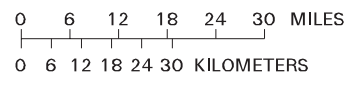


- Explanation
- Hydrologic boundary
  - Streams
  - 05388250 Transmitting gaging station and station number
  - 05388310 Crest-stage gaging station and station number



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

## Gaging Stations

05420460	Beaver Slough at 3rd Street at Clinton, IA . . . . .	.94
05420500	Mississippi River at Clinton, IA . . . . .	.96
05420680	Wapsipinicon River nr Tripoli, IA . . . . .	103
05421000	Wapsipinicon River at Independence, IA . . . . .	110
05421740	Wapsipinicon River at Anamosa, IA . . . . .	112
05422000	Wapsipinicon River near De Witt, IA . . . . .	114
05422470	Crow Creek at Bettendorf, IA . . . . .	119
05422560	Duck Creek at 110th Ave at Davenport, IA . . . . .	121
05422600	Duck Creek at Duck Creek Golf Course, Davenport, IA . . . . .	123

## Crest Stage Gaging Stations

05420600	Little Wapsipinicon River Tributary near Riceville, IA . . . . .	487
05420850	Little Wapsipinicon River near Oran, IA . . . . .	487
05420875	Buck Creek near Oran, IA . . . . .	487
05421100	Pine Creek Tributary near Winthrop, IA . . . . .	487
05421300	Wapsipinicon River Tributary at Winthrop, IA . . . . .	487
05421890	Silver Creek at Welton, IA . . . . .	488

## 05420460 BEAVER SLOUGH AT THIRD STREET CLINTON, IA

LOCATION.--Lat 41°49'38", long 90°11'25", in SW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec.18, T.81 N., R.7 E., Clinton County, Hydrologic Unit 07080101, at river end of 3rd street, at downstream end of ADM repair dock, 10.3 miles upstream from Wapsipinicon River, 4.8 miles upstream from Camanche gage, 5.9 miles downstream from Lock and Dam 13, and at mile 516.6 upstream from Ohio River.

DRAINAGE AREA.--85,600 mi<sup>2</sup>, approximately, at Fulton-Lyons Bridge at Clinton.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 562.68 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minor flow regulation caused by navigation dams. U.S. Geological Survey 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	4,120	4,050	5,080	5,180	e3,450	e8,720	20,100	16,300	29,500	21,700	8,180	6,790
2	5,060	5,270	4,260	4,740	e3,500	10,300	21,500	16,000	31,200	18,800	7,970	6,740
3	4,620	6,100	3,730	4,390	e3,610	13,300	22,600	15,300	31,200	15,000	8,980	6,820
4	3,380	7,680	3,820	3,500	e4,190	14,400	24,200	14,400	30,200	13,900	9,000	6,700
5	3,430	10,000	4,420	3,560	e4,370	16,900	25,000	12,300	29,000	12,600	10,100	6,220
6	3,960	9,060	4,880	e3,450	e4,460	20,100	25,700	11,500	28,800	11,600	11,800	5,780
7	4,140	7,290	4,810	e3,540	e4,370	20,600	27,100	10,500	29,000	13,500	10,700	6,670
8	4,160	6,050	4,810	e3,610	e4,350	17,900	27,600	10,500	30,000	14,900	9,410	6,770
9	4,320	5,730	5,200	e3,630	e4,350	16,500	26,600	10,200	31,000	15,400	9,220	6,530
10	4,480	5,500	6,490	e3,750	e4,350	14,300	24,200	10,300	32,600	15,000	8,900	6,700
11	4,650	5,520	6,580	e4,070	e4,370	12,800	22,400	11,500	32,900	15,200	8,900	7,560
12	4,600	5,700	5,430	e4,320	e4,440	11,400	19,500	11,500	33,400	15,500	8,540	7,680
13	4,550	4,810	4,230	e3,930	e4,440	9,500	17,200	12,200	34,100	16,400	8,230	7,700
14	4,460	4,830	3,860	e3,700	e4,440	9,910	15,600	13,300	35,000	16,300	8,260	7,680
15	5,660	4,650	3,700	e3,610	e4,420	10,600	14,200	13,200	35,500	15,600	8,230	7,250
16	5,430	4,620	3,910	e3,820	e4,390	11,100	13,500	13,000	36,000	14,900	8,020	7,870
17	5,010	5,200	3,540	e4,090	e4,440	11,500	13,000	13,000	36,700	14,400	7,660	11,400
18	4,280	5,730	3,220	e3,930	e4,440	11,500	12,000	13,800	39,400	14,400	7,970	12,800
19	4,160	6,390	3,820	e3,700	e4,460	11,300	11,000	15,600	40,600	14,400	8,140	14,200
20	4,370	e7,130	4,460	e3,540	e4,460	11,200	10,600	15,600	41,000	14,100	8,540	14,800
21	4,370	e7,360	4,970	e3,840	e4,740	11,400	11,600	15,500	41,000	13,700	8,280	14,600
22	4,190	e6,900	5,010	e3,630	e5,200	11,200	13,200	16,100	40,600	13,900	7,580	15,200
23	4,300	e6,560	4,970	e3,520	e5,890	10,900	13,500	23,000	39,600	13,900	6,790	14,700
24	4,460	e6,320	5,040	e3,520	e6,650	11,600	13,200	31,000	37,900	13,800	6,290	13,600
25	4,720	6,140	5,040	e3,430	e7,610	12,300	13,700	34,300	36,000	12,500	6,820	13,000
26	5,150	5,860	4,970	e3,380	e7,980	13,200	15,300	34,300	33,800	10,400	7,460	13,100
27	6,100	5,930	5,080	e3,590	e7,590	14,700	15,900	31,700	31,000	10,100	7,630	12,900
28	5,310	6,190	5,180	e3,500	e6,950	14,900	15,700	27,400	27,400	9,600	7,800	12,800
29	4,050	6,050	5,500	e3,500	e7,540	15,600	15,400	23,900	24,200	7,920	8,740	13,200
30	3,750	5,590	5,640	e3,450	---	17,800	15,900	23,900	23,500	7,730	8,500	12,900
31	3,820	---	5,640	e3,470	---	18,500	---	26,600	---	8,180	7,130	---
TOTAL	139,060	184,210	147,290	116,890	145,450	415,930	537,000	547,700	1,002,100	425,330	259,770	300,660
MEAN	4,486	6,140	4,751	3,771	5,016	13,420	17,900	17,670	33,400	13,720	8,380	10,020
MAX	6,100	10,000	6,580	5,180	7,980	20,600	27,600	34,300	41,000	21,700	11,800	15,200
MIN	3,380	4,050	3,220	3,380	3,450	8,720	10,600	10,200	23,500	7,730	6,290	5,780
AC-FT	275,800	365,400	292,100	231,900	288,500	825,000	1,065,000	1,086,000	1,988,000	843,600	515,300	596,400
CFSM	0.05	0.07	0.06	0.04	0.06	0.16	0.21	0.21	0.39	0.16	0.10	0.12
IN.	0.06	0.08	0.06	0.05	0.06	0.18	0.23	0.24	0.44	0.18	0.11	0.13

