



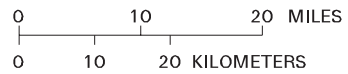


EXPLANATION

-  Hydrologic boundary
-  Streams
-  05388250 Transmitting gaging station and station number
-  05388310 Crest-stage gaging station and station number



Base from U.S. Geological Survey hydrologic unit map State of Iowa, 1974

Gaging Stations

05387440	Upper Iowa River at Bluffton, IA40
05387500	Upper Iowa River at Decorah, IA42
05388250	Upper Iowa River near Dorchester, IA44
05389400	Bloody Run Creek near Marquette, IA46
05389500	Mississippi River at McGregor, IA55
05411500	Mississippi River at Clayton, IA62

Crest Stage Gaging Stations

05387490	Dry Run Creek near Decorah, IA	486
05388310	Waterloo Creek near Dorchester, IA	486
05389501	Mississippi River Tributary at McGregor, IA	486
05414350	Little Maquoketa River near Graf, IA	486
05414400	Middle Fork Little Maquoketa River near Rickardsville, IA	486
05414450	North Fork Little Maquoketa River near Rickardsville, IA	486
05414605	Bloody Run Tributary near Sherrill, IA	487

MISSISSIPPI RIVER BASIN

05387440 UPPER IOWA RIVER AT BLUFFTON, IA

LOCATION.--Lat 43°24'25", long 91°53'56", in SW¹/₄ SW¹/₄ NE¹/₄ sec.10, T.99 N., R.9 W., Winneshiek County, Hydrologic Unit 07060002, on left bank 10 ft downstream of bridge on County Highway W20, 0.5 miles upstream of Silver Creek, and 9.3 mi upstream from Decorah.

DRAINAGE AREA.--367 mi².

PERIOD OF RECORD.--September 1957 to July 1977; low-flow measurement site: Stage only records from October 20, 1999 to September 30, 2002; Discharge records from October 1, 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 945.50 ft. above NGVD of 1929.

REMARKS.--Records good. U.S. Geological Survey data collection platform with satellite and telephone modem telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 27, 1961, discharge 20,200 ft³/s; Flood of June 21, 1954, discharge 13,600 ft³/s; on basis of peak flow at Decorah gage, downstream 11.0 miles.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	46	41	e59	e39	e297	143	100	1,300	329	285	181
2	40	49	e40	e50	e40	e795	126	88	1,080	305	270	176
3	43	53	44	e47	e41	e516	111	85	916	297	302	164
4	40	64	41	e44	e37	e404	102	86	784	372	466	159
5	42	61	47	e40	e39	e1,260	97	82	691	334	436	159
6	44	65	46	e47	e41	e1,840	99	82	718	1,620	353	204
7	46	64	46	e56	e42	e1,300	89	74	950	1,210	306	182
8	53	50	48	e53	e43	e525	87	81	676	1,090	291	169
9	50	50	49	e49	e47	381	82	104	2,020	1,090	347	159
10	49	43	57	e50	e45	311	78	152	2,520	988	423	156
11	46	49	e44	e54	e47	252	72	335	1,850	1,070	346	153
12	47	47	e29	e48	e45	212	73	290	2,240	1,740	308	149
13	46	46	e35	e42	e45	215	73	252	2,220	1,760	281	144
14	46	47	e41	e43	e44	225	73	1,290	1,500	1,180	258	150
15	44	49	e46	e40	e40	e199	74	768	1,140	935	240	286
16	44	51	e43	e43	e39	e180	76	405	960	786	227	3,250
17	48	52	e41	e38	e39	e160	78	340	1,900	671	232	2,700
18	53	63	e46	e35	e42	150	84	293	1,640	568	226	946
19	50	58	e46	e37	e45	153	82	259	1,200	503	220	640
20	52	60	e43	e44	e47	146	77	325	950	458	208	481
21	51	56	e46	e49	e45	124	90	1,060	819	465	201	395
22	52	56	e43	e38	e48	128	91	5,020	720	470	199	351
23	51	57	e41	e40	e51	129	92	5,300	639	435	192	313
24	45	52	e38	e40	e45	126	84	3,020	560	383	188	288
25	50	e46	e41	e44	e48	122	88	2,180	500	358	184	264
26	49	51	e46	e43	e52	145	92	1,680	464	336	191	241
27	45	47	e52	e41	e57	152	107	1,340	414	316	207	224
28	48	43	58	e39	e63	169	135	1,090	392	299	179	213
29	49	46	61	e39	e131	184	122	1,100	371	298	191	215
30	51	40	61	e37	---	185	106	1,640	338	281	192	208
31	50	---	e66	e36	---	164	---	1,750	---	275	177	---
TOTAL	1,468	1,561	1,426	1,365	1,387	11,149	2,783	30,671	32,472	21,222	8,126	13,320
MEAN	47.4	52.0	46.0	44.0	47.8	360	92.8	989	1,082	685	262	444
MAX	53	65	66	59	131	1,840	143	5,300	2,520	1,760	466	3,250
MIN	40	40	29	35	37	122	72	74	338	275	177	144
AC-FT	2,910	3,100	2,830	2,710	2,750	22,110	5,520	60,840	64,410	42,090	16,120	26,420
CFSM	0.13	0.14	0.13	0.12	0.13	0.98	0.25	2.70	2.95	1.87	0.71	1.21
IN.	0.15	0.16	0.14	0.14	0.14	1.13	0.28	3.11	3.29	2.15	0.82	1.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)

