Water-Data Report 2012

# 14165000 MOHAWK RIVER NEAR SPRINGFIELD, OR

Willamette Basin
Mckenzie Subbasin

LOCATION.--Lat 44°05′35″, long 122°57′22″ referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.17, T.17 S., R.2 W., Lane County, OR, Hydrologic Unit 17090004, on left bank, 50 ft downstream from bridge, 1.3 mi northeast of Springfield and at mile 1.59.

DRAINAGE AREA.--177 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1935 to September 1952, October 1963 to September 1997, October 1998 to current year. Prior to October 1935, monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1248: 1939. WSP 1738: Drainage area. WDR OR-86-2: 1985(m).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 442.47 ft above NGVD of 1929. Oct. 1, 1935 to Sept. 30, 1952, nonrecording gage at same site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Many diversions for irrigation upstream from station. Continuous water-quality records for periods October 1963 to September 1969 and April 1983 to September 1984 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--65 years (water years 1936-52, 1964-97, 1999-2012), 530 $ft^3/s$, 40.65 in/yr, 383,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,500 $ft^3/s$ Feb. 7, 1996, gage height, 23.11 ft; minimum discharge, 8.2 $ft^3/s$ Sept. 9, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 22.9 ft, from floodmark, probably affected by backwater from McKenzie River, discharge, 9,200 $ft^3/s$.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 $ft^3/s$ and (or) maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|
| Dec 30 | 1700 | 5,250 | 14.40 |
| Jan 19 | 1930 | *8,490 | *17.81 |
| Jan 25 | 0130 | 4,140 | 13.17 |
| Mar 16 | 1330 | 4,490 | 12.63 |
| Mar 22 | 0600 | 4,930 | 13.31 |
| Mar 31 | 0330 | 5,470 | 14.09 |

Minimum discharge, 35 $ft^3/s$, Oct. 1, 2, gage height, 0.92 ft.



Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 14165000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/14165000.2012.pdf

