

ESCALANTE RIVER BASIN

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09337500 ESCALANTE RIVER NEAR ESCALANTE, UT

LOCATION.--Lat $37^{\circ}46'41''$, long $111^{\circ}34'26''$, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 35 S., R. 3 E., Garfield County, Hydrologic Unit 14070005, Bureau of Land Management, on left bank 150 ft downstream from Pine Creek and 1.5 mi northeast of Escalante.

DRAINAGE AREA.--320 mi².

PERIOD OF RECORD.--August 1909 to April 1913, October 1942 to September 1955, December 1971 to current year. Published as Escalante Creek near Escalante 1909-13.

REVISED RECORDS.--WSP 1149: 1943(M), 1944, 1945(M). WDR UT-73-1: 1972.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,670 ft above NGVD of 1929, from topographic map. Prior to April 30, 1913, staff at approximately same site at different datum.

REMARKS.--Records good except for daily discharges less than 2.0 ft³/s and estimated daily discharges, which are poor. Regulation of low flows by diversion into Wide Hollow Reservoir (an off-stream storage site about 4 mi upstream; capacity about 2,300 acre-feet) and by diversion on Pine Creek for irrigation of about 2,300 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,550 ft³/s, Aug 24, 1998, gage height, 11.05 ft, from rating curve extended above 150 ft³/s on basis of slope-area measurements at gage heights, 5.31 ft, 6.25 ft, 7.59 ft, and 11.05 ft; minimum daily, 0.07 ft³/s, Jul 11, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 619 ft³/s, Sep 6, gage height, 4.42 ft; minimum daily discharge, 0.11 ft³/s, Dec 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|------|------|--------|-------|-------|-------|------|-------|-------|
| 1 | 0.88 | 3.1 | 3.6 | 2.8 | 2.4 | 2.1 | 0.96 | 1.3 | 0.79 | 0.30 | 4.0 | 0.24 |
| 2 | 5.2 | 3.1 | 3.1 | 6.2 | 2.4 | 2.7 | 0.71 | 0.79 | 0.67 | 0.30 | 0.93 | 0.25 |
| 3 | 11 | 2.4 | 2.7 | 2.7 | 1.8 | 4.3 | 0.73 | 0.72 | 0.50 | 0.24 | 0.80 | 1.6 |
| 4 | 1.1 | 2.0 | 2.6 | 2.9 | 1.4 | 9.5 | 1.00 | 0.72 | 0.47 | 0.25 | 0.65 | 1.9 |
| 5 | 1.1 | 2.6 | 2.3 | 2.9 | 1.3 | 7.7 | 1.7 | 1.0 | 0.42 | 0.26 | 0.57 | 2.6 |
| 6 | 1.0 | 2.6 | 2.2 | 2.8 | 1.3 | 5.4 | 3.0 | 1.1 | 0.48 | 0.27 | 0.55 | 14 |
| 7 | 0.96 | 2.6 | 2.7 | 3.0 | e1.3 | 7.4 | 2.3 | 1.2 | 0.45 | 0.27 | 0.60 | 5.0 |
| 8 | 0.91 | 3.5 | 2.7 | 2.9 | e1.3 | 9.2 | 1.3 | 1.2 | 0.49 | 0.27 | 0.64 | 2.9 |
| 9 | 0.91 | 3.8 | 2.5 | 2.8 | e1.6 | 10 | 0.96 | 1.2 | 0.48 | 0.26 | 1.00 | 2.2 |
| 10 | 0.91 | 3.2 | 1.9 | 2.8 | 2.9 | 10 | 0.88 | 1.2 | 0.44 | 0.25 | 0.64 | 2.0 |
| 11 | 0.91 | 2.9 | 2.4 | 2.9 | 2.8 | 10 | 0.83 | 0.93 | 0.47 | 0.25 | 0.51 | 1.6 |
| 12 | 0.91 | 2.2 | 2.3 | 2.5 | 2.7 | 9.8 | 0.78 | 0.81 | 0.54 | 0.24 | 0.45 | 1.4 |
| 13 | 0.91 | 3.1 | 2.5 | 2.6 | 3.7 | 9.4 | 0.79 | 0.66 | 0.49 | 0.24 | 0.31 | 0.54 |
| 14 | 0.91 | 3.3 | 2.7 | 2.5 | 4.1 | 9.9 | 0.79 | 0.66 | 0.48 | 0.28 | 1.1 | 0.34 |
| 15 | 0.91 | 2.8 | 3.1 | 2.5 | 5.1 | 8.9 | 2.1 | 2.2 | 0.42 | 0.30 | 1.0 | 0.31 |
| 16 | 0.91 | 2.3 | 3.1 | 2.3 | 2.8 | 8.9 | 1.0 | 1.4 | 0.42 | 0.27 | 0.88 | 0.28 |
