Water-Data Report 2013

# 05465000 Cedar River near Conesville, IA

Iowa Basin
Lower Cedar Subbasin

LOCATION.--Lat 41°24′33″, long 91°17′25″ referenced to North American Datum of 1927, in SW ¼ SW ¼ SW ¼ sec.2, T.76 N., R.4 W., Muscatine County, IA, 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, and 10.8 mi upstream from mouth of Cedar River.

DRAINAGE AREA.--7,787 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from 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 National Geodetic Vertical Datum of 1929. Prior to February 2, 1940, and April 11, 1952, to July 1, 1954, non-recording gage; February 2, 1940, to April 10, 1952, and July 2, 1954, to September 16, 1963, water-stage recorder at site 150 ft downstream at same datum.

REMARKS.--Records good except 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 in March 1929 reached a stage of 15.8 ft, from information by local residents to U.S. Army Corps of Engineers, discharge not determined.

**05465000 Cedar River near Conesville, IA—Continued**

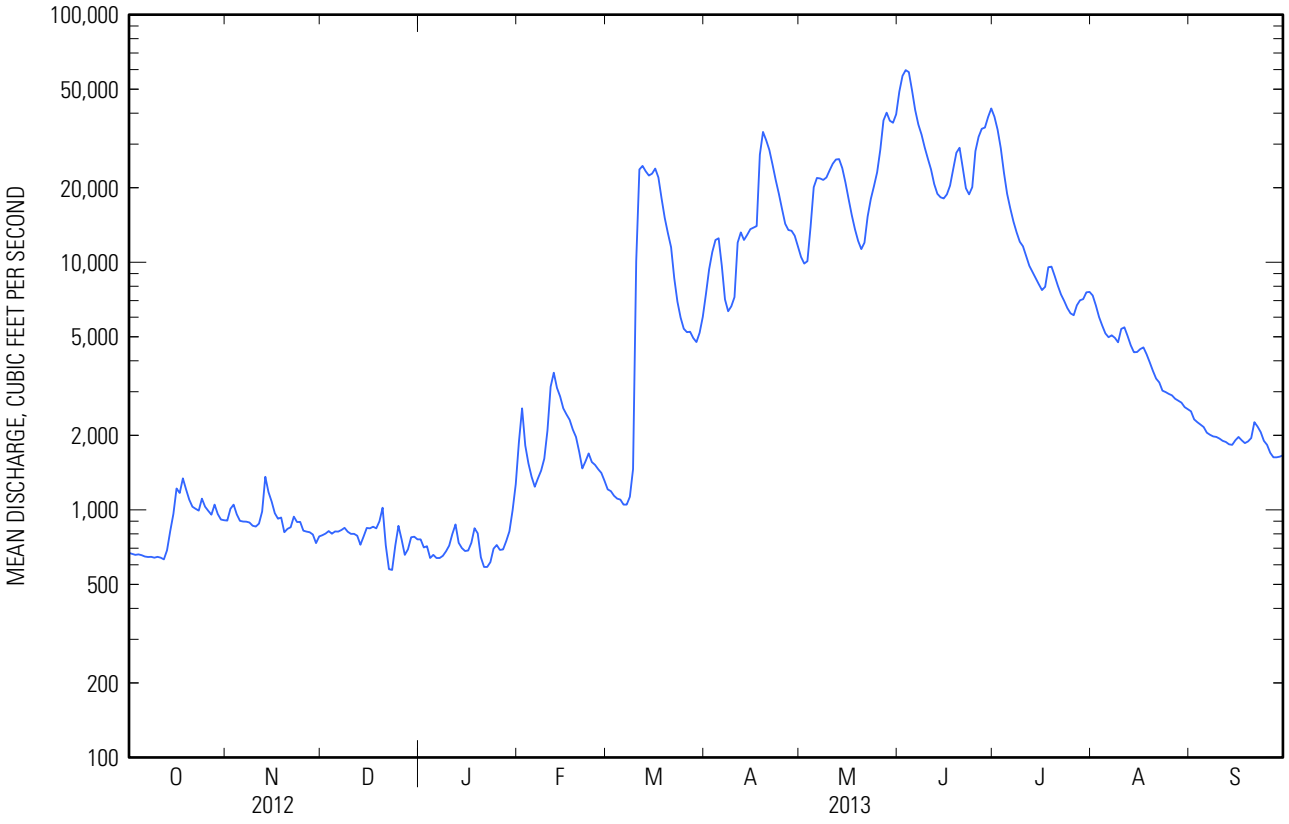
**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**
**DAILY MEAN VALUES**
[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 670 | 905 | 790 | e760 | e1,880 | e1,210 | 7,450 | 10,500 | 48,900 | 38,700 | 7,340 | 2,500 |
| 2 | 664 | 1,010 | 802 | e705 | e2,570 | e1,190 | 9,370 | 9,880 | 56,600 | 34,300 | 6,690 | 2,320 |
| 3 | 658 | 1,050 | 821 | e713 | e1,820 | e1,140 | 11,000 | 10,100 | 59,700 | 28,900 | 6,010 | 2,260 |
| 4 | 661 | 959 | 801 | e639 | e1,540 | e1,110 | 12,300 | 13,900 | 58,600 | 23,000 | 5,550 | 2,210 |
| 5 | 656 | 903 | 818 | e658 | e1,360 | e1,100 | 12,500 | 20,100 | 49,500 | 18,900 | 5,160 | 2,160 |
| 6 | 648 | 897 | 817 | e639 | e1,240 | e1,050 | 9,680 | 21,900 | 41,200 | 16,500 | 4,980 | 2,050 |
| 7 | 645 | 896 | 829 | e639 | e1,340 | e1,050 | 7,080 | 21,800 | 36,000 | 14,600 | 5,070 | 2,010 |
| 8 | 646 | 889 | 846 | e652 | e1,440 | e1,130 | 6,340 | 21,500 | 32,800 | 13,200 | 4,950 | 1,980 |
| 9 | 641 | 863 | 816 | e680 | e1,610 | 1,460 | 6,640 | 22,000 | 29,100 | 12,100 | 4,750 | 1,970 |
| 10 | 646 | 856 | 800 | e717 | e2,090 | 10,100 | 7,230 | 23,500 | 26,200 | 11,600 | 5,380 | 1,940 |
| 11 | 641 | 880 | 800 | e799 | e3,140 | 23,700 | 12,000 | 25,000 | 23,700 | 10,600 | 5,460 | 1,900 |
| 12 | 631 | 985 | 786 | e873 | e3,580 | 24,500 | 13,200 | 26,000 | 20,700 | 9,680 | 5,040 | 1,880 |
| 13 | 687 | 1,360 | 723 | e736 | e3,110 | 23,300 | 12,300 | 26,100 | 18,900 | 9,140 | 4,620 | 1,840 |
| 14 | 820 | 1,180 | 780 | e701 | e2,870 | 22,400 | 12,900 | 24,000 | 18,300 | 8,630 | 4,330 | 1,830 |
| 15 | 962 | 1,080 | 845 | e682 | e2,570 | 22,800 | 13,600 | 21,000 | 18,100 | 8,150 | 4,340 | 1,910 |
| 16 | 1,220 | 969 | 842 | e685 | e2,430 | 23,900 | 13,800 | 18,000 | 18,800 | 7,720 | 4,460 | 1,970 |
