

## Gaging Stations

06609500	Boyer River at Logan, IA . . . . .	430
06610000	Missouri River at Omaha, NE . . . . .	435
06807000	Missouri River at Nebraska City, NE . . . . .	440

## Crest Stage Gaging Stations

06609560	Willow Creek near Soldier, IA . . . . .	494
06610510	Moser Creek near Earling, IA . . . . .	494
06610581	Mosquito Creek Tributary near Neola, IA . . . . .	494
06805849	Keg Creek Tributary near Mineola, IA . . . . .	494

## 06609500 BOYER RIVER AT LOGAN, IA

LOCATION.--Lat 41°38'30", long 95°46'57", in SE¼ NW¼ sec. 19, T.79 N., R.42 W., Harrison County, Hydrologic Unit 10230007, on left bank downstream side of county bridge on Eight Street in Logan, 0.5 mi downstream from Elk Grove Creek, 10.4 mi upstream from Willow Creek, and 15.7 mi upstream from mouth.

DRAINAGE AREA.--871 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1918 to November 1924, February 1925 to July 1925, November 1937 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 956: 1938-39. WSP 1240: 1918-19, 1920 (M), 1921, 1922 (M), 1924-25, 1938 (M), 1945. WSP 1440: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,009.38 ft above NGVD of 1929 (Chicago and Northwestern Railway Company bench mark). See WSP 1918 for history of changes prior to Oct. 18, 1960.

REMARKS.--Records are good except those for estimated daily discharges, which are poor. U.S. Army Corps of Engineers rain gage and data collection platform with satellite telemetry at station. Precipitation records are available online at the U.S. Army Corps of Engineers website: [www2.mvr.usace.army.mil/WaterControl/datamining2.cfm](http://www2.mvr.usace.army.mil/WaterControl/datamining2.cfm).

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	78	84	104	135	e57	2,120	613	310	845	478	245	126
2	78	86	101	132	e57	1,440	543	303	691	481	e300	117
3	81	110	107	128	e46	1,020	482	293	631	564	e290	113
4	80	183	108	e76	e49	645	440	289	596	778	e420	109
5	79	166	101	e54	e53	932	414	276	578	553	306	103
6	78	125	91	e54	e54	2,190	405	271	564	495	253	108
7	77	106	100	e56	e50	1,150	385	246	534	534	229	110
8	75	96	e94	e66	e50	776	363	236	498	520	209	99
9	72	89	e84	e56	e63	592	341	254	468	557	201	101
10	75	95	e71	e52	e73	511	322	255	462	886	191	99
11	86	104	e61	e66	e78	447	312	245	609	594	184	91
12	92	97	e58	e60	e69	385	305	237	813	505	182	84
13	98	87	e63	e59	e68	360	299	232	849	614	183	81
14	113	85	e73	e58	e64	362	287	243	914	481	187	87
15	108	89	e77	e55	e59	357	276	229	673	418	180	110
16	98	87	e75	e70	e89	353	267	219	575	392	175	179
17	91	90	e72	e64	e87	347	268	238	3,780	386	171	123
18	92	105	e92	e57	e97	345	254	344	3,320	353	165	118
19	88	101	e82	e52	e106	359	262	283	1,390	350	171	112
20	87	97	e83	e64	e102	393	274	251	1,010	333	186	99
21	85	91	e105	e74	e100	384	319	240	1,000	322	167	102
22	84	88	e99	e56	e122	334	306	603	1,180	328	158	96
23	80	e82	e93	e70	e238	322	297	1,990	827	315	150	97
24	79	e75	e87	e66	e225	311	295	2,160	731	297	152	105
25	84	e85	e106	e61	e185	303	363	2,190	674	300	146	102
26	84	e82	e120	e57	e154	297	401	1,260	647	294	149	92
27	88	e86	158	e46	e556	476	393	941	609	277	146	88
28	92	e84	150	e43	e1,220	1,330	380	790	577	262	145	87
29	90	e88	e145	e44	e2,560	1,260	354	686	542	278	135	83
30	89	e95	e139	e44	---	904	326	875	508	272	121	82
31	86	---	140	e50	---	717	---	825	---	253	145	---
TOTAL	2,667	2,938	3,039	2,025	6,731	21,722	10,546	17,814	27,095	13,470	6,042	3,103
MEAN	86.0	97.9	98.0	65.3	232	701	352	575	903	435	195	103
MAX	113	183	158	135	2,560	2,190	613	2,190	3,780	886	420	179
MIN	72	75	58	43	46	297	254	219	462	253	121	81
AC-FT	5,290	5,830	6,030	4,020	13,350	43,090	20,920	35,330	53,740	26,720	11,980	6,150
CFSM	0.10	0.11	0.11	0.07	0.27	0.80	0.40	0.66	1.04	0.50	0.22	0.12
IN.	0.11	0.13	0.13	0.09	0.29	0.93	0.45	0.76	1.16	0.58	0.26	0.13

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2004, BY WATER YEAR (WY)

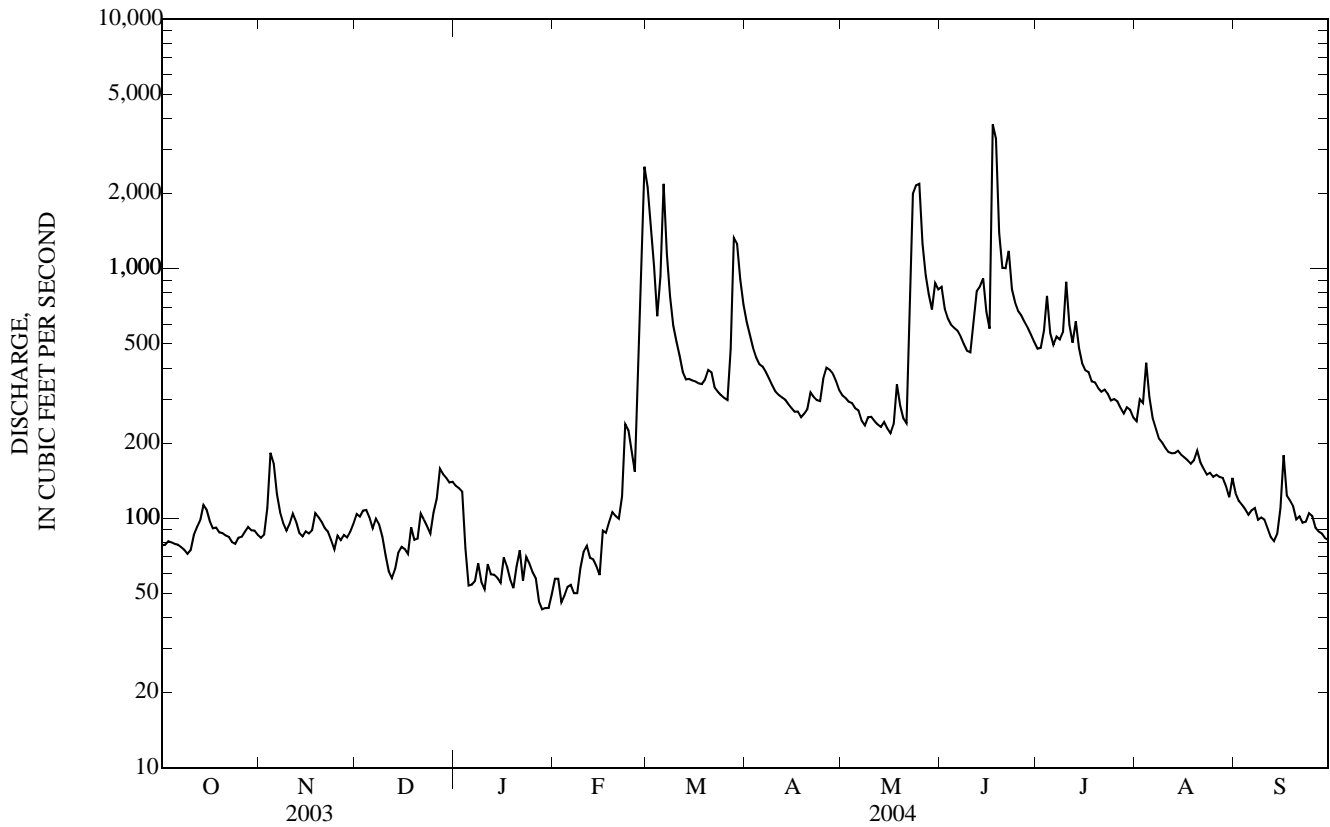
MEAN	183	167	137	127	311	592	441	519	756	468	304	249
MAX	796	558	565	692	1,209	2,619	1,988	1,698	2,541	3,022	1,636	1,288
(WY)	(1974)	(1974)	(1973)	(1973)	(1971)	(1979)	(1983)	(1984)	(1990)	(1993)	(1951)	(1978)
MIN	11.1	8.33	6.68	3.06	3.55	40.4	23.3	39.9	33.3	51.0	34.5	11.6
(WY)	(1957)	(1940)	(1938)	(1940)	(1940)	(1981)	(1957)	(1968)	(1956)	(1977)	(1976)	(1939)