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

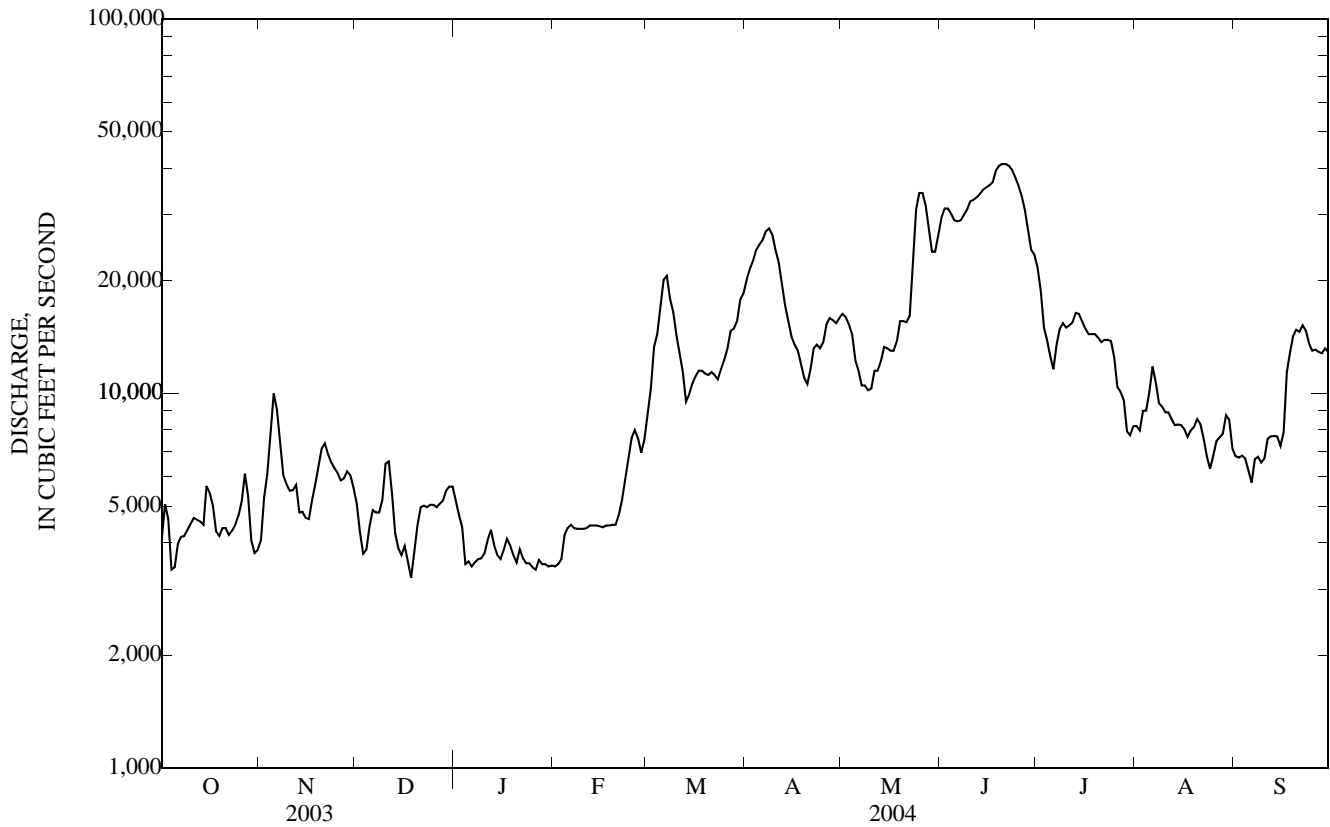
MEAN	10,540	11,470	9,098	8,423	9,469	14,230	26,770	25,530	21,410	18,920	12,710	10,780
MAX	17,900	18,320	11,680	12,780	14,510	19,900	43,980	42,580	35,240	49,690	28,330	21,640
(WY)	(2003)	(1996)	(1997)	(1995)	(1994)	(1995)	(1997)	(2001)	(1993)	(1993)	(1993)	(1993)
MIN	4,486	6,140	4,751	3,771	5,016	9,474	10,350	11,590	13,010	11,950	5,371	4,277
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2001)	(2000)	(2000)	(1997)	(1995)	(2003)	(2003)

