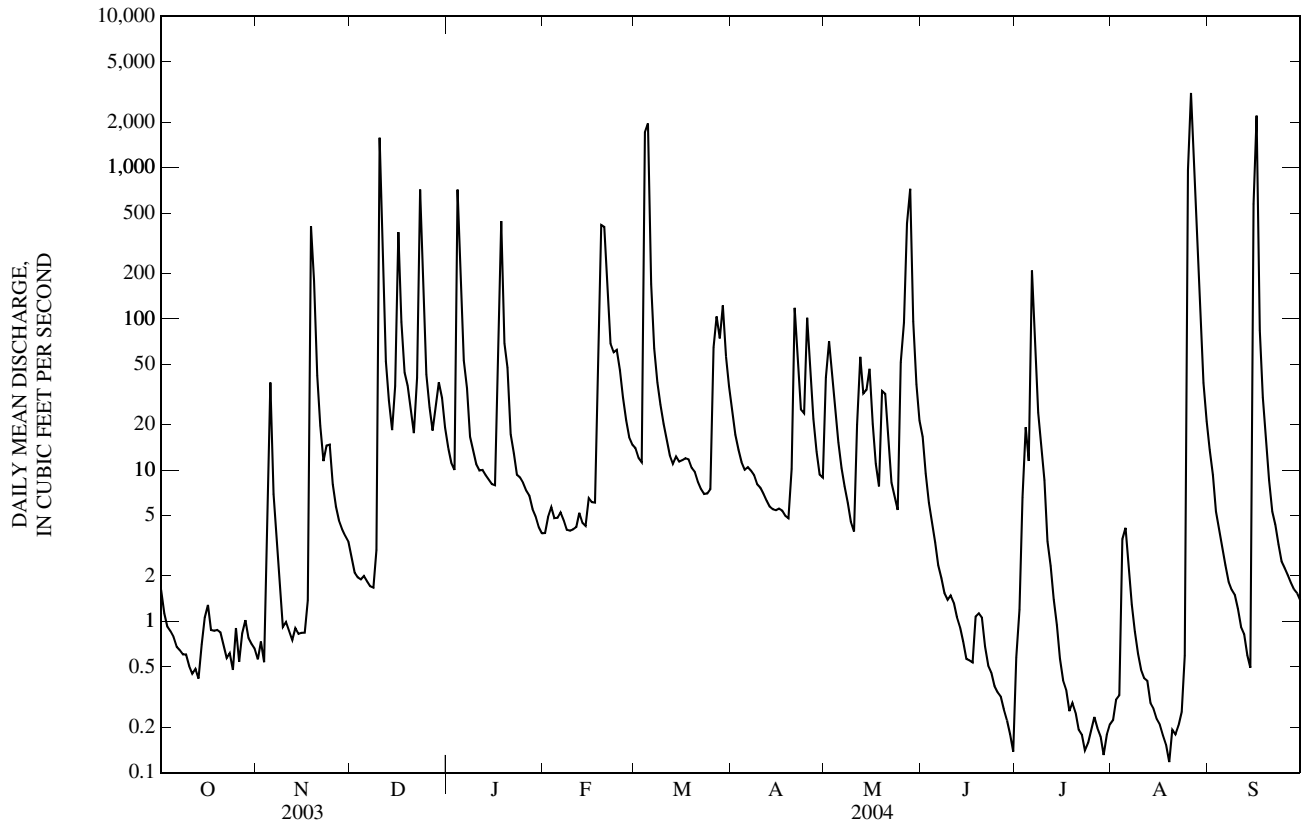
FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1980 - 2004

ANNUAL MEAN	54.9	65.3	72.4
HIGHEST ANNUAL MEAN			188
LOWEST ANNUAL MEAN			15.1
HIGHEST DAILY MEAN	3,950	May 10	7,880
LOWEST DAILY MEAN	0.00	Aug 18-30	0.00
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 18	0.00
MAXIMUM PEAK FLOW	---	5,310	11,800
MAXIMUM PEAK STAGE	---	16.30	22.25
INSTANTANEOUS LOW FLOW	---	0.10	0.00
ANNUAL RUNOFF (INCHES)	7.17	8.54	9.46
10 PERCENT EXCEEDS	61	76	83
50 PERCENT EXCEEDS	2.1	5.7	3.7
90 PERCENT EXCEEDS	0.08	0.39	0.03

05507600 LICK CREEK AT PERRY, MO—Continued



05507700 MARK TWAIN LAKE NEAR CENTER, MO

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

DRAINAGE AREA.--2,318 mi².

PERIOD OF RECORD.--1984 to current year. 1984 to Sept. 30, 1991, available in files at the U.S. Army Corps of Engineers.

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

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

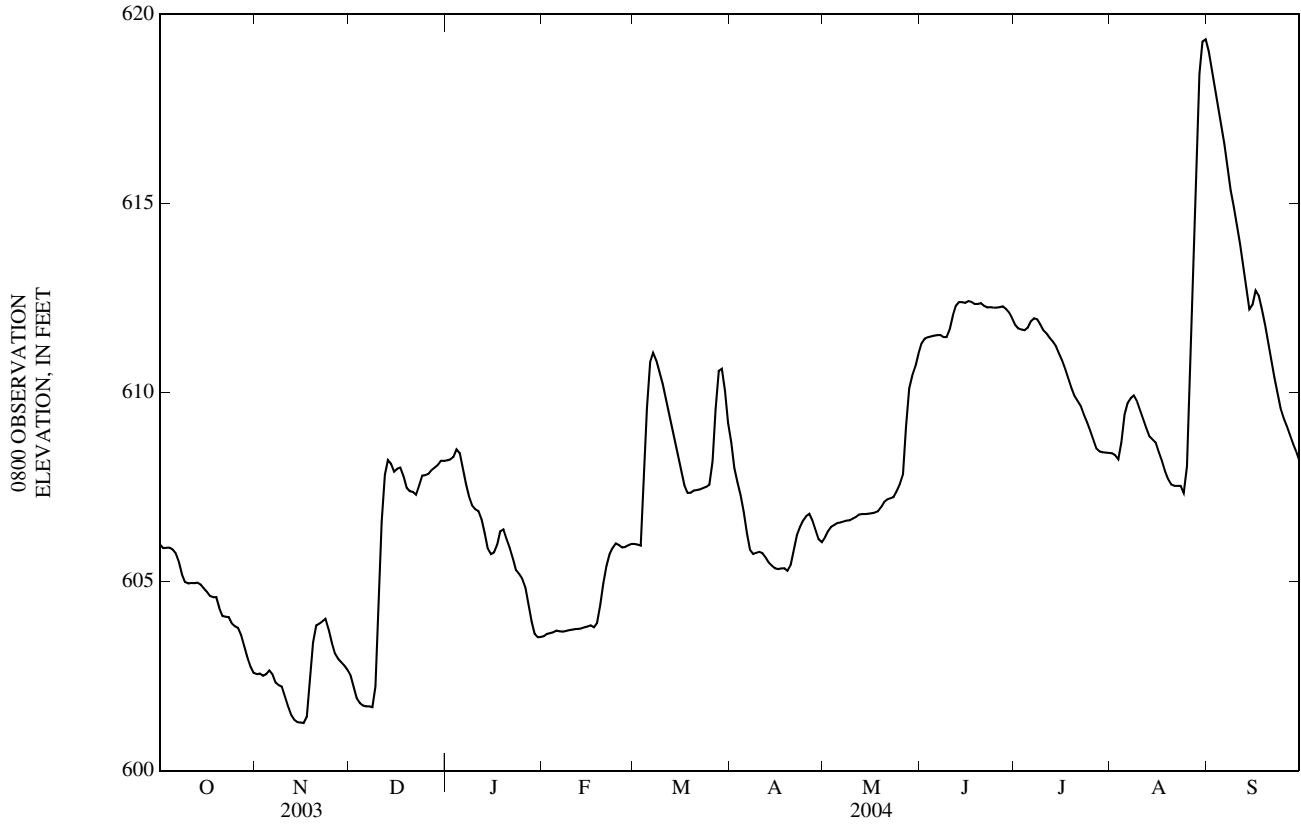
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,380,000 ac-ft, Sept. 27, 1993, elevation, 636.77 ft; minimum, 386,000 ac-ft, Oct. 10, 1984, elevation, 596.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 840,000 ac-ft, Aug. 31, elevation, 619.38 ft; minimum, 461,000 ac-ft, Nov. 15-17, elevation, 601.25 ft, Nov. 17.

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	606.16	602.54	602.62	608.17	603.54	606.01	608.90	606.04	611.14	611.90	608.40	619.32
2	605.89	602.56	602.48	608.23	603.57	605.99	608.57	606.22	611.39	611.73	608.39	618.88
3	605.88	602.57	602.09	608.23	603.64	605.97	607.72	606.39	611.44	611.67	608.32	618.44
4	605.90	602.48	601.83	608.33	603.64	605.94	607.57	606.48	611.47	611.66	608.19	617.97
5	605.90	602.58	601.76	608.58	603.67	608.37	607.15	606.51	611.49	611.64	608.92	617.45
6	605.83	602.68	601.70	608.31	603.72	610.21	606.68	606.57	611.51	611.75	609.67	616.93
7	605.71	602.48	601.70	607.82	603.67	611.10	606.07	606.56	611.52	611.95	609.75	616.38
8	605.44	602.26	601.70	607.46	603.68	611.03	605.73	606.60	611.52	611.97	609.90	615.73
9	605.07	602.26	601.67	607.15	603.70	610.75	605.73	606.62	611.44	611.92	609.93	615.16
10	604.95	602.20	602.50	606.94	603.72	610.44	605.77	606.62	611.48	611.75	609.68	614.77
11	604.95	601.84	605.53	606.90	603.73	610.13	605.79	606.69	611.76	611.59	609.45	614.25
12	604.97	601.64	607.11	606.85	603.75	609.74	605.73	606.72	612.17	611.55	609.21	613.76
13	604.95	601.39	608.18	606.56	603.75	609.34	605.59	606.80	612.36	611.39	608.99	613.16
14	604.98	601.32	608.23	606.14	603.77	609.00	605.46	606.78	612.41	611.33	608.76	612.61
15	604.89	601.26	608.06	605.74	603.80	608.58	605.40	606.79	612.38	611.18	608.76	612.00
16	604.79	601.28	607.83	605.72	603.82	608.20	605.33	606.80	612.37	610.97	608.63	612.49
17	604.70	601.25	608.06	605.79	603.85	607.81	605.33	606.81	612.44	610.79	608.33	612.80
18	604.58	601.51	607.99	606.07	603.76	607.42	605.36	606.83	612.37	610.55	608.12	612.44
19	604.59	602.75	607.68	606.46	603.98	607.31	605.35	606.87	612.33	610.29	607.83	612.09
20	604.59	603.70	607.39	606.34	604.58	607.37	605.25	607.01	612.35	610.04	607.64	611.65
21	604.14	603.91	607.39	606.03	605.13	607.43	605.53	607.15	612.37	609.84	607.53	611.20
22	604.07	603.88	607.36	605.83	605.56	607.42	605.97	607.18	612.25	609.74	607.53	610.73
23	604.07	603.98	607.26	605.51	605.80	607.45	606.35	607.21	612.25	609.59	607.53	610.25
24	604.06	604.03	607.67	605.21	605.94	607.48	606.48	607.24	612.26	609.33	607.53	609.84
25	603.81	603.58	607.87	605.20	606.04	607.52	606.68	607.47	612.24	609.16	607.25	609.46
26	603.82	603.30	607.79	605.02	605.93	607.58	606.75	607.62	612.25	608.92	608.44	609.25
27	603.75	603.00	607.88	604.76	605.89	608.48	606.81	607.93	612.26	608.68	611.08	609.05
28	603.50	602.95	607.98	604.26	605.93	610.10	606.53	609.67	612.29	608.44	614.05	608.80
29	603.18	602.83	608.03	603.79	605.97	610.81	606.28	610.33	612.17	608.44	617.13	608.58
30	602.90	602.76	608.11	603.53	---	610.54	606.04	610.50	612.09	608.41	619.08	608.37
31	602.67	---	608.24	603.53	---	609.78	---	610.79	---	608.41	619.38	---
MEAN	604.67	602.56	605.86	606.27	604.40	608.56	606.26	607.28	611.99	610.53	609.79	613.13
MAX	606.16	604.03	608.24	608.58	606.04	611.10	608.90	610.79	612.44	611.97	619.38	619.32
MIN	602.67	601.25	601.67	603.53	603.54	605.94	605.25	606.04	611.14	608.41	607.25	608.37

