## 15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL

LOCATION.--Lat 56°14'26", long 130°52'49", in NW¼ NW¼ NE¼ sec. 16, T. 65 S., R. 94 E. (Bradfield Canal A-3 quad), Hydrologic Unit 19010101, in Misty Fiords National Monument, on right bank 17 mi upstream from the Post(Bishop Ranch), near the mouth of Burroughs Bay and approximately 60 mi southeast of Wrangell.

DRAINAGE AREA.-- 745 $mi^2$

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2003 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 130 ft above sea level, from topographic map.

REMARKS.-- Records good, except June 5 to August 26, 2003, which are poor.

EXTREMES FOR WATER YEAR 2003.--Maximum discharge 22,100 $ft^3/s$, September 2, gage-height 29.48 ft; minimum discharge not determined, occurs during winter.

EXTREMES FOR WATER YEAR 2004.--Maximum discharge 34,800 $ft^3/s$,October 26, gage-height 32.96 ft; minimum discharge not determined, occurs during winter..

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 | --- | --- | --- | --- | --- | --- | --- | 5440 | 7590 | 9730 | 11400 | 8970 |
| 2 | --- | --- | --- | --- | --- | --- | --- | 4540 | 6560 | 8880 | 11600 | 19100 |
| 3 | --- | --- | --- | --- | --- | --- | --- | 3590 | 5960 | 9250 | 10300 | 13400 |
| 4 | --- | --- | --- | --- | --- | --- | --- | 2910 | 5930 | 12300 | 9030 | 9700 |
| 5 | --- | --- | --- | --- | --- | --- | --- | 2450 | 7020 | 11900 | 8200 | 9230 |
| 6 | --- | --- | --- | --- | --- | --- | --- | 2300 | 10000 | 11000 | 7840 | 10700 |
| 7 | --- | --- | --- | --- | --- | --- | --- | 2270 | 12200 | 10700 | 8790 | 11200 |
| 8 | --- | --- | --- | --- | --- | --- | --- | 2520 | 11300 | 11000 | 9610 | 9860 |
| 9 | --- | --- | --- | --- | --- | --- | --- | 3080 | 10500 | 10600 | 10300 | 7890 |
| 10 | --- | --- | --- | --- | --- | --- | --- | 3740 | 10900 | 11600 | 8930 | 9560 |
| 11 | --- | --- | --- | --- | --- | --- | --- | 4480 | 10800 | 12500 | 8100 | 13800 |
| 12 | --- | --- | --- | --- | --- | --- | --- | 5330 | 10400 | 12800 | 8570 | 9600 |
| 13 | --- | --- | --- | --- | --- | --- | --- | 5110 | 10300 | 13000 | 9860 | 11600 |
| 14 | --- | --- | --- | --- | --- | --- | --- | 4000 | 9110 | 11900 | 9920 | 14300 |
| 15 | --- | --- | --- | --- | --- | --- | --- | 3270 | 9130 | 10700 | 11300 | 10100 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 2790 | 7950 | 11200 | 13500 | 7990 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 2630 | 8330 | 12400 | 12400 | 6590 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 2920 | 10500 | 11600 | 12800 | 6880 |
| 19 | --- | --- | --- | --- | --- | --- | --- | 3230 | 9260 | 11600 | 11000 | 8430 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 3390 | 7970 | 12400 | 9770 | 7090 |
| 21 | --- | --- | --- | --- | --- | --- | --- | 3710 | 7760 | 12900 | 10400 | 9020 |
| 22 | --- | --- | --- | --- | --- | --- | --- | 4500 | 7620 | 11900 | 7920 | 8980 |
| 23 | --- | --- | --- | --- | --- | --- | --- | 5800 | 7640 | 10200 | 6580 | 6700 |
| 24 | --- | --- | --- | --- | --- | --- | --- | 8590 | 7450 | 9910 | 6180 | 13000 |
| 25 | --- | --- | --- | --- | --- | --- | --- | 8690 | 7270 | 11100 | 5930 | 15500 |
| 26 | --- | --- | --- | --- | --- | --- | --- | 6930 | 8560 | 11600 | 6020 | 12000 |
| 27 | --- | --- | --- | --- | --- | --- | --- | 6310 | 7810 | 11200 | 6000 | 10200 |
| 28 | --- | --- | --- | --- | --- | --- | --- | 6390 | 7940 | 11100 | 6040 | 9770 |
| 29 | --- | --- | --- | --- | --- | --- | --- | 7630 | 8560 | 11600 | 6490 | 10100 |
| 30 | --- | --- | --- | --- | --- | --- | 5200 | 7080 | 8720 | 11400 | 7950 | 9190 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 7210 | --- | 11400 | 8600 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 142830 | 261040 | 351370 | 281330 | 310450 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | 4607 | 8701 | 11330 | 9075 | 10350 |
| MAX | --- | --- | --- | --- | --- | --- | | 8690 | 12200 | 13000 | 13500 | 19100 |
| MIN | --- | --- | --- | --- | --- | --- | | 2270 | 5930 | 8880 | 5930 | 6590 |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 283300 | 517800 | 696900 | 558000 | 615800 |
| CFSM | --- | --- | --- | --- | --- | --- | --- | 6.18 | 11.7 | 15.2 | 12.2 | 13.9 |
| IN. | --- | --- | --- | --- | --- | --- | --- | 7.13 | 13.03 | 17.54 | 14.05 | 15.50 |

## 15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8270 | 5130 | --- | --- | --- | --- | 1550 | 6990 | 6930 | 10900 | 9290 | 7110 |
| 2 | 7560 | 4700 | --- | --- | --- | --- | 1480 | 7600 | 6610 | 11100 | 11000 | 6570 |
| 3 | 6950 | 4310 | --- | --- | --- | --- | 1820 | 7250 | 6380 | 10800 | 11000 | 7780 |
| 4 | 6850 | 3980 | --- | --- | --- | --- | 2110 | 7250 | 6940 | 10500 | 10300 | 10500 |
| 5 | 6170 | 3730 | --- | --- | --- | --- | 2000 | 6850 | 8940 | 10300 | 10800 | 7900 |
| 6 | 7130 | 3540 | --- | --- | --- | --- | 1790 | 5460 | 9770 | 11800 | 11900 | 6950 |
| 7 | 7780 | 3340 | --- | --- | --- | --- | 1720 | 5130 | 11200 | 11200 | 10700 | 6310 |
| 8 | 6540 | 3170 | --- | --- | --- | --- | 1900 | 5440 | 12300 | 9800 | 10200 | 5610 |
| 9 | 5750 | 3130 | --- | --- | --- | --- | 2020 | 5640 | 12200 | 10400 | 10100 | 5010 |
| 10 | 5460 | 3110 | --- | --- | --- | --- | 2360 | 5220 | 9450 | 11600 | 11100 | 4190 |
| 11 | 4900 | 3040 | --- | --- | --- | --- | 3840 | 5420 | 8340 | 10500 | 11200 | 4560 |
| 12 | 4370 | 4730 | --- | --- | --- | --- | 4940 | 5620 | 8090 | 9700 | 9920 | 4690 |
| 13 | 4050 | 10500 | --- | --- | --- | --- | 4580 | 6510 | 8940 | 9880 | 9890 | 5960 |
| 14 | 4000 | 7360 | --- | --- | --- | --- | 4370 | 7490 | 8440 | 10800 | 10800 | 7280 |
| 15 | 3790 | 4960 | --- | --- | --- | --- | 3950 | 7490 | 7690 | 11200 | 13200 | 6030 |
| 16 | 3520 | 4150 | --- | --- | --- | --- | 3210 | 7400 | 7460 | 12600 | 14100 | 4730 |
| 17 | 3590 | 3700 | --- | --- | --- | --- | 2860 | 7180 | 9020 | 11600 | 13600 | 4060 |
| 18 | 3700 | --- | --- | --- | --- | --- | 2770 | 7500 | 10700 | 10700 | 13400 | 3790 |
| 19 | 4090 | --- | --- | --- | --- | --- | 2540 | 8350 | 13000 | 10900 | 11800 | 3510 |
| 20 | 3990 | --- | --- | --- | --- | --- | 2380 | 9940 | 13700 | 12100 | 11000 | 3700 |
| 21 | 3920 | --- | --- | --- | --- | --- | 2540 | 10400 | 14200 | 12100 | 10200 | 16100 |
| 22 | 4410 | --- | --- | --- | --- | --- | 2820 | 9010 | 14500 | 11600 | 10100 | 12800 |
| 23 | 4480 | --- | --- | --- | --- | --- | 3140 | 8020 | 15200 | 11600 | 8320 | 13500 |
| 24 | 4130 | --- | --- | --- | --- | --- | 3120 | 8220 | 15700 | 12000 | 7410 | 24000 |
| 25 | 18000 | --- | --- | --- | --- | --- | 3300 | 9140 | 15000 | 11400 | 7270 | 13500 |
| 26 | 30000 | --- | --- | --- | --- | --- | 5180 | 10000 | 14800 | 10100 | 7410 | 8120 |
| 27 | 15300 | --- | --- | --- | --- | --- | 4810 | 9070 | 14600 | 9760 | 9310 | 9290 |
| 28 | 10700 | --- | --- | --- | --- | --- | 4180 | 8040 | 12500 | 11600 | 10100 | 8430 |
| 29 | 7950 | --- | --- | --- | --- | 1580 | 4100 | 8030 | 12400 | 13400 | 8000 | 6250 |
| 30 | 6430 | --- | --- | --- | --- | 2180 | 5070 | 7480 | 11700 | 11500 | 7350 | 5510 |
| 31 | 5660 | --- | --- | --- | --- | 1820 | --- | 7420 | --- | 9910 | 6930 | --- |
| TOTAL | 219440 | --- | --- | --- | --- | --- | 92450 | 230560 | 326700 | 343350 | 317700 | 233740 |
| MEAN | 7079 | --- | --- | --- | --- | --- | 3082 | 7437 | 10890 | 11080 | 10250 | 7791 |
| MAX | 30000 | | --- | --- | --- | | 5180 | 10400 | 15700 | 13400 | 14100 | 24000 |
| MIN | 3520 | | --- | --- | --- | | 1480 | 5130 | 6380 | 9700 | 6930 | 3510 |
| AC-FT | 435300 | --- | --- | --- | --- | --- | 183400 | 457300 | 648000 | 681000 | 630200 | 463600 |
| CFSM | 9.50 | --- | --- | --- | --- | --- | 4.14 | 9.98 | 14.6 | 14.9 | 13.8 | 10.5 |
| IN. | 10.96 | --- | --- | --- | --- | --- | 4.62 | 11.51 | 16.31 | 17.14 | 15.86 | 11.67 |

## 15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2003 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April 2003 to current year.

INSTRUMENTATION.--Digital water-temperature recorder with 15-minute recording interval.

REMARKS.--No record from November 5 - March 31, due to probe out of water. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on March 31 and July 14. No variation was found in the temperature cross sections. No variation was found between mean stream temperature and sensor temperature. Records good while probe was submerged.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 11.0°C, July 9, 23-24, 2004; minimum recorded, 0.5°C December 22, January 14-15, 2004; 0.0°C likely during period of missing record in winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 11.0°C, July 9, 23-24; minimum recorded, 0.5°C December 22, January 14-15, 0.0°C likely during period of missing record in winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Location in X-sect. looking dwnstrm ft from l bank (00009) | Specif. conduc-tance, wat unf uS/cm 25 degC (00095) | pH, water, unfltrd field, std units (00400) | Temper-ature, water, deg C (00010) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of sat-uration (00301) |
|---|---|---|---|---|---|---|---|---|
| MAR | | | | | | | | |
| 31... | 1800 | 38.0 | 150 | 7.7 | 4.0 | 763 | 12.9 | 98 |
| 31... | 1801 | 113 | 150 | 7.7 | 4.0 | 763 | 12.9 | 98 |
| 31... | 1802 | 188 | 150 | 7.7 | 4.0 | 763 | 12.9 | 98 |
| 31... | 1803 | 263 | 151 | 7.7 | 4.0 | 763 | 12.9 | 98 |
| JUL | | | | | | | | |
| 14... | 1817 | 25.0 | 72 | 7.9 | 9.0 | 755 | 11.3 | 99 |
| 14... | 1818 | 85.0 | 72 | 7.8 | 9.0 | 755 | 11.1 | 97 |
| 14... | 1819 | 145 | 71 | 7.7 | 9.0 | 755 | 11.1 | 97 |
| 14... | 1820 | 205 | 72 | 7.7 | 9.0 | 755 | 11.1 | 97 |
| 14... | 1821 | 270 | 72 | 7.7 | 9.0 | 755 | 11.1 | 97 |

| Date | Time | Medium code | Sample type | Gage height, feet (00065) | Instan-taneous dis-charge, cfs (00061) | Sam-pling method, code (82398) | Stream width, feet (00004) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of sat-uration (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unf uS/cm 25 degC (00095) | Temper-ature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 09... | 1600 | 9 | 9 | 23.76 | 5720 | 10 | 275 | 745 | 11.8 | 98 | 7.9 | 95 | -- |
| MAR | | | | | | | | | | | | | |
| 31... | 1730 | 9 | 9 | 21.64 | 1740 | 10 | 300 | 763 | 12.9 | 98 | 7.7 | 150 | 3.5 |
| JUL | | | | | | | | | | | | | |
| 14... | 1800 | 9 | 9 | 25.65 | 11100 | 10 | 285 | 755 | 11.1 | 97 | 7.7 | 72 | 18.5 |
| SEP | | | | | | | | | | | | | |
| 23... | 1330 | 9 | 9 | 26.14 | 11500 | 10 | 255 | 755 | -- | -- | 7.8 | 74 | 8.5 |

| Date | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Calcium water unfltrd recover-able, mg/L (00916) | Magnes-ium, water, fltrd, mg/L (00925) | Magnes-ium, water, unfltrd recover-able, mg/L (00927) | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086) | Bicar-bonate, wat flt incrm. titr., field, mg/L (00453) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 09... | 6.5 | 42 | 14.5 | -- | 1.33 | -- | .78 | 1.47 | 30 | 36 | .28 | <.2 | 3.98 |
| MAR | | | | | | | | | | | | | |
| 31... | 4.0 | 71 | 24.5 | 23.3 | 2.33 | 2.22 | 1.18 | 2.87 | 48 | 59 | .78 | <.2 | 5.94 |
| JUL | | | | | | | | | | | | | |
| 14... | 9.0 | 32 | 11.4 | 13.4 | .802 | 2.59 | .72 | .90 | 23 | 28 | E.18 | <.2 | 2.60 |
| SEP | | | | | | | | | | | | | |
| 23... | 6.5 | 34 | 11.8 | -- | 1.01 | -- | .79 | 1.01 | 26 | 32 | .21 | <.2 | 3.37 |

## 15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Sulfate water, fltrd, mg/L (00945) | Residue water, fltrd, sum of consti-tuents mg/L (70301) | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Partic-ulate nitro-gen, susp, water, mg/L (49570) | Ortho-phos-phate, water, fltrd, mg/L as P (00671) | Phos-phorus, water, fltrd, mg/L (00666) | Phos-phorus, water, unfltrd mg/L (00665) | Total carbon, suspnd sedimnt total, mg/L (00694) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 09... | 14.6 | 55 | 50 | <.10 | E.06 | <.010 | .051 | E.001 | -- | <.006 | E.003 | .024 | -- |
| MAR | | | | | | | | | | | | | |
| 31... | 22.8 | 90 | 106 | <.10 | <.10 | <.010 | .157 | <.002 | <.02 | <.006 | E.003 | <.004 | .2 |
| JUL | | | | | | | | | | | | | |
| 14... | 9.9 | -- | 52 | <.10 | E.05 | <.010 | .018 | <.002 | .02 | <.006 | <.004 | .32 | .3 |
| SEP | | | | | | | | | | | | | |
| 23... | 10.2 | 44 | 53 | <.10 | E.07 | <.010 | .059 | <.002 | -- | <.006 | E.002 | .140 | -- |

| Date | Organic carbon, water, fltrd, mg/L (00681) | Alum-inum, water, fltrd, ug/L (01106) | Alum-inum, water, unfltrd recover-able, ug/L (01105) | Anti-mony, water, fltrd, ug/L (01095) | Anti-mony, water, unfltrd ug/L (01097) | Arsenic water, fltrd, ug/L (01000) | Barium, water, fltrd, ug/L (01005) | Barium, water, unfltrd recover-able, ug/L (01007) | Beryll-ium, water, fltrd, ug/L (01010) | Beryll-ium, water, unfltrd recover-able, ug/L (01012) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 09... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | | | |
| 31... | 1.1 | 18 | 61 | .54 | .5 | .3 | 29 | 29 | <.06 | <.06 | E4 | E6 | .04 |
| JUL | | | | | | | | | | | | | |
| 14... | .3 | 48 | 3260 | .31 | .3 | E.1 | 18 | 76 | <.06 | .09 | <8 | <8 | .04 |
| SEP | | | | | | | | | | | | | |
| 23... | 1.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| Date | Cadmium water, unfltrd ug/L (01027) | Chrom-ium, water, fltrd, ug/L (01030) | Chrom-ium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, fltrd, ug/L (01035) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Lithium water, fltrd, ug/L (01130) | Lithium water unfltrd recover-able, ug/L (01132) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 09... | -- | -- | -- | -- | -- | -- | -- | 9 | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | | | |
| 31... | E.04 | <.8 | <.8 | .115 | .130 | 2.2 | 2.7 | 41 | 170 | .12 | .09 | .8 | 1.0 |
| JUL | | | | | | | | | | | | | |
| 14... | .21 | <.8 | 4.3 | .110 | 3.04 | .7 | 26.0 | 13 | 5170 | <.08 | 3.58 | M | 2.6 |
| SEP | | | | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | 19 | -- | -- | -- | -- | -- |

| Date | Mangan-ese, water, fltrd, ug/L (01056) | Mangan-ese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Molyb-denum, water, fltrd, ug/L (01060) | Molyb-denum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selen-ium, water, fltrd, ug/L (01145) | Selen-ium, water, unfltrd ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recover-able, ug/L (01077) | Stront-ium, water, fltrd, ug/L (01080) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | | |
| 09... | 14.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| MAR | | | | | | | | | | | | | |
| 31... | 13.7 | 15 | <.02 | <.02 | 1.8 | 1.8 | .79 | .48 | .5 | .5 | <.2 | <.16 | 127 |
| JUL | | | | | | | | | | | | | |
| 14... | 18.2 | 153 | <.02 | E.01 | 1.1 | .7 | .47 | 4.93 | <.4 | E.2 | <.2 | <.16 | 60 |
| SEP | | | | | | | | | | | | | |
| 23... | 12.5 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Stront-ium, water, unfltrd recover-able, ug/L (01082) | Thall-ium, water, fltrd, ug/L (01057) | Thall-ium, water, unfltrd ug/L (01059) | Vanad-ium, water, fltrd, ug/L (01085) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | Uranium natural water, fltrd, ug/L (22703) | Sus-pended sedi-ment concen-tration mg/L (80154) | Sus-pended sedi-ment dis-charge, tons/d (80155) | Sampler type, code (84164) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 09... | -- | -- | -- | -- | -- | -- | -- | 24 | 371 | 3054 |
| MAR | | | | | | | | | | |
| 31... | 122 | <.04 | <.2 | .5 | 6.2 | 3 | .27 | 3 | 14 | 3044 |
| JUL | | | | | | | | | | |
| 14... | 69.2 | <.04 | <.2 | .2 | 1.0 | 40 | .09 | 209 | 6260 | 3054 |
| SEP | | | | | | | | | | |
| 23... | -- | -- | -- | -- | -- | -- | -- | 576 | 17900 | 3054 |

## 15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 7.0 | 5.5 | 6.5 | 3.0 | 2.0 | 2.5 | --- | --- | --- | --- | --- | --- |
| 2 | 7.0 | 5.5 | 6.5 | 3.0 | 2.5 | 2.5 | --- | --- | --- | --- | --- | --- |
| 3 | 7.0 | 5.5 | 6.0 | 2.5 | 2.0 | 2.0 | --- | --- | --- | --- | --- | --- |
| 4 | 7.0 | 5.5 | 6.0 | 2.0 | 1.5 | 1.5 | --- | --- | --- | --- | --- | --- |
| 5 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 6.5 | 6.0 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 6.5 | 6.0 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 6.0 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 6.5 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 6.0 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 6.5 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 5.5 | 4.5 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 5.5 | 5.0 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 6.0 | 5.5 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 6.0 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 6.0 | 5.5 | 6.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 6.0 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 6.0 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 6.0 | 5.5 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 6.0 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 5.5 | 5.0 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 5.5 | 5.0 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 5.5 | 5.0 | 5.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 5.0 | 4.5 | 5.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 5.0 | 4.0 | 4.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 4.0 | 2.5 | 3.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 3.0 | 2.0 | 2.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 3.0 | 2.0 | 2.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | 7.0 | 2.0 | 5.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | --- | --- | --- | --- | --- | --- | 4.5 | 2.5 | 3.5 | 5.5 | 3.5 | 4.5 |
| 2 | --- | --- | --- | --- | --- | --- | 3.5 | 3.0 | 3.0 | 6.0 | 3.5 | 4.5 |
| 3 | --- | --- | --- | --- | --- | --- | 4.0 | 2.5 | 3.5 | 6.0 | 3.5 | 5.0 |
| 4 | --- | --- | --- | --- | --- | --- | 5.0 | 3.0 | 4.0 | 7.0 | 3.5 | 5.0 |
| 5 | --- | --- | --- | --- | --- | --- | 5.0 | 2.5 | 3.5 | 6.5 | 3.0 | 5.0 |
| 6 | --- | --- | --- | --- | --- | --- | 5.5 | 2.5 | 4.0 | 7.0 | 3.0 | 5.0 |
| 7 | --- | --- | --- | --- | --- | --- | 5.0 | 3.5 | 4.5 | 7.5 | 4.0 | 5.5 |
| 8 | --- | --- | --- | --- | --- | --- | 6.5 | 3.5 | 4.5 | 7.0 | 4.5 | 6.0 |
| 9 | --- | --- | --- | --- | --- | --- | 5.0 | 3.0 | 4.0 | 6.0 | 4.5 | 5.0 |
| 10 | --- | --- | --- | --- | --- | --- | 4.5 | 3.5 | 4.0 | 7.5 | 4.5 | 6.0 |
| 11 | --- | --- | --- | --- | --- | --- | 5.5 | 3.0 | 4.0 | 8.0 | 4.0 | 6.0 |
| 12 | --- | --- | --- | --- | --- | --- | 4.0 | 2.5 | 3.0 | 8.0 | 4.0 | 6.0 |
| 13 | --- | --- | --- | --- | --- | --- | 5.0 | 3.0 | 3.5 | 8.5 | 4.0 | 6.5 |
| 14 | --- | --- | --- | --- | --- | --- | 6.0 | 2.5 | 4.0 | 7.5 | 4.0 | 6.0 |
| 15 | --- | --- | --- | --- | --- | --- | 5.0 | 2.0 | 3.5 | 8.5 | 4.0 | 6.0 |
| 16 | --- | --- | --- | --- | --- | --- | 5.0 | 2.0 | 3.5 | 7.5 | 4.5 | 6.0 |
| 17 | --- | --- | --- | --- | --- | --- | 5.0 | 3.5 | 4.5 | 8.5 | 4.0 | 6.5 |
| 18 | --- | --- | --- | --- | --- | --- | 6.0 | 3.5 | 4.5 | 9.0 | 4.5 | 6.5 |
| 19 | --- | --- | --- | --- | --- | --- | 6.5 | 3.0 | 4.5 | 9.0 | 4.5 | 6.5 |
| 20 | --- | --- | --- | --- | --- | --- | 7.0 | 3.0 | 5.0 | 8.5 | 4.5 | 6.5 |
| 21 | --- | --- | --- | --- | --- | --- | 7.0 | 3.5 | 5.0 | 8.0 | 4.0 | 6.0 |
| 22 | --- | --- | --- | --- | --- | --- | 5.5 | 3.5 | 4.0 | 8.5 | 4.0 | 6.0 |
| 23 | --- | --- | --- | --- | --- | --- | 5.5 | 3.5 | 4.5 | 9.0 | 5.0 | 7.0 |
| 24 | --- | --- | --- | --- | --- | --- | 4.5 | 3.5 | 4.0 | 7.5 | 5.0 | 6.0 |
| 25 | --- | --- | --- | --- | --- | --- | 4.0 | 3.5 | 4.0 | 7.5 | 5.5 | 6.5 |
| 26 | --- | --- | --- | --- | --- | --- | 5.0 | 3.0 | 4.0 | 7.0 | 5.0 | 6.0 |
| 27 | --- | --- | --- | --- | --- | --- | 7.0 | 3.5 | 5.0 | 8.0 | 4.5 | 6.0 |
| 28 | --- | --- | --- | --- | --- | --- | 7.0 | 3.5 | 5.5 | 8.5 | 5.0 | 6.5 |
| 29 | --- | --- | --- | --- | --- | --- | 7.5 | 3.5 | 5.5 | 7.5 | 5.0 | 6.5 |
| 30 | --- | --- | --- | --- | --- | --- | 7.5 | 3.5 | 5.5 | 8.0 | 5.5 | 6.5 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7.5 | 5.0 | 6.5 |
| MONTH | --- | --- | --- | --- | --- | --- | 7.5 | 2.0 | 4.2 | 9.0 | 3.0 | 5.9 |

15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 8.0 | 5.5 | 6.5 | 9.0 | 6.5 | 7.5 | 8.5 | 6.0 | 7.5 | 8.0 | 7.0 | 7.5 |
| 2 | 8.5 | 5.5 | 7.0 | 8.0 | 6.5 | 7.0 | 8.0 | 6.5 | 7.0 | 8.0 | 6.5 | 7.0 |
| 3 | 9.5 | 5.0 | 7.5 | 10.0 | 6.0 | 8.0 | 8.5 | 6.5 | 7.5 | 7.5 | 7.0 | 7.0 |
| 4 | 8.0 | 5.5 | 7.0 | 8.5 | 6.0 | 7.5 | 9.0 | 7.0 | 7.5 | 7.5 | 6.0 | 7.0 |
| 5 | 8.0 | 6.0 | 7.0 | 7.5 | 6.5 | 7.0 | 8.5 | 7.0 | 7.5 | 8.0 | 6.5 | 7.0 |
| 6 | 8.5 | 5.5 | 6.5 | 7.5 | 6.5 | 7.0 | 9.0 | 7.0 | 7.5 | 8.5 | 6.5 | 7.5 |
| 7 | 10.0 | 5.5 | 7.5 | 6.5 | 5.5 | 6.0 | 9.0 | 7.0 | 7.5 | 7.5 | 6.5 | 7.0 |
| 8 | 9.5 | 5.5 | 7.5 | 9.0 | 6.0 | 7.5 | 9.0 | 6.5 | 8.0 | 8.0 | 6.0 | 7.0 |
| 9 | 7.5 | 5.5 | 6.5 | 11.0 | 6.5 | 8.5 | 9.0 | 7.0 | 8.0 | 7.5 | 6.0 | 6.5 |
| 10 | 7.5 | 5.0 | 6.5 | 9.0 | 7.0 | 8.0 | 9.0 | 7.0 | 8.0 | 7.5 | 6.5 | 7.0 |
| 11 | 8.0 | 5.5 | 7.0 | 9.5 | 6.5 | 7.5 | 8.5 | 7.0 | 7.5 | 7.5 | 7.0 | 7.0 |
| 12 | 7.5 | 5.5 | 6.5 | 9.0 | 6.5 | 7.5 | 8.5 | 7.0 | 7.5 | 7.0 | 6.5 | 7.0 |
| 13 | 7.0 | 6.0 | 6.5 | 10.5 | 6.5 | 8.5 | 8.5 | 7.5 | 7.5 | 7.0 | 6.5 | 7.0 |
| 14 | 8.0 | 5.5 | 6.5 | 9.5 | 6.5 | 8.0 | 8.5 | 7.5 | 8.0 | 7.0 | 6.5 | 7.0 |
| 15 | 7.5 | 6.0 | 6.5 | 10.5 | 6.5 | 8.5 | 9.5 | 7.0 | 8.0 | 7.5 | 6.5 | 7.0 |
| 16 | 10.5 | 5.5 | 8.0 | 9.0 | 7.0 | 8.0 | 9.0 | 6.5 | 8.0 | 7.5 | 6.5 | 7.0 |
| 17 | 10.5 | 6.0 | 8.5 | 9.5 | 7.0 | 8.0 | 10.0 | 6.5 | 8.0 | 7.5 | 6.5 | 7.0 |
| 18 | 10.5 | 6.5 | 8.5 | 10.5 | 6.5 | 8.5 | 10.0 | 6.5 | 8.0 | 7.5 | 7.0 | 7.0 |
| 19 | 10.5 | 6.0 | 8.0 | 9.0 | 7.0 | 7.5 | 8.5 | 6.5 | 7.5 | 7.5 | 6.5 | 7.0 |
| 20 | 10.0 | 6.0 | 8.0 | 8.5 | 7.0 | 7.5 | 8.5 | 6.5 | 7.5 | 7.5 | 6.5 | 7.0 |
| 21 | 10.0 | 6.0 | 8.0 | 10.0 | 7.0 | 8.0 | 9.0 | 6.5 | 7.5 | 7.0 | 6.5 | 6.5 |
| 22 | 10.0 | 6.0 | 8.0 | 10.5 | 6.0 | 8.0 | 9.5 | 6.5 | 7.5 | 6.5 | 6.0 | 6.0 |
| 23 | 10.0 | 6.0 | 8.0 | 11.0 | 6.5 | 8.5 | 9.0 | 5.5 | 7.0 | 6.5 | 6.0 | 6.0 |
| 24 | 10.5 | 6.0 | 8.0 | 11.0 | 6.5 | 8.5 | 9.0 | 6.0 | 7.5 | 6.5 | 6.5 | 6.5 |
| 25 | 10.0 | 6.0 | 8.0 | 9.0 | 7.0 | 8.0 | 9.0 | 6.0 | 7.5 | 7.0 | 6.0 | 6.5 |
| 26 | 10.5 | 6.5 | 8.5 | 9.5 | 6.5 | 8.0 | 8.5 | 6.5 | 7.0 | 7.0 | 5.5 | 6.5 |
| 27 | 8.5 | 6.5 | 7.5 | 10.5 | 6.5 | 8.5 | 7.5 | 6.5 | 7.0 | 7.5 | 6.5 | 7.0 |
| 28 | 9.5 | 6.0 | 7.5 | 9.0 | 7.5 | 7.5 | 8.0 | 6.0 | 7.0 | 7.0 | 5.5 | 6.5 |
| 29 | 9.5 | 6.5 | 7.5 | 9.0 | 7.0 | 8.0 | 8.0 | 6.5 | 7.0 | 7.0 | 5.5 | 6.5 |
| 30 | 7.5 | 6.5 | 7.0 | 9.0 | 6.5 | 7.5 | 8.0 | 6.5 | 7.0 | 8.0 | 6.5 | 7.0 |
| 31 | --- | --- | --- | 9.0 | 6.0 | 7.5 | 8.0 | 6.5 | 7.0 | --- | --- | --- |
| MONTH | 10.5 | 5.0 | 7.4 | 11.0 | 5.5 | 7.8 | 10.0 | 5.5 | 7.5 | 8.5 | 5.5 | 6.8 |

## 15019990 TYEE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°12'00", long 131°30'24", in SE$^1/_4$ SW$^1/_4$ sec. 28, T. 65 S., R. 90 E. (Bradfield Canal A-5 quad), Hydrologic Unit 19010101, in Tongass National Forest, on left bank at outlet of Tyee Lake, 1.5 mi south of Bradfield Canal and 37 mi southeast of Wrangell, Alaska.

DRAINAGE AREA.--14.7 mi$^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to September 1981 and June 1992 to current year. Records for November 1922 to September 1927 and August 1963 to October 1969, published as Tyee Creek at Mouth near Wrangell (station 15020100) are not equivalent owing to inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 1,370 ft above sea level from topographic map. Prior to June 9, 1992, at site 500 ft downstream at datum 13.66 ft lower.

REMARKS.--No estimated daily discharges. Records fair, except for discharges below 10 ft$^3$/s, which are poor. Water for power generation is diverted from Tyee Lake and discharged into Bradfield Canal. Diversion to hydropower plant began February 1984, and is not included in the discharge records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 128 | 165 | 0.00 | 0.00 | 5.7 | 0.00 | 0.00 | 104 | 315 | 232 | 55 | 1.8 |
| 2 | 102 | 119 | 0.00 | 0.00 | 3.4 | 0.00 | 0.00 | 155 | 309 | 216 | 65 | 1.0 |
| 3 | 80 | 83 | 0.00 | 0.00 | 1.7 | 0.00 | 0.00 | 200 | 302 | 201 | 85 | 1.7 |
| 4 | 65 | 56 | 0.00 | 0.00 | 0.60 | 0.00 | 0.00 | 228 | 298 | 180 | 89 | 18 |
| 5 | 55 | 36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 227 | 343 | 169 | 85 | 36 |
| 6 | 68 | 21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 207 | 377 | 226 | 87 | 39 |
| 7 | 95 | 12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 191 | 389 | 231 | 83 | 38 |
| 8 | 107 | 6.9 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 180 | 428 | 213 | 71 | 34 |
| 9 | 97 | 4.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 171 | 437 | 189 | 57 | 26 |
| 10 | 98 | 2.1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 165 | 405 | 173 | 47 | 19 |
| 11 | 94 | 0.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 167 | 364 | 158 | 39 | 15 |
| 12 | 79 | 13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 168 | 349 | 138 | 29 | 16 |
| 13 | 67 | 310 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 178 | 361 | 118 | 21 | 91 |
| 14 | 67 | 370 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 197 | 358 | 106 | 16 | 149 |
| 15 | 60 | 290 | 0.00 | 8.0 | 0.00 | 0.00 | 0.00 | 217 | 329 | 98 | 14 | 147 |
| 16 | 51 | 223 | 0.00 | 15 | 0.00 | 0.00 | 0.00 | 227 | 304 | 106 | 13 | 126 |
| 17 | 54 | 167 | 0.00 | 21 | 0.00 | 0.00 | 0.00 | 229 | 300 | 104 | 11 | 100 |
| 18 | 104 | 127 | 0.00 | 46 | 0.00 | 0.00 | 0.00 | 236 | 315 | 90 | 8.9 | 77 |
| 19 | 160 | 90 | 0.00 | 58 | 0.00 | 0.00 | 0.00 | 255 | 351 | 79 | 6.9 | 59 |
| 20 | 150 | 60 | 0.00 | 59 | 0.00 | 0.00 | 0.00 | 297 | 379 | 77 | 6.1 | 54 |
| 21 | 159 | 38 | 0.00 | 66 | 0.00 | 0.00 | 0.00 | 335 | 393 | 77 | 5.2 | 247 |
| 22 | 193 | 23 | 0.00 | 88 | 0.00 | 0.00 | 0.00 | 339 | 403 | 73 | 4.0 | 311 |
| 23 | 218 | 15 | 0.00 | 103 | 0.00 | 0.00 | 0.00 | 321 | 407 | 65 | 2.5 | 403 |
| 24 | 211 | 9.4 | 0.00 | 93 | 0.00 | 0.00 | 0.58 | 315 | 410 | 62 | 1.2 | 669 |
| 25 | 447 | 6.1 | 0.00 | 75 | 0.00 | 0.00 | 2.1 | 346 | 402 | 68 | 0.47 | 583 |
| 26 | 789 | 3.5 | 0.00 | 57 | 0.00 | 0.00 | 10 | 383 | 382 | 68 | 0.11 | 435 |
| 27 | 624 | 2.3 | 0.00 | 40 | 0.00 | 0.00 | 23 | 386 | 359 | 58 | 0.93 | 360 |
| 28 | 503 | 0.90 | 0.00 | 28 | 0.00 | 0.00 | 31 | 359 | 323 | 60 | 2.9 | 305 |
| 29 | 388 | 0.00 | 0.00 | 19 | 0.00 | 0.00 | 39 | 338 | 284 | 84 | 2.7 | 237 |
| 30 | 292 | 0.00 | 0.00 | 13 | --- | 0.00 | 57 | 328 | 255 | 81 | 2.6 | 182 |
| 31 | 221 | --- | 0.00 | 8.9 | --- | 0.00 | --- | 324 | --- | 67 | 2.7 | --- |
| TOTAL | 5826 | 2253.99 | 0.00 | 797.90 | 11.40 | 0.00 | 162.68 | 7773 | 10631 | 3867 | 914.21 | 4780.5 |
| MEAN | 188 | 75.1 | 0.00 | 25.7 | 0.39 | 0.00 | 5.42 | 251 | 354 | 125 | 29.5 | 159 |
| MAX | 789 | 370 | 0.00 | 103 | 5.7 | 0.00 | 57 | 386 | 437 | 232 | 89 | 669 |
| MIN | 51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 104 | 255 | 58 | 0.11 | 1.0 |
| AC-FT | 11560 | 4470 | 0.00 | 1580 | 23 | 0.00 | 323 | 15420 | 21090 | 7670 | 1810 | 9480 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 155 | 51.0 | 12.8 | 8.15 | 0.23 | 0.00 | 3.10 | 85.0 | 272 | 178 | 106 | 187 |
| MAX | 264 | 108 | 64.4 | 61.4 | 2.08 | 0.00 | 24.8 | 251 | 367 | 305 | 216 | 298 |
| (WY) | 2000 | 1993 | 2003 | 2003 | 2003 | 1993 | 1993 | 2004 | 1999 | 1999 | 2000 | 2001 |
| MIN | 66.1 | 5.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 176 | 55.2 | 19.2 | 41.5 |
| (WY) | 2003 | 1997 | 1995 | 1993 | 1993 | 1993 | 1994 | 2002 | 1994 | 1998 | 2003 | 1993 |

# Record for 1980 and 1981 water years, prior to diversion of 1984,not included. See Period of Record.

## 15019990 TYEE LAKE OUTLET NEAR WRANGELL—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1992 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 31967.40 | | 37017.68 | | | |
| ANNUAL MEAN | 87.6 | | 101 | | 87.9 | |
| HIGHEST ANNUAL MEAN | | | | | 113 | 2001 |
| LOWEST ANNUAL MEAN | | | | | 56.5 | 1995 |
| HIGHEST DAILY MEAN | 789 | Oct 26 | 789 | Oct 26 | 789 | Oct 26 2003 |
| LOWEST DAILY MEAN | a0.00 | Feb 10 | b0.00 | Nov 29 | c0.00 | Dec 30 1992 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 | Feb 10 | 0.00 | Nov 29 | 0.00 | Dec 30 1992 |
| MAXIMUM PEAK FLOW | | | d856 | Oct 26 | d975 | Oct 26 1993 |
| MAXIMUM PEAK STAGE | | | 27.43 | Oct 26 | 28.62 | Oct 26 1993 |
| INSTANTANEOUS LOW FLOW | | | f | | f | |
| ANNUAL RUNOFF (AC-FT) | 63410 | | 73420 | | 63670 | |
| 10 PERCENT EXCEEDS | 290 | | 336 | | 280 | |
| 50 PERCENT EXCEEDS | 21 | | 30 | | 20 | |
| 90 PERCENT EXCEEDS | 0.00 | | 0.00 | | 0.00 | |

PRIOR TO DIVERSION OF 1984

| SUMMARY STATISTICS | WATER YEARS 1980 - 1981 | |
|---|---|---|
| ANNUAL MEAN | 179 | |
| HIGHEST ANNUAL MEAN | 213 | 1981 |
| LOWEST ANNUAL MEAN | 146 | 1980 |
| HIGHEST DAILY MEAN | 1690 | Oct. 7 1980 |
| LOWEST DAILY MEAN | g1.4 | Apr. 2 1980 |
| ANNUAL SEVEN-DAY MINIMUN | 2.0 | Mar.31 1980 |
| INSTANTANEOUS PEAK FLOW | 1910 | Oct. 7 1980 |
| INSTANTANEOUS PEAK STAGE | 12.72 | Oct. 7 1980 |
| ANNUAL RUNOFF (AC-FT) | 130000 | |
| 10 PERCENT EXCEEDS | 457 | |
| 50 PERCENT EXCEEDS | 86 | |
| 90 PERCENT EXCEEDS | 11 | |

\# Record for 1980 and 1981 water years, prior to diversion of 1984,not included. See Period of Record.
a Feb 10 to May 13 and Nov 29 to Dec 31.
b Nov 29 to Jan. 14,Feb. 5 to Apr. 23
c No flow many days during winter months most years.
d From rating extended above 400 cfs.
f Not determined, see lowest daily mean
g April 2-3 1980.