05420460 BEAVER SLOUGH AT THIRD STREET CLINTON, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	3,709,420		4,221,390			
ANNUAL MEAN	10,160		11,530		14,960	
HIGHEST ANNUAL MEAN					23,060	1993
LOWEST ANNUAL MEAN					10,720	2000
HIGHEST DAILY MEAN	37,700	May 22	41,000	Jun 20 a	61,600	Apr 23, 2001
LOWEST DAILY MEAN	2,820	Sep 8	3,220	Dec 18	2,820	Sep 8, 2003
ANNUAL SEVEN-DAY MINIMUM	3,250	Sep 5	3,470	Jan 25	3,250	Sep 5, 2003
MAXIMUM PEAK FLOW			42,000	Jun 21		
MAXIMUM PEAK STAGE			21.08	Jun 21		
ANNUAL RUNOFF (AC-FT)	7,358,000		8,373,000		10,840,000	
ANNUAL RUNOFF (CFSM)	0.119		0.135		0.175	
ANNUAL RUNOFF (INCHES)	1.61		1.83		2.37	
10 PERCENT EXCEEDS	22,400		26,600		27,400	
50 PERCENT EXCEEDS	6,380		8,200		12,100	
90 PERCENT EXCEEDS	4,120		3,850		6,390	

a also June 21.

e Estimated



## MISSISSIPPI RIVER MAIN STEM

05420500 MISSISSIPPI RIVER AT CLINTON, IA

(National stream-quality accounting network station)

LOCATION.--Lat 41°46'50", long 90°15'07", in NW<sup>1</sup>/<sub>4</sub> sec.34, T.81 N., R.6 E., Clinton County, Hydrologic Unit 07080101, on right bank at end of Eighth Avenue in Camanche, 5.0 mi upstream from Wapsipinicon River, 6.4 mi downstream from Clinton, 10.6 mi downstream from Lock and Dam 13, and at mile 511.8 upstream from Ohio River.

DRAINAGE AREA.--85,600 mi<sup>2</sup>, approximately, at Fulton-Lyons Bridge at Clinton.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1873 (fragmentary), October 1873 to current year (October 1932 to September 1939, published as "at Le Claire")(June 1873 to December 1932 published in the Iowa State Planning Board report "Stream-flow records of Iowa, 1873-1932").

REVISED RECORDS.--WDR IA-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 562.68 ft above NGVD of 1929. June 6, 1969 to Sept. 16, 1988, water-stage recorder at site 400 ft upstream at same datum. Auxiliary water-stage recorder at Lock and Dam 13 since Oct. 1, 1958. See WSP 1728 for history of changes prior to Oct. 1, 1955.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minor flow regulation caused by navigation dams. 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 OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1828, that of Apr. 28, 1965.

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	17,900	17,600	22,100	22,500	e15,000	e35,000	83,800	68,000	123,000	90,400	34,100	28,300
2	22,000	22,900	18,500	20,600	e15,200	43,100	89,500	66,700	130,000	78,400	33,200	28,100
3	20,100	26,500	16,200	19,100	e15,700	55,300	94,100	63,600	130,000	62,700	37,400	28,400
4	14,700	33,400	16,600	15,200	e18,200	60,000	101,000	60,200	126,000	58,000	37,500	27,900
5	14,900	43,600	19,200	15,500	e19,000	70,600	104,000	51,300	121,000	52,700	41,900	25,900
6	17,200	39,400	21,200	e15,000	e19,400	83,600	107,000	48,000	120,000	48,400	49,000	24,100
7	18,000	31,700	20,900	e15,400	e19,000	85,700	113,000	43,800	121,000	56,100	44,500	27,800
8	18,100	26,300	20,900	e15,700	e18,900	74,600	115,000	43,800	125,000	62,100	39,200	28,200
9	18,800	24,900	22,600	e15,800	e18,900	68,700	111,000	42,600	129,000	64,100	38,400	27,200
10	19,500	23,900	28,200	e16,300	e18,900	59,700	101,000	43,000	136,000	62,700	37,100	27,900
11	20,200	24,000	28,600	e17,700	e19,000	53,300	93,400	48,100	137,000	63,400	37,100	31,500
12	20,000	24,800	23,600	e18,800	e19,300	47,300	81,300	47,900	139,000	64,400	35,600	32,000
13	19,800	20,900	18,400	e17,100	e19,300	39,600	71,600	50,800	142,000	68,500	34,300	32,100
14	19,400	21,000	16,800	e16,100	e19,300	41,300	65,100	55,500	146,000	67,800	34,400	32,000
15	24,600	20,200	16,100	e15,700	e19,200	44,200	59,000	55,000	148,000	65,100	34,300	30,200
16	23,600	20,100	17,000	e16,600	e19,100	46,100	56,100	54,300	150,000	62,000	33,400	32,800
17	21,800	22,600	15,400	e17,800	e19,300	48,100	54,000	54,000	153,000	60,100	31,900	47,500
18	18,600	24,900	14,000	e17,100	e19,300	48,100	49,900	57,500	164,000	60,000	33,200	53,300
19	18,100	27,800	16,600	e16,100	e19,400	47,200	45,700	65,100	169,000	60,100	33,900	59,100
20	19,000	e31,000	19,400	e15,400	e19,400	46,800	44,200	65,100	171,000	58,800	35,600	61,500
21	19,000	e32,000	21,600	e16,700	e20,600	47,400	48,300	64,400	171,000	57,200	34,500	60,900
22	18,200	e30,000	21,800	e15,800	e22,600	46,700	55,200	66,900	169,000	58,100	31,600	63,400
23	18,700	e28,500	21,600	e15,300	e25,600	45,500	56,400	95,900	165,000	57,900	28,300	61,400
24	19,400	e27,500	21,900	e15,300	e28,900	48,200	54,800	129,000	158,000	57,700	26,200	56,500
25	20,500	26,700	21,900	e14,900	e33,100	51,200	56,900	143,000	150,000	51,900	28,400	54,200
26	22,400	25,500	21,600	e14,700	e33,400	55,200	63,700	143,000	141,000	43,300	31,100	54,400
27	26,500	25,800	22,100	e15,600	e29,000	61,100	66,400	132,000	129,000	42,200	31,800	53,900
28	23,100	26,900	22,500	e15,200	e29,000	62,100	65,400	114,000	114,000	40,000	32,500	53,400
29	17,600	26,300	23,900	e15,200	e29,800	64,900	64,200	99,500	101,000	33,000	36,400	54,800
30	16,300	24,300	24,500	e15,000	---	74,200	66,400	99,400	98,000	32,200	35,400	53,600
31	16,600	---	24,500	e15,100	---	77,200	---	111,000	---	34,100	29,700	---
TOTAL	604,600	801,000	640,200	508,300	622,800	1,732,000	2,237,400	2,282,400	4,176,000	1,773,400	1,081,900	1,252,300
MEAN	19,500	26,700	20,650	16,400	21,480	55,870	74,580	73,630	139,200	57,210	34,900	41,740
MAX	26,500	43,600	28,600	22,500	33,400	85,700	115,000	143,000	171,000	90,400	49,000	63,400
MIN	14,700	17,600	14,000	14,700	15,000	35,000	44,200	42,600	98,000	32,200	26,200	24,100
AC-FT	1,199,000	1,589,000	1,270,000	1,008,000	1,235,000	3,435,000	4,438,000	4,527,000	8,283,000	3,518,000	2,146,000	2,484,000
CFSM	0.23	0.31	0.24	0.19	0.25	0.65	0.87	0.86	1.63	0.67	0.41	0.49
IN.	0.26	0.35	0.28	0.22	0.27	0.75	0.97	0.99	1.81	0.77	0.47	0.54