**14165000 MOHAWK RIVER NEAR SPRINGFIELD, OR—Continued**

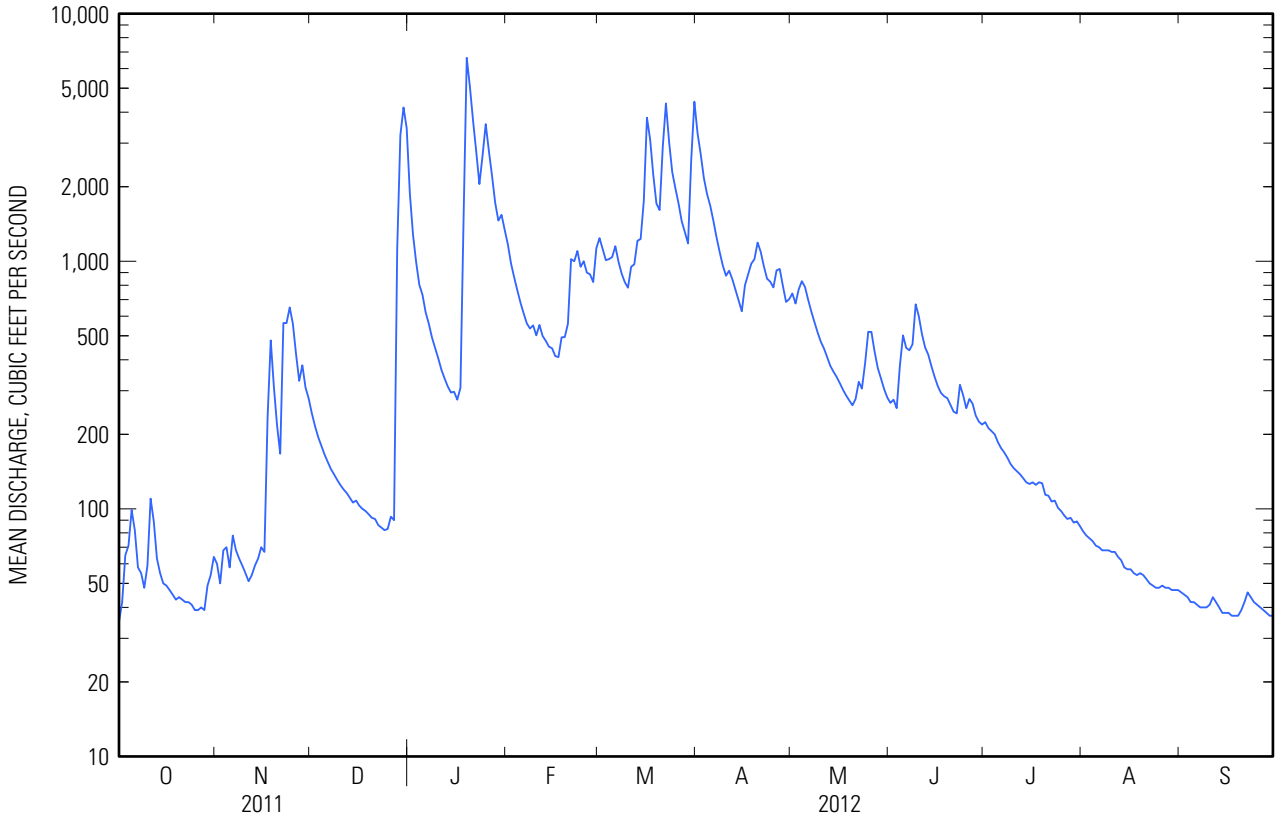
**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**
**DAILY MEAN VALUES**
[e, estimated; &, affected value]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 35 | 60 | 243 | 1,880 | 1,170 | 1,240 | 3,290 | 741 | 268 | 224 | 81 | 46 |
| 2 | 42 | 50 | 216 | 1,280 | 980 | 1,120 | 2,710 | 675 | 276 | 212 | 78 | 45 |
| 3 | 65 | 68 | 195 | 990 | 861 | 1,010 | 2,170 | 770 | 255 | 206 | 76 | 44 |
| 4 | 71 | 70 | 180 | 803 | 763 | 1,020 | e1,870 | 831 | 378 | 200 | 74 | 42 |
| 5 | 99 | 58 | 166 | 732 | 680 | 1,040 | e1,680 | 787 | 502 | 186 | 71 | 42 |
| 6 | 82 | 78 | 155 | 622 | 616 | 1,150 | e1,460 | 698 | 447 | 176 | 70 | 41 |
| 7 | 58 | 68 | 145 | 559 | 561 | 996 | e1,250 | 626 | 437 | 169 | 68 | 40 |
| 8 | 55 | 63 | 138 | 492 | 535 | 891 | e1,090 | 567 | 462 | 161 | 68 | 40 |
| 9 | 48 | 59 | 131 | 446 | 551 | 823 | e960 | 515 | 670 | 152 | 68 | 40 |
| 10 | 59 | 55 | 125 | 405 | 502 | 782 | 874 | 473 | 599 | 146 | 67 | 41 |
| 11 | 110 | 51 | 120 | 364 | 553 | 950 | 916 | 444 | 507 | 142 | 67 | 44 |
| 12 | 89 | 54 | 116 | 336 | 499 | 972 | 846 | 410 | 448 | 138 | 64 | 42 |
| 13 | 63 | 59 | 111 | 312 | 477 | 1,210 | 767 | 378 | 419 | 133 | 62 | 40 |
| 14 | 55 | 63 | 106 | 295 | 452 | 1,230 | 694 | 358 | 376 | 128 | 58 | 38 |
| 15 | 50 | 70 | 108 | 297 | 445 | 1,750 | 628 | 341 | 341 | 126 | 57 | 38 |
| 16 | 49 | 67 | 103 | 276 | 414 | 3,800 | 800 | 322 | 313 | 128 | 57 | 38 |
| 17 | 47 | 234 | 100 | 308 | 410 | 3,110 | 885 | 303 | 294 | 125 | 55 | 37 |
| 18 | 45 | 479 | 98 | 1,500 | 493 | 2,230 | 978 | 287 | 285 | 128 | 54 | 37 |
| 19 | 43 | 310 | 95 | 6,630 | 494 | 1,710 | e1,020 | 274 | 280 | 127 | 55 | 37 |
| 20 | 44 | 217 | 92 | 5,060 | 559 | 1,610 | e1,190 | 262 | 263 | 114 | 54 | 39 |
| 21 | 43 | 167 | 91 | 3,690 | 1,020 | 2,890 | e1,090 | 278 | 247 | 113 | 52 | 42 |
| 22 | 42 | 563 | 86 | 2,770 | e1,000 | 4,340 | 952 | 326 | 243 | 107 | 50 | 46 |
| 23 | 42 | 563 | 84 | 2,050 | e1,100 | 3,040 | 850 | 306 | 317 | 108 | 49 | 44 |
| 24 | 41 | 651 | 82 | e2,670 | e950 | 2,290 | 827 | 387 | 288 | 101 | 48 | 42 |
| 25 | 39 | 559 | 83 | 3,580 | e1,000 | 1,970 | 784 | 519 | 255 | 98 | 48 | 41 |
| 26 | 39 | 422 | 93 | 2,790 | e900 | 1,710 | 919 | 518 | 278 | 94 | 49 | 40 |
| 27 | 40 | 329 | 90 | 2,210 | e885 | 1,450 | 931 | 432 | 266 | 91 | 48 | 39 |
| 28 | 39 | 380 | 1,120 | 1,720 | 824 | 1,310 | 795 | 371 | 238 | 92 | 48 | 38 |
| 29 | 49 | 309 | 3,230 | 1,460 | 1,130 | 1,180 | 685 | 337 | 225 | 88 | 47 | 37 |
| 30 | 54 | 279 | 4,180 | 1,540 | --- | 2,560 | 703 | 305 | 219 | 89 | 47 | 37 |
| 31 | 64 | --- | 3,450 | &1,340 | --- | 4,410 | --- | 282 | --- | 85 | 47 | --- |
| Total | 1,701 | 6,455 | 15,332 | 49,407 | 20,824 | 55,794 | 34,614 | 14,123 | 10,396 | 4,187 | 1,837 | 1,217 |
| Mean | 54.9 | 215 | 495 | 1,594 | 718 | 1,800 | 1,154 | 456 | 347 | 135 | 59.3 | 40.6 |
| Max | 110 | 651 | 4,180 | 6,630 | 1,170 | 4,410 | 3,290 | 831 | 670 | 224 | 81 | 46 |
| Min | 35 | 50 | 82 | 276 | 410 | 782 | 628 | 262 | 219 | 85 | 47 | 37 |
| Ac-ft | 3,370 | 12,800 | 30,410 | 98,000 | 41,300 | 110,700 | 68,660 | 28,010 | 20,620 | 8,300 | 3,640 | 2,410 |
| Cfsm | 0.31 | 1.22 | 2.79 | 9.00 | 4.06 | 10.2 | 6.52 | 2.57 | 1.96 | 0.76 | 0.33 | 0.23 |
| In. | 0.36 | 1.36 | 3.22 | 10.38 | 4.38 | 11.73 | 7.27 | 2.97 | 2.18 | 0.88 | 0.39 | 0.26 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2012, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 104 | 577 | 1,123 | 1,259 | 1,067 | 887 | 620 | 372 | 215 | 78.0 | 39.1 | 39.6 |
| Max | 719 | 1,653 | 3,235 | 3,034 | 2,480 | 1,975 | 1,545 | 762 | 848 | 190 | 91.4 | 112 |
| (WY) | (1951) | (1951) | (1997) | (2006) | (1996) | (1972) | (1937) | (1996) | (2010) | (1983) | (1968) | (1968) |
| Min | 19.2 | 26.5 | 52.6 | 84.0 | 126 | 281 | 242 | 118 | 54.3 | 34.3 | 14.7 | 18.9 |
| (WY) | (1988) | (1937) | (1977) | (1977) | (1977) | (1965) | (1942) | (1966) | (1966) | (1940) | (1966) | (1967) |