05507700 MARK TWAIN LAKE NEAR CENTER, MO—Continued



RESERVOIR STORAGE, ACRE 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	548,000	483,000	484,000	586,000	500,000	545,000	601,000	546,000	648,000	664,000	591,000	839,000
2	543,000	483,000	482,000	588,000	500,000	545,000	594,000	549,000	653,000	660,000	591,000	829,000
3	543,000	483,000	475,000	588,000	502,000	544,000	577,000	552,000	654,000	659,000	589,000	818,000
4	543,000	482,000	471,000	590,000	502,000	544,000	574,000	554,000	655,000	659,000	587,000	807,000
5	543,000	484,000	470,000	594,000	502,000	590,000	567,000	554,000	655,000	658,000	602,000	795,000
6	542,000	485,000	469,000	589,000	503,000	628,000	558,000	555,000	656,000	661,000	617,000	783,000
7	539,000	482,000	469,000	579,000	502,000	647,000	546,000	555,000	656,000	665,000	618,000	770,000
8	534,000	478,000	469,000	572,000	503,000	645,000	540,000	556,000	656,000	666,000	622,000	754,000
9	528,000	478,000	468,000	567,000	503,000	639,000	540,000	556,000	654,000	665,000	622,000	741,000
10	526,000	477,000	482,000	563,000	503,000	633,000	540,000	556,000	655,000	661,000	617,000	732,000
11	526,000	471,000	536,000	562,000	504,000	627,000	541,000	558,000	661,000	657,000	612,000	719,000
12	526,000	468,000	566,000	561,000	504,000	618,000	540,000	558,000	670,000	657,000	607,000	708,000
13	526,000	463,000	587,000	555,000	504,000	610,000	537,000	560,000	675,000	653,000	603,000	694,000
14	526,000	462,000	588,000	547,000	504,000	603,000	535,000	560,000	676,000	652,000	598,000	681,000
15	524,000	461,000	584,000	540,000	505,000	594,000	534,000	560,000	675,000	649,000	598,000	666,000
16	523,000	461,000	580,000	539,000	505,000	587,000	533,000	560,000	675,000	644,000	596,000	678,000
17	521,000	461,000	584,000	541,000	506,000	579,000	533,000	560,000	677,000	640,000	590,000	685,000
18	519,000	465,000	583,000	546,000	504,000	572,000	533,000	561,000	675,000	635,000	585,000	677,000
19	519,000	487,000	577,000	553,000	508,000	570,000	533,000	561,000	674,000	630,000	580,000	669,000
20	519,000	503,000	571,000	551,000	519,000	571,000	531,000	564,000	675,000	625,000	576,000	659,000
21	510,000	506,000	571,000	546,000	529,000	572,000	536,000	567,000	675,000	620,000	574,000	649,000
22	509,000	506,000	570,000	542,000	537,000	572,000	544,000	567,000	672,000	618,000	574,000	639,000
23	509,000	508,000	569,000	536,000	541,000	572,000	551,000	568,000	672,000	615,000	574,000	629,000
24	509,000	508,000	576,000	530,000	544,000	573,000	554,000	568,000	673,000	610,000	574,000	620,000
25	505,000	501,000	580,000	530,000	546,000	573,000	558,000	572,000	672,000	606,000	568,000	612,000
26	505,000	496,000	579,000	527,000	544,000	575,000	559,000	575,000	672,000	602,000	592,000	608,000
27	504,000	491,000	581,000	522,000	543,000	592,000	560,000	582,000	673,000	597,000	646,000	604,000
28	499,000	490,000	583,000	513,000	544,000	626,000	555,000	617,000	673,000	592,000	715,000	599,000
29	494,000	488,000	584,000	505,000	544,000	640,000	550,000	631,000	670,000	592,000	787,000	594,000
30	489,000	487,000	585,000	500,000	---	635,000	546,000	634,000	669,000	591,000	833,000	590,000
31	485,000	---	588,000	500,000	---	619,000	---	640,000	---	591,000	840,000	---
MEAN	521,000	483,000	544,000	550,000	516,000	595,000	550,000	570,000	667,000	635,000	622,000	695,000
MAX	548,000	508,000	588,000	594,000	546,000	647,000	601,000	640,000	677,000	666,000	840,000	839,000
MIN	485,000	461,000	468,000	500,000	500,000	544,000	531,000	546,000	648,000	591,000	568,000	590,000

05507800 SALT RIVER NEAR CENTER, MO

LOCATION.--Lat 39°34'27", long 91°34'18", NW ¼ SE ¼ sec.4, T.55 N., R.6 W., Ralls County, Hydrologic Unit 07110007, on left bank at left downstream end of bridge on Highway A, 0.5 mi downstream from Clarence Cannon Dam, 5.0 mi northwest of Center, and at mile 53.1.

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 500.00 ft above National Geodetic Vertical Datum of 1929. Prior to October 1979 nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. U.S. Army Corps of Engineers satellite telemeter at station. Flow regulated by Clarence Cannon Dam, 0.5 mi upstream.

EXTREME OUTSIDE PERIOD OF RECORD.--Maximum gage height, 33.00 ft, Apr. 22, 1973, 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	2,050	93	393	90	54	75	7,620	73	63	2,650	64	5,800
2	517	66	2,680	282	52	929	5,180	66	64	906	527	6,460
3	55	701	2,810	107	53	720	4,800	65	62	1,020	1,620	5,570
4	55	329	1,490	242	54	1,190	3,590	88	58	1,010	1,090	6,380
5	54	661	160	3,910	54	2,730	4,810	97	55	1,000	67	6,300
6	1,320	1,540	66	4,700	52	3,390	5,360	66	52	1,170	1,880	6,240
7	1,590	2,920	65	3,940	55	3,320	3,970	69	48	1,670	715	6,270
8	2,890	294	141	3,110	55	4,010	127	69	355	2,620	64	6,950
9	2,180	66	583	2,620	53	3,990	68	69	60	2,010	1,340	6,170
10	135	2,400	1,330	1,010	53	4,020	67	70	51	2,520	2,820	5,150
11	68	2,640	2,900	65	53	3,980	67	70	995	1,560	2,480	5,970
12	71	1,760	3,160	2,680	53	3,990	1,190	69	279	1,450	2,200	5,530
13	239	954	3,140	3,610	52	4,020	1,680	71	41	2,490	2,300	6,160
14	641	248	1,910	3,600	52	4,120	916	76	563	2,430	577	5,800
15	819	81	5,100	1,510	52	4,130	583	74	1,260	2,100	1,140	3,380
16	909	66	5,040	65	51	4,190	179	73	1,410	2,570	2,360	4,370
17	1,030	67	4,100	65	51	4,190	67	73	1,130	2,780	2,660	4,710
18	227	517	4,440	66	56	3,100	65	74	1,050	2,330	1,830	5,020
19	66	73	2,960	1,670	56	52	1,180	72	618	2,640	3,020	4,780
20	2,010	132	2,410	2,750	56	52	68	71	43	2,340	1,830	4,380
21	610	1,180	838	2,690	56	52	67	70	330	1,540	100	4,650
22	764	425	3,260	3,030	55	53	69	68	849	1,110	63	4,770
23	625	65	2,310	3,270	56	53	67	68	81	2,550	680	4,570
24	1,970	2,800	897	477	57	51	67	68	64	2,250	1,890	3,720
25	811	2,990	2,380	1,180	2,120	51	66	906	64	2,000	1,430	1,940
26	67	2,460	232	2,980	1,150	52	66	71	62	2,490	322	2,190
27	888	1,600	64	3,410	342	51	2,230	179	61	2,180	1,880	1,750
28	3,590	625	65	4,190	54	51	2,590	338	480	706	479	2,250
29	1,820	720	858	3,220	52	3,360	2,480	65	922	62	1,110	2,090
30	2,570	1,720	63	260	---	8,980	1,660	98	1,850	66	4,700	1,750
31	1,490	---	1,020	59	---	9,320	---	64	---	64	5,670	---
MEAN	1,036	1,006	1,834	1,963	173	2,525	1,698	111	434	1,751	1,578	4,702
MAX	3,590	2,990	5,100	4,700	2,120	9,320	7,620	906	1,850	2,780	5,670	6,950
MIN	54	65	63	59	51	51	65	64	41	62	63	1,750
IN.	0.51	0.48	0.90	0.96	0.08	1.24	0.81	0.05	0.21	0.86	0.77	2.23

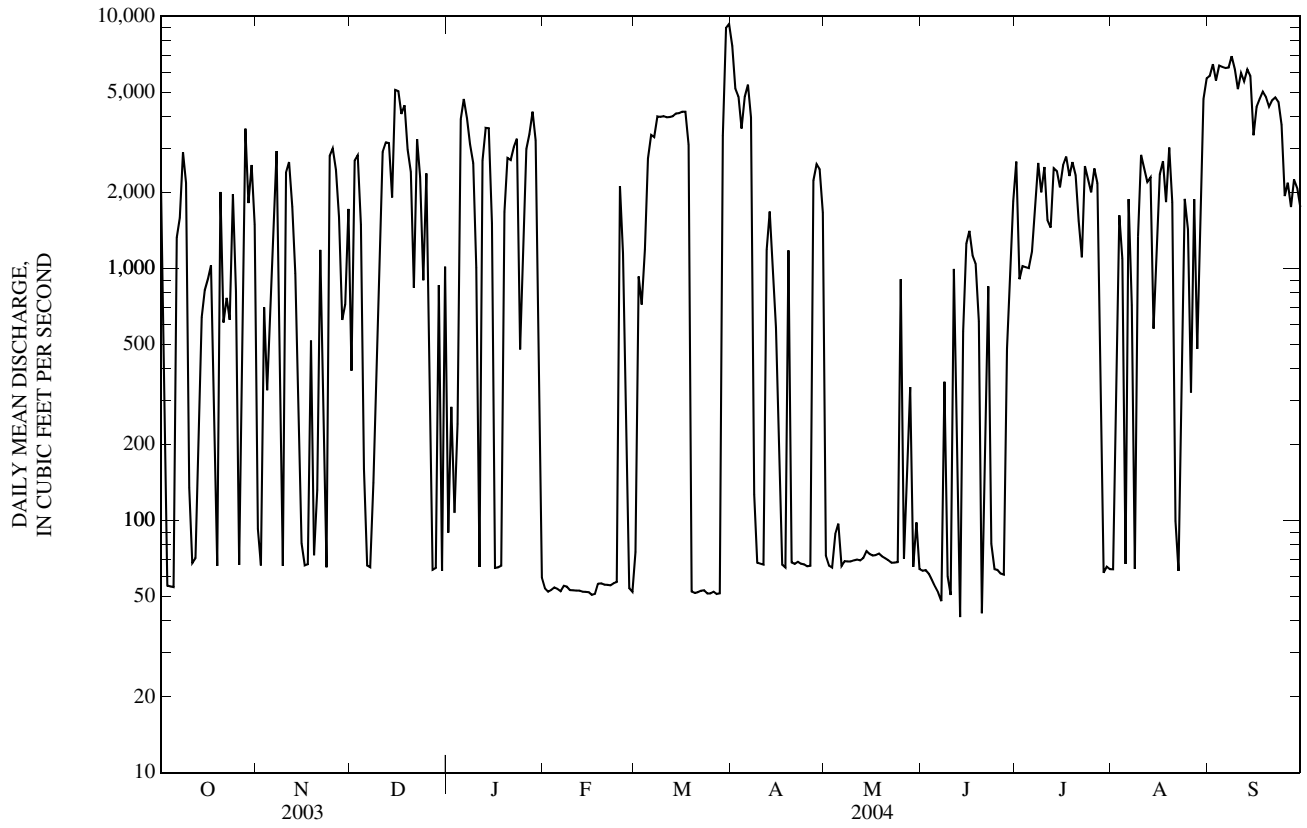
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEAN	1,022	1,275	1,696	996	1,651	2,643	2,188	2,573	2,553	2,823	1,458	1,145			
MAX	9,085	6,038	10,360	3,703	8,098	10,530	10,310	7,784	10,560	10,810	7,895	7,902			
(WY)	(1994)	(1987)	(1983)	(1986)	(1982)	(1985)	(1983)	(2002)	(1995)	(1981)	(1993)	(1993)			
MIN	4.62	14.8	31.4	30.5	81.6	87.0	56.9	67.5	126	75.2	13.9	25.3			
(WY)	(1980)	(1981)	(1980)	(1980)	(1989)	(1989)	(2003)	(1989)	(1988)	(1983)	(1980)	(1983)			

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1980 - 2004
ANNUAL MEAN	886	1,571	1,837
HIGHEST ANNUAL MEAN			3,462
LOWEST ANNUAL MEAN			283
HIGHEST DAILY MEAN	6,360	May 15	9,320
LOWEST DAILY MEAN	32	Jun 11, Sep 15	41
ANNUAL SEVEN-DAY MINIMUM	40	Apr 2	52
MAXIMUM PEAK FLOW	---		9,450
MAXIMUM PEAK STAGE	---		13.16
INSTANTANEOUS LOW FLOW	---		40
ANNUAL RUNOFF (INCHES)	5.12		9.10
10 PERCENT EXCEEDS	2,660		4,190
50 PERCENT EXCEEDS	93		906
90 PERCENT EXCEEDS	49		55

05507800 SALT RIVER NEAR CENTER, MO—Continued



05508000 SALT RIVER NEAR NEW LONDON, MO

LOCATION.--Lat 39°36'44", long 91°24'26", in NE ¼ NW ¼ sec.36, T.56 N., R.5 W., Ralls County, Hydrologic Unit 07110007, on left bank near downstream end of bridge on north bound side of dual U.S. Highway 61, 9.9 mi downstream from Clarence Cannon Dam, 2.0 mi north of New London, 8.0 mi upstream from Spencer Creek, and at mile 35.5.

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 477.03 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 7, 1931, nonrecording gage 400 ft upstream at datum 0.03 ft higher; Apr. 7, 1931 to Jan. 17, 1935, nonrecording gage at site 180 ft upstream at datum 0.04 ft lower; Jan. 17, 1935 to April 1985, water-stage recorder 400 ft upstream same datum.