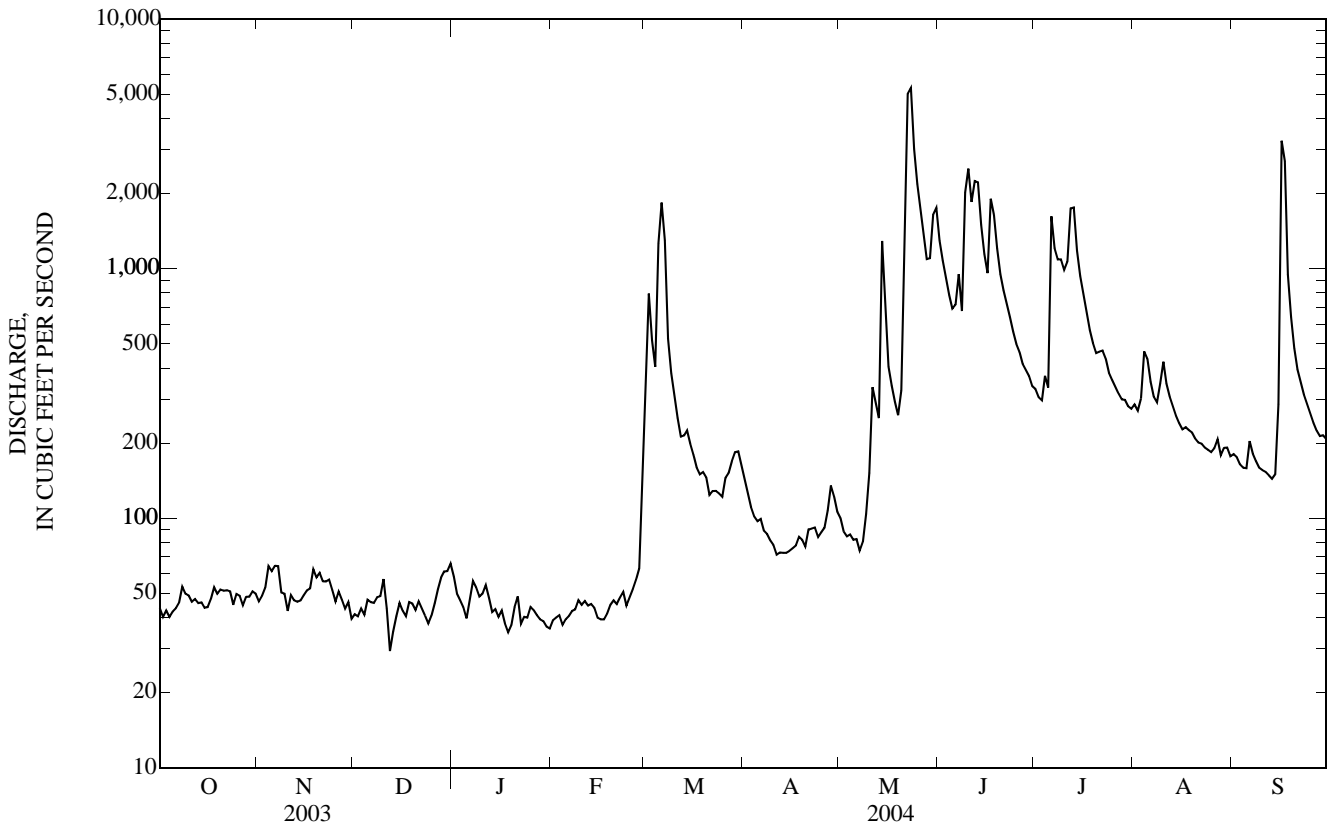
MEAN	61.0	61.9	48.1	43.2	51.1	223	104	713	632	432	164	244
MAX	74.7	71.7	50.2	44.0	54.4	360	116	989	1,082	685	262	444
(WY)	(2003)	(2003)	(2003)	(2004)	(2003)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	47.4	52.0	46.0	42.4	47.8	86.5	92.8	436	183	178	66.5	44.5
(WY)	(2004)	(2004)	(2004)	(2003)	(2004)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)

05387440 UPPER IOWA RIVER AT BLUFFTON, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004	
ANNUAL TOTAL	41,382		126,950		232	
ANNUAL MEAN	113		347		118	
HIGHEST ANNUAL MEAN					347	2004
LOWEST ANNUAL MEAN					118	2003
HIGHEST DAILY MEAN	1,460	May 12	5,300	May 23	5,300	May 23, 2004
LOWEST DAILY MEAN	29	Dec 12	29	Dec 12 a	29	Dec 12, 2003 a
ANNUAL SEVEN-DAY MINIMUM	36	Jan 17	38	Jan 29	36	Jan 17, 2003 a
MAXIMUM PEAK FLOW			6,300	May 23	6,300	May 23, 2004
MAXIMUM PEAK STAGE			10.26	May 23	10.26	May 23, 2004
ANNUAL RUNOFF (AC-FT)	82,080		251,800		168,400	
ANNUAL RUNOFF (CFSM)	0.309		0.945		0.633	
ANNUAL RUNOFF (INCHES)	4.19		12.87		8.60	
10 PERCENT EXCEEDS	230		1,060		479	
50 PERCENT EXCEEDS	57		105		77	
90 PERCENT EXCEEDS	42		42		42	

a Ice affected

e Estimated



MISSISSIPPI RIVER BASIN

05387500 UPPER IOWA RIVER AT DECORAH, IA

LOCATION.--(revised)Lat 43°18'18", long 91°47'43", in NW¹/₄ NE¹/₄ SW¹/₄ sec.16, T.98 N., R.8 W., Winneshiek County, Hydrologic Unit 07060002, on right bank 1,200 ft upstream of bridge on College Drive, 0.8 miles downstream from Dry Run Creek Cutoff, and 3.0 miles upstream from Trout Run.

DRAINAGE AREA.--511 mi².

PERIOD OF RECORD.--Discharge records from August 1951 to September 1983, October 1, 2002 to current year;Stage only records from October 20, 1999 to September 30,2002.

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft. above NGVD of 1929.

