



Water-Data Report 2008

12464800 COAL CREEK AT MOHLER, WA

Upper Columbia Basin
Upper Crab Subbasin

LOCATION.--Lat 47°24'25", long 118°19'04" referenced to North American Datum of 1927, in SE ¼ SE ¼ sec.7, T.22 N., R.36 E., Lincoln County, WA, Hydrologic Unit 17020013, on left bank 25 ft upstream from bridge on county road, 0.3 mi east of Mohler, and 15 mi upstream from mouth.

DRAINAGE AREA.--64.7 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1963 to September 1974, October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,000 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No known regulation. Some diversion for irrigation above station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--17 years (water years 1964-74, 2003-08), 3.88 ft³/s, 2,810 acre-ft yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft³/s, Feb. 11, 2007, gage height, 3.86 ft; no flow for long periods most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 3, 1963, reached a stage of 4.42 ft, discharge, 1,060 ft³/s, computed by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 161 ft³/s, Feb. 29, gage height, 3.34 ft; minimum discharge, 0.23 ft³/s, part of each day Oct. 5, Aug. 9-11 and 14-18.

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12464800 COAL CREEK AT MOHLER, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|-------|-------|-------|-------|--------|-------|-------|------|-------|-------|------|-------|
| 1 | 0.31 | 0.39 | 0.41 | 0.88 | 0.94 | 111 | 7.5 | 4.2 | 1.1 | 0.51 | 0.36 | 0.38 |
| 2 | 0.32 | 0.38 | 0.45 | 0.82 | 0.92 | 35 | 7.4 | 4.1 | 1.1 | 0.50 | 0.38 | 0.38 |
| 3 | 0.33 | 0.38 | 0.62 | 0.89 | 0.94 | 21 | 6.8 | 3.8 | 1.1 | 0.50 | 0.36 | 0.38 |
| 4 | 0.29 | 0.38 | 0.55 | 15 | 0.93 | 28 | 6.5 | 3.5 | 1.1 | 0.54 | 0.34 | 0.39 |
| 5 | 0.26 | 0.38 | 0.49 | 12 | 1.0 | 24 | 6.5 | 3.5 | 1.1 | 0.57 | 0.32 | 0.39 |
| 6 | 0.28 | 0.37 | 0.50 | 2.1 | 1.0 | 27 | 6.4 | 3.5 | 1.1 | 0.57 | 0.30 | 0.43 |
| 7 | 0.32 | 0.35 | 0.53 | 1.2 | 1.0 | 26 | 6.3 | 3.4 | 1.1 | 0.61 | 0.29 | 0.41 |
| 8 | 0.32 | 0.34 | 0.51 | 1.1 | 0.99 | 27 | 6.1 | 3.2 | 0.99 | 0.64 | 0.30 | 0.38 |
| 9 | 0.35 | 0.37 | 0.50 | 1.1 | 1.1 | 30 | 6.0 | 3.0 | 0.98 | 0.66 | 0.29 | 0.40 |
| 10 | 0.30 | 0.36 | 0.50 | 1.0 | 1.3 | 31 | 5.8 | 2.9 | 1.0 | 0.60 | 0.26 | 0.43 |
| 11 | 0.33 | 0.34 | 0.45 | 1.0 | 1.2 | 33 | 5.5 | 2.8 | 0.99 | 0.60 | 0.26 | 0.46 |
| 12 | 0.35 | 0.37 | 0.52 | 1.0 | 1.3 | 43 | 5.5 | 2.7 | 0.98 | 0.61 | 0.26 | 0.46 |
| 13 | 0.34 | 0.39 | 0.54 | 1.0 | 1.3 | 24 | 5.5 | 2.6 | 0.98 | 0.59 | 0.26 | 0.45 |
| 14 | 0.34 | 0.38 | 0.53 | 1.0 | 1.3 | 19 | 5.6 | 2.6 | 0.87 | 0.54 | 0.26 | 0.44 |
| 15 | 0.34 | 0.39 | 0.54 | 1.0 | 1.3 | 16 | 5.5 | 2.5 | 0.83 | 0.53 | 0.24 | 0.44 |
| 16 | 0.34 | 0.40 | 0.54 | 1.1 | 1.3 | 14 | 5.3 | 2.4 | 0.78 | 0.53 | 0.25 | 0.46 |
| 17 | 0.34 | 0.43 | 0.58 | 1.1 | 1.3 | 11 | 5.2 | 2.3 | 0.75 | 0.51 | 0.26 | 0.41 |
| 18 | 0.35 | 0.43 | 0.64 | 1.1 | 1.2 | 9.9 | 5.1 | 2.1 | 0.72 | 0.52 | 0.24 | 0.38 |
| 19 | 0.40 | 0.44 | 0.65 | 1.2 | 1.3 | 9.6 | 5.0 | 2.1 | 0.65 | 0.52 | 0.28 | 0.38 |
| 20 | 0.35 | 0.43 | 0.68 | e1.1 | 1.3 | 8.8 | 5.0 | 2.1 | 0.65 | 0.49 | 0.35 | 0.38 |