## 15019990 TYEE LAKE OUTLET NEAR WRANGELL—Continued

### LAKE-STAGE RECORDS

PERIOD OF RECORD.-- June of 1992 to Sept.2002 (fragmentary) during many winter months when lake level was below the point of Zero flow at the outlet. 2003 to 2004.

GAGE.-- Water-stage recorder. Datum of gage is mean low low water (GPS survey of Aug.21,2003 by USGS using NADD 83) lake outlet at a datum of 1,368.80 ft. above mean low low water at the point of zero flow.

REMARKS.-- Lake outlet consists of Large boulders and log jams with uncontrolled spillway at elevation 1368.80 ft. Waterfor power generation is diverted from Tyee lake and discharged into Bradfield Canal. Diversion to power plant began in February 1984.

EXTREMES FOR PERIOD OF RECORD.-- Maximum elevation,1983.02 ft. Oct.26,1993:minimum observed unknown until 2003 wy

EXTREMES FOR CURRENT YEAR.-- Maximum elevation,1381.28 ft.October 25 ,2003; minimum 1363.82 ft.March 28,2004

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1373.41 | 1373.60 | 1368.60 | 1366.75 | 1369.86 | 1366.99 | 1364.60 | 1372.57 | 1375.77 | 1374.63 | 1371.59 | 1369.34 |
| 2 | 1372.83 | 1372.84 | 1368.54 | 1366.50 | 1369.59 | 1366.82 | 1364.50 | 1373.45 | 1375.69 | 1374.39 | 1371.82 | 1369.17 |
| 3 | 1372.34 | 1372.18 | 1368.42 | 1366.23 | 1369.31 | 1366.66 | 1364.55 | 1374.15 | 1375.59 | 1374.17 | 1372.22 | 1369.31 |
| 4 | 1371.95 | 1371.63 | 1368.18 | 1365.96 | 1369.05 | 1366.50 | 1364.71 | 1374.57 | 1375.55 | 1373.84 | 1372.29 | 1370.57 |
| 5 | 1371.68 | 1371.15 | 1367.96 | 1365.67 | 1368.85 | 1366.38 | 1364.74 | 1374.55 | 1376.13 | 1373.68 | 1372.21 | 1371.16 |
| 6 | 1372.02 | 1370.73 | 1367.70 | 1365.36 | 1368.68 | 1366.23 | 1364.70 | 1374.26 | 1376.57 | 1374.54 | 1372.25 | 1371.24 |
| 7 | 1372.68 | 1370.33 | 1367.43 | 1365.08 | 1368.49 | 1366.19 | 1364.71 | 1374.02 | 1376.71 | 1374.61 | 1372.18 | 1371.20 |
| 8 | 1372.95 | 1369.97 | 1367.14 | 1364.88 | 1368.35 | 1366.34 | 1364.85 | 1373.84 | 1377.19 | 1374.35 | 1371.93 | 1371.11 |
| 9 | 1372.74 | 1369.66 | 1366.83 | 1364.79 | 1368.34 | 1366.83 | 1365.00 | 1373.70 | 1377.30 | 1373.98 | 1371.65 | 1370.88 |
| 10 | 1372.74 | 1369.38 | 1366.51 | 1365.05 | 1368.38 | 1366.87 | 1365.18 | 1373.61 | 1376.91 | 1373.74 | 1371.41 | 1370.66 |
| 11 | 1372.65 | 1369.11 | 1366.21 | 1365.18 | 1368.33 | 1366.84 | 1365.71 | 1373.64 | 1376.39 | 1373.49 | 1371.23 | 1370.50 |
| 12 | 1372.31 | 1369.92 | 1365.96 | 1365.23 | 1368.24 | 1366.76 | 1366.51 | 1373.65 | 1376.20 | 1373.16 | 1370.97 | 1370.53 |
| 13 | 1372.01 | 1375.60 | 1365.67 | 1365.93 | 1368.17 | 1366.64 | 1367.07 | 1373.81 | 1376.36 | 1372.83 | 1370.73 | 1372.28 |
| 14 | 1372.00 | 1376.48 | 1365.36 | 1367.73 | 1368.16 | 1366.53 | 1367.40 | 1374.11 | 1376.32 | 1372.61 | 1370.53 | 1373.36 |
| 15 | 1371.81 | 1375.44 | 1365.12 | 1370.02 | 1368.09 | 1366.45 | 1367.67 | 1374.40 | 1375.95 | 1372.46 | 1370.44 | 1373.32 |
| 16 | 1371.57 | 1374.48 | 1364.98 | 1370.48 | 1367.99 | 1366.35 | 1367.82 | 1374.55 | 1375.62 | 1372.61 | 1370.39 | 1372.97 |
| 17 | 1371.67 | 1373.64 | 1364.79 | 1370.74 | 1367.87 | 1366.16 | 1367.94 | 1374.59 | 1375.57 | 1372.57 | 1370.28 | 1372.49 |
| 18 | 1372.88 | 1372.98 | 1364.61 | 1371.38 | 1367.85 | 1365.94 | 1368.04 | 1374.68 | 1375.77 | 1372.30 | 1370.13 | 1372.06 |
| 19 | 1374.03 | 1372.31 | 1364.89 | 1371.67 | 1367.86 | 1365.73 | 1368.04 | 1374.95 | 1376.24 | 1372.10 | 1369.97 | 1371.68 |
| 20 | 1373.86 | 1371.70 | 1365.19 | 1371.68 | 1367.88 | 1365.53 | 1368.03 | 1375.53 | 1376.58 | 1372.05 | 1369.90 | 1371.56 |
| 21 | 1374.00 | 1371.19 | 1365.20 | 1371.83 | 1367.99 | 1365.32 | 1368.13 | 1376.03 | 1376.77 | 1372.06 | 1369.81 | 1374.81 |
| 22 | 1374.61 | 1370.81 | 1366.04 | 1372.28 | 1368.01 | 1365.10 | 1368.35 | 1376.08 | 1376.89 | 1371.98 | 1369.66 | 1375.72 |
| 23 | 1375.02 | 1370.48 | 1367.48 | 1372.56 | 1367.95 | 1364.81 | 1368.82 | 1375.85 | 1376.94 | 1371.81 | 1369.45 | 1376.88 |
| 24 | 1374.91 | 1370.17 | 1367.96 | 1372.37 | 1367.87 | 1364.53 | 1369.04 | 1375.76 | 1376.97 | 1371.75 | 1369.21 | 1379.91 |
| 25 | 1378.09 | 1369.89 | 1368.13 | 1372.03 | 1367.75 | 1364.30 | 1369.38 | 1376.17 | 1376.87 | 1371.88 | 1369.00 | 1378.97 |
| 26 | 1381.28 | 1369.60 | 1368.15 | 1371.64 | 1367.61 | 1364.07 | 1370.20 | 1376.64 | 1376.63 | 1371.88 | 1368.83 | 1377.27 |
| 27 | 1379.42 | 1369.41 | 1367.98 | 1371.26 | 1367.46 | 1363.89 | 1370.80 | 1376.68 | 1376.33 | 1371.67 | 1369.11 | 1376.35 |
| 28 | 1378.07 | 1369.13 | 1367.75 | 1370.94 | 1367.31 | 1363.82 | 1371.03 | 1376.34 | 1375.87 | 1371.71 | 1369.51 | 1375.63 |
| 29 | 1376.70 | 1368.88 | 1367.48 | 1370.68 | 1367.16 | 1364.02 | 1371.23 | 1376.07 | 1375.35 | 1372.20 | 1369.49 | 1374.69 |
| 30 | 1375.46 | 1368.67 | 1367.23 | 1370.40 | --- | 1364.63 | 1371.64 | 1375.94 | 1374.95 | 1372.14 | 1369.47 | 1373.87 |
| 31 | 1374.46 | --- | 1366.99 | 1370.13 | --- | 1364.71 | --- | 1375.89 | --- | 1371.86 | 1369.48 | --- |
| MEAN | 1373.94 | 1371.38 | 1366.79 | 1368.79 | 1368.22 | 1365.74 | 1367.35 | 1374.84 | 1376.27 | 1372.87 | 1370.55 | 1372.98 |
| MAX | 1381.28 | 1376.48 | 1368.60 | 1372.56 | 1369.86 | 1366.99 | 1371.64 | 1376.68 | 1377.30 | 1374.63 | 1372.29 | 1379.91 |
| MIN | 1371.57 | 1368.67 | 1364.61 | 1364.79 | 1367.16 | 1363.82 | 1364.50 | 1372.57 | 1374.95 | 1371.67 | 1368.83 | 1369.17 |

## 15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¼ SW¼ sec. 22, T. 65 S., R. 89 E. (Bradfield Canal A-5 quad), Hydrologic Unit 19010101, in Tongass National Forest, on right bank 1 mi upstream from mouth on north shore of Bradfield Canal, 4 mi downstream from Fall Lake, and 34 mi southeast of Wrangell.

DRAINAGE AREA.--67.4 $mi^2$.

PERIOD OF RECORD.--August 1951 to April 30, 2004.(discontinued)

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, by barometer. Prior to September 30, 1960, at site 300 ft upstream at datum 0.12 ft lower. October 1, 1960, to August 23, 1975, at prior site and present datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT PERIOD.-- Maximum discharge for period October 2003 through April 2004, 11,300 $ft^3/s$, Oct. 26, gage height 13.57, minimum not determined, minimum daily mean discharge 70 $ft^3/s$ January 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 531 | 310 | 345 | e150 | e76 | e150 | 348 | --- | --- | --- | --- | --- |
| 2 | 481 | 263 | 651 | e120 | e80 | e140 | 339 | --- | --- | --- | --- | --- |
| 3 | 439 | 227 | 436 | e90 | e85 | e130 | 492 | --- | --- | --- | --- | --- |
| 4 | 429 | e190 | 270 | e85 | e90 | e120 | 658 | --- | --- | --- | --- | --- |
| 5 | 476 | e180 | 228 | e80 | e94 | e110 | 480 | --- | --- | --- | --- | --- |
| 6 | 690 | e170 | 192 | e80 | e100 | 166 | 386 | --- | --- | --- | --- | --- |
| 7 | 1080 | e160 | 181 | e85 | e400 | 372 | 381 | --- | --- | --- | --- | --- |
| 8 | 973 | e150 | e170 | e90 | e500 | 725 | 464 | --- | --- | --- | --- | --- |
| 9 | 631 | e140 | e160 | e97 | e520 | 860 | 486 | --- | --- | --- | --- | --- |
| 10 | 769 | e130 | e150 | e200 | e400 | 454 | 587 | --- | --- | --- | --- | --- |
| 11 | 587 | e190 | e145 | e390 | e310 | 419 | 927 | --- | --- | --- | --- | --- |
| 12 | 402 | 1480 | e160 | e600 | e290 | 356 | 1320 | --- | --- | --- | --- | --- |
| 13 | 365 | 4470 | e190 | e900 | e270 | 269 | 1010 | --- | --- | --- | --- | --- |
| 14 | 677 | 1390 | e240 | e1400 | e250 | 237 | 787 | --- | --- | --- | --- | --- |
| 15 | 518 | 666 | e300 | e1200 | e240 | 272 | 671 | --- | --- | --- | --- | --- |
| 16 | 385 | 479 | e330 | 724 | e230 | 307 | 518 | --- | --- | --- | --- | --- |
| 17 | 501 | 388 | e320 | 868 | 214 | 291 | 460 | --- | --- | --- | --- | --- |
| 18 | 1180 | 328 | 384 | 1120 | 298 | 213 | 457 | --- | --- | --- | --- | --- |
| 19 | 1670 | 266 | 1430 | 905 | 480 | e170 | 395 | --- | --- | --- | --- | --- |
| 20 | 834 | 216 | 1200 | 702 | 510 | e150 | 364 | --- | --- | --- | --- | --- |
| 21 | 1120 | e170 | 688 | 889 | 574 | e140 | 411 | --- | --- | --- | --- | --- |
| 22 | 1020 | e140 | 2080 | 1250 | 410 | e130 | 515 | --- | --- | --- | --- | --- |
| 23 | 1150 | e120 | 2140 | 1140 | 332 | e120 | 715 | --- | --- | --- | --- | --- |
| 24 | 914 | e110 | 987 | 642 | 317 | e178 | 725 | --- | --- | --- | --- | --- |
| 25 | 6780 | e105 | 770 | 403 | 258 | 215 | 813 | --- | --- | --- | --- | --- |
| 26 | 8100 | e101 | 515 | e200 | 221 | 223 | 1310 | --- | --- | --- | --- | --- |
| 27 | 1930 | e100 | 364 | e73 | 196 | 255 | 932 | --- | --- | --- | --- | --- |
| 28 | 1610 | e100 | 276 | e70 | 181 | 395 | 670 | --- | --- | --- | --- | --- |
| 29 | 763 | e110 | 237 | e71 | e160 | 690 | 622 | --- | --- | --- | --- | --- |
| 30 | 495 | e190 | 213 | e72 | --- | 913 | 880 | --- | --- | --- | --- | --- |
| 31 | 379 | --- | 191 | e73 | --- | 490 | --- | --- | --- | --- | --- | --- |
| TOTAL | 37879 | 13039 | 15943 | 14769 | 8086 | 9660 | 19123 | --- | --- | --- | --- | --- |
| MEAN | 1222 | 435 | 514 | 476 | 279 | 312 | 637 | --- | --- | --- | --- | --- |
| MAX | 8100 | 4470 | 2140 | 1400 | 574 | 913 | 1320 | --- | --- | --- | --- | --- |
| MIN | 365 | 100 | 145 | 70 | 76 | 110 | 339 | --- | --- | --- | --- | --- |
| MED | 690 | 185 | 300 | 200 | 258 | 237 | 553 | --- | --- | --- | --- | --- |
| AC-FT | 75130 | 25860 | 31620 | 29290 | 16040 | 19160 | 37930 | --- | --- | --- | --- | --- |
| CFSM | 18.1 | 6.45 | 7.63 | 7.07 | 4.14 | 4.62 | 9.46 | --- | --- | --- | --- | --- |
| IN. | 20.91 | 7.20 | 8.80 | 8.15 | 4.46 | 5.33 | 10.55 | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1077 | 499 | 345 | 263 | 236 | 204 | 366 | 918 | 1385 | 1340 | 1137 | 1161 |
| MAX | 2152 | 1252 | 1065 | 819 | 655 | 510 | 733 | 1357 | 1896 | 1878 | 1871 | 2039 |
| (WY) | 1962 | 1970 | 1990 | 1981 | 1954 | 1986 | 1994 | 1956 | 1996 | 1972 | 2002 | 2001 |
| MIN | 610 | 118 | 102 | 50.6 | 46.7 | 54.8 | 90.0 | 624 | 960 | 861 | 601 | 507 |
| (WY) | 1970 | 1986 | 1984 | 1969 | 1969 | 1969 | 1954 | 1977 | 1981 | 1995 | 1993 | 1965 |

\# See Period of Record; partial years used in monthly statistics
e Estimated

## 15022000 HARDING RIVER NEAR WRANGELL—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | WATER YEARS 1951 - 2004# | |
|---|---|---|---|---|
| ANNUAL TOTAL | 287791 | | | |
| ANNUAL MEAN | 788 | | 747 | |
| HIGHEST ANNUAL MEAN | | | 921 | 1992 |
| LOWEST ANNUAL MEAN | | | 558 | 1995 |
| HIGHEST DAILY MEAN | 8100 | Oct 26 | 11400 | Oct 14 1961 |
| LOWEST DAILY MEAN | 94 | Mar 12 | a35 | Jan 23 1969 |
| ANNUAL SEVEN-DAY MINIMUM | 107 | Nov 23 | 35 | Jan 23 1969 |
| MAXIMUM PEAK FLOW | b11300 | Oct 26 | b15300 | Oct 26 1993 |
| MAXIMUM PEAK STAGE | 13.57 | Oct 26 | c16.22 | Oct 14 1961 |
| INSTANTANEOUS LOW FLOW | d | | 35 | Jan 23 1969 |
| ANNUAL RUNOFF (AC-FT) | 570800 | | 541100 | |
| ANNUAL RUNOFF (CFSM) | 11.7 | | 11.1 | |
| ANNUAL RUNOFF (INCHES) | 158.84 | | 150.56 | |
| 10 PERCENT EXCEEDS | 1610 | | 1610 | |
| 50 PERCENT EXCEEDS | 504 | | 544 | |
| 90 PERCENT EXCEEDS | 140 | | 110 | |

\# See Period of Record; partial years used in monthly statistics
a From Jan. 23 to Feb. 11, 1969
b From rating curve extended above 5,000 $ft^3/s$ on basis of slope-area measurement at gage height, 13.90 ft
c At site then in use
d Not determined, see lowest daily mean

## 15024800 STIKINE RIVER NEAR WRANGELL
(International gaging station)

LOCATION.--Lat 56°42'29", long 132°07'49", in SE¼ SE¼ sec. 35, T. 59 S., R. 84 E. (Petersburg C-1 quad), Hydrologic Unit 19010201, on right bank about 10 mi upstream from mouth near Point Rothsay, 11 mi west of Alaska-British Columbia boundary, and 18 mi northeast of Wrangell.

DRAINAGE AREA.--19,920 $mi^2$, approximately.

PERIOD OF RECORD.--July 1976 to current year.

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

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges during periods of ice effect, Nov. 26 to Apr. 18, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 83400 | 43200 | e9800 | e7300 | e6100 | e7600 | e13000 | 43400 | 105000 | 171000 | 102000 | 63300 |
| 2 | 78600 | 38500 | e9500 | e7200 | e6000 | e7500 | e12500 | 52600 | 98400 | 159000 | 97500 | 63400 |
| 3 | 74000 | e31000 | e9300 | e7000 | e5800 | e7400 | e16100 | 59000 | 92100 | 153000 | 99000 | 65600 |
| 4 | 70600 | e27000 | e9100 | e6900 | e5700 | e7200 | e18300 | 63500 | 89100 | 147000 | 99400 | 86500 |
| 5 | 70200 | e23000 | e9000 | e6800 | e5700 | e7000 | e17900 | 67100 | 96700 | 140000 | 103000 | 78200 |
| 6 | 69100 | e20000 | e8800 | e6700 | e5700 | e7000 | e16600 | 62800 | 115000 | 142000 | 109000 | 64200 |
| 7 | 77100 | e18000 | e8700 | e6700 | e5800 | e7000 | e16300 | 56200 | 137000 | 144000 | 107000 | 58500 |
| 8 | 71100 | e16000 | e8600 | e6600 | e5900 | e7000 | e16800 | 55500 | 168000 | 139000 | 102000 | 53300 |
| 9 | 61700 | e16000 | e8500 | e6600 | e6100 | e7200 | e17800 | 58800 | 180000 | 152000 | 100000 | 46400 |
| 10 | 57900 | e17000 | e8400 | e6500 | e6300 | e7400 | e17900 | 60600 | 168000 | 159000 | 105000 | 40300 |
| 11 | 51100 | e18000 | e8300 | e6700 | e6600 | e7700 | 21000 | 59900 | 147000 | 153000 | 116000 | 36900 |
| 12 | 45000 | e20000 | e8300 | e7000 | e6800 | e7900 | 24900 | 59300 | 131000 | 140000 | 114000 | 36600 |
| 13 | 40900 | e45000 | e8300 | e7200 | e6900 | e8000 | 26200 | 62400 | 126000 | 140000 | 97900 | 43600 |
| 14 | 41800 | e34000 | e8400 | e7500 | e7000 | e7800 | 27000 | 70400 | 126000 | 148000 | 98900 | 53700 |
| 15 | 38700 | e28000 | e8400 | e7700 | e7000 | e7600 | 26600 | 78200 | 122000 | 150000 | 111000 | 51100 |
| 16 | 34700 | e24000 | e8500 | e7800 | e7200 | e7600 | e23500 | 82900 | 118000 | 151000 | 125000 | 44000 |
| 17 | 32500 | e20000 | e8800 | e7800 | e7300 | e7600 | e22000 | 86400 | 121000 | 145000 | 131000 | 38700 |
| 18 | 34500 | e18000 | e9000 | e7800 | e7400 | e7600 | e21500 | 91200 | 133000 | 134000 | 132000 | 35300 |
| 19 | 42700 | e17000 | e9200 | e7500 | e7500 | e7700 | e20900 | 97500 | 152000 | 131000 | 128000 | 32900 |
| 20 | 39600 | e15000 | e9500 | e7200 | e7600 | e7800 | e20100 | 110000 | 171000 | 133000 | 113000 | 33600 |
| 21 | 35900 | e14000 | e10000 | e7200 | e7800 | e8000 | e20600 | 125000 | 184000 | 139000 | 100000 | 90300 |
| 22 | 37000 | e13000 | e11000 | e7200 | e8100 | e8300 | e21500 | 129000 | 192000 | 136000 | 94800 | 115000 |
| 23 | 38200 | e13000 | e12000 | e7100 | e8200 | e8600 | 25300 | 119000 | 191000 | 136000 | 87800 | 102000 |
| 24 | 35800 | e12000 | e11000 | e6800 | e8400 | e9400 | 26100 | 112000 | 197000 | 136000 | 72900 | 151000 |
| 25 | 78600 | e12000 | e10000 | e6600 | e8400 | e12000 | 27600 | 117000 | 199000 | 133000 | 69000 | 134000 |
| 26 | 173000 | e11000 | e9700 | e6500 | e8300 | e14000 | 34400 | 131000 | 193000 | 121000 | 68200 | 85000 |
| 27 | 176000 | e11000 | e9000 | e6500 | e8100 | e14500 | 36700 | 140000 | 192000 | 109000 | 75100 | 78900 |
| 28 | 114000 | e11000 | e8300 | e6200 | e8000 | e14500 | 35100 | 134000 | 180000 | 117000 | 90900 | 83900 |
| 29 | 82000 | e10000 | e8000 | e6200 | e7800 | e14000 | 34300 | 121000 | 174000 | 135000 | 78700 | 64600 |
| 30 | 62600 | e10000 | e7600 | e6200 | --- | e14000 | 36400 | 113000 | 179000 | 133000 | 68900 | 55000 |
| 31 | 51200 | --- | e7400 | e6100 | --- | e13500 | --- | 109000 | --- | 112000 | 64500 | --- |
| TOTAL | 1999500 | 605700 | 280400 | 215100 | 203500 | 280400 | 694900 | 2727700 | 4477300 | 4338000 | 3061500 | 1985800 |
| MEAN | 64500 | 20190 | 9045 | 6939 | 7017 | 9045 | 23160 | 87990 | 149200 | 139900 | 98760 | 66190 |
| MAX | 176000 | 45000 | 12000 | 7800 | 8400 | 14500 | 36700 | 140000 | 199000 | 171000 | 132000 | 151000 |
| MIN | 32500 | 10000 | 7400 | 6100 | 5700 | 7000 | 12500 | 43400 | 89100 | 109000 | 64500 | 32900 |
| MED | 57900 | 17500 | 8800 | 6900 | 7000 | 7700 | 21500 | 82900 | 150000 | 140000 | 100000 | 60900 |
| AC-FT | 3966000 | 1201000 | 556200 | 426700 | 403600 | 556200 | 1378000 | 5410000 | 8881000 | 8604000 | 6072000 | 3939000 |
| CFSM | 3.24 | 1.01 | 0.45 | 0.35 | 0.35 | 0.45 | 1.16 | 4.42 | 7.49 | 7.02 | 4.96 | 3.32 |
| IN. | 3.73 | 1.13 | 0.52 | 0.40 | 0.38 | 0.52 | 1.30 | 5.09 | 8.36 | 8.10 | 5.72 | 3.71 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 57330 | 24480 | 13970 | 11550 | 9172 | 9968 | 16730 | 66950 | 135200 | 134600 | 106900 | 80130 |
| MAX | 113300 | 58280 | 25780 | 39450 | 19080 | 42340 | 31960 | 119100 | 199900 | 163800 | 134200 | 128600 |
| (WY) | 1987 | 1979 | 1990 | 1981 | 1977 | 1992 | 1992 | 1993 | 1992 | 1985 | 1977 | 1981 |
| MIN | 30590 | 10010 | 5593 | 5958 | 5111 | 4719 | 7292 | 32260 | 103400 | 109100 | 76770 | 50760 |
| (WY) | 1986 | 1986 | 1997 | 1978 | 1999 | 1978 | 2002 | 1982 | 1978 | 1983 | 1995 | 1986 |

\# See Period of Record; partial years used in monthly statistics
e Estimated

## 15024800 STIKINE RIVER NEAR WRANGELL—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1976 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 19451650 | | 20869800 | | | |
| ANNUAL MEAN | 53290 | | 57020 | | 55760 | |
| HIGHEST ANNUAL MEAN | | | | | 72870 | 1981 |
| LOWEST ANNUAL MEAN | | | | | 42100 | 1978 |
| HIGHEST DAILY MEAN | 176000 | Oct 27 | 199000 | Jun 25 | 324000 | Sep 23 1994 |
| LOWEST DAILY MEAN | 4500 | Mar 12 | a5700 | Feb 4 | 4000 | Feb 12 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 4740 | Mar 8 | 5800 | Feb 2 | 4090 | Mar 8 1999 |
| MAXIMUM PEAK FLOW | | | b201000 | Jun 24 | 351000 | Sep 23 1994 |
| MAXIMUM PEAK STAGE | | | b24.34 | Jun 24 | 30.60 | Sep 23 1994 |
| ANNUAL RUNOFF (AC-FT) | 38580000 | | 41400000 | | 40390000 | |
| ANNUAL RUNOFF (CFSM) | 2.68 | | 2.86 | | 2.80 | |
| ANNUAL RUNOFF (INCHES) | 36.33 | | 38.97 | | 38.03 | |
| 10 PERCENT EXCEEDS | 127000 | | 139000 | | 136000 | |
| 50 PERCENT EXCEEDS | 37000 | | 35600 | | 31900 | |
| 90 PERCENT EXCEEDS | 7000 | | 7000 | | 7200 | |

a Feb. 4-6
b Jun. 24-25
# See Period of Record; partial years used in monthly statistics

## 15041200 TAKU RIVER NEAR JUNEAU
(International gaging station)

LOCATION.--Lat 58°32'19", long 133°42'00", in NE$^1/_4$ NW$^1/_4$ sec. 33, T. 38 S., R. 71 E. (Taku River C-6 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on left bank, 1.5 mi upstream from Wright River, and 31 mi northeast of Juneau.

DRAINAGE AREA.--6,600 mi$^2$, approximately.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1987 to current year.

REVISED RECORD.--WDR AK-98-1, 1987-1997; WDR AK-00-1 1989-90 (M), 1992-95 (M).

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft$^3$/s and maximum (*).

| Date | Time | Discharge (ft$^3$/s) | Gage height (ft) | Date | Time | Discharge (ft$^3$/s) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Jun 09 | 0145 | 59,300 | 39.86 | July 01 | 1315 | 51,000 | 38.97 |
| Jun 25 | 1630 | *128,000 | *45.07 | July 14 | 1645 | 55,400 | 39.45 |

DISCHARGE, in CFS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20800 | e7400 | e3600 | e2700 | e1600 | e2000 | 2600 | 11500 | 28400 | 50500 | 27000 | 15300 |
| 2 | 19200 | e6800 | e3500 | e2600 | e1600 | e1900 | 2740 | 13700 | 26700 | 47700 | 23600 | 15300 |
| 3 | 17700 | e6000 | e3400 | e2500 | e1500 | e1900 | 3240 | 15700 | 24800 | 47000 | 25500 | 19800 |
| 4 | 16900 | e5100 | e3300 | e2400 | e1500 | e1900 | 3840 | 17600 | 24800 | 45800 | 27900 | 24600 |
| 5 | 17200 | e4600 | e3250 | e2400 | e1500 | e1900 | 3940 | 17700 | 29100 | 41800 | 27400 | 22100 |
| 6 | 15400 | e4300 | e3200 | e2300 | e1500 | e1800 | 3760 | 16200 | 37600 | 39200 | 29100 | 18800 |
| 7 | 14400 | e4100 | e3100 | e2200 | e1600 | e1800 | 3640 | 16000 | 47000 | 39100 | 29300 | 15500 |
| 8 | 13200 | e4000 | e3100 | e2200 | e1700 | e1900 | 3720 | 17800 | 55700 | 37000 | 29100 | 12700 |
| 9 | 11700 | e4200 | e3000 | e2200 | e1800 | e1900 | 3880 | 19600 | 57200 | 37300 | 26900 | 11000 |
| 10 | 10700 | e4700 | e2900 | e2200 | e1900 | e2000 | 3950 | 19600 | 47500 | 37000 | 27300 | 9900 |
| 11 | 9800 | e5200 | e2900 | e2200 | e1900 | e2100 | 4170 | 18900 | 38200 | 36200 | 29300 | 9090 |
| 12 | 8920 | e6000 | e2900 | e2100 | e2000 | e2100 | 4580 | 19300 | 32300 | 35200 | 28300 | 9150 |
| 13 | 8180 | e7400 | e3000 | e2200 | e2000 | e2100 | 4810 | 21600 | 30300 | 39600 | 25300 | 10400 |
| 14 | 7670 | e6700 | e3000 | e2300 | e2100 | e2000 | 5000 | 25200 | 33500 | 50400 | 25300 | 11200 |
| 15 | 7280 | e6000 | e3000 | e2400 | e2100 | e2000 | 4920 | 28200 | 34700 | 40300 | 28300 | 10600 |
| 16 | 6840 | e5600 | e3100 | e2300 | e2100 | e2000 | 4570 | 29500 | 33400 | 36500 | 30700 | 9790 |
| 17 | 6470 | e5300 | e3200 | e2300 | e2100 | e2000 | 4370 | 30400 | 33200 | 35900 | 33900 | 8820 |
| 18 | 6290 | e5000 | e3200 | e2200 | e2170 | e2000 | 4380 | 30700 | 35800 | 34400 | 36900 | 8030 |
| 19 | 6150 | e4700 | e3300 | e2200 | e2200 | e1900 | 4450 | 31900 | 42900 | 33000 | 34200 | 7490 |
| 20 | 6150 | e4500 | e3400 | e2200 | e2300 | e1900 | 4430 | 36400 | 47500 | 32500 | 29700 | 7430 |
| 21 | 5990 | e4300 | e3400 | e2300 | e2400 | e2000 | 4600 | 41300 | 49200 | 33400 | 27500 | 17800 |
| 22 | 5830 | e4200 | e3500 | e2300 | e2500 | e2000 | 4970 | 40100 | 48200 | 35700 | 26700 | 28000 |
| 23 | 5860 | e4100 | e3600 | e2200 | e2500 | e2000 | 5120 | 37300 | 48000 | 38300 | 22600 | 24900 |
| 24 | 5810 | e4100 | e3500 | e2100 | e2500 | 2140 | 5140 | 38600 | 64100 | 36700 | 19100 | 33100 |
| 25 | 7760 | e4000 | e3400 | e2000 | e2400 | 2470 | 5660 | 42700 | 113000 | 32500 | 17900 | 29000 |
| 26 | 16800 | e4000 | e3200 | e1900 | e2300 | 2800 | 7510 | 46500 | 76800 | 28700 | 17100 | 20900 |
| 27 | 21700 | e3900 | e3100 | e1800 | e2300 | 2870 | 8630 | 43100 | 48800 | 26900 | 19800 | 24200 |
| 28 | 16000 | e3800 | e3000 | e1700 | e2200 | 2810 | 8860 | 38400 | 48100 | 32200 | 22400 | 25000 |
| 29 | 12400 | e3800 | e2800 | e1700 | e2100 | 2840 | 9120 | 36100 | 47000 | 40000 | 20900 | 20100 |
| 30 | 10200 | e3700 | e2700 | e1700 | --- | 2850 | 9540 | 36600 | 49100 | 37300 | 17300 | 17100 |
| 31 | 8480 | --- | e2800 | e1600 | --- | 2690 | --- | 31300 | --- | 32700 | 15900 | --- |
| TOTAL | 347780 | 147500 | 98350 | 67400 | 58370 | 66570 | 150140 | 869500 | 1332900 | 1170800 | 802200 | 497100 |
| MEAN | 11220 | 4917 | 3173 | 2174 | 2013 | 2147 | 5005 | 28050 | 44430 | 37770 | 25880 | 16570 |
| MAX | 21700 | 7400 | 3600 | 2700 | 2500 | 2870 | 9540 | 46500 | 113000 | 50500 | 36900 | 33100 |
| MIN | 5810 | 3700 | 2700 | 1600 | 1500 | 1800 | 2600 | 11500 | 24800 | 26900 | 15900 | 7430 |
| AC-FT | 689800 | 292600 | 195100 | 133700 | 115800 | 132000 | 297800 | 1725000 | 2644000 | 2322000 | 1591000 | 986000 |
| CFSM | 1.70 | 0.74 | 0.48 | 0.33 | 0.30 | 0.33 | 0.76 | 4.25 | 6.73 | 5.72 | 3.92 | 2.51 |
| IN. | 1.96 | 0.83 | 0.55 | 0.38 | 0.33 | 0.38 | 0.85 | 4.90 | 7.51 | 6.60 | 4.52 | 2.80 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 11610 | 4740 | 3434 | 2282 | 1935 | 2480 | 4333 | 20040 | 34310 | 31980 | 26280 | 18980 |
| MAX | 17250 | 8633 | 6613 | 4223 | 3682 | 10500 | 6815 | 33800 | 49280 | 41080 | 33330 | 26550 |
| (WY) | 1992 | 1994 | 2000 | 2000 | 1992 | 1992 | 1992 | 1993 | 1992 | 1992 | 2002 | 1994 |
| MIN | 6265 | 2488 | 1256 | 1125 | 1041 | 1359 | 1870 | 9652 | 23170 | 25040 | 18610 | 11180 |
| (WY) | 1997 | 1997 | 1997 | 1988 | 1999 | 1991 | 2002 | 2001 | 1995 | 1996 | 1995 | 1992 |

\# See Period of Record;partial years used in monthly statistics
e Estimated

## 15041200 TAKU RIVER NEAR JUNEAU—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1988 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 4260730 | | 5608610 | | | |
| ANNUAL MEAN | 11670 | | 15320 | | 13600 | |
| HIGHEST ANNUAL MEAN | | | | | 16820 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 10800 | 1996 |
| HIGHEST DAILY MEAN | 57700 | Aug 10 | 113000 | Jun 25 | 113000 | Jun 25 2004 |
| LOWEST DAILY MEAN | a1200 | Mar 10 | b1500 | Feb 3 | 710 | Feb 12 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 1230 | Mar 8 | 1540 | Jan 31 | 721 | Feb 8 1988 |
| MAXIMUM PEAK FLOW | | | c128000 | Jun 25 | c128000 | Jun 25 2004 |
| MAXIMUM PEAK STAGE | | | 45.07 | Jun 25 | 45.07 | Jun 25 2004 |
| INSTANTANEOUS LOW FLOW | | | d | | 710 | Feb 12 1989 |
| ANNUAL RUNOFF (AC-FT) | 8451000 | | 11120000 | | 9851000 | |
| ANNUAL RUNOFF (CFSM) | 1.77 | | 2.32 | | 2.06 | |
| ANNUAL RUNOFF (INCHES) | 24.02 | | 31.61 | | 27.99 | |
| 10 PERCENT EXCEEDS | 28200 | | 37800 | | 33200 | |
| 50 PERCENT EXCEEDS | 7250 | | 6820 | | 7280 | |
| 90 PERCENT EXCEEDS | 1500 | | 2000 | | 1650 | |

\# See Period of Record; partial years used in monthly statistics
a Mar. 10 to 14
b Feb. 3-6
c Result of Tulsequah River glacier dam breakout
d Not determined see lowest daily mean

## 15041200 TAKU RIVER NEAR JUNEAU—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 1999 to current year

INSTRUMENTATION.--Electronic water-temperature recorder set for 15-minute recording interval.

REMARKS.- Records good. Records represent water temperature at the sensor within 0.5°C. The outburst peak of the lake dammed by Tulsequah Glacier occurred on June 25, 2004.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 12.5°C, July 14, 1999 , July 20 and 21, 2001, July 9-10,12-13 and 18, 2003, and June 18 and July 16, 2004; minimum, 0.0°C, many days during most winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 12.5°C, June 18 and July 16, 2004; minimum, 0.0°C, many days during winter.

