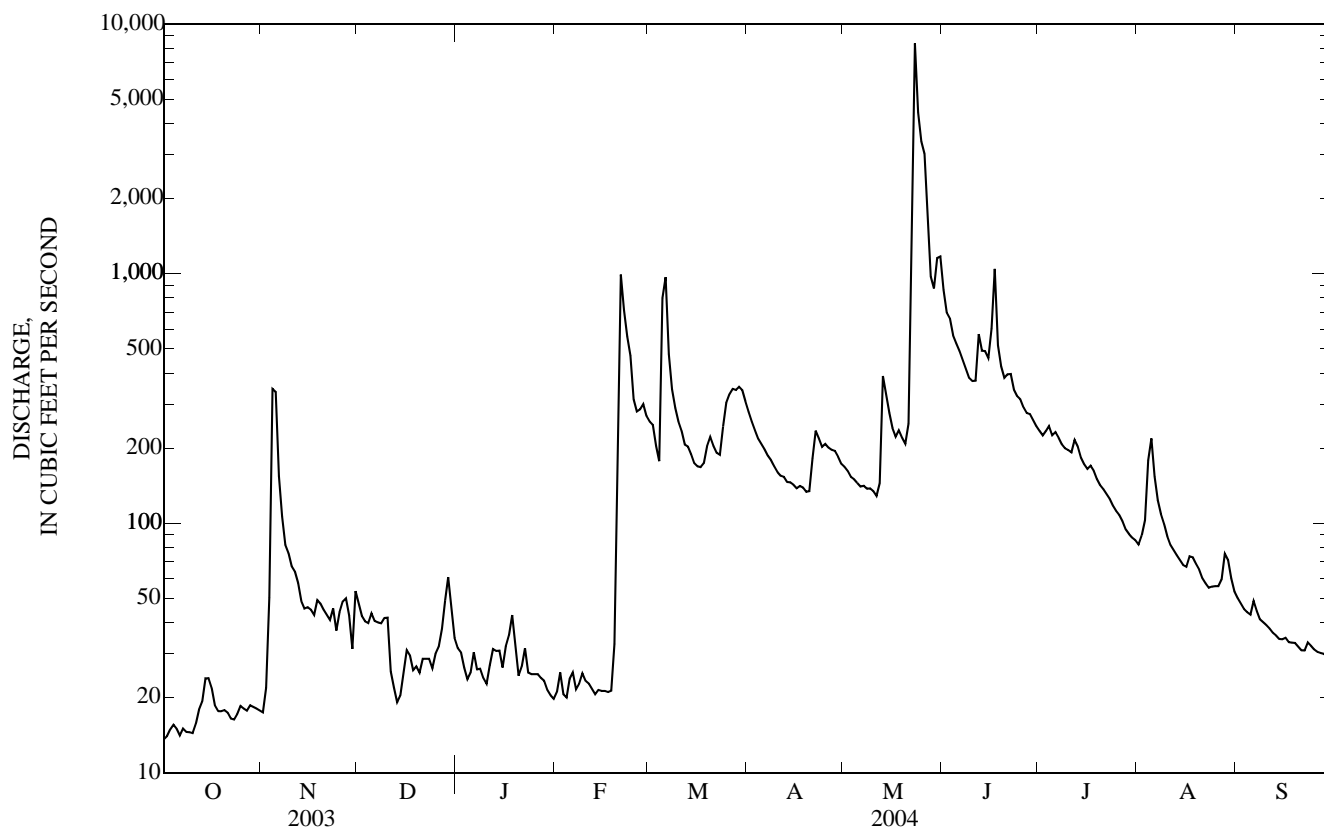


05464220 WOLF CREEK NEAR DYSART, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	38,750		77,065		185	
ANNUAL MEAN	106		211		50.1	
HIGHEST ANNUAL MEAN					394	1998
LOWEST ANNUAL MEAN					50.1	2002
HIGHEST DAILY MEAN	1,200	May 9	8,360	May 23	8,360	May 23, 2004
LOWEST DAILY MEAN	13	Jan 10	14	Oct 1 a	7.1	Jan 15, 2002
ANNUAL SEVEN-DAY MINIMUM	15	Sep 30	15	Oct 1	8.8	Jan 13, 2002
MAXIMUM PEAK FLOW			14,500	May 23	14,500	May 23, 2004
MAXIMUM PEAK STAGE			17.39	May 23	17.39	May 23, 2004
ANNUAL RUNOFF (AC-FT)	76,860		152,900		134,100	
ANNUAL RUNOFF (CFSM)	0.355		0.704		0.619	
ANNUAL RUNOFF (INCHES)	4.82		9.59		8.41	
10 PERCENT EXCEEDS	293		385		376	
50 PERCENT EXCEEDS	35		74		72	
90 PERCENT EXCEEDS	17		21		20	

a also Oct. 2, 6, 10.
e Estimated



05464500 CEDAR RIVER AT CEDAR RAPIDS, IA

LOCATION.--Lat 41°58'19"(revised), long 91°40'01", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.28, T.83 N., R.7 W., Linn County, Hydrologic Unit 07080205, on right bank 400 ft upstream from bridge on Eighth Avenue in Cedar Rapids, 2.7 mi upstream from Prairie Creek, and at mile 112.7 upstream from mouth of Iowa River.

DRAINAGE AREA.--6,510 mi².

PERIOD OF RECORD.--October 1902 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 955: 1924. WSP 1308: 1904, 1906-13, 1915, 1917, 1919-24, 1928, 1930.. WSP 1438: Drainage area. WSP 1558: 1915-18 (M), 1920 (M), 1922 (M), 1929, 1933, 1943.

GAGE.--Water-stage recorder. Datum of gage is 700.47 ft above NGVD of 1929. Prior to Aug. 20, 1920, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow affected by city hydroelectric dam 0.5 mile upstream since June 1979. U.S. Army Corps of Engineers rain gage and data collection platform with satellite telemetry at station. and U.S. Geological Survey data collection platform with telephone modem at station. Precipitation records are available online at the U.S. Army Corps of Engineers website: www2.mvr.usace.army.mil/WaterControl/datamining2.cfm.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1851 reached a stage of about 20 ft, discharge, 65,000 ft³/s, estimated.