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1874 - 2004, BY WATER YEAR (WY)

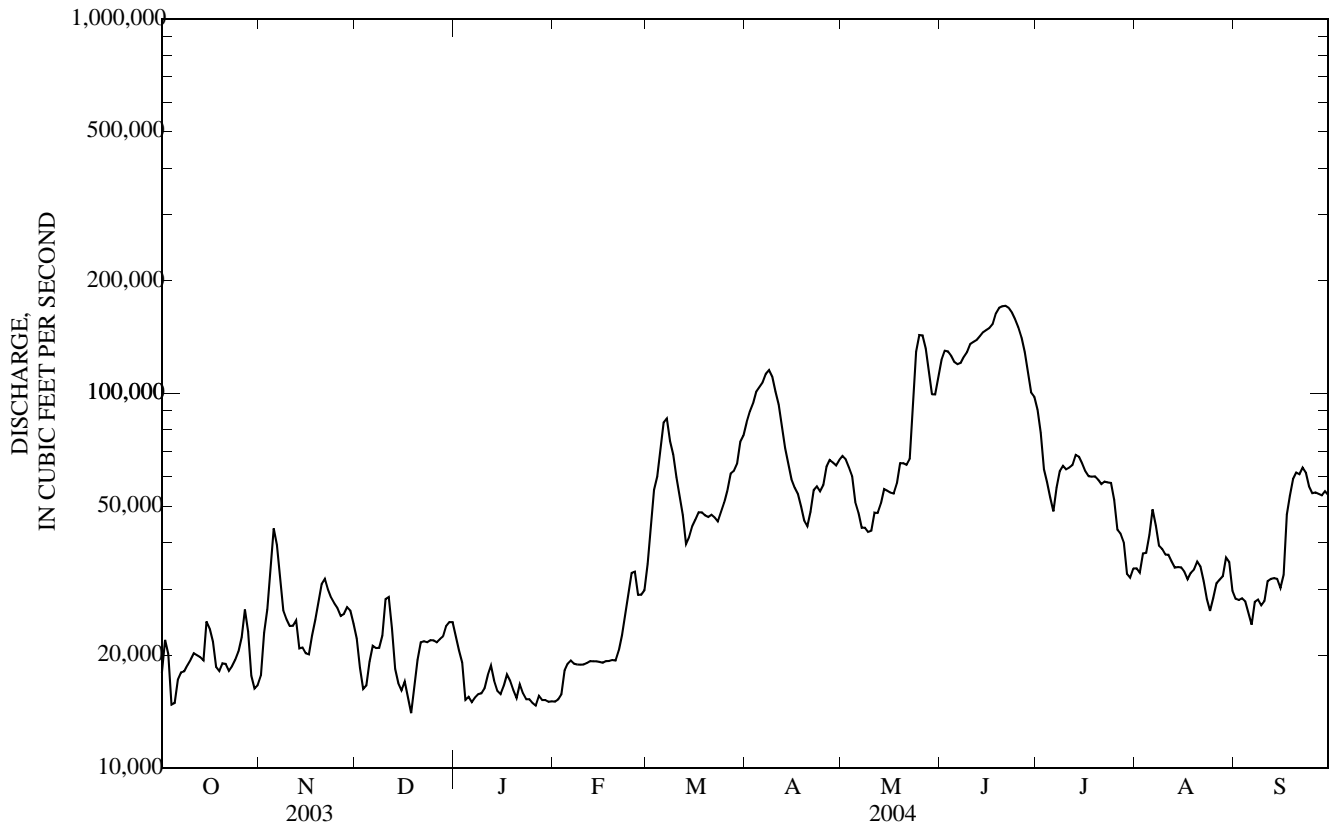
	40,720	39,200	27,970	25,790	28,190	50,510	89,790	82,630	69,850	56,280	37,860	38,040
MEAN	40,720	39,200	27,970	25,790	28,190	50,510	89,790	82,630	69,850	56,280	37,860	38,040
MAX	203,600	146,800	73,590	54,100	65,680	127,500	175,900	212,400	182,100	198,900	113,400	92,380
(WY)	(1882)	(1882)	(1882)	(1873)	(1966)	(1973)	(1997)	(1888)	(1892)	(1993)	(1993)	(1938)
MIN	13,490	13,760	11,120	11,390	14,000	17,600	26,040	23,190	15,420	14,690	12,460	13,870
(WY)	(1934)	(1934)	(1934)	(1890)	(1893)	(1934)	(1931)	(1977)	(1988)	(1988)	(1936)	(1933)