06609500 BOYER RIVER AT LOGAN, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1919 - 2004	
ANNUAL TOTAL	115,186		117,192			
ANNUAL MEAN	316		320		358	
HIGHEST ANNUAL MEAN					1,018	1993
LOWEST ANNUAL MEAN					58.7	1956
HIGHEST DAILY MEAN	4,170	Jul 11	3,780	Jun 17	24,600	Jul 9, 1993
LOWEST DAILY MEAN	58	Dec 12	43	Jan 28 a	1.5	Jul 16, 1938
ANNUAL SEVEN-DAY MINIMUM	68	Feb 6	49	Jan 26	2.0	Jan 13, 1940
MAXIMUM PEAK FLOW			4,820	Jun 17	30,800	Jun 17, 1990
MAXIMUM PEAK STAGE			10.67	Jun 17	25.22	Mar 1, 1965 a
ANNUAL RUNOFF (AC-FT)	228,500		232,500		259,200	
ANNUAL RUNOFF (CFSM)	0.362		0.368		0.411	
ANNUAL RUNOFF (INCHES)	4.92		5.01		5.58	
10 PERCENT EXCEEDS	629		688		754	
50 PERCENT EXCEEDS	165		162		166	
90 PERCENT EXCEEDS	78		66		35	

a Ice affected.

e Estimated.



## 06609500 BOYER RIVER AT LOGAN, IA—Continued

(Large river mass contaminants station)

## WATER QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 30, 2004.

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

Date	Time	Instantaneous discharge, cfs (00061)	Stream width, feet (00004)	Turbidity, wat unflab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfl uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)
MAR 12...	0930	382	90.0	79	737	13.2	96	8.5	612	1.0	236	287	--
APR 14...	0730	293	90.0	28	733	11.1	100	8.3	637	9.1	238	290	--
MAY 11...	1300	242	90.0	42	730	8.0	97	8.4	630	22.5	237	289	--
MAY 23...	1015	1,820	--	2,600	723	4.8	56	7.4	429	20.0	145	177	--
JUN 08...	1130	497	95.0	98	735	7.8	97	8.3	661	24.1	230	281	--
JUN 17...	1000	4,740	110	E3,700	738	4.7	54	7.6	260	20.0	88	108	--
JUL 13...	1230	651	92.0	170	733	8.1	107	8.1	686	27.8	238	265	12
AUG 10...	1130	190	90.0	42	--	10.3	--	8.4	198	21.9	256	300	6
SEP 07...	1530	110	80.0	11	--	10.1	--	8.6	664	25.3	254	307	1

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	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)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd, mg/L (00665)	Total nitrogen, wat flt by analysis, mg/L (62854)	Total nitrogen, wat unfl by analysis, mg/L (62855)	Total carbon, suspnd sediment total, mg/L (00694)
MAR 12...	19.0	15.7	45.0	.12	8.55	.016	.37	.372	.39	.60	8.68	9.26	3.3
APR 14...	22.5	11.3	44.9	<.04	8.98	.008	.23	.303	.30	.39	8.94	9.60	1.6
MAY 11...	20.1	9.5	43.2	<.04	7.83	.019	.47	.246	.26	.43	7.62	8.29	4.5
MAY 23...	13.3	9.5	25.1	.20	6.04	.114	E1.29	.195	.22	6.83	6.79	9.14	E12.9
JUN 08...	18.8	16.2	38.6	<.04	12.0	.010	1.34	.292	.31	.62	13.0	8.11	9.1
JUN 17...	5.97	8.0	12.6	.05	4.63	.052	13.0	.143	.172	7.77	4.99	16.1	125
JUL 13...	19.2	16.6	38.4	<.04	13.2	.009	1.03	.291	.33	.76	13.3	12.9	10.0
AUG 10...	22.5	15.8	45.8	<.04	8.60	.011	.31	.530	.51	.75	9.39	9.36	4.1
SEP 07...	27.1	13.1	51.3	<.04	5.45	.032	.15	.702	.023	.78	5.71	5.74	.9

## 06609500 BOYER RIVER AT LOGAN, IA—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Inorganic carbon, suspnd sediment total, mg/L (00688)	Organic carbon, suspnd sediment total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd, 0.7u GF ug/L (82686)	Benfluralin, water, fltrd, 0.7u GF ug/L (82673)
MAR 12...	<.1	3.2	3.3	1.4	1.6	<.006	E.027	.008	<.005	<.005	.084	<.050	<.010
APR 14...	<.1	1.6	2.4	1.9	2.7	<.006	E.019	.023	<.005	<.005	.070	<.050	<.010
MAY 11...	.1	4.3	2.7	7.6	16.4	<.006	E.045	.111	.007	<.005	.566	<.050	<.010
MAY 23...	E.2	E12.7	7.1	37.4	27.1	<.006	E.668	5.23	.039	<.005	26.9	<.050	<.010
JUN 08...	.1	9.0	4.1	4.1	6.6	<.006	E.042	.038	<.005	<.005	.428	<.050	<.010
JUN 17...	3.7	121	4.6	37.7	17.9	<.006	E.418	.390	E.005	<.005	17.7	<.050	<.010
JUL 13...	.1	9.9	2.4	9.5	12.8	<.006	E.028	.016	<.005	<.005	.258	<.050	<.010
AUG 10...	<.1	4.1	2.1	2.6	7.5	<.006	E.029	.009	<.005	<.005	.175	<.050	<.010
SEP 07...	<.1	.9	2.5	5.5	6.5	<.006	E.016	1.03	<.005	<.005	.239	<.050	<.010

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd, 0.7u GF ug/L (82680)	Carbofuran, water, fltrd, 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd, 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd, 0.7u GF ug/L (82677)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd, 0.7u GF ug/L (82663)
MAR 12...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
APR 14...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
MAY 11...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
MAY 23...	<.004	E.007	<.020	.012	<.006	.029	<.003	<.012	<.005	<.009	<.02	E.003	<.009
JUN 08...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
JUN 17...	<.004	<.041	E.736	.006	<.006	E.015	<.003	E.003	<.005	<.009	<.02	<.004	<.009
JUL 13...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
AUG 10...	<.004	<.041	<.020	E.004	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
SEP 07...	<.004	<.041	<.020	<.005	<.006	E.007	<.003	<.012	<.005	<.009	<.02	<.004	<.009