REMARKS.--No estimated daily discharges. Records good. U.S. Army Corps of Engineers satellite telemeter at station. Flow mostly regulated by Clarence Cannon Dam, 9.9 mi upstream, since September 1979. Five percent of the drainage area, 130 mi², is natural drainage not regulated.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,230	937	376	918	107	97	9,600	698	80	2,610	67	4,780
2	2,000	100	1,570	107	105	767	4,160	124	70	1,400	69	6,530
3	113	86	2,860	329	101	725	6,190	105	68	1,070	948	5,640
4	84	918	1,920	222	90	1,770	3,570	97	65	988	2,060	6,470
5	79	279	1,220	2,950	88	3,350	5,280	147	59	949	154	6,410
6	261	1,210	99	4,580	86	3,660	4,890	99	54	1,280	527	6,350
7	1,230	2,880	83	4,370	83	3,450	4,800	88	50	1,080	1,940	6,350
8	2,600	1,340	79	3,310	80	4,160	1,440	87	43	2,610	118	7,360
9	2,900	111	169	2,530	88	4,120	124	83	342	2,020	152	6,680
10	1,200	1,370	2,790	2,300	82	4,150	107	81	74	2,310	2,660	4,980
11	104	2,620	2,770	274	82	4,100	101	98	117	1,920	2,380	6,170
12	85	1,570	3,780	1,310	84	4,090	1,050	100	1,130	1,170	2,190	5,370
13	80	1,970	2,760	3,590	84	4,130	1,660	100	76	2,550	2,250	6,490
14	266	346	2,060	3,520	83	4,260	976	113	38	2,370	1,720	5,910
15	707	266	4,980	3,060	83	4,270	278	106	1,120	2,020	124	4,800
16	913	91	5,490	204	80	4,270	701	93	1,370	2,640	2,210	3,230
17	907	80	4,700	126	77	4,340	108	89	1,180	2,750	2,350	4,710
18	1,100	616	4,450	138	110	4,060	92	87	1,060	2,270	1,920	5,280
19	100	708	3,320	819	249	481	1,050	89	908	2,490	3,080	4,830
20	820	148	3,520	2,250	272	112	287	84	305	2,320	1,950	4,550
21	1,800	443	922	3,390	173	94	177	80	96	1,950	1,090	4,800
22	341	1,290	2,000	2,730	133	90	133	77	717	1,150	92	4,770
23	1,110	127	2,840	3,270	122	94	111	83	451	1,980	100	4,880
24	487	1,300	1,500	1,850	116	96	110	79	78	2,320	1,200	3,690
25	2,360	3,560	2,320	142	1,090	94	131	632	62	1,830	2,650	2,790
26	168	2,330	955	2,780	1,620	109	110	492	60	2,300	621	2,140
27	362	2,640	166	3,400	958	133	932	117	58	2,180	5,950	1,750
28	2,890	266	132	4,310	181	126	2,780	548	57	2,090	2,700	2,280
29	1,940	1,190	791	3,410	99	1,700	2,580	134	778	113	652	2,100
30	2,660	1,550	228	1,700	---	9,150	2,290	88	1,270	82	3,400	1,760
31	1,770	---	239	130	---	10,000	---	125	---	73	6,550	---
MEAN	1,086	1,078	1,971	2,065	228	2,647	1,861	162	395	1,770	1,738	4,795
MAX	2,900	3,560	5,490	4,580	1,620	10,000	9,600	698	1,370	2,750	6,550	7,360
MIN	79	80	79	107	77	90	92	77	38	73	67	1,750
IN.	0.51	0.49	0.92	0.96	0.10	1.23	0.84	0.08	0.18	0.82	0.81	2.16

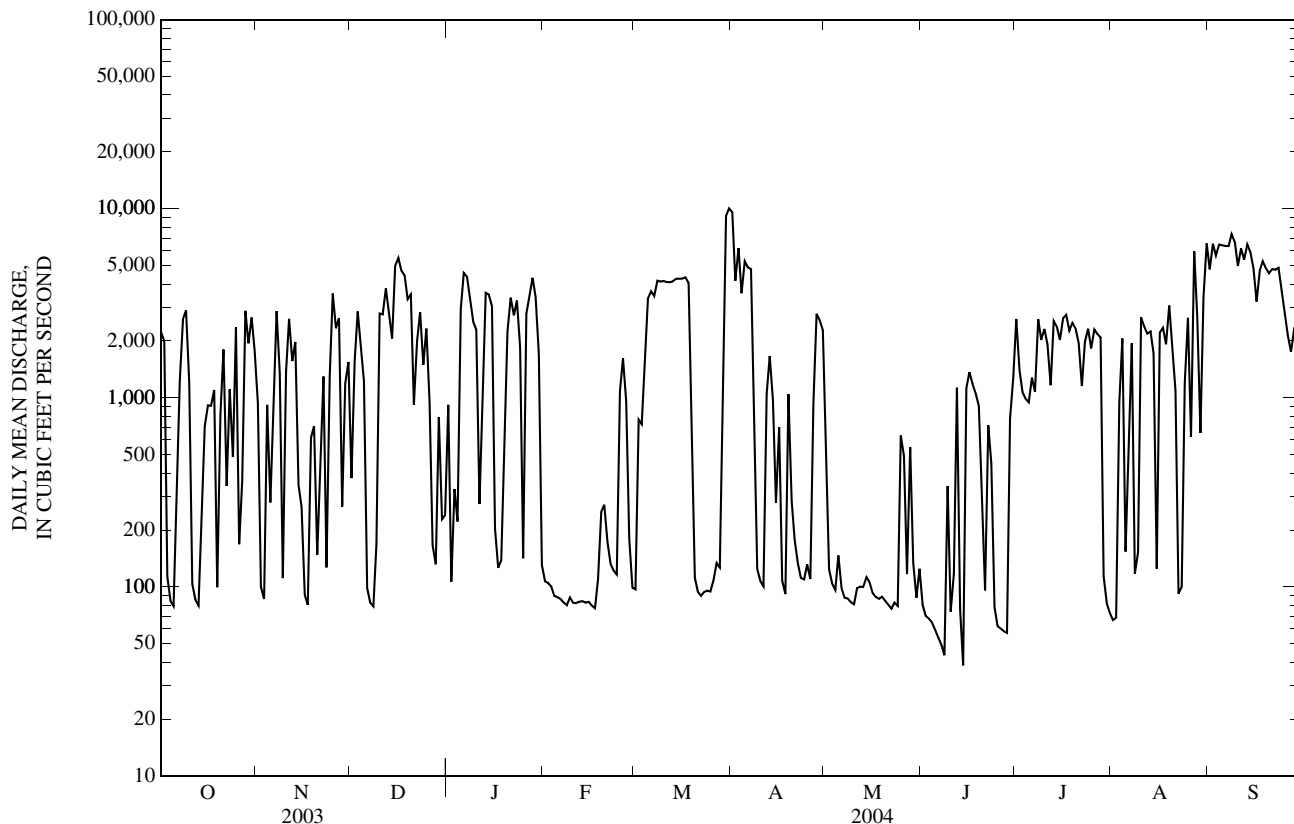
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980-2004^a, BY WATER YEAR (WY)

MEAN	1,050	1,388	1,811	1,081	1,790	2,823	2,345	2,758	2,639	2,923	1,541	1,198
MAX	9,165	6,406	11,100	4,001	8,787	10,810	10,660	9,003	10,950	11,900	7,961	8,300
(WY)	(1994)	(1986)	(1983)	(1985)	(1982)	(1985)	(1983)	(2002)	(1995)	(1981)	(1993)	(1993)
MIN	16.9	18.4	48.6	37.1	84.9	90.2	80.8	93.4	128	88.4	42.8	28.5
(WY)	(1980)	(1981)	(1980)	(1981)	(1989)	(1989)	(2003)	(1989)	(1988)	(1983)	(1983)	(1983)

05508000 SALT RIVER NEAR NEW LONDON, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980-2004 ^a	
ANNUAL MEAN	939		1,653		1,947	
HIGHEST ANNUAL MEAN					3,577	1993
LOWEST ANNUAL MEAN					307	1989
HIGHEST DAILY MEAN	6,760	May 15	10,000	Mar 31	62,100	Jul 30, 1981
LOWEST DAILY MEAN	40	Apr 6	38	Jun 14	9.5	Nov 21, 1980
ANNUAL SEVEN-DAY MINIMUM	44	Apr 3	58	Jun 2	9.6	Nov 20, 1980
MAXIMUM PEAK FLOW	---		13,500	Aug 27	74,200	Jul 29, 1981
MAXIMUM PEAK STAGE	---		13.77	Aug 27	31.09	Jul 29, 1981
INSTANTANEOUS LOW FLOW	---		35	Jun 14	9.5	Nov 21, 1980
ANNUAL RUNOFF (INCHES)	5.14		9.08		10.67	
10 PERCENT EXCEEDS	2,760		4,390		5,580	
50 PERCENT EXCEEDS	207		982		496	
90 PERCENT EXCEEDS	58		83		59	

^a Post-regulation period.



05508805 SPENCER CREEK BELOW PLUM CREEK NEAR FRANKFORD, MO

LOCATION.--Lat 39°31'14", long 91°20'34", in NW ¼ NW ¼ NW ¼ sec.27, T.55 N., R.4 W., Ralls County, Hydrologic Unit 07110007, on left bank 25 ft downstream from bridge on dual U.S. Highway 61, 0.75 mi downstream from Plum Creek, 2.5 mi northwest of Frankford, and at mile 4.5.

DRAINAGE AREA.--206 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 485.00 ft above National Geodetic Vertical Datum of 1929. Mar. 24, 1930, to Sept. 30, 1936, nonrecording gage at site 0.75 mi upstream at datum 3.63 ft higher; Oct. 7, 1961, to July 15, 1974, fragmentary record, at present site, datum unknown; July 26, 1974, to Apr. 15, 1975, from nonrecording gage present site and datum.

REMARKS.--No estimated daily discharges. 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	10	7.7	14	57	22	51	96	54	75	4.3	2.4	51
2	7.7	7.8	12	52	25	44	76	76	55	8.2	2.3	37
3	6.2	7.7	11	48	28	41	65	61	43	16	2.2	28
4	5.5	9.2	11	896	24	1,840	56	48	36	28	3.4	23
5	4.8	49	11	521	23	2,570	49	43	31	35	34	19
6	4.4	36	11	168	23	433	45	36	27	178	17	17
7	4.1	21	10	133	22	218	42	29	24	262	12	14
8	3.7	15	9.9	101	20	151	39	25	21	71	7.4	12
9	3.9	12	11	85	20	120	34	21	18	33	5.1	11
10	4.3	10	2,260	75	20	97	32	19	20	21	3.6	10
11	4.2	10	539	61	20	81	31	171	22	18	2.4	9.4
12	6.3	9.4	209	47	23	68	28	116	18	15	1.8	8.7
13	6.5	7.7	133	43	21	60	26	122	15	12	1.4	7.8
14	21	7.0	103	39	20	61	24	255	13	8.6	1.1	7.6
15	33	6.9	100	35	27	55	24	230	13	6.8	0.95	8.1
16	16	7.3	514	34	26	55	25	107	13	5.7	0.69	678
17	11	8.3	247	71	25	54	24	64	12	5.0	0.61	154
18	9.7	431	134	500	59	51	22	55	11	4.3	0.68	49
19	7.8	374	104	176	500	46	20	216	13	3.9	0.40	26
20	6.1	109	86	113	591	42	49	133	12	3.5	0.77	17
21	5.1	56	68	83	309	37	192	79	10	3.4	0.73	12
22	4.5	38	60	62	176	34	116	48	9.2	3.2	0.70	9.4
23	3.7	32	892	47	144	33	84	36	8.1	2.7	0.90	7.8
24	4.5	38	327	40	145	34	85	30	6.9	2.5	1.8	6.6
25	6.3	31	153	35	124	35	208	358	6.1	2.7	1,160	7.1
26	7.8	26	102	34	92	86	119	196	5.7	2.4	2,330	6.9
27	8.9	21	82	31	72	189	76	1,150	5.2	2.0	4,900	6.6
28	11	18	92	27	60	147	56	2,800	4.8	1.7	909	5.6
29	8.5	17	129	26	53	277	45	365	4.5	1.6	458	5.0
30	7.6	15	98	23	---	177	42	169	4.1	2.3	152	5.2
31	8.1	---	71	22	---	129	---	107	---	2.5	79	---
MEAN	8.14	47.9	213	119	93.6	236	61.0	233	18.6	24.7	326	42.0
MAX	33	431	2,260	896	591	2,570	208	2,800	75	262	4,900	678
MIN	3.7	6.9	9.9	22	20	33	20	19	4.1	1.6	0.40	5.0
IN.	0.05	0.26	1.19	0.67	0.49	1.32	0.33	1.30	0.10	0.14	1.82	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

MEAN	41.4	164	158	113	210	199	242	295	135	152	70.6	83.4
MAX	376	1,310	985	453	766	738	919	1,028	451	1,788	326	1,402
(WY)	(1987)	(1986)	(1983)	(1999)	(1985)	(1984)	(1994)	(2002)	(1982)	(1981)	(2004)	(1993)
MIN	0.22	0.48	1.67	2.58	3.40	9.23	14.3	15.1	2.23	0.84	0.96	0.32
(WY)	(1989)	(1990)	(1990)	(1980)	(1980)	(1981)	(2000)	(1988)	(1988)	(1988)	(1994)	(1988)

