LOCATION.--Lat 40°41'33", long 92°46'20" referenced to North American Datum of 1927, in NW 1/4 SW 1/4 NW 1/4 sec.13, T.68 N., R.17 W., Appanoose County, IA, Hydrologic Unit 10280201, on right bank 6 ft downstream from bridge on County Highway J45 (543rd Street), 5.0 mi west of Moulton, 0.7 mi downstream from Hickory Creek, 21.7 mi downstream from Rathbun Dam, and 8.4 mi upstream from Iowa-Missouri state line.

DRAINAGE AREA.--740 mi².

PERIOD OF RECORD.--Discharge records from August 1979 to current year.

GAGE.--Water stage recorder. Datum of gage is 800.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark).

REMARKS.--Flow regulated by Rathbun Reservoir (station 06903880), 20.8 mi upstream, since November 21, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1947 reached a stage of about 45 ft, from information by U.S. Army Corps of Engineers, discharge not determined.

A summary of all available data for this streamgage is provided through the USGS National Water Information System web interface (NWISWeb). The following link provides access to current/historical observations, daily data, daily statistics, monthly statistics, annual statistics, peak streamflow, field measurements, field/lab water-quality samples, and the latest water-year summaries. Data can be filtered by parameter and/or dates, and can be output in various tabular and graphical formats.

<http://waterdata.usgs.gov/nwis/inventory/?site_no=06904010>

The USGS WaterWatch Toolkit is available at:

<http://waterwatch.usgs.gov/?id=ww_toolkit>

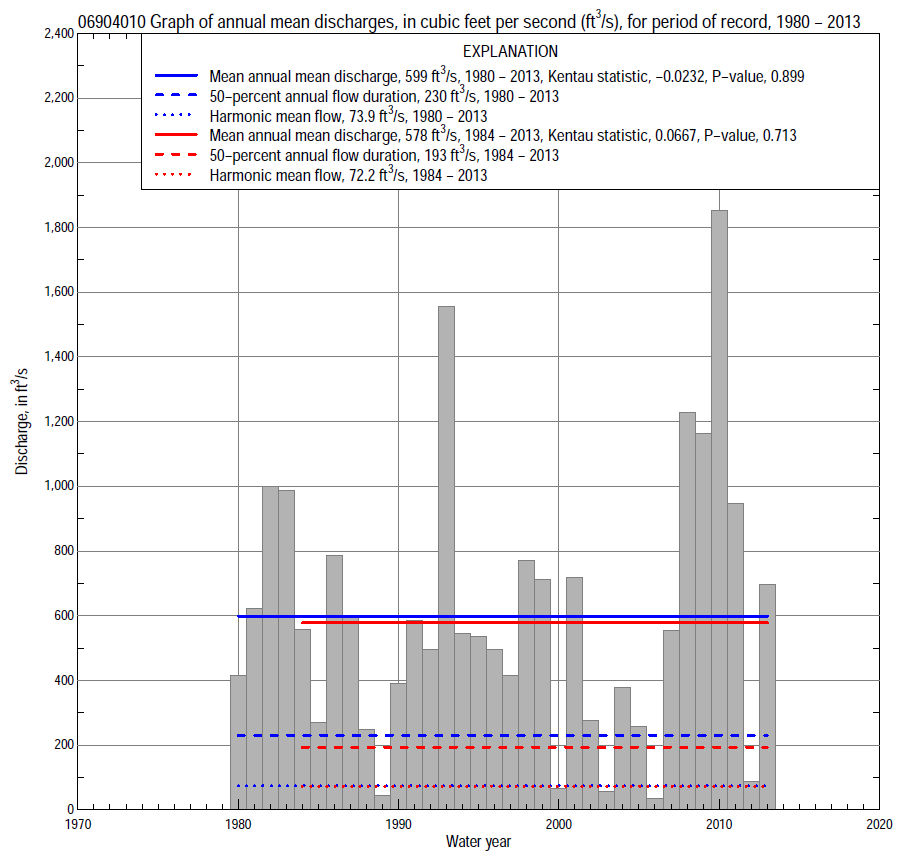
Tools for summarizing streamflow information include the duration hydrograph builder, the cumulative streamflow hydrograph builder, the streamgage statistics retrieval tool, the rating curve builder, the flood tracking chart builder, the National Weather Service Advanced Hydrologic Prediction Service (AHPS) river forecast hydrograph builder, and the raster-hydrograph builder. Entering the above number for this streamgage into these toolkit webpages will provide streamflow information specific to this streamgage.