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	897	790	1,140	1,170	e670	3,310	6,950	3,970	28,300	5,810	3,370	2,870
2	807	1,130	1,170	1,160	e606	3,870	6,260	3,710	29,300	5,500	3,470	2,700
3	853	1,580	1,140	1,190	e526	4,360	5,570	3,510	32,400	5,360	3,560	2,590
4	849	4,610	1,150	887	e608	4,660	5,030	3,300	29,300	5,410	4,030	2,480
5	813	4,790	1,170	e337	e606	6,930	4,680	3,140	23,800	5,500	5,360	2,340
6	813	3,360	1,180	e527	e563	7,890	4,360	2,930	19,300	5,640	5,420	2,280
7	803	2,510	1,150	e577	e595	8,610	4,110	3,050	16,300	5,920	5,900	2,240
8	810	1,960	1,210	e707	e603	8,790	3,860	2,930	14,100	7,880	5,710	2,300
9	821	1,720	1,320	e787	e622	8,980	3,680	2,820	12,600	11,400	5,240	2,280
10	825	1,580	1,430	e795	e659	8,760	3,470	2,900	11,500	15,700	4,790	2,150
11	806	1,500	1,020	e800	e687	7,460	3,330	3,050	11,200	20,500	4,420	2,090
12	845	1,490	e683	e816	e669	6,220	3,170	2,990	12,100	18,900	4,400	1,990
13	807	1,330	e492	e800	e629	5,410	3,060	3,080	13,500	15,100	4,410	1,910
14	922	1,360	e692	e724	e588	4,900	2,870	3,650	14,300	13,200	4,180	1,820
15	866	1,320	e858	e810	e602	4,560	2,930	4,030	14,600	13,200	3,830	1,790
16	1,020	1,240	e867	e860	e588	4,350	2,830	4,250	14,300	13,100	3,600	1,790
17	866	1,240	e812	e909	e575	4,130	2,830	5,230	13,400	11,400	3,400	1,910
18	824	1,250	e783	e1,130	e481	4,060	2,760	6,010	13,800	9,140	3,260	5,160
19	822	1,290	e519	e876	e575	4,010	2,730	5,350	12,700	7,750	3,310	9,560
20	834	1,280	e712	e553	e750	3,900	2,750	4,870	12,000	6,860	3,890	13,300
21	803	1,280	e820	e725	e1,570	3,760	2,770	4,890	12,200	6,010	4,130	19,000
22	830	1,300	e1,150	e648	e3,060	3,530	3,030	11,500	11,400	5,580	3,700	24,400
23	836	1,550	e1,220	e600	e3,840	3,400	3,010	16,700	10,000	5,270	3,580	19,000
24	801	1,550	e1,000	e635	e3,710	3,690	3,160	28,400	9,230	5,070	3,520	13,600
25	881	1,430	e831	e640	e3,050	4,520	3,210	43,500	8,490	5,150	3,350	11,200
26	820	1,360	e903	e628	2,760	4,830	3,270	55,500	7,880	4,850	3,320	9,540
27	815	1,300	e950	e628	2,640	5,890	3,220	61,800	7,290	4,460	3,600	8,270
28	811	1,220	1,550	e596	2,690	6,500	3,390	55,900	6,900	4,150	3,980	7,340
29	797	1,140	1,350	e588	3,450	7,090	3,950	44,100	6,530	3,890	3,670	6,550
30	788	1,210	1,270	e551	---	7,070	4,110	34,200	6,140	3,760	3,350	5,920
31	810	---	1,260	e583	---	7,470	---	31,600	---	3,560	3,100	---
TOTAL	25,895	50,670	31,802	23,237	38,972	172,910	110,350	462,860	434,860	255,020	124,850	190,370
MEAN	835	1,689	1,026	750	1,344	5,578	3,678	14,930	14,500	8,226	4,027	6,346
MAX	1,020	4,790	1,550	1,190	3,840	8,980	6,950	61,800	32,400	20,500	5,900	24,400
MIN	788	790	492	337	481	3,310	2,730	2,820	6,140	3,560	3,100	1,790
MED	821	1,350	1,140	724	629	4,830	3,250	4,250	12,600	5,810	3,700	2,650
AC-FT	51,360	100,500	63,080	46,090	77,300	343,000	218,900	918,100	862,500	505,800	247,600	377,600
CFSM	0.13	0.26	0.16	0.12	0.21	0.86	0.57	2.29	2.23	1.26	0.62	0.97
IN.	0.15	0.29	0.18	0.13	0.22	0.99	0.63	2.64	2.48	1.46	0.71	1.09

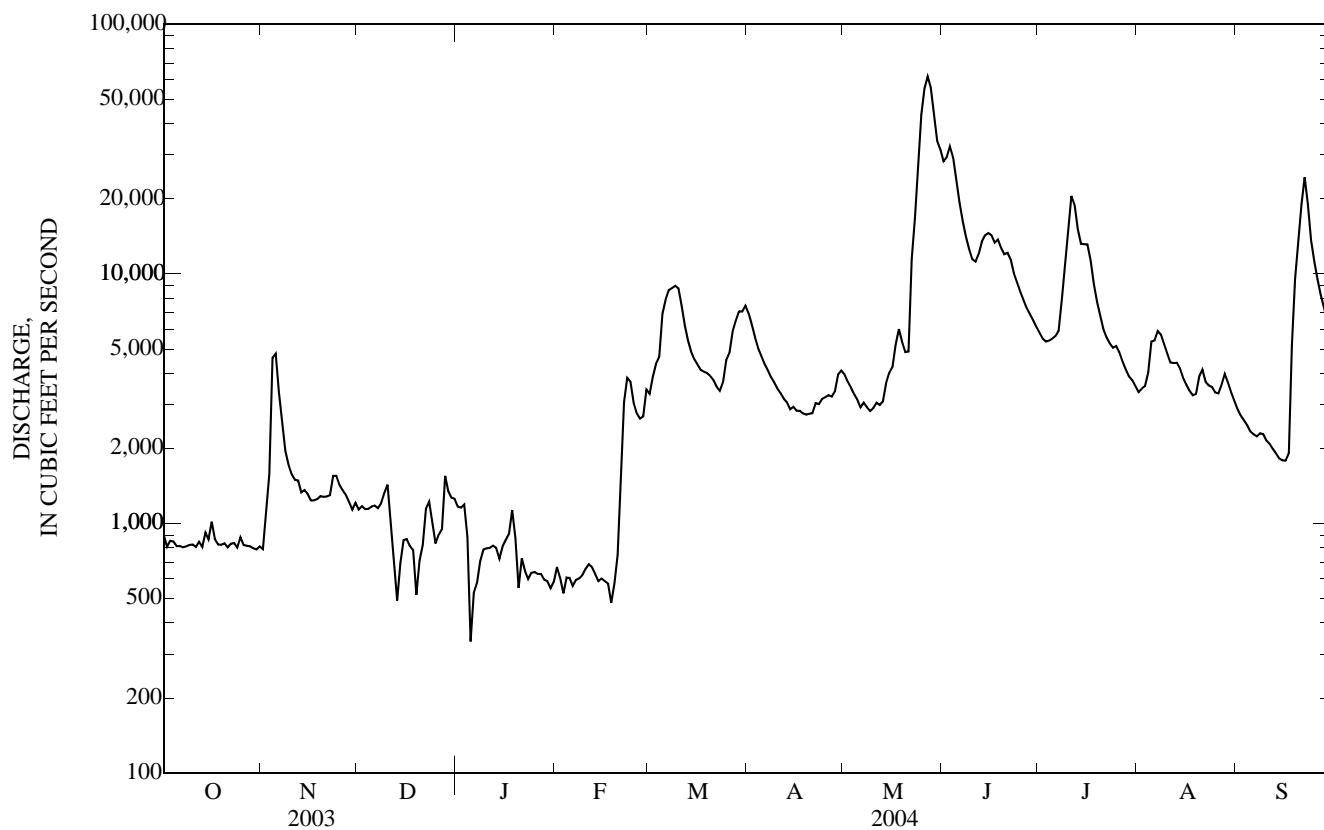
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2004, BY WATER YEAR (WY)

