Water-Data Report 2013

05464500 Cedar River at Cedar Rapids, IA

Iowa Basin
Middle Cedar Subbasin

LOCATION.--Lat 41°58′19″, long 91°40′01″ referenced to North American Datum of 1927, in SW ¼ SW ¼ NE ¼ sec.28, T.83 N., R.7 W., Linn County, IA, Hydrologic Unit 07080205, on right bank 400 ft upstream from bridge on 8th Avenue in Cedar Rapids, 2.7 mi upstream from Prairie Creek, and 85.4 mi upstream from mouth of Cedar River.

DRAINAGE AREA.--6,510 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from October 1902 to current year. Prior to September 1927, monthly mean discharge 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 National Geodetic Vertical Datum of 1929. Prior to August 20, 1920, non-recording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow affected by city hydroelectric dam, 0.5 mile upstream, since June 1979. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1851 reached a stage of about 20 ft, discharge about 65,000 ft^3/s.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 05464500, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/05464500.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	502	1,180	753	502	1,600	e1,030	10,200	7,730	60,500	29,200	7,070	2,240
2	503	957	708	395	1,360	e1,040	11,700	7,590	61,300	23,800	6,330	2,210
3	495	865	797	455	1,040	e1,000	12,800	7,950	50,600	20,200	5,810	2,120
4	496	852	797	414	883	1,000	12,500	11,200	39,100	17,700	5,490	2,010
5	476	827	755	405	886	973	8,840	15,700	32,900	15,900	5,280	1,970
6	477	830	790	426	760	e974	6,330	17,700	30,300	14,100	5,050	1,890
7	474	816	782	452	890	e998	5,280	18,400	26,800	12,900	4,400	1,940
8	472	811	733	455	851	e988	4,940	20,000	23,900	11,800	4,640	1,880
9	451	796	740	471	830	2,030	5,530	22,000	22,700	11,100	5,490	1,830
10	468	776	735	491	1,270	8,090	6,800	24,000	20,600	10,400	5,270	1,790
11	510	1,220	581	637	2,560	15,200	8,200	24,700	18,600	9,560	4,710	1,790
12	503	1,060	731	680	2,920	20,800	9,640	22,900	17,700	9,120	4,220	1,780
13	662	1,090	726	579	e2,840	e24,500	11,300	20,000	17,700	8,610	4,210	1,740
14	1,020	855	640	545	e2,530	e28,400	12,200	17,600	17,800	8,150	4,260	1,710
15	1,130	840	732	510	e2,410	22,800	12,100	15,100	18,900	7,710	4,450	1,690
16	1,510	909	770	520	e2,350	18,900	11,300	12,800	21,900	8,700	4,450	1,670
17	1,230	597	e804	601	e2,250	15,200	12,400	11,100	29,800	10,600	4,060	1,650
18	1,030	757	e814	625	2,000	13,000	22,000	9,870	32,500	10,200	3,700	1,640
19	975	779	e823	621	1,850	11,700	25,500	9,090	25,900	9,190	3,460	1,710
20	910	996	e843	484	1,620	10,200	22,300	10,600	20,800	8,360	3,330	1,880
21	817	848	338	552	1,230	e7,120	18,800	14,600	18,500	7,610	3,130	1,890
22	980	916	268	400	1,270	e5,530	16,600	18,200	18,300	7,140	2,950	1,730
23	913	749	330	399	e1,410	4,640	14,500	20,900	18,700	6,650	2,920	1,690
24	922	739	604	477	e1,380	4,360	12,500	28,000	17,600	6,380	2,920	1,610
25	926	743	644	490	e1,220	4,560	11,000	e40,100	21,100	6,000	2,840	1,530
26	1,170	748	518	458	1,190	4,570	10,800	36,300	26,900	6,890	2,740	1,500
27	951	579	457	506	1,120	4,120	10,900	31,700	40,100	7,700	2,710	1,490
28	887	713	510	530	1,000	4,250	10,300	32,500	46,500	7,810	2,640	1,530
29	896	663	543	557	---	5,140	9,030	36,500	41,200	8,340	2,530	1,500
30	902	700	502	629	---	6,260	8,250	50,500	35,000	8,310	2,530	1,460
31	1,100	---	486	2,070	---	8,170	---	57,900	---	7,950	2,380	---
Total	24,758	25,211	20,254	17,336	43,520	257,543	354,540	673,230	874,200	338,080	125,970	53,070
Mean	799	840	653	559	1,554	8,308	11,820	21,720	29,140	10,910	4,064	1,769
Max	1,510	1,220	843	2,070	2,920	28,400	25,500	57,900	61,300	29,200	7,070	2,240
Min	451	579	268	395	760	973	4,940	7,590	17,600	6,000	2,380	1,460
Ac-ft	49,110	50,010	40,170	34,390	86,320	510,800	703,200	1,335,000	1,734,000	670,600	249,900	105,300
Cfsm	0.12	0.13	0.10	0.09	0.24	1.28	1.82	3.34	4.48	1.68	0.62	0.27
In.	0.14	0.14	0.12	0.10	0.25	1.47	2.03	3.85	5.00	1.93	0.72	0.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,481	2,490	1,890	1,635	2,537	6,778	7,137	5,925	6,701	4,608	3,120	2,451
Max	12,100	10,010	8,675	8,529	12,230	19,900	35,320	24,500	46,450	33,910	28,700	13,990
(WY)	(2008)	(2010)	(1983)	(1973)	(1984)	(2010)	(1993)	(1991)	(2008)	(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)