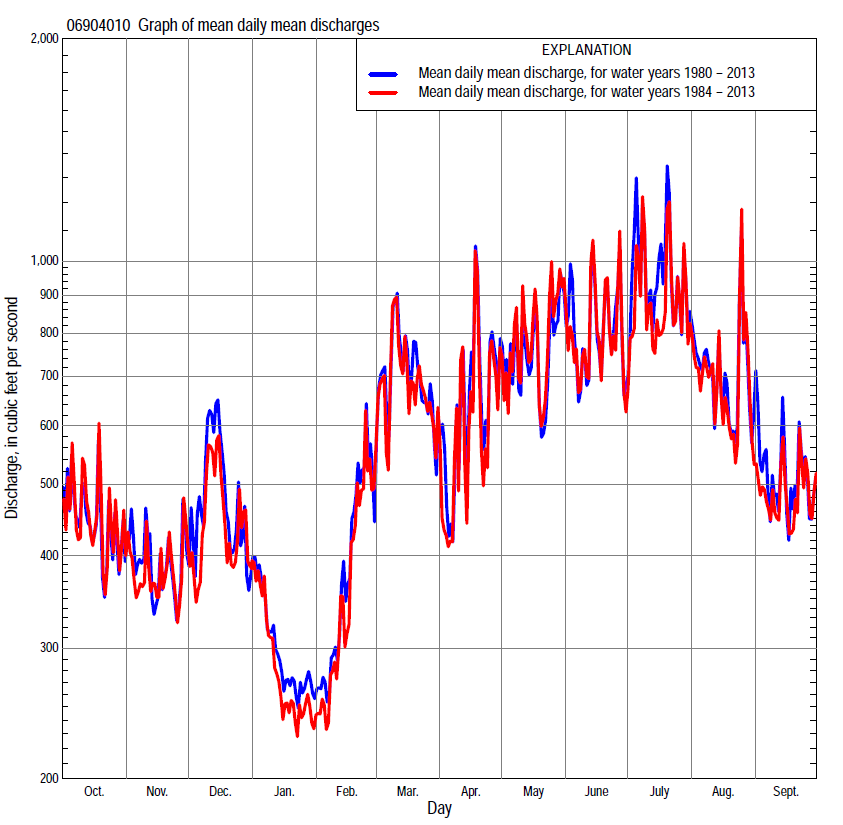
A description of the statistics presented for this streamgage is available in the main body of the report at:

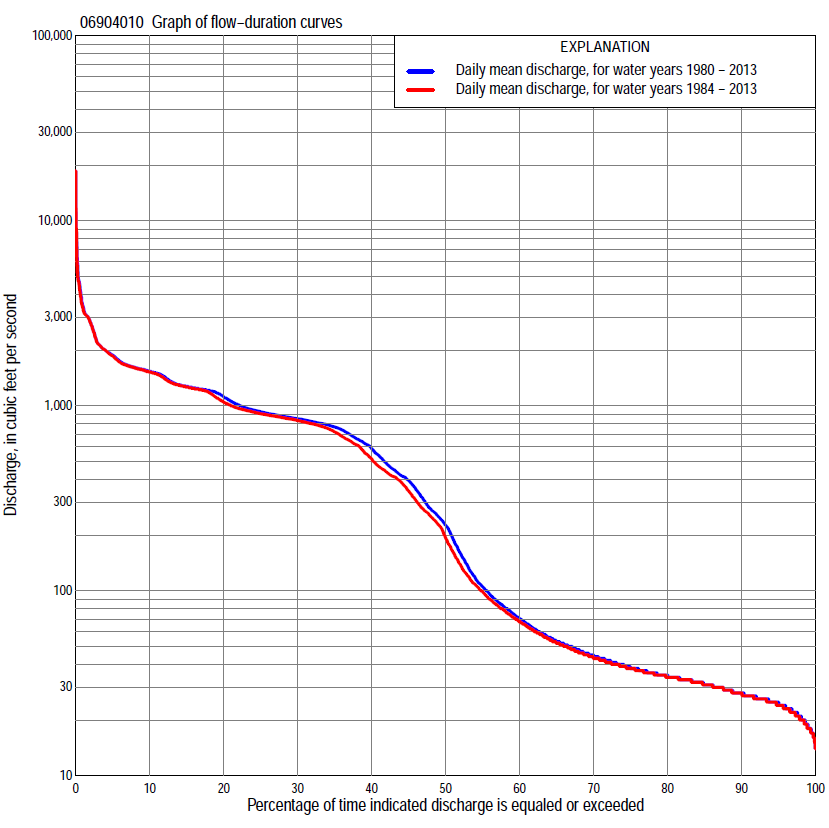
<http://dx.doi.org/10.3133/ofr20151214>

A link to other streamgages included in this report, a map showing the location of the streamgages, information on the programs used to compute the statistical analyses, and references are included in the main body of the report.

