Water-Data Report 2013

05464315 Cedar River at Vinton, IA

Iowa Basin
Middle Cedar Subbasin

LOCATION.--Lat 42°10′15″, long 92°01′25″ referenced to North American Datum of 1927, in SE ¼ NW ¼ SW ¼ sec.16, T.85 N., R.10 W., Benton County, IA, Hydrologic Unit 07080205, on right bank on downstream side of bridge on State Highway 150 in Vinton, 900 ft downstream from Hinkle Creek, 1.5 mi upstream of Prairie Creek, 3.0 mi upstream from Mud Creek, and 124.5 mi upstream from mouth.

DRAINAGE AREA.--6,040 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from March 2009 to current year.

GAGE.--Water-stage recorder. Datum of gage is 762.06 ft above National Geodetic Vertical Datum of 1929.

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

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 05464315, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/05464315.2013.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	491	796	622	e416	e1,210	e896	11,600	7,240	60,300	18,500	4,840	2,250
2	493	722	640	e307	e1,080	e913	12,900	7,080	46,500	15,400	4,440	2,170
3	490	690	639	e358	e893	e878	12,500	7,480	33,900	13,400	4,170	2,100
4	488	667	649	e342	e784	e797	9,380	12,300	27,700	11,700	3,970	2,040
5	481	656	652	e307	e769	e735	6,070	16,100	24,600	10,300	3,970	1,990
6	467	666	637	e350	e636	e851	4,950	17,200	21,900	9,330	4,000	1,980
7	461	679	616	e354	e760	e931	4,450	19,500	19,700	8,480	3,970	1,930
8	440	659	622	e396	e699	e922	4,240	21,700	18,900	7,800	4,800	1,930
9	459	635	645	e389	e627	e1,650	4,330	23,400	17,000	7,290	4,830	1,910
10	500	655	657	e432	e1,040	9,380	5,390	23,700	15,100	e6,880	4,350	1,860
11	501	710	630	e447	e1,940	21,100	7,360	21,300	14,200	e6,490	3,940	1,840
12	510	810	609	e435	e2,700	21,800	10,300	18,500	14,400	e6,250	3,810	1,850
13	524	672	587	e478	e2,720	23,300	11,700	16,000	14,300	e6,020	3,890	1,760
14	782	667	591	e447	e2,350	20,700	11,200	13,900	15,400	e5,800	4,020	1,680
15	1,310	674	655	e428	e2,300	17,900	10,500	11,900	18,900	e5,920	4,140	1,670
16	1,010	644	746	e439	e2,170	14,600	10,400	10,200	26,300	7,820	3,840	1,700
17	845	631	756	e476	e2,090	12,400	12,200	9,070	27,600	7,960	3,540	1,680
18	773	621	759	e449	e1,820	11,200	18,800	8,130	21,100	7,080	3,300	1,740
19	718	625	777	e363	e1,670	10,200	20,000	8,440	16,800	6,430	3,140	1,840
20	704	656	e782	e399	e1,440	7,080	17,000	13,400	14,200	5,820	3,010	2,010
21	671	654	e272	e422	e1,010	5,330	15,500	18,300	13,000	5,390	2,810	1,860
22	688	628	e229	e352	e1,170	4,470	13,200	21,500	13,300	5,020	2,840	1,790
23	743	632	e276	e297	e1,250	4,000	11,300	29,000	12,000	4,920	2,830	1,700
24	725	609	e482	e371	e1,220	4,100	9,820	39,000	12,000	4,490	2,780	1,650
25	947	629	e545	e406	e1,100	4,340	9,580	32,200	16,300	4,470	2,720	1,620
26	793	603	e478	e375	e1,010	3,920	9,970	26,200	27,800	5,510	2,700	1,580
27	703	591	e373	e430	e976	3,800	9,600	27,600	38,500	5,710	2,630	1,560
28	729	587	e435	e473	e797	4,440	8,580	32,000	33,200	6,370	2,540	1,620
29	731	607	e486	e1,120	---	5,340	7,680	40,300	27,800	6,300	2,490	1,600
30	909	623	e467	e2,020	---	7,020	7,270	50,500	23,000	6,110	2,420	1,500
31	954	---	e428	e1,570	---	9,580	---	56,400	---	5,490	2,250	---
Total	21,040	19,698	17,742	15,848	38,231	234,573	307,770	659,540	685,700	234,450	108,980	54,410
Mean	679	657	572	511	1,365	7,567	10,260	21,280	22,860	7,563	3,515	1,814
Max	1,310	810	782	2,020	2,720	23,300	20,000	56,400	60,300	18,500	4,840	2,250
Min	440	587	229	297	627	735	4,240	7,080	12,000	4,470	2,250	1,500
Ac-ft	41,730	39,070	35,190	31,430	75,830	465,300	610,500	1,308,000	1,360,000	465,000	216,200	107,900
Cfsm	0.11	0.11	0.09	0.08	0.23	1.25	1.70	3.52	3.78	1.25	0.58	0.30
In.	0.13	0.12	0.11	0.10	0.24	1.44	1.90	4.06	4.22	1.44	0.67	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2009 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3,193	3,717	2,188	2,060	2,891	9,925	7,577	11,080	11,650	7,231	3,610	2,248
Max	6,354	8,982	3,808	3,441	6,096	17,930	10,260	21,280	22,860	13,970	7,405	5,158
(WY)	(2010)	(2010)	(2010)	(2010)	(2011)	(2010)	(2013)	(2013)	(2013)	(2010)	(2010)	(2010)
Min	679	657	572	511	1,365	2,740	3,530	5,057	2,285	975	693	569
(WY)	(2013)	(2013)	(2013)	(2013)	(2013)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)	(2012)

