Water-Data Report 2013

05457700 Cedar River at Charles City, IA

Iowa Basin
Upper Cedar Subbasin

LOCATION.--Lat 43°03'44.0", long 92°40'25.3" referenced to North American Datum of 1927, in NE ¼ SE ¼ NE ¼ sec.12, T.95 N., R.16 W., Floyd County, IA, Hydrologic Unit 07080201, on right bank 800 ft downstream from bridge on U.S. Highway 18 (Brantingham Street) in Charles City, 10.6 mi upstream from Gizzard Creek, and 231.3 mi upstream from mouth.

DRAINAGE AREA.--1,054 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from October 1964 to September 1995, October 2000 to current year; stage-only records from October 1995 to September 2000.

GAGE.--Water-stage recorder. Datum of gage is 973.02 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Occasional minor regulation caused by dam 0.2 mi upstream. Daily wire-weight gage-height readings available for period September 13, 1945, to June 30, 1954, at same site and datum. Discharge not published for this period because of extreme regulation of streamflow by dam. U.S. Geological Survey data collection platform with satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 27, 1961, reached a stage of 21.6 ft, from high-water mark, discharge 29,200 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 05457700, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/05457700.2013.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	124	156	161	e95	e122	e138	5,560	972	6,100	2,500	563	291
2	120	158	160	e103	e129	e130	2,710	1,140	5,280	2,120	555	295
3	117	156	161	e109	e133	e132	1,440	1,740	3,320	1,870	529	282
4	118	159	160	e107	e133	e135	1,000	2,900	2,740	1,650	511	284
5	121	159	154	e112	e133	e140	844	5,080	3,170	1,480	623	286
6	118	162	155	e115	e131	e135	779	7,110	2,890	1,310	1,300	301
7	119	166	155	e123	e134	e132	735	7,550	2,410	1,180	1,070	274
8	121	163	155	e127	e131	e138	598	6,080	2,300	1,080	803	275
9	129	163	163	e135	e132	e540	660	4,640	2,070	1,160	701	264
10	135	161	153	143	e178	e2,500	1,460	3,950	2,050	1,160	632	264
11	131	178	120	153	e179	e3,970	2,290	3,930	2,100	1,060	600	256
12	128	174	158	e146	e180	2,660	2,180	3,470	2,620	961	657	252
13	132	163	160	e125	e182	1,420	1,820	2,820	8,720	891	718	244
14	153	159	165	e129	e188	831	1,630	2,410	5,570	1,690	610	242
15	164	159	179	e133	e202	689	2,130	2,130	3,540	2,260	551	266
16	143	161	179	e142	e216	687	2,140	1,920	2,990	1,750	512	267
17	140	153	180	e137	e216	667	1,690	1,830	2,680	1,340	482	271
18	136	154	176	e146	e190	562	1,640	4,240	2,280	1,080	457	264
19	134	156	166	e144	e187	e357	2,100	7,110	2,100	931	433	278
20	135	155	e150	e133	e168	e281	2,170	16,900	1,890	826	415	264
21	134	153	e137	e108	e159	e216	1,800	16,500	1,800	773	406	247
22	143	157	e130	e109	e153	e204	1,540	9,200	1,800	754	412	248
23	138	158	e129	e116	e145	e213	1,760	6,060	5,870	713	384	244
24	154	142	e124	e111	e143	e210	2,690	5,220	9,490	644	384	236
25	218	145	e113	e114	e144	221	2,560	4,170	7,600	669	376	238
26	195	196	e116	e119	e145	234	2,040	3,760	6,040	650	368	236
27	192	131	e121	131	e147	435	1,630	4,640	4,980	699	332	234
28	176	149	133	134	e142	1,430	1,340	5,490	3,890	749	334	234
29	165	163	e127	151	---	3,190	1,170	5,920	3,020	688	328	227
30	160	168	e122	e152	---	5,900	1,050	6,080	2,760	636	323	234
31	159	---	e111	e136	---	6,360	---	4,730	---	596	328	---
Total	4,452	4,777	4,573	3,938	4,442	34,857	53,156	159,692	114,070	35,870	16,697	7,798
Mean	144	159	148	127	159	1,124	1,772	5,151	3,802	1,157	539	260
Max	218	196	180	153	216	6,360	5,560	16,900	9,490	2,500	1,300	301
Min	117	131	111	95	122	130	598	972	1,800	596	323	227
Ac-ft	8,830	9,480	9,070	7,810	8,810	69,140	105,400	316,700	226,300	71,150	33,120	15,470
Cfsm	0.14	0.15	0.14	0.12	0.15	1.07	1.68	4.89	3.61	1.10	0.51	0.25
In.	0.16	0.17	0.16	0.14	0.16	1.23	1.88	5.64	4.03	1.27	0.59	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	598	506	358	281	376	1,264	1,604	1,240	1,251	841	643	588
Max	2,431	1,639	1,396	888	1,707	3,667	6,010	5,151	5,892	3,009	4,704	2,987
(WY)	(2008)	(1983)	(1983)	(1973)	(1984)	(2011)	(2001)	(2013)	(2008)	(1993)	(1993)	(2004)
Min	126	97.7	85.4	86.3	127	176	251	197	130	159	114	116
(WY)	(1977)	(1977)	(1990)	(1990)	(1990)	(1968)	(1968)	(1977)	(1977)	(1988)	(1988)	(1976)

