

Water-Data Report 2010

14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OR

Willamette Basin
Coast Fork Willamette Subbasin

LOCATION.--Lat 43°58'50", long 122°57'55" referenced to North American Datum of 1927, in NW ¼ sec.29, T.18 S., R.2 W., Lane County, OR, Hydrologic Unit 17090002, on right bank, at downstream side of bridge on State Highway 58, 2.5 mi southeast of Goshen and at mile 6.4.

DRAINAGE AREA.--642 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1905 to February 1912, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1318.

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1248: 1905-12. WSP 1935: 1956.

GAGE.--Water-stage recorder. Datum of gage is 473.80 ft above NGVD of 1929. Aug. 23, 1905 to Feb. 7, 1912, nonrecording gage at site 600 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated since 1942 by Cottage Grove Lake (active capacity, 32,930 acre-ft) and since 1949 by Dorena Lake (active capacity, 77,580 acre-ft). Several small diversions for logponds and irrigation upstream from station. Continuous water-quality records for period October 1961 to September 1975 have been collected at this location. Periodic suspended sediment data are available for period October 1991 to September 1993.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--66 years (water years 1906-11, 1951-2010), 1,558 ft³/s, 1,129,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,500 ft³/s Nov. 22, 1909, gage height, 19.5 ft, site and datum then in use, from rating curve extended above 15,000 ft³/s; minimum discharge, 36 ft³/s Sept. 29, 30, Oct. 11, 12, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,200 ft³/s June 4, gage height, 11.22 ft; minimum discharge, 138 ft³/s Aug. 17.