WATER TEMPERATURE, in DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 6.5 | 5.5 | 6.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 2 | 6.5 | 5.0 | 6.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 6.0 | 4.5 | 5.5 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 4 | 5.5 | 4.5 | 5.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 5 | 6.0 | 5.0 | 5.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 6.0 | 5.5 | 6.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 7 | 6.5 | 5.5 | 6.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 8 | 6.5 | 5.5 | 6.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 6.0 | 5.5 | 5.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 5.5 | 5.0 | 5.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 5.5 | 4.0 | 4.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 12 | 4.5 | 3.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 13 | 3.5 | 3.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14 | 4.0 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 4.0 | 3.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 3.5 | 3.0 | 3.0 | 0.5 | 0.0 | 0.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 17 | 3.5 | 3.0 | 3.5 | 0.5 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18 | 3.5 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 19 | 4.0 | 3.5 | 3.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 4.0 | 4.0 | 4.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 21 | 4.0 | 3.0 | 3.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 3.0 | 2.5 | 3.0 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 4.0 | 3.0 | 3.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 4.0 | 3.5 | 3.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25 | 4.5 | 3.5 | 3.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26 | 5.0 | 4.5 | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 27 | 4.5 | 3.5 | 4.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28 | 3.5 | 3.0 | 3.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 3.0 | 1.5 | 2.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 1.5 | 0.5 | 1.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 31 | 0.5 | 0.0 | 0.0 | --- | --- | --- | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| MONTH | 6.5 | 0.0 | 4.0 | 0.5 | 0.0 | 0.1 | 0.5 | 0.0 | 0.1 | 0.5 | 0.0 | 0.0 |

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER TEMPERATURE, in DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 0.5 | 3.0 | 2.0 | 2.5 | 7.5 | 5.5 | 6.0 |
| 2 | 0.5 | 0.0 | 0.0 | 1.5 | 0.5 | 0.5 | 2.5 | 1.5 | 2.0 | 7.0 | 5.0 | 6.0 |
| 3 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 3.0 | 1.5 | 2.5 | 7.5 | 5.0 | 6.5 |
| 4 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 3.5 | 2.0 | 2.5 | 7.5 | 5.0 | 6.0 |
| 5 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 1.0 | 4.5 | 2.0 | 3.0 | 7.0 | 4.0 | 6.0 |
| 6 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 4.0 | 2.0 | 3.0 | 8.0 | 5.0 | 6.5 |
| 7 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 4.0 | 2.5 | 3.0 | 8.0 | 6.0 | 7.0 |
| 8 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 5.0 | 2.5 | 3.5 | 8.0 | 6.0 | 7.0 |
| 9 | 0.5 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 4.0 | 3.0 | 3.0 | 7.5 | 6.0 | 6.5 |
| 10 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.5 | 5.0 | 3.0 | 3.5 | 8.0 | 5.5 | 6.5 |
| 11 | 0.5 | 0.0 | 0.5 | 1.5 | 0.5 | 1.0 | 5.0 | 3.0 | 4.0 | 8.5 | 5.5 | 7.0 |
| 12 | 0.5 | 0.0 | 0.5 | 1.0 | 0.5 | 1.0 | 4.0 | 3.0 | 3.5 | 9.0 | 6.0 | 7.5 |
| 13 | 0.5 | 0.0 | 0.5 | 1.5 | 0.5 | 1.0 | 4.5 | 2.5 | 3.5 | 9.5 | 6.5 | 8.0 |
| 14 | 0.5 | 0.0 | 0.5 | 1.5 | 0.5 | 1.0 | 4.5 | 2.5 | 3.5 | 9.0 | 6.5 | 8.0 |
| 15 | 0.5 | 0.0 | 0.5 | 1.5 | 1.0 | 1.5 | 4.0 | 2.0 | 3.0 | 9.0 | 6.5 | 7.5 |
| 16 | 0.5 | 0.0 | 0.5 | 2.0 | 1.0 | 1.5 | 4.5 | 2.5 | 3.5 | 8.5 | 6.5 | 7.5 |
| 17 | 0.5 | 0.0 | 0.5 | 2.5 | 1.5 | 1.5 | 4.5 | 3.5 | 4.0 | 8.5 | 7.0 | 8.0 |
| 18 | 0.5 | 0.5 | 0.5 | 2.5 | 1.0 | 1.5 | 5.5 | 3.5 | 4.5 | 9.5 | 7.0 | 8.0 |
| 19 | 0.5 | 0.5 | 0.5 | 3.0 | 1.0 | 1.5 | 6.0 | 3.5 | 4.5 | 10.0 | 7.0 | 8.5 |
| 20 | 1.0 | 0.5 | 0.5 | 2.5 | 0.5 | 1.0 | 6.0 | 3.5 | 4.5 | 9.5 | 7.5 | 8.5 |
| 21 | 1.0 | 0.5 | 0.5 | 2.0 | 0.0 | 1.0 | 6.5 | 4.0 | 5.0 | 9.0 | 7.0 | 8.0 |
| 22 | 0.5 | 0.5 | 0.5 | 2.0 | 0.5 | 1.5 | 5.0 | 3.5 | 4.0 | 9.0 | 6.0 | 7.5 |
| 23 | 0.5 | 0.5 | 0.5 | 3.0 | 0.5 | 2.0 | 4.5 | 3.0 | 3.5 | 9.5 | 7.0 | 8.0 |
| 24 | 1.0 | 0.5 | 0.5 | 4.0 | 1.5 | 2.5 | 5.0 | 4.0 | 4.5 | 9.0 | 8.0 | 8.0 |
| 25 | 1.0 | 0.5 | 0.5 | 3.5 | 2.5 | 3.0 | 4.5 | 4.0 | 4.5 | 8.0 | 7.0 | 7.5 |
| 26 | 1.0 | 0.0 | 0.5 | 4.0 | 2.5 | 3.0 | 5.0 | 3.5 | 4.5 | 8.5 | 6.5 | 7.5 |
| 27 | 1.5 | 0.0 | 0.5 | 3.5 | 2.5 | 2.5 | 5.5 | 4.0 | 5.0 | 9.0 | 6.5 | 8.0 |
| 28 | 1.5 | 0.0 | 0.5 | 2.5 | 1.0 | 2.0 | 6.5 | 4.5 | 5.5 | 9.5 | 7.0 | 8.0 |
| 29 | 1.5 | 0.5 | 0.5 | 2.5 | 1.0 | 1.5 | 7.0 | 4.0 | 5.5 | 9.5 | 7.5 | 8.5 |
| 30 | --- | --- | --- | 2.5 | 1.0 | 1.5 | 8.0 | 5.0 | 6.5 | 8.5 | 6.0 | 7.0 |
| 31 | --- | --- | --- | 3.0 | 1.0 | 2.0 | --- | --- | --- | 9.5 | 7.0 | 8.0 |
| MONTH | 1.5 | 0.0 | 0.3 | 4.0 | 0.0 | 1.3 | 8.0 | 1.5 | 3.9 | 10.0 | 4.0 | 7.4 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 10.0 | 7.0 | 8.5 | 10.0 | 8.5 | 9.0 | 9.0 | 7.5 | 8.5 | 9.0 | 6.5 | 7.5 |
| 2 | 9.5 | 8.0 | 8.5 | 10.0 | 8.0 | 9.0 | 9.0 | 8.0 | 8.5 | 8.5 | 7.0 | 7.5 |
| 3 | 10.5 | 7.5 | 9.0 | 9.5 | 8.0 | 9.0 | 9.0 | 8.0 | 8.5 | 7.5 | 7.0 | 7.0 |
| 4 | 10.5 | 8.5 | 9.5 | 10.0 | 8.0 | 9.0 | 10.5 | 8.0 | 9.0 | 7.5 | 6.5 | 7.0 |
| 5 | 10.0 | 8.5 | 9.0 | 11.0 | 8.5 | 9.5 | 10.5 | 8.5 | 9.5 | 7.5 | 6.0 | 6.0 |
| 6 | 10.5 | 7.5 | 9.0 | 11.0 | 9.0 | 10.0 | 10.0 | 8.0 | 8.5 | 6.5 | 6.0 | 6.0 |
| 7 | 11.0 | 8.0 | 9.5 | 10.5 | 8.0 | 9.0 | 9.0 | 7.0 | 8.0 | 7.5 | 5.5 | 6.5 |
| 8 | 10.0 | 8.5 | 9.0 | 10.5 | 7.5 | 9.0 | 10.5 | 7.0 | 8.5 | 7.0 | 5.5 | 6.5 |
| 9 | 9.0 | 8.0 | 8.5 | 11.0 | 8.5 | 9.5 | 10.5 | 8.0 | 9.5 | 7.0 | 5.0 | 6.0 |
| 10 | 10.0 | 7.5 | 8.5 | 10.0 | 9.0 | 9.5 | 10.5 | 8.5 | 9.5 | 6.5 | 5.0 | 5.5 |
| 11 | 10.0 | 8.0 | 9.0 | 9.5 | 8.5 | 9.0 | 10.5 | 9.0 | 9.5 | 6.5 | 5.5 | 6.0 |
| 12 | 10.5 | 8.0 | 9.5 | 10.0 | 8.0 | 9.0 | 10.0 | 8.0 | 9.0 | 7.0 | 6.0 | 6.5 |
| 13 | 10.0 | 8.5 | 9.0 | 9.5 | 7.5 | 8.5 | 10.5 | 7.5 | 9.0 | 7.0 | 6.0 | 6.5 |
| 14 | 9.0 | 8.0 | 8.5 | 9.5 | 6.5 | 8.0 | 11.0 | 8.5 | 9.5 | 7.0 | 6.0 | 6.5 |
| 15 | 10.0 | 8.0 | 8.5 | 11.5 | 8.0 | 9.5 | 10.5 | 8.5 | 9.5 | 7.0 | 6.0 | 6.5 |
| 16 | 11.0 | 8.0 | 9.5 | 12.5 | 9.0 | 10.5 | 10.0 | 8.0 | 9.0 | 7.0 | 5.5 | 6.5 |
| 17 | 12.0 | 9.0 | 10.5 | 12.0 | 10.0 | 11.0 | 10.0 | 8.0 | 9.0 | 7.0 | 5.5 | 6.5 |
| 18 | 12.5 | 9.5 | 11.0 | 11.5 | 9.5 | 10.5 | 9.5 | 7.5 | 8.5 | 7.0 | 5.5 | 6.0 |
| 19 | 11.5 | 9.5 | 10.5 | 12.0 | 9.5 | 10.5 | 9.5 | 8.5 | 9.0 | 7.0 | 5.5 | 6.0 |
| 20 | 11.5 | 8.5 | 10.0 | 11.5 | 9.5 | 10.5 | 10.0 | 8.0 | 9.0 | 7.0 | 6.0 | 6.5 |
| 21 | 11.5 | 8.5 | 10.0 | 12.0 | 10.0 | 11.0 | 9.5 | 8.0 | 9.0 | 6.5 | 6.0 | 6.5 |
| 22 | 12.0 | 9.0 | 10.5 | 11.5 | 9.5 | 10.5 | 10.0 | 8.0 | 9.0 | 6.5 | 5.5 | 6.0 |
| 23 | 11.5 | 8.5 | 10.0 | 10.5 | 8.0 | 9.5 | 9.5 | 7.5 | 8.0 | 5.5 | 5.0 | 5.5 |
| 24 | 10.5 | 7.5 | 9.0 | 10.0 | 8.5 | 9.0 | 9.0 | 7.0 | 8.0 | 6.0 | 5.5 | 5.5 |
| 25 | 10.0 | 7.0 | 8.0 | 10.5 | 9.0 | 9.5 | 8.5 | 7.0 | 7.5 | 6.0 | 5.0 | 5.5 |
| 26 | 10.5 | 8.0 | 9.5 | 10.5 | 9.0 | 9.5 | 8.0 | 7.0 | 7.5 | 6.0 | 5.0 | 5.5 |
| 27 | 11.0 | 8.5 | 9.5 | 10.0 | 9.0 | 9.5 | 8.5 | 7.5 | 7.5 | 6.0 | 5.5 | 5.5 |
| 28 | 11.5 | 9.0 | 10.0 | 9.5 | 9.0 | 9.5 | 8.0 | 7.0 | 7.5 | 6.0 | 5.0 | 5.5 |
| 29 | 11.5 | 8.5 | 10.0 | 9.5 | 8.5 | 9.0 | 8.5 | 7.0 | 7.5 | 6.5 | 5.5 | 6.0 |
| 30 | 11.5 | 9.0 | 10.0 | 9.0 | 7.5 | 8.5 | 8.5 | 6.5 | 7.5 | 6.5 | 6.0 | 6.5 |
| 31 | --- | --- | --- | 9.0 | 7.5 | 8.5 | 9.0 | 7.0 | 8.0 | --- | --- | --- |
| MONTH | 12.5 | 7.0 | 9.4 | 12.5 | 6.5 | 9.5 | 11.0 | 6.5 | 8.6 | 9.0 | 5.0 | 6.2 |

## 15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", in NW¼ NE¼ sec. 23, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, Hydrologic Unit 19010301, on left bank, 150 ft upstream from Alaska Electric Light and Power Company dam and diversion, 0.5 mi northeast of Juneau, and 1 mi upstream from mouth at Gastineau Channel.

DRAINAGE AREA.--9.76 $mi^2$.

PERIOD OF RECORD.--July 1916 to December 1920 (monthly discharge only), October 1946 to September 1948, October 1949 to September 1982. Annual maximums, water years 1991, 1994, 1996. October 1997 to current year.

REVISED RECORDS.--WSP 1372: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above sea level, from topographic map. July 20, 1916 to December 31, 1920, at site 50 ft upstream at different datum. September 11, 1946 to September 30, 1948, nonrecording gage at site 0.7 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Water may be diverted about 0.5 mi upstream and three wells, located upstream from the gage in Last Chance Basin, pump water for municipal use and may decrease flow during winter periods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 $ft^3/s$ and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Oct 26 | 0500 | 1360 | 5.23 | Sept 23 | 1545 | *1460 | *5.40 |
| Sep 21 | 0430 | 1400 | 5.29 | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 100 | 59 | 24 | 21 | 18 | 19 | 16 | 186 | 183 | 157 | 87 | 22 |
| 2 | 76 | 57 | 44 | 18 | 17 | 18 | 51 | 213 | 209 | 161 | 85 | 160 |
| 3 | 59 | 42 | 27 | e17 | 16 | 17 | 115 | 194 | 217 | 175 | 98 | 186 |
| 4 | 104 | 37 | 22 | e15 | 16 | 16 | 99 | 183 | 224 | 123 | 78 | 86 |
| 5 | 72 | 31 | 20 | e13 | 23 | 15 | 64 | 140 | 260 | 190 | 73 | 86 |
| 6 | 100 | 27 | 19 | e13 | 21 | 15 | 47 | 111 | 264 | 154 | 71 | 108 |
| 7 | 119 | 26 | 18 | e12 | 17 | 17 | 41 | 105 | 313 | 109 | 63 | 73 |
| 8 | 73 | 24 | 17 | e11 | 60 | 44 | 56 | 115 | 284 | 129 | 59 | 44 |
| 9 | 55 | 34 | 16 | 11 | 149 | 30 | 56 | 125 | 217 | 109 | 58 | 32 |
| 10 | 59 | 27 | 15 | 13 | 100 | 25 | 56 | 125 | 179 | 123 | 61 | 26 |
| 11 | 43 | 33 | 15 | 17 | 78 | 25 | 55 | 121 | 143 | 90 | 75 | 28 |
| 12 | 31 | 344 | 15 | 14 | 86 | 20 | 60 | 134 | 157 | 90 | 42 | 86 |
| 13 | 33 | 143 | 14 | 28 | 72 | 18 | 58 | 162 | 179 | 99 | 35 | 228 |
| 14 | 32 | 87 | 14 | 128 | 64 | 16 | 52 | 189 | 216 | 106 | 48 | 103 |
| 15 | 26 | 81 | 14 | 94 | 47 | 16 | 39 | 188 | 175 | 133 | 60 | 100 |
| 16 | 24 | 71 | 16 | 56 | 35 | 15 | 30 | 168 | 161 | 103 | 58 | 66 |
| 17 | 23 | 60 | 24 | 53 | 27 | 13 | 27 | 153 | 186 | 103 | 41 | 46 |
| 18 | 40 | 47 | 23 | 121 | 24 | 12 | 24 | 154 | 260 | 84 | 44 | 35 |
| 19 | 119 | 38 | 63 | 91 | 29 | 12 | 22 | 181 | 317 | 84 | 41 | 27 |
| 20 | 109 | 35 | 60 | 108 | 76 | 11 | 22 | 253 | 300 | 100 | 40 | 412 |
| 21 | 70 | 32 | 53 | 183 | 104 | 11 | 23 | 292 | 280 | 154 | 34 | 572 |
| 22 | 78 | 30 | 242 | 171 | 110 | 10 | 37 | 248 | 300 | 119 | 28 | 435 |
| 23 | 98 | 25 | 192 | 109 | 75 | 10 | 50 | 232 | 284 | 87 | 19 | 688 |
| 24 | 116 | 25 | 99 | 78 | 58 | 10 | 54 | 284 | 276 | 136 | 17 | 461 |
| 25 | 505 | 24 | 74 | e50 | 41 | 13 | 95 | 434 | 256 | 143 | 16 | 216 |
| 26 | 590 | 22 | 56 | e40 | 31 | 15 | 128 | 385 | 220 | 87 | 26 | 190 |
| 27 | 217 | 21 | 39 | e33 | 25 | 15 | 99 | 288 | 220 | 213 | 75 | 419 |
| 28 | 158 | 20 | 33 | e28 | 23 | 17 | 81 | 220 | 201 | 434 | 109 | 210 |
| 29 | 100 | 19 | 31 | e26 | 21 | 18 | 72 | 209 | 172 | 256 | 30 | 193 |
| 30 | 81 | 18 | 27 | 23 | --- | 20 | 109 | 205 | 172 | 175 | 19 | 178 |
| 31 | 68 | --- | 24 | 19 | --- | 17 | --- | 198 | --- | 112 | 14 | --- |
| TOTAL | 3378 | 1539 | 1350 | 1614 | 1463 | 530 | 1738 | 6195 | 6825 | 4338 | 1604 | 5516 |
| MEAN | 109 | 51.3 | 43.5 | 52.1 | 50.4 | 17.1 | 57.9 | 200 | 228 | 140 | 51.7 | 184 |
| MAX | 590 | 344 | 242 | 183 | 149 | 44 | 128 | 434 | 317 | 434 | 109 | 688 |
| MIN | 23 | 18 | 14 | 11 | 16 | 10 | 16 | 105 | 143 | 84 | 14 | 22 |
| MED | 76 | 32 | 24 | 28 | 35 | 16 | 54 | 188 | 218 | 123 | 48 | 106 |
| AC-FT | 6700 | 3050 | 2680 | 3200 | 2900 | 1050 | 3450 | 12290 | 13540 | 8600 | 3180 | 10940 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)# | | | | | | | | | | | | |
| MEAN | 158 | 81.8 | 37.4 | 23.3 | 15.2 | 12.4 | 25.3 | 127 | 225 | 224 | 188 | 185 |
| MAX | 349 | 206 | 202 | 170 | 81.4 | 137 | 91.7 | 220 | 326 | 364 | 374 | 302 |
| (WY) | 2000 | 1947 | 2000 | 1981 | 1977 | 1947 | 1947 | 1948 | 2002 | 1975 | 1961 | 1999 |
| MIN | 62.6 | 18.1 | 6.22 | 1.71 | 0.48 | 0.05 | 3.78 | 64.5 | 121 | 111 | 51.7 | 73.7 |
| (WY) | 1952 | 1976 | 1956 | 1974 | 1972 | 1974 | 1954 | 1920 | 2003 | 2003 | 2004 | 1978 |

\# See period of record; partial years used in monthly statistics
e Estimated

## 15050000 GOLD CREEK AT JUNEAU—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1916 - 2004 | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 30466.0 | | 36090 | | | |
| ANNUAL MEAN | 83.5 | | 98.6 | | 109 | |
| HIGHEST ANNUAL MEAN | | | | | 155 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 77.5 | 1951 |
| HIGHEST DAILY MEAN | 883 | Sep 8 | 688 | Sep 23 | 1830 | Aug 12 1961 |
| LOWEST DAILY MEAN | a1.4 | Mar 13 | b10 | Mar 22 | c0.00 | Mar 4 1951 |
| ANNUAL SEVEN-DAY MINIMUM | 1.7 | Mar 8 | 11 | Mar 18 | 0.00 | Mar 4 1951 |
| MAXIMUM PEAK FLOW | | | 1460 | Sep 23 | 2950 | Sep 25 1996 |
| MAXIMUM PEAK STAGE | | | 5.40 | Sep 23 | 8.14 | Sep 25 1996 |
| INSTANTANEOUS LOW FLOW | | | 8.3 | Mar 8 | 0.00 | Mar 4 1951 |
| ANNUAL RUNOFF (AC-FT) | 60430 | | 71580 | | 78960 | |
| 10 PERCENT EXCEEDS | 197 | | 220 | | 264 | |
| 50 PERCENT EXCEEDS | 53 | | 60 | | 66 | |
| 90 PERCENT EXCEEDS | 7.1 | | 16 | | 5.0 | |

\# See Period of Record; partial years used in monthly statistics
a May have been lower during period of ice affect
b Mar. 22-24.
c No flow at times during winter

## 15051010 SALMON CREEK NEAR JUNEAU

LOCATION.--Lat 58°19'57", long 134°27'57", in NE¼ SE¼ NW¼ sec. 9, T. 41 S., R. 67 E. (Juneau B-2 SE quad), City and Borough of Juneau, Hydrologic Unit 19010301, in Tongass National Forest, on left bank, about 0.3 mi upstream from mouth and 2.5 mi northwest of Juneau.

DRAINAGE AREA.--9.69 $mi^2$.

PERIOD OF RECORD.--October 1990 to current year. Daily discharge record previously collected 0.5 mi upstream at station number 15051008 "above canyon mouth" during water-years 1982-90. Drainage area, 9.50 $mi^2$.

REVISED RECORDS.--WDR AK 93-1: 1991 (m).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges which are poor. Flow regulated by Salmon Creek Reservoir 2.5 mi upstream. Diversions upstream for off-stream hydropower plant; outflow from the plant goes into Gastineau Channel and is not included in the discharge records. Diversions upstream into Twin Lakes via a pipeline are also not included in the discharge records.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 35 | 23 | 20 | 13 | e13 | 13 | 14 | 44 | 45 | 37 | 20 | 12 |
| 2 | 31 | 21 | 32 | e12 | 12 | 13 | 43 | 52 | 49 | 35 | 18 | 19 |
| 3 | 28 | 19 | 19 | e11 | 11 | 12 | 75 | 48 | 46 | 39 | 18 | 27 |
| 4 | 29 | 17 | 16 | e10 | 11 | 12 | 47 | 43 | 45 | 31 | 16 | 25 |
| 5 | 28 | 16 | 14 | e9.4 | 19 | 11 | 30 | 35 | 54 | 41 | 14 | 23 |
| 6 | 29 | 15 | 13 | e9.1 | 17 | 11 | 24 | 31 | 50 | 34 | 13 | 35 |
| 7 | 34 | 15 | 12 | e9.6 | 14 | 15 | 23 | 33 | 64 | 27 | 12 | 25 |
| 8 | 30 | 14 | 12 | e9.5 | 42 | 42 | 26 | 36 | 53 | 29 | 14 | 18 |
| 9 | 27 | 22 | 11 | e9.5 | 75 | 27 | 25 | 37 | 48 | 29 | 16 | 16 |
| 10 | 30 | 18 | 10 | e10 | 49 | 26 | 25 | 38 | 43 | 29 | 18 | 14 |
| 11 | 29 | 24 | 11 | e11 | 45 | 28 | 23 | 35 | 39 | 25 | 21 | 13 |
| 12 | 24 | 159 | 11 | 12 | 52 | 19 | 23 | 35 | 39 | 23 | 17 | 18 |
| 13 | 23 | 54 | 11 | 28 | 34 | 16 | 22 | 40 | 41 | 24 | 16 | 51 |
| 14 | 22 | 40 | 9.7 | 98 | 28 | 15 | 21 | 45 | 49 | 26 | 16 | 36 |
| 15 | 20 | 41 | 9.6 | 45 | 23 | 15 | 18 | 44 | 39 | 25 | 17 | 33 |
| 16 | 18 | 34 | 14 | 27 | 19 | 14 | 16 | 41 | 37 | 25 | 16 | 26 |
| 17 | 16 | 28 | 27 | 30 | 17 | 13 | 15 | 39 | 41 | 24 | 15 | 20 |
| 18 | 18 | 22 | 26 | 60 | 17 | 11 | 14 | 40 | 53 | 20 | 15 | 17 |
| 19 | 24 | 19 | 63 | 42 | 21 | 10 | 13 | 45 | 59 | 18 | 15 | 15 |
| 20 | 28 | 17 | 46 | 54 | 48 | 9.9 | 13 | 52 | 56 | 19 | 16 | 69 |
| 21 | 22 | 17 | 39 | 76 | 56 | 9.7 | 13 | 56 | 51 | 22 | 14 | 140 |
| 22 | 23 | 18 | 109 | 62 | 57 | 9.4 | 17 | 48 | 51 | 16 | 13 | 89 |
| 23 | 31 | 16 | 81 | 46 | 34 | 9.1 | 20 | 46 | 51 | 13 | 12 | 170 |
| 24 | 31 | 16 | 46 | 32 | 27 | 9.0 | 25 | 66 | 51 | 33 | 12 | 138 |
| 25 | 101 | 15 | 33 | 27 | 22 | 15 | 47 | 86 | 50 | 28 | 12 | 68 |
| 26 | 110 | 14 | 26 | e24 | 19 | 15 | 57 | 72 | 45 | 17 | 12 | 57 |
| 27 | 51 | 13 | 20 | e21 | 17 | 14 | 38 | 53 | 42 | 35 | 15 | 112 |
| 28 | 45 | 12 | 18 | e18 | 16 | 17 | 29 | 46 | 40 | 93 | 16 | 65 |
| 29 | 34 | 12 | 17 | e16 | 15 | 17 | 26 | 47 | 35 | 54 | 14 | 52 |
| 30 | 28 | 12 | 17 | e15 | --- | 17 | 30 | 46 | 34 | 37 | 12 | 49 |
| 31 | 25 | --- | 15 | e14 | --- | 14 | --- | 46 | --- | 25 | 14 | --- |
| TOTAL | 1024 | 763 | 808.3 | 861.1 | 830 | 479.1 | 812 | 1425 | 1400 | 933 | 469 | 1452 |
| MEAN | 33.0 | 25.4 | 26.1 | 27.8 | 28.6 | 15.5 | 27.1 | 46.0 | 46.7 | 30.1 | 15.1 | 48.4 |
| MAX | 110 | 159 | 109 | 98 | 75 | 42 | 75 | 86 | 64 | 93 | 21 | 170 |
| MIN | 16 | 12 | 9.6 | 9.1 | 11 | 9.0 | 13 | 31 | 34 | 13 | 12 | 12 |
| AC-FT | 2030 | 1510 | 1600 | 1710 | 1650 | 950 | 1610 | 2830 | 2780 | 1850 | 930 | 2880 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 61.2 | 30.5 | 26.9 | 19.7 | 21.5 | 16.1 | 23.3 | 47.6 | 54.0 | 43.3 | 37.0 | 61.0 |
| MAX | 131 | 76.9 | 69.5 | 33.5 | 45.0 | 39.0 | 38.6 | 71.3 | 82.9 | 69.0 | 76.1 | 108 |
| (WY) | 1999 | 1994 | 2000 | 1992 | 1992 | 1992 | 1994 | 1992 | 1991 | 1997 | 2002 | 1991 |
| MIN | 33.0 | 16.3 | 12.7 | 9.65 | 9.16 | 8.91 | 9.52 | 29.0 | 31.7 | 21.9 | 15.1 | 41.0 |
| (WY) | 2004 | 1991 | 1997 | 1997 | 1999 | 2003 | 2002 | 2003 | 2003 | 2003 | 2004 | 1997 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1991 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 9808.6 | | 11256.5 | | | |
| ANNUAL MEAN | 26.9 | | 30.8 | | 36.9 | |
| HIGHEST ANNUAL MEAN | | | | | 48.6 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 29.7 | 1995 |
| HIGHEST DAILY MEAN | 164 | Sep 27 | 170 | Sep 23 | 954 | Oct 20 1998 |
| LOWEST DAILY MEAN | 5.6 | Mar 13 | 9.0 | Mar 24 | 5.6 | Mar 13 2003 |
| ANNUAL SEVEN-DAY MINIMUM | 6.2 | Mar 8 | 9.6 | Jan 4 | 6.2 | Mar 8 2003 |
| MAXIMUM PEAK FLOW | | | 394 | Sep 23 | 1930 | Sep 25 1996 |
| MAXIMUM PEAK STAGE | | | 3.13 | Sep 23 | a4.65 | Sep 25 1996 |
| INSTANTANEOUS LOW FLOW | | | 7.4 | Aug 30 | b | |
| ANNUAL RUNOFF (AC-FT) | 19460 | | 22330 | | 26740 | |
| 10 PERCENT EXCEEDS | 49 | | 53 | | 70 | |
| 50 PERCENT EXCEEDS | 20 | | 24 | | 27 | |
| 90 PERCENT EXCEEDS | 8.4 | | 12 | | 10 | |

\# See Period of Record
a From flood marks
b Undetermined, see lowest daily mean
e Estimated

## 15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY

LOCATION.--Lat 58°21'59", long 134°34'34", in SW¼ SW¼ SE¼ sec. 30, T. 40 S., R. 66 (Juneau B-2 SW quad), Hydrologic Unit 19010301, City and Borough of Juneau on right bank at downstream side of footbridge, 50 ft downstream from Egan Drive, 0.4 mi southeast of intersection of Egan Drive and Mendenhall Loop Road and 3 mi east of Auke Bay Post Office.

DRAINAGE AREA.--2.60 $mi^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to September 2004 (discontinued). Prior to October 1996, published as miscellaneous site 15052482 Jordan Creek at Trout Street Bridge near Auke Bay, at site about 500 ft downstream at different datum.

GAGE.--Water-stage recorder. Datum of gage is 19.80 ft above sea level, determined by levels survey.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTEREMES OUTSIDE PERIOD OF DAILY RECORD.--Flood of September 25, 1996, reached a stage of 4.34 ft, site and datum then in use, from floodmarks, discharge 140 $ft^3/s$; no flow observed March 2, 1989, March 5, 1996, January 15, 1997, and July 2-4,7,8,10-24,26, 2004; August 7-10,13-26,31, 2004; September 1, 2004.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | 4.2 | 3.4 | e5.0 | e2.8 | 4.1 | 4.2 | 9.4 | 2.0 | 0.11 | 0.25 | 0.00 |
| 2 | 9.5 | 3.9 | 8.5 | e4.0 | e2.7 | 3.6 | 12 | 9.8 | 2.3 | 0.00 | 0.18 | 0.52 |
| 3 | 8.3 | 3.5 | 5.0 | e3.6 | e2.8 | 3.4 | 32 | 8.6 | 2.2 | 0.00 | 0.43 | 1.3 |
| 4 | 8.0 | 3.0 | 3.6 | e3.2 | e6.0 | 3.3 | 16 | 8.5 | 1.8 | 0.00 | 0.38 | 1.8 |
| 5 | 7.0 | 2.6 | 3.1 | e2.7 | 15 | 3.2 | 11 | 7.1 | 1.7 | 0.16 | 0.16 | 1.5 |
| 6 | 7.6 | 2.2 | 2.7 | e2.5 | 7.7 | 2.9 | 9.7 | 6.2 | 1.4 | 0.12 | 0.10 | 5.9 |
| 7 | 6.5 | 2.2 | 2.4 | e2.4 | 4.4 | 4.4 | 9.7 | 5.9 | 1.4 | 0.00 | 0.00 | 4.9 |
| 8 | 5.8 | 2.1 | 2.3 | e2.5 | 8.6 | 9.2 | 14 | 5.9 | 1.2 | 0.00 | 0.00 | 1.3 |
| 9 | 6.0 | 4.0 | 2.1 | e3.0 | 24 | 6.1 | 11 | 5.6 | 1.5 | 0.24 | 0.00 | 0.79 |
| 10 | 5.1 | 3.4 | e2.0 | e3.6 | 25 | 6.4 | 9.7 | 5.1 | 1.7 | 0.00 | 0.00 | 0.67 |
| 11 | 4.6 | 4.8 | e1.9 | e5.0 | 14 | 8.0 | 8.7 | 5.1 | 1.1 | 0.00 | 0.15 | 0.59 |
| 12 | 4.0 | 24 | e1.9 | e4.0 | 19 | 5.5 | 8.6 | 5.0 | 0.99 | 0.00 | 0.10 | 0.82 |
| 13 | 4.3 | 22 | 2.0 | e8.0 | 11 | 4.6 | 8.0 | 4.9 | 1.3 | 0.00 | 0.00 | 10 |
| 14 | 4.2 | 12 | 1.7 | e30 | 10 | 4.0 | 7.2 | 4.8 | 1.4 | 0.00 | 0.00 | 5.1 |
| 15 | 3.6 | 11 | 1.7 | e13 | 8.1 | 4.5 | 6.3 | 4.6 | 1.1 | 0.00 | 0.00 | 2.4 |
| 16 | 3.2 | 8.9 | 3.0 | e8.0 | 7.2 | 4.4 | 5.7 | 4.2 | 0.90 | 0.00 | 0.00 | 1.8 |
| 17 | 2.9 | 7.6 | 7.5 | e15 | 6.5 | 3.9 | 5.7 | 3.6 | 0.96 | 0.00 | 0.00 | 1.4 |
| 18 | 2.8 | 6.3 | 7.4 | e20 | 6.9 | 3.1 | 5.7 | 3.2 | 0.74 | 0.00 | 0.00 | 1.2 |
| 19 | 2.6 | e4.0 | 15 | e16 | 7.9 | 2.7 | 5.0 | 3.5 | 0.62 | 0.00 | 0.00 | 1.0 |
| 20 | 2.5 | e3.5 | 14 | e19 | 11 | 2.3 | 4.5 | 3.4 | 0.56 | 0.00 | 0.00 | 4.0 |
| 21 | 2.2 | e3.0 | 12 | 22 | 13 | e2.3 | 4.1 | 3.1 | 0.45 | 0.00 | 0.00 | 20 |
| 22 | 2.2 | 4.9 | 34 | 28 | 18 | 2.0 | 4.2 | 2.6 | e0.25 | 0.00 | 0.00 | 10 |
| 23 | 2.2 | 3.8 | 32 | 21 | 10 | 1.9 | 4.6 | 2.3 | 0.50 | 0.00 | 0.00 | 28 |
| 24 | 2.2 | 3.5 | 19 | e11 | 8.4 | 1.9 | 5.5 | 3.3 | 0.37 | 0.00 | 0.00 | 29 |
| 25 | 12 | 3.2 | 15 | e7.0 | 7.2 | 5.1 | 9.2 | 5.0 | 0.21 | 0.12 | 0.00 | 9.0 |
| 26 | 23 | 2.9 | 11 | e5.1 | 6.2 | 9.2 | 14 | 4.6 | 0.16 | 0.00 | 0.00 | 5.1 |
| 27 | 9.3 | 2.6 | e8.0 | e4.1 | 5.5 | 5.4 | 8.8 | 3.4 | 0.15 | 1.3 | 0.19 | 7.9 |
| 28 | 14 | e2.4 | e6.8 | e3.5 | 5.0 | 5.0 | 7.0 | 2.7 | 0.22 | 3.9 | 1.0 | 5.7 |
| 29 | 6.4 | e2.2 | e6.7 | e3.2 | 4.5 | 5.3 | 6.3 | 2.4 | 0.16 | 3.7 | 0.65 | 5.6 |
| 30 | 5.1 | 2.1 | 6.6 | e3.0 | --- | 5.3 | 6.9 | 2.1 | 0.12 | 0.98 | 0.14 | 6.6 |
| 31 | 4.7 | --- | 6.0 | e2.9 | --- | 4.3 | --- | 1.8 | --- | 0.44 | 0.00 | --- |
| TOTAL | 193.8 | 165.8 | 248.3 | 281.3 | 278.4 | 137.3 | 265.3 | 147.7 | 29.46 | 11.07 | 3.73 | 173.89 |
| MEAN | 6.25 | 5.53 | 8.01 | 9.07 | 9.60 | 4.43 | 8.84 | 4.76 | 0.98 | 0.36 | 0.12 | 5.80 |
| MAX | 23 | 24 | 34 | 30 | 25 | 9.2 | 32 | 9.8 | 2.3 | 3.9 | 1.0 | 29 |
| MIN | 2.2 | 2.1 | 1.7 | 2.4 | 2.7 | 1.9 | 4.1 | 1.8 | 0.12 | 0.00 | 0.00 | 0.00 |
| AC-FT | 384 | 329 | 493 | 558 | 552 | 272 | 526 | 293 | 58 | 22 | 7.4 | 345 |
| CFSM | 2.40 | 2.13 | 3.08 | 3.49 | 3.69 | 1.70 | 3.40 | 1.83 | 0.38 | 0.14 | 0.05 | 2.23 |
| IN. | 2.77 | 2.37 | 3.55 | 4.02 | 3.98 | 1.96 | 3.80 | 2.11 | 0.42 | 0.16 | 0.05 | 2.49 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 16.1 | 7.99 | 9.99 | 6.77 | 3.74 | 3.15 | 5.01 | 6.65 | 4.17 | 4.32 | 6.15 | 12.9 |
| MAX | 23.2 | 11.2 | 20.8 | 11.3 | 9.60 | 4.74 | 12.1 | 13.7 | 10.2 | 8.49 | 15.0 | 18.7 |
| (WY) | 2003 | 2000 | 2000 | 1999 | 2004 | 2001 | 1999 | 1999 | 1999 | 2000 | 2002 | 1999 |
| MIN | 6.25 | 4.21 | 2.67 | 3.52 | 0.47 | 1.62 | 0.72 | 1.70 | 0.98 | 0.36 | 0.12 | 5.80 |
| (WY) | 2004 | 1999 | 1999 | 1998 | 1999 | 1998 | 2002 | 2003 | 2004 | 2004 | 2004 | 2004 |

e Estimated
# See Period of Record; partial year used in monthly statistics

## 15052000 LEMON CREEK NEAR JUNEAU

LOCATION.--Lat 58°23'30", long 134°25'15", in SE¼ NW¼ NW¼ sec. 19, T. 40 S., R. 67 E. (Juneau B-2 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on left bank 0.3 mi upstream from Canyon Creek, 4.5 mi upstream from the mouth at Gastineau Channel, and 6 mi north of Juneau.

DRAINAGE AREA.-- 12.1 $mi^2$.

PERIOD OF RECORD.--August 1951 to November 1953, July 1954 to September 1973, annual maximum 1999, May 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 650 ft above sea level, from topographic map. Prior to Oct.1967 same site and datum about 6.94 ft lower; Oct.1967 to Sept 1973 at same site at datum about 5.85 ft lower.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Large diurnal fluctuations caused by glacier melt at source.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 346 | 61 | 17 | e12 | e13 | 8.1 | 7.7 | 79 | 186 | 409 | 299 | 196 |
| 2 | 303 | 55 | 35 | e11 | e12 | 7.8 | 26 | 88 | 188 | 413 | 331 | 378 |
| 3 | 331 | 46 | 19 | e10 | e11 | 7.6 | 60 | 95 | 177 | 403 | 429 | 887 |
| 4 | 454 | 35 | 15 | e9.7 | e11 | 7.5 | 30 | 108 | 201 | 339 | 376 | 560 |
| 5 | 415 | 29 | 14 | e9.4 | e11 | 7.5 | 17 | 93 | 249 | 420 | 362 | 472 |
| 6 | 485 | 27 | 14 | e9.0 | e12 | 7.4 | 14 | 74 | 285 | 394 | 388 | 447 |
| 7 | 445 | 25 | 13 | e8.6 | e12 | 7.8 | 18 | 71 | 395 | 328 | 379 | 212 |
| 8 | 234 | 24 | 13 | e8.3 | e18 | 19 | 22 | 77 | 365 | 356 | 345 | 122 |
| 9 | 176 | e23 | e12 | e8.0 | e65 | 12 | 17 | 77 | 347 | 374 | 384 | 95 |
| 10 | 138 | e21 | e11 | e7.8 | e49 | 9.4 | 18 | 74 | 310 | 347 | 455 | 82 |
| 11 | 94 | 28 | e10 | e7.5 | 35 | 9.8 | 19 | 78 | 255 | 326 | 485 | 82 |
| 12 | 70 | 93 | e9.8 | e9.0 | 43 | 8.8 | 24 | 94 | 248 | 345 | 325 | 309 |
| 13 | 61 | 52 | e9.5 | e25 | 34 | 8.0 | 20 | 115 | 254 | 410 | 325 | 628 |
| 14 | 56 | 35 | e9.2 | 170 | 23 | 7.5 | 18 | 139 | 263 | 496 | 498 | 342 |
| 15 | 45 | 32 | e9.0 | 61 | 16 | e7.0 | 13 | 133 | 252 | 549 | 652 | 248 |
| 16 | 39 | 28 | 12 | 30 | 14 | e6.7 | 12 | 119 | 240 | 441 | 752 | 171 |
| 17 | 34 | 24 | 14 | 42 | 12 | e6.2 | 12 | 105 | 268 | 408 | 576 | 130 |
| 18 | 57 | e22 | 15 | 56 | 13 | e6.0 | 11 | 116 | 383 | 366 | 451 | 107 |
| 19 | 108 | e21 | 38 | 34 | 14 | e6.0 | 10 | 142 | 498 | 348 | 433 | 75 |
| 20 | 97 | e20 | 26 | 55 | 25 | e6.0 | 11 | 203 | 498 | 329 | 419 | 239 |
| 21 | 71 | e19 | 29 | 56 | 37 | e6.0 | 12 | 240 | 477 | 400 | 514 | 863 |
| 22 | 78 | e18 | 94 | 58 | 38 | e6.0 | 19 | 203 | 484 | 422 | 512 | 647 |
| 23 | 64 | 18 | 59 | 40 | 19 | e6.5 | 18 | 193 | 496 | 400 | 299 | 1150 |
| 24 | 73 | 17 | 32 | 33 | 14 | 7.4 | 18 | 249 | 507 | 553 | 237 | 920 |
| 25 | 380 | 16 | 26 | e28 | 11 | 12 | 38 | 410 | 493 | 503 | 206 | 311 |
| 26 | 840 | 15 | 20 | e25 | 9.9 | 12 | 48 | 485 | 463 | 342 | 263 | 373 |
| 27 | 310 | 15 | e18 | e22 | 9.1 | 10 | 26 | 362 | 461 | 485 | 525 | 604 |
| 28 | 167 | 15 | e16 | e19 | 8.8 | 11 | 22 | 260 | 431 | 1360 | 673 | 313 |
| 29 | 105 | 15 | e15 | e17 | 8.4 | 11 | 21 | 222 | 416 | 1360 | 469 | 510 |
| 30 | 82 | 14 | e14 | e15 | --- | 11 | 46 | 207 | 442 | 662 | 301 | 581 |
| 31 | 69 | --- | e13 | e13 | --- | 8.4 | --- | 194 | --- | 417 | 228 | --- |
| TOTAL | 6227 | 863 | 651.5 | 909.3 | 598.2 | 267.4 | 647.7 | 5105 | 10532 | 14705 | 12891 | 12054 |
| MEAN | 201 | 28.8 | 21.0 | 29.3 | 20.6 | 8.63 | 21.6 | 165 | 351 | 474 | 416 | 402 |
| MAX | 840 | 93 | 94 | 170 | 65 | 19 | 60 | 485 | 507 | 1360 | 752 | 1150 |
| MIN | 34 | 14 | 9.0 | 7.5 | 8.4 | 6.0 | 7.7 | 71 | 177 | 326 | 206 | 75 |
| AC-FT | 12350 | 1710 | 1290 | 1800 | 1190 | 530 | 1280 | 10130 | 20890 | 29170 | 25570 | 23910 |
| CFSM | 16.6 | 2.38 | 1.74 | 2.42 | 1.70 | 0.71 | 1.78 | 13.6 | 29.0 | 39.2 | 34.4 | 33.2 |
| IN. | 19.14 | 2.65 | 2.00 | 2.80 | 1.84 | 0.82 | 1.99 | 15.69 | 32.38 | 45.21 | 39.63 | 37.06 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 161 | 49.9 | 20.0 | 10.1 | 6.53 | 5.96 | 14.7 | 90.3 | 269 | 421 | 463 | 364 |
| MAX | 428 | 129 | 68.6 | 34.0 | 20.6 | 23.5 | 47.1 | 189 | 382 | 557 | 718 | 544 |
| (WY) | 2003 | 1970 | 2003 | 2003 | 2004 | 1968 | 2003 | 1963 | 1969 | 1961 | 1961 | 1957 |
| MIN | 50.8 | 16.4 | 4.71 | 1.50 | 1.00 | 1.50 | 4.50 | 42.6 | 158 | 310 | 324 | 205 |
| (WY) | 1957 | 1972 | 1962 | 1952 | 1952 | 1952 | 1955 | 1971 | 1952 | 1952 | 1954 | 1964 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1951 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 64871.2 | | 65451.1 | | | |
| ANNUAL MEAN | 178 | | 179 | | 157 | |
| HIGHEST ANNUAL MEAN | | | | | 206 | 2003 |
| LOWEST ANNUAL MEAN | | | | | 122 | 1952 |
| HIGHEST DAILY MEAN | 1690 | Aug 15 | 1360 | Jul 28 | 2660 | Aug 13 1961 |
| LOWEST DAILY MEAN | 5.0 | Mar 13 | a6.0 | Mar 18 | 0.70 | Feb 13 1966 |
| ANNUAL SEVEN-DAY MINIMUM | 5.4 | Mar 9 | 6.1 | Mar 17 | 0.73 | Feb 13 1966 |
| MAXIMUM PEAK FLOW | | | 2300 | Jul 28 | b5900 | Oct 20 1998 |
| MAXIMUM PEAK STAGE | | | 11.27 | Jul 28 | c | Aug 12 2002 |
| ANNUAL RUNOFF (AC-FT) | 128700 | | 129800 | | 113900 | |
| ANNUAL RUNOFF (CFSM) | 14.7 | | 14.8 | | 13.0 | |
| ANNUAL RUNOFF (INCHES) | 199.44 | | 201.22 | | 176.55 | |
| 10 PERCENT EXCEEDS | 443 | | 479 | | 439 | |
| 50 PERCENT EXCEEDS | 62 | | 61 | | 44 | |
| 90 PERCENT EXCEEDS | 9.0 | | 9.5 | | 4.0 | |

\# See Period of Record, partial years used in monthly summary statistics.
a March 18-22
b From rating curve extended above 1,200 $ft^3/s$, from flood marks, at datum then in use.
c Not determined.
e Estimated

## 15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1997 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 1797.31 | | 1936.05 | | | |
| ANNUAL MEAN | 4.92 | | 5.29 | | 7.28 | |
| HIGHEST ANNUAL MEAN | | | | | 9.87 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 5.29 | 2004 |
| HIGHEST DAILY MEAN | 52 | Sep 27 | 34 | Dec 22 | 129 | Dec 28 1999 |
| LOWEST DAILY MEAN | a0.34 | Jun 15 | b0.00 | Jul 2 | c0.00 | Mar 3 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 0.44 | Jun 11 | 0.00 | Jul 10 | 0.00 | Mar 3 1999 |
| MAXIMUM PEAK FLOW | | | d46 | Dec 22 | 149 | Dec 28 1999 |
| MAXIMUM PEAK STAGE | | | 5.41 | Dec 22 | 7.59 | Dec 28 1999 |
| INSTANTANEOUS LOW FLOW | | | f | | 0.00 | Mar 3 1999 |
| ANNUAL RUNOFF (AC-FT) | 3560 | | 3840 | | 5270 | |
| ANNUAL RUNOFF (CFSM) | 1.89 | | 2.03 | | 2.80 | |
| ANNUAL RUNOFF (INCHES) | 25.72 | | 27.70 | | 38.04 | |
| 10 PERCENT EXCEEDS | 12 | | 12 | | 16 | |
| 50 PERCENT EXCEEDS | 2.6 | | 3.6 | | 4.6 | |
| 90 PERCENT EXCEEDS | 0.90 | | 0.00 | | 0.91 | |

\# See Period of Record; partial year used in monthly statistics
a June 15 and June 16
b July 2-4,7,8,10-24,26; August 7-10,13-26,31; September 1
c Mar. 3 to Mar. 9, 1999 and Apr. 8 to Apr. 18, 2002; July 2-4,7,8,10-24,26, 2004; August 7-10,13-26,31, 2004; September 1, 2004
d May have been higher during period of estimated discharge.
e Estimated
f Not determined, see lowest daily mean

## 15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1997 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1999 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder with 15-minute recording interval started on July 15, 1999.