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethoprop, water, fltrd, 0.7u GF ug/L (82672)	Desulf-inyl fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd, 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd, 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd, 0.7u GF ug/L (82671)
MAR 12...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.205	<.006	<.003
APR 14...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.042	<.006	<.003
MAY 11...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.333	.007	<.003
MAY 23...	<.005	<.029	<.013	<.024	E.006	<.003	<.004	<.035	<.027	<.015	3.91	.139	<.003
JUN 08...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.146	E.004	<.003
JUN 17...	<.005	<.029	<.013	E.005	E.010	<.003	<.004	<.035	<.027	<.015	.650	.008	<.003
JUL 13...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.053	<.006	<.003
AUG 10...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.035	<.006	<.003
SEP 07...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.111	<.006	<.003

## 06609500 BOYER RIVER AT LOGAN, IA—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Naprop- amide, water, fltrd 0.7u GF (82684)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF (82669)	Pendi- meth- alin, water, fltrd 0.7u GF (82683)	Phorate water fltrd 0.7u GF (82664)	Prome- ton, water, fltrd, ug/L (04037)	Propy- zamide, water, fltrd 0.7u GF (82676)	Propa- chlor, water, fltrd, ug/L (04024)	Pro- panil, water, fltrd 0.7u GF (82679)	Propar- gite, water, fltrd 0.7u GF (82685)	Sima- zine, water, fltrd, ug/L (04035)	Tebu- thiuron water fltrd 0.7u GF (82670)
MAR 12...	<.007	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	<.005	<.02
APR 14...	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02
MAY 11...	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02
MAY 23...	<.007	<.003	<.010	<.004	E.021	<.011	.01	<.004	<.025	<.011	<.02	.092	<.02
JUN 08...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	E.005	<.02
JUN 17...	<.007	<.015	<.010	<.004	E.016	<.011	.01	<.004	<.025	<.011	<.02	.076	<.02
JUL 13...	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.149	<.02
AUG 10...	<.007	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	E.004	<.02
SEP 07...	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terba- cil, water, fltrd 0.7u GF (82665)	Terbu- fos, water, fltrd 0.7u GF (82675)	Thio- bencarb water fltrd 0.7u GF (82681)	Tri- allate, water, fltrd 0.7u GF (82678)	Tri- flur- alin, water, fltrd 0.7u GF (82661)	Sus- pended sedi- ment concen- tration mg/L (80154)	Number of sam- pling points, count (00063)
MAR 12...	<.034	<.02	<.010	<.002	<.009	189	9
APR 14...	<.034	<.02	<.010	<.002	<.009	77	10
MAY 11...	<.034	<.02	<.010	<.002	<.009	156	12
MAY 23...	<.034	<.02	<.010	<.002	.015	6,330	10
JUN 08...	<.034	<.02	<.010	<.002	<.009	253	11
JUN 17...	<.034	<.02	<.010	<.002	.016	7,600	8
JUL 13...	<.034	<.02	<.010	<.002	<.009	677	9
AUG 10...	E.031	<.02	<.010	<.002	<.009	332	12
SEP 07...	<.034	<.02	<.010	<.002	<.009	33	10

06610000 MISSOURI RIVER AT OMAHA, NE  
(National stream-quality accounting network station)

LOCATION.--Lat 41°15'32", long 95°55'20", in SE $\frac{1}{4}$  NW $\frac{1}{4}$  sec.23, T.15 N., R.13 E., Douglas County, Hydrologic Unit 10230006, on right bank on left side of concrete floodwall, at foot of Douglas Street, 275 ft downstream from Interstate 480 Highway bridge in Omaha, and at mile 615.9.

DRAINAGE AREA.--322,800 mi<sup>2</sup>, approximately. The 3,959 mi<sup>2</sup> in Great Divide basin are not included.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1928 to current year. April 1872 to December 1899 (gage heights only) in reports of the Missouri River Commission and since January 1875, (gage heights only) in reports of the U.S. Weather Bureau.

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 948.24 ft above NGVD of 1929. See WSP 1730 for history of changes prior to Sept. 30, 1936. Oct. 1, 1936 to Sept. 30, 1982 at datum 10.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and data collection platform with satellite telemetry at station. Precipitation records are available online at the U.S. Army Corps of Engineers website: [www2.mvr.usace.army.mil/WaterControl/datamining2.cfm](http://www2.mvr.usace.army.mil/WaterControl/datamining2.cfm).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 396,000 ft<sup>3</sup>/s Apr. 18, 1952, gage height, 40.20 ft, present datum; minimum, about 2,200 ft<sup>3</sup>/s Jan. 6, 1937; minimum gage height, 6.85 ft, present datum, Feb. 5, 1989, result of freeze-up.

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	28,800	30,100	15,300	16,900	16,800	24,100	26,100	25,900	42,200	34,200	30,100	28,000
2	28,800	30,200	15,300	17,000	16,900	25,600	24,800	26,100	39,200	34,300	30,000	28,100
3	29,100	31,500	15,400	17,000	17,500	26,300	24,000	27,800	40,000	35,200	30,800	28,100
4	29,100	32,400	15,300	16,800	18,400	24,500	23,700	29,800	42,100	40,200	32,700	28,500
5	29,200	32,300	15,300	16,200	18,300	25,100	23,700	30,200	39,200	41,600	31,100	29,100
6	29,200	31,900	15,100	15,500	17,100	26,900	23,800	30,000	39,400	38,500	30,600	29,400
7	29,100	31,300	14,900	15,000	16,800	27,900	23,700	30,000	40,900	37,500	30,200	29,700
8	29,100	31,000	14,800	14,500	17,400	23,700	24,000	30,100	39,200	37,800	30,600	29,200
9	29,100	30,700	15,000	15,100	16,600	21,500	25,000	30,400	38,300	40,000	31,200	29,000
10	29,500	30,800	14,800	16,200	16,100	19,400	25,200	31,900	37,700	40,000	30,900	28,900
11	30,300	31,000	15,000	17,000	16,900	17,900	24,900	34,000	38,300	38,900	30,500	29,400
12	30,600	31,000	14,500	17,100	17,200	17,000	25,300	32,500	42,000	37,000	30,400	29,400
13	31,000	31,000	14,600	17,300	16,800	16,300	25,600	31,900	42,200	36,200	30,200	29,400
14	30,800	31,200	15,800	17,700	16,200	15,400	25,500	32,900	38,600	34,700	29,900	29,200
15	30,300	30,800	16,800	17,600	15,700	15,500	25,200	30,600	38,900	34,300	29,500	30,500
16	30,200	30,800	17,400	17,000	16,500	16,200	25,300	30,400	38,300	35,700	29,100	33,700
17	29,700	31,200	17,800	16,500	16,100	16,100	25,700	31,900	41,700	33,500	28,700	39,000
18	29,300	31,300	17,900	16,000	15,500	15,900	25,800	29,700	51,300	32,700	28,900	40,400
19	29,300	31,200	17,800	16,100	15,600	15,500	25,800	30,200	44,200	32,700	28,700	37,900
20	29,200	29,500	18,300	16,400	15,700	15,500	26,600	32,100	43,900	32,400	29,100	35,500
21	29,500	26,400	17,500	16,200	15,800	15,800	26,800	29,200	44,100	32,300	28,600	35,700
22	29,600	23,900	16,700	16,600	15,600	17,300	27,300	31,000	44,400	32,700	28,200	35,600
23	29,700	21,700	16,300	17,200	16,600	19,700	27,700	46,600	41,500	31,600	28,100	35,500
24	29,800	19,000	15,800	17,300	18,300	21,200	27,800	51,600	39,400	31,000	28,300	35,900
25	29,800	17,000	15,600	18,700	17,300	22,000	28,100	50,300	38,300	30,600	29,100	37,400
26	29,900	15,900	15,500	19,100	15,800	22,000	28,900	48,700	37,700	30,400	28,800	37,400
27	30,100	15,600	15,500	17,900	15,200	24,000	28,600	39,500	36,900	30,300	28,500	36,000
28	30,200	15,400	16,100	17,700	16,900	26,200	27,500	37,900	35,800	30,200	28,300	34,000
29	30,200	15,300	17,200	15,500	20,800	28,500	26,100	38,500	35,400	30,400	28,200	32,700
30	30,100	15,200	17,400	14,600	---	27,900	25,700	34,700	34,900	30,600	28,100	32,000
31	29,900	---	17,100	16,000	---	27,100	---	37,500	---	30,400	28,100	---
TOTAL	920,500	806,600	497,800	515,700	486,400	658,000	774,200	1,053,900	1,206,000	1,067,900	915,500	974,600
MEAN	29,690	26,890	16,060	16,640	16,770	21,230	25,810	34,000	40,200	34,450	29,530	32,490
MAX	31,000	32,400	18,300	19,100	20,800	28,500	28,900	51,600	51,300	41,600	32,700	40,400
MIN	28,800	15,200	14,500	14,500	15,200	15,400	23,700	25,900	34,900	30,200	28,100	28,000
AC-FT	1,826,000	1,600,000	987,400	1,023,000	964,800	1,305,000	1,536,000	2,090,000	2,392,000	2,118,000	1,816,000	1,933,000
CFSM	0.09	0.08	0.05	0.05	0.05	0.07	0.08	0.11	0.12	0.11	0.09	0.10
IN.	0.11	0.09	0.06	0.06	0.06	0.08	0.09	0.12	0.14	0.12	0.11	0.11