SUMMARY STATISTICS

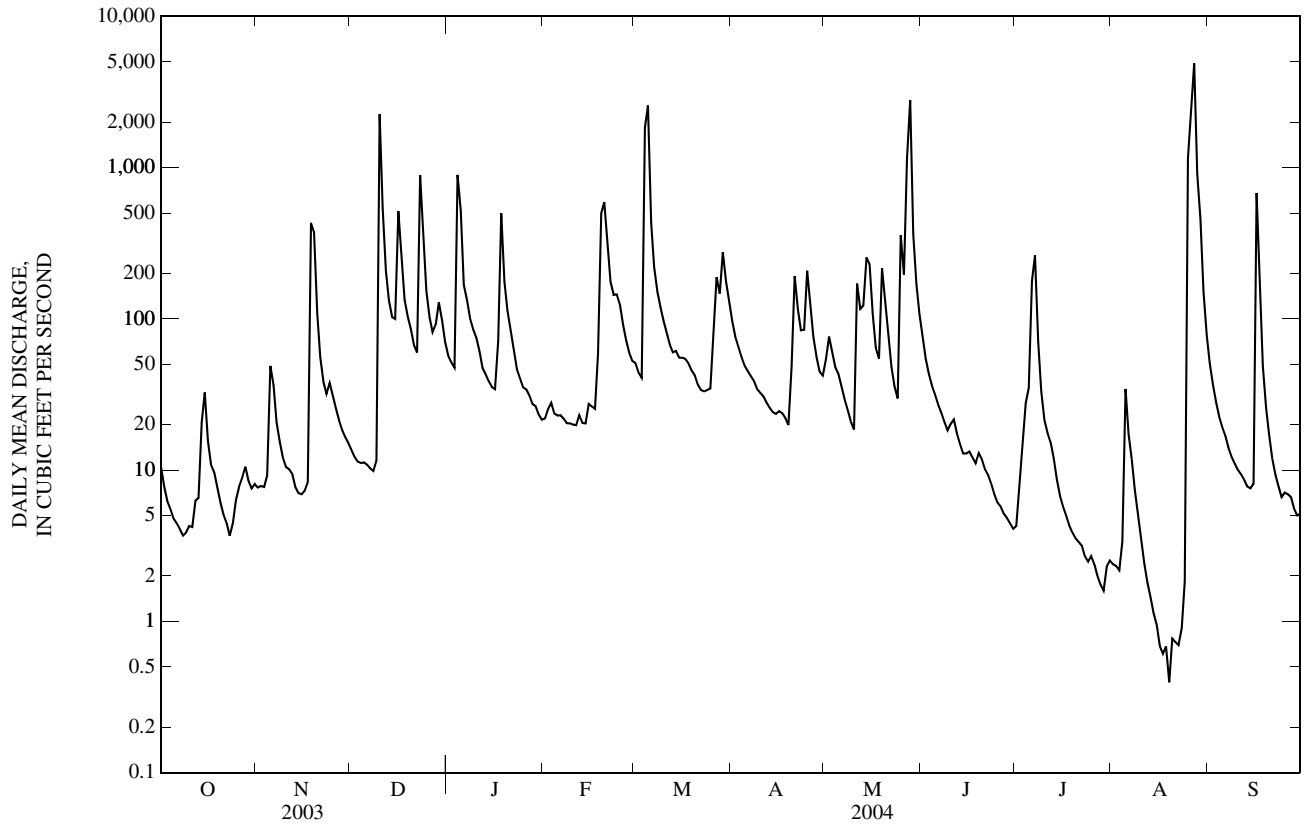
FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1980 - 2004

ANNUAL MEAN	109	119	155
HIGHEST ANNUAL MEAN			355
LOWEST ANNUAL MEAN			33.1
HIGHEST DAILY MEAN	5,460	May 10	4,900
LOWEST DAILY MEAN	0.60	Aug 11	0.40
ANNUAL SEVEN-DAY MINIMUM	0.73	Aug 9	0.65
MAXIMUM PEAK FLOW	---		10,500
MAXIMUM PEAK STAGE	---		14.69
INSTANTANEOUS LOW FLOW	---		0.28
ANNUAL RUNOFF (INCHES)	7.21	7.90	10.22
10 PERCENT EXCEEDS	168	193	222
50 PERCENT EXCEEDS	16	26	23
90 PERCENT EXCEEDS	2.6	4.1	1.2

05508805 SPENCER CREEK BELOW PLUM CREEK NEAR FRANKFORD, MO—Continued



MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05514500 CUIVRE RIVER NEAR TROY, MO

LOCATION.--Lat 39°00'32", long 90°58'39", in SE ¼ sec.14, T.49 N., R.1 W., Lincoln County, Hydrologic Unit 07110008, on downstream side of right end of downstream bridge on dual U.S. Highway 61, 1.2 mi downstream from confluence of North Fork and West Fork Cuivre Rivers, and 2.0 mi north of Troy.

DRAINAGE AREA.--903 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 450.27 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1930, nonrecording gage at site 3 mi downstream at datum 4.31 ft lower; Oct. 1, 1930, to July 1939, nonrecording gage at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--The highest flood since 1888 was the flood of December 1895 which reached a gage height of 27.90 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	36	18	71	217	130	214	652	567	448	38	31	145
2	29	22	62	205	126	197	516	1,180	338	41	28	105
3	24	23	56	188	e120	189	427	664	270	134	27	81
4	23	26	55	4,570	e121	3,580	361	453	224	675	29	65
5	21	1,050	55	4,680	e121	17,800	315	342	194	970	229	54
6	20	361	49	1,030	e119	6,090	286	278	171	1,140	94	45
7	18	191	48	524	e115	1,570	267	225	154	1,160	50	36
8	16	114	47	440	e109	809	242	187	137	432	38	30
9	17	80	49	337	e107	599	214	157	127	252	32	27
10	19	64	2,000	277	e109	482	196	135	132	156	27	25
11	18	58	2,670	245	e156	406	186	141	135	1,300	22	23
12	16	52	799	222	462	341	170	146	119	927	19	21
13	15	40	375	202	e365	301	156	268	108	343	18	20
14	18	34	247	188	e288	283	146	665	98	178	16	20
15	16	31	192	170	e255	257	140	869	103	117	15	21
16	16	30	172	162	e246	243	139	457	819	87	14	1,470
17	28	31	574	788	e238	235	135	299	207	69	15	1,270
18	35	3,390	412	6,330	245	228	126	216	122	59	15	434
19	32	4,670	225	1,770	647	217	113	5,100	299	51	13	191
20	40	1,060	154	650	1,580	208	260	3,220	134	46	20	116
21	40	510	127	474	1,390	178	449	709	96	44	19	81
22	32	311	273	395	749	161	466	425	91	43	18	63
23	28	230	12,600	281	504	156	312	291	79	37	20	52
24	23	242	3,870	277	431	166	344	225	68	31	62	43
25	21	308	1,050	238	405	202	2,350	2,470	55	31	398	36
26	19	204	587	e202	346	3,630	922	4,530	50	31	9,390	30
27	18	148	438	e186	289	7,220	532	4,110	46	29	3,760	25
28	20	111	361	167	247	2,140	382	12,800	44	27	2,090	22
29	17	93	302	e162	223	3,320	287	3,460	41	26	497	19
30	18	84	260	e156	---	1,590	267	1,020	39	34	311	19
31	18	---	230	e141	---	929	---	608	---	33	197	---
MEAN	22.9	453	916	835	353	1,740	379	1,491	165	276	565	153
MAX	40	4,670	12,600	6,330	1,580	17,800	2,350	12,800	819	1,300	9,390	1,470
MIN	15	18	47	141	107	156	113	135	39	26	13	19
IN.	0.03	0.56	1.17	1.07	0.42	2.22	0.47	1.90	0.20	0.35	0.72	0.19

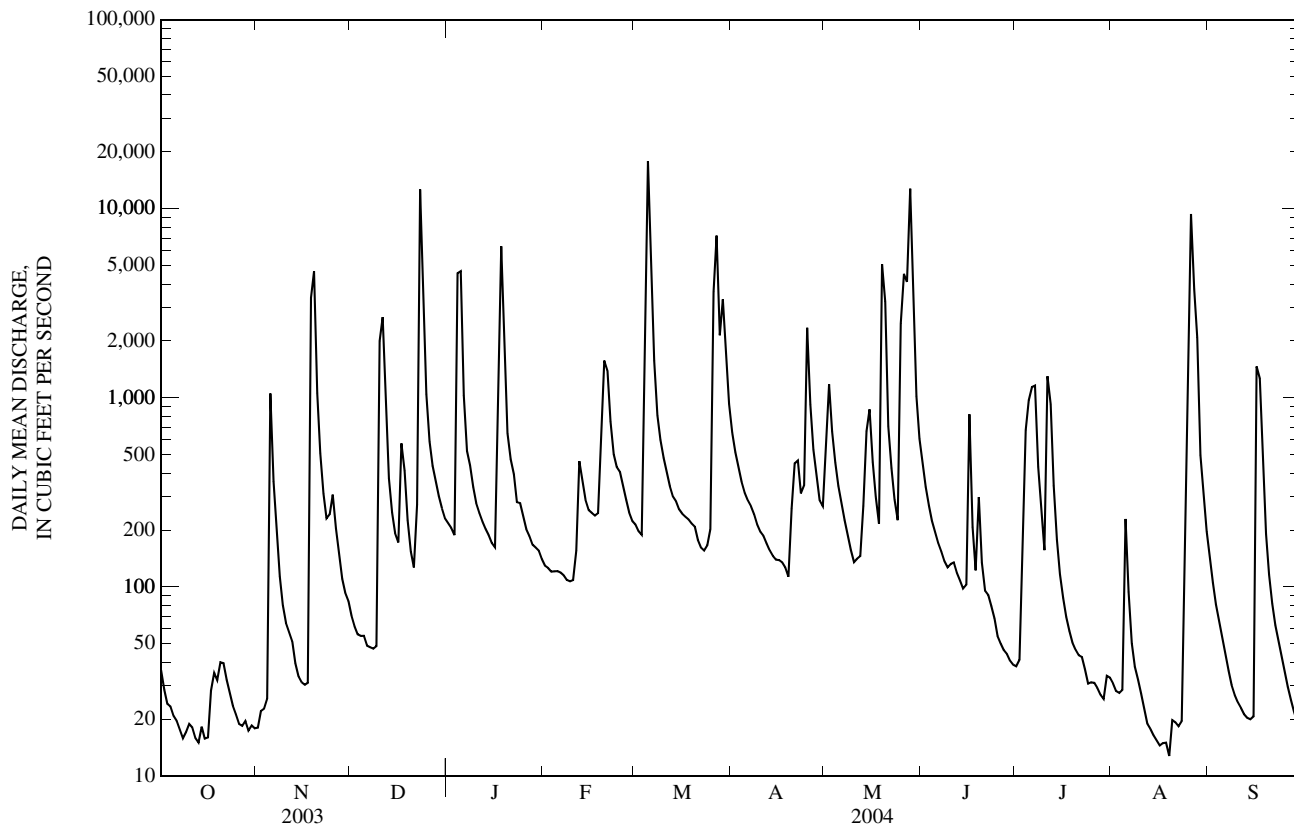
STATISTICS OF MONTHLY MEAN DATA FOR PERIOD OF RECORD, BY WATER YEAR (WY)

MEAN	388	501	503	538	858	1,005	1,196	1,114	713	544	291	442
MAX	6,704	4,503	5,924	2,465	4,250	3,596	6,126	6,311	4,735	4,366	1,994	9,098
(WY)	(1942)	(1986)	(1983)	(1949)	(1962)	(1922)	(1994)	(1929)	(1970)	(1981)	(1923)	(1993)
MIN	0.10	1.30	1.11	1.63	1.80	2.51	25.8	17.1	11.0	0.44	0.23	0.24
(WY)	(1965)	(1954)	(1964)	(1954)	(1954)	(1954)	(1954)	(1934)	(1936)	(1934)	(1936)	(1964)

05514500 CUIVRE RIVER NEAR TROY, MO—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		FOR PERIOD OF RECORD	
ANNUAL MEAN	698		617		673	
HIGHEST ANNUAL MEAN					2,186	1993
LOWEST ANNUAL MEAN					27.3	1954
HIGHEST DAILY MEAN	31,300	May 11	17,800	Mar 5	76,400	Oct 5, 1941
LOWEST DAILY MEAN	5.9	Aug 28	13	Aug 19	0.00	Several Years
ANNUAL SEVEN-DAY MINIMUM	6.6	Aug 22	15	Aug 13	0.00	At Times
MAXIMUM PEAK FLOW	---		20,700	Mar 5	120,000	Oct 5, 1941
MAXIMUM PEAK STAGE	---		24.29	Mar 5	33.40	Oct 5, 1941
INSTANTANEOUS LOW FLOW	---		12	Aug 16,19	0.00	Several Years
ANNUAL RUNOFF (INCHES)	10.50		9.31		10.13	
10 PERCENT EXCEEDS	1,190		1,170		1,240	
50 PERCENT EXCEEDS	90		170		92	
90 PERCENT EXCEEDS	16		21		6.0	

e Estimated



MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05514500 CUIVRE RIVER NEAR TROY, MO—Continued
(Ambient Water-Quality Monitoring Network)

WATER-QUALITY RECORDS

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

REMARKS.--National Stream-Quality Accounting Network station October 1986 through September 1994. Ambient Water-Quality Monitoring Network station October 1994 to current year.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd μ S/cm 25 degC (00095)	Temperature, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	
NOV 13...	0900	Environmental	44	11.6	99	7.7	395	8.3	180	57.2	8.88	5.22	
NOV 13...	0901	Replicate	--	11.5	98	7.7	396	8.3	180	58.0	9.00	5.31	
JAN 13...	1000	Environmental	222	13.4	99	7.8	385	2.1	--	--	--	--	
MAR 01...	1000	Environmental	219	12.5	111	7.2	356	9.0	--	--	--	--	
MAY 03...	1225	Environmental	650	8.0	79	7.7	320	14.5	130	42.8	6.37	5.12	
JUL 20...	1500	Environmental	49	10.5	139	7.4	338	28.4	--	--	--	--	
SEP 14...	1100	Environmental	23	7.7	93	7.6	366	23.8	--	--	--	--	
Date	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd end pt, field, mg/L as CaCO ₃ (00410)	ANC, wat unfltrd incrm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unfltrd incrm. titr., field, mg/L (00450)	Carbonate, wat unfltrd incrm. titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat fltrd mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
NOV 13...	11.1	162	163	199	<1	16.6	<0.2	17.9	228	17	0.61	E.03n	0.46
NOV 13...	11.2	--	--	--	--	17.0	<0.2	18.0	230	16	0.40	<0.04	0.47
JAN 13...	--	145	142	173	<1	--	--	--	--	24	0.55	E.03n	1.63
MAR 01...	--	113	114	139	<1	--	--	--	--	17	0.55	<0.04	1.13
MAY 03...	12.0	110	110	135	<1	17.4	0.2	20.3	207	52	1.2	0.11	2.02
JUL 20...	--	139	139	170	<1	--	--	--	--	32	0.89	<0.04	<0.06
SEP 14...	--	153	153	187	<1	--	--	--	--	<10	0.60	<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, col/100 mL (31633)	Fecal coliform, M-FC MF, col/100 mL (31625)	Fecal streptococci KF MF, col/100 mL (31673)	Aluminum, water, fltrd, μ g/L (01106)	Aluminum, water, unfltrd recoverable, μ g/L (01105)	Arsenic water, fltrd, μ g/L (01000)	Cadmium water, fltrd, μ g/L (01025)	Cadmium water, unfltrd μ g/L (01027)	Copper, water, fltrd, μ g/L (01040)
NOV 13...	<0.008	E.01n	E.03n	0.09	64	130k	86	E1n	253v	0.7	<0.04	E.02n	1.0
NOV 13...	<0.008	E.01n	E.02n	0.08	90	140k	82	E1n	247v	0.7	<0.04	<0.04	1.0
JAN 13...	0.014	0.07	0.10	0.14	64	78	143	--	--	--	--	--	--
MAR 01...	0.017	0.03	0.05	0.10	10k	30k	10k	--	--	--	--	--	--
MAY 03...	0.060	0.10	0.07	0.19	230k	360k	129k	7	968	1.0	<0.04	E.03n	2.0
JUL 20...	<0.008	<0.02	<0.04	0.11	200	290	114	--	--	--	--	--	--
SEP 14...	<0.008	<0.02	<0.04	0.08	40	30k	40	--	--	--	--	--	--