REMARKS.-- There is missing record on July 2-5,7-8,12-24, and August 8-11,14-27, because the probe came out of water. Discharges decreased to zero flow in late summer of the 2004 water year. Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum recorded, 18.5°C, on June 22, and 24-25, 2004 ; minimum, 0°C, many days during winters.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum recorded, 18.5°C, on June 22, and 24-25, 2004 ; minimum, 0°C, many days during winter.

WATER TEMPERATURE, in (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 8.0 | 6.5 | 7.5 | 3.0 | 2.0 | 2.5 | 0.5 | 0.0 | 0.0 | 1.5 | 0.0 | 0.5 |
| 2 | 7.5 | 6.0 | 7.0 | 3.0 | 2.0 | 2.5 | 1.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 3 | 8.0 | 6.0 | 7.0 | 2.5 | 1.5 | 2.0 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 4 | 8.5 | 7.5 | 8.0 | 1.5 | 1.0 | 1.5 | 1.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 5 | 8.5 | 8.0 | 8.0 | 1.5 | 0.5 | 1.0 | 1.5 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 6 | 8.5 | 8.0 | 8.5 | 1.5 | 0.5 | 1.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 7 | 8.5 | 8.5 | 8.5 | 2.5 | 1.5 | 2.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 8 | 8.5 | 7.0 | 7.5 | 2.5 | 1.5 | 2.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 9 | 7.5 | 6.5 | 7.0 | 3.0 | 2.5 | 3.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 10 | 7.5 | 7.0 | 7.0 | 3.5 | 2.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 7.0 | 5.5 | 6.0 | 3.5 | 3.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 5.5 | 4.5 | 5.0 | 4.5 | 3.5 | 4.0 | 1.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 13 | 6.0 | 5.5 | 5.5 | 4.0 | 2.5 | 3.5 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 14 | 7.0 | 6.0 | 6.5 | 4.0 | 3.0 | 3.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15 | 6.0 | 4.0 | 4.5 | 4.5 | 4.0 | 4.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 16 | 5.5 | 3.5 | 4.5 | 4.0 | 3.5 | 4.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 17 | 6.5 | 5.5 | 6.0 | 3.5 | 2.5 | 3.0 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 18 | 7.0 | 6.0 | 6.5 | 3.0 | 0.5 | 2.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 19 | 7.5 | 7.0 | 7.0 | 0.5 | 0.0 | 0.5 | 1.5 | 1.0 | 1.5 | 0.5 | 0.0 | 0.0 |
| 20 | 7.0 | 5.5 | 6.5 | 0.0 | 0.0 | 0.0 | 2.0 | 1.0 | 1.5 | 1.0 | 0.0 | 0.5 |
| 21 | 6.0 | 4.5 | 5.0 | 0.0 | 0.0 | 0.0 | 2.5 | 2.0 | 2.0 | 1.0 | 1.0 | 1.0 |
| 22 | 6.0 | 5.5 | 6.0 | 1.5 | 0.0 | 0.5 | 2.5 | 1.5 | 2.0 | 1.0 | 1.0 | 1.0 |
| 23 | 7.0 | 6.0 | 6.5 | 1.5 | 1.5 | 1.5 | 2.5 | 2.0 | 2.0 | 1.5 | 1.0 | 1.5 |
| 24 | 7.0 | 6.0 | 6.5 | 1.5 | 0.5 | 1.0 | 2.5 | 2.0 | 2.0 | 1.0 | 0.0 | 0.5 |
| 25 | 8.5 | 7.0 | 8.0 | 2.0 | 1.5 | 1.5 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 26 | 8.5 | 7.5 | 8.5 | 1.5 | 1.0 | 1.5 | 1.5 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 27 | 7.5 | 6.5 | 7.0 | 1.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28 | 6.5 | 5.0 | 5.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 5.0 | 3.0 | 4.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 3.0 | 2.0 | 2.5 | 0.5 | 0.0 | 0.5 | 1.5 | 0.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 31 | 3.0 | 2.0 | 2.5 | --- | --- | --- | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| MONTH | 8.5 | 2.0 | 6.3 | 4.5 | 0.0 | 1.9 | 2.5 | 0.0 | 0.9 | 1.5 | 0.0 | 0.2 |

## 15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

WATER TEMPERATURE, in (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 3.0 | 2.0 | 2.5 | 8.0 | 6.0 | 6.5 |
| 2 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.5 | 2.5 | 2.0 | 2.5 | 7.5 | 6.0 | 6.5 |
| 3 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 | 3.0 | 1.5 | 2.5 | 9.5 | 6.0 | 7.5 |
| 4 | 0.0 | 0.0 | 0.0 | 1.5 | 1.0 | 1.5 | 4.0 | 2.5 | 3.0 | 9.0 | 5.0 | 7.0 |
| 5 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 5.0 | 2.5 | 3.5 | 8.5 | 4.5 | 6.5 |
| 6 | 1.0 | 0.0 | 0.5 | 2.0 | 1.5 | 1.5 | 5.5 | 2.5 | 3.5 | 9.0 | 5.0 | 7.0 |
| 7 | 1.0 | 1.0 | 1.0 | 2.5 | 1.5 | 2.0 | 5.5 | 3.5 | 4.5 | 9.5 | 6.0 | 7.5 |
| 8 | 1.5 | 0.0 | 1.0 | 2.5 | 1.5 | 2.0 | 5.5 | 3.0 | 4.0 | 10.0 | 5.5 | 7.5 |
| 9 | 1.0 | 0.0 | 0.5 | 2.0 | 1.5 | 1.5 | 5.0 | 3.0 | 4.0 | 9.0 | 7.0 | 7.5 |
| 10 | 1.5 | 0.0 | 1.0 | 2.0 | 1.5 | 2.0 | 6.0 | 4.0 | 4.5 | 10.0 | 6.5 | 8.0 |
| 11 | 2.0 | 1.5 | 1.5 | 3.0 | 2.0 | 2.5 | 6.0 | 3.0 | 4.5 | 9.5 | 5.5 | 8.0 |
| 12 | 1.5 | 1.0 | 1.5 | 2.5 | 2.0 | 2.0 | 5.5 | 4.5 | 5.0 | 10.0 | 6.5 | 8.0 |
| 13 | 2.0 | 1.5 | 1.5 | 2.5 | 1.0 | 2.0 | 5.5 | 4.0 | 5.0 | 10.5 | 6.5 | 8.5 |
| 14 | 2.5 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 | 5.5 | 3.5 | 4.5 | 10.5 | 7.0 | 9.0 |
| 15 | 2.0 | 1.0 | 1.5 | 2.0 | 1.5 | 2.0 | 5.5 | 2.5 | 4.0 | 10.0 | 6.5 | 8.5 |
| 16 | 2.0 | 1.5 | 1.5 | 2.0 | 0.5 | 1.5 | 5.5 | 2.0 | 3.5 | 9.5 | 8.0 | 9.0 |
| 17 | 2.5 | 1.5 | 2.0 | 3.0 | 1.5 | 2.0 | 5.5 | 4.0 | 5.0 | 9.5 | 8.0 | 8.5 |
| 18 | 2.0 | 2.0 | 2.0 | 1.5 | 0.5 | 1.0 | 6.0 | 3.5 | 4.5 | 10.5 | 7.5 | 9.0 |
| 19 | 2.5 | 2.0 | 2.5 | 1.5 | 0.0 | 0.5 | 6.0 | 3.0 | 4.5 | 10.5 | 7.5 | 9.0 |
| 20 | 2.5 | 2.5 | 2.5 | 2.0 | 0.0 | 1.0 | 6.5 | 3.0 | 4.5 | 11.5 | 8.0 | 9.5 |
| 21 | 3.0 | 2.5 | 2.5 | 2.0 | 0.0 | 1.0 | 7.0 | 3.5 | 5.0 | 11.0 | 8.0 | 10.0 |
| 22 | 2.5 | 1.5 | 2.0 | 2.0 | 1.5 | 1.5 | 6.0 | 5.0 | 5.5 | 11.0 | 7.5 | 9.5 |
| 23 | 3.0 | 2.0 | 2.5 | 2.0 | 0.5 | 1.5 | 5.0 | 4.0 | 4.5 | 11.5 | 8.0 | 10.0 |
| 24 | 2.5 | 1.5 | 2.0 | 3.5 | 1.5 | 2.5 | 5.0 | 4.0 | 4.5 | 11.0 | 9.0 | 10.0 |
| 25 | 2.0 | 0.5 | 1.0 | 3.0 | 2.5 | 2.5 | 5.0 | 4.5 | 4.5 | 9.0 | 8.5 | 8.5 |
| 26 | 1.5 | 0.5 | 1.0 | 3.5 | 2.0 | 2.5 | 5.5 | 4.0 | 5.0 | 9.0 | 7.5 | 8.5 |
| 27 | 1.0 | 0.0 | 0.5 | 3.5 | 2.0 | 3.0 | 6.5 | 4.0 | 5.5 | 9.5 | 7.5 | 8.5 |
| 28 | 1.5 | 0.5 | 1.0 | 4.0 | 2.5 | 3.0 | 7.0 | 4.5 | 5.5 | 9.5 | 8.0 | 8.5 |
| 29 | 1.5 | 0.5 | 1.0 | 3.5 | 0.5 | 2.5 | 8.0 | 3.5 | 5.5 | 10.5 | 8.5 | 9.5 |
| 30 | --- | --- | --- | 2.0 | 0.0 | 1.0 | 9.0 | 4.5 | 6.5 | 10.5 | 8.5 | 9.5 |
| 31 | --- | --- | --- | 2.5 | 1.0 | 2.0 | --- | --- | --- | 10.5 | 8.5 | 9.5 |
| MONTH | 3.0 | 0.0 | 1.2 | 4.0 | 0.0 | 1.7 | 9.0 | 1.5 | 4.4 | 11.5 | 4.5 | 8.4 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 10.5 | 9.0 | 9.5 | 15.0 | 12.0 | 13.5 | 12.5 | 11.5 | 12.0 | 11.5 | 9.5 | 10.5 |
| 2 | 9.0 | 8.5 | 9.0 | --- | --- | --- | 14.5 | 11.0 | 12.5 | 11.0 | 10.0 | 10.5 |
| 3 | 11.0 | 7.0 | 9.0 | --- | --- | --- | 13.5 | 12.0 | 12.5 | 11.0 | 10.5 | 11.0 |
| 4 | 11.0 | 8.5 | 10.0 | --- | --- | --- | 14.0 | 10.5 | 12.0 | 11.0 | 10.0 | 10.5 |
| 5 | 10.5 | 9.5 | 10.0 | --- | --- | --- | 14.0 | 11.0 | 12.5 | 10.5 | 9.5 | 10.0 |
| 6 | 12.0 | 9.5 | 10.5 | 13.5 | 12.0 | 12.5 | 15.0 | 12.5 | 13.5 | 9.5 | 9.0 | 9.5 |
| 7 | 14.0 | 10.0 | 12.0 | --- | --- | --- | 14.5 | 13.0 | 13.5 | 9.0 | 8.0 | 8.5 |
| 8 | 13.0 | 10.5 | 11.5 | --- | --- | --- | --- | --- | --- | 8.5 | 6.5 | 7.5 |
| 9 | 11.0 | 9.5 | 10.0 | 15.0 | 12.5 | 13.5 | --- | --- | --- | 7.5 | 5.5 | 6.5 |
| 10 | 11.0 | 9.0 | 10.0 | 14.0 | 13.0 | 13.5 | --- | --- | --- | 7.0 | 5.0 | 6.0 |
| 11 | 11.0 | 9.0 | 10.0 | 14.5 | 12.0 | 13.0 | --- | --- | --- | 8.0 | 6.5 | 7.0 |
| 12 | 12.0 | 9.5 | 11.0 | --- | --- | --- | 14.0 | 12.0 | 12.5 | 8.0 | 8.0 | 8.0 |
| 13 | 11.5 | 10.0 | 11.0 | --- | --- | --- | 14.0 | 11.5 | 12.5 | 8.5 | 8.0 | 8.0 |
| 14 | 11.0 | 9.5 | 10.0 | --- | --- | --- | --- | --- | --- | 9.0 | 8.0 | 8.5 |
| 15 | 11.0 | 9.5 | 10.0 | --- | --- | --- | --- | --- | --- | 8.5 | 8.0 | 8.0 |
| 16 | 13.0 | 8.5 | 10.5 | --- | --- | --- | --- | --- | --- | 8.5 | 7.0 | 7.5 |
| 17 | 14.0 | 10.0 | 12.0 | --- | --- | --- | --- | --- | --- | 7.5 | 6.0 | 7.0 |
| 18 | 15.5 | 11.0 | 13.0 | --- | --- | --- | --- | --- | --- | 7.0 | 5.0 | 6.0 |
| 19 | 17.0 | 12.5 | 14.5 | --- | --- | --- | --- | --- | --- | 6.0 | 4.5 | 5.5 |
| 20 | 17.5 | 13.0 | 15.0 | --- | --- | --- | --- | --- | --- | 8.0 | 6.0 | 7.0 |
| 21 | 18.0 | 13.0 | 15.0 | --- | --- | --- | --- | --- | --- | 8.5 | 8.0 | 8.5 |
| 22 | 18.5 | 13.5 | 15.5 | --- | --- | --- | --- | --- | --- | 8.0 | 8.0 | 8.0 |
| 23 | 18.0 | 13.5 | 15.5 | --- | --- | --- | --- | --- | --- | 8.5 | 8.0 | 8.0 |
| 24 | 18.5 | 14.0 | 16.0 | --- | --- | --- | --- | --- | --- | 8.5 | 8.0 | 8.5 |
| 25 | 18.5 | 14.0 | 16.0 | 14.0 | 11.0 | 13.0 | --- | --- | --- | 8.0 | 7.5 | 7.5 |
| 26 | 18.0 | 14.5 | 16.5 | 13.5 | 12.5 | 13.0 | --- | --- | --- | 8.0 | 7.5 | 7.5 |
| 27 | 17.0 | 14.0 | 15.0 | 13.5 | 12.0 | 13.0 | --- | --- | --- | 8.5 | 7.5 | 8.0 |
| 28 | 14.5 | 13.0 | 14.0 | 13.0 | 12.5 | 12.5 | 12.0 | 11.5 | 11.5 | 8.0 | 7.0 | 7.5 |
| 29 | 15.5 | 13.0 | 14.0 | 12.5 | 12.0 | 12.5 | 12.0 | 10.5 | 11.0 | 8.0 | 7.5 | 7.5 |
| 30 | 16.5 | 13.0 | 14.5 | 13.5 | 11.5 | 12.5 | 13.0 | 10.0 | 11.0 | 8.0 | 7.5 | 7.5 |
| 31 | --- | --- | --- | 13.5 | 12.0 | 12.5 | 11.5 | 9.5 | 10.5 | --- | --- | --- |
| MONTH | 18.5 | 7.0 | 12.3 | --- | --- | --- | --- | --- | --- | 11.5 | 4.5 | 8.1 |

## 15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'47", long 134°34'22", in NW¼ SE¼ sec. 6, T. 40 S., R. 66 E. (Juneau B-2 NW quad.), Hydrologic Unit 19010301, at the north end of Mendenhall Lake, 1.2 mi north of Mendenhall Lake Outlet and 4.1 mi northeast of Auke Bay, and 7 mi upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 $mi^2$.

PERIOD OF RECORD.--May 1965 to October 1994, annual maximum, water years 1995-96, October 1996 to current year. Prior to April 15, 1983, at site 1.3 mi southeast at east end of Mendenhall Lake, same datum.

REVISED RECORDS.--WDR AK-95-1: 1981(M)

GAGE.--Water-stage recorder. Elevation of gage is 60 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Streamflow is augmented and diurnal fluctuations caused by melting from Mendenhall Glacier, which covers two-thirds of the basin. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--During late summer 1961, flood flows of 27,000 $ft^3/s$ were estimated at the mouth of the Mendenhall River. For discussion of this flood, see USGS Hydrologic Atlas HA-259.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 $ft^3/s$ and maximum (*):.

| Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) |
|---|---|---|---|---|---|---|---|
| July 29 | 2045 | *9410 | *8.63 | Sept 24 | 0745 | 6070 | 7.18 |
| Aug 16 | 2230 | 5600 | 6.94 | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2870 | 671 | 125 | e120 | 123 | 130 | 112 | 464 | 1460 | 3580 | 3550 | e1800 |
| 2 | 2330 | 501 | 150 | e110 | 117 | 119 | 124 | 609 | 1450 | 3380 | 3040 | e1600 |
| 3 | 2280 | 412 | 154 | e110 | 111 | 113 | 213 | e660 | 1550 | 3460 | 3400 | e1900 |
| 4 | 2470 | 353 | 142 | e110 | 110 | 107 | 283 | e630 | 1600 | 3240 | 3350 | e2400 |
| 5 | 2670 | 308 | 131 | e110 | 116 | 101 | 262 | e620 | 1670 | 3310 | 3340 | e2000 |
| 6 | 2440 | 271 | 123 | e100 | 124 | 95 | 236 | e630 | 1810 | 3390 | 3440 | e1800 |
| 7 | 2530 | 242 | 116 | e100 | 120 | 93 | 225 | 635 | 2260 | 3030 | 3550 | e1700 |
| 8 | 2190 | 216 | 113 | e100 | 127 | 107 | 249 | 644 | 2460 | 3130 | 3490 | e1550 |
| 9 | 1440 | 230 | 106 | e90 | 201 | 121 | 238 | 648 | 2360 | 3470 | 3430 | 1310 |
| 10 | 1290 | 228 | 99 | e90 | 261 | 120 | 231 | 650 | 2360 | 3280 | 3900 | 1120 |
| 11 | 1040 | 226 | 95 | 89 | 266 | 123 | 230 | 682 | 2040 | 2860 | 4460 | 1010 |
| 12 | 745 | 438 | 91 | 85 | 318 | 118 | 241 | 755 | 1800 | 2890 | 3200 | 1170 |
| 13 | 610 | 510 | 86 | 94 | 302 | 111 | 246 | 894 | 1890 | 3140 | 2860 | 1770 |
| 14 | 573 | 415 | 80 | 180 | 296 | 103 | 245 | 1170 | 1940 | 3600 | 3510 | 2310 |
| 15 | 506 | 371 | 79 | 301 | 275 | 100 | 238 | 1290 | 1830 | 3860 | 4800 | 2360 |
| 16 | 433 | 335 | 83 | 252 | 261 | 97 | 222 | 1270 | 1800 | 3970 | 5310 | 1810 |
| 17 | 376 | 296 | 91 | 217 | 244 | 91 | 199 | 1060 | 2010 | 3710 | 4970 | 1300 |
| 18 | 360 | 244 | 98 | 240 | 211 | 84 | 182 | 932 | 2440 | 3080 | 4500 | 1060 |
| 19 | 398 | 191 | 119 | 271 | 186 | 78 | 168 | 1010 | 3210 | 3060 | 3770 | 870 |
| 20 | 488 | 166 | 143 | 299 | 177 | 72 | 160 | 1160 | 3620 | 3150 | 3610 | 938 |
| 21 | 533 | 154 | 146 | 380 | 186 | 68 | 156 | 1400 | 3670 | 3280 | 3200 | 2580 |
| 22 | 578 | 152 | 221 | 427 | 253 | 67 | 159 | 1410 | 3700 | 3600 | e4000 | 4290 |
| 23 | 600 | 147 | 335 | 413 | 242 | 65 | 168 | 1360 | 3860 | 3840 | 3080 | 4850 |
| 24 | 566 | 144 | 332 | 334 | 216 | 63 | 179 | 1450 | 4100 | 4390 | 2620 | 5720 |
| 25 | 998 | 139 | 289 | 262 | 200 | 74 | 210 | 1860 | 4020 | 3580 | 2360 | 4400 |
| 26 | 2280 | 133 | 234 | 204 | 193 | 103 | 311 | 2300 | 3720 | 2790 | 2000 | 3860 |
| 27 | 2820 | 130 | 185 | 172 | 175 | 111 | 336 | 2300 | 3580 | 2820 | 2180 | 3780 |
| 28 | 2240 | 127 | 160 | 156 | 159 | 113 | 321 | 2260 | 3370 | 5290 | e2300 | 3070 |
| 29 | 1610 | 129 | 146 | 144 | 143 | 120 | 307 | 1960 | 3360 | 8410 | e3000 | 2410 |
| 30 | 1440 | 126 | 135 | 135 | --- | 126 | 337 | 1720 | 3530 | 8050 | e2300 | 2950 |
| 31 | 1010 | --- | 128 | 129 | --- | 119 | --- | 1540 | --- | 4540 | e2000 | --- |
| TOTAL | 42714 | 8005 | 4535 | 5824 | 5713 | 3112 | 6788 | 35973 | 78470 | 117180 | 104520 | 69688 |
| MEAN | 1378 | 267 | 146 | 188 | 197 | 100 | 226 | 1160 | 2616 | 3780 | 3372 | 2323 |
| MAX | 2870 | 671 | 335 | 427 | 318 | 130 | 337 | 2300 | 4100 | 8410 | 5310 | 5720 |
| MIN | 360 | 126 | 79 | 85 | 110 | 63 | 112 | 464 | 1450 | 2790 | 2000 | 870 |
| AC-FT | 84720 | 15880 | 9000 | 11550 | 11330 | 6170 | 13460 | 71350 | 155600 | 232400 | 207300 | 138200 |
| CFSM | 16.2 | 3.14 | 1.72 | 2.21 | 2.31 | 1.18 | 2.66 | 13.6 | 30.7 | 44.4 | 39.6 | 27.3 |
| IN. | 18.67 | 3.50 | 1.98 | 2.55 | 2.50 | 1.36 | 2.97 | 15.72 | 34.30 | 51.22 | 45.69 | 30.46 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)# | | | | | | | | | | | | |
| MEAN | 1374 | 348 | 166 | 119 | 93.7 | 91.2 | 141 | 666 | 1907 | 3037 | 3361 | 2664 |
| MAX | 2649 | 920 | 563 | 600 | 254 | 379 | 313 | 1227 | 2819 | 3835 | 4701 | 4100 |
| (WY) | 1987 | 1977 | 2003 | 1981 | 1977 | 1992 | 1994 | 1993 | 1969 | 1979 | 1990 | 1991 |
| MIN | 532 | 110 | 40.0 | 30.8 | 21.5 | 22.3 | 46.9 | 268 | 732 | 1939 | 2025 | 1380 |
| (WY) | 1969 | 1986 | 1984 | 1969 | 1969 | 1974 | 2002 | 1985 | 1985 | 1985 | 1985 | 1984 |

\# See Period of Record; partial years used in monthly summary statistics and break in record
e Estimated

## 15052500 MENDENHALL RIVER NEAR AUKE BAY—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1965 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 463673 | | 482522 | | | |
| ANNUAL MEAN | 1270 | | 1318 | | 1176 | |
| HIGHEST ANNUAL MEAN | | | | | 1547 | 1990 |
| LOWEST ANNUAL MEAN | | | | | 758 | 1985 |
| HIGHEST DAILY MEAN | 9780 | Aug 16 | 8410 | Jul 29 | 13700 | Sep 8 1981 |
| LOWEST DAILY MEAN | a46 | Mar 17 | 63 | Mar 24 | 19 | Mar 1 1969 |
| ANNUAL SEVEN-DAY MINIMUM | 48 | Mar 15 | 70 | Mar 19 | 19 | Mar 5 1974 |
| MAXIMUM PEAK FLOW | | | 9410 | Jul 29 | 16000 | Sep 11 1995 |
| MAXIMUM PEAK STAGE | | | 8.63 | Jul 29 | b11.18 | Sep 11 1995 |
| INSTANTANEOUS LOW FLOW | | | c62 | Mar 24 | d19 | Mar 1 1969 |
| ANNUAL RUNOFF (AC-FT) | 919700 | | 957100 | | 851800 | |
| ANNUAL RUNOFF (CFSM) | 14.9 | | 15.5 | | 13.8 | |
| ANNUAL RUNOFF (INCHES) | 202.69 | | 210.93 | | 187.72 | |
| 10 PERCENT EXCEEDS | 3370 | | 3560 | | 3240 | |
| 50 PERCENT EXCEEDS | 488 | | 451 | | 395 | |
| 90 PERCENT EXCEEDS | 69 | | 109 | | 49 | |

\# See Period of Record; partial years used in monthly summary statistics and break in record
a Mar. 17-19
b From flood marks
c Mar. 24-25
d Mar. 1-3, 1969, and Mar. 7-11, 1974

## 15052800 MONTANA CREEK NEAR AUKE BAY

LOCATION.--Lat 58°23'53", long 134°36'34", in SE¼ SW¼ sec. 13, T. 40 S., R. 65 E. (Juneau B-2 NW quad.), Hydrologic Unit 19010301,On right bank 30 ft upstream from bridge on Mendenhall Loop Road, 1.2 mi upstream from mouth at Mendenhall River, 1.5 mi northeast of Auke Lake, and 3.9 mi downstream from McGinnis Creek.

DRAINAGE AREA.--14.1 $mi^2$.

PERIOD OF RECORD.-- August 1965 to September 1975, July 1983 to September 1987, Annual Maximum 1996 to 2000, November 2000 to current year.

REVISED RECORDS.--WDR-99-1: 1996-98 (M).

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level, from topographic map.

REMARKS.--Records fair, except estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 800 $ft^3/s$ and maximum (*)

| Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) |
|---|---|---|---|---|---|---|---|
| Oct 26 | 0615 | 1190 | 14.81 | Jan 18 | 2000 | 975 | 14.35 |
| Nov 12 | 1015 | 1460 | 15.25 | Sep 21 | 0700 | 1460 | 15.24 |
| Jan 14 | 1700 | 1630 | 15.48 | Sep 23 | 1915 | *1740 | *15.62 |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 83 | 45 | 38 | e22 | e17 | e25 | 27 | 138 | 85 | 71 | 53 | 31 |
| 2 | 69 | 40 | 89 | e20 | e16 | e22 | 96 | 172 | 89 | 65 | 47 | 89 |
| 3 | 63 | 35 | 47 | e17 | e15 | 20 | 199 | 139 | 83 | 68 | 57 | 238 |
| 4 | 84 | 32 | 35 | e15 | e16 | 18 | 148 | 127 | 92 | 61 | 52 | 172 |
| 5 | 76 | 28 | 30 | e13 | e25 | 17 | 70 | 102 | 116 | 91 | 47 | 118 |
| 6 | 92 | 26 | 28 | e12 | e47 | 16 | 57 | 89 | 118 | 70 | 44 | 189 |
| 7 | 188 | 25 | 26 | e11 | 96 | 22 | 79 | 91 | 153 | 57 | 41 | 131 |
| 8 | 160 | 24 | 25 | e11 | 193 | 83 | 124 | 88 | 135 | 56 | 39 | 68 |
| 9 | 79 | 85 | e24 | e11 | 428 | 51 | 76 | 90 | 112 | 58 | 39 | 51 |
| 10 | 79 | 61 | e23 | e13 | 307 | 35 | 80 | 88 | 96 | 54 | 38 | 43 |
| 11 | 76 | 90 | e24 | e16 | 146 | 45 | 70 | 88 | 77 | 47 | 90 | 39 |
| 12 | 58 | 615 | e25 | e15 | 177 | 34 | 73 | 99 | 74 | 47 | 51 | 77 |
| 13 | 64 | 172 | 24 | e29 | 106 | 28 | 69 | 112 | 80 | 49 | 40 | 282 |
| 14 | 78 | 102 | e24 | 938 | 97 | 22 | 63 | 121 | 96 | 53 | 39 | 123 |
| 15 | 54 | 104 | e25 | 450 | 76 | 21 | 52 | 109 | 85 | 53 | 41 | 78 |
| 16 | 46 | 86 | 26 | 214 | 62 | 22 | 45 | 97 | 77 | 52 | 41 | 62 |
| 17 | 41 | 64 | 54 | 223 | 53 | 22 | 44 | 84 | 86 | 51 | 39 | 50 |
| 18 | 39 | 48 | 59 | 499 | 54 | 18 | 49 | 79 | 116 | 43 | 39 | 43 |
| 19 | 48 | e45 | 128 | 335 | 81 | 18 | 42 | 99 | 143 | 41 | 41 | 38 |
| 20 | 51 | e39 | 101 | 202 | 106 | 14 | 41 | 122 | 139 | 40 | 42 | 173 |
| 21 | 40 | e35 | 72 | 214 | 167 | 19 | 43 | 133 | 126 | 59 | 36 | 695 |
| 22 | 37 | e32 | 184 | 199 | 197 | 13 | 48 | 113 | 123 | 66 | 35 | 328 |
| 23 | 59 | 37 | 196 | 136 | 89 | 12 | 60 | 107 | 122 | 46 | 31 | 764 |
| 24 | 49 | 35 | 95 | 102 | 67 | 13 | 97 | 133 | 121 | 70 | 28 | 505 |
| 25 | 396 | 34 | 68 | e70 | 55 | 50 | 131 | 196 | 114 | 64 | 27 | 203 |
| 26 | 558 | 32 | 50 | e48 | 45 | 82 | 186 | 257 | 101 | 44 | 27 | 147 |
| 27 | 153 | 32 | e42 | e34 | e38 | 47 | 99 | 144 | 94 | 57 | 76 | 344 |
| 28 | 142 | 31 | e35 | e27 | e33 | 44 | 74 | 102 | 83 | 426 | 80 | 160 |
| 29 | 80 | 31 | e29 | e23 | 29 | 47 | 65 | 94 | 74 | 198 | 60 | 171 |
| 30 | 61 | 34 | e25 | e21 | --- | 40 | 87 | 91 | 73 | 106 | 40 | 187 |
| 31 | 51 | --- | e24 | e19 | --- | 29 | --- | 85 | --- | 68 | 34 | --- |
| TOTAL | 3154 | 2099 | 1675 | 3959 | 2838 | 949 | 2394 | 3589 | 3083 | 2331 | 1394 | 5599 |
| MEAN | 102 | 70.0 | 54.0 | 128 | 97.9 | 30.6 | 79.8 | 116 | 103 | 75.2 | 45.0 | 187 |
| MAX | 558 | 615 | 196 | 938 | 428 | 83 | 199 | 257 | 153 | 426 | 90 | 764 |
| MIN | 37 | 24 | 23 | 11 | 15 | 12 | 27 | 79 | 73 | 40 | 27 | 31 |
| AC-FT | 6260 | 4160 | 3320 | 7850 | 5630 | 1880 | 4750 | 7120 | 6120 | 4620 | 2760 | 11110 |
| CFSM | 7.22 | 4.96 | 3.83 | 9.06 | 6.94 | 2.17 | 5.66 | 8.21 | 7.29 | 5.33 | 3.19 | 13.2 |
| IN. | 8.32 | 5.54 | 4.42 | 10.45 | 7.49 | 2.50 | 6.32 | 9.47 | 8.13 | 6.15 | 3.68 | 14.77 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 158 | 75.6 | 47.6 | 50.0 | 42.1 | 46.6 | 53.9 | 127 | 157 | 140 | 154 | 168 |
| MAX | 285 | 138 | 112 | 186 | 121 | 195 | 88.5 | 185 | 207 | 213 | 246 | 263 |
| (WY) | 1975 | 1975 | 1986 | 1985 | 1971 | 1972 | 1969 | 1972 | 1967 | 1975 | 1972 | 1987 |
| MIN | 89.7 | 21.4 | 15.9 | 5.02 | 7.52 | 9.64 | 25.0 | 61.9 | 71.1 | 52.5 | 45.0 | 70.9 |
| (WY) | 1969 | 1986 | 1972 | 1974 | 1972 | 1974 | 2002 | 2003 | 1971 | 1971 | 2004 | 1984 |

## 15052800 MONTANA CREEK NEAR AUKE BAY—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1965 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 29805 | | 33064 | | | |
| ANNUAL MEAN | 81.7 | | 90.3 | | 103 | |
| HIGHEST ANNUAL MEAN | | | | | 131 | 1975 |
| LOWEST ANNUAL MEAN | | | | | 80.8 | 1971 |
| HIGHEST DAILY MEAN | 629 | Sep 27 | 938 | Jan 14 | 1350 | Sep 29 1970 |
| LOWEST DAILY MEAN | 13 | Mar 13 | a11 | Jan 7 | 3.4 | Feb 8 1972 |
| ANNUAL SEVEN-DAY MINIMUM | 14 | Mar 9 | 12 | Jan 4 | 3.5 | Jan 13 1974 |
| MAXIMUM PEAK FLOW | | | 1740 | Sep 23 | 3800 | Oct 20 1998 |
| MAXIMUM PEAK STAGE | | | 15.62 | Sep 23 | 17.36 | Oct 20 1998 |
| INSTANTANEOUS LOW FLOW | | | b | | 3.2 | Feb 8 1972 |
| ANNUAL RUNOFF (AC-FT) | 59120 | | 65580 | | 74360 | |
| ANNUAL RUNOFF (CFSM) | 5.79 | | 6.41 | | 7.28 | |
| ANNUAL RUNOFF (INCHES) | 78.63 | | 87.23 | | 98.91 | |
| 10 PERCENT EXCEEDS | 159 | | 174 | | 220 | |
| 50 PERCENT EXCEEDS | 56 | | 61 | | 74 | |
| 90 PERCENT EXCEEDS | 25 | | 23 | | 15 | |

\# See Period of Record, partial years used in monthly statistics
a Jan 7 to 9
b Not determined, see lowest daily mean
e Estimated

## 15053200 DUCK CREEK BELOW NANCY STREET NEAR AUKE BAY

LOCATION.--Lat 58°22'31", long 134°34'38", in NW¼ SW¼ NE¼ sec. 30, T. 40 S., R. 66 E. (Juneau B-2 NW), Hydrologic Unit 19010301, City and Borough of Juneau, on right bank, 50 ft south of intersection of Nancy Street and Mendenhall Loop Road, 0.4 mi north of intersection of Egan Drive and Mendenhall Loop Road, and 1.44 mi upstream from mouth.

DRAINAGE AREA.-- 1.30 $mi^2$.

PERIOD OF RECORD.--December 1993 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 21.87 ft above sea level, determined by levels survey.