| 17 | 1,170 | 921 | 855 | e736 | e2,310 | 22,000 | 14,000 | 15,500 | 20,400 | 7,960 | 4,530 | 1,910 |
| 18 | 1,340 | 931 | 842 | 843 | e2,110 | 18,100 | 27,200 | 13,600 | 23,800 | 9,550 | 4,250 | 1,860 |
| 19 | 1,210 | 812 | 899 | 804 | e1,970 | 15,100 | 33,600 | 12,200 | 27,700 | 9,600 | 3,940 | 1,890 |
| 20 | 1,100 | 838 | 1,020 | 643 | e1,720 | 13,100 | 31,100 | 11,300 | 29,000 | 8,810 | 3,640 | 1,950 |
| 21 | 1,030 | 851 | e719 | 588 | e1,470 | 11,500 | 28,400 | 12,000 | 24,100 | 8,040 | 3,390 | 2,260 |
| 22 | 1,010 | 939 | e576 | e588 | e1,570 | 8,620 | 24,800 | 15,300 | 19,900 | 7,410 | 3,270 | 2,170 |
| 23 | 993 | 893 | e572 | e615 | e1,690 | 6,930 | 21,500 | 18,000 | 18,800 | 6,980 | 3,030 | 2,060 |
| 24 | 1,110 | 894 | e717 | e697 | e1,560 | 5,980 | 18,900 | 20,300 | 20,100 | 6,530 | 2,990 | 1,900 |
| 25 | 1,030 | 824 | e862 | e721 | e1,520 | 5,390 | 16,400 | 23,100 | 28,100 | 6,220 | 2,940 | 1,830 |
| 26 | 991 | 817 | e759 | e689 | e1,460 | 5,220 | 14,300 | 28,500 | 32,100 | 6,110 | 2,900 | 1,700 |
| 27 | 956 | 812 | e658 | e692 | e1,410 | 5,240 | 13,500 | 37,400 | 34,600 | 6,700 | 2,810 | 1,630 |
| 28 | 1,050 | 795 | e693 | e748 | e1,310 | 4,940 | 13,400 | 40,200 | 35,000 | 7,020 | 2,760 | 1,630 |
| 29 | 962 | 734 | e775 | e819 | --- | 4,760 | 12,800 | 37,300 | 38,600 | 7,100 | 2,710 | 1,640 |
| 30 | 914 | 781 | e779 | e995 | --- | 5,190 | 11,600 | 36,600 | 41,800 | 7,560 | 2,600 | 1,660 |
| 31 | 908 | --- | e760 | e1,270 | --- | 6,020 | --- | 39,600 | --- | 7,590 | 2,550 | --- |
| Total | 27,270 | 27,524 | 24,402 | 22,726 | 54,690 | 299,230 | 448,890 | 676,180 | 951,100 | 378,900 | 132,440 | 58,820 |
| Mean | 880 | 917 | 787 | 733 | 1,953 | 9,653 | 14,960 | 21,810 | 31,700 | 12,220 | 4,272 | 1,961 |
| Max | 1,340 | 1,360 | 1,020 | 1,270 | 3,580 | 24,500 | 33,600 | 40,200 | 59,700 | 38,700 | 7,340 | 2,500 |
| Min | 631 | 734 | 572 | 588 | 1,240 | 1,050 | 6,340 | 9,880 | 18,100 | 6,110 | 2,550 | 1,630 |
| Ac-ft | 54,090 | 54,590 | 48,400 | 45,080 | 108,500 | 593,500 | 890,400 | 1,341,000 | 1,887,000 | 751,500 | 262,700 | 116,700 |
| Cfsm | 0.11 | 0.12 | 0.10 | 0.09 | 0.25 | 1.24 | 1.92 | 2.80 | 4.07 | 1.57 | 0.55 | 0.25 |
| In. | 0.13 | 0.13 | 0.12 | 0.11 | 0.26 | 1.43 | 2.14 | 3.23 | 4.54 | 1.81 | 0.63 | 0.28 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2013, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 3,308 | 3,393 | 2,642 | 2,458 | 3,341 | 8,273 | 9,758 | 8,574 | 9,438 | 6,913 | 4,368 | 3,309 |
| Max | 13,280 | 15,030 | 11,110 | 11,860 | 12,000 | 25,230 | 36,790 | 26,650 | 47,690 | 42,110 | 34,190 | 19,530 |
| (WY) | (2008) | (2010) | (1983) | (1973) | (1984) | (2010) | (1993) | (2008) | (2008) | (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**

