

09337000 PINE CREEK NEAR ESCALANTE, UT

LOCATION.--Lat 37°51'45", long 111°38'07", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 12, T. 34 S., R. 2 E., Garfield County, Hydrologic Unit 14070005, Dixie National Forest, on right bank 0.1 mi downstream from "The Box" canyon, 0.2 mi upstream from unnamed right bank tributary, and 7.0 mi north of Escalante.

DRAINAGE AREA.--68.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1950 to September 1955, July 1957 to current year.

REVISED RECORDS.--WDR UT-78-1: Drainage area.

GAGE.--Water-stage recorder. Crest-stage gage since June 16, 1994. Elevation of gage is 6,400 ft above NGVD of 1929, from topographic map. Prior to August 15, 1978, on left bank at same datum.

REMARKS.--Records good except those for daily discharges less than 2.0 ft<sup>3</sup>/s and estimated daily discharges, which are poor. Some regulation of low flow by several small headwater reservoirs (combined capacity 2,120 acre-ft).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft<sup>3</sup>/s, Aug 2, 1967, gage height, 7.72 ft, from rating curve extended above 180 ft<sup>3</sup>/s on basis of slope-area measurement at gage heights, 4.21 ft and 7.52 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

| Date   | Time | Discharge (ft <sup>3</sup> /s) | Gage height (ft) | Date  | Time | Discharge (ft <sup>3</sup> /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|-------|------|--------------------------------|------------------|
| Jul 27 | 1405 | 139                            | 3.65             | Sep 7 | 0705 | *203                           | *4.14            |

Minimum daily discharge 0.72 ft<sup>3</sup>/s, Jul 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 5.2   | 4.2   | e1.6  | e2.2  | e3.5  | e2.5  | 3.0   | 2.5   | 1.3   | 0.72  | 1.2   | 1.0   |
| 2     | 5.2   | 4.3   | e1.8  | e2.2  | e3.5  | e2.4  | 3.0   | 2.7   | 1.3   | 0.74  | 1.3   | 1.0   |
| 3     | 5.2   | 4.3   | e2.0  | e2.2  | e3.5  | e2.3  | 3.0   | 2.8   | 1.8   | 1.0   | 1.6   | 1.1   |
| 4     | 5.2   | 4.3   | e1.9  | e2.2  | e3.6  | e2.4  | 2.9   | 2.8   | 1.8   | 1.0   | 1.4   | 1.1   |
| 5     | 5.2   | 4.3   | e1.8  | e2.2  | e3.7  | e2.6  | 2.8   | 2.6   | 1.6   | 0.90  | 1.2   | 1.1   |
| 6     | 5.3   | 4.3   | e1.8  | e2.5  | e3.3  | e2.9  | 2.6   | 3.4   | 1.5   | 1.0   | 1.1   | 1.4   |
| 7     | 5.5   | 4.3   | e1.8  | e2.8  | e3.0  | e3.1  | 2.4   | 4.0   | 1.4   | 0.97  | 1.1   | 22    |
| 8     | 5.6   | 4.3   | e1.8  | e3.2  | e3.0  | e3.0  | 2.3   | 4.1   | 1.3   | 0.79  | 1.1   | 3.1   |
| 9     | 5.8   | 4.4   | e1.8  | e3.7  | e3.2  | e2.6  | 2.3   | 4.2   | 1.2   | 1.1   | 1.0   | 2.4   |
| 10    | 4.4   | 4.8   | e1.7  | 3.7   | e3.5  | e2.6  | 2.2   | 4.2   | 1.3   | 1.2   | 0.96  | 2.1   |
| 11    | 4.3   | 4.6   | e1.6  | 3.8   | e3.5  | e2.7  | 2.2   | 4.2   | 1.4   | 1.1   | 0.92  | 3.1   |
| 12    | 4.3   | 4.4   | e1.6  | 3.9   | e3.5  | e2.8  | 2.3   | 4.4   | 1.3   | 1.3   | 0.90  | 3.4   |
| 13    | 4.3   | 4.5   | e1.6  | 3.7   | e3.5  | e3.0  | 2.3   | 4.0   | 1.3   | 0.90  | 0.89  | 2.3   |
| 14    | 4.1   | 4.4   | e1.6  | e3.5  | e3.5  | e3.0  | 2.1   | 3.8   | 1.2   | 0.86  | 0.86  | 2.1   |
| 15    | 4.1   | 4.4   | e1.6  | e3.6  | e3.4  | e3.0  | 2.1   | 3.7   | 1.2   | 0.98  | 0.85  | 1.9   |
| 16    | 4.0   | 4.4   | e1.6  | e3.6  | e3.4  | e3.0  | 2.1   | 3.6   | 1.1   | 1.1   | 0.85  | 1.9   |
| 17    | 4.0   | 4.4   | e1.7  | e3.5  | e3.2  | e3.0  | 2.2   | 3.4   | 1.1   | 1.2   | 0.83  | 1.9   |
| 18    | 4.0   | 4.4   | e1.8  | e3.6  | e3.0  | e2.8  | 2.1   | 3.2   | 1.1   | 1.7   | 0.83  | 1.9   |
| 19    | 4.0   | 4.2   | e2.0  | e3.6  | e3.0  | e2.5  | 2.1   | 2.9   | 1.1   | 1.7   | 0.83  | 1.9   |
| 20    | 4.0   | 4.3   | e2.2  | e2.7  | e2.8  | e2.2  | 2.1   | 2.7   | 1.0   | 1.9   | 1.3   | 1.9   |
| 21    | 4.0   | 5.1   | e2.0  | e1.8  | e2.9  | e2.4  | 2.3   | 2.5   | 0.87  | 2.1   | 1.1   | 1.9   |
| 22    | 4.1   | 4.8   | e1.8  | e1.7  | e3.0  | e2.7  | 2.4   | 2.6   | 0.96  | 1.6   | 0.99  | 1.9   |
| 23    | 4.0   | 4.3   | e1.7  | e1.7  | e3.0  | e2.6  | 2.1   | 2.6   | 0.92  | 1.6   | 0.99  | 1.9   |
| 24    | 4.0   | 4.3   | e1.5  | e1.7  | e3.0  | e2.5  | 2.0   | 2.5   | 0.87  | 1.5   | 0.96  | 1.8   |
| 25    | 4.1   | e2.2  | e1.5  | e1.7  | e2.9  | e2.4  | 1.9   | 2.3   | 0.84  | 1.6   | 0.96  | 1.8   |
| 26    | 4.1   | e1.8  | e1.5  | e1.8  | e2.8  | e2.3  | 1.9   | 1.9   | 0.83  | 2.3   | 0.94  | 1.9   |
| 27    | 4.1   | e1.5  | e1.5  | e2.2  | e2.7  | e2.2  | 2.3   | 1.9   | 0.81  | 4.0   | 0.92  | 1.8   |
| 28    | 4.1   | e1.7  | e1.6  | e2.6  | e2.6  | 2.4   | 2.9   | 1.8   | 0.80  | 1.9   | 0.94  | 1.9   |
| 29    | 4.1   | e1.8  | e1.7  | e3.2  | ---   | 2.4   | 2.8   | 1.6   | 0.79  | 1.6   | 0.99  | 3.6   |
| 30    | 4.0   | e1.6  | e1.8  | e3.4  | ---   | 2.4   | 2.5   | 1.4   | 0.77  | 1.5   | 1.1   | 2.5   |
| 31    | 4.1   | ---   | e2.0  | e3.4  | ---   | 2.6   | ---   | 1.3   | ---   | 1.3   | 1.0   | ---   |
| TOTAL | 138.4 | 116.6 | 53.9  | 87.6  | 89.5  | 81.3  | 71.2  | 91.6  | 34.76 | 43.16 | 31.91 | 79.6  |
| MEAN  | 4.465 | 3.887 | 1.739 | 2.826 | 3.196 | 2.623 | 2.373 | 2.955 | 1.159 | 1.392 | 1.029 | 2.653 |
| MAX   | 5.8   | 5.1   | 2.2   | 3.9   | 3.7   | 3.1   | 3.0   | 4.4   | 1.8   | 4.0   | 1.6   | 22    |
| MIN   | 4.0   | 1.5   | 1.5   | 1.7   | 2.6   | 2.2   | 1.9   | 1.3   | 0.77  | 0.72  | 0.83  | 1.0   |
| AC-FT | 275   | 231   | 107   | 174   | 178   | 161   | 141   | 182   | 69    | 86    | 63    | 158   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951-55, 1958-2002, BY WATER YEAR (WY)