05514500 CUIVRE RIVER NEAR TROY, 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								
13...	13	<0.08	0.55v	223	<0.02	E.3n	M	E1n
13...	13	<0.08	0.54v	219	<0.02	E.4n	M	E1n
JAN								
13...	--	--	--	--	--	--	--	--
MAR								
01...	--	--	--	--	--	--	--	--
MAY								
03...	38	E.05n	1.40	50.1	<0.02	E.4n	M	5
JUL								
20...	--	--	--	--	--	--	--	--
SEP								
14...	--	--	--	--	--	--	--	--

Remark codes used in this table:

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

Value qualifier codes used in this table:

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

MISSISSIPPI RIVER BASIN ABOVE MISSOURI RIVER

05514840 DARDENNE CREEK AT O'FALLON, MO

LOCATION.--Lat 38°44'25", long 90°41'42", in NE ¼ NE ¼ SE ¼ sec.16, T.46 N., R.3 E., St. Charles County, Hydrologic Unit 07110009, attached to downstream side of State Highway K bridge, 4.2 mi south of Interstate 70.

DRAINAGE AREA.--61.0 mi².

PERIOD OF RECORD.--Nov. 18, 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

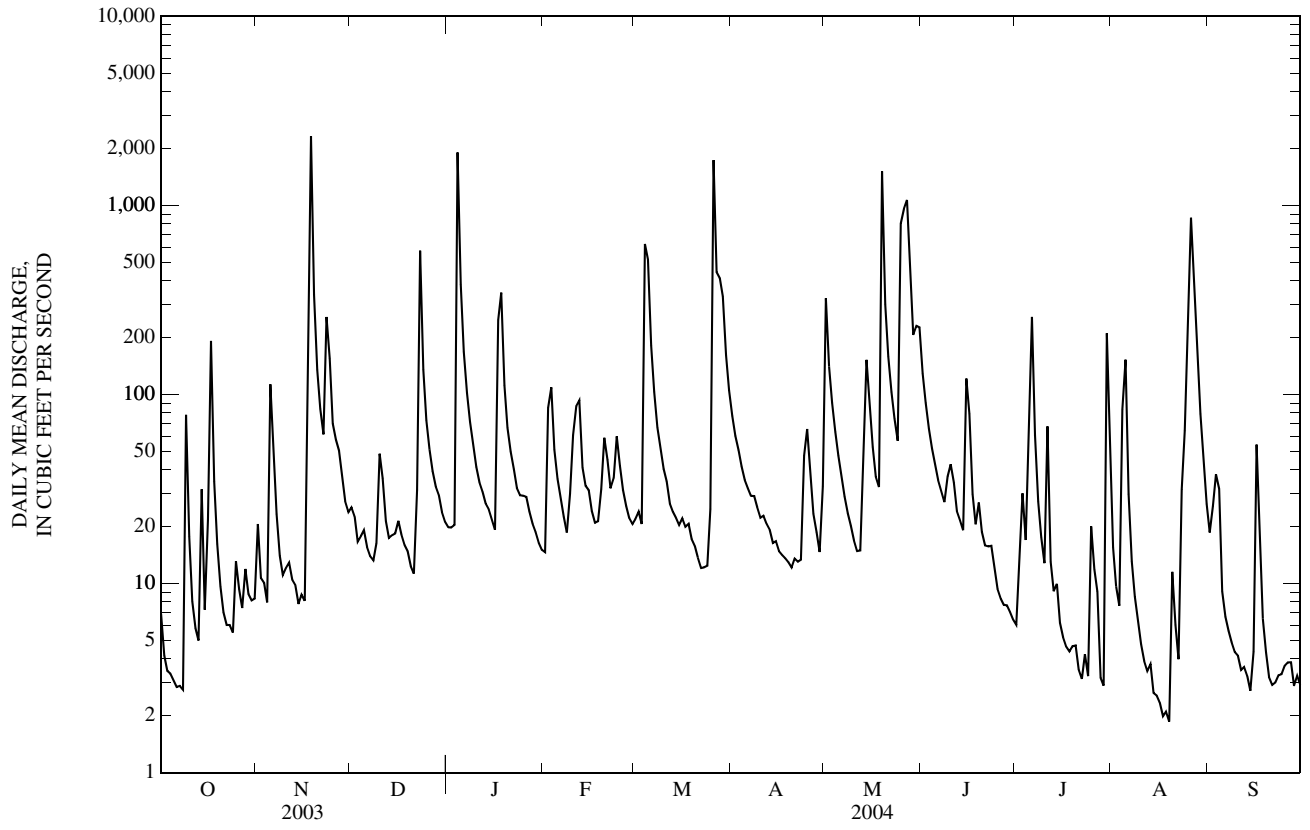
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	21	25	20	15	22	77	323	129	6.0	16	19
2	4.2	11	23	20	85	24	61	140	90	14	9.7	26
3	3.4	10	17	20	109	21	51	90	66	30	7.6	38
4	3.3	7.9	18	1,910	51	626	42	63	52	17	83	32
5	3.1	113	19	382	36	517	35	47	43	88	153	9.1
6	2.8	53	16	168	29	182	32	37	35	257	30	6.7
7	2.9	23	14	102	23	103	29	29	31	61	13	5.6
8	2.7	14	13	72	19	67	29	24	27	27	8.5	4.9
9	78	11	16	54	30	53	25	20	37	18	6.3	4.3
10	18	12	49	41	61	40	22	17	43	13	4.8	4.2
11	8.1	13	36	34	87	35	23	15	34	68	3.9	3.5
12	5.8	10	21	31	93	27	21	15	24	13	3.4	3.6
13	5.0	9.8	17	26	41	24	19	47	22	9.1	3.7	3.2
14	32	7.8	18	25	33	22	16	153	19	10	2.6	2.7
15	7.3	8.7	18	22	31	20	17	94	121	6.2	2.6	4.4
16	22	8.1	21	19	24	22	15	53	79	5.2	2.3	54
17	192	423	18	248	21	20	14	37	30	4.6	2.0	15
18	35	2,320	16	346	21	21	14	32	21	4.4	2.1	6.5
19	16	338	15	112	32	17	13	1,510	27	4.7	1.9	4.3
20	9.7	135	12	67	59	16	12	301	19	4.7	12	3.2
21	7.0	84	11	50	45	14	14	159	16	3.5	6.0	2.9
22	6.0	62	31	40	32	12	13	103	16	3.1	4.0	3.0
23	6.0	257	576	32	36	12	13	74	16	4.2	31	3.3
24	5.5	155	135	29	60	12	48	57	12	3.2	64	3.3
25	13	70	73	29	42	25	66	802	9.4	20	276	3.7
26	9.3	58	51	29	31	1,730	37	959	8.3	12	860	3.8
27	7.4	51	39	24	26	444	23	1,070	7.7	9.0	424	3.8
28	12	37	33	21	22	413	19	464	7.7	3.2	209	2.9
29	8.8	27	29	19	21	330	15	207	7.1	2.9	79	3.3
30	8.2	24	24	16	---	162	33	230	6.4	211	44	2.9
31	8.3	---	21	15	---	105	---	227	---	50	26	---
MEAN	17.7	146	46.0	130	41.9	166	28.3	239	35.2	31.7	77.1	9.44
MAX	192	2,320	576	1,910	109	1,730	77	1,510	129	257	860	54
MIN	2.7	7.8	11	15	15	12	12	15	6.4	2.9	1.9	2.7
IN.	0.34	2.67	0.87	2.45	0.74	3.13	0.52	4.51	0.64	0.60	1.46	0.17

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

MEAN	20.5	52.3	39.3	47.8	59.9	85.4	60.8	142	125	18.4	22.4	9.39
MAX	33.4	146	91.2	130	101	166	138	271	220	31.7	77.1	18.6
(WY)	(2002)	(2004)	(2002)	(2004)	(2001)	(2004)	(2002)	(2002)	(2000)	(2004)	(2004)	(2003)
MIN	6.93	8.38	4.14	3.84	34.9	22.9	20.1	10.5	35.2	8.97	3.64	3.37
(WY)	(2001)	(2003)	(2001)	(2000)	(2003)	(2000)	(2000)	(2001)	(2004)	(2001)	(2003)	(2001)

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL MEAN	56.8		81.1		58.8	
HIGHEST ANNUAL MEAN					82.2	
LOWEST ANNUAL MEAN					27.2	
HIGHEST DAILY MEAN	2,320	Nov 18	2,320	Nov 18	4,140	Jun 24, 2000
LOWEST DAILY MEAN	0.82	Aug 27	1.9	Aug 19	0.82	Aug 27, 2003
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 1	2.5	Aug 13	1.3	Sep 17, 2000
MAXIMUM PEAK FLOW	---		3,810	Jan 4	5,770	Jun 24, 2000
MAXIMUM PEAK STAGE	---		15.52	Jan 4	19.14	Jun 24, 2000
INSTANTANEOUS LOW FLOW	---		1.7	Aug 19	0.53	Sep 20, 2000
ANNUAL RUNOFF (INCHES)	12.63		18.10		13.09	
10 PERCENT EXCEEDS	112		156		104	
50 PERCENT EXCEEDS	17		22		14	
90 PERCENT EXCEEDS	2.7		4.1		3.0	



05514860 DARDENNE CREEK AT OLD TOWN ST. PETERS, MO

LOCATION.--Lat 38°48'12", long 90°38'06", in SE ¼ SW ¼ SW ¼ sec.24, T.47 N., R.3 E., St. Charles County, Hydrologic Unit 07110009, on left bank 0.6 mi upstream from State Highway C.

DRAINAGE AREA.--102 mi².

PERIOD OF RECORD.--Nov. 18, 1999 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	20	64	31	24	25	36	e142	396	108	6.5	34	32
2	9.1	67	42	24	184	36	e96	128	70	19	22	31
3	6.3	27	30	27	179	33	e74	88	54	100	20	34
4	6.6	30	30	2,410	111	948	e64	65	46	31	118	37
5	5.6	263	30	1,940	58	978	e57	52	39	64	152	23
6	5.3	172	27	190	47	164	50	44	33	465	41	17
7	5.9	61	22	129	41	104	44	36	29	70	24	15
8	6.5	35	21	102	40	77	46	28	30	42	17	15
9	213	26	27	86	47	65	42	25	44	31	14	14
10	86	21	95	72	96	55	37	24	43	25	11	13
11	25	27	56	62	108	49	43	22	35	173	11	12
12	13	23	32	59	104	42	34	21	26	34	9.5	11
13	10	19	26	57	58	37	32	41	23	20	9.7	11
14	103	19	28	61	49	37	31	145	21	18	8.6	12
15	22	24	30	57	47	33	28	84	53	16	8.0	11
16	22	19	34	47	39	37	26	50	80	18	7.8	77
17	482	227	28	418	34	34	25	38	28	14	7.1	28
18	88	4,160	33	544	37	35	23	49	23	9.8	7.2	17
19	43	1,240	34	134	47	32	22	2,330	28	9.0	11	13
20	29	173	34	91	69	27	21	739	19	8.3	35	11
21	21	110	34	73	59	25	23	124	17	7.9	21	8.9
22	21	84	34	62	46	22	22	85	17	6.8	12	7.3
23	19	468	428	51	51	22	29	69	13	15	34	8.4
24	19	256	139	48	68	24	86	57	11	9.4	92	9.2
25	39	101	84	46	55	59	91	721	8.7	50	271	9.2
26	39	76	61	48	44	1,800	51	1,840	7.4	26	1,670	7.8
27	20	70	48	42	39	1,710	36	2,430	7.4	18	1,810	8.4
28	37	52	40	49	34	e474	29	1,220	7.7	13	299	8.4
29	26	40	39	35	32	e437	25	157	8.1	8.8	81	9.6
30	19	33	31	33	---	e354	61	298	7.4	483	53	8.8
31	17	---	28	27	---	e232	---	352	---	71	39	---
MEAN	47.7	266	53.4	227	63.7	259	46.3	379	31.2	60.7	160	17.3
MAX	482	4,160	428	2,410	184	1,800	142	2,430	108	483	1,810	77
MIN	5.3	19	21	24	25	22	21	21	7.4	6.5	7.1	7.3
IN.	0.54	2.91	0.60	2.57	0.67	2.92	0.51	4.29	0.34	0.69	1.81	0.19