05420500 MISSISSIPPI RIVER AT CLINTON, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1874 - 2004	
ANNUAL TOTAL	15,604,900		17,712,300			
ANNUAL MEAN	42,750		48,390		48,940	
HIGHEST ANNUAL MEAN					94,690	1882
LOWEST ANNUAL MEAN					18,870	1934
HIGHEST DAILY MEAN	157,000	May 22	171,000	Jun 20 a	307,000	Apr 28, 1965
LOWEST DAILY MEAN	13,900	Sep 30	14,000	Dec 18	6,500	Dec 25, 1933
ANNUAL SEVEN-DAY MINIMUM	16,000	Sep 5	15,100	Jan 25	7,430	Dec 24, 1933
MAXIMUM PEAK FLOW			175,000	Jun 21		
MAXIMUM PEAK STAGE			18.17	Jun 21	24.65	Apr 28, 1965
ANNUAL RUNOFF (AC-FT)	30,950,000		35,130,000		35,460,000	
ANNUAL RUNOFF (CFSM)	0.499		0.565		0.572	
ANNUAL RUNOFF (INCHES)	6.78		7.70		7.77	
10 PERCENT EXCEEDS	90,000		111,000		95,200	
50 PERCENT EXCEEDS	27,400		34,200		37,600	
90 PERCENT EXCEEDS	18,500		16,800		19,000	

a also June 21.

e Estimated



## MISSISSIPPI RIVER MAIN STEM

05420500 MISSISSIPPI RIVER AT CLINTON, IA—Continued

(National stream-quality accounting network station)

## WATER QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to September 1987, October 1994 to current year.

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

Date	Time	Instantaneous discharge, cfs (00061)	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)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unflab, uS/cm 25 degC (90095)	Specif. conductance, wat unflab, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)
OCT 20...	1030	19,700	15	744	11.4	112	8.9	8.6	376	390	20.0	14.6	190
NOV 19...	1005	30,300	23	738	16.2	128	8.8	7.8	386	390	--	5.5	180
FEB 26...	1110	33,600	23	756	12.8	88	7.7	7.5	390	389	3.5	.0	170
MAR 23...	1000	44,600	17	748	14.3	113	8.0	8.1	346	388	10.5	4.7	170
APR 22...	0950	56,900	20	751	9.6	93	9.0	8.1	310	306	7.0	13.9	150
MAY 11...	1030	48,100	20	747	8.4	90	8.8	8.2	278	277	--	17.5	130
MAY 26...	1100	143,000	340	746	5.6	60	7.6	7.9	257	263	--	17.4	120
JUN 08...	1030	124,000	50	749	7.0	81	7.6	7.5	300	312	28.0	22.3	140
JUN 22...	1015	167,000	32	743	--	--	7.6	7.8	293	310	--	21.1	140
JUL 07...	1100	53,300	15	745	7.1	86	7.9	8.2	404	433	12.5	23.4	200
JUL 21...	0930	57,000	11	752	6.1	78	8.0	8.0	422	450	--	27.0	210
AUG 17...	0920	31,400	12	748	8.6	99	8.6	8.5	389	426	--	21.4	210
SEP 02...	1020	27,600	15	748	7.7	93	8.7	--	--	412	28.0	23.5	--

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

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end lab, mg/L as CaCO <sub>3</sub> (29801)	Alkalinity, wat flt inc tit field, mg/L as CaCO <sub>3</sub> (39086)	Bicarbonate, wat flt incrm. titr., mg/L (00453)	Carbonate, wat flt incrm. titr., mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)
OCT 20...	41.9	19.8	2.72	.4	12.7	163	158	169	12	18.6	<.2	1.91	20.9
NOV 19...	41.3	18.6	2.31	.4	11.7	162	158	166	13	19.1	<.2	3.17	21.3
FEB 26...	39.9	16.5	4.69	.4	13.0	146	140	171	.0	23.0	<.2	8.23	20.5
MAR 23...	41.8	16.8	4.46	.5	14.3	146	129	157	.0	20.9	<.2	10.2	20.9
APR 22...	36.5	14.3	2.94	.4	10.4	122	115	129	5	14.5	<.2	.48	19.2
MAY 11...	29.3	12.9	2.56	.3	8.69	109	105	117	6	13.0	<.2	.15	17.3
MAY 26...	32.1	10.7	4.11	.2	4.98	96	92	112	.0	9.26	<.2	5.69	10.4
JUN 08...	33.5	12.8	2.64	.3	9.34	113	110	134	.0	14.2	<.2	5.20	15.6
JUN 22...	36.4	12.5	2.94	.3	7.10	106	100	122	.0	11.3	<.2	11.0	21.1
JUL 07...	48.4	19.2	2.72	.3	8.35	149	148	180	.0	16.7	.2	10.1	34.7
JUL 21...	51.0	20.1	2.67	.3	8.83	158	155	189	.0	16.2	.2	9.27	37.1
AUG 17...	46.6	21.8	2.28	.3	9.58	166	159	175	9	16.8	.2	7.60	29.6
SEP 02...	--	--	--	--	--	--	158	172	10	--	--	--	--