**Statistics Based on the Regulated Streamflow Period of Record**

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**Statistics Based on the Regulated Streamflow Period of Record**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 06904010 Monthly and annual flow durations, based on 1980–2013 regulated period of record (34 years) | | | | | | | | | | | | | |  |  |
| Percentage of days discharge equaled or exceeded |  |  |  |  | Discharge (cubic feet per second) | | | | |  |  |  |  | Annual flow durations | |
| Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Annual | Kentau statistic | P-value |
| 99 | 19 | 18 | 17 | 20 | 20 | 22 | 23 | 19 | 16 | 17 | 18 | 22 | 18 | 0.159 | 0.191 |
| 98 | 22 | 20 | 18 | 21 | 21 | 23 | 23 | 22 | 18 | 18 | 19 | 24 | 21 | 0.139 | 0.252 |
| 95 | 24 | 23 | 20 | 25 | 26 | 36 | 35 | 28 | 25 | 23 | 23 | 25 | 25 | 0.087 | 0.475 |
| 90 | 26 | 25 | 24 | 28 | 32 | 45 | 40 | 32 | 31 | 27 | 27 | 27 | 28 | 0.103 | 0.397 |
| 85 | 28 | 26 | 26 | 30 | 35 | 53 | 46 | 37 | 38 | 32 | 32 | 29 | 31 | 0.066 | 0.593 |
| 80 | 29 | 28 | 28 | 33 | 37 | 63 | 53 | 46 | 61 | 40 | 35 | 31 | 35 | 0.021 | 0.870 |
| 75 | 31 | 29 | 34 | 35 | 40 | 78 | 61 | 81 | 187 | 50 | 37 | 33 | 39 | -0.007 | 0.964 |
| 70 | 32 | 32 | 42 | 38 | 46 | 100 | 73 | 147 | 373 | 106 | 41 | 34 | 45 | -0.045 | 0.722 |
| 65 | 33 | 34 | 53 | 41 | 51 | 146 | 89 | 302 | 518 | 350 | 49 | 36 | 54 | -0.027 | 0.836 |
| 60 | 35 | 38 | 64 | 45 | 61 | 236 | 130 | 434 | 620 | 539 | 67 | 39 | 71 | -0.037 | 0.767 |
| 55 | 38 | 41 | 84 | 48 | 73 | 273 | 227 | 576 | 741 | 765 | 141 | 45 | 107 | -0.012 | 0.929 |
| 50 | 45 | 47 | 112 | 52 | 90 | 423 | 278 | 758 | 790 | 834 | 278 | 61 | 230 | -0.027 | 0.836 |
| 45 | 55 | 61 | 221 | 60 | 120 | 607 | 483 | 802 | 815 | 1,100 | 527 | 85 | 398 | -0.041 | 0.744 |
| 40 | 104 | 112 | 410 | 69 | 182 | 720 | 659 | 852 | 845 | 1,220 | 845 | 248 | 596 | -0.048 | 0.700 |
| 35 | 314 | 232 | 500 | 85 | 309 | 850 | 786 | 881 | 862 | 1,240 | 1,040 | 509 | 770 | -0.002 | 1.000 |
| 30 | 640 | 469 | 697 | 150 | 443 | 1,040 | 883 | 906 | 900 | 1,280 | 1,190 | 817 | 851 | 0.027 | 0.836 |
| 25 | 787 | 795 | 900 | 370 | 613 | 1,230 | 937 | 950 | 950 | 1,300 | 1,220 | 853 | 930 | 0.023 | 0.859 |
| 20 | 852 | 882 | 1,050 | 525 | 760 | 1,310 | 1,020 | 987 | 1,000 | 1,350 | 1,260 | 911 | 1,120 | 0.034 | 0.790 |
| 15 | 1,000 | 925 | 1,220 | 796 | 895 | 1,530 | 1,300 | 1,210 | 1,280 | 1,520 | 1,330 | 1,230 | 1,270 | 0.007 | 0.965 |
| 10 | 1,400 | 1,190 | 1,460 | 1,100 | 1,270 | 1,630 | 1,600 | 1,640 | 1,620 | 1,680 | 1,620 | 1,480 | 1,530 | 0.000 | 1.000 |
| 5 | 1,980 | 1,600 | 1,570 | 1,550 | 1,620 | 1,870 | 1,950 | 2,200 | 2,200 | 2,500 | 2,030 | 1,960 | 1,880 | 0.030 | 0.812 |
| 2 | 2,860 | 2,020 | 1,670 | 1,640 | 1,890 | 2,430 | 2,850 | 3,190 | 3,370 | 4,090 | 3,070 | 3,180 | 2,810 | -0.002 | 1.000 |