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY)

MEAN	38,240	33,960	20,900	17,720	19,710	27,730	38,400	38,460	41,670	40,210	38,580	38,670
MAX	74,070	75,040	44,260	33,250	40,410	54,660	93,840	87,620	76,120	78,560	68,890	69,770
(WY)	(1998)	(1998)	(1998)	(1987)	(1997)	(1997)	(1997)	(1997)	(1997)	(1993)	(1997)	(1997)
MIN	16,920	8,324	8,296	8,425	8,162	10,170	16,480	26,450	26,890	27,150	26,780	28,290
(WY)	(1962)	(1962)	(1962)	(1964)	(1963)	(1957)	(1957)	(1961)	(1961)	(1958)	(2003)	(1958)

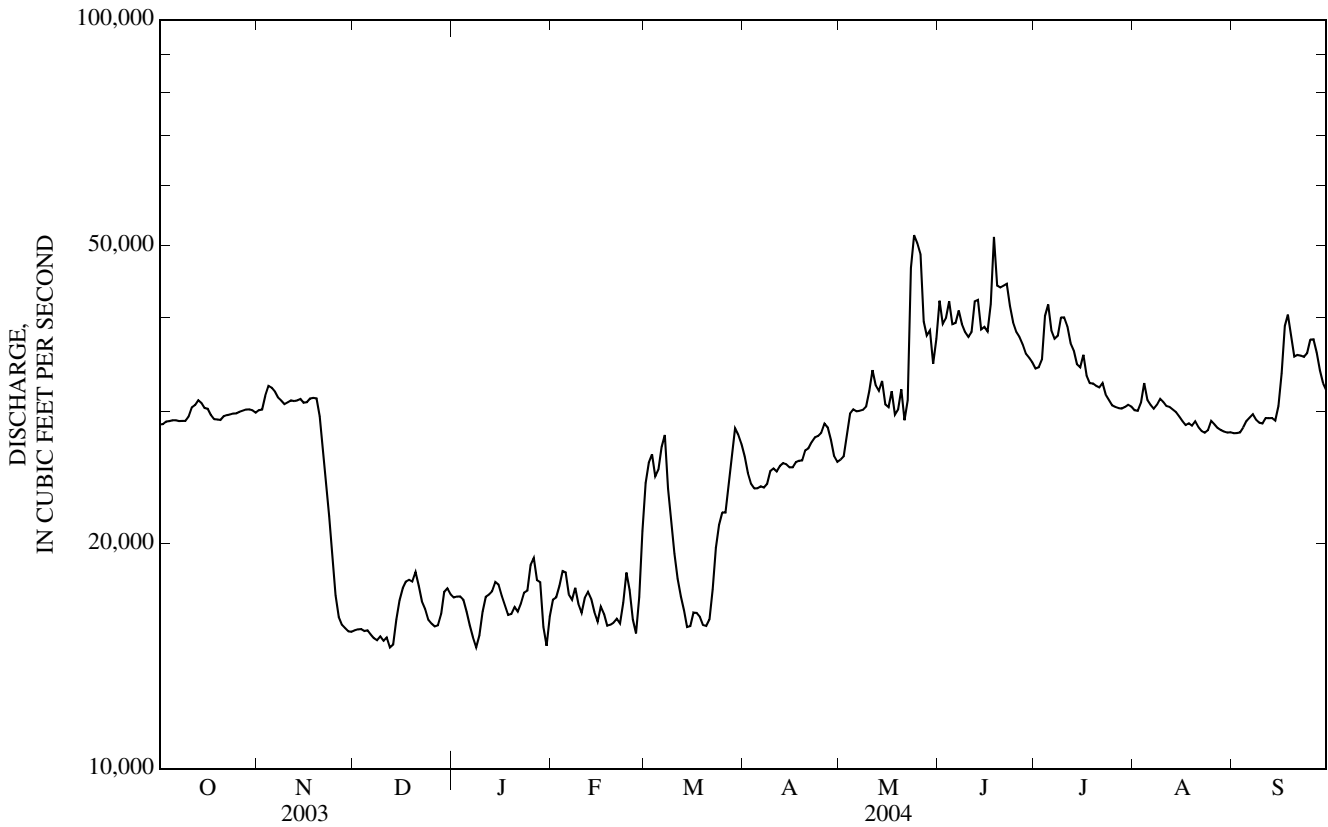


MISSOURI RIVER MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004 a	
ANNUAL TOTAL	9,556,400		9,877,100			
ANNUAL MEAN	26,180		26,990		32,890	
HIGHEST ANNUAL MEAN					62,150 1997	
LOWEST ANNUAL MEAN					20,490 1957	
HIGHEST DAILY MEAN	54,500	Jul 11	51,600	May 24	116,000	Apr 4, 1960
LOWEST DAILY MEAN	12,700	Mar 11	14,500	Dec 12 b	2,440	Dec 14, 1961
ANNUAL SEVEN-DAY MINIMUM	14,200	Mar 6	14,800	Dec 7	4,300	Nov 28, 1955
MAXIMUM PEAK FLOW			53,400	Jun 18	120,000	Apr 1, 1960
MAXIMUM PEAK STAGE			22.57	Jun 18	30.26	Jul 10, 1993
INSTANTANEOUS LOW FLOW			14,100	Jan 29 c		
ANNUAL RUNOFF (AC-FT)	18,960,000		19,590,000		23,830,000	
ANNUAL RUNOFF (CFSM)	0.081		0.084		0.102	
ANNUAL RUNOFF (INCHES)	1.10		1.14		1.38	
10 PERCENT EXCEEDS	34,400		38,300		52,100	
50 PERCENT EXCEEDS	28,700		28,900		32,200	
90 PERCENT EXCEEDS	15,400		15,800		14,300	

a Post regulation.  
 b Also Jan. 8.  
 c Also Jan. 30.