MEAN	2,341	2,411	1,849	1,566	2,458	6,587	6,842	5,483	5,992	4,353	3,014	2,425
MAX	10,570	9,327	8,675	8,529	12,230	17,420	35,320	24,500	23,420	33,910	28,700	13,990
(WY)	(1987)	(1973)	(1983)	(1973)	(1984)	(1929)	(1993)	(1991)	(1947)	(1993)	(1993)	(1993)
MIN	463	410	290	299	304	664	1,045	527	350	533	377	466
(WY)	(1990)	(1990)	(1990)	(1911)	(1940)	(1934)	(1957)	(1934)	(1934)	(1989)	(1934)	(1934)

05464500 CEDAR RIVER AT CEDAR RAPIDS, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1903 - 2004	
ANNUAL TOTAL	1,060,736		1,921,796			
ANNUAL MEAN	2,906		5,251		3,780	
HIGHEST ANNUAL MEAN					15,130	1993
LOWEST ANNUAL MEAN					689	1934
HIGHEST DAILY MEAN	19,500	May 16	61,800	May 27	71,500	Mar 31, 1961
LOWEST DAILY MEAN	326	Jan 12	337	Jan 5 a	140	Nov 18, 1989 b
ANNUAL SEVEN-DAY MINIMUM	645	Feb 14	577	Feb 13	224	Dec 20, 1989
MAXIMUM PEAK FLOW			62,500	May 27	73,000	Mar 31, 1961
MAXIMUM PEAK STAGE			18.30	May 27	20.00	Mar 18, 1929
ANNUAL RUNOFF (AC-FT)	2,104,000		3,812,000		2,738,000	
ANNUAL RUNOFF (CFSM)	0.446		0.807		0.581	
ANNUAL RUNOFF (INCHES)	6.06		10.98		7.89	
10 PERCENT EXCEEDS	6,910		12,600		8,420	
50 PERCENT EXCEEDS	1,330		3,120		2,160	
90 PERCENT EXCEEDS	752		690		687	

a Ice affected
 b Result of accidental gage operation at hydroelectric dam upstream.
 e Estimated



05464942 HOOVER CREEK AT HOOVER NATIONAL HISTORIC SITE AT WEST BRANCH, IA

LOCATION.--Lat 41°40'10", long 91°21'02", in NW¹/₄ NE¹/₄ sec.7, T.79 N., R.4 W., Cedar County, Hydrologic Unit 07080206, on right bank, at footbridge about 0.25 mi upstream of Hoover Presidential Library, at Hoover National Historic Site, at West Branch.

DRAINAGE AREA.--2.58 mi².

PERIOD OF RECORD.--April 27, 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 704.890 ft above NGVD of 1929.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 7, 1967 reached a stage of 6.52 ft, discharge 1,500 ft³/s from indirect discharge measurement, based on floodmarks at Downey Street bridge 1,100 ft downstream; flood of August 16, 1993 reached a stage of 10.41 ft, discharge 1,650 ft³/s from indirect discharge measurement, based on floodmarks at Hoover National Historic Site.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.07	0.66	1.3	e0.95	1.6	3.2	1.3	3.9	1.9	0.97	0.83
2	0.01	1.1	0.66	1.2	e0.93	1.5	2.9	1.3	3.5	1.9	1.0	0.76
3	0.01	0.97	0.67	1.1	e0.66	1.4	2.8	1.3	3.2	2.4	1.5	0.71
4	0.01	0.43	0.68	1.1	e0.55	8.2	2.6	1.2	3.0	2.1	2.1	0.67
5	0.01	0.28	0.77	e0.94	e0.61	11	2.5	1.2	2.8	4.5	1.2	0.64
6	0.01	0.22	0.69	e1.2	e0.61	5.4	2.3	1.2	2.6	4.0	1.0	0.65
7	0.02	0.17	0.70	e0.97	e0.58	4.6	2.1	1.3	2.4	2.2	0.98	0.60
8	0.02	0.15	0.73	e0.82	e0.59	4.1	2.0	1.2	2.2	1.8	0.93	0.56
9	0.02	0.13	1.2	e0.66	e0.60	3.6	1.9	1.1	2.1	3.3	0.89	0.54
10	0.02	0.15	6.6	e0.64	e0.59	3.3	1.8	1.1	2.5	2.5	0.88	0.51
11	0.07	0.16	3.6	0.81	e0.60	3.0	1.7	1.0	2.3	2.3	0.88	0.52
12	0.04	0.11	2.7	0.78	e0.57	2.9	1.7	0.98	2.1	2.1	0.84	0.51
13	0.05	0.10	2.2	0.74	e0.56	2.9	1.6	1.1	2.1	1.9	0.79	0.51
14	0.30	0.10	1.8	0.79	e0.54	3.1	1.6	0.98	4.0	1.7	0.76	0.59
15	0.07	0.10	1.7	0.76	e0.52	3.0	1.5	0.93	3.1	1.6	0.74	0.89
16	0.17	0.10	1.6	0.83	e0.49	3.1	1.5	0.89	3.0	1.5	0.82	0.53
17	0.07	0.12	1.4	1.3	e0.46	3.4	1.4	1.2	2.7	1.4	0.78	0.49
18	0.05	0.14	1.3	1.2	e0.48	3.9	1.4	2.1	2.5	1.4	0.81	0.51
19	0.05	0.11	1.2	e0.96	e0.61	3.7	1.3	1.5	2.3	1.3	0.74	0.49
20	0.06	0.10	1.2	e0.85	e8.0	3.5	1.9	1.4	2.2	1.2	0.69	0.48
21	0.06	0.10	1.2	e0.93	e5.3	3.2	1.8	1.3	5.6	1.2	0.66	0.49
22	0.06	0.10	1.2	e0.85	e3.8	3.1	1.6	3.8	3.6	1.4	0.64	0.52
23	0.06	6.5	1.1	e0.79	e3.2	3.0	1.5	6.0	3.1	1.2	0.62	0.58
24	0.09	1.6	1.1	e0.77	2.5	3.5	1.6	4.2	2.8	1.2	0.78	0.59
25	0.09	1.3	1.1	e0.76	2.0	3.5	1.6	5.0	2.6	1.1	0.94	0.61
26	0.08	1.1	0.99	e0.74	1.7	12	1.4	4.1	2.4	1.1	0.73	0.63
27	0.08	0.92	1.2	e0.69	1.6	5.8	1.4	3.6	2.3	1.0	2.3	0.65
28	0.08	0.80	1.7	e0.51	1.5	4.8	1.4	3.3	2.2	0.96	2.1	0.65
29	0.07	0.76	1.4	e0.44	1.5	4.2	1.3	3.1	2.1	0.98	1.5	0.65
30	0.07	0.73	1.4	e0.48	---	3.8	1.3	6.0	2.0	1.5	1.1	0.66
31	0.06	---	1.3	e0.86	---	3.5	---	4.7	---	1.0	0.92	---
TOTAL	1.87	18.72	45.75	26.77	42.60	127.6	54.6	69.38	83.2	55.64	31.59	18.02
MEAN	0.06	0.62	1.48	0.86	1.47	4.12	1.82	2.24	2.77	1.79	1.02	0.60
MAX	0.30	6.5	6.6	1.3	8.0	12	3.2	6.0	5.6	4.5	2.3	0.89
MIN	0.01	0.07	0.66	0.44	0.46	1.4	1.3	0.89	2.0	0.96	0.62	0.48
AC-FT	3.7	37	91	53	84	253	108	138	165	110	63	36
CFSM	0.02	0.24	0.57	0.33	0.57	1.60	0.71	0.87	1.07	0.70	0.39	0.23
IN.	0.03	0.27	0.66	0.39	0.61	1.84	0.79	1.00	1.20	0.80	0.46	0.26