REMARKS.--Records good. U.S. Geological Survey data collection platform with satellite and telephone modem telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known, probably since at least 1913, occurred May 29, 1941, at site of former gaging station near Decorah, 4 miles downstream, discharge, 28,500 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	65	75	67	e69	e52	e479	221	159	1,620	511	486	230
2	67	75	e66	e57	e57	e1,070	e200	150	1,360	481	501	220
3	73	76	67	e56	e58	e697	e190	143	1,160	461	633	205
4	72	87	69	e53	e52	e526	e179	136	1,030	635	1,000	198
5	70	84	69	e51	e55	e1,360	174	131	937	557	835	192
6	70	82	69	e61	e57	2,080	170	126	873	2,370	668	224
7	68	75	67	e65	e58	1,710	163	121	1,240	1,830	571	228
8	69	74	66	e62	e57	825	156	129	930	1,590	518	e209
9	68	76	65	e58	e61	584	151	148	2,150	1,680	610	198
10	64	77	70	e59	e59	460	146	174	3,340	1,580	675	193
11	65	74	e59	e63	e61	391	142	340	2,310	1,620	599	187
12	66	72	e51	e56	e60	326	138	355	2,770	2,220	507	183
13	66	71	e57	e49	e60	305	135	322	2,620	2,390	436	177
14	64	76	e59	e52	e56	319	130	663	1,960	1,720	385	189
15	63	77	e61	e50	e52	287	126	828	1,510	1,400	344	251
16	62	78	e59	e51	e52	250	123	553	1,310	1,220	321	2,320
17	63	76	e52	e46	e53	234	121	438	2,020	1,080	313	3,540
18	66	89	e55	e43	e56	221	124	371	2,010	967	307	1,260
19	68	85	e55	e45	e57	225	129	323	1,550	932	308	889
20	63	83	e50	e53	e59	211	136	389	1,250	859	287	703
21	64	81	e56	e59	e57	196	148	1,570	1,120	1,040	275	575
22	64	77	e54	e52	e60	186	149	6,550	1,010	992	265	481
23	64	77	e52	e60	e62	176	145	7,380	900	912	264	426
24	64	74	e49	e56	e56	166	144	4,420	832	823	260	385
25	64	66	e53	e61	e58	169	150	3,190	767	750	247	356
26	65	73	e56	e59	e61	242	151	2,370	702	665	254	332
27	64	78	61	e55	e67	231	159	1,830	651	593	387	312
28	67	73	65	e53	e84	246	179	1,440	611	551	274	296
29	73	68	66	e51	e200	251	173	1,670	576	546	259	282
30	74	78	68	e50	---	265	166	1,930	547	514	259	267
31	73	---	e74	e48	---	243	---	2,090	---	488	241	---
TOTAL	2,068	2,307	1,887	1,703	1,837	14,931	4,618	40,439	41,666	33,977	13,289	15,508
MEAN	66.7	76.9	60.9	54.9	63.3	482	154	1,304	1,389	1,096	429	517
MAX	74	89	74	69	200	2,080	221	7,380	3,340	2,390	1,000	3,540
MIN	62	66	49	43	52	166	121	121	547	461	241	177
AC-FT	4,100	4,580	3,740	3,380	3,640	29,620	9,160	80,210	82,640	67,390	26,360	30,760
CFSM	0.13	0.15	0.12	0.11	0.12	0.94	0.30	2.55	2.72	2.14	0.84	1.01
IN.	0.15	0.17	0.14	0.12	0.13	1.09	0.34	2.94	3.03	2.47	0.97	1.13

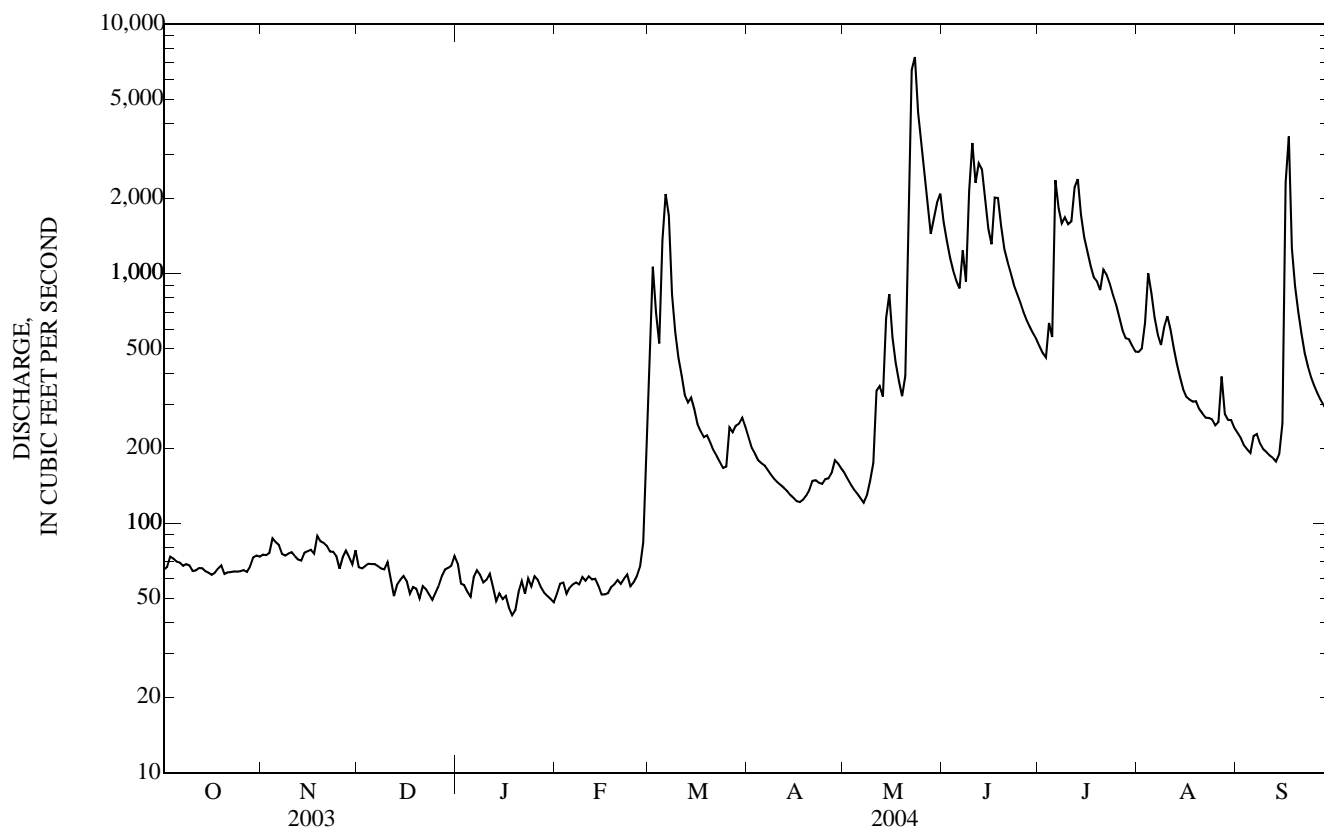
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004, BY WATER YEAR (WY)

MEAN	239	210	156	129	157	675	607	446	454	328	247	274
MAX	896	1,111	940	662	789	1,937	2,067	1,453	1,652	1,096	1,353	1,305
(WY)	(1973)	(1983)	(1983)	(1973)	(1966)	(1961)	(1965)	(1973)	(1969)	(2004)	(1953)	(1965)
MIN	37.2	43.2	40.2	25.7	25.2	72.6	89.6	81.6	64.5	53.0	44.8	39.6
(WY)	(1959)	(1965)	(1959)	(1959)	(1959)	(1968)	(1957)	(1958)	(1958)	(1958)	(1958)	(1958)

