Water-Data Report 2012

# 03360000 EEL RIVER AT BOWLING GREEN, IN

White River Basin

LOCATION.--Lat 39°22′58″, long 87°01′14″ referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.24, T.11 N., R.6 W., Clay County, IN, Hydrologic Unit 05120203, on left bank 500 ft downstream from bridge on State Highway 46 at Bowling Green, 0.2 mi downstream from Jordan Creek, 15 mi northwest of Spencer, and at mile 38.4.

DRAINAGE AREA. -- 830.00 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD. -- January 1931 to current year. Prior to October 1934, published as "near Centerpoint".

REVISED RECORDS. -- WSP 893: 1935, 1937-39. WSP 973: 1937-38, 1939(M). WSP 1335: 1931(M). WSP 2109: Drainage area.

GAGE. -- Water-stage recorder. Datum of gage is 548.02 ft above National Geodetic Vertical Datum of 1929, (levels by U.S. Army Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS. -- Records fair except for estimated daily discharges, which are poor. Flow regulated by Cagles Mill Lake.

EXTREMES OUTSIDE PERIOD OF RECORD. -- Maximum stage, about 30.0 ft in 1875, present datum, from information by U.S. Army Corps of Engineers.

**03360000 EEL RIVER AT BOWLING GREEN, IN—Continued**

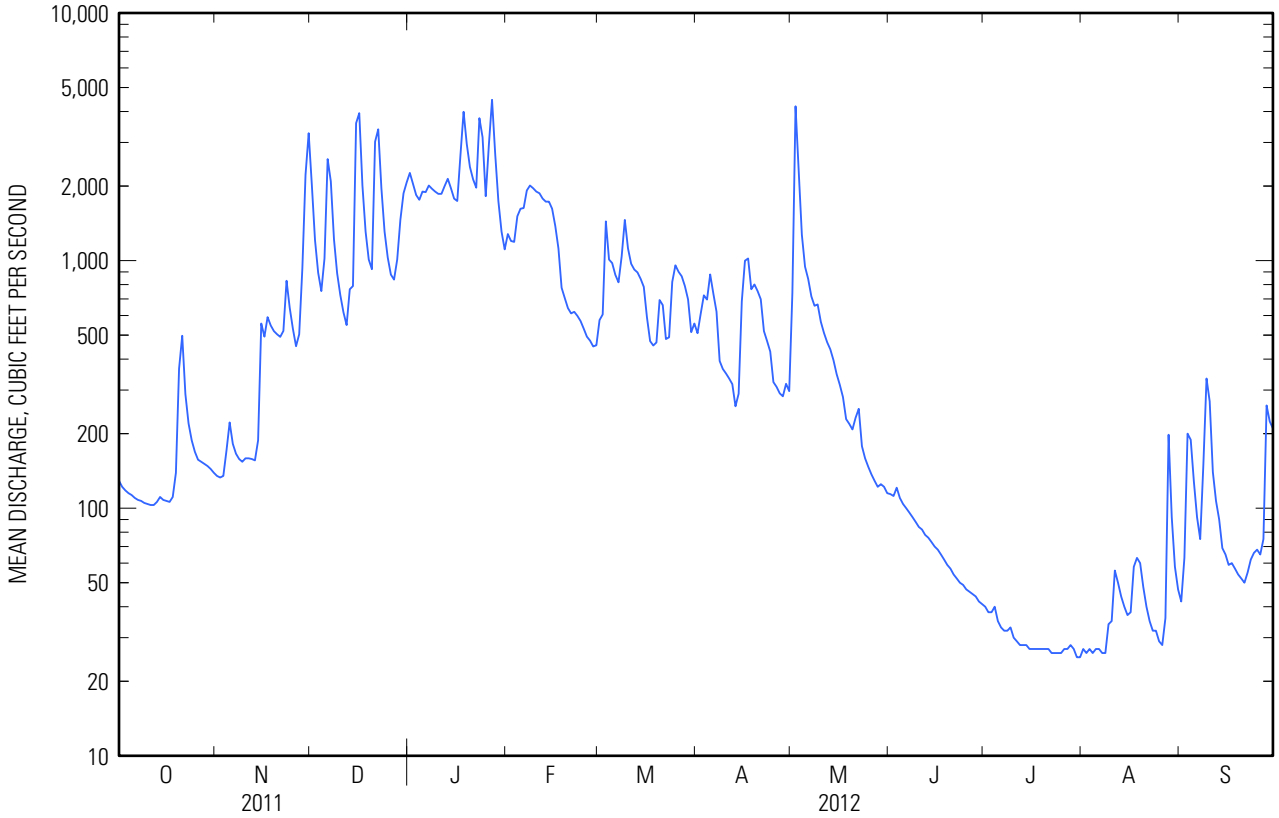
**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**
**DAILY MEAN VALUES**
[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 129 | 135 | 2,020 | 2,260 | 1,280 | 575 | 509 | 741 | e114 | e40 | e27 | 42 |
| 2 | 122 | 133 | 1,210 | 2,040 | 1,200 | 606 | 610 | 4,200 | e112 | e38 | 26 | e63 |
| 3 | 118 | 135 | 893 | 1,840 | 1,190 | 1,440 | 724 | 2,300 | e121 | e38 | 27 | e200 |
| 4 | 115 | 171 | 753 | 1,760 | 1,510 | 1,010 | 696 | 1,270 | e110 | e40 | 26 | e189 |
| 5 | 113 | 222 | 1,020 | 1,900 | 1,620 | 977 | 879 | e945 | e104 | e35 | 27 | e128 |
| 6 | 110 | 182 | 2,570 | 1,890 | 1,630 | 876 | 736 | e843 | e100 | e33 | 27 | e92 |
| 7 | 108 | 166 | 2,090 | 2,010 | 1,920 | 817 | 622 | e717 | e96 | e32 | e26 | e75 |
| 8 | 107 | 158 | 1,220 | 1,950 | 2,010 | 1,040 | 393 | e657 | e92 | e32 | 26 | e150 |
| 9 | 105 | 154 | 889 | 1,900 | 1,960 | 1,460 | 365 | e665 | e88 | e33 | 34 | e334 |
| 10 | 104 | 159 | 726 | 1,860 | 1,900 | 1,120 | 350 | e566 | e84 | e30 | 35 | e270 |
| 11 | 103 | 159 | 618 | 1,860 | 1,870 | 971 | 334 | e510 | e82 | e29 | e56 | e140 |
| 12 | 103 | 158 | 549 | 2,000 | 1,780 | 920 | 317 | e468 | e78 | e28 | e50 | e107 |
| 13 | 106 | 156 | 766 | 2,140 | 1,730 | 896 | 258 | e438 | e76 | e28 | 44 | e90 |
| 14 | 111 | 188 | 789 | e1,960 | 1,730 | 844 | 290 | e396 | e73 | e28 | 40 | e69 |