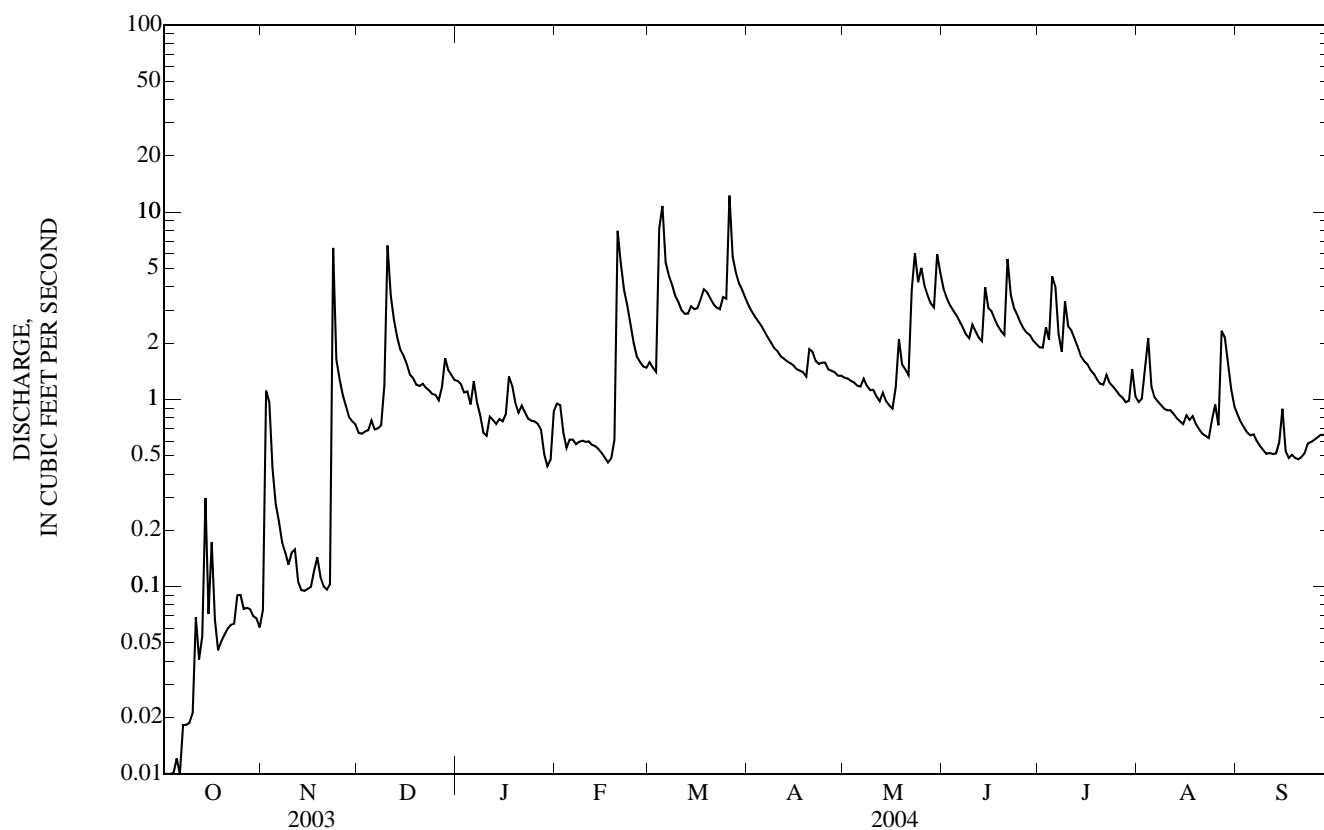
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	1.02	0.64	0.73	0.56	2.47	3.13	2.38	4.36	3.28	1.62	0.91	0.31
MAX	2.75	0.85	1.48	0.86	7.46	5.28	3.92	7.60	5.51	2.26	2.89	0.60
(WY)	(2003)	(2003)	(2004)	(2004)	(2001)	(2001)	(2001)	(2001)	(2001)	(2002)	(2002)	(2004)
MIN	0.06	0.38	0.22	0.40	0.26	1.10	0.44	2.24	1.44	0.96	0.15	0.08
(WY)	(2004)	(2001)	(2001)	(2003)	(2003)	(2003)	(2003)	(2004)	(2003)	(2003)	(2003)	(2003)

05464942 HOOVER CREEK AT HOOVER NATIONAL HISTORIC SITE AT WEST BRANCH, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	296.44		575.74		1.77	
ANNUAL MEAN	0.81		1.57		0.98	
HIGHEST ANNUAL MEAN					2.68	2001
LOWEST ANNUAL MEAN					0.98	2003
HIGHEST DAILY MEAN	12	Mar 12	12	Mar 26	78	May 31, 2000
LOWEST DAILY MEAN	0.00	Aug 30	0.01	Oct 1 a	0.00	Sep 5, 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 4	0.01	Oct 1	0.00	Sep 4, 2003
MAXIMUM PEAK FLOW			44	Mar 4	207	May 31, 2000
MAXIMUM PEAK STAGE			4.16	Mar 4	7.45	Aug 23, 2002
INSTANTANEOUS LOW FLOW			0.01	Oct 1 b	0.00	Sep 4, 2001 c
ANNUAL RUNOFF (AC-FT)	588		1,140		1,280	
ANNUAL RUNOFF (CFSM)	0.315		0.610		0.687	
ANNUAL RUNOFF (INCHES)	4.27		8.30		9.34	
10 PERCENT EXCEEDS	1.7		3.5		4.0	
50 PERCENT EXCEEDS	0.45		1.1		0.80	
90 PERCENT EXCEEDS	0.02		0.10		0.12	

- a Also Oct. 2-6.
- b Also Oct. 2-9.
- c Also Sept. 5, 6, 2001; Aug. 28-31, Sept. 4-13, 26, and Sept. 30, 2003.
- e Estimated.



05465000 CEDAR RIVER NEAR CONESVILLE, IA

LOCATION.--(revised)Lat 41°24'33", long 91°17'25", in SW¹/₄ SW¹/₄ sec.2, T.76 N., R.4 W., Muscatine County, Hydrologic Unit 07080206, on right bank 10 ft downstream from bridge on county highway G28, 3.4 mi northeast of Conesville, 5.2 mi downstream from Wapsinonoc Creek, 10.7 mi upstream from mouth, and at mile 39.8 upstream from mouth of Iowa River.

DRAINAGE AREA.--7,785 mi².

PERIOD OF RECORD.--September 1939 to current year.

REVISED RECORDS.--WSP 1438: Drainage area. WSP 1708: 1956.

GAGE.--Water-stage recorder. Datum of gage is 581.95 ft above NGVD of 1929. Prior to Feb. 2, 1940, and Apr. 11, 1952, to July 1, 1954, nonrecording gage, Feb. 2, 1940, to Apr. 10, 1952, and July 2, 1954, to Sept. 16, 1963, water-stage recorder, at site 150 ft downstream on left bank at same datum.