05387500 UPPER IOWA RIVER AT DECORAH, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1952 - 2004	
ANNUAL TOTAL	54,581		174,230			
ANNUAL MEAN	150		476		327	
HIGHEST ANNUAL MEAN					845	1983
LOWEST ANNUAL MEAN					96.7	1958
HIGHEST DAILY MEAN	1,630	May 13	7,380	May 23	15,000	Mar 27, 1961
LOWEST DAILY MEAN	49	Dec 24	43	Jan 18 a	22	Feb 2, 1959
ANNUAL SEVEN-DAY MINIMUM	53	Dec 19	48	Jan 13	22	Feb 1, 1959
MAXIMUM PEAK FLOW			8,180	May 23	20,200	Mar 27, 1961
MAXIMUM PEAK STAGE			9.32	May 23	13.08	Mar 27, 1961
ANNUAL RUNOFF (AC-FT)	108,300		345,600		236,600	
ANNUAL RUNOFF (CFSM)	0.293		0.932		0.639	
ANNUAL RUNOFF (INCHES)	3.97		12.68		8.68	
10 PERCENT EXCEEDS	284		1,370		650	
50 PERCENT EXCEEDS	77		168		152	
90 PERCENT EXCEEDS	59		56		60	

a Ice affected.
e Estimated



05388250 UPPER IOWA RIVER NEAR DORCHESTER, IA

LOCATION.--Lat 43°25'16", long 91°30'31", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.1, T.99 N., R.6 W., Allamakee County, Hydrologic Unit 07060002, on right bank at upstream side of bridge on State Highway 76, 650 ft. upstream from Mineral Creek, 0.5 mi upstream from Bear Creek, 3.5 mi south of Dorchester, and 18.1 mi upstream from mouth.

DRAINAGE AREA.--770 mi².

PERIOD OF RECORD.--September 1936 to September 1938 and October 1939 to June 1975(discharge measurements only), October 1938 to September 1939, July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 660.00 ft. above NGVD of 1929. Prior to Jan. 6, 1938, nonrecording gage on old bridge at site 0.2 mi upstream at datum 5.91 ft. higher. Jan. 6, 1938 to Apr. 26, 1948, nonrecording gage at datum 60.00 ft. lower, Apr. 27, 1948 to August 1963, nonrecording gage on old bridge and August 1963 to June 1975 nonrecording gage on new bridge at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Geological Survey data collection platform with satellite and telephone modem telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1941, reached a stage of 21.8 ft., from flood profile, discharge, 30,400 ft³/s on basis of slope-area determination of peak flow.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	133	130	e118	e96	e1,040	352	242	2,080	617	578	433
2	134	134	116	e112	e102	e1,630	325	229	1,680	582	605	420
3	137	147	118	e106	e102	e1,180	302	217	1,430	563	638	409
4	137	187	123	e101	e100	e893	284	208	1,240	598	1,220	379
5	136	184	133	e99	e105	e1,890	268	203	1,120	645	920	386
6	134	165	133	e105	e111	2,990	267	201	1,050	1,790	813	456
7	132	157	129	e114	e112	2,090	257	195	1,150	2,190	713	502
8	130	145	127	e110	e112	1,260	244	212	1,070	1,630	655	488
9	127	135	127	e101	e118	810	231	234	1,310	1,570	645	457
10	130	136	130	e109	e117	642	222	259	3,970	1,810	672	446
11	131	145	e117	e113	e122	552	215	300	2,640	1,490	715	439
12	135	142	e97	e107	e120	471	210	473	3,040	1,920	646	443
13	137	136	e99	e100	e122	419	205	479	2,710	2,200	602	440
14	138	134	e101	e107	e117	414	201	468	2,420	1,870	564	453
15	134	136	e104	e101	e109	404	197	815	1,840	1,470	534	484
16	130	138	e103	e102	e109	367	194	728	1,550	1,270	517	548
17	130	137	e99	e98	e111	342	194	610	1,890	1,130	508	3,690
18	130	169	e104	e94	e114	326	e196	537	2,090	1,020	495	1,790
19	135	179	e103	e98	e119	317	e200	483	1,750	941	493	1,150
20	134	159	e100	e104	e121	322	208	477	1,440	1,040	475	e993
21	132	149	e107	e109	e119	304	230	1,190	1,270	1,020	454	e851
22	130	144	e105	e97	e120	286	233	6,780	1,170	1,160	442	e745
23	131	141	e100	e103	e122	276	232	8,430	1,050	955	436	e673
24	134	134	e96	e102	e115	274	222	6,030	968	863	472	e619
25	134	127	e98	e106	e117	270	236	3,480	901	791	444	e580
26	131	119	e101	e105	e122	341	241	2,520	828	737	441	e534
27	134	131	e106	e102	e139	396	231	1,990	776	699	753	e480
28	137	136	e107	e100	e204	383	234	1,620	731	664	548	420
29	137	127	e110	e96	e469	382	251	2,240	691	648	474	415
30	137	117	e114	e93	---	378	248	2,500	653	650	454	403
31	136	---	e120	e93	---	376	---	2,460	---	607	444	---
TOTAL	4,135	4,323	3,457	3,205	3,766	22,025	7,130	46,810	46,508	35,140	18,370	20,526
MEAN	133	144	112	103	130	710	238	1,510	1,550	1,134	593	684
MAX	138	187	133	118	469	2,990	352	8,430	3,970	2,200	1,220	3,690
MIN	127	117	96	93	96	270	194	195	653	563	436	379
AC-FT	8,200	8,570	6,860	6,360	7,470	43,690	14,140	92,850	92,250	69,700	36,440	40,710
CFSM	0.17	0.19	0.14	0.13	0.17	0.92	0.31	1.96	2.01	1.47	0.77	0.89
IN.	0.20	0.21	0.17	0.15	0.18	1.06	0.34	2.26	2.25	1.70	0.89	0.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