| 1 | 3,100 | 2,100 | 1,880 | 1,700 | 2,190 | 3,120 | 3,970 | 4,300 | 4,470 | 7,230 | 3,190 | 3,870 | 3,430 | -0.005 | 0.976 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 06904010 Annual exceedance probability of instantaneous peak discharges, based on 1980–2013 regulated period of recorda, in cubic feet per second (ft3/s) | | | | |
| [ND, not determined] | | | | |
| Annual exceed-ance probability | Recur-rence interval (years) | Discharge (ft3/s) | 95-percent lower confi-dence interval (ft3/s) | 95-percent upper confi-dence interval (ft3/s) |
| 0.500 | 2 | ND | ND | ND |
| 0.200 | 5 | ND | ND | ND |
| 0.100 | 10 | ND | ND | ND |
| 0.040 | 25 | ND | ND | ND |
| 0.020 | 50 | ND | ND | ND |
| 0.010 | 100 | ND | ND | ND |
| 0.005 | 200 | ND | ND | ND |
| 0.002 | 500 | ND | ND | ND |
| Kentau statistic | | 0.005 |  |  |
| P-value | | 0.976 |  |  |
| Begin year | | 1980b |  |  |
| End year | | 2013b |  |  |
| Number of peaks | | 34 |  |  |
| aContact the U.S. Army Corps of Engineers, Kansas City District, for the annual exceedance probability of instantaneous peak discharges. | | | | |
| bKendall's tau trend analysis computed using the regulated period of record. | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 06904010 Annual exceedance probability of high discharges, based on 1980–2013 regulated period of recorda (34 years) | | | | | | |
| [ND, not determined] | | | | | | |
| Annual exceedance probability | Recur-rence interval (years) | Maximum average discharge (cubic feet per second) for indicated number of consecutive days | | | | |
| 1 | 3 | 7 | 15 | 30 |
| 0.990 | 1.01 | ND | ND | ND | ND | ND |
| 0.950 | 1.05 | ND | ND | ND | ND | ND |
| 0.900 | 1.11 | ND | ND | ND | ND | ND |
| 0.800 | 1.25 | ND | ND | ND | ND | ND |
| 0.500 | 2 | ND | ND | ND | ND | ND |
| 0.200 | 5 | ND | ND | ND | ND | ND |
| 0.100 | 10 | ND | ND | ND | ND | ND |
| 0.040 | 25 | ND | ND | ND | ND | ND |
| 0.020 | 50 | ND | ND | ND | ND | ND |
| 0.010 | 100 | ND | ND | ND | ND | ND |
| 0.005 | 200 | ND | ND | ND | ND | ND |
| 0.002 | 500 | ND | ND | ND | ND | ND |
| Kentau statistic | | -0.027 | -0.048 | -0.023 | 0.009 | 0.048 |
| P-value | | 0.836 | 0.700 | 0.859 | 0.953 | 0.700 |
| aContact the U.S. Army Corps of Engineers, Kansas City District, for the annual exceedance probability of high discharges. | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 06904010 Annual nonexceedance probability of low discharges, based on April 1980 to March 2013 regulated period of record (33 years) | | | | | | | | |  |
| Annual nonexceed-ance probability | Recur-rence interval (years) | Minimum average discharge (cubic feet per second) for indicated number of consecutive days | | | | | | | | |
| 1 | 3 | 7 | 14 | 30 | 60 | 90 | 120 | 183 |
| 0.01 | 100 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 |
| 0.02 | 50 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12 |
| 0.05 | 20 | 15 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 20 |
| 0.10 | 10 | 16 | 17 | 18 | 19 | 19 | 19 | 22 | 26 | 32 |
| 0.20 | 5 | 18 | 19 | 20 | 20 | 22 | 26 | 35 | 43 | 57 |