REMARKS.--Records 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1929 reached a stage of 15.8 ft, from information by local residents to U.S. Army Corps of Engineers.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,250	1,120	1,740	1,940	e981	3,930	8,950	4,550	46,200	7,210	4,490	4,130
2	1,230	1,200	1,760	1,850	e1,050	4,380	8,470	4,500	41,500	6,810	4,220	3,790
3	1,220	1,420	1,670	1,760	e964	4,350	7,690	4,230	37,300	6,550	4,150	3,520
4	1,190	1,910	1,660	1,750	e904	4,850	7,020	3,970	36,300	6,580	4,590	3,310
5	1,180	3,860	1,690	e1,250	e992	7,780	6,280	3,860	37,500	6,570	4,840	3,150
6	1,160	6,290	1,690	e899	e990	12,000	5,880	3,780	34,900	7,000	5,610	3,000
7	1,160	4,720	1,670	e953	e955	11,200	e5,350	3,730	29,100	6,840	5,970	2,850
8	1,160	3,610	1,660	e1,080	e985	10,400	e4,910	3,810	23,100	6,800	6,310	2,710
9	1,150	3,020	1,700	e1,140	e1,000	10,100	4,690	3,690	18,300	8,080	6,400	2,680
10	1,160	2,660	2,010	e1,160	e994	10,100	4,490	3,440	15,700	11,400	6,080	2,710
11	1,150	2,420	2,660	e1,160	e1,020	9,970	4,360	3,510	15,000	14,900	5,590	2,640
12	1,160	2,300	e2,370	e1,190	e1,000	8,880	4,080	3,960	14,600	19,100	5,240	2,500
13	1,170	2,210	e1,760	e1,140	e996	7,460	3,850	3,960	14,300	21,300	5,090	2,400
14	1,230	2,100	e1,380	e1,060	e1,020	6,630	3,730	3,850	15,800	18,100	5,190	2,290
15	1,260	2,000	e1,570	e1,210	e986	6,040	3,680	4,000	18,700	14,400	5,100	2,230
16	1,320	1,950	e1,670	e1,300	e966	5,620	3,520	4,490	17,800	13,500	4,750	2,300
17	1,240	1,890	e1,670	e1,350	e942	5,350	3,590	4,580	17,400	13,500	4,560	2,210
18	1,320	1,840	e1,570	e1,640	e996	5,260	3,510	5,700	16,300	11,900	4,430	2,100
19	1,210	1,830	e1,540	e1,320	e1,010	5,340	3,510	8,400	15,600	10,100	4,210	2,990
20	1,180	1,820	e1,350	e1,060	e1,230	5,330	3,430	7,510	14,700	8,810	4,050	7,310
21	1,160	1,820	e1,520	e1,300	e2,250	5,190	3,920	6,780	13,600	7,950	4,340	10,800
22	1,150	1,770	e1,600	e1,130	e3,940	4,870	3,880	6,810	16,300	7,400	4,840	14,900
23	1,130	1,890	e1,620	e1,040	e5,450	4,620	3,800	17,000	14,400	6,920	4,620	19,300
24	1,140	2,380	e1,460	e1,080	e6,310	4,510	3,790	23,300	12,000	6,480	4,410	21,200
25	1,160	2,620	e1,320	e1,070	e6,710	4,810	3,830	25,700	11,000	6,140	4,450	15,600
26	1,170	2,360	e1,360	e1,060	5,710	7,120	3,850	32,100	10,100	6,060	4,290	11,400
27	1,180	2,150	e1,430	e1,060	4,260	8,740	3,870	46,900	9,420	5,850	4,270	9,800
28	1,150	2,040	1,530	e1,020	3,850	8,170	3,780	61,100	8,710	5,470	5,690	8,690
29	1,150	1,920	2,000	e964	3,680	8,560	3,860	69,200	8,180	5,130	6,820	7,860
30	1,130	1,790	2,370	e920	---	9,040	4,190	65,400	7,670	4,990	5,980	7,160
31	1,120	---	2,040	e920	---	8,790	---	55,100	---	4,800	4,820	---
TOTAL	36,740	70,910	53,040	37,776	62,141	219,390	139,760	498,910	591,480	286,640	155,400	187,530
MEAN	1,185	2,364	1,711	1,219	2,143	7,077	4,659	16,090	19,720	9,246	5,013	6,251
MAX	1,320	6,290	2,660	1,940	6,710	12,000	8,950	69,200	46,200	21,300	6,820	21,200
MIN	1,120	1,120	1,320	899	904	3,930	3,430	3,440	7,670	4,800	4,050	2,100
AC-FT	72.870	140.600	105.200	74.930	123.300	435.200	277.200	989.600	1,173.000	568.600	308.200	372.000
CFSM	0.15	0.30	0.22	0.16	0.28	0.91	0.60	2.07	2.53	1.19	0.64	0.80
IN.	0.18	0.34	0.25	0.18	0.30	1.05	0.67	2.38	2.83	1.37	0.74	0.90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

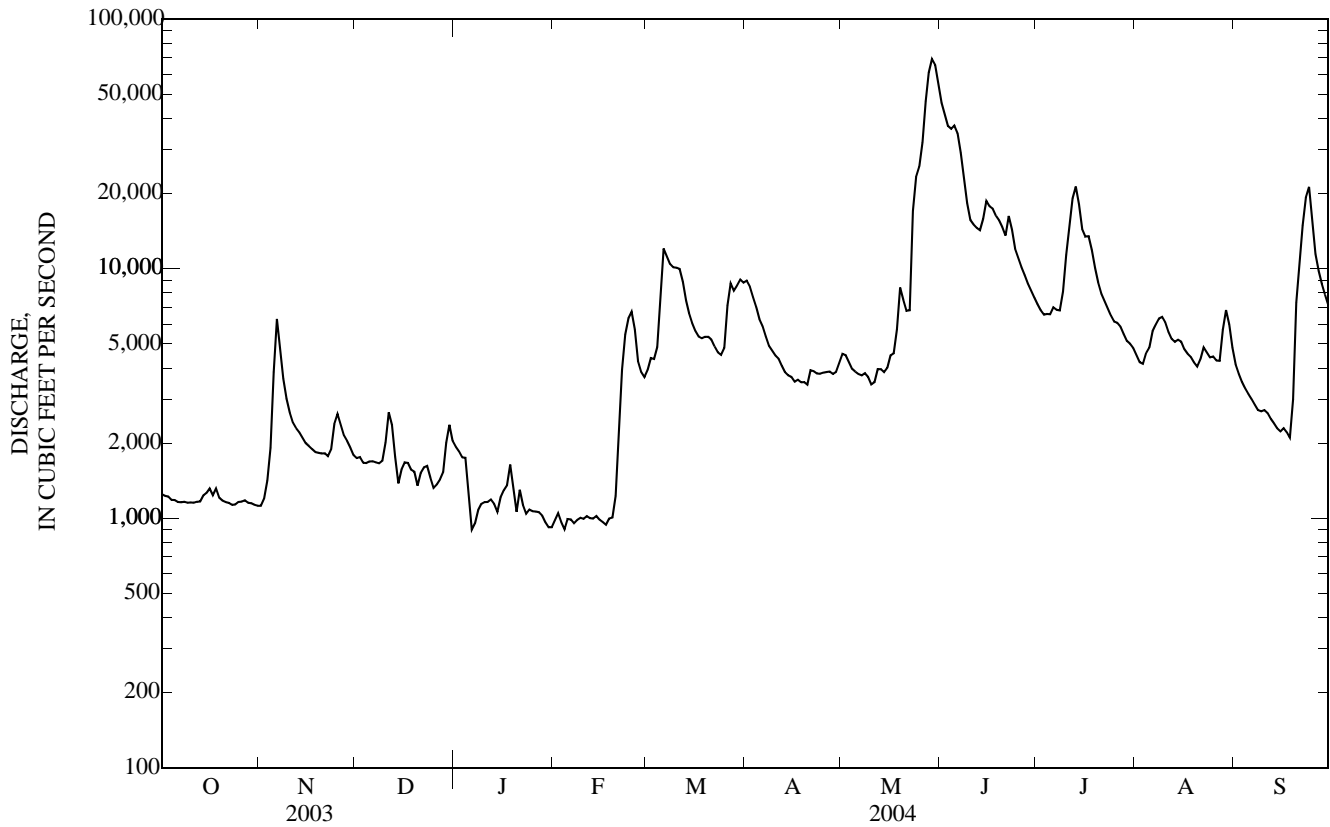
MEAN	3,084	3,273	2,562	2,340	3,191	7,880	9,428	7,854	8,458	6,560	4,206	3,291
MAX	12,380	10,240	11,110	11,860	12,000	17,590	36,790	24,440	27,780	42,110	34,190	19,530
(WY)	(1987)	(1973)	(1983)	(1973)	(1984)	(1948)	(1993)	(1991)	(1993)	(1993)	(1993)	(1993)
MIN	599	590	429	365	359	1,056	1,244	1,219	768	815	700	620
(WY)	(1957)	(1956)	(1990)	(1977)	(1940)	(1954)	(1957)	(1940)	(1977)	(1989)	(1989)	(1955)