| 21 | 0.35 | 0.43 | 0.66 | e0.90 | 1.3 | 8.2 | 5.0 | 2.1 | 0.67 | 0.48 | 0.34 | 0.41 |
| 22 | 0.37 | 0.43 | 0.66 | e0.80 | 1.3 | 7.4 | 5.1 | 2.0 | 0.67 | 0.52 | 0.32 | 0.42 |
| 23 | 0.34 | 0.43 | 0.75 | e0.80 | 1.3 | 7.2 | 5.2 | 2.0 | 0.62 | 0.51 | 0.32 | 0.38 |
| 24 | 0.35 | 0.46 | 0.80 | e0.86 | 1.5 | 7.1 | 5.1 | 1.8 | 0.62 | 0.48 | 0.34 | 0.39 |
| 25 | 0.34 | 0.43 | 0.82 | e0.94 | 1.8 | 6.6 | 4.9 | 1.7 | 0.62 | 0.47 | 0.35 | 0.38 |
| 26 | 0.36 | 0.43 | 0.86 | e1.0 | 2.2 | 6.5 | 4.7 | 1.6 | 0.57 | 0.46 | 0.37 | 0.38 |
| 27 | 0.37 | 0.45 | 0.83 | 1.1 | 2.6 | 6.5 | 4.6 | 1.5 | 0.54 | 0.39 | 0.36 | 0.38 |
| 28 | 0.39 | 0.43 | 0.87 | 0.99 | 39 | 6.3 | 4.5 | 1.5 | 0.55 | 0.42 | 0.36 | 0.38 |
| 29 | 0.39 | 0.44 | 0.92 | 0.98 | 71 | 6.4 | 4.4 | 1.4 | 0.53 | 0.43 | 0.37 | 0.35 |
| 30 | 0.41 | 0.40 | 0.87 | 1.0 | --- | 7.3 | 4.3 | 1.3 | 0.49 | 0.40 | 0.36 | 0.37 |
| 31 | 0.39 | --- | 0.83 | 0.99 | --- | 7.9 | --- | 1.2 | --- | 0.38 | 0.36 | --- |
| Total | 10.62 | 12.03 | 19.60 | 57.05 | 144.92 | 625.7 | 166.3 | 77.4 | 24.75 | 16.08 | 9.71 | 12.07 |
| Mean | 0.34 | 0.40 | 0.63 | 1.84 | 5.00 | 20.2 | 5.54 | 2.50 | 0.82 | 0.52 | 0.31 | 0.40 |
| Max | 0.41 | 0.46 | 0.92 | 15 | 71 | 111 | 7.5 | 4.2 | 1.1 | 0.66 | 0.38 | 0.46 |
| Min | 0.26 | 0.34 | 0.41 | 0.80 | 0.92 | 6.3 | 4.3 | 1.2 | 0.49 | 0.38 | 0.24 | 0.35 |
| Ac-ft | 21 | 24 | 39 | 113 | 287 | 1,240 | 330 | 154 | 49 | 32 | 19 | 24 |
| Cfsm | 0.01 | 0.01 | 0.01 | 0.03 | 0.08 | 0.31 | 0.09 | 0.04 | 0.01 | 0.01 | 0.00 | 0.01 |
| In. | 0.01 | 0.01 | 0.01 | 0.03 | 0.08 | 0.36 | 0.10 | 0.04 | 0.01 | 0.01 | 0.01 | 0.01 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2008, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 0.16 | 0.31 | 1.93 | 10.6 | 12.2 | 14.1 | 4.82 | 1.75 | 0.64 | 0.22 | 0.08 | 0.11 |
| Max | 0.35 | 0.72 | 16.1 | 46.3 | 42.0 | 102 | 14.8 | 3.71 | 1.64 | 0.59 | 0.32 | 0.40 |
| (WY) | (2007) | (2006) | (1974) | (1971) | (1970) | (1969) | (1969) | (1969) | (2006) | (2006) | (2004) | (2008) |
| Min | 0.00 | 0.03 | 0.19 | 0.00 | 1.16 | 2.06 | 1.15 | 0.42 | 0.08 | 0.00 | 0.00 | 0.00 |
| (WY) | (1964) | (1964) | (1964) | (1969) | (1964) | (2005) | (1973) | (1973) | (1963) | (1963) | (1963) | (1963) |

12464800 COAL CREEK AT MOHLER, WA—Continued**SUMMARY STATISTICS**

| | Calendar Year 2007 | Water Year 2008 | Water Years 1963 - 2008 | |
|---------------------------------|---------------------------|------------------------|--------------------------------|--------|
| Annual total | 1,778.10 | 1,176.23 | | |
| Annual mean | 4.87 | 3.21 | 3.88 | |
| Highest annual mean | | | 10.9 | 1969 |
| Lowest annual mean | | | 0.93 | 1964 |
| Highest daily mean | 305 | Feb 11 | 111 | Mar 1 |
| Lowest daily mean | 0.10 | Aug 17 | 0.24 | Aug 15 |
| Annual seven-day minimum | 0.11 | Aug 12 | 0.25 | Aug 12 |
| Annual runoff (ac-ft) | 3,530 | | 2,330 | 2,810 |
| Annual runoff (cfsm) | 0.075 | | 0.050 | 0.060 |
| Annual runoff (inches) | 1.02 | | 0.68 | 0.81 |
| 10 percent exceeds | 10 | | 6.5 | 8.0 |
| 50 percent exceeds | 0.73 | | 0.66 | 0.50 |
| 90 percent exceeds | 0.19 | | 0.34 | 0.01 |