## 06610000 MISSOURI RIVER AT OMAHA, NE—Continued

## WATER QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 30, 2004.

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

Date	Time	Instantaneous discharge, cfs (00061)	Stream width, feet (00004)	Turbidity, wat unflab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)
MAR													
11...	1030	1,180	225	200	744	11.9	96	8.3	490	5.2	172	210	16.9
29...	1230	4,180	260	E1,100	740	8.2	78	7.7	440	12.0	151	184	18.3
APR													
12...	1300	1,210	235	63	--	11.3	--	8.2	533	10.3	174	213	17.5
MAY													
10...	1230	4,630	260	E4,200	737	3.5	40	7.5	387	20.6	121	147	11.2
25...	1045	15,800	310	2,300	732	5.3	58	7.2	238	17.5	80	97	6.35
JUN													
07...	1245	3,580	250	200	733	7.6	89	8.0	510	21.3	176	214	13.8
JUL													
12...	1230	2,670	240	520	741	7.4	92	7.9	454	24.4	148	181	11.8
AUG													
09...	1230	1,480	210	58	742	8.2	97	8.1	502	22.0	194	236	14.9
SEP													
07...	1230	823	200	93	743	8.6	99	8.3	542	21.2	198	242	15.1

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	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)	Particulate nitrogen, susp, water, mg/L (49570)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat flt by analysis, mg/L (62854)	Total nitrogen, wat unfltrd by analysis, mg/L (62855)	Total carbon, suspnd sediment total, mg/L (00694)	Inorganic carbon, suspnd sediment total, mg/L (00688)
MAR													
11...	14.0	31.7	.18	7.85	.025	.70	.177	.192	.72	8.55	8.76	7.1	<.1
29...	12.7	27.8	.18	7.37	.063	4.03	.158	.190	3.09	7.93	11.7	47.2	.2
APR													
12...	11.4	30.4	<.04	7.75	.011	.32	.155	.176	.37	8.15	8.61	2.7	<.1
MAY													
10...	8.9	21.1	.22	6.45	.164	15.1	.101	.123	9.41	6.98	16.9	145	8.1
25...	9.2	12.9	.16	5.89	.071	.72	.076	.101	6.02	6.39	10.4	7.1	.2
JUN													
07...	16.2	27.0	<.04	11.5	.024	.98	.157	.162	.76	11.5	6.61	9.6	.2
JUL													
12...	14.2	21.8	<.04	8.01	.038	2.81	.154	.172	1.16	8.24	10.1	27.6	.4
AUG													
09...	16.5	28.4	<.04	7.24	.011	.85	.206	.22	.63	7.64	8.38	8.2	<.1
SEP													
07...	13.5	28.8	<.04	4.30	.016	.53	.180	.17	.42	4.59	5.02	4.1	<.1

## 06610000 MISSOURI RIVER AT OMAHA, NE—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Organic carbon, suspdnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Pheophytin a, phytoplankton, ug/L (62360)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	2,6-Diethyl-aniline water fltrd, 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd, 0.7u GF ug/L (82686)	Benfluralin, water, fltrd, 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)
MAR 11...	7.0	3.3	3.8	4.7	<.006	E.024	.009	<.005	<.005	.078	<.050	<.010	<.004
MAR 29...	47.0	6.0	26.2	24.6	<.006	E.028	.026	<.005	<.005	.160	<.050	<.010	<.004
APR 12...	2.7	2.2	2.5	6.2	<.006	E.023	.017	<.005	<.005	.070	<.050	<.010	<.004
MAY 10...	137	5.1	6.6	3.2	<.006	E.441	2.28	.240	<.005	E41.7	<.050	<.010	<.004
MAY 25...	6.9	5.4	18.2	8.8	<.006	E.469	.884	.051	<.005	8.69	<.050	<.010	<.004
JUN 07...	9.4	3.5	3.1	2.5	<.006	E.076	.051	.006	<.005	.781	<.050	<.010	<.004
JUL 12...	27.2	3.2	5.7	3.9	<.006	E.068	.032	<.005	<.005	.681	<.050	<.010	<.004
AUG 09...	8.1	2.4	5.5	10.9	<.006	E.036	.015	<.005	<.005	.239	<.050	<.010	<.004
SEP 07...	4.1	2.7	9.4	13.6	<.006	E.025	.025	<.005	<.005	.273	<.050	<.010	<.004

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd, 0.7u GF ug/L (82680)	Carbofuran, water, fltrd, 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water, fltrd, 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water, fltrd, 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd, 0.7u GF ug/L (82677)	EPTC, water, fltrd, 0.7u GF ug/L (82668)	Ethalfuralin, water, fltrd, 0.7u GF ug/L (82663)	Ethoprop, water, fltrd, 0.7u GF ug/L (82672)
MAR 11...	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005
MAR 29...	<.041	<.020	.006	<.006	E.012	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005
APR 12...	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005
MAY 10...	E.007	<.020	.008	<.006	.019	<.003	<.012	<.005	E.006	<.02	<.004	<.009	<.005
MAY 25...	E.007	<.020	.027	<.006	.516	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005
JUN 07...	<.041	<.020	<.005	<.006	E.008	<.003	<.012	<.005	E.003	<.02	<.004	<.009	<.005
JUL 12...	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005
AUG 09...	<.041	<.020	E.004	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005
SEP 07...	<.041	<.020	<.005	<.006	E.016	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Desulf-inyl fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water, fltrd, 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd, 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd, 0.7u GF ug/L (82671)	Napropamide, water, fltrd, 0.7u GF ug/L (82684)
MAR 11...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.027	<.006	<.003	<.007
MAR 29...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.066	<.006	<.003	<.007
APR 12...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.032	<.006	<.003	<.007
MAY 10...	<.029	<.013	E.006	E.009	<.003	<.004	<.035	<.027	<.015	.925	.053	<.003	<.007
MAY 25...	<.029	<.013	E.008	E.031	.024	<.004	<.035	<.027	<.015	3.06	.075	<.003	<.007
JUN 07...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.131	.006	<.003	<.007
JUL 12...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.121	E.005	<.003	<.007
AUG 09...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.041	<.006	<.003	<.007
SEP 07...	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	.098	<.006	<.003	<.007

06610000 MISSOURI RIVER AT OMAHA, NE—Continued

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

Date	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd, 0.7u GF ug/L (82669)	Pendi-methalin, water, fltrd, 0.7u GF ug/L (82683)	Phorate water, fltrd, 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd, 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd, 0.7u GF ug/L (82679)	Propar-gite, water, fltrd, 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water, fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, 0.7u GF ug/L (82665)
MAR 11...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
MAR 29...	<.003	<.010	<.004	E.007	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
APR 12...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
MAY 10...	<.003	<.010	<.004	E.017	<.011	.01	<.004	<.025	<.011	<.02	.098	<.02	<.034
MAY 25...	<.003	<.010	<.004	.028	<.011	.01	<.004	<.025	<.011	<.02	.042	<.02	<.034
JUN 07...	<.003	<.010	<.004	E.009	<.011	.01	<.004	<.025	<.011	<.02	.006	<.02	<.034
JUL 12...	<.003	<.010	<.004	<.022	<.011	.02	<.004	<.025	<.011	<.02	.009	<.02	<.034
AUG 09...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034
SEP 07...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.011	<.02	<.034

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

Date	Terbu-fos, water, fltrd, 0.7u GF ug/L (82675)	Thio-bencarb water, fltrd, 0.7u GF ug/L (82681)	Tri-allate, water, fltrd, 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd, 0.7u GF ug/L (82661)	Sus-pended sedi-ment concen-tration mg/L (80154)	Number of sam-pling points, count (00063)
MAR 11...	<.02	<.010	<.002	<.009	553	11
MAR 29...	<.02	<.010	<.002	E.004	3,210	10
APR 12...	<.02	<.010	<.002	<.009	200	12
MAY 10...	<.02	<.010	<.002	.035	8,700	14
MAY 25...	<.02	<.010	<.002	.034	5,340	8
JUN 07...	<.02	<.010	<.002	<.009	633	10
JUL 12...	<.02	<.010	<.002	<.009	1,500	10
AUG 09...	<.02	<.010	<.002	<.009	861	14
SEP 07...	<.02	<.010	<.002	<.009	228	11

## 06807000 MISSOURI RIVER AT NEBRASKA CITY, NE

LOCATION.--Lat 40°40'55", long 95°50'48", in NW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.9, T.8 N., R.14 E., Otoe County, Hydrologic Unit 10240001, on right bank 1.0 mi upstream from Highway 2 Bridge at Nebraska City, and at mile 562.6.