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

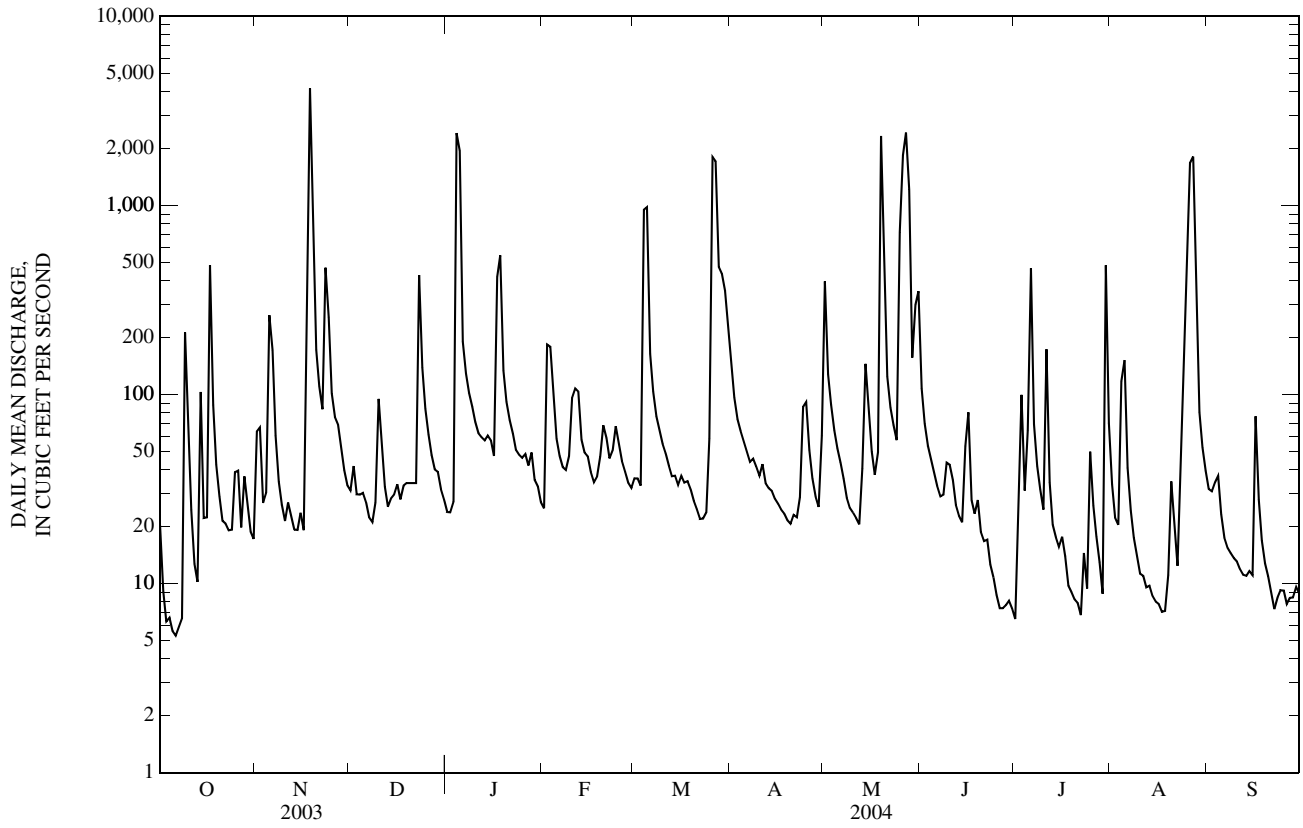
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
MEAN	64.5	105	77.2	93.5	117	138	110	264	253	42.4	49.9	33.6			
MAX	116	266	160	227	193	259	237	522	429	60.7	160	67.7			
(WY)	(2003)	(2004)	(2002)	(2004)	(2001)	(2004)	(2002)	(2002)	(2003)	(2004)	(2004)	(2002)			
MIN	27.0	32.6	7.16	6.85	63.7	33.2	31.1	30.0	31.2	15.5	10.3	5.76			
(WY)	(2001)	(2001)	(2001)	(2000)	(2004)	(2000)	(2000)	(2001)	(2004)	(2002)	(2003)	(2001)			

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL MEAN	126		135		116	
HIGHEST ANNUAL MEAN					152	
LOWEST ANNUAL MEAN					59.2	
HIGHEST DAILY MEAN	4,160	Nov 18	4,160	Nov 18	4,670	Jun 24, 2000
LOWEST DAILY MEAN	2.1	Aug 28	5.3	Oct 6	0.45	Oct 3, 2001
ANNUAL SEVEN-DAY MINIMUM	3.5	Aug 18	6.5	Oct 2	0.68	Sep 28, 2001
MAXIMUM PEAK FLOW	---		4,670	Nov 18	6,370	Jun 24, 2000
MAXIMUM PEAK STAGE	---		19.31	Nov 18	22.14	Jun 24, 2000
INSTANTANEOUS LOW FLOW	---		4.0	Oct 7	0.30	Oct 3, 2001
ANNUAL RUNOFF (INCHES)	16.80		18.04		15.48	
10 PERCENT EXCEEDS	247		197		189	
50 PERCENT EXCEEDS	34		35		27	
90 PERCENT EXCEEDS	7.7		9.7		5.3	

e Estimated

05514860 DARDENNE CREEK AT OLD TOWN ST. PETERS, MO—Continued



MISSISSIPPI RIVER MAIN STEM

05587450 MISSISSIPPI RIVER AT GRAFTON, IL

LOCATION.--Lat 38°58'05", long 90°25'44", in NE ¼ sec.15, T.6 N., R.12 W., Jersey County, Hydrologic Unit 07110009, on left bank 0.2 mi downstream from the mouth of Illinois River, 15.3 mi above Lock and Dam 26, 23.0 mi above mouth of Missouri River, and at mile 218.6 upstream of the mouth of Ohio River.

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

PERIOD OF RECORD.--

DISCHARGE: Intermittently from 1880 to 1928, computed daily 1928 to 1932 by the National Weather Service and/or the U.S. Army Corps of Engineers. Discharge previously published as "Mississippi River at Alton, IL" (05587500) October 1927 to September 1986.

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

GAGE.--Water-stage recorder. Datum of gage is 403.79 ft above National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder 15.3 mi downstream.

REMARKS.--Records poor. Natural flow of river affected by many navigation dams in upper Mississippi River Basin. Flood water from Missouri River overtops or breaches the levees at extremely high stages. U.S. Army Corps of Engineers satellite telemeter at station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31,500	38,300	66,800	57,600	49,500	87,200	191,000	119,000	275,000	269,000	85,100	110,000
2	28,700	38,100	58,700	55,800	47,300	86,200	204,000	122,000	281,000	258,000	84,200	82,100
3	26,200	36,500	66,100	53,700	e42,500	95,000	210,000	118,000	293,000	247,000	84,200	75,200
4	27,000	44,000	62,300	63,700	e37,000	106,000	210,000	119,000	303,000	234,000	88,600	70,600
5	26,800	56,700	48,600	62,200	e38,200	150,000	210,000	112,000	306,000	222,000	95,200	61,000
6	23,700	64,000	46,300	46,500	e39,800	204,000	208,000	107,000	306,000	199,000	99,600	53,700
7	16,200	61,500	51,400	41,200	e38,400	223,000	210,000	96,100	304,000	167,000	97,000	52,600
8	25,200	67,200	56,700	46,600	e38,400	224,000	212,000	96,300	300,000	154,000	88,900	44,700
9	39,600	67,900	54,200	38,100	e34,500	223,000	206,000	92,400	297,000	143,000	90,100	53,100
10	41,800	62,400	60,900	32,500	e34,300	221,000	201,000	92,200	292,000	145,000	90,300	48,200
11	32,900	61,100	111,000	40,500	e35,300	207,000	201,000	88,900	288,000	152,000	78,700	42,400
12	30,500	57,800	100,000	43,400	e39,100	170,000	199,000	87,200	283,000	159,000	81,400	42,500
13	26,000	54,400	87,500	40,900	e45,100	169,000	184,000	92,100	279,000	168,000	79,600	41,700
14	24,500	63,200	77,400	38,900	46,800	151,000	167,000	98,200	276,000	175,000	75,700	48,600
15	30,500	62,100	69,300	47,700	42,500	130,000	141,000	104,000	273,000	175,000	68,900	63,300
16	36,200	60,200	62,900	50,000	39,900	117,000	110,000	102,000	272,000	170,000	73,000	60,300
17	44,700	58,900	64,000	45,100	38,800	124,000	108,000	105,000	276,000	164,000	74,500	54,500
18	35,700	82,200	66,900	47,400	42,600	118,000	105,000	106,000	282,000	154,000	72,600	54,800
19	34,600	80,400	56,300	44,700	43,200	125,000	100,000	114,000	284,000	144,000	69,000	60,900
20	28,000	78,600	47,800	40,700	52,600	127,000	97,700	134,000	284,000	138,000	73,000	58,100
21	35,500	71,300	54,100	43,700	68,400	131,000	101,000	139,000	284,000	131,000	76,100	60,600
22	29,400	77,000	57,400	41,000	78,100	128,000	100,000	146,000	285,000	126,000	74,900	63,400
23	31,900	63,900	68,000	35,900	83,000	114,000	107,000	151,000	286,000	121,000	75,100	74,500
24	37,200	48,600	67,800	44,300	86,200	113,000	108,000	153,000	288,000	122,000	68,500	80,900
25	34,000	66,600	56,200	49,700	87,400	108,000	111,000	172,000	290,000	121,000	75,500	79,800
26	31,700	76,400	51,900	40,800	97,800	113,000	110,000	224,000	290,000	116,000	101,000	83,700
27	21,500	67,100	56,200	34,500	96,900	139,000	108,000	244,000	290,000	106,000	99,400	84,400
28	32,000	57,900	57,900	38,100	92,500	150,000	115,000	261,000	288,000	99,900	169,000	77,900
29	38,400	59,500	50,600	46,600	90,700	176,000	120,000	271,000	283,000	93,700	209,000	71,000
30	36,500	70,500	45,800	51,100	---	172,000	115,000	278,000	277,000	91,300	154,000	71,600
31	36,200	---	54,700	52,200	---	180,000	---	275,000	---	87,700	133,000	---
MEAN	31,440	61,810	62,440	45,650	55,410	147,800	152,300	142,600	287,200	156,500	93,070	64,200
MAX	44,700	82,200	111,000	63,700	97,800	224,000	212,000	278,000	306,000	269,000	209,000	110,000
MIN	16,200	36,500	45,800	32,500	34,300	86,200	97,700	87,200	272,000	87,700	68,500	41,700
IN.	0.21	0.40	0.42	0.31	0.35	0.99	0.99	0.96	1.87	1.05	0.63	0.42

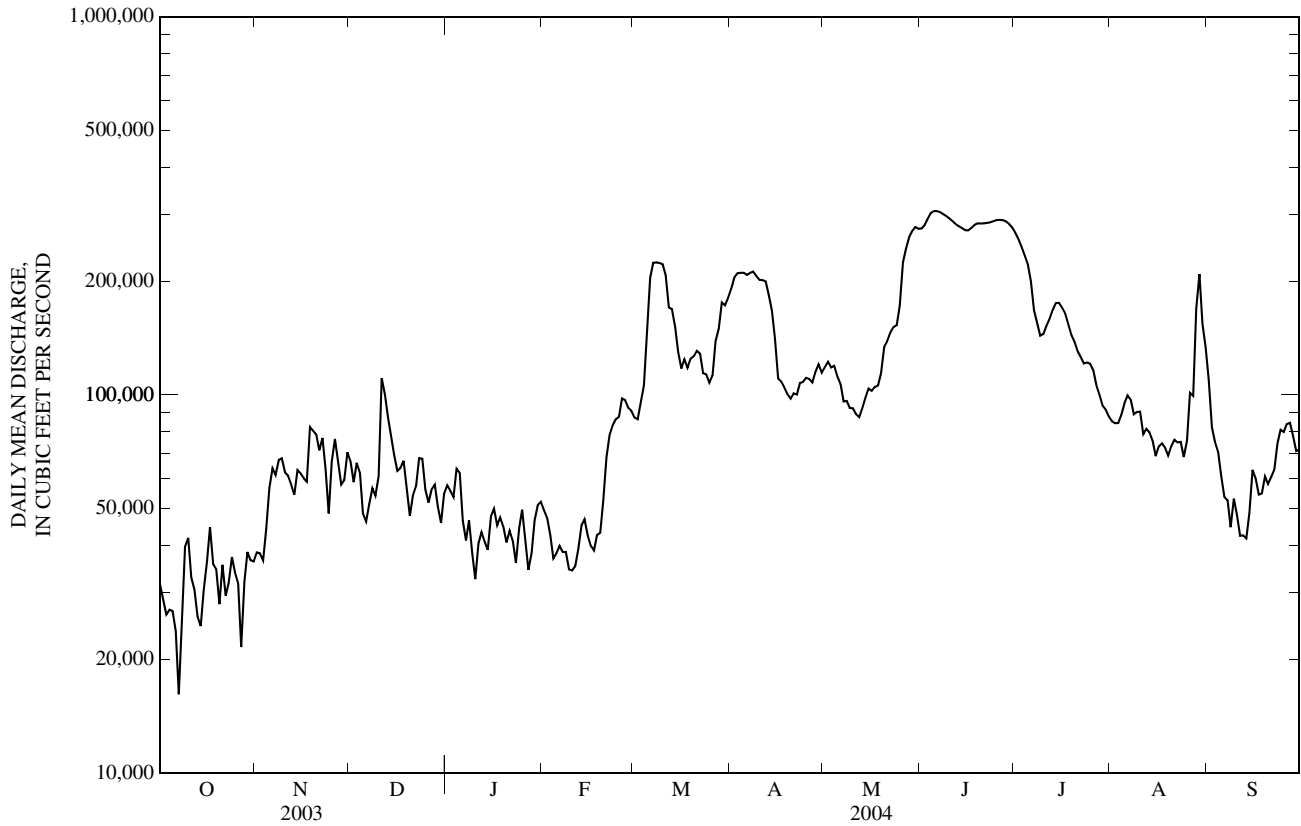
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