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

Date	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	2,6-Diethyl-aniline water fltrd 0.7u GF (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)
OCT 20...	1.4	9.84	.4	<.2	80.4	2.2	38.0	<.006	<.006	<.006	<.004	<.005	95.6
NOV 19...	--	--	E.4	--	77.9	2.0	--	<.006	E.008	E.005	<.005	<.005	82.6
FEB 26...	--	--	.5	--	76.3	2.1	--	<.006	E.024	.013	<.005	<.005	102
MAR 23...	.8	1.73	E.4	<.2	73.0	1.2	2.5	<.006	E.021	.015	<.005	<.005	95.4
APR 22...	--	--	E.3	--	63.6	1.7	--	<.006	E.020	.027	<.005	<.005	106
MAY 11...	--	--	E.3	--	59.8	1.8	--	<.006	E.021	.131	<.005	<.005	89.3
MAY 26...	.7	1.23	E.4	<.2	56.0	2.2	1.3	<.006	E.178	2.80	.048	<.005	98.6
JUN 08...	--	--	E.2	--	63.5	2.1	--	<.006	E.040	.196	.015	<.005	96.3
JUN 22...	--	--	.4	--	69.5	1.8	--	<.006	E.059	.171	.012	<.005	93.3
JUL 07...	--	--	.7	--	106	2.3	--	<.006	E.053	.073	.006	<.005	96.9
JUL 21...	1.5	1.99	.9	<.2	111	2.8	2.1	<.006	E.050	.024	<.005	<.005	96.8
AUG 17...	1.6	1.91	.7	<.2	105	3.3	E.4	<.006	E.042	.011	<.005	<.005	91.3
SEP 02...	--	--	--	--	--	--	--	<.006	E.047	.008	<.005	<.005	99.3

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

Date	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazi-non, water, fltrd, ug/L (39572)	Diazi-non-d10 surrog, wat flt 0.7u GF percent recovry (91063)	Diel-drin, water, fltrd, ug/L (39381)
OCT 20...	E.006	<.050	<.010	<.002	E.006	<.020	<.005	<.006	<.018	<.003	E.003	107	<.005
NOV 19...	.032	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	115	<.009
FEB 26...	.053	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	113	<.009
MAR 23...	.044	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	107	<.009
APR 22...	.061	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	109	<.009
MAY 11...	.187	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	111	<.009
MAY 26...	4.81	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	101	<.009
JUN 08...	.485	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	114	<.009
JUN 22...	1.04	<.050	<.010	<.004	<.041	E.037	<.005	<.006	<.018	<.003	E.004	111	<.009
JUL 07...	.826	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	110	<.009
JUL 21...	.440	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	108	<.009
AUG 17...	.252	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	104	<.009
SEP 02...	.171	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.005	124	<.009

05420500 MISSISSIPPI RIVER AT CLINTON, IA—Continued

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

Date	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	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)	Methylparathion, 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)
OCT 20...	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007
NOV 19...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	E.011	<.006	<.003	<.007
FEB 26...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.025	<.006	<.003	<.007
MAR 23...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.096	<.006	<.003	<.007
APR 22...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.053	<.006	<.003	<.007
MAY 11...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.057	<.006	<.003	<.007
MAY 26...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	1.21	.012	<.003	<.007
JUN 08...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.220	E.005	<.003	<.007
JUN 22...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.305	<.006	<.003	<.007
JUL 07...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.167	<.006	<.003	<.007
JUL 21...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.060	<.006	<.003	<.007
AUG 17...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.027	<.006	<.003	<.007
SEP 02...	<.02	<.004	<.009	<.005	<.003	<.004	<.035	<.027	<.015	.020	<.006	<.003	<.007

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)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate, water, fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebu-thiuron, water, fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)
OCT 20...	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	.152	.03	<.034
NOV 19...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.007	<.02	<.034
FEB 26...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.009	<.02	<.034
MAR 23...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.018	<.02	<.034
APR 22...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.009	<.02	<.034
MAY 11...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.006	<.02	<.034
MAY 26...	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	.048	<.02	<.034
JUN 08...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.016	<.02	<.034
JUN 22...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.021	<.02	<.034
JUL 07...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.013	<.02	<.034
JUL 21...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.013	<.02	<.034
AUG 17...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	.016	<.02	<.034
SEP 02...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.10	<.005	<.02	<.034

## MISSISSIPPI RIVER MAIN STEM

05420500 MISSISSIPPI RIVER AT CLINTON, IA—Continued

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

Date	Terbu- fos, water, fltrd 0.7u GF (82675) ug/L	Thio- bencarb water fltrd 0.7u GF (82681) ug/L	Tri- allate, water, fltrd 0.7u GF (82678) ug/L	Tri- flur- alin, water, fltrd 0.7u GF (82661) ug/L	Uranium natural water, fltrd, ug/L (22703)	Suspnd. sedi- ment, sieve diametr percent <.063mm (70331)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT 20...	<.02	<.005	<.002	<.009	.91	98	18	957
NOV 19...	<.02	<.010	<.002	<.009	--	98	26	2,130
FEB 26...	<.02	<.010	<.002	<.009	--	--	26	2,360
MAR 23...	<.02	<.010	<.002	<.009	.60	86	36	4,340
APR 22...	<.02	<.010	<.002	<.009	--	46	3	461
MAY 11...	<.02	<.010	<.002	<.009	--	--	32	4,160
MAY 26...	<.02	<.010	<.002	<.009	.52	100	529	204,000
JUN 08...	<.02	<.010	<.002	<.009	--	98	122	40,800
JUN 22...	<.02	<.010	<.002	<.009	--	97	75	33,800
JUL 07...	<.02	<.010	<.002	<.009	--	98	28	4,030
JUL 21...	<.02	<.010	<.002	<.009	2.18	99	19	2,920
AUG 17...	<.02	<.010	<.002	<.009	1.84	92	63	5,340
SEP 02...	<.02	<.010	<.002	<.009	--	92	27	2,010

## 05420680 WAPSIPINICON RIVER NEAR TRIPOLI, IA

LOCATION.--Lat 42°50'10", long 92°15'26", in NW<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> sec. 27, T.93 N., R.12 W., Bremer County, Hydrologic Unit 07080102, on left downstream bank 40 ft from bridge on State Highway 93, 1.0 mile upstream of the mouth of the East Fork of the Wapsipinicon River, and 2.0 miles north of Tripoli.