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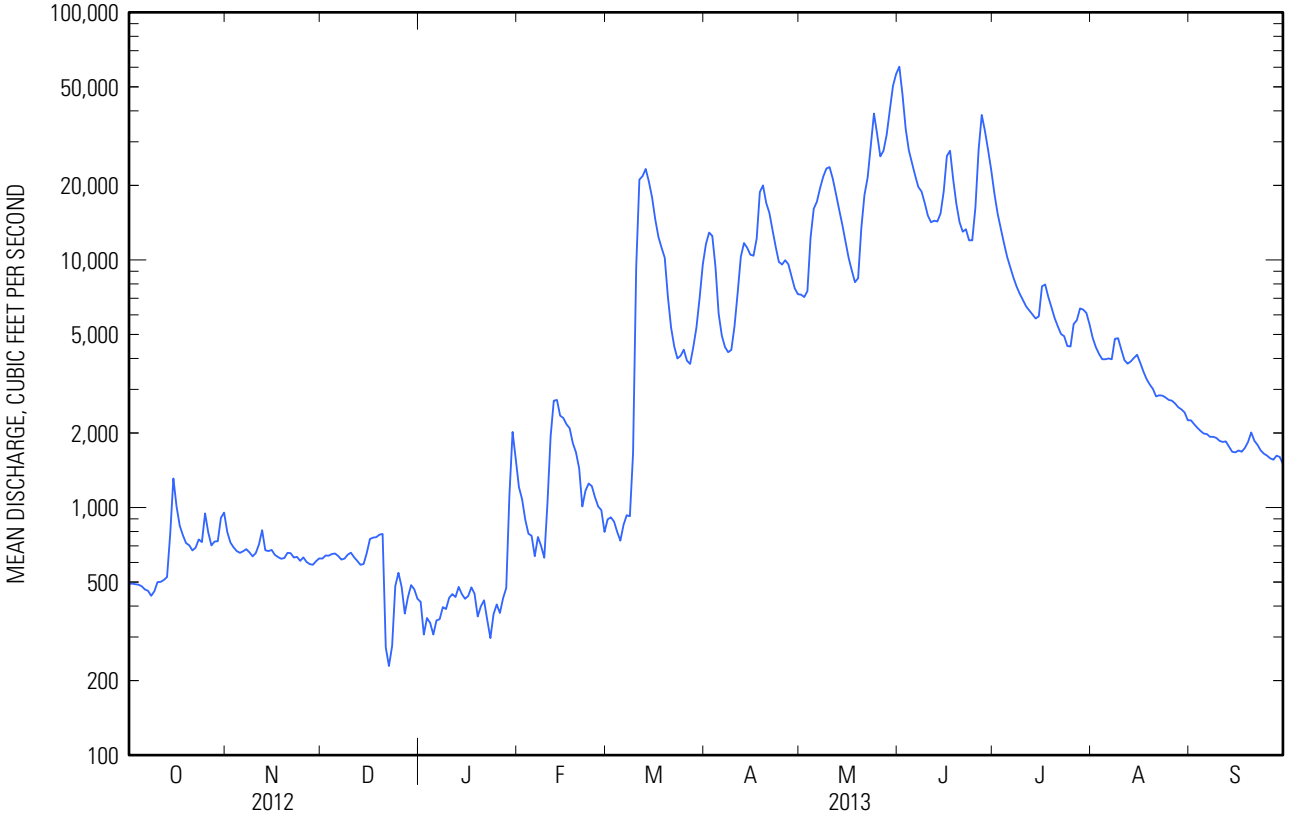
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 2009 - 2013	
Annual total	631,790		2,397,982			
Annual mean	1,726		6,570		5,706	
Highest annual mean					8,367	2010
Lowest annual mean					1,943	2012
Highest daily mean	10,800	May 9	60,300	Jun 1	60,300	Jun 1, 2013
Lowest daily mean	229	Dec 22	229	Dec 22	229	Dec 22, 2012
Annual seven-day minimum	379	Dec 21	345	Jan 2	345	Jan 2, 2013
Maximum peak flow			63,100	Jun 1	63,100	Jun 1, 2013
Maximum peak stage			18.59	Jun 1	18.59	Jun 1, 2013
Annual runoff (ac-ft)	1,253,000		4,756,000		4,133,000	
Annual runoff (cfsm)	0.286		1.09		0.945	
Annual runoff (inches)	3.89		14.77		12.83	
10 percent exceeds	3,550		18,900		13,900	
50 percent exceeds	1,160		2,100		3,060	
90 percent exceeds	545		471		699