| 0.50 | 2 | 25 | 26 | 28 | 30 | 37 | 54 | 93 | 122 | 172 |
| 0.80 | 1.25 | 39 | 41 | 49 | 63 | 89 | 154 | 280 | 373 | 518 |
| 0.90 | 1.11 | 53 | 57 | 71 | 108 | 163 | 304 | 526 | 688 | 921 |
| 0.96 | 1.04 | 77 | 86 | 116 | 221 | 351 | 703 | 1,070 | 1,350 | 1,700 |
| 0.98 | 1.02 | 100 | 116 | 165 | 379 | 617 | 1,280 | 1,740 | 2,120 | 2,530 |
| 0.99 | 1.01 | 129 | 156 | 235 | 650 | 1,070 | 2,300 | 2,740 | 3,210 | 3,610 |
| Kentau statistic | | 0.131 | 0.155 | 0.106 | 0.087 | 0.027 | 0.008 | -0.080 | -0.114 | -0.117 |
| P-value | | 0.291 | 0.209 | 0.394 | 0.486 | 0.840 | 0.963 | 0.525 | 0.361 | 0.345 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 06904010 Annual nonexceedance probability of seasonal low discharges, based on October 1979 to September 2013 regulated period of record (34 years) | | | | | | | | | | |
| Annual nonexceed-ance probability | Recur-rence interval (years) | Minimum average discharge (cubic feet per second) for indicated number of consecutive days | | | | | | | | |
| 1 | 7 | 14 | 30 |  | 1 | 7 | 14 | 30 |
|  |  | January-February-March | | | |  | April-May-June | | | |
| 0.01 | 100 | 14 | 14 | 14 | 14 |  | 8.0 | 8.0 | 8.0 | 8.0 |
| 0.02 | 50 | 18 | 18 | 18 | 18 |  | 9.9 | 9.9 | 9.9 | 9.9 |
| 0.05 | 20 | 21 | 21 | 21 | 21 |  | 14 | 14 | 14 | 18 |
| 0.10 | 10 | 22 | 22 | 22 | 22 |  | 19 | 19 | 23 | 33 |
| 0.20 | 5 | 23 | 26 | 26 | 30 |  | 25 | 30 | 40 | 69 |
| 0.50 | 2 | 34 | 39 | 47 | 64 |  | 50 | 79 | 122 | 248 |
| 0.80 | 1.25 | 73 | 88 | 124 | 189 |  | 120 | 249 | 392 | 761 |
| 0.90 | 1.11 | 135 | 164 | 244 | 385 |  | 205 | 487 | 734 | 1,290 |
| 0.96 | 1.04 | 304 | 370 | 575 | 921 |  | 385 | 1,050 | 1,450 | 2,180 |
| 0.98 | 1.02 | 569 | 686 | 1,080 | 1,730 |  | 600 | 1,790 | 2,270 | 2,980 |
| 0.99 | 1.01 | 1,070 | 1,270 | 2,030 | 3,180 |  | 914 | 2,960 | 3,410 | 3,900 |
| Kentau statistic | | -0.011 | -0.032 | -0.032 | -0.023 |  | 0.143 | 0.094 | 0.112 | 0.159 |
| P-value | | 0.941 | 0.801 | 0.801 | 0.859 |  | 0.241 | 0.441 | 0.358 | 0.192 |
|  |  | July-August-September | | | |  | October-November-December | | | |
| 0.01 | 100 | 9.1 | 9.1 | 9.1 | 9.1 |  | 10 | 10 | 10 | 10 |
| 0.02 | 50 | 10 | 10 | 10 | 10 |  | 11 | 11 | 11 | 11 |
| 0.05 | 20 | 12 | 12 | 12 | 12 |  | 12 | 12 | 12 | 12 |
| 0.10 | 10 | 15 | 15 | 16 | 19 |  | 15 | 15 | 15 | 15 |
| 0.20 | 5 | 20 | 21 | 25 | 35 |  | 19 | 19 | 21 | 25 |
| 0.50 | 2 | 33 | 54 | 75 | 125 |  | 32 | 42 | 55 | 75 |
| 0.80 | 1.25 | 95 | 203 | 307 | 510 |  | 71 | 135 | 194 | 287 |
| 0.90 | 1.11 | 211 | 488 | 735 | 1,130 |  | 122 | 292 | 430 | 639 |
| 0.96 | 1.04 | 615 | 1,430 | 2,070 | 2,750 |  | 239 | 763 | 1,120 | 1,620 |
| 0.98 | 1.02 | 1,390 | 3,120 | 4,300 | 5,010 |  | 388 | 1,540 | 2,220 | 3,100 |
| 0.99 | 1.01 | 3,130 | 6,640 | 8,650 | 8,760 |  | 624 | 3,040 | 4,280 | 5,720 |
| Kentau statistic | | 0.091 | 0.070 | 0.077 | -0.005 |  | 0.091 | 0.005 | 0.002 | -0.030 |
| P-value | | 0.457 | 0.573 | 0.534 | 0.976 |  | 0.458 | 0.976 | 1.000 | 0.813 |