14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OR—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|--------|--------|--------|---------|--------|--------|---------|---------|---------|--------|--------|--------|
| 1 | 770 | 1,180 | 1,700 | 5,840 | 1,080 | 783 | 6,700 | 3,840 | 1,700 | 414 | 170 | 551 |
| 2 | 809 | 1,270 | 1,140 | 4,840 | 1,260 | 732 | 6,640 | 3,450 | 3,000 | 314 | 165 | 547 |
| 3 | 872 | 1,060 | 834 | 3,670 | 1,430 | 725 | 7,380 | 3,040 | 7,760 | 312 | 158 | 540 |
| 4 | 883 | 849 | 685 | 3,380 | 1,390 | 781 | 6,400 | 2,500 | 10,300 | 320 | 155 | 535 |
| 5 | 872 | 730 | 623 | 4,200 | 1,360 | 742 | 5,180 | 2,230 | 9,190 | 312 | 155 | 534 |
| 6 | 863 | 615 | 537 | 4,800 | 1,280 | 664 | 4,100 | 1,540 | 6,030 | 306 | 154 | 532 |
| 7 | 879 | 954 | 495 | 4,800 | 1,210 | 620 | 3,020 | 1,170 | 3,650 | 300 | 154 | 539 |
| 8 | 880 | 1,100 | 425 | 4,300 | 1,060 | 670 | 2,610 | 1,090 | 2,490 | 291 | 156 | 550 |
| 9 | 870 | 1,080 | 393 | 3,900 | 764 | 645 | 2,350 | 1,030 | 2,370 | 283 | 155 | 552 |
| 10 | 873 | 865 | 386 | 3,080 | 724 | 656 | 1,760 | 1,030 | 2,450 | 267 | 156 | 554 |
| 11 | 879 | 764 | 342 | 2,350 | 715 | 647 | 2,400 | 1,070 | 3,370 | 259 | 153 | 543 |
| 12 | 872 | 837 | 343 | 1,900 | 942 | 1,300 | 2,200 | 1,020 | 2,950 | 251 | 149 | 536 |
| 13 | 880 | 841 | 340 | 1,920 | 946 | 1,980 | 2,050 | 983 | 2,230 | 239 | 150 | 536 |
| 14 | 925 | 788 | 297 | 2,030 | 927 | 1,410 | 1,860 | 950 | 1,930 | 228 | 149 | 532 |
| 15 | 988 | 732 | 527 | 1,770 | 979 | 1,140 | 1,790 | 920 | 1,650 | 221 | 148 | 530 |
| 16 | 939 | 684 | 2,100 | 2,160 | 1,070 | 976 | 1,250 | 846 | 1,450 | 215 | 147 | 528 |
| 17 | 1,150 | 1,030 | 2,380 | 2,780 | 964 | 851 | 999 | 789 | 1,310 | 206 | 144 | 538 |
| 18 | 1,130 | 2,180 | 2,260 | 2,580 | 888 | 751 | 893 | 864 | 1,130 | 199 | 144 | e700 |
| 19 | 1,130 | 1,860 | 2,050 | 2,220 | 820 | 685 | 965 | 1,040 | 923 | 193 | 144 | e950 |
| 20 | 1,110 | 1,710 | 1,600 | 1,920 | 765 | 631 | 2,100 | 1,500 | 896 | 190 | 145 | e1,100 |
| 21 | 1,100 | 1,930 | 1,650 | 1,570 | 705 | 604 | 2,400 | 1,770 | 765 | 186 | 146 | e950 |
| 22 | 1,110 | 2,110 | 2,100 | 1,180 | 655 | 631 | 2,270 | 1,950 | 650 | 184 | 145 | 995 |
| 23 | 1,120 | 2,560 | 2,190 | 964 | 583 | 612 | 2,020 | 2,460 | 585 | 181 | 145 | 1,020 |
| 24 | 1,070 | 2,280 | 1,810 | 808 | 755 | 584 | 1,630 | 2,340 | 551 | 179 | 398 | 1,010 |
| 25 | 926 | 1,830 | 1,340 | 1,250 | 932 | 643 | 1,420 | 1,900 | 489 | 177 | 423 | 999 |
| 26 | 821 | 1,250 | 1,270 | 1,210 | 1,020 | 1,460 | 1,240 | 2,300 | 432 | 175 | 424 | 997 |
| 27 | 913 | 2,720 | 1,190 | 1,130 | 1,060 | 2,780 | 3,620 | 2,910 | 412 | 173 | 451 | 1,060 |
| 28 | 896 | 3,030 | 1,000 | 1,000 | 884 | 2,600 | 5,480 | 2,900 | 441 | 173 | 526 | 1,050 |
| 29 | 793 | 2,630 | 919 | 903 | --- | 4,290 | 5,170 | 2,180 | 450 | 171 | 531 | 1,040 |
| 30 | 964 | 2,300 | 1,290 | 1,040 | --- | 6,990 | 4,930 | 1,520 | 451 | 170 | 548 | 1,030 |
| 31 | 1,060 | --- | 2,190 | 1,080 | --- | 6,830 | --- | 1,540 | --- | 170 | 553 | --- |
| Total | 29,347 | 43,769 | 36,406 | 76,575 | 27,168 | 45,413 | 92,827 | 54,672 | 72,005 | 7,259 | 7,341 | 22,078 |
| Mean | 947 | 1,459 | 1,174 | 2,470 | 970 | 1,465 | 3,094 | 1,764 | 2,400 | 234 | 237 | 736 |
| Max | 1,150 | 3,030 | 2,380 | 5,840 | 1,430 | 6,990 | 7,380 | 3,840 | 10,300 | 414 | 553 | 1,100 |
| Min | 770 | 615 | 297 | 808 | 583 | 584 | 893 | 789 | 412 | 170 | 144 | 528 |
| Ac-ft | 58,210 | 86,820 | 72,210 | 151,900 | 53,890 | 90,080 | 184,100 | 108,400 | 142,800 | 14,400 | 14,560 | 43,790 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2010, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 797 | 1,867 | 3,265 | 3,577 | 2,663 | 2,167 | 1,582 | 1,066 | 613 | 245 | 340 | 539 |
| Max | 3,119 | 6,305 | 9,820 | 8,219 | 6,891 | 5,716 | 4,020 | 3,285 | 2,424 | 588 | 1,115 | 1,057 |
| (WY) | (1951) | (1974) | (1965) | (2006) | (1961) | (1957) | (1963) | (1963) | (1993) | (1957) | (1955) | (1978) |
| Min | 147 | 121 | 196 | 200 | 203 | 385 | 460 | 247 | 129 | 90.3 | 49.7 | 63.5 |
| (WY) | (1911) | (1953) | (1977) | (1977) | (1977) | (1992) | (1987) | (1987) | (1987) | (1910) | (1910) | (1910) |

14157500 COAST FORK WILLAMETTE RIVER NEAR GOSHEN, OR—Continued

SUMMARY STATISTICS

| | Calendar Year 2009 | | Water Year 2010 | | Water Years 1906 - 2010 | |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| Annual total | 404,321 | | 514,860 | | | |
| Annual mean | 1,108 | | 1,411 | | 1,558 | |
| Highest annual mean | | | | | 2,701 | 1956 |
| Lowest annual mean | | | | | 512 | 1977 |
| Highest daily mean | 9,040 | Jan 1 | 10,300 | Jun 4 | 36,500 | Jan 4, 1907 |
| Lowest daily mean | 152 | Jul 28 | 144 | Aug 17 | 36 | Sep 29, 1908 |
| Annual seven-day minimum | 152 | Jul 28 | 145 | Aug 17 | 42 | Aug 28, 1911 |
| Annual runoff (ac-ft) | 802,000 | | 1,021,000 | | 1,129,000 | |
| 10 percent exceeds | 2,470 | | 2,930 | | 4,080 | |
| 50 percent exceeds | 729 | | 964 | | 744 | |
| 90 percent exceeds | 158 | | 197 | | 173 | |