DRAINAGE AREA.--410,000 mi<sup>2</sup>, approximately. The 3,959 mi<sup>2</sup> in Great Divide basin are not included.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected in this vicinity from August 1878 to December 1899 are contained in reports of Missouri River Commission.

REVISED RECORDS.--WSP 761: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 905.36 ft above NGVD of 1929, supplementary adjustment of 1954. See WSP 1918 or 1919 for history of changes prior to Apr. 1, 1963.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by upstream main-stem reservoirs. Fort Randall Dam was completed in July 1952, with storage beginning in December 1952. Gavins Point Dam was completed in July 1955, with storage beginning in December 1955. U.S. Army Corps of Engineers rain gage and data collection platform with satellite telemetry at station. Precipitation records are available online at the U.S. Army Corps of Engineers website: [www2.mvr.usace.army.mil/WaterControl/datamining2.cfm](http://www2.mvr.usace.army.mil/WaterControl/datamining2.cfm).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 414,000 ft<sup>3</sup>/s Apr. 19, 1952; maximum gage height, 27.66 ft Apr. 18, 1952; minimum discharge, 1,600 ft<sup>3</sup>/s Dec. 31, 1946 (discharge measurement); minimum gage height observed, -0.28 ft Dec. 24, 1960, result of freezeup.

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	30,000	32,600	17,000	20,200	17,900	37,100	33,600	30,600	48,900	39,300	33,600	29,400
2	30,000	32,800	18,200	19,800	18,800	41,100	31,500	30,300	49,800	39,100	33,200	29,000
3	30,400	33,400	19,200	19,800	18,600	39,900	30,100	30,700	47,900	42,100	33,300	28,900
4	30,100	36,400	19,700	20,200	19,800	37,200	29,100	32,300	48,900	42,700	38,100	29,000
5	29,700	35,800	19,300	18,500	20,800	36,900	28,500	33,500	47,600	46,200	36,200	29,400
6	29,800	34,800	18,400	16,600	20,600	37,500	28,000	33,200	46,100	45,500	34,000	30,800
7	30,400	34,800	17,700	15,300	19,200	38,000	28,400	33,400	46,900	45,000	33,600	30,100
8	30,200	34,300	16,900	15,000	19,100	34,600	28,500	33,500	46,900	45,200	33,100	29,700
9	30,400	33,900	17,400	15,400	19,700	31,500	28,600	33,600	45,800	47,300	33,100	29,200
10	30,600	33,900	18,000	16,800	19,100	29,100	29,100	34,400	44,700	49,200	33,100	29,100
11	31,600	34,000	16,100	18,300	19,200	27,300	28,900	36,600	43,800	51,900	32,700	29,300
12	32,100	33,500	16,000	19,000	20,400	25,300	29,600	36,500	44,700	49,500	32,400	29,800
13	32,200	33,400	15,500	19,300	20,800	23,800	30,100	35,600	53,300	46,400	32,600	29,900
14	33,300	33,300	16,500	20,100	20,300	22,200	30,100	35,800	48,400	45,300	32,300	29,800
15	32,500	33,200	18,600	21,200	19,300	21,400	29,800	35,500	47,300	42,800	32,200	30,100
16	32,000	33,000	20,100	20,500	18,800	22,400	29,300	33,400	46,300	43,000	32,000	32,500
17	32,200	33,500	20,700	21,300	19,500	22,700	29,200	34,700	45,800	42,400	31,700	36,100
18	31,600	34,600	20,700	21,900	18,600	23,100	29,800	35,000	54,700	40,000	31,400	39,600
19	31,500	33,600	20,400	21,200	18,500	22,100	29,400	34,000	54,600	38,300	31,200	39,500
20	31,400	32,900	20,300	19,900	19,300	21,300	29,700	36,000	51,000	37,400	31,200	37,500
21	31,700	30,800	21,100	20,200	20,100	21,400	30,300	35,900	50,700	36,500	30,900	37,900
22	32,000	28,200	20,700	20,500	20,700	22,200	30,300	34,700	50,700	39,000	29,900	40,900
23	31,700	26,200	19,700	21,100	22,200	24,700	31,000	53,700	49,000	37,900	29,400	39,000
24	31,700	23,800	19,400	21,400	25,900	27,000	31,500	73,800	46,300	36,200	29,500	38,500
25	31,700	21,100	19,100	21,800	27,100	28,300	33,100	80,000	45,100	35,200	30,600	38,900
26	31,400	18,200	18,700	22,900	25,900	28,300	33,300	71,700	43,500	34,600	31,700	41,500
27	31,400	16,700	19,000	21,700	26,500	29,700	33,500	61,600	42,500	33,900	30,300	40,900
28	31,600	17,600	20,000	19,900	27,400	34,200	32,700	54,000	41,300	33,600	29,700	39,000
29	31,800	17,100	21,600	19,000	33,400	35,000	32,200	51,700	40,200	33,600	29,700	37,400
30	32,000	16,500	22,000	16,300	---	35,800	30,900	53,200	39,900	33,800	29,600	36,400
31	32,600	---	21,300	16,100	---	34,900	---	48,100	---	34,000	29,300	---
TOTAL	971,600	893,900	589,300	601,200	617,500	916,000	910,100	1,297,000	1,412,600	1,266,900	991,600	1,019,100
MEAN	31,340	29,800	19,010	19,390	21,290	29,550	30,340	41,840	47,090	40,870	31,990	33,970
MAX	33,300	36,400	22,000	22,900	33,400	41,100	33,600	80,000	54,700	51,900	38,100	41,500
MIN	29,700	16,500	15,500	15,000	17,900	21,300	28,000	30,300	39,900	33,600	29,300	28,900
AC-FT	1,927,000	1,773,000	1,169,000	1,192,000	1,225,000	1,817,000	1,805,000	2,573,000	2,802,000	2,513,000	1,967,000	2,021,000
CFSM	0.08	0.07	0.05	0.05	0.05	0.07	0.07	0.10	0.11	0.10	0.08	0.08
IN.	0.09	0.08	0.05	0.05	0.06	0.08	0.08	0.12	0.13	0.11	0.09	0.09