**Statistics Based on the 1984–2013 Regulated Streamflow Period of Record**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 06904010 Monthly and annual flow durations, based on 1984–2013 regulated period of record (30 years) | | | | | | | | | | | | | |  |  |
| Percentage of days discharge equaled or exceeded |  |  |  |  | Discharge (cubic feet per second) | | | | |  |  |  |  | Annual flow durations | |
| Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Annual | Kentau statistic | P-value |
| 99 | 19 | 18 | 17 | 20 | 20 | 21 | 23 | 19 | 16 | 17 | 18 | 22 | 18 | 0.191 | 0.142 |
| 98 | 22 | 19 | 18 | 20 | 20 | 23 | 23 | 22 | 17 | 18 | 19 | 24 | 20 | 0.175 | 0.179 |
| 95 | 24 | 22 | 20 | 25 | 29 | 35 | 34 | 27 | 24 | 23 | 22 | 25 | 24 | 0.117 | 0.371 |
| 90 | 26 | 25 | 25 | 28 | 34 | 44 | 39 | 32 | 30 | 27 | 27 | 27 | 28 | 0.115 | 0.381 |
| 85 | 27 | 26 | 26 | 31 | 35 | 55 | 44 | 39 | 35 | 30 | 33 | 30 | 31 | 0.055 | 0.681 |
| 80 | 29 | 27 | 28 | 33 | 38 | 63 | 51 | 54 | 47 | 38 | 35 | 31 | 34 | 0.032 | 0.816 |
| 75 | 30 | 29 | 34 | 36 | 42 | 79 | 57 | 96 | 98 | 44 | 37 | 33 | 38 | 0.011 | 0.943 |
| 70 | 32 | 31 | 41 | 40 | 47 | 99 | 67 | 198 | 307 | 59 | 40 | 34 | 43 | -0.041 | 0.761 |
| 65 | 33 | 33 | 50 | 42 | 52 | 128 | 78 | 342 | 469 | 185 | 46 | 36 | 52 | -0.011 | 0.943 |
| 60 | 34 | 37 | 60 | 45 | 63 | 222 | 100 | 468 | 604 | 412 | 58 | 38 | 68 | -0.021 | 0.886 |
| 55 | 36 | 40 | 80 | 49 | 76 | 259 | 155 | 647 | 713 | 618 | 117 | 41 | 99 | 0.016 | 0.915 |
| 50 | 41 | 46 | 109 | 54 | 95 | 387 | 245 | 767 | 798 | 790 | 256 | 49 | 193 | 0.011 | 0.943 |
| 45 | 55 | 56 | 173 | 65 | 120 | 520 | 323 | 813 | 826 | 1,040 | 378 | 72 | 345 | 0.025 | 0.858 |
| 40 | 120 | 115 | 350 | 72 | 180 | 693 | 567 | 863 | 852 | 1,220 | 661 | 97 | 514 | 0.021 | 0.887 |
| 35 | 322 | 234 | 456 | 94 | 287 | 831 | 735 | 886 | 880 | 1,240 | 1,010 | 307 | 721 | 0.074 | 0.580 |
| 30 | 640 | 464 | 650 | 163 | 420 | 1,010 | 828 | 912 | 923 | 1,280 | 1,170 | 627 | 831 | 0.126 | 0.335 |
| 25 | 775 | 750 | 799 | 362 | 532 | 1,230 | 909 | 954 | 958 | 1,300 | 1,210 | 823 | 904 | 0.129 | 0.326 |
| 20 | 849 | 869 | 945 | 490 | 732 | 1,290 | 996 | 1,010 | 1,040 | 1,340 | 1,250 | 868 | 1,050 | 0.131 | 0.318 |
| 15 | 884 | 902 | 1,190 | 700 | 847 | 1,530 | 1,220 | 1,360 | 1,310 | 1,500 | 1,290 | 990 | 1,260 | 0.090 | 0.498 |
| 10 | 1,500 | 1,010 | 1,330 | 936 | 1,200 | 1,630 | 1,580 | 1,680 | 1,670 | 1,650 | 1,610 | 1,490 | 1,520 | 0.078 | 0.556 |
| 5 | 2,020 | 1,610 | 1,530 | 1,480 | 1,580 | 1,830 | 1,860 | 2,320 | 2,200 | 2,030 | 2,030 | 1,960 | 1,850 | 0.126 | 0.335 |