REMARKS.--No estimated daily discharge. Records are good, except for daily discharges less than 1 $ft^3/s$, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.0 | 3.6 | 2.7 | 3.0 | 2.2 | 2.6 | 3.8 | 2.3 | 0.81 | 0.63 | 1.0 | 0.63 |
| 2 | 5.2 | 3.1 | 8.0 | 2.3 | 2.1 | 2.4 | 7.8 | 2.1 | 0.96 | 0.63 | 0.96 | 0.74 |
| 3 | 4.6 | 2.7 | 6.1 | 2.0 | 1.9 | 2.4 | 15 | 1.9 | 1.0 | 0.63 | 1.1 | 1.4 |
| 4 | 5.5 | 2.3 | 4.5 | 1.8 | 2.0 | 2.4 | 9.8 | 1.8 | 0.84 | 0.63 | 1.0 | 1.6 |
| 5 | 6.1 | 2.1 | 3.6 | 1.6 | 11 | 2.5 | 6.9 | 1.6 | 0.74 | 0.68 | 0.89 | 1.8 |
| 6 | 7.0 | 1.9 | 3.0 | 1.5 | 9.2 | 2.4 | 5.5 | 1.5 | 0.72 | 0.66 | 0.80 | 2.7 |
| 7 | 6.9 | 1.8 | 2.6 | 1.4 | 6.3 | 4.2 | 4.9 | 1.4 | 0.69 | 0.63 | 0.78 | 2.6 |
| 8 | 6.5 | 1.7 | 2.4 | 1.5 | 9.3 | 6.6 | 6.5 | 1.3 | 0.67 | 0.63 | 0.73 | 2.0 |
| 9 | 5.8 | 5.2 | 2.1 | 1.4 | 15 | 5.6 | 4.8 | 1.3 | 0.73 | 0.62 | 0.68 | 1.6 |
| 10 | 5.5 | 4.1 | 1.9 | 1.5 | 14 | 6.2 | 3.5 | 1.2 | 0.79 | 0.53 | 0.63 | 1.4 |
| 11 | 5.5 | 4.9 | 1.9 | 2.1 | 8.7 | 7.5 | 3.2 | 1.1 | 0.75 | 0.51 | 0.80 | 1.2 |
| 12 | 5.0 | 13 | 1.9 | 2.0 | 11 | 5.4 | 3.0 | 0.93 | 0.74 | 0.50 | 0.79 | 1.4 |
| 13 | 5.5 | 13 | 2.1 | 6.0 | 6.8 | 4.5 | 2.8 | 0.85 | 0.72 | 0.39 | 0.74 | 3.8 |
| 14 | 5.9 | 10 | 1.9 | 19 | 5.4 | 3.9 | 2.2 | 0.78 | 0.75 | 0.38 | 0.67 | 3.1 |
| 15 | 5.2 | 8.9 | 1.8 | 11 | 4.6 | 4.4 | 2.5 | 0.74 | 0.72 | 0.35 | 0.62 | 2.6 |
| 16 | 4.9 | 7.3 | 2.7 | 5.5 | 4.2 | 4.2 | 2.4 | 0.74 | 0.68 | 0.31 | 0.58 | 2.3 |
| 17 | 4.6 | 6.3 | 7.0 | 4.7 | 3.8 | 3.9 | 2.6 | 0.77 | 0.67 | 0.31 | 0.52 | 1.9 |
| 18 | 4.5 | 5.1 | 7.3 | 13 | 3.9 | 3.6 | 2.4 | 0.71 | 0.63 | 0.31 | 0.54 | 1.7 |
| 19 | 4.3 | 4.3 | 12 | 8.4 | 4.5 | 3.1 | 2.0 | 0.68 | 0.55 | 0.24 | 0.57 | 1.4 |
| 20 | 4.5 | 3.5 | 11 | 16 | 6.8 | 2.7 | 1.9 | 0.67 | 0.50 | 0.22 | 0.58 | 3.4 |
| 21 | 4.1 | 3.1 | 9.1 | 14 | 7.1 | 2.5 | 1.6 | 0.65 | 0.52 | 0.28 | 0.54 | 7.8 |
| 22 | 3.9 | 3.5 | 14 | 15 | 9.2 | 2.3 | 1.6 | 0.62 | 0.53 | 0.31 | 0.48 | 5.6 |
| 23 | 4.2 | 3.4 | 15 | 10 | 6.5 | 2.2 | 1.4 | 0.66 | 0.58 | 0.29 | 0.44 | 9.2 |
| 24 | 4.3 | 3.5 | 11 | 7.0 | 5.3 | 2.0 | 2.4 | 0.90 | 0.58 | 0.33 | 0.36 | 10 |
| 25 | 11 | 3.1 | 8.2 | 5.1 | 4.4 | 3.1 | 4.7 | 1.3 | 0.60 | 0.55 | 0.35 | 6.3 |
| 26 | 14 | 2.7 | 6.6 | 4.2 | 3.9 | 5.0 | 6.7 | 1.4 | 0.58 | 0.54 | 0.35 | 4.6 |
| 27 | 9.0 | 2.5 | 5.3 | 3.6 | 3.6 | 4.4 | 4.8 | 1.2 | 0.62 | 0.65 | 0.54 | 4.6 |
| 28 | 9.3 | 2.3 | 4.3 | 3.1 | 3.2 | 4.2 | 3.6 | 1.1 | 0.64 | 2.0 | 0.67 | 4.1 |
| 29 | 6.3 | 2.3 | 3.9 | 2.8 | 2.9 | 4.3 | 3.0 | 0.98 | 0.63 | 1.9 | 0.73 | 4.4 |
| 30 | 5.0 | 2.1 | 3.8 | 2.5 | --- | 4.7 | 2.6 | 0.83 | 0.63 | 1.6 | 0.74 | 4.6 |
| 31 | 4.2 | --- | 3.4 | 2.4 | --- | 4.2 | --- | 0.77 | --- | 1.2 | 0.69 | --- |
| TOTAL | 184.3 | 133.3 | 171.1 | 175.4 | 178.8 | 119.4 | 125.9 | 34.78 | 20.57 | 19.44 | 20.87 | 100.47 |
| MEAN | 5.95 | 4.44 | 5.52 | 5.66 | 6.17 | 3.85 | 4.20 | 1.12 | 0.69 | 0.63 | 0.67 | 3.35 |
| MAX | 14 | 13 | 15 | 19 | 15 | 7.5 | 15 | 2.3 | 1.0 | 2.0 | 1.1 | 10 |
| MIN | 3.9 | 1.7 | 1.8 | 1.4 | 1.9 | 2.0 | 1.4 | 0.62 | 0.50 | 0.22 | 0.35 | 0.63 |
| AC-FT | 366 | 264 | 339 | 348 | 355 | 237 | 250 | 69 | 41 | 39 | 41 | 199 |
| CFSM | 4.57 | 3.42 | 4.25 | 4.35 | 4.74 | 2.96 | 3.23 | 0.86 | 0.53 | 0.48 | 0.52 | 2.58 |
| IN. | 5.27 | 3.81 | 4.90 | 5.02 | 5.12 | 3.42 | 3.60 | 1.00 | 0.59 | 0.56 | 0.60 | 2.87 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 9.04 | 4.85 | 5.31 | 3.17 | 2.73 | 2.48 | 2.80 | 2.47 | 2.03 | 2.53 | 3.66 | 7.66 |
| MAX | 18.1 | 10.3 | 12.2 | 5.66 | 6.17 | 5.08 | 6.16 | 4.97 | 3.47 | 4.23 | 7.66 | 14.5 |
| (WY) | 2000 | 2000 | 2000 | 2004 | 2004 | 1994 | 1999 | 1999 | 1999 | 1997 | 2002 | 2000 |
| MIN | 5.29 | 2.36 | 1.95 | 0.85 | 0.79 | 0.94 | 0.64 | 0.86 | 0.69 | 0.63 | 0.67 | 3.35 |
| (WY) | 1998 | 1996 | 1996 | 1997 | 1999 | 1995 | 2003 | 2002 | 2004 | 2004 | 2004 | 2004 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1994 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 1247.72 | | 1284.33 | | | |
| ANNUAL MEAN | 3.42 | | 3.51 | | 4.06 | |
| HIGHEST ANNUAL MEAN | | | | | 6.90 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 3.26 | 1995 |
| HIGHEST DAILY MEAN | 22 | Sep 27 | 19 | Jan 14 | 68 | Dec 28 1999 |
| LOWEST DAILY MEAN | a0.31 | Apr 9 | 0.22 | Jul 20 | 0.19 | Mar 15 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 0.34 | Apr 7 | 0.28 | Jul 17 | 0.26 | Mar 10 2000 |
| MAXIMUM PEAK FLOW | | | 27 | Jan 14 | 80 | Dec 28 1999 |
| MAXIMUM PEAK STAGE | | | 5.76 | Jan 14 | b7.59 | Sep 25 1996 |
| INSTANTANEOUS LOW FLOW | c | | 0.18 | Jul 20 | d0.18 | Mar 8 1999 |
| ANNUAL RUNOFF (AC-FT) | 2470 | | 2550 | | 2940 | |
| ANNUAL RUNOFF (CFSM) | 2.63 | | 2.70 | | 3.12 | |
| ANNUAL RUNOFF (INCHES) | 35.70 | | 36.75 | | 42.40 | |
| 10 PERCENT EXCEEDS | 8.0 | | 7.9 | | 8.5 | |
| 50 PERCENT EXCEEDS | 2.2 | | 2.4 | | 2.6 | |
| 90 PERCENT EXCEEDS | 0.72 | | 0.59 | | 0.89 | |

\# See period of record; partial years used in monthly statistics
a Apr. 9-11
b Backwater caused by culvert, which was removed Apr. 1998
c Undetermined, see lowest daily mean
d Mar. 8, 1999 and Mar. 14 and 15, 2000; and Jul. 20, 2004

## 15055500 ANTLER RIVER BELOW ANTLER LAKE NEAR AUKE BAY

LOCATION.--Lat 58°51'07", long 134°42'31", in NE$^1/_4$ SE$^1/_4$ NE$^1/_4$ sec. 10, T. 35 S., R. 64 E. (Juneau D-3 quad), Hydrologic Unit 19010301, in Tongass National Forest, 200 ft below outlet of Antler Lake, 10 mi northeast of Berners Bay, and located 32 mi northwest of Auke Bay.

DRAINAGE AREA.--26.0 mi$^2$, approximately.

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above sea level, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 224 | 97 | 29 | 39 | e34 | e39 | 35 | 128 | 228 | 356 | 192 | 111 |
| 2 | 193 | 84 | 38 | 35 | e32 | 33 | 46 | 165 | 230 | 332 | 168 | 112 |
| 3 | 173 | 75 | 40 | 32 | e31 | 31 | 89 | 182 | 222 | 317 | 166 | 161 |
| 4 | 169 | 68 | 37 | 29 | e29 | 29 | 102 | 195 | 230 | 292 | 165 | 193 |
| 5 | 164 | 60 | 35 | 27 | e32 | 28 | 94 | 186 | 267 | 265 | 168 | 200 |
| 6 | 150 | 56 | 33 | 25 | e35 | 27 | 86 | 172 | 328 | 249 | 175 | 225 |
| 7 | 147 | 46 | 30 | 24 | e47 | 28 | 79 | 165 | 433 | 232 | 178 | 204 |
| 8 | 144 | 39 | 29 | 24 | e68 | 34 | 78 | 162 | 497 | 227 | 176 | 158 |
| 9 | 127 | 40 | 27 | 24 | e96 | 38 | 76 | 164 | 415 | 233 | 176 | 127 |
| 10 | 115 | 39 | 26 | 23 | e120 | 40 | 72 | 162 | 342 | 236 | 182 | 105 |
| 11 | 105 | 37 | 24 | 22 | e150 | 44 | 68 | 161 | 283 | 240 | 201 | 89 |
| 12 | 92 | 73 | 24 | 21 | e140 | 43 | 67 | 170 | 251 | 229 | 189 | 84 |
| 13 | 82 | 96 | 23 | 22 | e130 | 41 | 65 | 191 | 257 | 229 | 169 | 99 |
| 14 | 74 | 89 | 22 | 28 | e110 | 38 | 64 | 224 | 293 | 236 | 171 | 107 |
| 15 | 67 | 92 | 22 | 33 | e100 | 37 | 61 | 242 | 296 | 246 | 190 | 100 |
| 16 | 61 | 88 | 24 | 33 | e93 | 36 | 57 | 244 | 280 | 248 | 207 | 90 |
| 17 | 56 | 79 | 26 | 35 | e86 | 34 | 53 | 233 | 288 | 245 | 221 | 80 |
| 18 | 54 | 69 | 29 | 44 | e78 | 32 | 50 | 216 | 348 | 220 | 219 | 71 |
| 19 | 55 | 59 | 37 | 50 | e74 | 30 | 47 | 228 | 460 | 201 | 203 | 64 |
| 20 | 56 | 52 | 47 | 54 | e70 | 28 | 44 | 267 | 530 | 194 | 188 | 64 |
| 21 | 56 | 46 | 53 | 63 | e75 | 27 | 43 | 319 | 536 | 187 | 173 | 213 |
| 22 | 59 | 44 | 125 | 68 | e79 | 26 | 44 | 316 | 515 | 186 | 172 | 302 |
| 23 | 69 | 41 | 156 | 68 | e77 | 25 | 51 | 300 | 509 | 184 | 155 | 429 |
| 24 | 75 | 39 | 135 | 62 | e70 | 25 | 52 | 301 | 504 | 195 | 139 | 695 |
| 25 | 122 | 36 | 111 | e58 | e64 | 24 | 61 | 327 | 500 | 200 | 125 | 489 |
| 26 | 236 | 34 | 91 | e54 | e57 | 25 | 90 | 337 | 468 | 180 | 116 | 326 |
| 27 | 246 | 32 | 75 | e50 | e52 | 26 | 101 | 321 | 423 | 165 | 141 | 407 |
| 28 | 198 | 30 | 63 | e47 | e46 | 29 | 97 | 285 | 381 | 237 | 151 | 348 |
| 29 | 160 | 29 | 54 | e42 | e42 | 32 | 92 | 259 | 354 | 313 | 141 | 249 |
| 30 | 134 | 28 | 49 | e39 | --- | 37 | 96 | 250 | 358 | 281 | 128 | 194 |
| 31 | 113 | --- | 43 | e37 | --- | 37 | --- | 234 | --- | 229 | 119 | --- |
| TOTAL | 3776 | 1697 | 1557 | 1212 | 2117 | 1003 | 2060 | 7106 | 11026 | 7384 | 5264 | 6096 |
| MEAN | 122 | 56.6 | 50.2 | 39.1 | 73.0 | 32.4 | 68.7 | 229 | 368 | 238 | 170 | 203 |
| MAX | 246 | 97 | 156 | 68 | 150 | 44 | 102 | 337 | 536 | 356 | 221 | 695 |
| MIN | 54 | 28 | 22 | 21 | 29 | 24 | 35 | 128 | 222 | 165 | 116 | 64 |
| AC-FT | 7490 | 3370 | 3090 | 2400 | 4200 | 1990 | 4090 | 14090 | 21870 | 14650 | 10440 | 12090 |
| CFSM | 4.68 | 2.18 | 1.93 | 1.50 | 2.81 | 1.24 | 2.64 | 8.82 | 14.1 | 9.16 | 6.53 | 7.82 |
| IN. | 5.40 | 2.43 | 2.23 | 1.73 | 3.03 | 1.44 | 2.95 | 10.17 | 15.78 | 10.56 | 7.53 | 8.72 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 165 | 65.3 | 69.3 | 42.5 | 31.5 | 21.5 | 42.4 | 150 | 309 | 262 | 220 | 219 |
| MAX | 240 | 97.9 | 134 | 69.5 | 73.0 | 32.4 | 68.7 | 229 | 368 | 327 | 317 | 271 |
| (WY) | 1999 | 2003 | 2000 | 2003 | 2004 | 2004 | 2004 | 2004 | 2004 | 2000 | 2002 | 1999 |
| MIN | 104 | 39.4 | 30.6 | 21.2 | 11.5 | 14.6 | 14.5 | 90.1 | 222 | 207 | 170 | 160 |
| (WY) | 1998 | 2002 | 2002 | 1999 | 1999 | 1999 | 2002 | 2001 | 2003 | 2003 | 2004 | 2002 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1997 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 40892 | | 50298 | | | |
| ANNUAL MEAN | 112 | | 137 | | 133 | |
| HIGHEST ANNUAL MEAN | | | | | 147 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 121 | 2002 |
| HIGHEST DAILY MEAN | 467 | Aug 17 | 695 | Sep 24 | 993 | Oct 20 1998 |
| LOWEST DAILY MEAN | a14 | Mar 11 | 21 | Jan 12 | 7.8 | Mar 9 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 14 | Mar 11 | 23 | Jan 7 | 8.0 | Mar 5 1999 |
| MAXIMUM PEAK FLOW | | | 740 | Sep 24 | b1300 | Oct 20 1998 |
| MAXIMUM PEAK STAGE | | | 32.89 | Sep 24 | 34.07 | Oct 20 1998 |
| INSTANTANEOUS LOW FLOW | | | c21 | Dec 14 | 7.8 | Mar 9 1999 |
| ANNUAL RUNOFF (AC-FT) | 81110 | | 99770 | | 96500 | |
| ANNUAL RUNOFF (CFSM) | 4.31 | | 5.29 | | 5.12 | |
| ANNUAL RUNOFF (INCHES) | 58.51 | | 71.97 | | 69.61 | |
| 10 PERCENT EXCEEDS | 227 | | 297 | | 304 | |
| 50 PERCENT EXCEEDS | 91 | | 92 | | 90 | |
| 90 PERCENT EXCEEDS | 18 | | 29 | | 19 | |

\# See period of record; partial years used in monthly statistics
a Mar. 11-13, 15-17, and 20
b From rating curve extended above 600 cfs on basis of slope-area measurement at gage height 34.07 ft.
c Dec. 14, 15, and Jan. 11-13
e Estimated

## 15056030 KAKUHAN CREEK NEAR HAINES

LOCATION.--Lat 59°00'19", long 135°11'02", in SW¼ NE¼ SE¼ sec. 14, T. 33 S., R. 61 E. (Skagway A-1 quad), Hydrologic Unit 19010301, in Tongass National Forest, about 500 ft upstream from mouth on east side of Lynn Canal, 19 mi southeast of Haines, and 60 mi northwest of Juneau.

DRAINAGE AREA.--1.53 mi$^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above sea level, from topographic map. May 1997 to May 15,2003, at a site 300 ft down stream at a different datum.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft$^3$/s and maximum (*):

| Date | Time | Discharge (ft$^3$/s) | Gage height (ft) | Date | Time | Discharge (ft$^3$/s) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Oct. 6 | 0115 | *276 | *12.37 | Jun. 30 | 0700 | 51 | 11.47 |
| Jun. 8 | 0030 | 54 | 11.48 | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20 | 4.5 | 1.0 | e0.57 | e0.49 | 1.1 | 0.49 | 15 | 14 | 36 | 17 | 10 |
| 2 | 19 | 3.9 | 1.4 | e0.54 | e0.47 | 1.5 | 1.7 | 15 | 14 | 29 | 16 | 15 |
| 3 | 21 | 3.6 | 1.0 | e0.52 | e0.46 | 0.55 | 9.4 | 15 | 13 | 26 | 18 | 18 |
| 4 | 25 | 3.0 | 0.90 | e0.50 | e0.43 | 0.57 | 2.4 | 17 | 15 | 25 | 19 | 13 |
| 5 | 28 | 2.9 | e0.77 | e0.48 | e0.42 | 0.56 | 0.82 | 13 | 20 | 27 | 20 | 12 |
| 6 | 52 | 2.6 | e0.72 | e0.46 | e7.0 | 0.54 | 0.72 | 12 | 27 | 26 | 21 | 8.3 |
| 7 | 33 | 2.1 | e0.68 | e0.44 | e7.4 | 0.59 | 1.3 | 13 | 35 | 26 | 21 | 4.8 |
| 8 | 23 | 1.9 | e0.65 | e0.43 | e4.8 | 2.1 | 2.0 | 14 | 33 | 24 | 20 | 3.5 |
| 9 | 12 | 1.9 | e0.62 | e0.43 | e2.9 | 0.83 | 1.9 | 13 | 23 | 24 | 19 | 3.4 |
| 10 | 9.6 | 1.9 | e0.63 | e0.44 | e2.3 | 0.72 | 2.0 | 11 | 22 | 23 | 20 | 2.2 |
| 11 | 7.5 | 1.9 | 0.63 | e0.46 | e2.0 | 0.74 | 2.6 | 12 | 17 | 22 | 22 | 1.9 |
| 12 | 5.8 | 3.1 | 0.63 | e0.60 | e1.7 | 0.61 | 2.5 | 14 | 16 | 23 | 19 | 6.1 |
| 13 | 5.4 | 2.0 | 0.62 | e0.51 | e1.5 | 0.55 | 1.4 | 18 | 18 | 23 | 19 | 7.1 |
| 14 | 5.2 | 1.9 | 0.59 | e0.63 | e1.4 | 0.51 | 1.4 | 21 | 17 | 25 | 21 | 2.9 |
| 15 | 4.9 | 1.9 | 0.60 | e2.5 | e1.3 | 0.50 | 1.1 | 20 | 16 | 26 | 23 | 1.9 |
| 16 | 4.3 | 1.9 | 0.64 | e8.0 | e1.2 | 0.50 | 1.1 | 17 | 15 | 26 | 25 | 1.5 |
| 17 | 4.1 | e1.7 | 0.73 | e4.8 | 1.0 | 0.48 | 0.92 | 15 | 17 | 23 | 26 | 1.2 |
| 18 | 5.0 | e1.6 | 0.70 | e2.9 | 1.1 | e0.46 | 0.73 | 15 | 28 | 20 | 24 | 1.2 |
| 19 | 5.1 | e1.5 | 1.9 | e1.6 | 1.2 | e0.44 | 0.68 | 18 | 34 | 21 | 22 | 1.0 |
| 20 | 4.5 | e1.4 | 1.2 | e0.97 | 1.9 | e0.42 | 0.66 | 23 | 32 | 21 | 19 | 8.4 |
| 21 | 4.3 | e1.3 | 2.8 | e3.0 | 3.7 | e0.40 | 1.1 | 26 | 31 | 21 | 20 | 19 |
| 22 | 4.6 | e1.2 | 12 | 2.3 | 4.0 | e0.39 | 2.2 | 23 | 32 | 23 | 19 | 7.0 |
| 23 | 4.9 | e1.1 | 5.8 | 0.96 | 3.1 | e0.38 | 1.9 | 21 | 33 | 24 | 15 | 19 |
| 24 | 5.7 | e1.1 | 2.2 | e0.85 | 2.2 | 0.47 | 1.2 | 24 | 33 | 24 | 12 | 12 |
| 25 | 17 | 1.0 | 1.1 | e0.78 | 1.7 | 0.52 | 5.7 | 27 | 32 | 22 | 11 | 5.6 |
| 26 | 25 | e1.0 | e0.87 | e0.72 | 1.4 | 0.51 | 7.0 | 22 | 31 | 19 | 15 | 12 |
| 27 | 11 | e0.97 | e0.73 | e0.68 | 1.1 | 0.52 | 2.5 | 21 | 29 | 21 | 16 | 16 |
| 28 | 7.0 | e0.94 | e0.63 | e0.63 | e0.80 | 0.66 | 1.9 | 18 | 30 | 26 | 15 | 8.0 |
| 29 | 5.5 | e0.90 | e0.56 | e0.58 | 0.67 | 0.66 | 3.6 | 18 | 33 | 24 | 13 | 5.4 |
| 30 | 5.2 | 0.88 | e0.60 | e0.55 | --- | 0.56 | 10 | 17 | 37 | 21 | 14 | 4.8 |
| 31 | 4.8 | --- | e0.60 | e0.52 | --- | 0.50 | --- | 14 | --- | 19 | 12 | --- |
| TOTAL | 389.4 | 57.59 | 44.50 | 39.35 | 59.64 | 19.84 | 72.92 | 542 | 747 | 740 | 573 | 232.2 |
| MEAN | 12.6 | 1.92 | 1.44 | 1.27 | 2.06 | 0.64 | 2.43 | 17.5 | 24.9 | 23.9 | 18.5 | 7.74 |
| MAX | 52 | 4.5 | 12 | 8.0 | 7.4 | 2.1 | 10 | 27 | 37 | 36 | 26 | 19 |
| MIN | 4.1 | 0.88 | 0.56 | 0.43 | 0.42 | 0.38 | 0.49 | 11 | 13 | 19 | 11 | 1.0 |
| AC-FT | 772 | 114 | 88 | 78 | 118 | 39 | 145 | 1080 | 1480 | 1470 | 1140 | 461 |
| CFSM | 8.21 | 1.25 | 0.94 | 0.83 | 1.34 | 0.42 | 1.59 | 11.4 | 16.3 | 15.6 | 12.1 | 5.06 |
| IN. | 9.47 | 1.40 | 1.08 | 0.96 | 1.45 | 0.48 | 1.77 | 13.18 | 18.16 | 17.99 | 13.93 | 5.65 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 11.1 | 3.61 | 3.07 | 1.50 | 1.18 | 0.96 | 2.43 | 9.49 | 23.2 | 30.9 | 27.0 | 17.1 |
| MAX | 18.4 | 8.35 | 5.89 | 2.94 | 2.06 | 1.76 | 4.47 | 17.5 | 27.2 | 40.5 | 43.9 | 24.4 |
| (WY) | 2003 | 2003 | 2003 | 2003 | 2004 | 1999 | 2003 | 2004 | 2003 | 2003 | 2002 | 2003 |
| MIN | 4.70 | 1.72 | 0.89 | 0.88 | 0.58 | 0.50 | 0.70 | 4.87 | 20.9 | 22.9 | 18.5 | 7.74 |
| (WY) | 1998 | 2002 | 2002 | 2002 | 2002 | 2002 | 2002 | 2001 | 2000 | 2002 | 2004 | 2004 |

\# See period of Record;partial years used in monthly statistics
e Estimated

## 15056030 KAKUHAN CREEK NEAR HAINES—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1997 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 4580.43 | | 3517.44 | | | |
| ANNUAL MEAN | 12.5 | | 9.61 | | 11.0 | |
| HIGHEST ANNUAL MEAN | | | | | 14.0 | 2003 |
| LOWEST ANNUAL MEAN | | | | | 9.61 | 2004 |
| HIGHEST DAILY MEAN | 90 | Aug 15 | 52 | Oct 6 | 155 | Aug 13 2002 |
| LOWEST DAILY MEAN | 0.56 | Dec 29 | 0.38 | Mar 23 | 0.36 | Feb 24 2001 |
| ANNUAL SEVEN-DAY MINIMUM | 0.62 | Dec 9 | 0.42 | Mar 18 | 0.41 | Feb 19 2001 |
| MAXIMUM PEAK FLOW | | | a276 | Oct 6 | b415 | Aug 31 1998 |
| MAXIMUM PEAK STAGE | | | 12.37 | Oct 6 | c8.77 | Aug 31 1998 |
| ANNUAL RUNOFF (AC-FT) | 9090 | | 6980 | | 8010 | |
| ANNUAL RUNOFF (CFSM) | 8.20 | | 6.28 | | 7.22 | |
| ANNUAL RUNOFF (INCHES) | 111.37 | | 85.52 | | 98.13 | |
| 10 PERCENT EXCEEDS | 35 | | 24 | | 30 | |
| 50 PERCENT EXCEEDS | 4.5 | | 4.4 | | 4.3 | |
| 90 PERCENT EXCEEDS | 0.75 | | 0.55 | | 0.71 | |

\# See period of Record;partial years used in monthly statistics
a From a rating curve extended above 33 $ft^3/s$
b From rating curve extended above 51 $ft^3/s$
c At site 300 ft. downstream, at different datum.

## 15056030 KAKUHAN CREEK NEAR HAINES—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1998 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1998 to current year.

INSTRUMENTATION.-- Electronic water-temperature recorder set for 15-minute recording interval.

REMARKS.-- Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on October 22. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature. Sensor was moved upstream 200ft on May 15,2003.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 15.5°C, August 16, 2004; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 15.5°C, August 16; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Sample location, cross section ft from rt bank (72103) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| OCT | | | | | | | |
| 22... | 1430 | 23.0 | 3.0 | 11.00 | 4.7 | 5.5 | 6.5 |
| 22... | 1431 | 23.0 | 6.0 | 11.00 | 4.7 | 5.5 | 6.5 |
| 22... | 1432 | 23.0 | 9.0 | 11.00 | 4.7 | 5.5 | 6.5 |
| 22... | 1433 | 23.0 | 12.0 | 11.00 | 4.7 | 5.5 | 6.5 |
| 22... | 1434 | 23.0 | 15.0 | 11.00 | 4.7 | 5.5 | 6.5 |
| 22... | 1435 | 23.0 | 18.0 | 11.00 | 4.7 | 5.5 | 6.5 |
| 22... | 1436 | 23.0 | 21.0 | 11.00 | 4.7 | 5.5 | 6.5 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 11.5 | 7.5 | 9.0 | 4.0 | 0.5 | 2.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 2 | 11.0 | 7.5 | 8.5 | 3.0 | 1.5 | 2.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 3 | 10.0 | 7.5 | 8.5 | 2.5 | 1.0 | 1.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 4 | 9.0 | 8.0 | 8.5 | 1.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 8.5 | 7.0 | 7.5 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | 8.5 | 6.5 | 7.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | 7.5 | 6.5 | 7.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | 7.5 | 5.0 | 6.0 | 3.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | 7.0 | 5.0 | 6.0 | 3.0 | 2.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | 6.0 | 4.5 | 5.0 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 11 | 5.5 | 3.5 | 4.5 | 3.0 | 1.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 |
| 12 | 6.0 | 3.0 | 4.5 | 4.5 | 3.0 | 4.0 | 0.5 | 0.0 | 0.5 | 0.5 | 0.5 | 0.5 |
| 13 | 5.5 | 4.5 | 5.0 | 3.5 | 1.5 | 2.5 | 1.0 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 |
| 14 | 5.5 | 4.0 | 5.0 | 2.5 | 1.5 | 2.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 |
| 15 | 5.0 | 3.0 | 3.5 | 3.5 | 2.5 | 3.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 16 | 4.0 | 3.0 | 3.5 | 2.5 | 0.0 | 1.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 17 | 5.0 | 4.0 | 4.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 18 | 6.0 | 4.5 | 5.5 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 19 | 6.5 | 5.5 | 6.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 20 | 7.0 | 5.0 | 6.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 21 | 5.5 | 4.0 | 5.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 |
| 22 | 5.5 | 4.5 | 5.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.5 | 2.0 | 1.0 | 0.0 | 0.5 |
| 23 | 5.5 | 4.5 | 5.0 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 1.0 | 0.0 | 0.5 |
| 24 | 5.0 | 4.5 | 4.5 | 0.5 | 0.0 | 0.0 | 1.5 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 25 | 7.5 | 4.5 | 7.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 26 | 6.5 | 5.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 5.5 | 4.0 | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28 | 4.5 | 2.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 2.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | 1.0 | 0.0 | 0.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| MONTH | 11.5 | 0.0 | 5.3 | 4.5 | 0.0 | 1.0 | 2.5 | 0.0 | 0.4 | 1.0 | 0.0 | 0.1 |

## 15056030 KAKUHAN CREEK NEAR HAINES—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 5.5 | 4.5 | 5.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 5.5 | 4.0 | 5.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 1.0 | 1.5 | 7.5 | 4.0 | 5.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 6.0 | 3.5 | 4.5 |
| 5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 6.0 | 3.0 | 4.5 |
| 6 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 3.5 | 1.5 | 2.5 | 6.5 | 3.5 | 4.5 |
| 7 | 0.5 | 0.0 | 0.5 | 1.0 | 0.0 | 0.5 | 3.5 | 2.0 | 3.0 | 7.0 | 4.0 | 5.0 |
| 8 | 0.5 | 0.0 | 0.5 | 1.0 | 0.0 | 0.0 | 4.0 | 2.0 | 2.5 | 7.5 | 4.0 | 5.0 |
| 9 | 1.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.5 | 3.0 | 2.0 | 2.5 | 5.5 | 4.0 | 5.0 |
| 10 | 1.0 | 0.5 | 1.0 | 1.5 | 1.0 | 1.0 | 4.0 | 2.5 | 3.0 | 7.5 | 4.0 | 5.0 |
| 11 | 1.5 | 1.0 | 1.0 | 2.0 | 1.0 | 1.5 | 4.0 | 1.5 | 2.5 | 7.5 | 4.0 | 5.5 |
| 12 | 1.5 | 1.0 | 1.0 | 2.0 | 0.5 | 1.5 | 3.0 | 2.5 | 3.0 | 8.0 | 4.0 | 5.5 |
| 13 | 1.5 | 1.0 | 1.5 | 1.5 | 0.5 | 1.0 | 4.0 | 2.5 | 3.0 | 8.0 | 4.5 | 6.0 |
| 14 | 1.5 | 1.0 | 1.5 | 1.0 | 0.0 | 0.5 | 3.0 | 2.0 | 2.5 | 8.0 | 4.5 | 6.0 |
| 15 | 1.0 | 0.5 | 1.0 | 1.5 | 1.0 | 1.0 | 3.5 | 1.5 | 2.0 | 8.0 | 4.5 | 5.5 |
| 16 | 0.5 | 0.5 | 0.5 | 2.0 | 1.0 | 1.0 | 3.0 | 1.0 | 2.0 | 7.5 | 5.0 | 6.0 |
| 17 | 0.5 | 0.5 | 0.5 | 1.5 | 0.0 | 1.0 | 3.0 | 2.0 | 2.5 | 8.0 | 4.5 | 6.0 |
| 18 | 1.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 3.5 | 2.0 | 2.5 | 8.0 | 4.5 | 6.0 |
| 19 | 1.5 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 3.5 | 1.5 | 2.5 | 9.0 | 5.0 | 6.5 |
| 20 | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 4.0 | 1.5 | 2.5 | 9.0 | 5.0 | 6.5 |
| 21 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 4.5 | 2.0 | 3.0 | 7.5 | 4.5 | 5.5 |
| 22 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 3.5 | 2.5 | 3.0 | 8.0 | 4.5 | 6.0 |
| 23 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 4.0 | 2.5 | 3.0 | 8.5 | 4.5 | 6.0 |
| 24 | 2.0 | 1.5 | 1.5 | 0.5 | 0.0 | 0.0 | 3.5 | 2.5 | 3.0 | 6.5 | 6.0 | 6.0 |
| 25 | 1.5 | 1.0 | 1.0 | 1.5 | 0.5 | 1.0 | 3.5 | 2.5 | 3.0 | 6.5 | 5.0 | 5.5 |
| 26 | 1.0 | 0.5 | 0.5 | 2.0 | 1.0 | 1.5 | 4.0 | 2.0 | 3.5 | 8.0 | 5.0 | 6.0 |
| 27 | 0.5 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 5.0 | 2.5 | 3.5 | 7.5 | 4.5 | 6.0 |
| 28 | 0.5 | 0.0 | 0.0 | 1.5 | 0.0 | 1.0 | 5.5 | 3.0 | 4.0 | 8.5 | 4.5 | 6.0 |
| 29 | 0.5 | 0.0 | 0.5 | 1.5 | 0.5 | 1.5 | 6.5 | 3.0 | 4.0 | 7.5 | 5.5 | 6.5 |
| 30 | --- | --- | --- | 0.5 | 0.0 | 0.5 | 7.5 | 4.0 | 5.0 | 8.0 | 4.5 | 6.0 |
| 31 | --- | --- | --- | 0.5 | 0.0 | 0.0 | --- | --- | --- | 8.0 | 5.5 | 6.5 |
| MONTH | 2.5 | 0.0 | 0.8 | 2.0 | 0.0 | 0.5 | 7.5 | 0.0 | 2.6 | 9.0 | 3.0 | 5.6 |

| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.5 | 5.5 | 6.5 | 9.5 | 8.0 | 9.0 | 11.0 | 9.0 | 9.5 | 12.0 | 7.5 | 9.0 |
| 2 | 6.5 | 5.0 | 5.5 | 12.5 | 8.5 | 10.0 | 10.5 | 8.0 | 9.5 | 10.0 | 8.5 | 9.0 |
| 3 | 9.5 | 4.5 | 6.5 | 10.0 | 9.0 | 9.5 | 10.5 | 9.0 | 9.5 | 9.5 | 7.5 | 8.5 |
| 4 | 9.5 | 6.0 | 7.5 | 11.5 | 8.5 | 9.5 | 13.5 | 8.0 | 10.5 | 9.0 | 7.5 | 8.0 |
| 5 | 9.0 | 7.0 | 7.5 | 11.0 | 8.0 | 9.0 | 14.0 | 9.0 | 11.0 | 7.5 | 6.0 | 6.5 |
| 6 | 12.5 | 6.5 | 9.0 | 12.0 | 8.0 | 9.5 | 14.0 | 9.5 | 11.0 | 7.5 | 6.0 | 6.5 |
| 7 | 11.0 | 7.0 | 8.5 | 11.0 | 8.0 | 9.5 | 14.0 | 9.0 | 11.0 | 7.0 | 4.0 | 5.5 |
| 8 | 7.0 | 6.0 | 6.5 | 13.0 | 8.5 | 10.5 | 14.0 | 9.5 | 11.5 | 7.5 | 4.0 | 5.5 |
| 9 | 7.0 | 5.5 | 6.0 | 13.0 | 9.0 | 10.5 | 14.5 | 9.5 | 11.5 | 7.5 | 4.0 | 5.5 |
| 10 | 7.0 | 5.0 | 5.5 | 10.0 | 9.0 | 10.0 | 14.0 | 10.0 | 11.5 | 7.0 | 4.0 | 5.5 |
| 11 | 7.5 | 5.0 | 6.5 | 13.0 | 8.5 | 10.5 | 12.0 | 9.0 | 10.5 | 7.0 | 5.5 | 6.0 |
| 12 | 9.5 | 6.0 | 7.5 | 14.0 | 9.0 | 11.0 | 12.5 | 8.0 | 10.0 | 7.5 | 6.5 | 7.0 |
| 13 | 9.5 | 6.0 | 8.0 | 14.0 | 9.0 | 11.5 | 14.0 | 8.5 | 11.0 | 7.5 | 6.5 | 7.0 |
| 14 | 7.5 | 6.5 | 7.0 | 14.5 | 10.0 | 12.0 | 15.0 | 9.5 | 12.0 | 8.0 | 6.5 | 7.0 |
| 15 | 8.0 | 6.5 | 7.0 | 15.0 | 10.0 | 12.0 | 14.5 | 10.5 | 12.0 | 8.0 | 6.5 | 7.0 |
| 16 | 10.0 | 5.5 | 7.5 | 15.0 | 9.5 | 11.5 | 15.5 | 10.5 | 12.5 | 8.0 | 5.5 | 6.5 |
| 17 | 12.0 | 6.5 | 9.0 | 11.5 | 9.5 | 10.5 | 14.5 | 10.5 | 12.0 | 7.0 | 5.0 | 6.0 |
| 18 | 12.5 | 7.5 | 9.5 | 11.5 | 9.5 | 10.5 | 12.0 | 10.5 | 11.5 | 7.0 | 4.5 | 5.5 |
| 19 | 12.5 | 7.5 | 9.5 | 13.5 | 9.0 | 10.5 | 12.0 | 10.5 | 11.0 | 6.5 | 4.5 | 5.5 |
| 20 | 12.0 | 7.5 | 9.0 | 13.5 | 10.0 | 11.0 | 13.5 | 10.0 | 11.0 | 7.5 | 6.0 | 6.5 |
| 21 | 12.5 | 7.5 | 9.5 | 12.5 | 10.5 | 11.5 | 13.5 | 9.5 | 11.5 | 9.0 | 6.5 | 7.5 |
| 22 | 12.5 | 7.5 | 9.5 | 12.5 | 9.5 | 10.5 | 11.0 | 8.0 | 9.5 | 7.0 | 6.0 | 6.5 |
| 23 | 13.0 | 8.0 | 10.0 | 12.5 | 9.5 | 10.5 | 11.5 | 7.0 | 9.0 | 8.0 | 6.5 | 7.0 |
| 24 | 13.5 | 8.5 | 10.5 | 11.0 | 9.0 | 10.0 | 12.0 | 8.0 | 9.5 | 7.5 | 5.5 | 6.5 |
| 25 | 13.5 | 8.5 | 10.5 | 10.5 | 8.5 | 9.5 | 11.0 | 8.5 | 9.5 | 6.5 | 4.5 | 5.5 |
| 26 | 13.0 | 8.5 | 10.5 | 10.0 | 8.0 | 9.0 | 11.0 | 9.5 | 10.0 | 7.0 | 6.0 | 6.5 |
| 27 | 10.5 | 9.0 | 10.0 | 10.5 | 9.5 | 10.0 | 10.0 | 9.0 | 9.5 | 7.5 | 5.0 | 6.5 |
| 28 | 10.0 | 8.5 | 9.0 | 11.5 | 9.5 | 10.5 | 10.5 | 8.5 | 9.0 | 6.5 | 5.0 | 6.0 |
| 29 | 12.5 | 8.5 | 10.0 | 10.0 | 8.5 | 9.0 | 11.5 | 8.0 | 9.5 | 7.5 | 6.5 | 7.0 |
| 30 | 10.0 | 9.0 | 9.5 | 11.5 | 8.0 | 9.5 | 12.5 | 7.5 | 9.5 | 8.0 | 7.0 | 7.5 |
| 31 | --- | --- | --- | 11.0 | 8.5 | 9.5 | 12.0 | 7.5 | 9.0 | --- | --- | --- |
| MONTH | 13.5 | 4.5 | 8.3 | 15.0 | 8.0 | 10.2 | 15.5 | 7.0 | 10.5 | 12.0 | 4.0 | 6.7 |

## 15056210 TAIYA RIVER NEAR SKAGWAY

LOCATION.--Lat 59°30'43", long 135°20'40", in SW¼ NE¼ SE¼ sec. 22, T. 27 S., R. 59 E. (Skagway C-1 quad), Hydrologic Unit 19010303, on the downstream side of highway bridge, 1.0 mi downstream from West Creek, 2.2 mi upstream from mouth, and 4 mi north of Skagway.