DRAINAGE AREA.--343 mi<sup>2</sup>.

## WATER DISCHARGE RECORDS

PERIOD OF RECORD.--September 1957 to July 1977 (operated as a partial-record low flow measurement site). Discharge records April 1996 to September 1998; October 1, 2000 to current year. Stage-only records May 13 to September 30, 2000.

REVISIONS.--WDR-IA-98-1: 1997(M)

GAGE.--Water stage recorder. Datum of gage is 1,000 ft above NGVD of 1929, from map.

REMARKS.--Records good except for those for estimated daily discharges, which are poor. U.S. Geological Survey rain gage and data collection platform with satellite and telephone modem telemetry at station. Precipitation records are not published, but are available.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1, 1969, discharge about 18,900 ft<sup>3</sup>/s, gage height 17.26 ft; Flood of May 17, 1999, discharge 3,900 ft<sup>3</sup>/s, gage height 14.39 ft; Flood of July 21, 1999, discharge 19,400 ft<sup>3</sup>/s, gage height 18.50 ft.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	20	e29	e12	e214	374	153	2,890	191	139	114
2	14	18	22	e31	e14	e307	306	138	2,320	174	144	102
3	15	23	17	e30	e13	e400	261	125	1,710	174	177	91
4	15	35	20	e26	e12	e490	228	116	1,150	195	162	84
5	15	39	21	e21	e13	e587	196	109	855	271	145	78
6	15	37	21	e16	e16	e641	172	105	710	535	148	85
7	15	32	22	e16	e15	e678	156	101	610	1,070	150	135
8	16	32	23	e15	e13	e665	143	105	517	1,110	131	116
9	15	29	23	e14	e14	e535	131	109	446	840	118	111
10	15	24	26	e14	e14	e317	121	110	432	721	121	93
11	14	25	35	e16	e15	e206	116	112	604	1,020	230	82
12	16	26	e26	e19	e14	e159	109	150	734	1,490	232	68
13	14	26	e21	e19	e14	136	104	182	867	2,090	178	66
14	18	24	e21	e19	e13	162	99	212	927	2,320	149	66
15	16	24	e23	e17	e11	150	95	334	801	1,900	130	73
16	18	23	e28	e20	e12	124	92	427	650	1,330	120	98
17	18	23	e25	e22	e12	113	90	329	633	800	113	176
18	19	27	e22	e20	e14	115	90	274	651	546	103	301
19	18	34	e21	e18	e16	110	97	234	785	415	96	426
20	18	33	e19	e17	e28	106	109	203	896	343	92	557
21	16	30	e25	e18	e41	102	138	264	881	311	88	417
22	16	28	e23	e15	e58	100	168	4,090	705	386	84	240
23	16	27	e22	e15	e92	97	168	7,410	621	353	79	186
24	16	26	e19	e15	e67	104	157	7,830	467	328	80	159
25	16	32	e25	e15	e49	136	155	5,200	391	274	109	137
26	16	28	e29	e15	e37	381	163	3,660	336	230	216	122
27	16	22	e34	e14	e50	809	192	2,820	292	200	186	110
28	17	23	e32	e13	e78	820	217	2,220	259	176	177	100
29	18	29	e30	e12	e124	674	200	2,010	235	164	155	91
30	18	19	e29	e11	---	648	174	1,940	212	150	139	85
31	18	---	e29	e11	---	485	---	2,500	---	141	131	---
TOTAL	502	815	753	553	881	10,571	4,821	43,572	23,587	20,248	4,322	4,569
MEAN	16.2	27.2	24.3	17.8	30.4	341	161	1,406	786	653	139	152
MAX	19	39	35	31	124	820	374	7,830	2,890	2,320	232	557
MIN	14	17	17	11	11	97	90	101	212	141	79	66
AC-FT	996	1,620	1,490	1,100	1,750	20,970	9,560	86,430	46,780	40,160	8,570	9,060
CFSM	0.05	0.08	0.07	0.05	0.09	0.99	0.46	4.06	2.27	1.89	0.40	0.44
IN.	0.05	0.09	0.08	0.06	0.09	1.14	0.52	4.68	2.54	2.18	0.46	0.49

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

MEAN	130	67.8	46.2	43.9	115	443	567	595	564	274	95.7	72.8
MAX	407	114	84.5	77.0	275	1,354	1,648	1,406	1,172	653	229	152
(WY)	(1998)	(2001)	(1997)	(1997)	(1998)	(1997)	(2001)	(2004)	(1998)	(2004)	(2002)	(2004)
MIN	16.2	27.2	24.3	17.8	21.1	51.3	161	174	188	69.2	36.0	18.8
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2004)	(1996)	(1997)	(2001)	(2001)	(2003)