| 2 | 3,030 | 2,020 | 1,590 | 1,650 | 1,750 | 2,430 | 2,790 | 3,240 | 3,230 | 3,400 | 3,080 | 3,140 | 2,810 | 0.136 | 0.301 |
| 1 | 3,120 | 2,050 | 1,680 | 1,730 | 1,940 | 3,120 | 3,730 | 4,490 | 4,110 | 5,230 | 3,520 | 3,870 | 3,310 | 0.177 | 0.175 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 06904010 Annual exceedance probability of high discharges, based on 1984–2013 regulated period of recorda (30 years) | | | | | | |
| [ND, not determined] | | | | | | |
| Annual exceedance probability | Recur-rence interval (years) | Maximum average discharge (cubic feet per second) for indicated number of consecutive days | | | | |
| 1 | 3 | 7 | 15 | 30 |
| 0.990 | 1.01 | ND | ND | ND | ND | ND |
| 0.950 | 1.05 | ND | ND | ND | ND | ND |
| 0.900 | 1.11 | ND | ND | ND | ND | ND |
| 0.800 | 1.25 | ND | ND | ND | ND | ND |
| 0.500 | 2 | ND | ND | ND | ND | ND |
| 0.200 | 5 | ND | ND | ND | ND | ND |
| 0.100 | 10 | ND | ND | ND | ND | ND |
| 0.040 | 25 | ND | ND | ND | ND | ND |
| 0.020 | 50 | ND | ND | ND | ND | ND |
| 0.010 | 100 | ND | ND | ND | ND | ND |
| 0.005 | 200 | ND | ND | ND | ND | ND |
| 0.002 | 500 | ND | ND | ND | ND | ND |
| Kentau statistic | | 0.136 | 0.131 | 0.149 | 0.177 | 0.191 |
| P-value | | 0.301 | 0.318 | 0.254 | 0.175 | 0.143 |
| aContact the U.S. Army Corps of Engineers, Kansas City District, for the annual exceedance probability of high discharges. | | | | | | |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 06904010 Annual nonexceedance probability of low discharges, based on April 1983 to March 2013 regulated period of record (30 years) | | | | | | | | |  |
| Annual nonexceed-ance probability | Recur-rence interval (years) | Minimum average discharge (cubic feet per second) for indicated number of consecutive days | | | | | | | | |
| 1 | 3 | 7 | 14 | 30 | 60 | 90 | 120 | 183 |
| 0.01 | 100 | 7.4 | 7.5 | 7.6 | 7.7 | 7.8 | 7.9 | 8.0 | 8.1 | 8.2 |
| 0.02 | 50 | 9.8 | 9.9 | 10 | 10 | 10 | 10 | 11 | 11 | 11 |
| 0.05 | 20 | 13 | 14 | 14 | 14 | 15 | 15 | 15 | 17 | 19 |
| 0.10 | 10 | 17 | 17 | 18 | 18 | 18 | 19 | 21 | 24 | 29 |
| 0.20 | 5 | 18 | 19 | 20 | 21 | 22 | 25 | 32 | 39 | 51 |
| 0.50 | 2 | 24 | 25 | 28 | 29 | 36 | 49 | 81 | 105 | 150 |
| 0.80 | 1.25 | 39 | 41 | 45 | 55 | 78 | 136 | 244 | 317 | 455 |
| 0.90 | 1.11 | 53 | 58 | 63 | 86 | 134 | 265 | 467 | 592 | 823 |
| 0.96 | 1.04 | 78 | 88 | 96 | 155 | 264 | 606 | 985 | 1,190 | 1,560 |
| 0.98 | 1.02 | 103 | 121 | 130 | 240 | 435 | 1,100 | 1,650 | 1,910 | 2,380 |
| 0.99 | 1.01 | 135 | 164 | 176 | 371 | 710 | 1,980 | 2,660 | 2,960 | 3,480 |