| 15 | 108 | 557 | 3,590 | e1,780 | 1,620 | 783 | 684 | e348 | e70 | e27 | e37 | e65 |
| 16 | 107 | 493 | 3,940 | e1,740 | 1,380 | 590 | 999 | e315 | e68 | e27 | e38 | e59 |
| 17 | 106 | 591 | 2,010 | 2,660 | 1,120 | 473 | 1,020 | e281 | e65 | e27 | e58 | e60 |
| 18 | 111 | 547 | 1,310 | 3,990 | 777 | 454 | 766 | e229 | e62 | e27 | e63 | e57 |
| 19 | 139 | 519 | 1,010 | 2,960 | 706 | 467 | 801 | e219 | e59 | e27 | e60 | e54 |
| 20 | 366 | 504 | 923 | 2,390 | 643 | 693 | 753 | e208 | e57 | e27 | e48 | 52 |
| 21 | 497 | 492 | 3,020 | 2,130 | 612 | 661 | 698 | e232 | e54 | e27 | e40 | 50 |
| 22 | 289 | 520 | 3,390 | 1,970 | 621 | 482 | 519 | e252 | e52 | e26 | e35 | 55 |
| 23 | 220 | 829 | 1,960 | 3,760 | 598 | 490 | 473 | e178 | e50 | e26 | e32 | 62 |
| 24 | 188 | 645 | 1,310 | 3,150 | 570 | 820 | 429 | e159 | e49 | e26 | e32 | 66 |
| 25 | 169 | 531 | 1,030 | 1,820 | 531 | 957 | 323 | e147 | e47 | e26 | e29 | 68 |
| 26 | 157 | 451 | 878 | 2,940 | 493 | 901 | 309 | e137 | e46 | 27 | 28 | 65 |
| 27 | 154 | 504 | 838 | 4,460 | 475 | 864 | 291 | e129 | e45 | 27 | 36 | 75 |
| 28 | 151 | 931 | 1,010 | 2,690 | 450 | 789 | 283 | e122 | e44 | 28 | e198 | 260 |
| 29 | 148 | 2,220 | 1,460 | 1,740 | 455 | 697 | 318 | e125 | e42 | 27 | 92 | 224 |
| 30 | 144 | 3,270 | 1,870 | 1,310 | --- | 514 | 297 | e122 | e41 | e25 | 58 | 210 |
| 31 | 139 | --- | 2,070 | 1,110 | --- | 557 | --- | e115 | --- | e25 | 47 | --- |
| Total | 4,747 | 15,880 | 47,732 | 69,970 | 34,381 | 24,744 | 16,046 | 18,034 | 2,181 | 916 | 1,402 | 3,431 |
| Mean | 153 | 529 | 1,540 | 2,257 | 1,186 | 798 | 535 | 582 | 72.7 | 29.5 | 45.2 | 114 |
| Max | 497 | 3,270 | 3,940 | 4,460 | 2,010 | 1,460 | 1,020 | 4,200 | 121 | 40 | 198 | 334 |
| Min | 103 | 133 | 549 | 1,110 | 450 | 454 | 258 | 115 | 41 | 25 | 26 | 42 |
| Cfsm | 0.18 | 0.64 | 1.86 | 2.72 | 1.43 | 0.96 | 0.64 | 0.70 | 0.09 | 0.04 | 0.05 | 0.14 |
| In. | 0.21 | 0.71 | 2.14 | 3.14 | 1.54 | 1.11 | 0.72 | 0.81 | 0.10 | 0.04 | 0.06 | 0.15 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2012, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 311 | 602 | 923 | 1,281 | 1,335 | 1,575 | 1,618 | 1,272 | 969 | 629 | 326 | 316 |
| Max | 1,838 | 3,076 | 2,960 | 7,212 | 3,249 | 3,843 | 4,120 | 5,090 | 5,141 | 2,746 | 2,656 | 2,682 |
| (WY) | (2002) | (1986) | (1991) | (1950) | (1950) | (1938) | (1944) | (1943) | (2008) | (1987) | (1979) | (2003) |
| Min | 22.5 | 29.7 | 29.0 | 27.5 | 107 | 125 | 285 | 129 | 66.9 | 29.5 | 24.1 | 13.9 |
| (WY) | (1941) | (1965) | (1964) | (1977) | (1934) | (1941) | (1971) | (1934) | (1988) | (2012) | (1936) | (1954) |