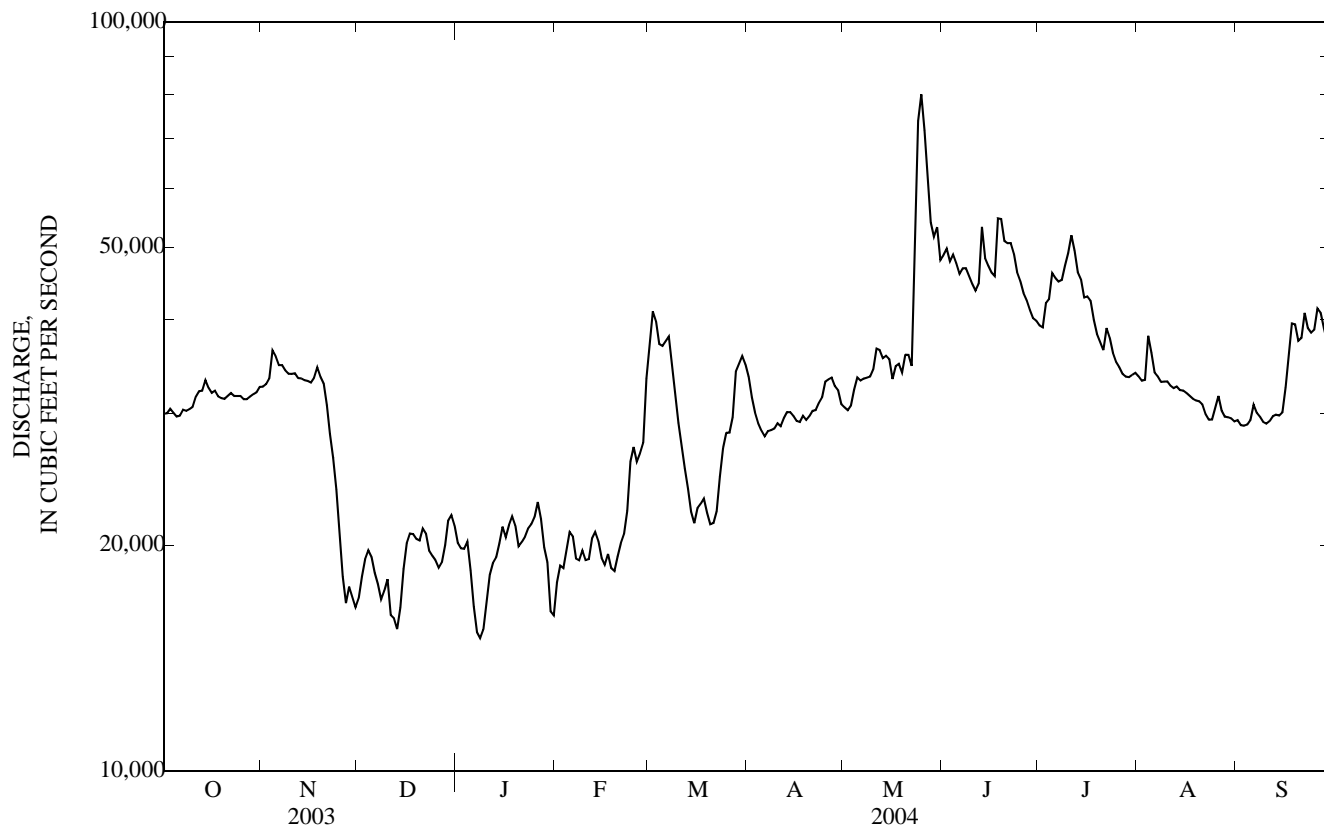
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004, BY WATER YEAR (WY)

MEAN	42,480	38,730	25,390	21,440	26,370	37,500	47,210	47,490	51,820	46,000	42,160	42,160
MAX	76,760	79,410	52,410	39,970	48,630	66,730	98,960	90,280	117,500	116,700	71,540	73,410
(WY)	(1998)	(1998)	(1987)	(1987)	(1983)	(1983)	(1997)	(1997)	(1984)	(1993)	(1996)	(1997)
MIN	22,420	14,380	10,510	10,160	12,780	15,310	21,850	32,470	33,530	28,830	28,040	32,150
(WY)	(1962)	(1962)	(1956)	(1957)	(1957)	(1957)	(1957)	(1955)	(1958)	(2002)	(2003)	(2003)

06807000 MISSOURI RIVER AT NEBRASKA CITY, NE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004 a	
ANNUAL TOTAL	10,972,200		11,486,800			
ANNUAL MEAN	30,060		31,380		39,090	
HIGHEST ANNUAL MEAN					66,450 1997	
LOWEST ANNUAL MEAN					25,370 1957	
HIGHEST DAILY MEAN	62,900	May 6	80,000	May 25	188,000	Jul 25, 1993
LOWEST DAILY MEAN	15,500	Jan 18	15,000	Jan 8	4,320	Jan 11, 1957
ANNUAL SEVEN-DAY MINIMUM	16,400	Jan 13	16,600	Jan 5	5,590	Nov 29, 1955
MAXIMUM PEAK FLOW			82,000	May 25	196,000	Jul 23, 1993
MAXIMUM PEAK STAGE			16.73	May 25	27.19	Jul 23, 1993
INSTANTANEOUS LOW FLOW			14,600	Jan 8		
ANNUAL RUNOFF (AC-FT)	21,760,000		22,780,000		28,320,000	
ANNUAL RUNOFF (CFSM)	0.073		0.077		0.095	
ANNUAL RUNOFF (INCHES)	1.00		1.04		1.30	
10 PERCENT EXCEEDS	42,000		45,600		61,200	
50 PERCENT EXCEEDS	31,000		31,400		36,800	
90 PERCENT EXCEEDS	18,600		19,100		18,000	

a Post regulation.



## WATER-QUALITY RECORDS

LOCATION.--Water quality samples were collected by boat, 0.5 miles upstream of gage.

PERIOD OF RECORD.--May 1951 to current year. Daily sediment loads August 1957 to September 1971 in reports of U.S. Army Corps of Engineers.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1951 to December 1977, October 1991 to current year.

WATER TEMPERATURES: May 1951 to December 1977, October 1991 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1971 to September 1976, October 1991 to current year.

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, 994 microsiemens Dec. 17, 1962; minimum daily, 273 microsiemens June 17, 1964.

WATER TEMPERATURES: Maximum daily, 31.0°C July 26, 1977, and July 25, 1997; minimum daily, 0.0°C on many days during winter periods.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,420 mg/L Aug. 7, 1996; minimum daily mean, 80 mg/L Aug. 3, 2002.

SEDIMENT LOADS: Maximum daily, 3,120,000 tons June 24, 1996; minimum daily, 3,920 tons Dec. 13, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 806 microsiemens Jan. 12; minimum daily, 492 microsiemens May 25.

WATER TEMPERATURES: Maximum daily, 29.0°C July 23; minimum daily, 2.0°C Dec. 18, Feb. 12.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,250 mg/L May 25; minimum daily, 87 mg/L Feb. 2.

SEDIMENT LOADS: Maximum daily, 919,000 tons May 25; minimum daily, 3,920 tons Dec. 13.