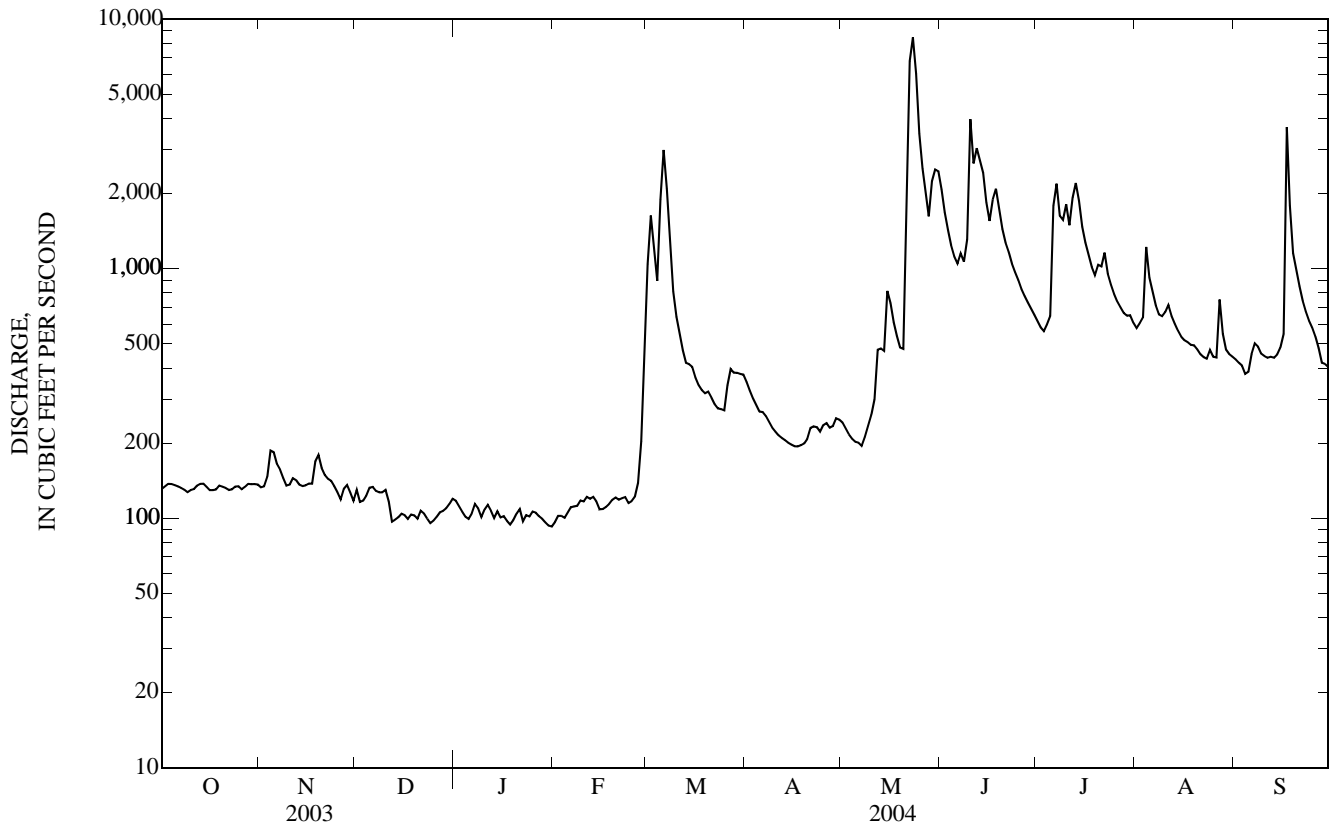
MEAN	396	416	335	248	381	959	1,039	856	907	687	561	444
MAX	2,045	1,476	1,421	836	1,400	1,922	3,973	2,066	3,538	3,318	3,702	1,334
(WY)	(1987)	(1983)	(1983)	(1983)	(1984)	(1983)	(1993)	(1991)	(2000)	(1993)	(1993)	(1986)
MIN	116	125	99.9	96.7	112	221	225	175	123	92.9	112	77.5
(WY)	(1990)	(1990)	(1990)	(1977)	(1978)	(2003)	(1977)	(1977)	(1977)	(1939)	(1989)	(1939)

05388250 UPPER IOWA RIVER NEAR DORCHESTER, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	88,029		215,395			
ANNUAL MEAN	241		589		605	
HIGHEST ANNUAL MEAN					1,726	1993
LOWEST ANNUAL MEAN					178	1977
HIGHEST DAILY MEAN	1,730	May 13	8,430	May 23	15,100	Aug 17, 1993
LOWEST DAILY MEAN	82	Jan 23	93	Jan 30 a	30	Sep 23, 1939
ANNUAL SEVEN-DAY MINIMUM	86	Jan 20	97	Jan 27	49	Sep 20, 1939
MAXIMUM PEAK FLOW			9,320	May 22	22,000	Aug 17, 1993
MAXIMUM PEAK STAGE			15.37	May 22	20.00	Aug 17, 1993
ANNUAL RUNOFF (AC-FT)	174,600		427,200		438,400	
ANNUAL RUNOFF (CFSM)	0.313		0.764		0.786	
ANNUAL RUNOFF (INCHES)	4.25		10.41		10.68	
10 PERCENT EXCEEDS	436		1,510		1,300	
50 PERCENT EXCEEDS	150		254		357	
90 PERCENT EXCEEDS	107		105		136	

a also January 31; Ice affected

e Estimated



MISSISSIPPI RIVER BASIN

05389400 BLOODY RUN CREEK NEAR MARQUETTE, IA

LOCATION.--Lat 43°02'27", long 91°12'23", in Basil Giard Claim #1, sec.16, T.95 N., R.3 W., Clayton County, Hydrologic Unit 07060001, on right bank 50 ft downstream from State Highway 18 bridge, 1.5 miles upstream from mouth at Mississippi River, and 1.5 miles west of Marquette.