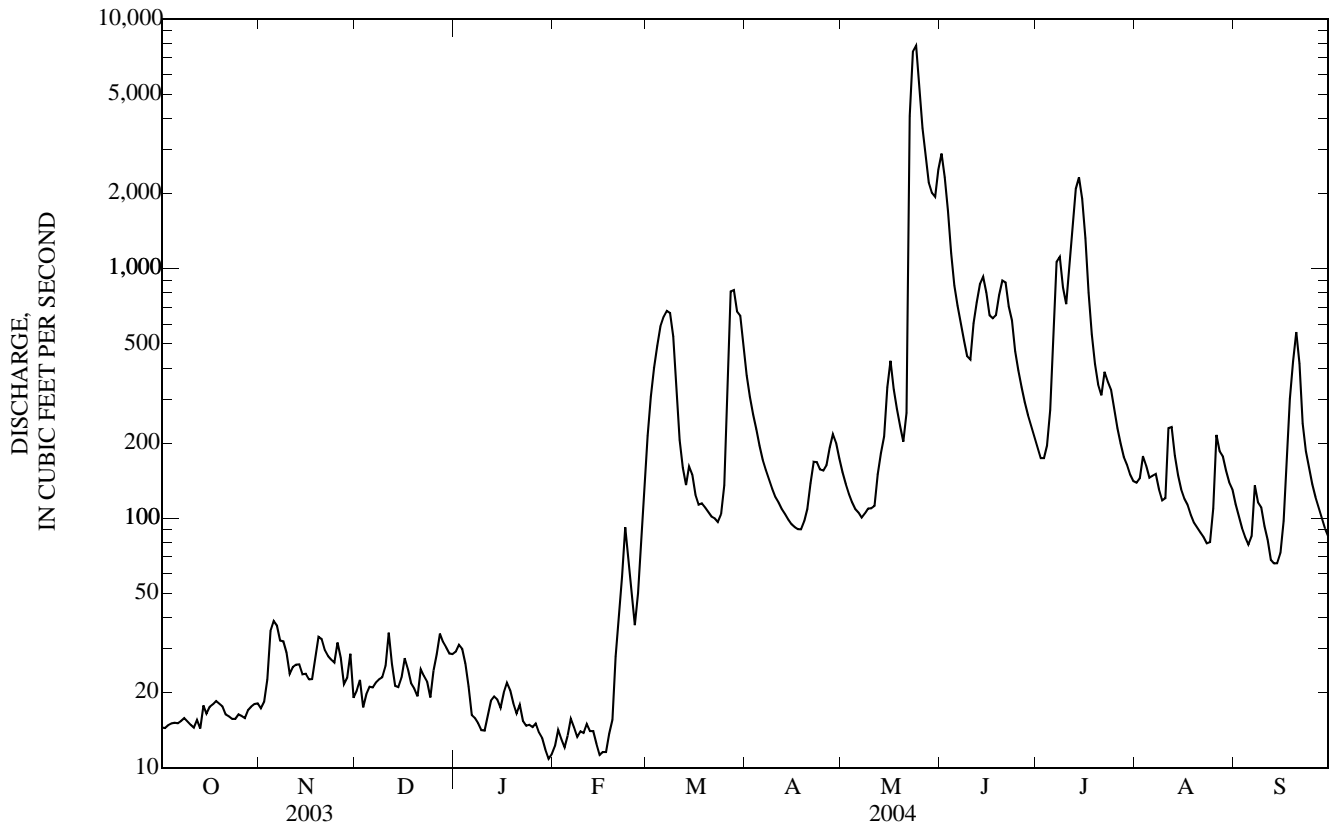
WAPSIPINICON RIVER BASIN

05420680 WAPSIPINICON RIVER NEAR TRIPOLI, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	51,021		115,194		255	
ANNUAL MEAN	140		315		127	
HIGHEST ANNUAL MEAN					367	1998
LOWEST ANNUAL MEAN					127	2002
HIGHEST DAILY MEAN	1,600	May 11	7,830	May 24	7,830	May 24, 2004
LOWEST DAILY MEAN	12	Jan 27	11	Jan 30 <sup>a</sup>	11	Jan 30, 2004
ANNUAL SEVEN-DAY MINIMUM	12	Feb 7	12	Jan 29	12	Feb 7, 2003
MAXIMUM PEAK FLOW			9,680	May 23	9,680	May 23, 2004
MAXIMUM PEAK STAGE			15.97	May 23	15.97	May 23, 2004
ANNUAL RUNOFF (AC-FT)	101,200		228,500		184,900	
ANNUAL RUNOFF (CFSM)	0.404		0.910		0.738	
ANNUAL RUNOFF (INCHES)	5.49		12.39		10.02	
10 PERCENT EXCEEDS	341		706		648	
50 PERCENT EXCEEDS	30		104		80	
90 PERCENT EXCEEDS	15		15		23	

<sup>a</sup> Also Jan. 31 and Feb. 15. Ice affected.

<sup>e</sup> Estimated.







## 05420680 WAPSIPINICON RIVER NEAR TRIPOLI, IA—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-meth-alin, 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)	Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)	Terba-cil, water, fltrd, 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd, 0.7u GF ug/L (82675)
OCT 06...	<.003	<.010	<.004	<.022	<.011	E.01	<.004	<.010	<.011	<.02	<.02	<.034	<.02
NOV 04...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.02	<.034	<.02
JAN 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 09...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.02	<.034	<.02
APR 05...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	M	<.034	<.02
MAY 03...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.02	<.034	<.02
JUN 02...	<.003	<.010	<.004	<.022	<.011	.01	<.004	E.006	<.011	<.02	<.02	<.034	<.02
JUL 06...	<.003	<.010	<.004	<.022	<.011	.07	<.004	<.025	<.011	<.02	<.02	<.034	<.02
AUG 03...	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011	<.02	<.02	<.034	<.02
12...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Date	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)
OCT 06...	<.005	<.002	<.009	44
NOV 04...	--	--	--	50
DEC 02...	<.010	<.002	<.009	8
JAN 06...	--	--	--	6
FEB 09...	<.010	<.002	<.009	8
APR 05...	<.010	<.002	<.009	11
MAY 03...	<.010	<.002	<.009	--
JUN 02...	<.010	<.002	<.009	24
JUL 06...	<.010	<.002	<.009	55
AUG 03...	<.010	<.002	<.009	28
12...	--	--	--	--





05420680 WASPINICON RIVER NEAR TRIPOLI, IA—Continued