| | Calendar Year 2012 | | Water Year 2013 | | Water Years 1940 - 2013 | |
|---|---|---|---|---|---|---|
| **Annual total** | 840,540 | | 3,102,172 | | | |
| **Annual mean** | 2,297 | | 8,499 | | 5,486 | |
| **Highest annual mean** | | | | | 18,710 | 1993 |
| **Lowest annual mean** | | | | | 1,176 | 1956 |
| **Highest daily mean** | 10,600 | May 11 | 59,700 | Jun 3 | 119,000 | Jun 15, 2008 |
| **Lowest daily mean** | 572 | Dec 23 | 572 | Dec 23 | 250 | Nov 28, 1955 |
| **Annual seven-day minimum** | 643 | Oct 6 | 643 | Oct 6 | 329 | Jan 30, 1940 |
| **Maximum peak flow** | | | 61,300 | Jun 3 | 127,000 | Jun 14, 2008 |
| **Maximum peak stage** | | | 16.90 | Jun 3 | 23.40 | Jun 15, 2008 |
| **Instantaneous low flow** | | | 484 | Jan 21 | | |
| **Annual runoff (ac-ft)** | 1,667,000 | | 6,153,000 | | 3,975,000 | |
| **Annual runoff (cfsm)** | 0.295 | | 1.09 | | 0.705 | |
| **Annual runoff (inches)** | 4.02 | | 14.82 | | 9.57 | |
| **10 percent exceeds** | 4,660 | | 24,300 | | 12,700 | |
| **50 percent exceeds** | 1,760 | | 2,430 | | 3,300 | |
| **90 percent exceeds** | 771 | | 717 | | 990 | |