DRAINAGE AREA.--34.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 624.818 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. U.S. Geological Survey rain gage and data collection platform with satellite telemetry 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	9.0	9.4	9.1	8.2	57	23	10	38	8.3	8.1	8.7
2	10	9.7	9.1	10	8.5	27	19	9.5	27	8.0	11	8.7
3	10	13	10	10	8.5	13	14	10	20	8.1	25	8.6
4	9.9	28	9.7	8.8	8.3	14	14	9.9	17	11	32	8.5
5	10	12	10	9.2	8.6	240	14	9.8	16	13	12	8.5
6	10	10	9.9	8.4	8.9	47	13	10	16	15	10	8.6
7	9.3	9.7	9.9	8.2	8.6	24	13	9.7	14	14	9.7	8.4
8	9.1	9.2	10	8.6	8.4	16	13	11	12	13	9.6	8.3
9	9.1	9.0	10	8.9	8.2	13	12	10	11	14	10	8.3
10	8.6	9.5	11	9.1	8.2	13	12	13	14	14	9.1	8.4
11	8.6	9.6	8.7	9.3	8.0	13	12	12	28	13	8.9	8.4
12	8.5	9.2	8.6	9.5	7.7	12	12	11	33	14	8.8	8.3
13	9.5	9.0	8.5	9.7	7.4	12	12	18	17	11	8.7	8.5
14	9.1	9.0	9.0	9.5	8.0	14	11	16	14	10	8.6	9.2
15	8.3	9.2	9.3	8.8	7.6	12	11	14	13	10	8.5	8.4
16	8.4	9.4	9.7	9.5	7.7	11	11	13	25	17	8.7	8.6
17	8.6	9.2	9.4	9.7	7.6	12	11	14	34	13	9.0	8.6
18	8.7	10	9.8	9.0	7.5	12	11	20	14	9.4	9.1	8.6
19	8.6	10	9.8	8.5	7.9	13	11	15	12	9.3	9.2	8.6
20	8.6	9.8	8.7	8.6	8.3	12	11	14	11	9.3	9.0	8.5
21	8.6	9.6	9.2	9.0	11	11	12	28	24	19	9.0	8.5
22	8.5	9.5	9.8	e8.8	9.1	11	10	390	15	13	9.1	8.5
23	8.6	11	9.8	8.5	9.6	11	9.9	e1,800	12	10	9.3	8.9
24	8.6	10	8.9	8.5	19	14	10	e370	11	9.0	9.7	9.0
25	8.6	9.4	8.7	8.6	13	24	11	e150	10	8.5	10	8.9
26	9.0	9.8	9.1	8.7	19	95	10	53	10	8.1	9.7	8.8
27	8.9	9.9	9.9	8.9	46	52	9.6	40	9.6	8.1	18	8.9
28	8.8	9.6	11	8.8	78	43	10	30	9.3	8.0	12	8.8
29	9.1	9.4	9.7	8.7	68	37	9.6	79	8.9	8.6	10	8.8
30	9.3	9.7	9.6	e8.5	---	33	10	57	8.6	8.6	9.2	8.9
31	9.1	---	10	8.4	---	28	---	54	---	8.2	8.9	---
TOTAL	280.0	311.4	296.2	277.8	434.8	946	362.1	3,300.9	504.4	343.5	339.9	258.7
MEAN	9.03	10.4	9.55	8.96	15.0	30.5	12.1	106	16.8	11.1	11.0	8.62
MAX	10	28	11	10	78	240	23	1,800	38	19	32	9.2
MIN	8.3	9.0	8.5	8.2	7.4	11	9.6	9.5	8.6	8.0	8.1	8.3
AC-FT	555	618	588	551	862	1,880	718	6,550	1,000	681	674	513
CFSM	0.26	0.30	0.28	0.26	0.44	0.89	0.35	3.12	0.49	0.32	0.32	0.25
IN.	0.31	0.34	0.32	0.30	0.47	1.03	0.39	3.60	0.55	0.37	0.37	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

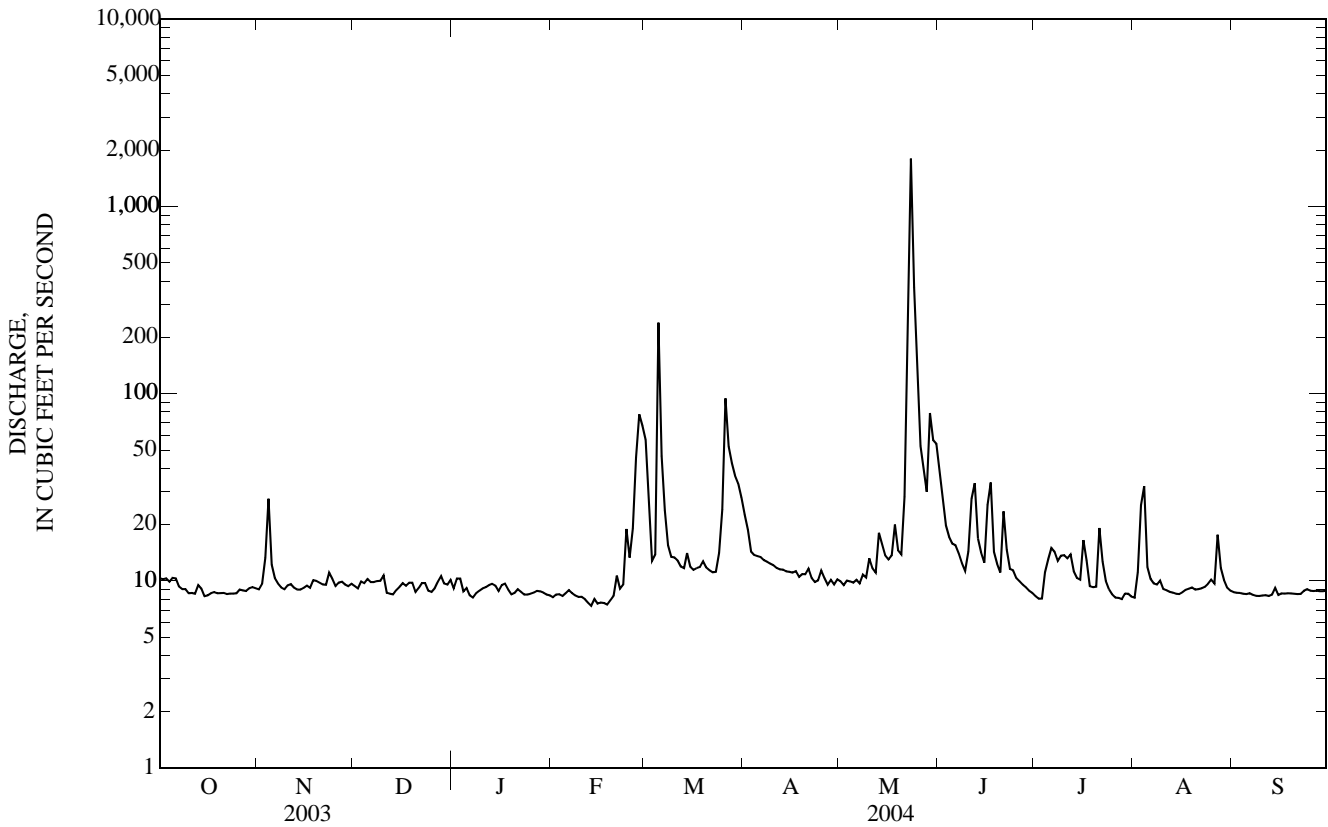
MEAN	19.3	20.2	17.0	15.3	20.5	27.6	24.5	35.1	28.3	25.1	23.6	20.7
MAX	30.9	35.3	26.0	22.3	33.6	87.6	55.3	106	55.4	54.2	48.9	36.4
(WY)	(1994)	(1992)	(1992)	(1992)	(1994)	(1993)	(1993)	(2004)	(1993)	(1993)	(1993)	(1993)
MIN	9.03	10.4	9.55	8.96	11.3	14.0	11.3	16.9	12.1	11.1	11.0	8.62
(WY)	(2004)	(2004)	(2004)	(2004)	(2001)	(2003)	(2003)	(2003)	(2003)	(2004)	(2004)	(2004)