**03360000 EEL RIVER AT BOWLING GREEN, IN—Continued**

**SUMMARY STATISTICS**

| | Calendar Year 2011 | | Water Year 2012 | | Water Years 1931 - 2012 | |
|---|---|---|---|---|---|---|
| **Annual total** | 491,252 | | 239,464 | | | |
| **Annual mean** | 1,346 | | 654 | | 930 | |
| **Highest annual mean** | | | | | 1,730 | 2008 |
| **Lowest annual mean** | | | | | 161 | 1954 |
| **Highest daily mean** | 12,700 | Apr 20 | 4,460 | Jan 27 | 28,700 | Jun 29, 1957 |
| **Lowest daily mean** | 43 | Sep 17 | 25 | Jul 30 | 11 | Oct 7, 1954 |
| **Annual seven-day minimum** | 44 | Sep 12 | 26 | Jul 29 | 12 | Oct 2, 1954 |
| **Maximum peak flow** | | | 4,960 | Dec 15 | 34,000 | Jan 4, 1950 |
| **Maximum peak stage** | | | 14.57 | Dec 15 | 23.53 | Jan 4, 1950 |
| **Annual runoff (cfsm)** | 1.62 | | 0.788 | | 1.12 | |
| **Annual runoff (inches)** | 22.02 | | 10.73 | | 15.23 | |
| **10 percent exceeds** | 2,640 | | 1,900 | | 2,200 | |
| **50 percent exceeds** | 889 | | 294 | | 396 | |
| **90 percent exceeds** | 71 | | 33 | | 59 | |