DRAINAGE AREA.--179 $mi^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- October 1969 to November 1977; October 2003 to September 2004.

GAGE.--Water-stage recorder.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD --Flood of September 1967 overflowed banks and probably reached a peak discharge of over 25,000 $ft^3/s$.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | e2000 | 362 | e110 | e103 | e77 | e135 | e90 | 1250 | e1800 | e4200 | e3000 | e2300 |
| 2 | e1700 | 326 | e220 | e97 | e75 | e130 | 118 | 1440 | e1700 | e4100 | e2500 | e2200 |
| 3 | e1700 | 295 | e190 | e90 | e75 | 123 | 363 | 1360 | e1700 | e4000 | e2750 | e3000 |
| 4 | e1800 | 266 | e150 | e85 | e75 | 116 | 337 | 1560 | e1650 | e3900 | e3000 | e4000 |
| 5 | e1900 | e250 | e130 | e80 | e135 | 113 | 237 | 1320 | e1800 | e3900 | e3200 | e2000 |
| 6 | e1800 | e240 | e115 | e77 | e175 | 108 | 195 | 1210 | e2700 | e3850 | e3400 | 1250 |
| 7 | e1900 | 234 | e105 | e74 | e140 | 110 | 190 | 1310 | e3450 | e3800 | e3300 | 938 |
| 8 | e1500 | 218 | e96 | e72 | e110 | 124 | 224 | 1400 | e4720 | e3750 | e3250 | 774 |
| 9 | e1300 | 237 | e94 | e70 | e400 | 132 | 229 | 1460 | e5530 | e3700 | e3200 | 732 |
| 10 | e1100 | 215 | e93 | e68 | e325 | 130 | 219 | 1370 | e4850 | e3600 | e3300 | 718 |
| 11 | e920 | 200 | e95 | e66 | e260 | 167 | 238 | 1390 | e3900 | e3550 | e3350 | 672 |
| 12 | 764 | 327 | e98 | e65 | e225 | 150 | 240 | 1590 | e3090 | e3800 | e3500 | 782 |
| 13 | 649 | 307 | e105 | e73 | e200 | 130 | 229 | 1910 | e2780 | e4100 | e3700 | 1290 |
| 14 | 564 | 272 | e109 | e82 | e185 | 119 | 249 | 2230 | e2870 | e5000 | e4000 | 1270 |
| 15 | 496 | 293 | e112 | e93 | e175 | 116 | 240 | 2260 | e3280 | e5100 | e5000 | 1090 |
| 16 | 445 | 277 | 130 | e105 | 168 | 111 | 232 | 2160 | e3310 | e5100 | e5000 | 833 |
| 17 | 405 | e225 | 142 | e120 | 147 | 106 | 223 | 2110 | e3760 | e3900 | e4620 | 660 |
| 18 | 396 | e170 | 143 | e140 | 137 | 101 | 219 | 2030 | e3840 | e3600 | e4300 | 533 |
| 19 | 454 | e120 | 144 | e130 | 143 | e95 | 216 | 2280 | e4600 | e3250 | e4000 | 463 |
| 20 | 524 | e110 | 162 | e150 | 195 | e90 | 219 | 2730 | e6010 | e3200 | e3800 | 673 |
| 21 | 460 | e100 | 155 | e168 | 298 | e85 | 235 | 2680 | e6870 | e3600 | e3700 | 2390 |
| 22 | 427 | e96 | 439 | e173 | 368 | e82 | 271 | 2530 | e6960 | e4000 | e3600 | e4000 |
| 23 | 481 | e97 | 606 | e165 | 281 | e79 | 320 | 2470 | e6690 | e4300 | e3300 | e3100 |
| 24 | 438 | e103 | 363 | e145 | 233 | e76 | 315 | e2600 | e6610 | e3800 | e2900 | 2320 |
| 25 | 1250 | e120 | 260 | e125 | 202 | e80 | 406 | e2500 | e5310 | e3400 | e2600 | 1620 |
| 26 | 1790 | e105 | e220 | e113 | e185 | e83 | 571 | e2500 | e4600 | e3000 | e2500 | 1620 |
| 27 | 1260 | e92 | e180 | e100 | e165 | e95 | 549 | e2600 | e4400 | e2800 | e2800 | 2340 |
| 28 | 847 | e92 | e160 | e95 | e155 | e100 | 537 | e2400 | e4500 | e4000 | e3300 | 1990 |
| 29 | 592 | e95 | e140 | e88 | e145 | 120 | 581 | e2100 | e4600 | e4800 | e3200 | 1870 |
| 30 | 464 | e100 | e130 | e83 | --- | 113 | 814 | e2000 | e4500 | e4000 | e2700 | 1840 |
| 31 | 401 | --- | e110 | e79 | --- | 102 | --- | e1900 | --- | e3400 | e2500 | --- |
| TOTAL | 30727 | 5944 | 5306 | 3174 | 5454 | 3421 | 9106 | 60650 | 122380 | 120500 | 105270 | 49268 |
| MEAN | 991 | 198 | 171 | 102 | 188 | 110 | 304 | 1956 | 4079 | 3887 | 3396 | 1642 |
| MAX | 2000 | 362 | 606 | 173 | 400 | 167 | 814 | 2730 | 6960 | 5100 | 5000 | 4000 |
| MIN | 396 | 92 | 93 | 65 | 75 | 76 | 90 | 1210 | 1650 | 2800 | 2500 | 463 |
| AC-FT | 60950 | 11790 | 10520 | 6300 | 10820 | 6790 | 18060 | 120300 | 242700 | 239000 | 208800 | 97720 |
| CFSM | 5.54 | 1.11 | 0.96 | 0.57 | 1.05 | 0.62 | 1.70 | 10.9 | 22.8 | 21.7 | 19.0 | 9.17 |
| IN. | 6.39 | 1.24 | 1.10 | 0.66 | 1.13 | 0.71 | 1.89 | 12.60 | 25.43 | 25.04 | 21.88 | 10.24 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 793 | 384 | 148 | 85.1 | 106 | 77.2 | 148 | 832 | 2267 | 3570 | 3473 | 2009 |
| MAX | 1535 | 805 | 330 | 112 | 191 | 139 | 304 | 1956 | 4079 | 4558 | 4776 | 3131 |
| (WY) | 1975 | 1970 | 1970 | 1970 | 1977 | 1970 | 2004 | 2004 | 2004 | 1971 | 1977 | 1975 |
| MIN | 444 | 91.5 | 54.2 | 33.3 | 49.4 | 27.7 | 53.5 | 452 | 1625 | 2592 | 2718 | 1215 |
| (WY) | 1974 | 1974 | 1973 | 1973 | 1974 | 1974 | 1972 | 1971 | 1974 | 1970 | 1970 | 1973 |

| SUMMARY STATISTICS | FOR 2004 WATER YEAR | | WATER YEARS 1970 - 2004# | |
|---|---|---|---|---|
| ANNUAL TOTAL | 521200 | | | |
| ANNUAL MEAN | 1424 | | 1168 | |
| HIGHEST ANNUAL MEAN | | | 1424 | 2004 |
| LOWEST ANNUAL MEAN | | | 880 | 1973 |
| HIGHEST DAILY MEAN | 6960 | Jun 22 | 9620 | Sep 13 1975 |
| LOWEST DAILY MEAN | 65 | Jan 12 | a16 | Mar 30 1974 |
| ANNUAL SEVEN-DAY MINIMUM | 70 | Jan 7 | 17 | Mar 27 1974 |
| MAXIMUM PEAK FLOW | b | | 11500 | Sep 27 1976 |
| MAXIMUM PEAK STAGE | c | | 18.43 | Sep 27 1976 |
| ANNUAL RUNOFF (AC-FT) | 1034000 | | 846200 | |
| ANNUAL RUNOFF (CFSM) | 7.96 | | 6.53 | |
| ANNUAL RUNOFF (INCHES) | 108.32 | | 88.66 | |
| 10 PERCENT EXCEEDS | 3900 | | 3400 | |
| 50 PERCENT EXCEEDS | 457 | | 350 | |
| 90 PERCENT EXCEEDS | 95 | | 60 | |

\# See Period of Record; partial years used in monthly statistics
a Mar. 30 and 31
b Not determined; see highest daily mean
c Not determined
e Estimated

## 15056210 TAIYA RIVER NEAR SKAGWAY—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-74, 1976-1977, and 2004.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June to October 1971, July 1972 to October 1973, March to September 1974, February to September 1977, and October 2003 to September 2004.

INSTRUMENTATION.--Electronic water temperature recorder, recorder set at 15 minute recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on April 6, 2004. No variation was found within the cross section, or between mean stream temperature and temperature at the sensor. Missing record December 1-14, and May 24 to June 24 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 10.0°C, May 21, 1974 ; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum,8.5°C, July 16 and 19, but may have been higher during period of missing record; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Location in X-sect. looking dwnstrm ft from l bank (00009) | Specif. conduc-tance, wat unf uS/cm 25 degC (00095) | pH, water, unfltrd field, std units (00400) | Temper-ature, water, deg C (00010) | Dis-solved oxygen, mg/L (00300) |
|---|---|---|---|---|---|---|
| APR | | | | | | |
| 06... | 0923 | 2.00 | 79 | 7.7 | 2.0 | 13.9 |
| 06... | 0924 | 28.0 | 79 | 7.7 | 2.0 | 13.9 |
| 06... | 0925 | 54.0 | 79 | 7.7 | 2.0 | 13.9 |
| 06... | 0926 | 80.0 | 79 | 7.7 | 2.0 | 13.9 |
| 06... | 0927 | 106 | 79 | 7.7 | 2.0 | 13.8 |

| Date | Time | Medium code | Sample type | Gage height, feet (00065) | Instan-taneous dis-charge, cfs (00061) | Sam-pling method, code (82398) | Stream width, feet (00004) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of sat-uration (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unf uS/cm 25 degC (00095) | Temper-ature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | | | | |
| 15... | 1000 | 9 | 9 | -- | 112 | 10 | 101 | 734 | 13.3 | 100 | 7.8 | 77 | -2.0 |
| FEB | | | | | | | | | | | | | |
| 10... | 1030 | 9 | 9 | -- | 325 | 10 | 84.0 | 765 | 13.2 | 90 | 7.7 | 63 | 2.0 |
| APR | | | | | | | | | | | | | |
| 06... | 0915 | 9 | 9 | 12.65 | 197 | 10 | 130 | 756 | 13.9 | 100 | 7.7 | 79 | 1.0 |
| JUN | | | | | | | | | | | | | |
| 25... | 0730 | 9 | 9 | 16.50 | 5300 | 10 | 190 | 758 | 12.6 | 98 | 7.1 | 22 | 25.0 |
| AUG | | | | | | | | | | | | | |
| 17... | 0920 | 9 | 9 | 16.16 | 4620 | 10 | 184 | 760 | 13.1 | 104 | 7.0 | 17 | 24.5 |

| Date | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Calcium water unfltrd recover-able, mg/L (00916) | Magnes-ium, water, fltrd, mg/L (00925) | Magnes-ium, water, unfltrd recover-able, mg/L (00927) | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086) | Bicar-bonate, wat flt incrm. titr., field, mg/L (00453) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | | | | |
| 15... | .5 | 36 | 11.8 | -- | 1.65 | -- | 1.55 | 1.27 | 34 | 41 | .85 | <.2 | 5.32 |
| FEB | | | | | | | | | | | | | |
| 10... | .0 | 30 | 9.68 | -- | 1.53 | -- | 1.25 | 1.09 | 26 | 32 | 1.42 | <.2 | 4.57 |
| APR | | | | | | | | | | | | | |
| 06... | 2.0 | 36 | 11.6 | 10.7 | 1.77 | 1.58 | 1.54 | 1.47 | 34 | 42 | 1.24 | <.2 | 5.62 |
| JUN | | | | | | | | | | | | | |
| 25... | 4.5 | 9 | 3.10 | 5.04 | .387 | 2.40 | .57 | .28 | 9 | 11 | 1.76 | .9 | 1.21 |
| AUG | | | | | | | | | | | | | |
| 17... | 5.5 | 8 | 2.64 | -- | .324 | -- | .43 | .18 | 6 | 7 | .96 | <.2 | 1.01 |

15056210 TAIYA RIVER NEAR SKAGWAY—Continued

| Date | Sulfate water, fltrd, mg/L (00945) | Residue water, fltrd, sum of consti-tuents mg/L (70301) | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Partic-ulate nitro-gen, susp, water, mg/L (49570) | Ortho-phos-phate, water, fltrd, mg/L as P (00671) | Phos-phorus, water, fltrd, mg/L (00666) | Phos-phorus, water, unfltrd mg/L (00665) | Total carbon, suspnd sedimnt total, mg/L (00694) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | | | | |
| 15... | 3.5 | 47 | 42 | <.10 | <.10 | <.010 | .230 | <.002 | -- | <.006 | E.002 | <.004 | -- |
| FEB | | | | | | | | | | | | | |
| 10... | 2.6 | 39 | 45 | E.07 | E.09 | E.008 | .316 | E.001 | -- | <.006 | E.003 | <.04 | -- |
| APR | | | | | | | | | | | | | |
| 06... | 2.6 | 48 | 48 | E.05 | E.07 | <.010 | .260 | <.002 | <.02 | <.006 | E.004 | <.004 | <.1 |
| JUN | | | | | | | | | | | | | |
| 25... | 28.6 | 42 | 16 | E.10 | <.10 | E.005 | .027 | <.002 | .02 | .017 | .022 | .109 | .3 |
| AUG | | | | | | | | | | | | | |
| 17... | .7 | 10 | 11 | <.10 | <.10 | E.006 | E.014 | E.001 | -- | E.003 | <.004 | .139 | -- |

| Date | Organic carbon, water, fltrd, mg/L (00681) | Alum-inum, water, fltrd, ug/L (01106) | Alum-inum, water, unfltrd recover-able, ug/L (01105) | Anti-mony, water, fltrd, ug/L (01095) | Anti-mony, water, unfltrd ug/L (01097) | Arsenic water, fltrd, ug/L (01000) | Barium, water, fltrd, ug/L (01005) | Barium, water, unfltrd recover-able, ug/L (01007) | Beryll-ium, water, fltrd, ug/L (01010) | Beryll-ium, water, unfltrd recover-able, ug/L (01012) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | | | | |
| 15... | .9 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | | |
| 06... | 2.3 | 36 | 74 | <.20 | <.2 | <.2 | 37 | 37 | <.06 | <.06 | <8 | <8 | <.04 |
| JUN | | | | | | | | | | | | | |
| 25... | E.2 | 48 | 4760 | <.20 | <.2 | <.2 | 10 | 117 | <.06 | .08 | <8 | <8 | <.04 |
| AUG | | | | | | | | | | | | | |
| 17... | E.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| Date | Cadmium water, unfltrd ug/L (01027) | Chrom-ium, water, fltrd, ug/L (01030) | Chrom-ium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, fltrd, ug/L (01035) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Lithium water, fltrd, ug/L (01130) | Lithium water unfltrd recover-able, ug/L (01132) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | 23 | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | 61 | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | | |
| 06... | <.04 | <.8 | <.8 | .072 | .080 | 1.4 | 1.6 | 49 | 120 | .13 | .09 | <.6 | E.4 |
| JUN | | | | | | | | | | | | | |
| 25... | .05 | <.8 | 3.6 | .034 | 1.73 | E.2 | 2.6 | 37 | 6070 | E.06 | 1.96 | E.3 | 3.5 |
| AUG | | | | | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | 92 | -- | -- | -- | -- | -- |

## 15056210 TAIYA RIVER NEAR SKAGWAY—Continued

| Date | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recoverable, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recoverable, ug/L (71900) | Molybdenum, water, fltrd, ug/L (01060) | Molybdenum, water, unfltrd recoverable, ug/L (01062) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recoverable, ug/L (01067) | Selenium, water, fltrd, ug/L (01145) | Selenium, water, unfltrd ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recoverable, ug/L (01077) | Strontium, water, fltrd, ug/L (01080) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | | | | |
| 15... | 11.2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| FEB | | | | | | | | | | | | | |
| 10... | 9.7 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| APR | | | | | | | | | | | | | |
| 06... | 10.8 | 12 | <.02 | <.02 | 1.2 | 1.2 | .61 | .28 | <.4 | <.4 | <.2 | <.16 | 64.0 |
| JUN | | | | | | | | | | | | | |
| 25... | 5.5 | 105 | <.02 | <.02 | .6 | .6 | .12 | 1.73 | <.4 | <.4 | <.2 | <.16 | 17.7 |
| AUG | | | | | | | | | | | | | |
| 17... | 8.0 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |

| Date | Strontium, water, unfltrd recoverable, ug/L (01082) | Thallium, water, fltrd, ug/L (01057) | Thallium, water, unfltrd ug/L (01059) | Vanadium, water, fltrd, ug/L (01085) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recoverable, ug/L (01092) | Uranium natural water, fltrd, ug/L (22703) | Suspended sediment concentration mg/L (80154) | Suspended sediment discharge, tons/d (80155) | Sampler type, code (84164) |
|---|---|---|---|---|---|---|---|---|---|---|
| DEC | | | | | | | | | | |
| 15... | -- | -- | -- | -- | -- | -- | -- | 2 | .60 | 3044 |
| FEB | | | | | | | | | | |
| 10... | -- | -- | -- | -- | -- | -- | -- | 9 | 7.9 | 3044 |
| APR | | | | | | | | | | |
| 06... | 68.8 | <.04 | <.2 | .2 | 1.4 | E1 | .44 | 1 | .53 | 3044 |
| JUN | | | | | | | | | | |
| 25... | 30.9 | <.04 | <.2 | .2 | .7 | 24 | .09 | 234 | 3350 | 3054 |
| AUG | | | | | | | | | | |
| 17... | -- | -- | -- | -- | -- | -- | -- | 144 | 1800 | 3054 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | --- | --- | --- | 2.0 | 1.0 | 1.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 2 | --- | --- | --- | 2.0 | 1.0 | 1.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 3 | --- | --- | --- | 2.0 | 0.5 | 1.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 4 | --- | --- | --- | 1.0 | 0.0 | 0.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 5 | --- | --- | --- | 1.0 | 0.0 | 0.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 6 | --- | --- | --- | 0.5 | 0.0 | 0.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 7 | --- | --- | --- | 1.5 | 0.5 | 1.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 8 | --- | --- | --- | 2.0 | 0.0 | 1.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 9 | --- | --- | --- | 2.5 | 2.0 | 2.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 10 | --- | --- | --- | 2.0 | 1.5 | 2.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 11 | --- | --- | --- | 1.5 | 1.0 | 1.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 12 | 4.0 | 2.5 | 3.0 | 2.5 | 1.5 | 2.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 13 | 4.5 | 3.0 | 4.0 | 2.5 | 2.0 | 2.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 14 | 4.5 | 3.0 | 4.0 | 2.5 | 2.0 | 2.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 |
| 15 | 4.0 | 2.0 | 3.0 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16 | 3.5 | 2.5 | 3.0 | 2.0 | 0.5 | 1.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 17 | 4.5 | 3.0 | 3.5 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 18 | 5.0 | 4.0 | 4.5 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 19 | 5.0 | 4.0 | 4.5 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20 | 4.5 | 3.5 | 4.0 | 0.5 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| 21 | 4.0 | 2.5 | 3.5 | 0.5 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22 | 4.0 | 3.5 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 23 | 5.0 | 4.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24 | 4.5 | 3.5 | 4.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 25 | 5.5 | 4.0 | 4.5 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| 26 | 5.5 | 4.5 | 5.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | 5.0 | 4.0 | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28 | 4.0 | 3.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 29 | 3.0 | 1.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 2.0 | 0.5 | 1.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | 1.5 | 0.5 | 1.0 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0.0 | 0.0 | 0.0 |

## 15056210 TAIYA RIVER NEAR SKAGWAY—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 3.0 | 1.0 | 2.0 | 4.5 | 1.5 | 3.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 2.0 | 1.0 | 1.5 | 4.5 | 2.0 | 3.0 |
| 3 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 1.0 | 1.5 | 0.5 | 1.0 | 6.5 | 1.5 | 3.5 |
| 4 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 4.0 | 1.0 | 2.0 | 6.0 | 1.5 | 3.5 |
| 5 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.0 | 4.0 | 1.5 | 2.5 | 6.5 | 1.5 | 3.5 |
| 6 | 0.0 | 0.0 | 0.0 | 2.5 | 0.5 | 1.5 | 5.0 | 1.5 | 3.0 | 6.5 | 2.0 | 4.0 |
| 7 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 1.5 | 5.5 | 2.0 | 3.5 | 6.5 | 2.0 | 4.0 |
| 8 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.5 | 6.0 | 2.0 | 3.5 | 6.0 | 2.5 | 4.0 |
| 9 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.0 | 3.5 | 1.5 | 2.5 | 5.0 | 2.5 | 4.0 |
| 10 | 0.5 | 0.0 | 0.0 | 2.0 | 1.0 | 1.5 | 6.0 | 2.0 | 4.0 | 7.5 | 2.0 | 4.0 |
| 11 | 0.0 | 0.0 | 0.0 | 3.5 | 1.0 | 2.0 | 5.5 | 1.0 | 3.0 | 7.5 | 2.0 | 4.5 |
| 12 | 0.0 | 0.0 | 0.0 | 2.0 | 1.0 | 1.5 | 4.0 | 2.0 | 3.0 | 7.5 | 2.0 | 4.5 |
| 13 | 0.5 | 0.0 | 0.0 | 3.5 | 1.5 | 2.0 | 5.5 | 2.5 | 4.0 | 7.5 | 2.5 | 4.5 |
| 14 | 0.5 | 0.0 | 0.5 | 2.0 | 0.0 | 1.0 | 6.0 | 2.0 | 4.0 | 7.0 | 2.5 | 4.5 |
| 15 | 1.0 | 0.5 | 0.5 | 3.5 | 1.0 | 2.0 | 6.0 | 1.5 | 3.5 | 6.5 | 2.5 | 4.0 |
| 16 | 1.5 | 0.5 | 1.0 | 4.0 | 1.5 | 2.5 | 5.0 | 1.0 | 3.0 | 5.5 | 2.5 | 4.0 |
| 17 | 1.5 | 0.5 | 1.0 | 3.5 | 1.0 | 2.0 | 4.5 | 2.5 | 3.5 | 6.0 | 3.0 | 4.0 |
| 18 | 2.0 | 0.5 | 1.0 | 2.5 | 0.0 | 1.0 | 5.5 | 2.5 | 3.5 | 7.5 | 3.0 | 4.5 |
| 19 | 3.0 | 1.5 | 2.0 | 1.5 | 0.0 | 0.5 | 6.5 | 2.0 | 4.0 | 7.5 | 2.5 | 4.5 |
| 20 | 2.5 | 1.5 | 2.0 | 0.5 | 0.0 | 0.0 | 6.5 | 1.5 | 4.0 | 7.0 | 3.0 | 4.5 |
| 21 | 2.5 | 1.0 | 2.0 | 0.5 | 0.0 | 0.0 | 6.5 | 1.5 | 4.0 | 6.5 | 2.5 | 4.5 |
| 22 | 2.0 | 1.0 | 1.5 | 2.0 | 0.0 | 0.5 | 4.5 | 2.5 | 3.5 | 7.0 | 2.5 | 4.5 |
| 23 | 2.5 | 1.0 | 1.5 | 2.5 | 0.0 | 1.0 | 5.5 | 2.0 | 3.5 | 7.5 | 2.5 | 4.5 |
| 24 | 3.0 | 1.0 | 2.0 | 3.0 | 0.5 | 1.5 | 4.5 | 2.5 | 3.5 | --- | --- | --- |
| 25 | 2.0 | 0.5 | 1.0 | 4.0 | 1.5 | 2.5 | 4.5 | 2.5 | 3.5 | --- | --- | --- |
| 26 | 1.5 | 0.0 | 0.5 | 4.5 | 1.0 | 2.5 | 4.0 | 1.5 | 3.0 | --- | --- | --- |
| 27 | 0.5 | 0.0 | 0.0 | 5.0 | 2.0 | 3.0 | 6.5 | 2.0 | 4.0 | --- | --- | --- |
| 28 | 0.5 | 0.0 | 0.0 | 2.5 | 0.5 | 1.5 | 6.0 | 2.5 | 4.0 | --- | --- | --- |
| 29 | 1.0 | 0.0 | 0.0 | 3.0 | 1.5 | 2.0 | 7.5 | 1.5 | 4.0 | --- | --- | --- |
| 30 | --- | --- | --- | 3.5 | 1.0 | 2.0 | 7.0 | 1.5 | 4.0 | --- | --- | --- |
| 31 | --- | --- | --- | 3.0 | 0.5 | 2.0 | --- | --- | --- | --- | --- | --- |
| MONTH | 3.0 | 0.0 | 0.6 | 5.0 | 0.0 | 1.3 | 7.5 | 0.5 | 3.3 | --- | --- | --- |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | --- | --- | --- | 5.5 | 4.5 | 5.0 | 6.5 | 4.0 | 5.0 | 7.0 | 3.5 | 5.0 |
| 2 | --- | --- | --- | 7.0 | 4.0 | 5.5 | 6.0 | 4.0 | 5.0 | 6.0 | 4.5 | 5.0 |
| 3 | --- | --- | --- | 6.0 | 4.5 | 5.0 | 5.5 | 4.5 | 5.0 | 6.5 | 4.5 | 5.5 |
| 4 | --- | --- | --- | 6.0 | 4.0 | 5.0 | 8.0 | 4.0 | 5.5 | 5.5 | 4.0 | 4.5 |
| 5 | --- | --- | --- | 6.0 | 4.0 | 5.0 | 8.0 | 4.0 | 5.5 | 5.0 | 4.0 | 4.5 |
| 6 | --- | --- | --- | 7.0 | 4.0 | 5.5 | 8.0 | 4.0 | 5.5 | 6.0 | 4.0 | 4.5 |
| 7 | --- | --- | --- | 6.0 | 4.0 | 5.0 | 8.0 | 4.0 | 5.5 | 6.0 | 3.0 | 4.5 |
| 8 | --- | --- | --- | 7.5 | 4.0 | 5.5 | 8.0 | 4.0 | 5.5 | 6.5 | 2.5 | 4.5 |
| 9 | --- | --- | --- | 7.0 | 4.5 | 5.5 | 8.0 | 4.0 | 5.5 | 6.0 | 2.5 | 4.0 |
| 10 | --- | --- | --- | 6.0 | 4.5 | 5.0 | 7.5 | 4.5 | 5.5 | 6.0 | 2.0 | 4.0 |
| 11 | --- | --- | --- | 8.0 | 4.0 | 5.5 | 6.0 | 4.5 | 5.5 | 5.5 | 3.5 | 4.5 |
| 12 | --- | --- | --- | 8.0 | 4.0 | 5.5 | 7.5 | 4.0 | 5.5 | 5.5 | 4.0 | 5.0 |
| 13 | --- | --- | --- | 7.5 | 4.5 | 5.5 | 8.0 | 4.0 | 5.5 | 6.0 | 4.0 | 5.0 |
| 14 | --- | --- | --- | 7.5 | 4.5 | 6.0 | 8.0 | 4.0 | 5.5 | 6.5 | 4.5 | 5.0 |
| 15 | --- | --- | --- | 8.0 | 5.0 | 6.0 | 7.5 | 4.5 | 5.5 | 6.0 | 4.0 | 5.0 |
| 16 | --- | --- | --- | 8.5 | 4.5 | 6.0 | 7.5 | 4.5 | 6.0 | 6.0 | 3.5 | 4.5 |
| 17 | --- | --- | --- | 7.5 | 5.0 | 6.0 | 7.5 | 4.5 | 5.5 | 6.0 | 4.0 | 5.0 |
| 18 | --- | --- | --- | 7.5 | 5.0 | 6.0 | 6.0 | 4.5 | 5.0 | 6.5 | 4.0 | 5.0 |
| 19 | --- | --- | --- | 8.5 | 4.5 | 6.0 | 6.5 | 4.5 | 5.5 | 5.5 | 2.5 | 4.0 |
| 20 | --- | --- | --- | 8.0 | 4.5 | 6.0 | 7.0 | 4.5 | 5.5 | 5.5 | 4.0 | 5.0 |
| 21 | --- | --- | --- | 7.0 | 5.0 | 6.0 | 7.5 | 4.5 | 5.5 | 6.0 | 4.5 | 5.5 |
| 22 | --- | --- | --- | 7.0 | 4.5 | 5.5 | 7.5 | 4.5 | 5.5 | 5.0 | 4.0 | 4.5 |
| 23 | --- | --- | --- | 6.5 | 5.0 | 5.5 | 7.5 | 3.5 | 5.0 | 5.5 | 4.0 | 5.0 |
| 24 | --- | --- | --- | 6.5 | 4.5 | 5.5 | 6.5 | 3.5 | 5.0 | 5.5 | 4.5 | 5.0 |
| 25 | 8.0 | 4.5 | 6.0 | 6.5 | 4.5 | 5.5 | 6.0 | 4.0 | 5.0 | 5.5 | 4.0 | 4.5 |
| 26 | 7.0 | 4.5 | 5.5 | 5.5 | 4.5 | 5.0 | 5.5 | 4.0 | 5.0 | 5.5 | 4.5 | 5.0 |
| 27 | 8.0 | 4.0 | 5.5 | 5.5 | 4.5 | 5.0 | 6.0 | 4.5 | 5.0 | 5.5 | 4.0 | 5.0 |
| 28 | 5.5 | 4.5 | 5.0 | 6.0 | 4.5 | 5.5 | 6.0 | 4.5 | 5.0 | 5.5 | 4.0 | 4.5 |
| 29 | 7.0 | 4.0 | 5.5 | 5.5 | 4.5 | 5.0 | 6.0 | 4.0 | 5.0 | 6.0 | 5.0 | 5.5 |
| 30 | 6.0 | 4.5 | 5.0 | 6.0 | 4.0 | 5.0 | 6.5 | 4.0 | 5.0 | 6.0 | 5.0 | 5.5 |
| 31 | --- | --- | --- | 7.0 | 4.0 | 5.0 | 7.0 | 3.5 | 5.0 | --- | --- | --- |
| MONTH | --- | --- | --- | 8.5 | 4.0 | 5.5 | 8.0 | 3.5 | 5.3 | 7.0 | 2.0 | 4.8 |

## 15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS

LOCATION.--Lat 58°26'37", long 135°36'01", in SW¼ SE¼ SE¼ sec. 36, T. 39 S., R. 59 E. (Juneau B-5 quad), Hydrologic Unit 19010302, in Glacier Bay National Park and Preserve, 1.7 miles above the mouth at Icy Passage, 4.5 mi east of Gustavus, and 44 mi west of Juneau.

DRAINAGE AREA.--10.1 $mi^2$

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1999 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 560 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 180 $ft^3/s$, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 47 | 30 | 52 | e14 | e8.5 | 19 | 15 | 119 | 58 | 22 | 32 | 11 |
| 2 | 38 | 27 | 69 | e13 | e9.5 | 18 | 58 | 151 | 62 | 20 | 31 | 46 |
| 3 | 32 | 24 | 24 | e12 | e10 | 17 | 168 | 148 | 61 | 24 | 28 | 115 |
| 4 | 34 | 22 | 18 | e11 | e12 | 16 | 84 | 151 | 64 | 22 | 25 | 82 |
| 5 | 34 | 20 | 16 | e11 | e29 | 15 | 52 | 131 | 79 | 27 | 22 | 94 |
| 6 | 46 | 18 | e15 | e10 | e58 | 15 | 49 | 106 | 78 | 25 | 20 | 102 |
| 7 | 50 | 18 | e14 | e9.5 | e50 | 22 | 62 | 95 | 84 | 21 | 18 | 71 |
| 8 | 39 | 17 | e14 | e9.0 | e150 | 89 | 53 | 89 | 85 | 20 | 17 | 48 |
| 9 | 33 | 116 | 13 | e9.3 | e260 | 38 | 57 | 90 | 76 | 19 | 16 | 37 |
| 10 | 31 | 38 | e13 | e10 | 127 | 42 | 64 | 93 | 84 | 18 | 15 | 31 |
| 11 | 28 | 43 | e12 | e12 | 78 | 50 | 53 | 99 | 73 | 18 | 20 | 29 |
| 12 | 26 | 341 | e12 | e22 | 64 | 31 | 54 | 106 | 66 | 16 | 16 | 77 |
| 13 | 24 | 113 | 12 | e70 | 62 | 24 | 50 | 112 | 59 | 16 | 14 | 127 |
| 14 | 24 | 68 | 12 | e180 | 62 | 20 | 47 | 115 | 58 | 15 | 13 | 87 |
| 15 | 21 | 75 | 12 | e70 | 42 | 19 | 43 | 108 | 50 | 14 | 12 | 68 |
| 16 | 20 | 49 | 13 | e30 | 33 | 18 | 38 | 95 | 44 | 14 | 12 | 52 |
| 17 | 19 | 37 | 47 | e35 | 28 | 18 | 37 | 84 | 43 | 14 | 11 | 40 |
| 18 | 22 | 30 | 54 | e79 | 29 | e17 | 36 | 81 | 47 | 13 | 12 | 33 |
| 19 | 23 | e28 | 103 | e62 | 41 | e16 | 32 | 90 | 51 | 12 | 13 | 29 |
| 20 | 22 | e25 | 44 | e69 | 71 | e15 | 31 | 107 | 50 | 12 | 13 | 89 |
| 21 | 20 | e23 | 108 | 82 | 79 | e14 | 33 | 128 | 45 | 13 | 12 | 270 |
| 22 | 25 | e22 | 311 | 101 | 99 | 14 | 42 | 114 | 42 | 13 | 11 | 158 |
| 23 | 75 | e21 | 127 | 94 | 54 | 13 | 45 | 98 | 39 | 12 | 11 | 176 |
| 24 | 52 | 20 | 61 | 57 | 44 | 15 | 44 | 113 | 37 | 13 | 10 | 229 |
| 25 | 180 | 18 | 43 | e23 | 35 | 13 | 60 | 151 | 35 | 12 | 10 | 149 |
| 26 | 183 | 17 | 34 | e10 | 29 | 16 | 107 | 164 | 32 | 12 | 10 | 101 |
| 27 | 103 | 16 | e27 | e9.0 | e25 | 17 | 82 | 113 | 32 | 24 | 19 | 144 |
| 28 | 88 | 15 | e24 | e8.6 | 23 | 46 | 72 | 83 | 28 | 78 | 20 | 109 |
| 29 | 53 | 19 | e20 | e8.3 | 21 | 37 | 63 | 72 | 26 | 56 | 19 | 92 |
| 30 | 41 | 39 | e18 | e8.0 | --- | 22 | 75 | 65 | 24 | 36 | 16 | 150 |
| 31 | 35 | --- | e16 | e8.0 | --- | 18 | --- | 61 | --- | 32 | 12 | --- |
| TOTAL | 1468 | 1349 | 1358 | 1146.7 | 1633.0 | 744 | 1706 | 3332 | 1612 | 663 | 510 | 2846 |
| MEAN | 47.4 | 45.0 | 43.8 | 37.0 | 56.3 | 24.0 | 56.9 | 107 | 53.7 | 21.4 | 16.5 | 94.9 |
| MAX | 183 | 341 | 311 | 180 | 260 | 89 | 168 | 164 | 85 | 78 | 32 | 270 |
| MIN | 19 | 15 | 12 | 8.0 | 8.5 | 13 | 15 | 61 | 24 | 12 | 10 | 11 |
| MED | 34 | 25 | 20 | 13 | 42 | 18 | 52 | 106 | 51 | 18 | 15 | 88 |
| AC-FT | 2910 | 2680 | 2690 | 2270 | 3240 | 1480 | 3380 | 6610 | 3200 | 1320 | 1010 | 5650 |
| CFSM | 4.69 | 4.45 | 4.34 | 3.66 | 5.58 | 2.38 | 5.63 | 10.6 | 5.32 | 2.12 | 1.63 | 9.39 |
| IN. | 5.41 | 4.97 | 5.00 | 4.22 | 6.01 | 2.74 | 6.28 | 12.27 | 5.94 | 2.44 | 1.88 | 10.48 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 88.4 | 54.3 | 55.8 | 35.3 | 26.6 | 18.6 | 33.9 | 83.3 | 81.7 | 54.7 | 52.8 | 98.8 |
| MAX | 129 | 99.0 | 128 | 55.4 | 56.3 | 24.0 | 56.9 | 107 | 114 | 79.1 | 131 | 128 |
| (WY) | 2003 | 2003 | 2000 | 2003 | 2004 | 2004 | 2004 | 2004 | 2000 | 2000 | 2002 | 1999 |
| MIN | 47.4 | 22.8 | 20.6 | 18.7 | 11.0 | 8.67 | 15.2 | 53.2 | 47.6 | 21.4 | 16.5 | 77.5 |
| (WY) | 2004 | 2002 | 2002 | 2000 | 2000 | 2002 | 2002 | 2003 | 2003 | 2004 | 2004 | 2002 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1999 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 16287.5 | | 18367.7 | | | |
| ANNUAL MEAN | 44.6 | | 50.2 | | 56.6 | |
| HIGHEST ANNUAL MEAN | | | | | 70.3 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 50.2 | 2004 |
| HIGHEST DAILY MEAN | 341 | Nov 12 | 341 | Nov 12 | 1110 | Dec 27 1999 |
| LOWEST DAILY MEAN | 7.0 | Mar 12 | a8.0 | Jan 30 | 5.0 | Mar 10 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 7.4 | Mar 10 | 8.6 | Jan 27 | 5.8 | Mar 18 2002 |
| MAXIMUM PEAK FLOW | | | 759 | Nov 12 | b1650 | Dec 27 1999 |
| MAXIMUM PEAK STAGE | | | 29.67 | Nov 12 | 30.52 | Dec 27 1999 |
| INSTANTANEOUS LOW FLOW | | | c | | 5.0 | Mar 10 2000 |
| ANNUAL RUNOFF (AC-FT) | 32310 | | 36430 | | 41030 | |
| ANNUAL RUNOFF (CFSM) | 4.42 | | 4.97 | | 5.61 | |
| ANNUAL RUNOFF (INCHES) | 59.99 | | 67.65 | | 76.19 | |
| 10 PERCENT EXCEEDS | 101 | | 108 | | 122 | |
| 50 PERCENT EXCEEDS | 29 | | 33 | | 35 | |
| 90 PERCENT EXCEEDS | 13 | | 12 | | 11 | |

\# See period of Record, partial years used in monthly statistics
a January 30-31
b From rating curve extended above 130 cfs
c Undetermined, see lowest daily value
e Estimated

## 15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.-- October 1999 to September 2004 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1999 to September 2004 (discontinued).

INSTRUMENTATION.-- Electronic water-temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on May 14, 2004. No variation was found in the temperature cross section. No variation was found between mean stream temperature and sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 17.5°C, July 15-16, 2004; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE 2003: Maximum, 15.5°C, July 12; minimum, 0.0°C, on many days during the winter.