05389400 BLOODY RUN CREEK NEAR MARQUETTE, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	4,380.4		7,655.7		23.1	
ANNUAL MEAN	12.0		20.9		42.1	
HIGHEST ANNUAL MEAN					12.8	1993
LOWEST ANNUAL MEAN					12.8	2003
HIGHEST DAILY MEAN	49	Mar 14	1,800	May 23	1,800	May 23, 2004
LOWEST DAILY MEAN	8.3	Oct 15	7.4	Feb 13	6.8	Jan 20, 2001
ANNUAL SEVEN-DAY MINIMUM	8.5	Oct 15	7.6	Feb 12	7.6	Feb 12, 2004
MAXIMUM PEAK FLOW			4,620	May 23	4,620	May 23, 2004
MAXIMUM PEAK STAGE			12.38	May 23	12.38	May 23, 2004
INSTANTANEOUS LOW FLOW			6.5	Feb 15 a		
ANNUAL RUNOFF (AC-FT)	8,690		15,190		16,740	
ANNUAL RUNOFF (CFSM)	0.352		0.613		0.677	
ANNUAL RUNOFF (INCHES)	4.77		8.34		9.20	
10 PERCENT EXCEEDS	14		23		34	
50 PERCENT EXCEEDS	11		9.7		20	
90 PERCENT EXCEEDS	9.2		8.5		11	

a also February 16.

e Estimated



05389400 BLOODY RUN CREEK NEAR MARQUETTE, IA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1991 to September 30, 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1991 to September 30, 2004 (discontinued).

WATER TEMPERATURES: October 1991 to September 30, 2004 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: October 1991 to September 30, 2004 (discontinued).

REMARKS.--Records of specific conductance are obtained from suspended-sediment samples at time of analysis.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 670 microsiemens Sept. 27, 1994; minimum daily, 140 microsiemens Oct. 14, 1997.

WATER TEMPERATURES: Maximum daily, 32.0°C Aug. 17, 1998; minimum daily, 0.0°C Jan. 7, 18-21, 1994, Jan. 5,7,8, Feb. 21, 1997, Dec. 9, 2002.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,780 mg/L Mar. 31, 1993; minimum daily mean, 1 mg/L Oct. 30, 1994.

SEDIMENT LOADS: Maximum daily, 8120 tons MAT 23, 2004; minimum daily, 0.08 tons Oct. 30, 1994, Nov. 23-24, 1997, and Dec. 8, 1997.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 617 microsiemens July 5; minimum daily, 317 microsiemens May 22.

WATER TEMPERATURES: Maximum daily, 23.0°C July 13; minimum daily, 1.0°C Dec. 13, Jan. 5,6,18,28,29, Feb. 28.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1670 mg/L May 23; minimum daily mean, 9.0 mg/L Apr. 13,14.

SEDIMENT LOADS: Maximum daily, 8120 tons May 23; minimum daily, 0.26 tons Jan. 14.

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

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Suspnd. sediment, sieve diameter percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
OCT						
29...	1140	9.3	8.3	82	53	1.3
DEC						
09...	0850	9.9	--	69	53	1.4
JAN						
21...	1004	9.2	--	74	92	2.3
MAR						
09...	1220	14	--	41	50	1.9
APR						
20...	0825	10	--	25	54	1.5
MAY						
25...	1600	68	--	94	89	16
JUL						
07...	0910	14	--	62	48	1.9
AUG						
04...	0810	34	--	100	264	24

05389400 BLOODY RUN CREEK NEAR MARQUETTE, IA—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	477	401	457	392	---	378	472	---	555	411	462	449
2	455	---	491	411	394	456	---	434	---	410	465	423
3	470	387	528	---	389	512	---	409	---	---	472	492
4	---	440	530	---	408	540	---	411	---	439	473	---
5	---	436	526	412	384	359	480	---	---	617	483	---
6	463	400	---	468	399	464	460	---	---	430	404	472
7	447	424	---	403	---	---	517	461	489	438	520	406
8	517	---	---	444	399	---	427	---	477	---	507	---
9	474	---	419	---	380	497	537	475	430	417	490	472
10	523	422	---	---	479	429	---	462	---	426	396	---
11	---	414	385	422	409	437	507	---	438	409	431	470
12	---	368	390	384	390	---	430	503	---	---	475	551
13	538	431	423	526	---	533	482	---	445	438	430	448
14	---	---	439	423	---	---	448	---	514	408	---	473
15	492	435	426	441	393	437	480	---	465	391	567	491
16	512	---	405	477	410	432	---	538	---	---	420	536
17	451	424	401	447	404	433	---	---	---	---	386	447
18	---	435	404	417	391	---	---	576	---	412	471	---
19	478	450	---	438	390	---	---	---	445	386	486	455
20	407	446	400	548	---	496	492	550	480	384	---	492
21	503	408	---	409	---	406	454	---	500	480	---	---
22	479	---	425	---	---	443	400	317	503	398	434	434
23	435	---	393	---	543	438	475	342	508	---	---	504
24	470	429	---	---	---	468	402	487	465	---	---	524
25	---	435	395	406	546	---	444	529	---	449	406	532
26	524	452	404	391	544	---	410	486	---	---	---	473
27	511	487	416	415	---	---	403	---	---	---	541	498
28	---	468	---	396	413	---	447	---	415	---	---	---
29	450	---	394	393	348	478	469	549	456	413	448	440
30	405	---	423	410	---	445	---	---	---	---	438	---
31	432	---	415	---	---	517	---	530	---	394	484	---