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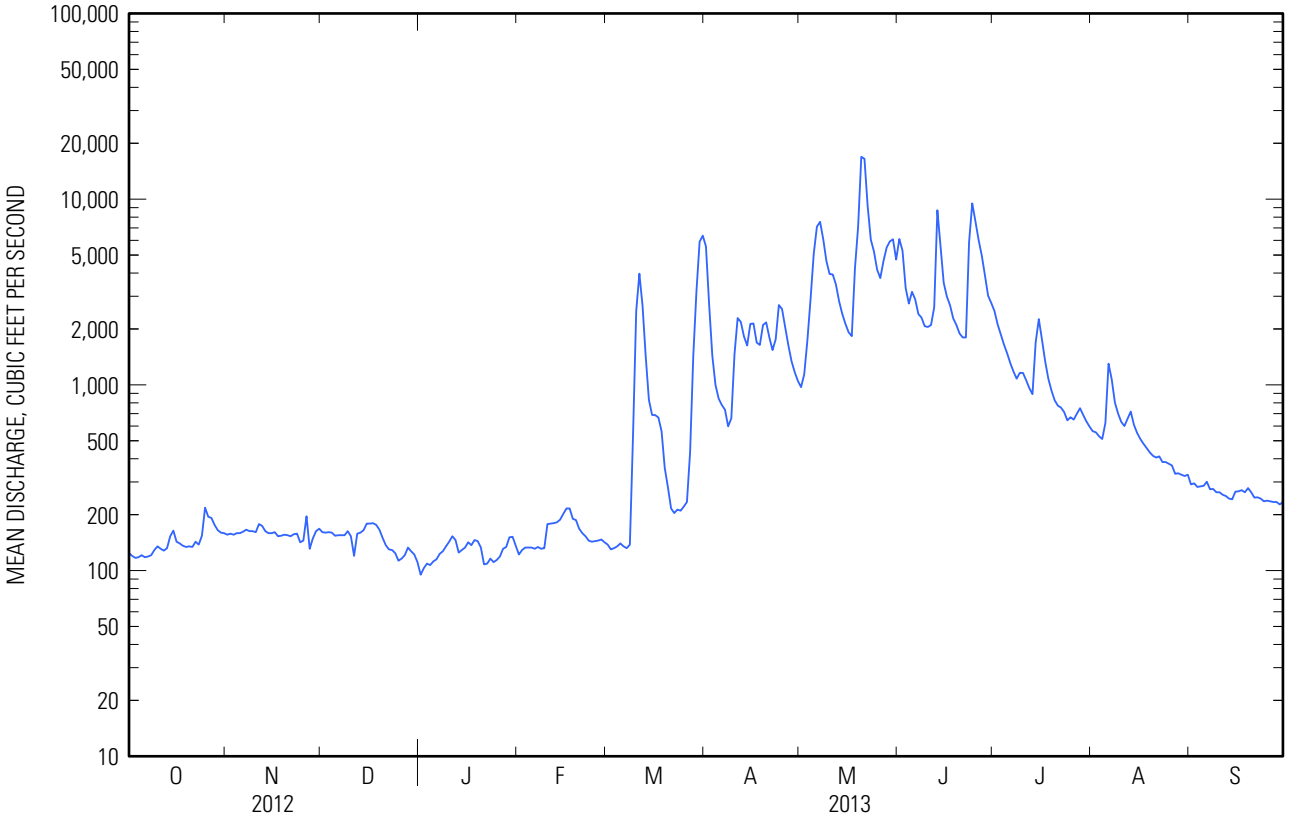
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1965 - 2013	
Annual total	104,304		444,322			
Annual mean	285		1,217		797	
Highest annual mean					2,048	1993
Lowest annual mean					159	1977
Highest daily mean	2,700	May 7	16,900	May 20	30,500	Jun 9, 2008
Lowest daily mean	111	Dec 31	95	Jan 1	60	Nov 23, 1976 [a]
Annual seven-day minimum	117	Sep 22	107	Dec 31	65	Dec 17, 1989
Maximum peak flow			21,500	May 20	34,600	Jun 9, 2008
Maximum peak stage			19.52	May 20	25.33	Jun 9, 2008
Instantaneous low flow					45	Nov 17, 1989
Annual runoff (ac-ft)	206,900		881,300		577,300	
Annual runoff (cfsm)	0.270		1.15		0.756	
Annual runoff (inches)	3.68		15.68		10.27	
10 percent exceeds	506		3,500		1,730	
50 percent exceeds	194		264		389	
90 percent exceeds	131		129		165	

[a] Also Jan 7, 1978.