| Kentau statistic | | 0.200 | 0.211 | 0.168 | 0.195 | 0.136 | 0.113 | 0.011 | -0.021 | -0.030 |
| P-value | | 0.125 | 0.104 | 0.199 | 0.134 | 0.301 | 0.392 | 0.943 | 0.887 | 0.830 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 06904010 Annual nonexceedance probability of seasonal low discharges, based on October 1983 to September 2013 regulated period of record (30 years) | | | | | | | | | | |
| Annual nonexceed-ance probability | Recur-rence interval (years) | Minimum average discharge (cubic feet per second) for indicated number of consecutive days | | | | | | | | |
| 1 | 7 | 14 | 30 |  | 1 | 7 | 14 | 30 |
|  |  | January-February-March | | | |  | April-May-June | | | |
| 0.01 | 100 | 15 | 15 | 15 | 15 |  | 8.7 | 8.7 | 8.7 | 8.7 |
| 0.02 | 50 | 16 | 16 | 16 | 16 |  | 11 | 11 | 11 | 11 |
| 0.05 | 20 | 20 | 20 | 20 | 20 |  | 14 | 14 | 14 | 17 |
| 0.10 | 10 | 21 | 24 | 23 | 23 |  | 19 | 20 | 23 | 33 |
| 0.20 | 5 | 23 | 26 | 27 | 31 |  | 25 | 30 | 40 | 69 |
| 0.50 | 2 | 35 | 39 | 47 | 64 |  | 49 | 76 | 120 | 251 |
| 0.80 | 1.25 | 79 | 88 | 116 | 180 |  | 119 | 234 | 379 | 777 |
| 0.90 | 1.11 | 148 | 166 | 222 | 352 |  | 206 | 457 | 706 | 1,320 |
| 0.96 | 1.04 | 342 | 386 | 510 | 797 |  | 397 | 994 | 1,390 | 2,210 |
| 0.98 | 1.02 | 648 | 738 | 948 | 1,430 |  | 631 | 1,700 | 2,170 | 3,020 |
| 0.99 | 1.01 | 1,230 | 1,410 | 1,750 | 2,530 |  | 983 | 2,830 | 3,250 | 3,940 |
| Kentau statistic | | -0.064 | -0.064 | -0.080 | -0.085 |  | 0.182 | 0.117 | 0.145 | 0.191 |
| P-value | | 0.630 | 0.630 | 0.544 | 0.521 |  | 0.164 | 0.372 | 0.269 | 0.143 |
|  |  | July-August-September | | | |  | October-November-December | | | |
| 0.01 | 100 | 11 | 11 | 11 | 11 |  | 10 | 10 | 10 | 10 |
| 0.02 | 50 | 12 | 12 | 12 | 12 |  | 11 | 11 | 11 | 11 |
| 0.05 | 20 | 13 | 13 | 13 | 13 |  | 12 | 12 | 12 | 12 |
| 0.10 | 10 | 16 | 16 | 16 | 19 |  | 15 | 15 | 15 | 15 |
| 0.20 | 5 | 19 | 20 | 23 | 32 |  | 18 | 19 | 21 | 24 |
| 0.50 | 2 | 31 | 44 | 60 | 104 |  | 32 | 41 | 54 | 70 |
| 0.80 | 1.25 | 88 | 158 | 232 | 416 |  | 73 | 129 | 189 | 269 |
| 0.90 | 1.11 | 203 | 384 | 566 | 938 |  | 128 | 279 | 416 | 604 |
| 0.96 | 1.04 | 631 | 1,180 | 1,690 | 2,390 |  | 257 | 733 | 1,070 | 1,560 |
| 0.98 | 1.02 | 1,510 | 2,700 | 3,710 | 4,550 |  | 427 | 1,480 | 2,110 | 3,020 |
| 0.99 | 1.01 | 3,610 | 6,080 | 7,980 | 8,330 |  | 699 | 2,950 | 4,030 | 5,660 |
| Kentau statistic | | 0.211 | 0.186 | 0.205 | 0.090 |  | 0.122 | 0.039 | 0.030 | 0.002 |
| P-value | | 0.103 | 0.154 | 0.116 | 0.498 |  | 0.352 | 0.775 | 0.830 | 1.000 |