WATER TEMPERATURE 2004: Maximum, 17.5°C, July 15-16; minimum, 0.0°C, on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Location in X-sect. looking dwnstrm ft from l bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| MAY | | | | | | | |
| 14... | 1204 | 49.0 | 1.50 | 28.21 | 104 | 6.0 | 12.5 |
| 14... | 1205 | 49.0 | 11.5 | 28.21 | 104 | 6.0 | 12.5 |
| 14... | 1206 | 49.0 | 21.5 | 28.21 | 104 | 6.0 | 12.5 |
| 14... | 1207 | 49.0 | 31.5 | 28.21 | 104 | 6.0 | 12.5 |

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 7.5 | 6.5 | 7.0 | 5.0 | 4.5 | 4.5 | 4.5 | 3.5 | 4.0 | 1.0 | 0.5 | 1.0 |
| 2 | 7.0 | 6.0 | 6.5 | 4.5 | 4.5 | 4.5 | 3.5 | 2.5 | 3.0 | 1.5 | 1.0 | 1.0 |
| 3 | 7.0 | 5.5 | 6.5 | 4.5 | 4.0 | 4.5 | 2.5 | 1.5 | 2.0 | 1.5 | 0.5 | 1.0 |
| 4 | 7.0 | 6.0 | 6.5 | 5.0 | 4.5 | 4.5 | 1.5 | 1.0 | 1.5 | 1.5 | 0.5 | 1.0 |
| 5 | 6.0 | 5.5 | 6.0 | 5.5 | 4.5 | 5.0 | 2.0 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 |
| 6 | 7.5 | 6.0 | 7.0 | 6.0 | 5.0 | 5.5 | 2.0 | 1.0 | 1.5 | 2.5 | 1.0 | 2.0 |
| 7 | 7.5 | 7.0 | 7.5 | 5.5 | 3.5 | 4.5 | 2.5 | 2.0 | 2.5 | 1.5 | 1.0 | 1.5 |
| 8 | 7.0 | 6.0 | 6.5 | 3.5 | 3.0 | 3.5 | 3.0 | 2.5 | 3.0 | 1.5 | 0.5 | 1.0 |
| 9 | 6.0 | 4.0 | 5.0 | 4.0 | 3.5 | 4.0 | 4.0 | 3.0 | 3.5 | 0.5 | 0.0 | 0.0 |
| 10 | 4.5 | 3.5 | 4.0 | 4.5 | 4.0 | 4.0 | 4.0 | 3.5 | 4.0 | 0.0 | 0.0 | 0.0 |
| 11 | 5.5 | 4.0 | 5.0 | 4.5 | 4.0 | 4.5 | 3.5 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 |
| 12 | 6.0 | 5.5 | 6.0 | 4.5 | 4.0 | 4.0 | 4.0 | 3.0 | 3.5 | 0.0 | 0.0 | 0.0 |
| 13 | 6.5 | 6.0 | 6.0 | 5.0 | 4.5 | 4.5 | 3.5 | 2.0 | 3.0 | 1.5 | 0.0 | 1.0 |
| 14 | 6.5 | 5.5 | 6.0 | 5.0 | 4.5 | 5.0 | 2.5 | 2.0 | 2.0 | 1.0 | 0.0 | 0.0 |
| 15 | 7.0 | 6.5 | 6.5 | 5.0 | 4.0 | 5.0 | 3.0 | 2.0 | 2.5 | 1.5 | 0.0 | 0.5 |
| 16 | 8.0 | 7.0 | 7.5 | 4.0 | 3.0 | 3.5 | 3.0 | 2.0 | 2.5 | 1.5 | 1.5 | 1.5 |
| 17 | 7.5 | 7.0 | 7.0 | 4.0 | 3.0 | 3.5 | 2.5 | 2.0 | 2.5 | 1.5 | 0.5 | 1.0 |
| 18 | 7.0 | 6.5 | 6.5 | 4.0 | 3.5 | 3.5 | 2.5 | 1.5 | 2.0 | 2.0 | 1.5 | 1.5 |
| 19 | 7.5 | 6.5 | 7.5 | 4.0 | 3.5 | 3.5 | 2.0 | 0.5 | 1.5 | 2.0 | 2.0 | 2.0 |
| 20 | 8.0 | 7.0 | 7.5 | 4.0 | 4.0 | 4.0 | 0.5 | 0.0 | 0.0 | 2.5 | 2.0 | 2.0 |
| 21 | 7.0 | 7.0 | 7.0 | 4.0 | 4.0 | 4.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.5 | 1.0 |
| 22 | 7.0 | 6.5 | 7.0 | 4.0 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 |
| 23 | 7.0 | 6.0 | 6.5 | 3.5 | 2.0 | 2.5 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 |
| 24 | 6.5 | 5.5 | 6.0 | 4.0 | 2.5 | 3.5 | 1.5 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 25 | 6.5 | 6.0 | 6.5 | 4.5 | 4.0 | 4.0 | 1.5 | 1.0 | 1.0 | 0.5 | 0.0 | 0.0 |
| 26 | 6.5 | 6.0 | 6.5 | 5.5 | 4.0 | 5.0 | 1.0 | 0.5 | 1.0 | 0.5 | 0.0 | 0.5 |
| 27 | 6.5 | 6.0 | 6.5 | 5.5 | 4.5 | 5.0 | 1.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.5 |
| 28 | 6.0 | 5.0 | 5.5 | 5.0 | 4.5 | 4.5 | 0.5 | 0.0 | 0.5 | 1.0 | 1.0 | 1.0 |
| 29 | 5.0 | 4.0 | 4.5 | 5.0 | 4.5 | 5.0 | 0.0 | 0.0 | 0.0 | 1.5 | 1.0 | 1.5 |
| 30 | 4.0 | 3.5 | 4.0 | 5.0 | 4.5 | 5.0 | 0.5 | 0.0 | 0.0 | 1.5 | 1.0 | 1.0 |
| 31 | 4.5 | 3.5 | 4.0 | --- | --- | --- | 1.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.5 |
| MONTH | 8.0 | 3.5 | 6.2 | 6.0 | 2.0 | 4.2 | 4.5 | 0.0 | 1.8 | 2.5 | 0.0 | 0.8 |

## 15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.5 | 0.5 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 4.0 | 5.0 |
| 2 | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 3.0 | 4.0 |
| 3 | 1.5 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 3.0 | 4.0 |
| 4 | 2.0 | 1.5 | 1.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 5.0 | 2.0 | 3.5 |
| 5 | 2.0 | 1.5 | 1.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 2.0 | 4.0 |
| 6 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 6.5 | 3.0 | 4.5 |
| 7 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.0 | 6.5 | 2.5 | 4.5 |
| 8 | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 2.5 | 0.5 | 1.5 | 7.5 | 3.0 | 5.0 |
| 9 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.5 | 1.0 | 7.5 | 3.5 | 5.5 |
| 10 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 3.0 | 1.0 | 1.5 | 6.5 | 4.0 | 5.5 |
| 11 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 3.5 | 1.0 | 1.5 | 5.5 | 5.0 | 5.5 |
| 12 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.5 | 1.5 | 5.5 | 5.0 | 5.0 |
| 13 | 2.5 | 1.0 | 2.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.5 | 1.5 | 6.0 | 4.0 | 5.0 |
| 14 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 4.0 | 0.5 | 2.0 | 5.0 | 3.5 | 4.5 |
| 15 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 3.0 | 2.0 | 2.5 | 6.5 | 3.5 | 5.0 |
| 16 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 2.0 | 6.5 | 3.0 | 4.5 |
| 17 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 7.0 | 3.5 | 5.0 |
| 18 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 9.0 | 5.0 | 6.5 |
| 19 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 5.0 | 2.0 | 3.0 | 8.5 | 4.0 | 6.0 |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 1.5 | 2.5 | 9.0 | 4.0 | 6.5 |
| 21 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 2.0 | 3.0 | 9.0 | 5.0 | 7.0 |
| 22 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 2.5 | 3.5 | 9.0 | 6.5 | 7.5 |
| 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 3.0 | 4.0 | 7.5 | 6.5 | 7.0 |
| 24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 2.5 | 4.0 | 7.5 | 6.5 | 7.0 |
| 25 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 3.0 | 4.5 | 6.5 | 6.0 | 6.0 |
| 26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 3.0 | 4.5 | 8.0 | 5.5 | 6.5 |
| 27 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 3.5 | 4.5 | 8.0 | 5.0 | 6.5 |
| 28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 2.5 | 4.5 | 8.0 | 6.0 | 7.0 |
| 29 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 6.5 | 3.0 | 4.5 | 8.5 | 7.0 | 7.5 |
| 30 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 6.5 | 3.5 | 5.0 | 9.0 | 6.5 | 8.0 |
| 31 | --- | --- | --- | 0.5 | 0.0 | 0.0 | --- | --- | --- | 8.0 | 7.0 | 7.5 |
| MONTH | 2.5 | 0.0 | 1.0 | 0.5 | 0.0 | 0.0 | 6.5 | 0.0 | 2.2 | 9.0 | 2.0 | 5.7 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 8.0 | 6.0 | 7.0 | 12.5 | 8.5 | 10.5 | 11.5 | 9.5 | 10.0 | 10.0 | 9.5 | 9.5 |
| 2 | 9.0 | 6.5 | 8.0 | 10.0 | 9.0 | 9.5 | 11.5 | 9.5 | 10.5 | 10.0 | 9.5 | 9.5 |
| 3 | 8.5 | 6.5 | 7.5 | 10.0 | 8.5 | 9.5 | 11.5 | 9.5 | 10.0 | 9.5 | 9.0 | 9.5 |
| 4 | 9.0 | 6.0 | 7.5 | 10.0 | 9.0 | 9.5 | 10.5 | 9.0 | 10.0 | 9.5 | 8.5 | 9.0 |
| 5 | 9.0 | 7.5 | 8.0 | 10.5 | 8.5 | 9.0 | 12.0 | 9.0 | 10.0 | 9.5 | 7.0 | 8.5 |
| 6 | 9.5 | 8.0 | 8.5 | 10.0 | 8.5 | 9.5 | 12.5 | 8.0 | 10.0 | 9.5 | 8.5 | 9.0 |
| 7 | 8.5 | 7.5 | 8.0 | 12.5 | 8.5 | 10.0 | 13.0 | 8.5 | 10.5 | 10.0 | 9.0 | 9.5 |
| 8 | 11.0 | 6.5 | 8.5 | 12.5 | 9.0 | 10.5 | 14.0 | 9.0 | 11.0 | 10.0 | 9.5 | 10.0 |
| 9 | 11.5 | 7.5 | 9.0 | 13.5 | 9.5 | 11.0 | 14.0 | 9.5 | 11.0 | 10.0 | 9.0 | 9.5 |
| 10 | 12.5 | 8.0 | 9.5 | 14.5 | 9.0 | 11.5 | 13.5 | 8.5 | 10.5 | 9.5 | 8.5 | 9.0 |
| 11 | 10.5 | 8.0 | 9.5 | 12.5 | 10.0 | 11.0 | 12.0 | 10.0 | 11.0 | 10.0 | 9.0 | 9.5 |
| 12 | 9.5 | 8.5 | 9.0 | 15.5 | 10.5 | 12.0 | 11.5 | 10.0 | 10.5 | 10.0 | 9.5 | 9.5 |
| 13 | 11.0 | 8.5 | 9.5 | 15.0 | 9.5 | 12.0 | 12.0 | 10.5 | 11.0 | 10.0 | 9.0 | 9.5 |
| 14 | 11.5 | 8.0 | 9.5 | 12.0 | 10.5 | 11.0 | 11.0 | 10.0 | 10.5 | 9.0 | 8.0 | 8.5 |
| 15 | 12.0 | 8.0 | 10.0 | 12.5 | 10.0 | 11.0 | 12.5 | 11.0 | 11.5 | 8.0 | 7.0 | 7.5 |
| 16 | 12.0 | 8.0 | 10.0 | 11.0 | 10.0 | 10.5 | 11.5 | 10.5 | 11.0 | 7.0 | 6.0 | 6.5 |
| 17 | 10.0 | 9.0 | 9.5 | 11.5 | 10.0 | 10.5 | 12.5 | 10.5 | 11.0 | 7.5 | 5.5 | 6.5 |
| 18 | 9.5 | 9.0 | 9.5 | 14.5 | 10.0 | 11.5 | 12.0 | 9.0 | 10.5 | 7.0 | 7.0 | 7.0 |
| 19 | 9.0 | 8.0 | 8.5 | 14.0 | 9.5 | 11.5 | 11.5 | 10.0 | 10.5 | 7.5 | 6.5 | 7.0 |
| 20 | 9.0 | 8.0 | 8.5 | 13.0 | 11.0 | 12.0 | 11.0 | 9.5 | 10.0 | 8.0 | 7.5 | 8.0 |
| 21 | 8.5 | 8.0 | 8.0 | 12.5 | 10.5 | 11.5 | 11.0 | 9.5 | 10.0 | 8.0 | 7.0 | 7.5 |
| 22 | 10.0 | 7.5 | 8.5 | 12.0 | 10.5 | 11.0 | 11.0 | 9.0 | 10.0 | 7.5 | 6.5 | 7.0 |
| 23 | 9.5 | 8.0 | 8.5 | 12.5 | 10.5 | 11.0 | 11.0 | 8.0 | 9.5 | 7.0 | 6.0 | 6.5 |
| 24 | 8.5 | 8.0 | 8.5 | 11.5 | 10.0 | 10.5 | 10.0 | 9.5 | 9.5 | 7.5 | 7.0 | 7.0 |
| 25 | 9.0 | 8.0 | 8.5 | 11.0 | 10.0 | 10.5 | 11.0 | 9.5 | 10.0 | 8.0 | 7.5 | 8.0 |
| 26 | 8.5 | 8.0 | 8.5 | 10.5 | 9.5 | 10.0 | 10.0 | 8.0 | 9.0 | 8.0 | 7.5 | 7.5 |
| 27 | 8.5 | 7.5 | 8.0 | 10.5 | 9.5 | 10.0 | 10.5 | 9.0 | 9.5 | 8.5 | 7.5 | 8.0 |
| 28 | 9.0 | 7.5 | 8.0 | 11.0 | 9.5 | 10.0 | 11.5 | 9.0 | 10.0 | 9.0 | 8.0 | 8.5 |
| 29 | 9.5 | 7.5 | 8.5 | 11.0 | 10.0 | 10.5 | 10.5 | 9.0 | 9.5 | 8.5 | 7.5 | 8.0 |
| 30 | 11.0 | 7.5 | 9.0 | 10.5 | 9.5 | 9.5 | 11.0 | 10.0 | 10.5 | 9.0 | 7.5 | 8.5 |
| 31 | --- | --- | --- | 10.5 | 8.5 | 9.5 | 10.0 | 9.5 | 10.0 | --- | --- | --- |
| MONTH | 12.5 | 6.0 | 8.6 | 15.5 | 8.5 | 10.6 | 14.0 | 8.0 | 10.3 | 10.0 | 5.5 | 8.3 |

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 9.0 | 8.0 | 8.5 | 3.0 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 2 | 8.5 | 7.0 | 8.0 | 4.0 | 2.5 | 3.0 | 0.5 | 0.0 | 0.5 | 0.5 | 0.0 | 0.5 |
| 3 | 8.5 | 7.0 | 7.5 | 2.5 | 1.5 | 2.0 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 |
| 4 | 9.0 | 8.5 | 8.5 | 1.5 | 0.5 | 1.0 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.5 |
| 5 | 9.0 | 8.0 | 8.5 | 2.0 | 0.0 | 1.0 | 1.5 | 0.0 | 1.0 | 0.5 | 0.0 | 0.0 |
| 6 | 9.0 | 8.5 | 8.5 | 2.5 | 1.0 | 2.0 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 7 | 9.0 | 8.0 | 8.5 | 3.0 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 8 | 8.0 | 7.0 | 7.5 | 3.0 | 2.0 | 2.5 | 1.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 9 | 7.5 | 7.0 | 7.0 | 3.0 | 1.5 | 2.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 10 | 7.0 | 6.0 | 6.5 | 3.0 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | 6.0 | 5.0 | 5.5 | 3.0 | 2.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | 5.5 | 4.0 | 5.0 | 3.5 | 3.0 | 3.5 | 1.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 13 | 6.5 | 5.5 | 6.0 | 3.5 | 1.5 | 3.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 14 | 6.5 | 5.0 | 6.0 | 3.0 | 1.5 | 2.5 | 1.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| 15 | 5.0 | 3.5 | 4.0 | 3.5 | 3.0 | 3.0 | 1.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 16 | 5.5 | 3.5 | 4.5 | 3.0 | 2.5 | 3.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 17 | 6.0 | 5.5 | 6.0 | 2.5 | 2.0 | 2.5 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 18 | 7.0 | 6.0 | 6.5 | 2.0 | 0.0 | 1.0 | 1.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 19 | 7.0 | 6.5 | 6.5 | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.5 | 0.5 | 0.0 | 0.0 |
| 20 | 6.5 | 5.0 | 6.0 | 0.5 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 1.5 | 0.5 | 0.5 |
| 21 | 6.5 | 4.0 | 5.5 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 2.0 | 1.5 | 1.5 | 1.5 |
| 22 | 6.5 | 6.0 | 6.0 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 |
| 23 | 6.5 | 5.5 | 6.0 | 1.0 | 0.0 | 0.5 | 2.0 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 |
| 24 | 6.5 | 5.5 | 6.0 | 1.5 | 0.5 | 1.0 | 2.0 | 2.0 | 2.0 | 1.0 | 0.0 | 0.5 |
| 25 | 7.5 | 6.5 | 7.0 | 1.5 | 0.5 | 1.0 | 2.0 | 0.0 | 1.0 | 0.5 | 0.0 | 0.0 |
| 26 | 7.5 | 6.5 | 7.0 | 1.0 | 0.5 | 0.5 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.5 |
| 27 | 6.5 | 6.0 | 6.5 | 0.5 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 28 | 6.0 | 4.5 | 5.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 29 | 4.5 | 3.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30 | 3.0 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 31 | 3.0 | 2.0 | 2.5 | --- | --- | --- | 1.5 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| MONTH | 9.0 | 2.0 | 6.2 | 4.0 | 0.0 | 1.6 | 2.0 | 0.0 | 0.7 | 2.0 | 0.0 | 0.2 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 2.0 | 0.5 | 1.0 | 1.5 | 0.0 | 1.0 | 5.0 | 4.0 | 4.5 |
| 2 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.5 | 1.5 | 1.0 | 1.0 | 5.5 | 4.0 | 4.5 |
| 3 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 2.0 | 1.0 | 1.5 | 6.5 | 4.0 | 5.0 |
| 4 | 0.0 | 0.0 | 0.0 | 2.0 | 0.5 | 1.0 | 3.0 | 1.5 | 2.0 | 6.0 | 3.5 | 4.5 |
| 5 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.0 | 4.0 | 2.0 | 2.5 | 6.5 | 3.5 | 4.5 |
| 6 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 1.0 | 4.0 | 2.0 | 3.0 | 6.5 | 3.5 | 5.0 |
| 7 | 0.0 | 0.0 | 0.0 | 2.0 | 1.0 | 1.5 | 3.5 | 2.0 | 3.0 | 6.5 | 4.0 | 5.0 |
| 8 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 1.0 | 4.0 | 1.5 | 2.5 | 7.0 | 3.5 | 5.0 |
| 9 | 0.5 | 0.0 | 0.0 | 1.5 | 0.0 | 1.0 | 4.0 | 2.5 | 3.0 | 6.0 | 4.5 | 5.0 |
| 10 | 1.5 | 0.5 | 1.0 | 1.5 | 0.0 | 1.0 | 4.0 | 2.0 | 3.0 | 7.0 | 4.0 | 5.5 |
| 11 | 2.0 | 1.5 | 1.5 | 2.0 | 1.0 | 1.5 | 4.0 | 2.0 | 3.0 | 7.5 | 3.5 | 5.5 |
| 12 | 2.0 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 | 3.5 | 3.0 | 3.5 | 7.5 | 4.0 | 5.5 |
| 13 | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | 1.5 | 4.0 | 3.0 | 3.5 | 8.0 | 4.0 | 5.5 |
| 14 | 2.0 | 1.5 | 2.0 | 1.5 | 0.0 | 1.0 | 4.5 | 2.5 | 3.5 | 7.5 | 4.5 | 6.0 |
| 15 | 2.0 | 1.5 | 1.5 | 1.0 | 0.0 | 0.5 | 4.5 | 2.0 | 3.0 | 7.5 | 4.0 | 5.5 |
| 16 | 2.0 | 1.5 | 1.5 | 2.0 | 0.5 | 1.0 | 4.0 | 1.5 | 3.0 | 6.5 | 4.5 | 5.5 |
| 17 | 2.0 | 1.5 | 2.0 | 2.0 | 0.5 | 1.5 | 4.5 | 3.0 | 3.5 | 6.0 | 5.0 | 5.5 |
| 18 | 2.5 | 1.5 | 2.0 | 0.5 | 0.0 | 0.0 | 4.0 | 2.5 | 3.5 | 7.0 | 5.0 | 5.5 |
| 19 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 | 5.5 | 2.0 | 3.5 | 8.0 | 4.5 | 6.0 |
| 20 | 1.5 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 5.0 | 2.0 | 3.5 | 8.5 | 4.5 | 6.0 |
| 21 | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 5.5 | 3.0 | 4.0 | 8.0 | 4.5 | 6.0 |
| 22 | 2.0 | 1.5 | 2.0 | 1.5 | 0.0 | 0.5 | 5.0 | 3.0 | 3.5 | 8.0 | 4.0 | 6.0 |
| 23 | 2.5 | 2.0 | 2.0 | 1.5 | 0.0 | 0.5 | 4.5 | 3.0 | 3.5 | 8.5 | 4.0 | 6.0 |
| 24 | 2.0 | 1.0 | 2.0 | 1.5 | 0.0 | 0.5 | 4.5 | 3.5 | 4.0 | 6.5 | 5.5 | 6.0 |
| 25 | 1.5 | 0.5 | 1.0 | 2.0 | 1.0 | 1.5 | 4.0 | 3.5 | 4.0 | 6.0 | 5.0 | 5.5 |
| 26 | 1.0 | 0.0 | 0.5 | 3.0 | 1.0 | 1.5 | 4.5 | 3.5 | 4.0 | 6.0 | 5.0 | 5.5 |
| 27 | 0.5 | 0.0 | 0.0 | 2.5 | 1.0 | 1.5 | 5.0 | 3.5 | 4.0 | 7.5 | 4.5 | 6.0 |
| 28 | 1.5 | 0.0 | 1.0 | 2.0 | 1.0 | 1.5 | 4.5 | 3.5 | 4.0 | 8.0 | 4.5 | 6.0 |
| 29 | 2.0 | 0.5 | 1.0 | 2.0 | 0.0 | 1.0 | 6.0 | 3.0 | 4.0 | 7.5 | 5.5 | 6.5 |
| 30 | --- | --- | --- | 1.5 | 0.0 | 0.5 | 6.5 | 3.5 | 5.0 | 8.5 | 5.5 | 7.0 |
| 31 | --- | --- | --- | 0.5 | 0.0 | 0.0 | --- | --- | --- | 7.5 | 5.5 | 6.5 |
| MONTH | 2.5 | 0.0 | 1.0 | 3.0 | 0.0 | 0.9 | 6.5 | 0.0 | 3.2 | 8.5 | 3.5 | 5.5 |

## 15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 8.5 | 5.5 | 7.0 | 11.0 | 9.5 | 10.0 | 11.0 | 10.0 | 11.0 | 11.5 | 8.5 | 10.0 |
| 2 | 7.5 | 6.0 | 6.5 | 12.5 | 9.0 | 11.0 | 12.0 | 10.5 | 11.0 | 12.0 | 10.5 | 11.0 |
| 3 | 9.0 | 5.5 | 7.5 | 11.5 | 10.5 | 11.0 | 12.0 | 11.0 | 11.0 | 11.5 | 11.0 | 11.5 |
| 4 | 8.5 | 6.0 | 7.5 | 12.0 | 10.0 | 11.0 | 14.0 | 10.0 | 11.5 | 11.0 | 10.5 | 11.0 |
| 5 | 8.0 | 7.0 | 7.5 | 11.0 | 10.0 | 10.5 | 13.0 | 10.0 | 11.5 | 10.5 | 10.0 | 10.5 |
| 6 | 10.5 | 6.5 | 8.0 | 13.5 | 10.0 | 11.0 | 14.5 | 11.0 | 12.5 | 10.5 | 9.5 | 10.0 |
| 7 | 10.0 | 6.5 | 8.5 | 13.0 | 10.5 | 11.5 | 15.0 | 11.5 | 12.5 | 9.5 | 8.0 | 8.5 |
| 8 | 8.0 | 6.5 | 7.0 | 14.0 | 9.5 | 11.5 | 15.5 | 10.0 | 12.5 | 8.5 | 7.0 | 7.5 |
| 9 | 7.5 | 6.5 | 7.0 | 14.5 | 10.5 | 12.0 | 16.0 | 10.5 | 12.5 | 8.0 | 6.5 | 7.5 |
| 10 | 8.0 | 6.0 | 7.0 | 12.0 | 10.5 | 11.5 | 15.5 | 10.5 | 12.5 | 8.0 | 6.0 | 7.0 |
| 11 | 8.0 | 6.0 | 7.0 | 13.5 | 10.0 | 11.5 | 14.0 | 12.0 | 13.0 | 8.5 | 7.0 | 8.0 |
| 12 | 9.0 | 6.5 | 8.0 | 15.0 | 9.5 | 12.0 | 14.0 | 10.5 | 12.0 | 9.0 | 8.0 | 8.5 |
| 13 | 9.0 | 7.0 | 8.0 | 16.0 | 11.0 | 12.5 | 15.5 | 10.0 | 12.5 | 9.0 | 8.5 | 9.0 |
| 14 | 8.0 | 7.0 | 7.5 | 16.5 | 11.0 | 13.0 | 16.0 | 10.0 | 12.5 | 9.0 | 8.0 | 8.5 |
| 15 | 9.0 | 7.0 | 8.0 | 17.5 | 10.5 | 13.5 | 16.5 | 11.0 | 13.5 | 8.5 | 7.5 | 8.0 |
| 16 | 10.0 | 6.5 | 8.0 | 17.5 | 11.0 | 13.5 | 17.0 | 12.0 | 14.0 | 8.5 | 7.0 | 7.5 |
| 17 | 11.0 | 7.0 | 9.5 | 15.0 | 12.5 | 13.5 | 17.0 | 12.0 | 14.0 | 8.0 | 7.0 | 7.5 |
| 18 | 12.0 | 8.0 | 10.0 | 14.0 | 11.5 | 13.0 | 15.0 | 12.5 | 13.5 | 8.0 | 6.0 | 7.0 |
| 19 | 12.5 | 9.0 | 11.0 | 15.0 | 10.5 | 12.5 | 13.5 | 12.5 | 13.0 | 7.5 | 5.5 | 6.5 |
| 20 | 12.5 | 9.0 | 11.0 | 15.0 | 12.0 | 13.0 | 15.5 | 12.5 | 13.5 | 9.0 | 7.0 | 8.0 |
| 21 | 12.5 | 8.5 | 11.0 | 15.0 | 12.0 | 13.0 | 16.5 | 12.0 | 13.5 | 9.5 | 8.0 | 9.0 |
| 22 | 13.0 | 9.0 | 11.0 | 14.5 | 12.0 | 13.0 | 16.0 | 11.0 | 13.0 | 8.0 | 8.0 | 8.0 |
| 23 | 13.5 | 9.5 | 11.5 | 15.0 | 12.0 | 13.5 | 14.5 | 9.0 | 11.5 | 8.5 | 8.0 | 8.5 |
| 24 | 14.0 | 9.5 | 11.5 | 13.5 | 12.0 | 12.5 | 14.5 | 9.0 | 11.5 | 8.5 | 7.5 | 8.0 |
| 25 | 14.0 | 10.0 | 12.0 | 15.5 | 11.5 | 13.0 | 12.5 | 9.5 | 11.0 | 8.0 | 7.0 | 7.5 |
| 26 | 12.5 | 10.5 | 11.5 | 13.5 | 11.5 | 12.5 | 13.0 | 11.0 | 12.0 | 8.0 | 7.5 | 7.5 |
| 27 | 11.5 | 10.0 | 10.5 | 12.5 | 11.5 | 12.0 | 13.0 | 11.5 | 12.0 | 8.5 | 7.5 | 8.0 |
| 28 | 10.5 | 9.5 | 10.0 | 13.0 | 12.0 | 12.5 | 12.5 | 11.5 | 12.0 | 8.0 | 7.0 | 7.5 |
| 29 | 10.5 | 9.5 | 10.0 | 12.5 | 11.0 | 12.0 | 13.0 | 11.0 | 12.0 | 8.0 | 7.5 | 8.0 |
| 30 | 10.5 | 9.5 | 10.0 | 12.0 | 10.5 | 11.0 | 13.5 | 10.5 | 11.5 | 8.0 | 8.0 | 8.0 |
| 31 | --- | --- | --- | 12.0 | 10.5 | 11.0 | 13.0 | 9.0 | 10.5 | --- | --- | --- |
| MONTH | 14.0 | 5.5 | 9.0 | 17.5 | 9.0 | 12.1 | 17.0 | 9.0 | 12.3 | 12.0 | 5.5 | 8.4 |

## 15070000 SWAN LAKE NEAR KETCHIKAN

LOCATION.--Lat 55°36'54", long 131°20'14", in SW¼ NE¼ sec. 20, T. 72 S., R. 92 E. (Ketchikan C-4 quad), Hydrologic Unit 19010102, Ketchikan Gateway Borough, on Revillagigedo Island, in Tongass National Forest, 0.7 mi upstream from mouth at Carroll Inlet, and 22 mi northeast of Ketchikan.

DRAINAGE AREA.--36.5 $mi^2$.

PERIOD OF RECORD.--September 1916 to January 1926, September 1927 to December 1933 and October 1946 to September 1959 (discharge). Published as "Swan Lake Outlet at Carroll Inlet" prior to 1946 and as "Falls Creek near Ketchikan" October 1946 to September 1959. Monthly discharges only for some periods, published in WSP 1372. October 1984 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: Drainage area, 1918.

GAGE.--Non-recording lake-level staff gage. Datum of lake-level staff gage is at sea level. Totalizing MWH meters on the two turbines in Swan Lake Powerhouse. September 1916 to January 1926 and September 1927 to December 1933 at site 1,500 ft downstream at different datum. October 1946 to September 1959, recording gage at site 2,500 ft downstream, elevation of gage was 130 ft above sea level, from topographic map.

REMARKS.--Reservoir is formed by a concrete arch dam located at the outlet of Swan Lake; construction began in August 1980 and was completed in March 1983. Total and usable capacities below spillway crest of 330 ft are 126,200 and 82,800 acre-ft, respectively. Reservoir is used for power. Discharge released through turbines is computed from relation between discharge, head, and power generation; release flow enters directly into Carroll Inlet and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above crest of the spillway. Turbine and spillway ratings and reservoir capacity table furnished by the City of Ketchikan in 1985.

COOPERATION.--Reservoir elevations and release flow provided by the City of Ketchikan.

AVERAGE DISCHARGE.--48 years (water years 1917-25, 1928-33, 1947-59, 1985-2004), 444 $ft^3/s$, 165.20 in/yr, 321,680 acre-ft/yr. Mean discharge for water years 1985-2004 adjusted for change in contents of Swan Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 134,920 acre-ft, October 26, 2003, elevation, 336.10 ft; minimum contents observed, 51,770 acre-ft, September 22, 1993, elevation, 278.4 ft. Maximum discharge, about 5,500 $ft^3/s$, November 1, 1917; minimum daily discharge, 19 $ft^3/s$, February 21 to 25, 1925. Maximum daily discharge since construction of dam, 3,680 $ft^3/s$, November 30, 1988; no flow released several days most years.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 134,920 acre-ft, October 26, elevation, 336.10 ft; minimum contents observed, 75,240 acre-ft, September 12, elevation, 294.80 ft. Maximum release from reservoir (mean daily, not adjusted for changes in storage),3,673 $ft^3/s$, October 26; minimum release, 158 $ft^3/s$, October 3.

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | ELEVATION | CONTENTS | CHANGE IN CONTENTS |
|---|---|---|---|
| Sep 30 | 326.3 | 120,810 | |
| Oct 31 | 330.5 | 126,890 | +6,080 |
| Nov 30 | 324.7 | 118,500 | -8,390 |
| Dec 31 | 328.7 | 124,290 | +5,790 |
| Jan 31 | 327.1 | 121,970 | -2,310 |
| Feb 29 | 320.9 | 113,010 | -8,970 |
| Mar 31 | 318.1 | 108,950 | -4,050 |
| Apr 30 | 323.2 | 116,330 | +7,370 |
| May 31 | 327.4 | 122,410 | +6,080 |
| Jun 30 | 326.0 | 120,380 | -2,030 |
| Jul 31 | 315.6 | 105,330 | -15,050 |
| Aug 31 | 299.4 | 80,900 | -24,440 |
| Sep 30 | 302.7 | 86,670 | +5,770 |
| | | CAL YR 2003 | -570 |
| | | WTR YR 2004 | -34,150 |

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
MEAN VALUES

| MONTH | RELEASE | SPILL | TOTAL | ADJUSTED |
|---|---|---|---|---|
| OCT | 344 | 274 | 618 | 717 |
| NOV | 419 | 77 | 496 | 355 |
| DEC | 455 | 33 | 488 | 582 |
| JAN | 467 | 251 | 718 | 680 |
| FEB | 430 | 0 | 430 | 274 |
| MAR | 390 | 0 | 390 | 324 |
| APR | 333 | 0 | 333 | 457 |
| MAY | 319 | 0 | 319 | 418 |
| JUN | 333 | 0 | 333 | 299 |
| JUL | 387 | 0 | 387 | 142 |
| AUG | 456 | 0 | 456 | 59 |
| SEP | 428 | 0 | 428 | 525 |
| CAL YR 2003 | 370 | 52 | 422 | 420 |
| WTR YR 2004 | 397 | 52.9 | 450 | 403 |

## 15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'31", long 131°11'38", in $SW^1/_4\,SW^1/_4$ sec. 6, T. 75 S., R. 94 E. (Ketchikan B-4 quad.), Gateway Borough, Hydrologic Unit 19010102, on Revillagigedo Island, in Tongass National Forest, on right bank 250 ft upstream from outlet of Low Lake, 750 ft upstream from mouth at Thorne Arm, and 18 mi east of Ketchikan.

DRAINAGE AREA.--32.1 $mi^2$, excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Records of daily discharge prior to October 1945 are available in computer files of the Geological Survey. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level, by barometer. Prior to October 1935, at site 150 ft downstream at different datum. October 1935 to October 3, 1975, at prior site and present datum.

REMARKS.--No estimated daily discharges. Records fair. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 $ft^3/s$ and/or maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Oct. 26 | 1030 | *3640 | *4.39 | Jan. 15 | 0700 | 2450 | 3.59 |
| Dec. 23 | 0415 | 2880 | 3.89 | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 302 | 436 | 450 | 215 | 147 | 157 | 358 | 496 | 318 | 139 | 103 | 104 |
| 2 | 253 | 342 | 592 | 183 | 129 | 142 | 301 | 503 | 345 | 133 | 121 | 101 |
| 3 | 217 | 281 | 537 | 156 | 113 | 136 | 269 | 561 | 338 | 126 | 149 | 135 |
| 4 | 192 | 236 | 452 | 136 | 99 | 134 | 279 | 546 | 310 | 120 | 167 | 292 |
| 5 | 178 | 204 | 470 | 119 | 114 | 172 | 281 | 488 | 299 | 123 | 184 | 295 |
| 6 | 215 | 178 | 378 | 106 | 143 | 193 | 262 | 424 | 296 | 206 | 179 | 266 |
| 7 | 382 | 157 | 308 | 102 | 146 | 308 | 249 | 373 | 286 | 283 | 166 | 246 |
| 8 | 534 | 141 | 260 | 106 | 197 | 431 | 268 | 337 | 276 | 298 | 153 | 236 |
| 9 | 484 | 132 | 224 | 162 | 321 | 557 | 265 | 311 | 269 | 261 | 142 | 218 |
| 10 | 509 | 127 | 197 | 340 | 508 | 500 | 277 | 300 | 257 | 228 | 131 | 197 |
| 11 | 466 | 134 | 196 | 449 | 459 | 493 | 336 | 287 | 239 | 208 | 121 | 191 |
| 12 | 390 | 356 | 232 | 474 | 374 | 447 | 379 | 275 | 246 | 190 | 112 | 195 |
| 13 | 366 | 1680 | 212 | 822 | 315 | 349 | 382 | 268 | 276 | 172 | 104 | 381 |
| 14 | 372 | 1640 | 179 | 1670 | 276 | 302 | 347 | 266 | 263 | 157 | 98 | 591 |
| 15 | 322 | 1130 | 307 | 2290 | 242 | 295 | 309 | 265 | 240 | 145 | 91 | 615 |
| 16 | 282 | 809 | 478 | 1610 | 213 | 304 | 278 | 260 | 220 | 145 | 86 | 499 |
| 17 | 303 | 620 | 540 | 1530 | 202 | 277 | 252 | 250 | 204 | 135 | 80 | 397 |
| 18 | 358 | 510 | 576 | 1620 | 275 | 235 | 244 | 243 | 194 | 128 | 75 | 324 |
| 19 | 477 | 392 | 582 | 1710 | 338 | 201 | 221 | 243 | 189 | 124 | 71 | 271 |
| 20 | 526 | 317 | 717 | 1290 | 453 | 177 | 200 | 254 | 186 | 123 | 77 | 239 |
| 21 | 463 | 262 | 899 | 1180 | 622 | 157 | 186 | 273 | 185 | 121 | 74 | 583 |
| 22 | 408 | 231 | 1990 | 1220 | 558 | 147 | 211 | 284 | 181 | 120 | 71 | 791 |
| 23 | 433 | 208 | 2730 | 1160 | 463 | 142 | 359 | 279 | 177 | 118 | 66 | 1120 |
| 24 | 481 | 225 | 1970 | 852 | 390 | 139 | 497 | 270 | 173 | 114 | 62 | 1750 |
| 25 | 1400 | 240 | 1390 | 606 | 320 | 138 | 777 | 282 | 167 | 109 | 58 | 1610 |
| 26 | 3240 | 210 | 989 | 443 | 268 | 138 | 1060 | 309 | 163 | 105 | 57 | 1100 |
| 27 | 2390 | 337 | 708 | 331 | 228 | 137 | 1000 | 332 | 157 | 100 | 66 | 816 |
| 28 | 1700 | 252 | 505 | 268 | 200 | 228 | 788 | 324 | 152 | 100 | 86 | 679 |
| 29 | 1160 | 212 | 370 | 231 | 177 | 494 | 633 | 304 | 148 | 104 | 104 | 524 |
| 30 | 792 | 259 | 301 | 198 | --- | 509 | 535 | 305 | 153 | 106 | 109 | 412 |
| 31 | 576 | --- | 257 | 170 | --- | 437 | --- | 303 | --- | 105 | 107 | --- |
| TOTAL | 20171 | 12258 | 19996 | 21749 | 8290 | 8476 | 11803 | 10215 | 6907 | 4646 | 3270 | 15178 |
| MEAN | 651 | 409 | 645 | 702 | 286 | 273 | 393 | 330 | 230 | 150 | 105 | 506 |
| MAX | 3240 | 1680 | 2730 | 2290 | 622 | 557 | 1060 | 561 | 345 | 298 | 184 | 1750 |
| MIN | 178 | 127 | 179 | 102 | 99 | 134 | 186 | 243 | 148 | 100 | 57 | 101 |
| MED | 433 | 255 | 470 | 443 | 268 | 228 | 291 | 300 | 229 | 126 | 103 | 352 |
| AC-FT | 40010 | 24310 | 39660 | 43140 | 16440 | 16810 | 23410 | 20260 | 13700 | 9220 | 6490 | 30110 |
| CFSM | 20.3 | 12.7 | 20.1 | 21.9 | 8.91 | 8.52 | 12.3 | 10.3 | 7.17 | 4.67 | 3.29 | 15.8 |
| IN. | 23.38 | 14.21 | 23.17 | 25.20 | 9.61 | 9.82 | 13.68 | 11.84 | 8.00 | 5.38 | 3.79 | 17.59 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 694 | 565 | 424 | 360 | 316 | 262 | 353 | 501 | 468 | 332 | 330 | 450 |
| MAX | 1326 | 1767 | 1081 | 975 | 944 | 673 | 655 | 867 | 764 | 718 | 767 | 966 |
| (WY) | 1975 | 1918 | 1931 | 1926 | 1993 | 1986 | 1949 | 1999 | 1951 | 1976 | 1972 | 2001 |
| MIN | 237 | 89.2 | 83.4 | 37.9 | 37.8 | 71.4 | 130 | 182 | 142 | 65.3 | 50.7 | 80.0 |
| (WY) | 1926 | 1974 | 1984 | 1950 | 1969 | 1969 | 1967 | 1998 | 1998 | 1958 | 1965 | 1965 |

# See Period of Record

## 15072000 FISH CREEK NEAR KETCHIKAN—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1915 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 161036 | | 142959 | | | |
| ANNUAL MEAN | 441 | | 391 | | 422 | |
| HIGHEST ANNUAL MEAN | | | | | 556 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 302 | 1978 |
| HIGHEST DAILY MEAN | 3240 | Oct 26 | 3240 | Oct 26 | 4410 | Oct 15 1961 |
| LOWEST DAILY MEAN | 51 | Aug 14 | 57 | Aug 26 | 20 | Sep 9 1928 |
| ANNUAL SEVEN-DAY MINIMUM | 59 | Aug 9 | 65 | Aug 21 | 23 | Sep 5 1928 |
| MAXIMUM PEAK FLOW | | | 3640 | Oct 26 | a5400 | Oct 15 1961 |
| MAXIMUM PEAK STAGE | | | 4.39 | Oct 26 | b5.85 | Oct 15 1961 |
| INSTANTANEOUS LOW FLOW | | | 53 | Aug 26 | 20 | Sep 9 1928 |
| ANNUAL RUNOFF (AC-FT) | 319400 | | 283600 | | 305900 | |
| ANNUAL RUNOFF (CFSM) | 13.7 | | 12.2 | | 13.2 | |
| ANNUAL RUNOFF (INCHES) | 186.62 | | 165.67 | | 178.70 | |
| 10 PERCENT EXCEEDS | 890 | | 789 | | 862 | |
| 50 PERCENT EXCEEDS | 308 | | 268 | | 319 | |
| 90 PERCENT EXCEEDS | 135 | | 114 | | 99 | |

\# See Period of Record
a From rating curve extended above 3,600 $ft^3/s$
b At site then in use

## 15081497 STANEY CREEK NEAR KLAWOCK

LOCATION.--Lat 55°48'05", long 133°06'31", in SW¼ NW¼ sec. 14, T. 70 S., R. 80 E. (Craig D-4 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on right bank, approximately 2.9 mi upstream from mouth, and 17 mi north of Klawock.