MEAN	84,750	88,780	83,690	74,370	92,220	140,200	178,800	202,900	182,600	149,000	101,800	79,700
MAX	334,900	171,300	169,900	161,000	158,000	217,400	342,100	333,300	287,200	469,300	416,900	309,900
(WY)	(1987)	(1987)	(1993)	(1993)	(1999)	(1997)	(1993)	(1993)	(2004)	(1993)	(1993)	(1993)
MIN	28,050	33,270	31,810	34,800	39,860	56,560	72,770	69,140	36,310	30,420	37,230	30,600
(WY)	(1989)	(1990)	(1990)	(1990)	(2003)	(2003)	(2000)	(1988)	(1988)	(1988)	(1988)	(2003)

05587450 MISSISSIPPI RIVER AT GRAFTON, IL—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1987 - 2004	
ANNUAL MEAN	77,650		108,300		121,700	
HIGHEST ANNUAL MEAN					250,700 1993	
LOWEST ANNUAL MEAN					53,860 1989	
HIGHEST DAILY MEAN	248,000	May 12	306,000	Jun 5,6	596,000	Aug 3, 1993
LOWEST DAILY MEAN	16,200	Oct 7	16,200	Oct 7	16,200	Oct 7, 2003
ANNUAL SEVEN-DAY MINIMUM	24,800	Oct 2	24,800	Oct 2	23,600	Dec 12, 1988
MAXIMUM PEAK FLOW	---		307,000	Jun 5,6	598,000	Aug 1, 1993
MAXIMUM PEAK STAGE	---		425.20	Jun 5	441.96	Aug 1, 1993
INSTANTANEOUS LOW FLOW	---		16,200	Oct 7	16,200	Oct 7, 2003
ANNUAL RUNOFF (INCHES)	6.15		8.61		9.65	
10 PERCENT EXCEEDS	170,000		250,000		246,000	
50 PERCENT EXCEEDS	57,800		82,200		94,100	
90 PERCENT EXCEEDS	30,600		38,100		42,500	

e Estimated



MISSISSIPPI RIVER MAIN STEM

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL
(Ambient Water-Quality Monitoring Network)

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

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

PERIOD OF RECORD.--March 1989 to current year. National Stream-Quality Accounting Network station September 1989 to October 1992. National Stream-Quality Accounting Network station November 1992 to September 2003. Ambient Water-Quality Monitoring Network November 1992 to current year.

REMARKS.--Sediment records fair.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT: October 1989 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

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

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

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 790 mg/L, March 7; minimum daily mean, 54 mg/L, Jan. 22.

SUSPENDED-SEDIMENT LOAD: Maximum daily, 476,000 tons, March 7; minimum daily, 3,440 tons, Oct. 7.

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

Date	Time	Sample type	Instantaneous discharge, cfs (00061)	Turbidity, wat unflab, 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)	Specific conductance, wat unfltrd μS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO ₃ (00900)
OCT 22...	1310	Environmental	29,400	12	--	--	10.6	112	8.5	487	17.6	210
NOV 12...	1225	Environmental	57,800	22	--	--	11.8	108	8.0	521	10.4	210
NOV 12...	1226	Replicate	--	--	--	--	--	--	--	--	--	200
DEC 01...	1345	Environmental	66,800	34	--	--	11.1	89	8.2	526	6.0	210
JAN 12...	1445	Environmental	43,400	42	0.117	0.086	15.4	111	8.4	569	1.7	260
FEB 23...	1340	Environmental	83,000	22	0.111	0.082	18.1	132	8.1	568	1.9	260
MAR 08...	1445	Environmental	224,000	320	0.179	0.136	9.7	81	7.8	476	7.2	190
APR 14...	1300	Environmental	167,000	51	0.165	0.123	9.2	87	8.0	420	12.3	170
APR 14...	1301	Replicate	--	--	0.160	0.120	9.3	88	8.1	405	12.5	180
MAY 10...	1310	Environmental	92,200	21	0.135	0.099	9.9	112	8.5	409	20.7	210
JUN 14...	1315	Environmental	276,000	89	0.194	0.143	6.7	84	7.6	414	25.6	210
JUL 12...	1325	Environmental	159,000	30	0.194	0.140	7.0	90	8.0	485	27.0	220
JUL 12...	1326	Replicate	--	--	0.197	0.143	7.0	90	8.0	494	27.2	220
AUG 09...	1315	Environmental	90,100	97	0.176	0.128	6.8	84	8.0	524	25.3	230
SEP 20...	1345	Environmental	58,100	25	0.154	0.112	8.3	98	8.6	430	23.4	210

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL—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 increm. titr., field, mg/L as CaCO ₃ (00419)	Bicarbonate, wat unf increm. titr., field, mg/L (00450)	Carbonate, wat unf increm. titr., field, mg/L (00447)	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 22...	47.1	22.3	3.68	26.2	169	170	178	14	38.4	0.2	1.1	37.9	296
NOV 12...	46.5	21.8	4.02	26.7	165	167	203	<1	40.4	0.3	3.0	39.5	303
12...	46.3	21.6	4.04	26.6	--	--	--	--	40.7	0.2	2.9	39.6	302
DEC 01...	47.9	20.7	4.01	18.1	154	156	191	<1	33.9	0.2	5.2	36.3	290
JAN 12...	63.3	25.5	3.32	23.3	188	190	228	2	38.5	0.2	5.8	41.6	329
FEB 23...	61.5	24.7	3.24	28.1	185	186	227	<1	48.4	0.2	6.0	41.5	364
MAR 08...	46.2	17.8	4.80	25.3	137	135	165	<1	42.5	0.2	7.8	34.8	288
APR 14...	40.3	16.1	3.46	14.8	128	129	157	<1	25.0	<0.2	6.3	25.7	237
14...	43.6	18.2	3.36	17.5	--	--	--	--	30.5	<0.2	6.1	29.5	263
MAY 10...	47.8	21.6	3.06	19.9	149	149	169	6	34.6	0.2	0.6	36.1	287
JUN 14...	50.9	19.7	3.56	14.6	157	161	196	<1	27.9	0.2	9.0	26.6	274
JUL 12...	52.9	20.2	3.30	11.3	153	155	189	<1	21.9	0.2	10.0	32.5	286
12...	53.9	20.3	3.30	11.5	--	--	--	--	22.4	0.2	10.0	32.6	284
AUG 09...	53.1	22.5	3.39	16.3	161	164	201	<1	29.0	0.3	8.5	42.0	303
SEP 20...	48.5	22.3	3.53	17.0	154	154	181	3	26.3	0.2	1.4	32.4	252

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)	Ortho-phosphate, 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 22...	19	0.96	<0.04	0.39	0.008	0.08	--	0.10	0.19	--	--	--	--
NOV 12...	29	0.78	0.08	0.95	0.020	0.12	--	0.16	0.20	--	--	--	--
12...	29	0.93	0.08	0.94	0.018	0.12	--	0.17	0.23	--	--	--	--
DEC 01...	42	0.87	0.08	2.71	0.020	0.10	--	0.14	0.21	--	--	--	--
JAN 12...	60	1.1	<0.04	3.54	0.021	0.06	0.47	0.09	0.22	3.6	<0.1	3.6	5.1
FEB 23...	28	0.88	0.07	2.65	0.021	0.06	0.29	0.08	0.18	1.9	<0.1	1.8	4.9
MAR 08...	597d	2.7	0.33	3.06	0.030	0.11	1.51	0.14	0.81	14.2	0.2	14.0	6.9
APR 14...	158d	1.3	<0.04	0.80	0.011	<0.02	0.69	0.07	0.30	5.0	0.2	4.8	5.8
14...	134d	1.6	E.04n	2.85	0.019	0.05	0.53	0.07	0.30	4.1	<0.1	4.0	5.6
MAY 10...	55	1.1	<0.04	2.65	0.026	0.07	0.57	0.07	0.19	3.0	<0.1	3.0	5.1
JUN 14...	166d	1.2	<0.04	5.05d	0.077	0.12	0.38	0.14	0.35	3.5	<0.1	3.4	6.4
JUL 12...	72	0.96	<0.04	4.79	0.040	0.09	0.60	0.12	0.22	3.8	<0.1	3.7	6.3
12...	66	1.0	<0.04	4.77	0.038	0.09	0.42	0.12	0.22	2.2	<0.1	2.2	7.0
AUG 09...	146d	1.0	<0.04	2.98	0.088	0.10	0.43	0.14	0.33	3.0	0.2	2.8	5.5
SEP 20...	<10	0.98	<0.04	0.82	0.027	0.07	0.45	0.11	0.20	3.0	<0.1	3.0	5.2

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL—Continued

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

Date	Pheo- phytin a, phyto- plank- ton, µg/L (62360)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli- form, M-FC col/ 100 mL (31625)	Fecal strep- tococci KF MF, col/ 100 mL (31673)	Chloro- phyll a phyto- plank- ton, fluoro, µg/L (70953)	Alum- inum, water, ftrd, µg/L (01106)	Alum- inum, water, unfltrd recover- able, µg/L (01105)	Cadmium water, ftrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, ftrd, µg/L (01040)	Iron, water, ftrd, µg/L (01046)	Lead, water, ftrd, µg/L (01049)	Lead, water, unfltrd recover- able, µg/L (01051)
OCT 22...	--	1k	6k	13k	--	--	--	--	--	--	--	--	--
NOV 12...	--	27	46	21	--	--	--	--	--	--	--	--	--
12...	--	33	33	18k	--	--	--	--	--	--	--	--	--
DEC 01...	--	34	22	18k	--	4	539	E.04n	0.08	2.6	6	E.07n	1.70
JAN 12...	17.2	11k	42	69	34.6	--	--	--	--	--	--	--	--
FEB 23...	E8.0	13k	10k	51	E14.1	--	--	--	--	--	--	--	--
MAR 08...	46.2	60k	170k	500	41.8	2	5,390d	E.03n	0.32	2.4	11	E.07n	10.5
APR 14...	28.6	21	17k	2k	24.7	--	--	--	--	--	--	--	--
14...	26.9	--	--	--	22.8	--	--	--	--	--	--	--	--
MAY 10...	25.7	22	58	1k	49.1	3	519	E.02n	0.07	1.6	E4n	E.06n	1.10
JUN 14...	11.6	200k	350	25k	10.1	--	--	--	--	--	--	--	--
JUL 12...	18.0	49	31	45	29.7	6	931	<0.04	0.07	1.7	E4n	0.11	1.60
12...	34.0	54	40	58	87.4	3	964	<0.04	0.06	1.9	E5n	<0.08	1.69
AUG 09...	12.8	120	110	10k	14.4	--	--	--	--	--	--	--	--
SEP 20...	19.5	23	24	3k	E45.6	--	--	--	--	--	--	--	--
Date	Mangan- ese, water, ftrd, µg/L (01056)	Mercury water, unfltrd recover- able, µg/L (71900)	Zinc, water, ftrd, µg/L (01090)	Zinc, water, unfltrd recover- able, µg/L (01092)	2,6-Di- ethyl- aniline water ftrd 0.7µ GF µg/L (82660)	CIAT, water, ftrd, µg/L (04040)	Aceto- chlor, water, ftrd, µg/L (49260)	Ala- chlor, water, ftrd, µg/L (46342)	alpha- HCH, water, ftrd, µg/L (34253)	Atra- zine, water, ftrd, µg/L (39632)	Azin- phos- methyl, water, ftrd 0.7µ GF µg/L (82686)	Ben- flur- alin, water, ftrd 0.7µ GF µg/L (82673)	Butyl- ate, water, ftrd, µg/L (04028)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	5.8	<0.02	4	9	--	--	--	--	--	--	--	--	--
JAN 12...	--	--	--	--	E.003t	E.053	0.039	0.009	<0.005	0.219	<0.050	<0.010	<0.002
FEB 23...	--	--	--	--	<0.006	E.045	0.051	0.020	<0.005	0.152	<0.050	<0.010	<0.002
MAR 08...	5.2	0.03	1	39	<0.006	E.044	0.049	<0.004	<0.005	0.180	<0.050	<0.010	<0.002
APR 14...	--	--	--	--	<0.006	E.013	0.063	0.009	<0.005	0.120	<0.050	<0.010	<0.002
14...	--	--	--	--	<0.006	E.018	0.066	0.009	<0.005	0.118	<0.050	<0.010	<0.002
MAY 10...	3.9	<0.02	1	6	<0.006	E.020	0.099	0.010	<0.005	0.474	<0.050	<0.010	<0.002
JUN 14...	--	--	--	--	<0.006	E.129	0.304	0.016	<0.005	2.25	<0.050	<0.010	<0.002
JUL 12...	1.0	<0.02	3	7	<0.006	E.133	0.095	0.011	<0.005	1.15	<0.050	<0.010	<0.002
12...	0.9	<0.02	1	7	<0.006	E.133	0.095	0.011	<0.005	1.15	<0.050	<0.010	<0.002
AUG 09...	--	--	--	--	<0.006	E.039	0.076	<0.004	<0.005	0.480	<0.050	<0.010	<0.002
SEP 20...	--	--	--	--	<0.006	E.039	0.021	<0.004	<0.005	0.220	<0.050	<0.010	<0.002

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL—Continued

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

Date	Carbaryl, water, fltrd 0.7µ GF (82680)	Carbofuran, water, fltrd 0.7µ GF (82674)	Chlorpyrifos water, fltrd, µg/L (38933)	cis-Permethrin water fltrd 0.7µ GF (82687)	Cyanazine, water, fltrd, µg/L (04041)	DCPA, water fltrd 0.7µ GF (82682)	Diazinon, water, fltrd, µg/L (39572)	Dieldrin, water, fltrd, µg/L (39381)	Disulfoton, water, fltrd 0.7µ GF (82677)	EPTC, water, fltrd 0.7µ GF (82668)	Ethalfuralin, water, fltrd 0.7µ GF (82663)	Ethoprop, water, fltrd 0.7µ GF (82672)	Fonofos water, fltrd, µg/L (04095)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
FEB 23...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
MAR 08...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
APR 14...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
APR 14...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
MAY 10...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
JUN 14...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
JUL 12...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
JUL 12...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
AUG 09...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003
SEP 20...	<0.041	<0.020	<0.005	<0.006	<0.018	<0.003	<0.005	<0.005	<0.02	<0.002	<0.009	<0.005	<0.003