05465000 CEDAR RIVER NEAR CONESVILLE, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1940 - 2004	
ANNUAL TOTAL	1,302,218		2,339,717			
ANNUAL MEAN	3,568		6,393		5,182	
HIGHEST ANNUAL MEAN					18,710	1993
LOWEST ANNUAL MEAN					1,176	1956
HIGHEST DAILY MEAN	21,700	May 18	69,200	May 29	69,800	Apr 6, 1993
LOWEST DAILY MEAN	848	Jan 13	899	Jan 6 a	250	Nov 28, 1955
ANNUAL SEVEN-DAY MINIMUM	1,100	Feb 16	958	Jan 29	329	Jan 30, 1940
MAXIMUM PEAK FLOW			70,200	May 29	74,000	Apr 6, 1993
MAXIMUM PEAK STAGE			17.00	May 29	17.11	Apr 6, 1993
ANNUAL RUNOFF (AC-FT)	2,583,000		4,641,000		3,754,000	
ANNUAL RUNOFF (CFSM)	0.458		0.821		0.665	
ANNUAL RUNOFF (INCHES)	6.22		11.18		9.04	
10 PERCENT EXCEEDS	7,740		14,600		11,900	
50 PERCENT EXCEEDS	2,000		3,860		3,130	
90 PERCENT EXCEEDS	1,170		1,130		954	

a Ice affected

e Estimated



05465500 IOWA RIVER AT WAPELLO, IA

LOCATION.--Lat 41°10'41", long 91°10'55", in NW¼ SE¼ sec.27, T.74 N., R.3 W., Louisa County, Hydrologic Unit 07080209, on right bank, 1200 ft. downstream from bridge on State Highway 99 at east edge of Wapello, 13.2 mi downstream from Cedar River, and at mile 15.8.

DRAINAGE AREA.--12,499 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1308: 1917, 1923-30, 1932. WSP 1438: Drainage area. WSP 1558: 1918, 1923-25 (M), 1929. WSP 1708: 1955(P), 1956. WDR IA-95-1:location.

GAGE.--Water-stage recorder. Datum of gage is 538.17 ft above NGVD of 1929; Oct. 1, 1914 to Apr. 15, 1934, nonrecording gage and Apr. 16, 1934 to Sept. 30, 1972, water-stage recorder at datum 10.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Coralville Lake (station 05453510) 67.3 mi upstream, since Sept. 17, 1958. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum instantaneous discharge, 111,000 ft³/s, July 8, 1993, gage height, 29.53 ft; minimum daily discharge, 300 ft³/s, Nov. 28, 1955.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,390	1,310	2,460	e2,990	e1,840	7,620	15,700	6,840	57,000	15,200	6,720	11,800
2	1,370	1,350	2,420	e2,730	e1,910	8,620	15,900	7,220	49,900	14,700	6,520	10,200
3	1,350	1,560	2,390	e2,660	e1,990	9,170	15,100	7,150	45,400	14,400	6,260	7,850
4	1,350	1,950	2,310	e2,590	e1,870	9,340	13,900	6,850	41,800	14,700	6,380	6,820
5	1,340	2,460	2,230	e2,560	e1,770	12,900	12,500	6,300	40,700	15,100	7,020	5,900
6	1,330	5,260	2,200	e1,910	e1,840	21,600	11,200	5,800	41,200	14,900	8,030	5,570
7	1,310	7,950	2,430	e1,560	e1,910	25,900	10,300	5,520	39,300	15,200	8,800	5,170
8	1,290	7,810	2,730	e1,520	e1,960	23,500	9,510	5,480	35,100	14,700	8,950	4,810
9	1,270	6,950	2,830	e1,690	e1,990	21,700	8,930	5,680	29,800	14,600	9,180	4,520
10	1,270	5,270	3,600	e1,900	e1,950	20,600	8,500	5,660	26,200	18,300	9,030	4,360
11	1,270	4,170	4,450	e1,990	e1,880	19,800	8,130	5,530	24,900	21,300	8,410	4,380
12	1,280	3,450	4,950	e2,060	e1,870	18,700	7,720	5,630	25,100	23,400	7,630	4,320
13	1,280	3,100	4,580	e2,150	e1,850	16,800	7,180	6,050	23,600	25,800	6,960	4,190
14	1,330	3,050	4,230	e2,000	e1,840	14,000	6,850	5,940	23,300	26,800	6,720	4,090
15	1,390	2,940	3,600	e2,100	e1,820	12,100	6,650	5,440	24,700	24,400	6,670	4,000
16	1,450	2,840	3,100	e2,290	e1,780	11,300	6,470	5,360	25,600	21,800	6,470	3,810
17	1,460	2,790	2,830	e2,440	e1,770	10,600	6,220	5,630	25,000	21,100	6,220	4,020
18	1,420	2,760	2,940	e2,650	e1,740	10,600	6,170	5,890	24,700	20,400	6,040	3,700
19	1,470	2,680	2,930	e2,850	e1,840	11,200	6,030	7,650	23,800	18,200	6,310	3,550
20	1,380	2,700	2,850	e2,350	e2,110	12,000	5,980	10,300	23,300	16,000	5,990	5,230
21	1,320	2,660	2,660	e2,090	e2,770	11,700	6,170	10,300	22,100	14,100	5,690	9,680
22	1,300	2,470	2,740	e2,230	e5,120	10,900	7,060	10,600	22,400	12,600	5,880	13,300
23	1,300	2,380	2,460	e1,950	e8,760	10,100	7,230	14,500	23,400	11,900	6,080	16,700
24	1,300	2,820	2,410	e1,930	e11,600	9,680	6,860	24,500	21,400	10,600	5,900	19,300
25	1,310	3,620	2,450	e1,930	e13,500	9,580	6,940	29,000	19,800	9,390	5,970	20,200
26	1,320	3,570	2,460	e1,920	e11,900	10,800	7,150	32,100	18,700	8,800	6,130	16,200
27	1,350	3,170	2,390	e1,900	11,100	18,200	7,200	35,700	17,700	8,500	5,990	12,700
28	1,370	2,880	2,370	e1,930	8,370	17,100	6,920	46,200	17,000	8,100	7,230	10,900
29	1,330	2,740	2,570	e1,830	7,570	16,000	6,550	56,800	16,300	7,610	13,900	9,740
30	1,340	2,650	3,560	e1,850	---	16,100	6,430	62,900	15,800	7,210	15,300	8,920
31	1,310	---	e3,250	e1,760	---	16,000	---	63,500	---	6,970	12,900	---
TOTAL	41,550	101,310	91,380	66,310	118,220	444,210	257,450	512,020	845,000	476,780	235,280	245,930
MEAN	1,340	3,377	2,948	2,139	4,077	14,330	8,582	16,520	28,170	15,380	7,590	8,198
MAX	1,470	7,950	4,950	2,990	13,500	25,900	15,900	63,500	57,000	26,800	15,300	20,200
MIN	1,270	1,310	2,200	1,520	1,740	7,620	5,980	5,360	15,800	6,970	5,690	3,550
AC-FT	82,410	200,900	181,300	131,500	234,500	881,100	510,700	1,016,000	1,676,000	945,700	466,700	487,800
CFSM	0.11	0.27	0.24	0.17	0.33	1.15	0.69	1.32	2.25	1.23	0.61	0.66
IN.	0.12	0.30	0.27	0.20	0.35	1.32	0.77	1.52	2.51	1.42	0.70	0.73