| 17 | 0.91 | 3.2 | 3.3 | 2.4 | 2.6 | 11 | 1.0 | 6.3 | 0.45 | 0.30 | 0.53 | 0.20 |
| 18 | 0.91 | 2.8 | 2.1 | 2.4 | 2.5 | 9.3 | 1.3 | 1.8 | 0.50 | 0.26 | 0.25 | 0.17 |
| 19 | 0.91 | 2.5 | 2.8 | 2.5 | 2.3 | 8.2 | 1.4 | 1.1 | 0.46 | 0.23 | 2.2 | 0.21 |
| 20 | 0.91 | 3.6 | 1.7 | 2.7 | 2.4 | 7.5 | 1.3 | 2.1 | 0.39 | 0.26 | 0.30 | 0.20 |
| 21 | 0.83 | 3.3 | 1.7 | 2.8 | 2.2 | 4.8 | 1.0 | 3.9 | 0.38 | 0.24 | 0.22 | 0.17 |
| 22 | 0.77 | 3.3 | 2.2 | 2.7 | 2.2 | 1.4 | 1.2 | 3.7 | 0.39 | 0.24 | 0.22 | 0.18 |
| 23 | 1.0 | 3.4 | 3.0 | 2.9 | 1.7 | 1.4 | 1.5 | 2.0 | 0.43 | 0.25 | 0.29 | 0.17 |
| 24 | 0.82 | 3.2 | 3.0 | 2.7 | 2.1 | 1.4 | 1.4 | 1.1 | 0.51 | 0.28 | 2.2 | 0.15 |
| 25 | 0.82 | 3.0 | 2.6 | 2.5 | 2.9 | 1.4 | 1.2 | 1.0 | 0.53 | 0.28 | 1.2 | 0.15 |
| 26 | 6.6 | 1.9 | 1.6 | 2.4 | 3.3 | 1.4 | 0.94 | 1.1 | 0.47 | 0.27 | 0.46 | 0.15 |
| 27 | 5.7 | 2.5 | 0.49 | 2.3 | 2.4 | 5.8 | 5.3 | 0.81 | 0.51 | 0.27 | 0.31 | 0.16 |
| 28 | 1.2 | 2.3 | 0.11 | 2.4 | 2.5 | 3.6 | 6.5 | 0.60 | 0.37 | 0.31 | 0.30 | 0.16 |
| 29 | 1.2 | 2.3 | 0.62 | 2.3 | --- | 1.2 | 5.0 | 0.58 | 0.33 | 0.31 | 0.27 | 0.15 |
| 30 | 1.5 | 3.1 | 1.9 | 2.3 | --- | 1.2 | 2.0 | 0.62 | 0.34 | 0.30 | 0.27 | 0.16 |
| 31 | 2.3 | --- | 2.5 | 2.4 | --- | 0.76 | --- | 0.75 | --- | 0.73 | 0.26 | --- |
| TOTAL | 55.81 | 85.9 | 72.02 | 84.8 | 68.0 | 185.56 | 50.87 | 44.55 | 14.07 | 8.78 | 23.91 | 39.54 |
| MEAN | 1.80 | 2.86 | 2.32 | 2.74 | 2.43 | 5.99 | 1.70 | 1.44 | 0.47 | 0.28 | 0.77 | 1.32 |
| MAX | 11 | 3.8 | 3.6 | 6.2 | 5.1 | 11 | 6.5 | 6.3 | 0.79 | 0.73 | 4.0 | 14 |
| MIN | 0.77 | 1.9 | 0.11 | 2.3 | 1.3 | 0.76 | 0.71 | 0.58 | 0.33 | 0.23 | 0.22 | 0.15 |
| AC-FT | 111 | 170 | 143 | 168 | 135 | 368 | 101 | 88 | 28 | 17 | 47 | 78 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943-1955, 1973-2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 7.56 | 6.84 | 7.17 | 8.40 | 10.3 | 12.3 | 13.6 | 22.5 | 17.6 | 6.03 | 8.28 | 6.99 |
| MAX | 29.9 | 23.8 | 18.1 | 26.4 | 23.8 | 39.7 | 54.8 | 124 | 125 | 30.5 | 30.8 | 39.4 |
| (WY) | (1973) | (1988) | (1943) | (1950) | (1943) | (1989) | (1993) | (1973) | (1983) | (1944) | (1983) | (1998) |
| MIN | 0.90 | 0.80 | 0.77 | 0.96 | 1.21 | 0.67 | 1.23 | 0.88 | 0.47 | 0.28 | 0.31 | 0.73 |
| (WY) | (1991) | (1991) | (1991) | (1991) | (1993) | (1991) | (1990) | (1954) | (2003) | (2003) | (2002) | (1955) |

ESCALANTE RIVER BASIN

09337500 ESCALANTE RIVER NEAR ESCALANTE, UT—Continued

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | FOR 2003 WATER YEAR | WATER YEARS 1943-1945, 1973-2003 |
|--------------------------|------------------------|---------------------|-------------------------------------|
| ANNUAL TOTAL | 993.21 | 733.81 | |
| ANNUAL MEAN | 2.72 | 2.01 | 10.8 |
| HIGHEST ANNUAL MEAN | | | 30.7 |
| LOWEST ANNUAL MEAN | | | 1.49 |
| HIGHEST DAILY MEAN | 22 | Sep 7 | 367 |
| LOWEST DAILY MEAN | 0.11 | Dec 28 | 0.07 |
| ANNUAL SEVEN-DAY MINIMUM | 0.21 | Aug 26 | 0.15 |
| ANNUAL RUNOFF (AC-FT) | 1,970 | | 7,800 |
| 10 PERCENT EXCEEDS | 7.0 | 3.7 | 23 |
| 50 PERCENT EXCEEDS | 1.8 | 1.3 | 4.8 |
| 90 PERCENT EXCEEDS | 0.30 | 0.27 | 1.0 |

e Estimated