Date	Lindane water, fltrd, µg/L (39341)	Linuron water fltrd 0.7µ GF (82666)	Malathion, water, fltrd, µg/L (39532)	Methyl parathion, water, fltrd 0.7µ GF (82667)	Metolachlor, water, fltrd, µg/L (39415)	Metribuzin, water, fltrd, µg/L (82630)	Molinate, water, fltrd 0.7µ GF (82671)	Napropamide, water, fltrd 0.7µ GF (82684)	p,p'-DDE, water, fltrd, µg/L (34653)	Parathion, water, fltrd, µg/L (39542)	Pebulate, water, fltrd 0.7µ GF (82669)	Pendimethalin, water, fltrd 0.7µ GF (82683)	Phorate water fltrd 0.7µ GF (82664)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	<0.004	<0.035	<0.027	<0.006	0.048	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
FEB 23...	<0.004	<0.035	<0.027	<0.006	0.022	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
MAR 08...	<0.004	<0.035	<0.027	<0.060	0.139	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
APR 14...	<0.004	<0.035	<0.027	<0.006	0.088	<0.006	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011
APR 14...	<0.004	<0.035	<0.027	<0.006	0.090	<0.006	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011
MAY 10...	<0.004	<0.035	<0.027	<0.006	0.109	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
JUN 14...	<0.004	<0.035	<0.027	<0.006	0.547	<0.010	<0.002	<0.007	<0.005	<0.010	<0.004	<0.022	<0.011
JUL 12...	<0.004	<0.035	<0.027	<0.006	0.220	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
JUL 12...	<0.004	<0.035	<0.027	<0.006	0.220	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
AUG 09...	<0.004	<0.035	<0.027	<0.006	0.057	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011
SEP 20...	<0.004	<0.035	<0.027	<0.006	0.040	<0.006	<0.002	<0.007	<0.003	<0.010	<0.004	<0.022	<0.011

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

Date	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)	Tebu-thiuron water fltrd µg/L (82670)	Terbacil, water, fltrd µg/L (82665)	Terbufos, water, fltrd µg/L (82675)	Thio-bencarb water fltrd µg/L (82681)	Tri-allate, water, fltrd µg/L (82678)	Tri-fluralin, water, fltrd µg/L (82661)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	--	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	E.01n	<0.004	<0.010	<0.011	<0.02	0.047	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
FEB 23...	E.01n	<0.004	<0.010	<0.011	<0.02	0.083	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAR 08...	0.02	<0.004	<0.010	<0.011	<0.02	0.068	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
APR 14...	E.01n	<0.004	<0.010	<0.011	<0.02	0.021	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
APR 14...	E.01n	<0.004	<0.010	<0.011	<0.02	0.021	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
MAY 10...	E.01n	<0.004	<0.010	<0.011	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JUN 14...	E.01n	<0.004	<0.010	<0.011	<0.02	0.028	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JUL 12...	E.01n	<0.004	<0.010	<0.011	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
JUL 12...	E.01n	<0.004	<0.010	<0.011	<0.02	0.023	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
AUG 09...	0.03	<0.004	<0.010	<0.011	<0.02	0.014	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009
SEP 20...	E.01n	<0.004	<0.010	<0.011	<0.02	0.018	<0.02	<0.034	<0.02	<0.005	<0.002	<0.009

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
t -- Below the long-term MDL

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	NOVEMBER			DECEMBER		
				Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER			NOVEMBER			DECEMBER		
1	31,500	135	11,500	38,300	58	6,050	66,800	131	23,500
2	28,700	118	9,150	38,100	70	7,210	58,700	184	29,100
3	26,200	109	7,730	36,500	70	6,890	66,100	195	34,700
4	27,000	86	6,250	44,000	70	8,370	62,300	120	20,300
5	26,800	90	6,510	56,700	88	13,500	48,600	95	12,500
6	23,700	92	5,920	64,000	101	17,400	46,300	95	11,900
7	16,200	78	3,440	61,500	95	15,700	51,400	104	14,500
8	25,200	81	5,630	67,200	93	17,000	56,700	101	15,500
9	39,600	101	10,700	67,900	97	17,700	54,200	116	16,800
10	41,800	89	10,000	62,400	102	17,200	60,900	219	38,500
11	32,900	93	8,280	61,100	119	19,800	111,000	440	132,000
12	30,500	97	7,990	57,800	113	18,100	100,000	378	104,000
13	26,000	99	6,930	54,400	94	13,900	87,500	359	84,900
14	24,500	101	6,680	63,200	106	18,100	77,400	364	76,200
15	30,500	103	8,490	62,100	80	13,400	69,300	344	64,500
16	36,200	95	9,170	60,200	96	15,700	62,900	236	40,200
17	44,700	77	9,230	58,900	114	18,200	64,000	221	38,200
18	35,700	77	7,400	82,200	132	29,300	66,900	226	40,900
19	34,600	74	6,850	80,400	138	29,900	56,300	176	27,000
20	28,000	101	7,630	78,600	165	35,000	47,800	127	16,500
21	35,500	87	8,380	71,300	210	40,400	54,100	108	15,700
22	29,400	74	5,870	77,000	154	31,900	57,400	100	15,500
23	31,900	70	5,980	63,900	173	29,400	68,000	165	30,700
24	37,200	70	7,010	48,600	246	32,400	67,800	168	30,900
25	34,000	88	8,080	66,600	218	38,800	56,200	119	18,200
26	31,700	86	7,360	76,400	131	26,900	51,900	90	12,600
27	21,500	84	4,860	67,100	156	28,000	56,200	85	12,900
28	32,000	76	6,580	57,900	185	29,000	57,900	72	11,200
29	38,400	74	7,690	59,500	163	26,200	50,600	73	10,000
30	36,500	68	6,680	70,500	137	26,000	45,800	70	8,680
31	36,200	60	5,890	---	---	---	54,700	67	9,930
	JANUARY			FEBRUARY			MARCH		
1	57,600	63	9,860	49,500	78	10,400	87,200	133	30,000
2	55,800	61	9,170	47,300	75	9,610	86,200	248	57,700
3	53,700	73	10,600	42,500	77	10,100	95,000	519	133,000
4	63,700	120	20,900	37,000	77	10,500	106,000	528	151,000
5	62,200	160	26,900	38,200	72	8,520	150,000	557	227,000
6	46,500	152	19,100	39,800	79	10,100	204,000	733	406,000
7	41,200	128	14,200	38,400	84	11,700	223,000	790	476,000
8	46,600	85	10,700	38,400	83	12,400	224,000	775	469,000
9	38,100	82	8,390	34,500	82	12,200	223,000	686	414,000
10	32,500	98	8,570	34,300	77	11,500	221,000	487	291,000
11	40,500	93	10,200	35,300	70	10,300	207,000	454	255,000
12	43,400	90	10,600	39,100	69	9,070	170,000	312	143,000
13	40,900	88	9,730	45,100	73	9,830	169,000	351	160,000
14	38,900	86	9,030	46,800	64	8,070	151,000	304	125,000
15	47,700	84	10,800	42,500	65	7,490	130,000	266	93,300
16	50,000	82	11,000	39,900	75	8,090	117,000	224	70,800
17	45,100	81	9,810	38,800	80	8,320	124,000	163	54,600
18	47,400	84	10,700	42,600	64	7,330	118,000	170	54,100
19	44,700	83	10,200	43,200	58	6,790	125,000	171	57,600
20	40,700	56	6,150	52,600	75	10,900	127,000	180	61,300
21	43,700	56	6,570	68,400	100	18,400	131,000	170	59,800
22	41,000	54	5,950	78,100	88	18,600	128,000	153	53,100
23	35,900	63	6,150	83,000	114	25,500	114,000	155	47,900
24	44,300	79	9,490	86,200	140	32,500	113,000	161	49,200
25	49,700	82	11,000	87,400	150	35,500	108,000	150	43,600
26	40,800	70	7,700	97,800	157	41,500	113,000	134	40,800
27	34,500	61	5,630	96,900	166	43,400	139,000	205	78,500
28	38,100	63	6,470	92,500	173	43,200	150,000	262	106,000
29	46,600	73	9,170	90,700	152	37,100	176,000	313	149,000
30	51,100	77	10,700	---	---	---	172,000	340	159,000
31	52,200	79	11,100	---	---	---	180,000	236	115,000

MISSISSIPPI RIVER MAIN STEM

05587455 MISSISSIPPI RIVER BELOW GRAFTON, IL—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
		APRIL		MAY	JUNE				
1	191,000	251	130,000	119,000	126	40,400	275,000	484	360,000
2	204,000	235	130,000	122,000	136	45,100	281,000	421	320,000
3	210,000	269	152,000	118,000	154	49,300	293,000	352	278,000
4	210,000	369	210,000	119,000	123	39,600	303,000	287	235,000
5	210,000	340	193,000	112,000	107	32,500	306,000	280	232,000
6	208,000	260	146,000	107,000	111	31,900	306,000	247	204,000
7	210,000	261	149,000	96,100	145	37,500	304,000	232	191,000
8	212,000	333	190,000	96,300	141	36,600	300,000	211	171,000
9	206,000	260	145,000	92,400	123	30,700	297,000	212	170,000
10	201,000	179	97,100	92,200	121	30,100	292,000	220	174,000
11	201,000	193	105,000	88,900	103	24,800	288,000	240	186,000
12	199,000	214	115,000	87,200	96	22,500	283,000	247	188,000
13	184,000	206	103,000	92,100	92	22,800	279,000	253	191,000
14	167,000	169	76,400	98,200	94	24,900	276,000	242	180,000
15	141,000	159	60,800	104,000	99	27,800	273,000	224	165,000
16	110,000	112	33,600	102,000	78	21,700	272,000	206	152,000
17	108,000	114	33,300	105,000	99	27,900	276,000	228	170,000
18	105,000	103	29,000	106,000	139	39,800	282,000	281	213,000
19	100,000	85	23,000	114,000	147	45,300	284,000	259	199,000
20	97,700	84	22,100	134,000	179	65,000	284,000	213	163,000
21	101,000	83	22,600	139,000	193	72,400	284,000	220	169,000
22	100,000	72	19,500	146,000	218	86,000	285,000	217	167,000
23	107,000	80	23,100	151,000	221	90,200	286,000	210	162,000
24	108,000	98	28,900	153,000	254	105,000	288,000	201	156,000
25	111,000	172	51,400	172,000	280	131,000	290,000	190	148,000
26	110,000	160	47,400	224,000	377	229,000	290,000	184	144,000
27	108,000	156	45,400	244,000	480	316,000	290,000	173	135,000
28	115,000	154	47,900	261,000	545	385,000	288,000	166	129,000
29	120,000	166	54,000	271,000	558	409,000	283,000	175	134,000
30	115,000	140	43,300	278,000	571	429,000	277,000	163	122,000
31	---	---	---	275,000	547	406,000	---	---	---
		JULY			AUGUST			SEPTEMBER	
1	269,000	158	114,000	85,100	102	23,500	110,000	222	66,400
2	258,000	181	126,000	84,200	75	17,000	82,100	224	49,700
3	247,000	194	130,000	84,200	76	17,400	75,200	192	39,000
4	234,000	183	116,000	88,600	81	19,300	70,600	200	38,200
5	222,000	203	121,000	95,200	93	23,900	61,000	182	29,900
6	199,000	149	80,500	99,600	106	28,600	53,700	165	23,900
7	167,000	135	61,000	97,000	155	40,500	52,600	144	20,400
8	154,000	113	47,100	88,900	177	42,600	44,700	130	15,800
9	143,000	127	49,300	90,100	157	38,200	53,100	104	15,000
10	145,000	151	59,200	90,300	121	29,700	48,200	112	14,500
11	152,000	124	51,000	78,700	88	18,700	42,400	96	11,000
12	159,000	124	53,300	81,400	87	19,000	42,500	93	10,700
13	168,000	127	57,700	79,600	101	21,700	41,700	93	10,500
14	175,000	129	61,000	75,700	88	18,100	48,600	105	13,900
15	175,000	144	68,000	68,900	79	14,700	63,300	138	23,700
16	170,000	134	61,300	73,000	83	16,300	60,300	130	21,200
17	164,000	130	57,600	74,500	81	16,200	54,500	117	17,200
18	154,000	117	48,400	72,600	78	15,400	54,800	119	17,600
19	144,000	99	38,700	69,000	76	14,100	60,900	132	21,600
20	138,000	91	33,800	73,000	90	17,800	58,100	119	18,600
21	131,000	99	35,000	76,100	137	28,100	60,600	110	18,000
22	126,000	117	39,700	74,900	146	29,600	63,400	111	19,000
23	121,000	131	42,600	75,100	173	35,000	74,500	118	23,700
24	122,000	118	38,800	68,500	158	29,100	80,900	120	26,300
25	121,000	91	29,500	75,500	139	28,500	79,800	129	27,700
26	116,000	84	26,200	101,000	232	63,500	83,700	121	27,400
27	106,000	86	24,700	99,400	331	88,800	84,400	121	27,600
28	99,900	80	21,500	169,000	450	213,000	77,900	141	29,700
29	93,700	76	19,200	209,000	784	443,000	71,000	121	23,200
30	91,300	82	20,200	154,000	519	219,000	71,600	92	17,700
31	87,700	93	22,000	133,000	371	134,000	---	---	---