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

Date	Time	Bed sedi- ment, dry svd sve dia percent <.063mm (80164)	Bed sedi- ment, dry svd sve dia percent <.125mm (80165)	Bed sedi- ment, dry svd sve dia percent <.25mm (80166)	Bed sedi- ment, dry svd sve dia percent <.5 mm (80167)	Bed sedi- ment, dry svd sve dia percent <1 mm (80168)	Bed sedi- ment, dry svd sve dia percent <2 mm (80169)	Bed sedi- ment, dry svd sve dia percent <4 mm (80170)	Bed sedi- ment, dry svd sve dia percent <8 mm (80171)	Bed sedi- ment, dry svd sve dia percent <16 mm (80172)	Number of sam- pling points, count (00063)
OCT 06...	1100	.0	.0	26	64	75	88	97	100	--	3
NOV 07...	1345	.0	.0	16	47	69	84	94	99	100	3
JAN 12...	1415	.0	.0	21	76	90	95	96	98	100	3
FEB 12...	1445	.0	.0	17	63	82	95	99	100	100	3
MAR 02...	1330	.0	.0	16	58	74	84	95	100	--	3
APR 08...	1220	.0	.0	18	76	92	98	99	100	--	3
APR 12...	1445	.0	.0	6	48	71	85	96	99	100	3
MAY 02...	1415	.0	.0	16	61	73	82	93	99	100	3
JUN 01...	1440	.0	.0	9	40	74	91	98	100	--	3
JUL 12...	1430	.0	.0	10	44	69	90	97	100	--	3
AUG 11...	1420	.0	.0	16	56	74	86	97	100	--	3
SEP 07...	1350	.0	.0	15	61	81	94	98	100	--	3





## MISSOURI RIVER MAIN STEM

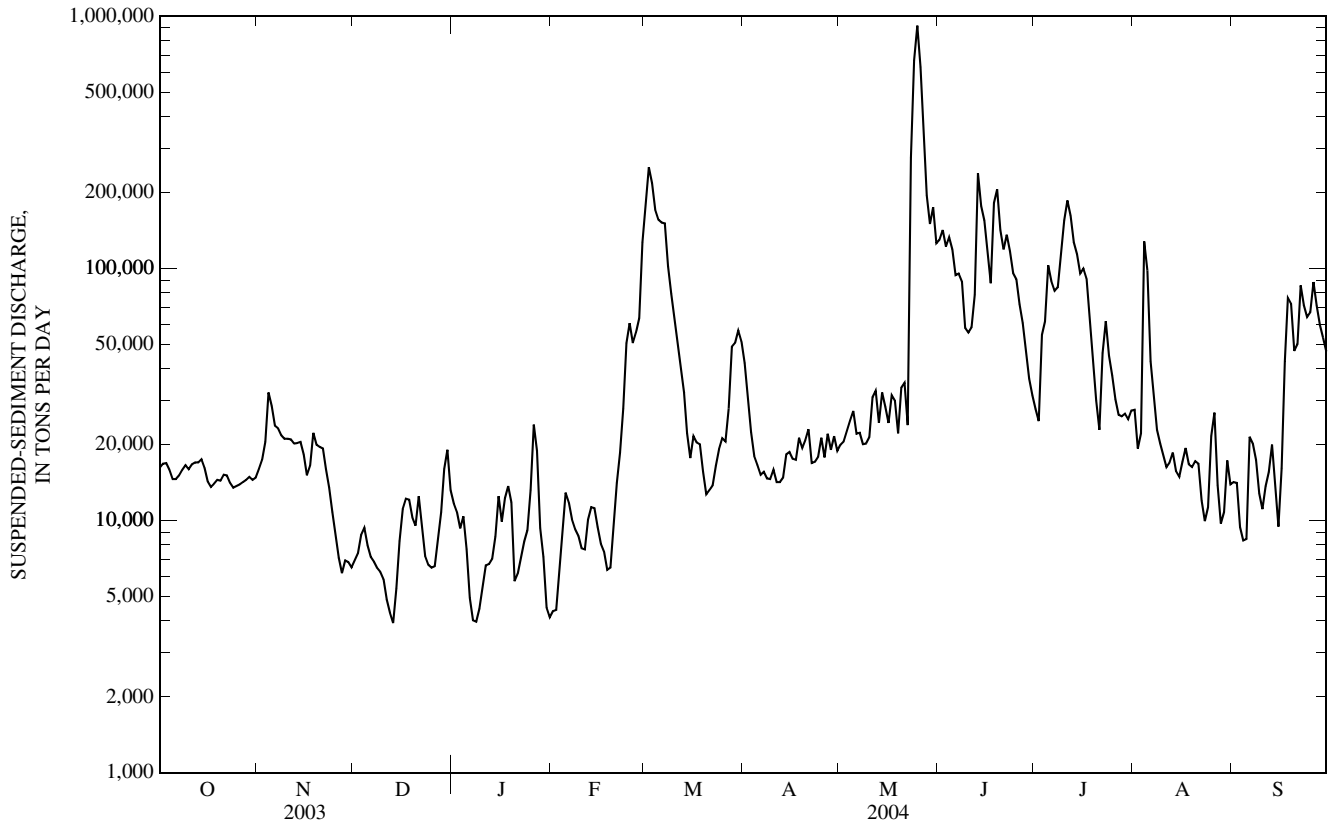
06807000 MISSOURI RIVER AT NEBRASKA CITY, NE—Continued

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	200	16,200	182	16,000	151	6,960	214	11,700	91	4,370	1,740	175,000
2	207	16,800	196	17,400	151	7,420	203	10,800	87	4,420	2,270	252,000
3	206	16,900	226	20,500	169	8,770	174	9,320	121	6,110	2,030	218,000
4	195	15,900	327	32,200	176	9,360	189	10,400	165	8,810	1,700	171,000
5	182	14,600	295	28,500	153	7,980	154	7,700	229	12,900	1,560	156,000
6	181	14,600	254	23,800	145	7,180	110	4,930	212	11,800	1,500	152,000
7	185	15,100	247	23,200	143	6,870	97	4,020	194	10,100	1,470	151,000
8	194	15,900	235	21,800	142	6,490	98	3,970	179	9,230	1,090	102,000
9	202	16,600	230	21,100	133	6,260	107	4,470	164	8,700	930	79,300
10	194	16,000	230	21,100	120	5,850	120	5,460	150	7,760	818	64,400
11	196	16,700	229	21,000	111	4,860	135	6,640	148	7,680	708	52,100
12	196	17,000	224	20,200	100	4,310	131	6,720	183	10,100	604	41,400
13	196	17,000	225	20,300	94	3,920	136	7,060	200	11,300	499	32,200
14	194	17,500	228	20,500	120	5,380	159	8,650	204	11,200	370	22,200
15	185	16,200	204	18,300	165	8,300	218	12,500	181	9,420	307	17,700
16	165	14,300	169	15,100	204	11,100	178	9,900	160	8,110	356	21,600
17	156	13,600	182	16,500	219	12,200	213	12,300	143	7,530	333	20,400
18	164	14,000	239	22,300	217	12,100	231	13,700	127	6,380	322	20,100
19	170	14,500	220	20,000	187	10,300	205	11,800	130	6,510	261	15,600
20	170	14,400	221	19,600	174	9,550	107	5,750	192	10,000	219	12,700
21	178	15,200	232	19,300	220	12,500	113	6,170	260	14,100	228	13,200
22	175	15,100	210	16,000	167	9,380	129	7,160	332	18,600	230	13,800
23	164	14,100	192	13,500	136	7,230	145	8,250	460	27,800	246	16,500
24	158	13,500	169	10,800	128	6,670	159	9,150	720	50,500	263	19,200
25	161	13,700	156	8,880	126	6,500	224	13,200	829	60,600	277	21,200
26	164	13,900	145	7,130	131	6,590	388	24,000	724	50,600	270	20,600
27	168	14,200	137	6,190	162	8,330	322	18,900	778	55,800	344	27,800
28	170	14,500	146	6,940	199	10,800	174	9,340	853	63,500	530	48,900
29	174	14,900	148	6,840	273	16,000	140	7,180	1,410	127,000	537	50,700
30	167	14,500	146	6,520	321	19,100	102	4,520	---	---	587	56,800
31	169	14,800	---	---	231	13,200	95	4,130	---	---	544	51,300
TOTAL	---	472,200	---	521,500	---	271,460	---	279,790	---	640,930	---	2,116,700



06807000 MISSOURI RIVER AT NEBRASKA CITY, NE—Continued



06807000 MISSOURI RIVER AT NEBRASKA CITY, NE—Continued