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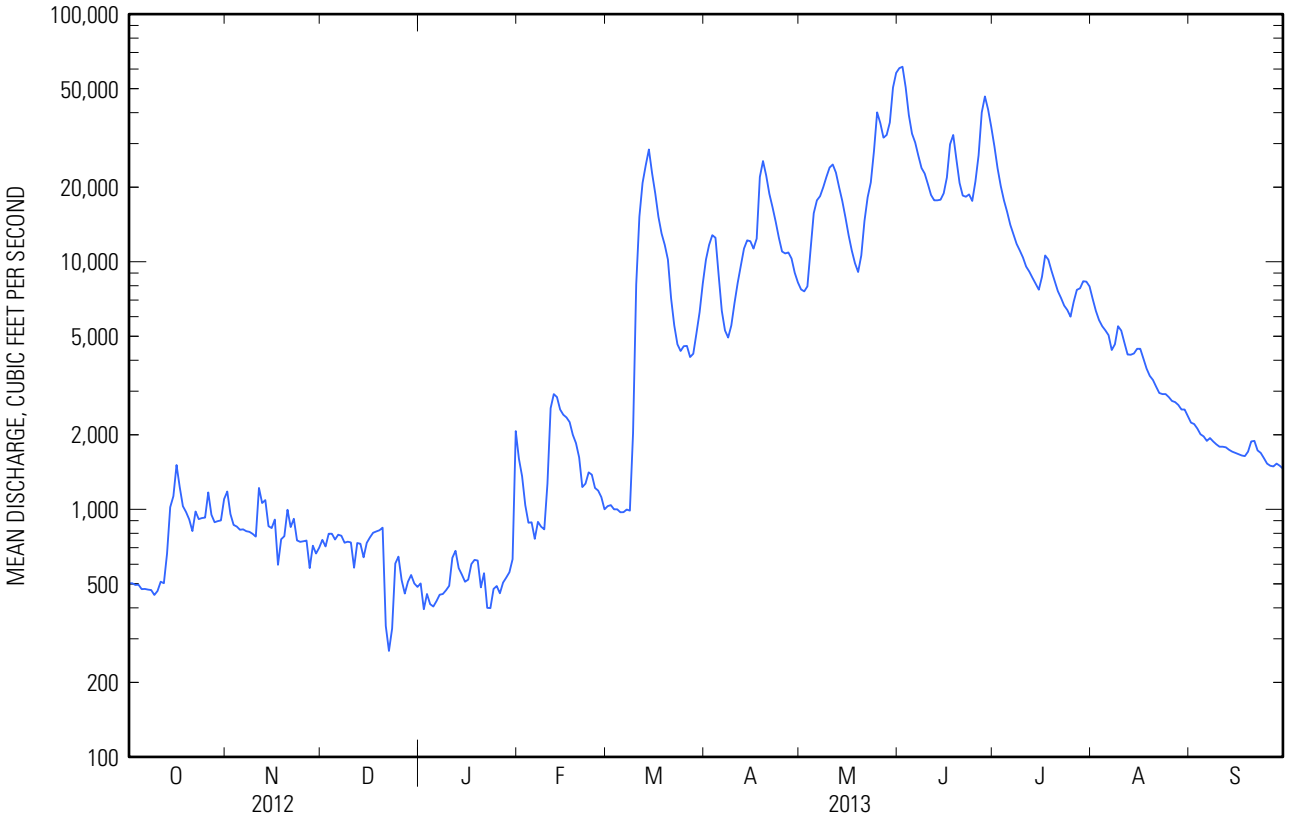
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1903 - 2013	
Annual total	677,741		2,807,712			
Annual mean	1,852		7,692		3,982	
Highest annual mean					15,130	1993
Lowest annual mean					689	1934
Highest daily mean	9,670	May 10	61,300	Jun 2	138,000	Jun 13, 2008
Lowest daily mean	268	Dec 22	268	Dec 22	140	Nov 18, 1989 [a]
Annual seven-day minimum	451	Dec 21	429	Jan 2	224	Dec 20, 1989
Maximum peak flow			63,700	Jun 2	140,000	Jun 13, 2008
Maximum peak stage			18.23	Jun 2	31.12	Jun 13, 2008
Annual runoff (ac-ft)	1,344,000		5,569,000		2,885,000	
Annual runoff (cfsm)	0.284		1.18		0.612	
Annual runoff (inches)	3.87		16.04		8.31	
10 percent exceeds	3,740		22,000		8,960	
50 percent exceeds	1,360		2,240		2,270	
90 percent exceeds	577		510		694	

[a] Result of accidental gate operation at hydroelectric dam upstream.