**14165000 MOHAWK RIVER NEAR SPRINGFIELD, OR—Continued**

**SUMMARY STATISTICS**

| | Calendar Year 2011 | | Water Year 2012 | | Water Years 1936 - 2012 | |
|---|---|---|---|---|---|---|
| **Annual total** | 192,480 | | 215,887 | | | |
| **Annual mean** | 527 | | 590 | | 530 | |
| **Highest annual mean** | | | | | 883 | 1997 |
| **Lowest annual mean** | | | | | 164 | 1977 |
| **Highest daily mean** | 4,410 | Jan 17 | 6,630 | Jan 19 | 11,500 | Dec 22, 1964 |
| **Lowest daily mean** | 32 | Sep 23 | 35 | Oct 1 | 9.6 | Aug 18, 1966 |
| **Annual seven-day minimum** | 34 | Sep 19 | 38 | Sep 14 | 11 | Aug 15, 1966 |
| **Annual runoff (ac-ft)** | 381,800 | | 428,200 | | 383,600 | |
| **Annual runoff (cfsm)** | 2.98 | | 3.33 | | 2.99 | |
| **Annual runoff (inches)** | 40.45 | | 45.37 | | 40.65 | |
| **10 percent exceeds** | 1,460 | | 1,460 | | 1,350 | |
| **50 percent exceeds** | 260 | | 277 | | 255 | |
| **90 percent exceeds** | 42 | | 44 | | 31 | |