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	9.0	5.0	3.0	---	4.0	14.0	---	17.0	20.0	18.0	20.0
2	9.0	---	4.0	5.0	4.0	4.0	---	15.0	---	21.0	20.0	20.0
3	10.0	7.0	5.0	---	3.0	6.0	---	15.0	---	---	20.0	20.0
4	---	8.0	5.0	---	2.0	6.0	---	17.0	---	19.0	21.0	---
5	---	7.0	5.0	1.0	4.0	3.0	15.0	---	---	20.0	20.0	---
6	13.0	6.0	---	1.0	6.0	6.0	17.0	---	---	18.0	20.0	17.0
7	14.0	6.0	---	3.0	---	---	16.0	15.0	22.0	14.2	16.0	17.0
8	15.0	---	---	4.0	4.0	---	16.0	---	21.0	---	20.0	---
9	15.0	---	6.0	---	5.0	8.0	14.0	19.0	21.0	17.0	20.0	17.0
10	15.0	6.0	---	---	4.0	8.0	---	18.0	---	20.0	16.0	---
11	---	8.0	3.0	5.0	5.0	3.0	13.0	---	19.0	18.0	16.0	18.0
12	---	5.0	2.0	4.0	5.0	---	13.0	20.0	---	---	17.0	16.0
13	13.0	6.0	1.0	4.0	---	5.0	15.0	---	21.0	23.0	16.0	18.0
14	---	---	4.0	3.0	---	---	17.0	---	21.0	21.0	---	19.0
15	12.0	7.0	5.0	3.0	4.0	5.0	16.0	---	21.0	21.0	17.0	19.0
16	9.0	---	3.0	4.0	4.0	5.0	---	14.0	---	---	16.0	17.0
17	10.0	8.0	3.0	4.0	5.0	9.0	---	---	---	---	19.0	17.0
18	---	9.0	5.0	1.0	8.0	---	---	18.0	---	20.0	19.0	---
19	13.0	7.0	---	2.0	6.0	---	---	---	18.0	19.0	18.0	18.0
20	14.0	7.0	4.0	3.0	---	10.0	8.7	20.0	16.0	21.0	---	17.0
21	11.0	6.0	---	4.0	---	10.0	14.0	---	17.0	20.0	---	---
22	11.0	---	5.0	---	---	10.0	14.0	17.0	18.0	20.0	17.0	17.0
23	11.0	---	4.0	---	6.0	13.0	16.0	17.0	19.0	---	---	17.0
24	9.0	4.0	---	---	---	13.0	13.0	16.0	17.0	---	---	16.0
25	---	5.0	2.0	3.0	5.0	---	12.0	13.5	---	19.0	17.0	16.0
26	8.0	5.0	5.0	3.0	5.0	---	14.0	17.0	---	---	---	13.0
27	8.0	5.0	6.0	3.0	---	---	13.0	---	---	---	22.0	16.0
28	---	4.0	---	1.0	1.0	---	20.0	---	16.0	---	---	---
29	8.3	---	4.0	1.0	2.0	13.0	19.0	16.0	16.0	19.0	18.0	15.0
30	10.0	---	5.0	2.0	---	10.0	---	---	---	---	20.0	---
31	9.0	---	4.0	---	---	13.0	---	17.0	---	17.0	18.0	---

MISSISSIPPI RIVER BASIN

05389400 BLOODY RUN CREEK NEAR MARQUETTE, IA—Continued

SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Day	Mean concentration (mg/l)		Mean concentration (mg/l)		Mean concentration (mg/l)		Mean concentration (mg/l)		Mean concentration (mg/l)		Mean concentration (mg/l)	
	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	40	1.1	55	1.4	25	0.63	29	0.72	128	2.8	80	12
2	68	1.9	59	1.5	17	0.41	24	0.66	120	2.7	39	3.2
3	72	2.0	62	2.2	14	0.37	30	0.83	123	2.8	18	0.62
4	73	2.0	69	5.1	12	0.32	39	0.93	133	3.0	71	5.0
5	75	2.1	61	2.0	18	0.51	47	1.2	147	3.4	884	550
6	76	2.1	54	1.5	19	0.51	40	0.90	140	3.4	348	52
7	68	1.7	43	1.1	17	0.46	46	1.0	122	2.8	86	5.6
8	45	1.1	47	1.2	15	0.40	40	0.93	108	2.4	72	3.0
9	40	0.97	55	1.4	14	0.38	37	0.89	128	2.8	51	1.9
10	50	1.2	64	1.6	19	0.54	36	0.89	123	2.7	53	1.9
11	50	1.2	68	1.8	23	0.54	37	0.92	113	2.4	44	1.6
12	45	1.0	61	1.5	29	0.67	57	1.5	116	2.4	34	1.1
13	41	1.0	39	0.95	83	1.9	24	0.63	109	2.2	27	0.86
14	46	1.1	35	0.85	92	2.2	10	0.26	97	2.1	32	1.2
15	53	1.2	38	0.94	87	2.2	16	0.38	88	1.8	41	1.3
16	48	1.1	47	1.2	92	2.4	20	0.52	124	2.6	47	1.4
17	43	1.0	56	1.4	89	2.3	39	1.0	124	2.5	37	1.2
18	49	1.2	48	1.3	77	2.0	43	1.0	107	2.2	36	1.1
19	59	1.4	32	0.87	66	1.7	57	1.3	96	2.0	39	1.3
20	65	1.5	34	0.89	57	1.4	61	1.4	81	1.8	41	1.3
21	47	1.1	41	1.1	57	1.4	81	2.0	64	1.8	40	1.2
22	41	0.95	41	1.1	59	1.6	84	2.0	48	1.2	40	1.2
23	43	0.99	39	1.2	72	1.9	94	2.1	31	0.81	52	1.6
24	35	0.82	37	1.0	76	1.8	104	2.4	20	1.0	32	1.2
25	35	0.80	21	0.52	78	1.8	112	2.6	13	0.45	49	5.3
26	36	0.88	23	0.62	74	1.8	105	2.5	30	1.7	131	35
27	32	0.76	23	0.61	44	1.2	73	1.7	43	5.3	73	10
28	32	0.77	20	0.51	49	1.4	100	2.4	51	11	55	6.4
29	30	0.74	21	0.53	65	1.7	143	3.4	81	15	42	4.2
30	42	1.0	23	0.61	67	1.7	146	3.4	---	---	29	2.6
31	49	1.2	---	---	28	0.76	137	3.1	---	---	28	2.1
TOTAL	---	37.88	---	38.50	---	38.90	---	45.46	---	89.06	---	718.38