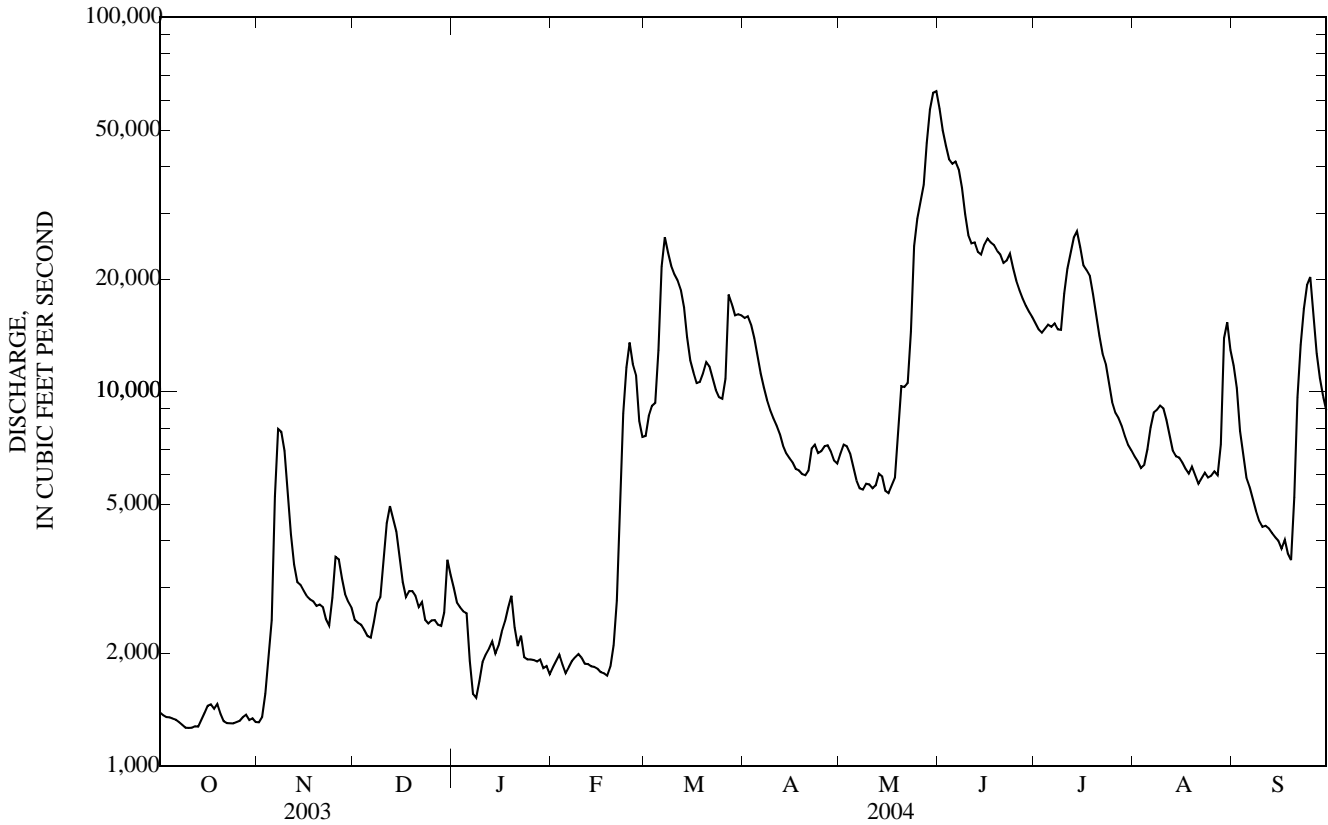
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

MEAN	5,336	5,911	5,128	4,302	6,071	13,260	15,940	14,080	14,340	12,400	7,810	5,940
MAX	17,200	16,080	18,150	20,420	17,080	26,130	45,840	33,030	36,630	77,320	61,750	37,270
(WY)	(1987)	(1993)	(1983)	(1973)	(1984)	(1982)	(1993)	(1993)	(1993)	(1993)	(1993)	(1993)
MIN	926	882	664	533	661	2,273	2,536	1,709	1,022	1,019	873	982
(WY)	(1990)	(1990)	(1990)	(1977)	(1977)	(1977)	(1977)	(1977)	(1977)	(1989)	(1989)	(1988)

05465500 IOWA RIVER AT WAPELLO, IA—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1959 - 2004 a	
ANNUAL TOTAL	1,929,110		3,435,440			
ANNUAL MEAN	5,285		9,386		9,219	
HIGHEST ANNUAL MEAN					30,550	1993
LOWEST ANNUAL MEAN					1,908	1989
HIGHEST DAILY MEAN	28,400	May 19	63,500	May 31	106,000	Jul 8, 1993
LOWEST DAILY MEAN	1,270	Oct 9	1,270	Oct 9 b	460	Jan 21, 1977
ANNUAL SEVEN-DAY MINIMUM	1,280	Oct 7	1,280	Oct 7	470	Jan 20, 1977
MAXIMUM PEAK FLOW			65,700	May 31	111,000	Jul 8, 1993
MAXIMUM PEAK STAGE			26.65	May 31	29.53	Jul 7, 1993
ANNUAL RUNOFF (AC-FT)	3,826,000		6,814,000		6,679,000	
ANNUAL RUNOFF (CFSM)	0.423		0.751		0.738	
ANNUAL RUNOFF (INCHES)	5.74		10.22		10.02	
10 PERCENT EXCEEDS	12,100		22,200		21,100	
50 PERCENT EXCEEDS	2,930		6,170		5,890	
90 PERCENT EXCEEDS	1,470		1,650		1,760	

a Post regulation.
 b Also Oct. 10, 11.
 e Estimated.