|          | 1951-55 | 1958-2002 | 1951-55 | 1958-2002 | 1951-55 | 1958-2002 | 1951-55 | 1958-2002 | 1951-55 | 1958-2002 | 1951-55 | 1958-2002 |
|----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| MEAN     | 3.146   | 2.887     | 2.279   | 2.257     | 2.278   | 2.791     | 6.891   | 17.15     | 7.192   | 5.589     | 4.887   | 4.174     |
| MAX (WY) | 9.65    | 8.09      | 6.25    | 6.20      | 6.70    | 6.78      | 28.9    | 50.9      | 34.5    | 25.4      | 15.2    | 16.5      |
| MIN (WY) | 1999    | 1999      | 1984    | 1984      | 1984    | 1999      | 1987    | 1958      | 1983    | 1983      | 1983    | 1998      |
| MIN (WY) | 0.000   | 0.000     | 0.000   | 0.045     | 0.039   | 0.052     | 0.070   | 0.21      | 0.000   | 0.000     | 0.000   | 0.000     |
|          | 1965    | 1965      | 1965    | 1965      | 1965    | 1965      | 1977    | 1977      | 1977    | 1955      | 1954    | 1955      |

ESCALANTE RIVER BASIN

09337000 PINE CREEK NEAR ESCALANTE, UT--Continued

| SUMMARY STATISTICS       | FOR 2001 CALENDAR YEAR | FOR 2002 WATER YEAR | WATER YEARS 1951-55, 1958-2002 |        |
|--------------------------|------------------------|---------------------|--------------------------------|--------|
| ANNUAL TOTAL             | 2319.8                 | 919.53              |                                |        |
| ANNUAL MEAN              | 6.356                  | 2.519               | 5.150                          |        |
| HIGHEST ANNUAL MEAN      |                        |                     | 12.5                           | 1983   |
| LOWEST ANNUAL MEAN       |                        |                     | 0.62                           | 1977   |
| HIGHEST DAILY MEAN       | 61                     | May 13              | 22                             | Sep 7  |
| LOWEST DAILY MEAN        | 1.5                    | Nov 27              | 0.72                           | Jul 1  |
| ANNUAL SEVEN-DAY MINIMUM | 1.6                    | Dec 23              | 0.78                           | Jun 26 |
| ANNUAL RUNOFF (AC-FT)    | 4600                   | 1820                | 3730                           |        |
| 10 PERCENT EXCEEDS       | 8.8                    | 4.3                 | 9.4                            |        |
| 50 PERCENT EXCEEDS       | 5.2                    | 2.3                 | 3.1                            |        |
| 90 PERCENT EXCEEDS       | 2.0                    | 1.00                | 0.60                           |        |

e Estimated