05465500 IOWA RIVER AT WAPELLO, IA—Continued

WATER-QUALITY RECORDS

LOCATION -- Samples collected from a boat about 0.75 mile downstream of gage.

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1978 to current year.

WATER TEMPERATURE: January 1978 to current year.

SUSPENDED-SEDIMENT DISCHARGE: April 1978 to current year.

REMARKS.--During periods of ice effect samples are collected in open water channel or through ice cover. Records of specific conductance are obtained from suspended-sediment samples at time of analysis.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 920 microsiemens Dec. 17, 1988; minimum daily, 168 microsiemens June 21, 1990.

WATER TEMPERATURES: Maximum daily, 33.0°C July 25, 1987; minimum daily, 0.0°C on many days during winter period.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,970 mg/L June 25, 1981; minimum daily mean, 1 mg/L Jan. 21, 22, 1981.

SEDIMENT LOADS: Maximum daily 604,000 tons June 20, 1990; minimum daily, 4.7 tons Dec. 23, 24, 1989.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 727 microsiemens Jan. 8; minimum daily, 423 microsiemens June 11.

WATER TEMPERATURES: Maximum daily, 24°C, Aug. 5; minimum daily, 0.0°C Feb. 11.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 711 mg/L May 30; minimum daily mean, 4 mg/L Feb. 11-13.

SEDIMENT LOADS: Maximum daily, 121,000 tons May 30; minimum daily, 21 tons Feb. 11.

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

Date	Time	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	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 unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt inc titr., field, mg/L (00453)
OCT													
08...	0917	10.26	1,280	50	748	9.4	99	9.3	498	--	17.1	111	111
NOV													
03...	1015	10.42	1,540	43	747	12.4	110	8.9	558	8.0	9.5	151	173
DEC													
04...	0930	11.28	2,220	15	750	11.3	84	8.3	596	3.0	2.3	173	206
JAN													
08...	0958	10.78	1,490	--	749	16.7	117	8.2	724	--	.1	210	256
FEB													
11...	0930	11.82	1,900	--	748	12.1	85	7.9	690	1.0	.0	209	255
APR													
07...	0848	14.57	10,300	14	743	11.0	104	8.4	569	11.7	12.8	182	216
MAY													
05...	1108	13.28	6,310	63	748	11.0	113	8.5	422	--	15.9	118	133
JUN													
01...	1105	25.26	58,500	--	737	--	--	7.5	--	--	20.0	116	142
JUL													
01...	0945	16.33	15,100	74	749	9.2	111	8.5	569	--	23.9	192	229
AUG													
05...	0930	13.40	7,110	88	751	7.7	93	8.4	490	23.0	24.0	150	173
SEP													
08...	0930	12.41	E5,090	--	754	10.8	127	8.7	448	24.0	22.8	--	--

05465500 IOWA RIVER AT WAPELLO, IA—Continued

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

Date	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 08...	<.002	<.009	5
NOV 03...	--	--	--
DEC 04...	<.002	<.009	12
JAN 08...	--	--	10
FEB 11...	<.002	<.009	4
APR 07...	<.002	<.009	121
MAY 05...	<.002	<.009	151
JUN 01...	<.002	E.005	232
JUL 01...	<.002	<.009	140
AUG 05...	<.002	<.009	110
SEP 08...	--	--	--

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

Date	Time	Instan- taneous dis- charge, cfs (00061)	Temper- ature, deg C (00010)	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 08...	1140	1,280	--	3	994	3,440
NOV 03...	1025	1,540	9.5	96	59	245
DEC 04...	0959	2,220	--	92	14	84
APR 07...	0858	10,300	--	94	143	3,980
MAY 05...	1030	6,310	--	48	171	2,910
JUN 01...	1030	58,500	--	17	596	94,100
JUL 01...	1024	15,100	--	27	392	16,000
AUG 05...	1000	7,110	--	85	127	2,440

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)
APR 07...	0858	.0	.0	3	33	71	89	96	100	100	5
MAY 05...	1030	.0	.0	4	44	86	97	100	100	--	5
JUN 01...	1030	.0	.0	1	28	74	94	100	100	--	4
JUL 01...	1030	.0	.0	5	32	74	92	98	100	--	5
AUG 05...	1000	.0	1	5	45	75	83	90	96	100	5

05465500 IOWA RIVER AT WAPELLO, IA—Continued

SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

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)	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)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH					
1	15	56	52	186	27	178	29	234	11	55	113	2,330				
2	15	56	56	204	22	141	23	170	11	57	136	3,180				
3	15	53	63	267	17	107	18	129	12	64	160	3,960				
4	16	58	88	467	8	47	18	126	11	56	184	4,650				
5	25	91	116	770	6	33	17	118	10	47	227	7,990				
6	36	128	143	2,060	8	47	13	67	9	44	290	17,000				
7	46	162	168	3,610	12	76	9	36	8	41	331	23,200				
8	58	203	155	3,280	16	117	10	41	7	37	306	19,500				
9	57	195	129	2,430	22	165	14	64	6	32	276	16,200				
10	50	172	108	1,540	33	329	17	87	5	26	249	13,900				
11	44	149	93	1,050	46	557	20	107	4	21	235	12,600				
12	37	127	79	738	54	722	22	122	4	22	221	11,200				
13	31	107	71	597	47	582	23	134	4	22	207	9,410				
14	53	192	68	564	39	447	23	124	5	24	193	7,320				
15	73	274	66	521	31	302	22	125	5	25	183	5,980				
16	89	350	63	482	23	194	21	130	5	25	178	5,410				
17	86	340	60	451	18	137	20	132	6	26	173	4,930				
18	80	307	57	424	20	157	22	157	6	27	173	4,960				
19	87	345	55	398	20	158	23	177	9	45	178	5,390				
20	75	281	59	427	18	137	21	133	25	142	183	5,910				
21	62	222	56	406	17	124	20	113	43	322	178	5,600				
22	55	194	52	348	20	148	22	132	94	1,300	170	4,990				
23	50	177	51	325	17	111	22	116	159	3,760	163	4,440				
24	45	159	64	492	16	104	19	99	224	7,020	155	4,050				
25	41	144	76	746	18	117	17	89	220	8,020	148	3,820				
26	45	160	66	639	18	121	16	83	175	5,620	187	5,550				
27	53	194	52	450	16	101	14	72	147	4,410	278	13,700				
28	57	210	42	328	15	94	12	63	123	2,800	271	12,600				
29	52	185	37	274	23	158	9	44	102	2,090	248	10,700				
30	55	198	32	228	32	305	9	46	---	---	229	9,960				
31	51	182	---	---	35	307	10	47	---	---	215	9,270				
TOTAL	---	5,671	---	24,702	---	6,323	---	3,317	---	36,180	---	269,700				

05465500 IOWA RIVER AT WAPELLO, IA—Continued