DRAINAGE AREA.--50.6 $mi^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1989 to current year. Equivalent daily discharge record collected at station No. 15081500 near Craig during water years 1964-81. Drainage area, 51.6 $mi^2$.

GAGE.--Water-stage recorder. Elevation of gage is 47 ft above sea level, by barometer.

REMARKS.--Records fair, except for discharges above 6,000 $ft^3/s$, and estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 $ft^3/s$ and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Oct 26 | 0545 | 11300 | 15.18 | Sep 21 | 0600 | 11200 | 15.16 |
| Nov 30 | 2245 | 7370 | 13.85 | Sep 24 | 0200 | *11600 | 15.26 |
| Dec 19 | 0345 | 8050 | 14.11 | | | | |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 91 | 110 | 3050 | e170 | e30 | 55 | 216 | 121 | 322 | 15 | 29 | 45 |
| 2 | 74 | 90 | 1400 | e120 | e25 | 51 | 363 | 100 | 293 | 16 | 145 | 35 |
| 3 | 64 | 75 | 370 | e90 | e30 | 84 | 366 | 163 | 127 | 16 | 222 | 403 |
| 4 | 58 | 63 | 212 | e70 | e50 | 147 | 380 | 128 | 67 | 16 | 129 | 644 |
| 5 | 69 | 56 | 216 | e56 | e100 | 235 | 204 | 95 | 48 | 18 | 232 | 168 |
| 6 | 234 | 53 | 175 | e45 | e200 | 274 | 163 | 65 | 39 | 257 | 236 | 144 |
| 7 | 312 | 49 | 133 | e50 | 489 | 2380 | 294 | 55 | 33 | 214 | 114 | 237 |
| 8 | 193 | 49 | 102 | e80 | 1090 | 2210 | 244 | 48 | 30 | 91 | 77 | 193 |
| 9 | 133 | e54 | 93 | e600 | 1370 | 669 | 161 | 46 | 27 | 52 | 50 | 106 |
| 10 | 193 | 175 | 113 | e650 | 688 | 457 | 230 | 52 | 24 | 37 | 38 | 71 |
| 11 | 186 | 294 | 100 | 473 | 284 | 645 | 304 | 52 | 23 | 37 | 32 | 50 |
| 12 | 117 | 5010 | e120 | 553 | 202 | 313 | 245 | 46 | 23 | 37 | 28 | 42 |
| 13 | 144 | 3730 | 181 | 1450 | 208 | 192 | 173 | 45 | 24 | 31 | 25 | 566 |
| 14 | 379 | 612 | 112 | 1780 | 224 | 170 | 149 | 45 | 25 | 26 | 23 | 350 |
| 15 | 191 | 332 | 1400 | 616 | 136 | 620 | 118 | 41 | 22 | 23 | 22 | 253 |
| 16 | 131 | 257 | 1810 | 339 | 106 | 1080 | 82 | 38 | 21 | 24 | 21 | 145 |
| 17 | 255 | 234 | 1390 | 979 | 163 | 376 | 65 | 35 | 20 | 46 | 21 | 85 |
| 18 | 373 | 223 | 1980 | 1490 | 704 | 202 | 63 | 35 | 19 | 37 | 22 | 68 |
| 19 | 370 | 151 | 5070 | 510 | 568 | 139 | 56 | 37 | 18 | 30 | 27 | 52 |
| 20 | 340 | 107 | 957 | 685 | 1060 | 117 | 52 | 36 | 17 | 31 | 40 | 186 |
| 21 | 217 | 135 | 755 | 749 | 626 | 106 | 52 | 35 | 16 | 64 | 34 | 4440 |
| 22 | 294 | e180 | 2950 | 586 | 296 | 144 | 75 | 33 | 16 | 45 | 27 | 1120 |
| 23 | 719 | 367 | 2050 | 475 | 195 | 179 | 188 | 28 | 15 | 32 | 23 | 3770 |
| 24 | 297 | 647 | 458 | 252 | 185 | 201 | 876 | 30 | 15 | 27 | 21 | 3910 |
| 25 | 3460 | 807 | 336 | e130 | 133 | 185 | 971 | 49 | 15 | 28 | 19 | 552 |
| 26 | 4450 | 360 | 220 | e80 | 105 | 151 | 1160 | 50 | 15 | 30 | 22 | 231 |
| 27 | 742 | 239 | 154 | e50 | 83 | 148 | 294 | 51 | 16 | 31 | 119 | 233 |
| 28 | 1260 | 165 | 114 | e48 | 68 | 620 | 168 | 42 | 16 | 52 | 140 | 208 |
| 29 | 330 | 272 | 133 | e46 | 62 | 1640 | 120 | 38 | 15 | 92 | 65 | 131 |
| 30 | 187 | 2450 | 173 | e45 | --- | 850 | 108 | 89 | 15 | 49 | 55 | 97 |
| 31 | 137 | --- | e271 | e36 | --- | 297 | --- | 189 | --- | 34 | 70 | --- |
| TOTAL | 16000 | 17346 | 26598 | 13303 | 9480 | 14937 | 7940 | 1917 | 1376 | 1538 | 2128 | 18535 |
| MEAN | 516 | 578 | 858 | 429 | 327 | 482 | 265 | 61.8 | 45.9 | 49.6 | 68.6 | 618 |
| MAX | 4450 | 5010 | 5070 | 1780 | 1370 | 2380 | 1160 | 189 | 322 | 257 | 236 | 4440 |
| MIN | 58 | 49 | 93 | 36 | 25 | 51 | 52 | 28 | 15 | 15 | 19 | 35 |
| AC-FT | 31740 | 34410 | 52760 | 26390 | 18800 | 29630 | 15750 | 3800 | 2730 | 3050 | 4220 | 36760 |
| CFSM | 10.2 | 11.4 | 17.0 | 8.48 | 6.46 | 9.52 | 5.23 | 1.22 | 0.91 | 0.98 | 1.36 | 12.2 |
| IN. | 11.76 | 12.75 | 19.55 | 9.78 | 6.97 | 10.98 | 5.84 | 1.41 | 1.01 | 1.13 | 1.56 | 13.63 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 649 | 558 | 610 | 461 | 381 | 347 | 294 | 220 | 116 | 91.1 | 189 | 500 |
| MAX | 1123 | 996 | 1270 | 782 | 983 | 565 | 559 | 558 | 252 | 200 | 469 | 898 |
| (WY) | 2000 | 1992 | 1992 | 1992 | 1991 | 1994 | 1997 | 1999 | 1999 | 1997 | 2002 | 2003 |
| MIN | 403 | 201 | 267 | 240 | 152 | 104 | 144 | 61.8 | 26.5 | 22.1 | 26.6 | 166 |
| (WY) | 2003 | 1997 | 1997 | 1998 | 1994 | 2002 | 2003 | 2004 | 1993 | 1993 | 1993 | 1995 |

\# See period of Record;partial years used in monthly summary of statistics
e Estimated

## 15081497 STANEY CREEK NEAR KLAWOCK—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1990 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 138776 | | 131098 | | | |
| ANNUAL MEAN | 380 | | 358 | | 368 | |
| HIGHEST ANNUAL MEAN | | | | | 506 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 283 | 1995 |
| HIGHEST DAILY MEAN | 5070 | Dec 19 | 5070 | Dec 19 | 14900 | Oct 26 1993 |
| LOWEST DAILY MEAN | a17 | Aug 11 | b15 | Jun 23 | 4.4 | Jul 21 1993 |
| ANNUAL SEVEN-DAY MINIMUM | 18 | Aug 8 | 15 | Jun 23 | 6.0 | Jul 15 1993 |
| MAXIMUM PEAK FLOW | | | 11600 | Sep 24 | c19800 | Oct 26 1993 |
| MAXIMUM PEAK STAGE | | | 15.26 | Sep 24 | 17.20 | Oct 26 1993 |
| INSTANTANEOUS LOW FLOW | | | d14 | Jun 24 | 4.0 | Jul 21 1993 |
| ANNUAL RUNOFF (AC-FT) | 275300 | | 260000 | | 266600 | |
| ANNUAL RUNOFF (CFSM) | 7.51 | | 7.08 | | 7.27 | |
| ANNUAL RUNOFF (INCHES) | 102.03 | | 96.38 | | 98.80 | |
| 10 PERCENT EXCEEDS | 897 | | 771 | | 879 | |
| 50 PERCENT EXCEEDS | 145 | | 130 | | 168 | |
| 90 PERCENT EXCEEDS | 32 | | 25 | | 37 | |

\# See Period of Record;partial years used in monthly statistics
a Aug. 11-13
b Jun. 23-26, 29-30, and Jul. 1
c From rating curve extended above 3300 $ft^3/sec$
d Jun. 24-26

## 15081497 STANEY CREEK NEAR KLAWOCK—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1990 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: January 1990 to current year.

INSTRUMENTATION.--Electronic water temperature recorder since January 11, 1990, set for 2-hour recording interval. As of April 9, 1996, recorder set to 15-minute recording interval.

REMARKS.-- Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross-section on August 25. No variation was found in the temperature cross-section or between mean stream temperature and temperature recorded at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE.--Maximum recorded, 26.0°C, June 29, 1990, but may have been higher during period of instrument malfunction July 9 to August 23, 1990; minimum, 0.0°C on many days during winter.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE.--Maximum, 23.5°C, June 20; minimum, 0.0°C on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Location in X-sect. looking dwnstrm ft from l bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| AUG | | | | | | | |
| 25... | 1100 | 60.5 | 6.00 | 6.82 | 18 | 14.0 | 20.5 |
| 25... | 1101 | 60.5 | 18.0 | 6.82 | 18 | 14.0 | 20.5 |
| 25... | 1102 | 60.5 | 30.0 | 6.82 | 18 | 14.0 | 20.5 |
| 25... | 1103 | 60.5 | 42.0 | 6.82 | 18 | 14.0 | 20.5 |
| 25... | 1104 | 60.5 | 54.0 | 6.82 | 18 | 14.0 | 20.5 |

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 10.5 | 8.5 | 9.5 | 5.0 | 3.0 | 4.0 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 2 | 10.5 | 9.5 | 10.0 | 4.5 | 2.5 | 3.5 | 3.0 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 3 | 10.5 | 9.5 | 10.0 | 4.0 | 2.5 | 3.5 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 4 | 11.5 | 9.5 | 10.0 | 3.5 | 1.5 | 2.5 | 2.5 | 1.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 5 | 10.0 | 8.5 | 9.5 | 3.0 | 1.0 | 2.0 | 3.0 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 6 | 10.5 | 9.5 | 10.0 | 3.0 | 1.0 | 2.0 | 3.0 | 1.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 7 | 10.0 | 9.0 | 9.5 | 2.5 | 1.0 | 2.0 | 3.0 | 1.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 8 | 9.5 | 8.0 | 9.0 | 2.5 | 0.5 | 2.0 | 2.5 | 0.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 9 | 9.5 | 8.5 | 9.0 | 3.0 | 0.0 | 1.5 | 2.0 | 1.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 10 | 8.5 | 7.5 | 8.0 | 2.0 | 0.5 | 1.5 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 11 | 8.0 | 7.0 | 7.5 | 3.5 | 1.5 | 2.5 | 2.0 | 0.0 | 1.5 | 0.5 | 0.0 | 0.0 |
| 12 | 8.0 | 7.0 | 7.5 | 5.5 | 3.5 | 5.0 | 1.5 | 0.0 | 0.5 | 1.0 | 0.0 | 0.0 |
| 13 | 8.0 | 7.0 | 7.5 | 6.0 | 5.0 | 5.5 | 1.5 | 0.0 | 1.0 | 1.0 | 0.0 | 0.5 |
| 14 | 8.0 | 6.5 | 7.5 | 5.0 | 4.0 | 4.5 | 2.0 | 0.0 | 1.0 | 1.5 | 1.0 | 1.0 |
| 15 | 7.0 | 5.5 | 6.0 | 5.0 | 4.5 | 4.5 | 2.5 | 0.0 | 1.0 | 2.0 | 1.0 | 1.5 |
| 16 | 7.5 | 6.0 | 7.0 | 5.0 | 4.0 | 4.5 | 2.0 | 1.5 | 1.5 | 2.0 | 1.0 | 1.5 |
| 17 | 8.0 | 7.0 | 7.5 | 4.5 | 1.5 | 3.5 | 2.0 | 2.0 | 2.0 | 2.0 | 1.0 | 1.5 |
| 18 | 8.0 | 7.0 | 7.5 | 3.5 | 1.5 | 2.5 | 2.5 | 2.0 | 2.5 | 2.5 | 2.0 | 2.0 |
| 19 | 8.0 | 7.5 | 7.5 | 3.0 | 1.0 | 2.5 | 3.0 | 2.5 | 3.0 | 2.5 | 1.5 | 2.0 |
| 20 | 7.5 | 6.0 | 6.5 | 2.5 | 0.5 | 1.5 | 3.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.5 |
| 21 | 7.5 | 6.0 | 6.5 | 1.5 | 0.0 | 0.0 | 3.5 | 2.5 | 3.0 | 3.0 | 2.5 | 3.0 |
| 22 | 7.5 | 7.0 | 7.0 | 0.5 | 0.0 | 0.0 | 4.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.5 |
| 23 | 7.0 | 6.5 | 7.0 | 2.0 | 0.5 | 1.0 | 4.0 | 3.5 | 3.5 | 3.0 | 2.0 | 2.5 |
| 24 | 7.5 | 6.5 | 7.0 | 2.5 | 1.5 | 1.5 | 4.0 | 3.5 | 3.5 | 2.0 | 0.5 | 1.5 |
| 25 | 9.0 | 7.5 | 8.5 | 2.5 | 1.5 | 2.0 | 3.5 | 1.5 | 3.0 | 2.0 | 0.0 | 0.5 |
| 26 | 9.5 | 8.5 | 9.0 | 2.5 | 1.5 | 2.0 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 27 | 8.5 | 8.0 | 8.5 | 2.5 | 0.5 | 1.5 | 2.5 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 28 | 8.0 | 6.5 | 7.5 | 3.0 | 1.5 | 2.0 | 2.5 | 1.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 29 | 6.5 | 4.5 | 5.5 | 2.5 | 0.5 | 1.0 | 2.5 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 30 | 5.0 | 3.0 | 4.0 | 3.0 | 0.5 | 1.5 | 2.5 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 31 | 4.0 | 2.5 | 3.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| MONTH | 11.5 | 2.5 | 7.8 | 6.0 | 0.0 | 2.5 | 4.0 | 0.0 | 2.1 | 3.5 | 0.0 | 0.8 |

## 15081497 STANEY CREEK NEAR KLAWOCK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 2.0 | 0.5 | 1.5 | 4.0 | 2.0 | 3.5 | 9.0 | 7.0 | 8.0 |
| 2 | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.0 | 4.5 | 3.5 | 4.0 | 9.5 | 7.0 | 8.0 |
| 3 | 0.0 | 0.0 | 0.0 | 2.5 | 1.0 | 2.0 | 5.5 | 3.5 | 4.5 | 9.0 | 7.0 | 8.0 |
| 4 | 0.0 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 5.5 | 3.5 | 4.5 | 11.5 | 6.0 | 8.5 |
| 5 | 0.0 | 0.0 | 0.0 | 2.5 | 1.0 | 1.5 | 6.0 | 4.0 | 4.5 | 12.0 | 6.5 | 9.0 |
| 6 | 0.0 | 0.0 | 0.0 | 2.5 | 1.0 | 2.0 | 6.5 | 4.0 | 5.0 | 12.5 | 6.5 | 9.5 |
| 7 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 7.0 | 5.0 | 6.0 | 12.5 | 7.0 | 9.5 |
| 8 | 0.5 | 0.0 | 0.0 | 3.0 | 2.0 | 2.5 | 6.5 | 4.0 | 5.0 | 10.0 | 7.5 | 8.0 |
| 9 | 1.0 | 0.0 | 0.5 | 2.5 | 1.5 | 2.0 | 6.0 | 4.5 | 5.0 | 10.0 | 7.5 | 8.5 |
| 10 | 1.5 | 1.0 | 1.0 | 3.0 | 2.0 | 2.5 | 6.5 | 5.0 | 5.5 | 13.0 | 7.5 | 10.0 |
| 11 | 2.0 | 1.0 | 1.5 | 3.0 | 2.5 | 2.5 | 7.0 | 5.5 | 6.0 | 14.5 | 7.5 | 11.0 |
| 12 | 2.5 | 1.5 | 2.0 | 3.0 | 1.5 | 2.5 | 6.5 | 5.5 | 6.0 | 15.5 | 8.0 | 11.5 |
| 13 | 3.0 | 2.0 | 2.5 | 3.0 | 2.0 | 2.5 | 7.5 | 5.0 | 6.0 | 15.5 | 9.0 | 12.0 |
| 14 | 2.5 | 1.0 | 2.0 | 3.0 | 2.0 | 2.5 | 7.5 | 5.0 | 6.0 | 15.5 | 10.0 | 12.5 |
| 15 | 2.0 | 1.0 | 1.5 | 2.5 | 1.5 | 2.0 | 7.0 | 4.0 | 5.5 | 12.5 | 10.5 | 11.5 |
| 16 | 2.5 | 1.5 | 2.0 | 2.5 | 2.0 | 2.0 | 8.0 | 4.0 | 6.0 | 13.5 | 10.0 | 11.5 |
| 17 | 3.0 | 2.0 | 2.5 | 3.0 | 1.5 | 2.0 | 7.0 | 5.0 | 6.0 | 14.0 | 8.5 | 11.5 |
| 18 | 2.5 | 2.0 | 2.5 | 3.0 | 2.0 | 2.5 | 7.5 | 4.5 | 6.0 | 16.0 | 9.5 | 12.5 |
| 19 | 2.5 | 2.0 | 2.5 | 3.0 | 1.5 | 2.5 | 8.0 | 4.0 | 6.0 | 17.0 | 10.0 | 13.5 |
| 20 | 3.0 | 2.5 | 2.5 | 3.5 | 2.0 | 3.0 | 9.5 | 4.5 | 7.0 | 17.5 | 10.5 | 14.0 |
| 21 | 3.5 | 2.5 | 3.0 | 4.0 | 2.5 | 3.0 | 10.0 | 5.0 | 7.5 | 17.5 | 11.5 | 14.5 |
| 22 | 3.0 | 2.0 | 2.5 | 5.0 | 3.0 | 4.0 | 8.0 | 6.0 | 6.5 | 17.0 | 10.0 | 14.0 |
| 23 | 4.0 | 2.5 | 3.0 | 5.0 | 3.0 | 4.0 | 7.0 | 4.5 | 5.5 | 17.5 | 10.5 | 14.0 |
| 24 | 3.0 | 2.0 | 2.5 | 5.0 | 4.0 | 4.5 | 6.0 | 5.0 | 5.0 | 14.0 | 11.5 | 12.5 |
| 25 | 3.0 | 2.0 | 2.5 | 5.5 | 3.5 | 4.0 | 5.5 | 5.0 | 5.0 | 13.0 | 11.5 | 12.0 |
| 26 | 2.5 | 1.5 | 2.0 | 5.0 | 3.0 | 4.0 | 7.0 | 5.0 | 6.0 | 13.5 | 11.0 | 12.0 |
| 27 | 2.0 | 1.0 | 1.5 | 5.0 | 3.5 | 4.0 | 8.0 | 5.0 | 6.0 | 15.0 | 10.5 | 12.5 |
| 28 | 2.0 | 0.0 | 1.5 | 4.5 | 3.5 | 4.0 | 9.0 | 5.0 | 6.5 | 12.5 | 10.5 | 11.5 |
| 29 | 2.5 | 1.0 | 2.0 | 4.0 | 3.5 | 3.5 | 10.0 | 5.0 | 7.0 | 11.5 | 10.0 | 11.0 |
| 30 | --- | --- | --- | 4.0 | 2.5 | 3.5 | 11.5 | 6.0 | 8.0 | 11.5 | 10.0 | 10.5 |
| 31 | --- | --- | --- | 4.0 | 2.0 | 3.0 | --- | --- | --- | 10.0 | 9.0 | 9.5 |
| MONTH | 4.0 | 0.0 | 1.5 | 5.5 | 0.5 | 2.7 | 11.5 | 2.0 | 5.7 | 17.5 | 6.0 | 11.0 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 10.0 | 8.0 | 9.0 | 18.0 | 16.0 | 17.0 | 16.5 | 14.0 | 15.0 | 15.0 | 11.0 | 13.0 |
| 2 | 9.5 | 8.0 | 9.0 | 17.0 | 16.0 | 16.5 | 15.5 | 13.5 | 14.0 | 13.5 | 11.0 | 12.5 |
| 3 | 13.0 | 8.0 | 10.0 | 18.0 | 15.5 | 17.0 | 15.0 | 12.5 | 13.5 | 13.0 | 12.0 | 12.5 |
| 4 | 11.5 | 9.5 | 10.5 | 17.0 | 15.5 | 16.5 | 15.5 | 12.0 | 14.0 | 13.0 | 11.5 | 12.0 |
| 5 | 15.0 | 10.5 | 12.5 | 16.5 | 14.0 | 15.5 | 15.0 | 13.0 | 14.0 | 12.0 | 10.0 | 11.0 |
| 6 | 14.0 | 11.0 | 12.5 | 14.0 | 11.5 | 13.0 | 14.0 | 11.5 | 13.0 | 12.5 | 10.5 | 11.5 |
| 7 | 17.5 | 11.5 | 14.5 | 14.5 | 11.0 | 12.5 | 14.5 | 11.0 | 12.5 | 12.5 | 11.0 | 11.5 |
| 8 | 16.5 | 13.0 | 14.5 | 17.0 | 12.5 | 14.5 | 15.5 | 12.0 | 13.5 | 12.0 | 10.0 | 11.0 |
| 9 | 17.0 | 13.0 | 14.5 | 17.5 | 13.5 | 15.0 | 18.0 | 12.5 | 15.5 | 13.0 | 10.0 | 11.5 |
| 10 | 14.5 | 12.5 | 14.0 | 16.0 | 14.5 | 15.0 | 17.5 | 14.0 | 16.0 | 11.5 | 9.5 | 10.5 |
| 11 | 13.0 | 12.0 | 12.5 | 17.0 | 14.0 | 15.0 | 18.5 | 14.5 | 16.5 | 12.5 | 10.0 | 11.0 |
| 12 | 13.5 | 11.5 | 12.5 | 19.5 | 13.0 | 16.5 | 18.5 | 14.5 | 16.5 | 11.5 | 10.0 | 11.0 |
| 13 | 13.0 | 12.5 | 12.5 | 21.0 | 14.5 | 18.0 | 19.0 | 14.0 | 17.0 | 11.5 | 10.5 | 11.0 |
| 14 | 13.5 | 12.5 | 13.0 | 22.0 | 15.5 | 18.5 | 20.0 | 14.0 | 17.5 | 11.0 | 9.5 | 10.5 |
| 15 | 13.0 | 12.0 | 12.5 | 23.0 | 15.5 | 19.5 | 20.0 | 16.0 | 18.5 | 10.5 | 9.0 | 10.0 |
| 16 | 17.5 | 12.5 | 14.5 | 20.0 | 16.0 | 18.0 | 20.5 | 16.5 | 19.0 | 10.0 | 8.0 | 9.0 |
| 17 | 20.0 | 13.5 | 16.5 | 18.5 | 16.0 | 17.0 | 19.5 | 17.0 | 17.5 | 10.5 | 7.5 | 9.0 |
| 18 | 21.0 | 15.0 | 18.0 | 21.0 | 14.0 | 17.0 | 19.0 | 16.5 | 17.5 | 11.0 | 9.0 | 10.0 |
| 19 | 22.0 | 16.5 | 19.5 | 18.5 | 16.0 | 16.5 | 18.0 | 14.5 | 17.0 | 10.0 | 8.0 | 9.0 |
| 20 | 23.5 | 17.5 | 20.5 | 17.0 | 15.0 | 16.0 | 18.5 | 16.5 | 17.5 | 10.0 | 8.5 | 9.0 |
| 21 | 23.0 | 18.0 | 20.5 | 17.5 | 15.5 | 16.5 | 19.0 | 15.5 | 17.5 | 10.5 | 9.5 | 10.5 |
| 22 | 20.5 | 18.5 | 19.5 | 20.0 | 13.5 | 17.0 | 19.0 | 14.5 | 17.0 | 10.0 | 10.0 | 10.0 |
| 23 | 21.5 | 17.0 | 19.5 | 20.5 | 14.0 | 17.5 | 17.5 | 13.5 | 16.0 | 10.5 | 10.0 | 10.0 |
| 24 | 20.5 | 17.5 | 19.0 | 18.5 | 16.5 | 17.5 | 17.0 | 12.0 | 15.0 | 10.5 | 10.0 | 10.5 |
| 25 | 19.0 | 17.0 | 17.5 | 19.5 | 16.0 | 17.5 | 17.0 | 12.0 | 15.0 | 10.0 | 9.0 | 9.5 |
| 26 | 17.0 | 16.0 | 16.0 | 17.0 | 15.5 | 16.0 | 15.5 | 13.0 | 14.0 | 10.0 | 8.5 | 9.0 |
| 27 | 16.0 | 15.5 | 16.0 | 19.5 | 15.5 | 17.0 | 15.0 | 13.0 | 14.0 | 10.5 | 9.0 | 9.5 |
| 28 | 17.0 | 15.0 | 16.0 | 18.0 | 16.5 | 17.5 | 15.0 | 12.5 | 13.5 | 9.5 | 7.5 | 8.5 |
| 29 | 17.0 | 15.5 | 16.5 | 16.5 | 14.5 | 15.5 | 16.0 | 13.0 | 14.5 | 9.5 | 8.0 | 8.5 |
| 30 | 18.5 | 16.0 | 17.0 | 17.0 | 14.0 | 15.5 | 14.5 | 12.5 | 13.5 | 9.5 | 7.5 | 8.5 |
| 31 | --- | --- | --- | 18.5 | 13.0 | 15.5 | 15.0 | 11.0 | 13.0 | --- | --- | --- |
| MONTH | 23.5 | 8.0 | 15.0 | 23.0 | 11.0 | 16.4 | 20.5 | 11.0 | 15.4 | 15.0 | 7.5 | 10.4 |

## 15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK

LOCATION.--Lat 55°33'26", long 133°01'01", in NW¼ SW¼ NW¼ sec. 7, T. 73 S., R. 82 E. (Craig C-3 quad), Hydrologic Unit 19010103, on Prince of Wales Island, approximately 1.1 mi upstream from the mouth at Klawock Lake, and 2.9 mi east of the city of Klawock.

DRAINAGE AREA.--4.73 $mi^2$

PERIOD OF RECORD.--December 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 400 ft above sea level, from topographic map.

REMARKS.--Records fair, except for estimated discharges and those above 180 $ft^3/s$, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.1 | 8.1 | 168 | 7.2 | 3.8 | 4.2 | 16 | 8.8 | 37 | 1.8 | 13 | 7.4 |
| 2 | 8.2 | 6.7 | 147 | e5.3 | 3.3 | 3.9 | 43 | 10 | 26 | 2.3 | 68 | 11 |
| 3 | 7.4 | 5.8 | 29 | e4.3 | 3.2 | 6.1 | 42 | 22 | 14 | 3.3 | 35 | 135 |
| 4 | 7.4 | 5.0 | 15 | e3.7 | 3.4 | 12 | 32 | 12 | 9.1 | 2.8 | 16 | 90 |
| 5 | 19 | 4.5 | 14 | e3.3 | 72 | 17 | 15 | 9.2 | 7.3 | 56 | 22 | 22 |
| 6 | 28 | 4.1 | 11 | e3.0 | 65 | 52 | 11 | 7.2 | 5.8 | 174 | 20 | 17 |
| 7 | 33 | 4.0 | 8.0 | 5.4 | 66 | 159 | 37 | 6.2 | 5.0 | 55 | 19 | 13 |
| 8 | 22 | 3.7 | 6.4 | 37 | 134 | 195 | 22 | 5.5 | 4.3 | 20 | 14 | 9.3 |
| 9 | 30 | 16 | 5.4 | 135 | 143 | 53 | 13 | 6.3 | 3.8 | e11.8 | 9.1 | 7.9 |
| 10 | 47 | 30 | 6.1 | 126 | 71 | 34 | 30 | 7.8 | 3.4 | e9.0 | 6.3 | 6.7 |
| 11 | 20 | 60 | 12 | 38 | 22 | 81 | 36 | 6.9 | 3.2 | e7.5 | 4.9 | 6.0 |
| 12 | 12 | 329 | 27 | 48 | 14 | 34 | 20 | 6.3 | 3.7 | e6.2 | 4.1 | 10 |
| 13 | 19 | 297 | 13 | 130 | 14 | 15 | 14 | 6.0 | 4.2 | e5.8 | 3.5 | 70 |
| 14 | 41 | 48 | 8.0 | 194 | 16 | 15 | 11 | 5.9 | 3.9 | 4.6 | 3.1 | 31 |
| 15 | 15 | 26 | 227 | 66 | 10 | 32 | 8.5 | 5.6 | 3.4 | 3.6 | 2.7 | 32 |
| 16 | 19 | 16 | 170 | 26 | 8.4 | 101 | 6.5 | 5.1 | 3.1 | 6.4 | 2.4 | 13 |
| 17 | 36 | 17 | 104 | 97 | 27 | 29 | 6.2 | 4.9 | 2.7 | 11 | 2.4 | 8.5 |
| 18 | 28 | 14 | 203 | 145 | 92 | 14 | 8.5 | 4.9 | 2.4 | 7.1 | 2.4 | 10 |
| 19 | 31 | 9.1 | 346 | 57 | 44 | 9.2 | 6.9 | 5.1 | 2.1 | 5.2 | 4.7 | 7.1 |
| 20 | 22 | 8.0 | 83 | 59 | 78 | 8.1 | 5.9 | 5.2 | 1.8 | 4.9 | 8.3 | 62 |
| 21 | 20 | 10 | 141 | 67 | 52 | 9.1 | 5.4 | 5.1 | 1.6 | 19 | 5.4 | 250 |
| 22 | 57 | 39 | 393 | 101 | 22 | 33 | 19 | 4.7 | 1.5 | 11 | 4.2 | 72 |
| 23 | 57 | 25 | 171 | 74 | 14 | 25 | 31 | 4.3 | 1.4 | 6.2 | 3.3 | 218 |
| 24 | 76 | 87 | 39 | 22 | 11 | 24 | 113 | 7.0 | 1.3 | 8.5 | 2.8 | 170 |
| 25 | 404 | 56 | 27 | e11 | 8.6 | 20 | 100 | 12 | 1.3 | 68 | 2.4 | 28 |
| 26 | 306 | 23 | 15 | e6.8 | 7.0 | 15 | 83 | 62 | 1.5 | 40 | 5.6 | 12 |
| 27 | 131 | 14 | 10 | e4.8 | 5.8 | 14 | 20 | 27 | 2.0 | 17 | 32 | 21 |
| 28 | 137 | 11 | 12 | e3.6 | 5.1 | 87 | 11 | 13 | 1.9 | 25 | 26 | 16 |
| 29 | 27 | 15 | 15 | e3.0 | 4.7 | 173 | 8.7 | 15 | 1.8 | 37 | 14 | 11 |
| 30 | 13 | 154 | 11 | 6.7 | --- | 70 | 8.9 | 30 | 1.7 | 22 | 17 | 8.3 |
| 31 | 9.6 | --- | 13 | 4.4 | --- | 21 | --- | 41 | --- | 12 | 12 | --- |
| TOTAL | 1691.7 | 1346.0 | 2449.9 | 1494.5 | 1020.3 | 1365.6 | 784.5 | 372.0 | 162.2 | 664.0 | 385.6 | 1375.2 |
| MEAN | 54.6 | 44.9 | 79.0 | 48.2 | 35.2 | 44.1 | 26.1 | 12.0 | 5.41 | 21.4 | 12.4 | 45.8 |
| MAX | 404 | 329 | 393 | 194 | 143 | 195 | 113 | 62 | 37 | 174 | 68 | 250 |
| MIN | 7.4 | 3.7 | 5.4 | 3.0 | 3.2 | 3.9 | 5.4 | 4.3 | 1.3 | 1.8 | 2.4 | 6.0 |
| MED | 27 | 15 | 15 | 26 | 14 | 24 | 15 | 6.9 | 3.1 | 9.0 | 6.3 | 15 |
| AC-FT | 3360 | 2670 | 4860 | 2960 | 2020 | 2710 | 1560 | 738 | 322 | 1320 | 765 | 2730 |
| CFSM | 11.5 | 9.49 | 16.7 | 10.2 | 7.44 | 9.31 | 5.53 | 2.54 | 1.14 | 4.53 | 2.63 | 9.69 |
| IN. | 13.30 | 10.59 | 19.27 | 11.75 | 8.02 | 10.74 | 6.17 | 2.93 | 1.28 | 5.22 | 3.03 | 10.82 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 50.0 | 40.4 | 59.8 | 49.3 | 29.8 | 32.5 | 25.2 | 32.7 | 27.0 | 20.9 | 29.4 | 61.3 |
| MAX | 56.3 | 44.9 | 79.0 | 59.4 | 40.6 | 44.1 | 36.5 | 59.9 | 69.3 | 32.4 | 61.2 | 82.0 |
| (WY) | 2002 | 2004 | 2004 | 2001 | 2002 | 2004 | 2001 | 2001 | 2001 | 2001 | 2002 | 2003 |
| MIN | 39.2 | 37.3 | 46.8 | 36.2 | 16.1 | 13.3 | 13.5 | 12.0 | 5.41 | 11.0 | 12.4 | 45.8 |
| (WY) | 2003 | 2002 | 2002 | 2002 | 2003 | 2002 | 2003 | 2004 | 2004 | 2003 | 2004 | 2004 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 2001 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 13396.4 | | 13111.5 | | | |
| ANNUAL MEAN | 36.7 | | 35.8 | | 35.2 | |
| HIGHEST ANNUAL MEAN | | | | | 37.1 | 2002 |
| LOWEST ANNUAL MEAN | | | | | 32.8 | 2003 |
| HIGHEST DAILY MEAN | 404 | Oct 25 | 404 | Oct 25 | 404 | Oct 25 2003 |
| LOWEST DAILY MEAN | 2.0 | Mar 12 | a1.3 | Jun 24 | a1.3 | Jun 24 2004 |
| ANNUAL SEVEN-DAY MINIMUM | 2.5 | May 5 | 1.5 | Jun 20 | 1.5 | Jun 20 2004 |
| MAXIMUM PEAK FLOW | | | 745 | Oct 26 | 745 | Oct 26 2003 |
| MAXIMUM PEAK STAGE | | | 10.40 | Oct 26 | 10.40 | Oct 26 2003 |
| INSTANTANEOUS LOW FLOW | | | b1.2 | Jun 23 | b1.2 | Jun 23 2004 |
| ANNUAL RUNOFF (AC-FT) | 26570 | | 26010 | | 25520 | |
| ANNUAL RUNOFF (CFSM) | 7.76 | | 7.57 | | 7.45 | |
| ANNUAL RUNOFF (INCHES) | 105.36 | | 103.12 | | 101.18 | |
| 10 PERCENT EXCEEDS | 106 | | 98 | | 89 | |
| 50 PERCENT EXCEEDS | 15 | | 13 | | 16 | |

\# See Period of Record, partial years used in monthly statistics
a June 24 and 25.
b June 23-26.
e Estimated

## 15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 2004.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 2004 to September 2004.

INSTRUMENTATION.--Electronic water-temperature recorder since May 2004, recording interval 15-minutes.

REMARKS.--Records represent water temperature at sensor within 0.5°C. No temperature cross sections were taken in the 2004 water year. Missing record June 3-7, 23, 28-30, and July 1-12, due to thermistor and recorder malfunction. Partial record on May 5 when recorder started and June 2, 27, and July 13 due to thermistor and recorder malfunction.

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 6.0 | 7.5 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.5 | 6.0 | 7.5 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.0 | 7.0 | 7.5 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.0 | 7.0 | 7.5 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 6.5 | 8.0 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 6.5 | 8.5 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 7.5 | 9.0 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 8.0 | 9.5 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 9.0 | 9.5 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 9.5 | 9.5 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 9.0 | 9.5 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 8.5 | 9.5 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 8.0 | 9.5 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 8.5 | 10.0 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 9.0 | 10.5 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.5 | 9.0 | 10.5 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.0 | 9.0 | 10.5 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 9.5 | 10.0 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 9.5 | 10.0 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 9.0 | 10.0 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 8.0 | 9.0 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 7.5 | 9.0 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 9.0 | 9.5 |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 8.5 | 9.0 |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 8.0 | 8.5 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 8.5 | 9.0 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

15081614 HALFMILE CREEK ABOVE DIVERSION NEAR KLAWOCK—Continued

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 9.5 | 8.0 | 8.5 | --- | --- | --- | 14.0 | 13.0 | 13.5 | 13.0 | 11.0 | 12.0 |
| 2 | --- | 8.5 | --- | --- | --- | --- | 14.0 | 13.0 | 13.5 | 13.0 | 12.5 | 12.5 |
| 3 | --- | --- | --- | --- | --- | --- | 14.0 | 13.0 | 13.5 | 13.0 | 12.5 | 13.0 |
| 4 | --- | --- | --- | --- | --- | --- | 15.0 | 12.5 | 14.0 | 13.5 | 12.5 | 13.0 |
| 5 | --- | --- | --- | --- | --- | --- | 14.5 | 13.5 | 14.0 | 12.5 | 11.0 | 12.0 |
| 6 | --- | --- | --- | --- | --- | --- | 15.0 | 13.0 | 14.0 | 12.5 | 11.5 | 12.0 |
| 7 | --- | --- | --- | --- | --- | --- | 15.0 | 12.5 | 13.5 | 12.5 | 12.0 | 12.5 |
| 8 | 12.0 | 10.5 | 11.0 | --- | --- | --- | 15.0 | 13.5 | 14.0 | 12.0 | 10.5 | 11.0 |
| 9 | 10.5 | 9.5 | 10.5 | --- | --- | --- | 16.5 | 13.5 | 14.5 | 11.5 | 10.5 | 11.0 |
| 10 | 10.5 | 9.0 | 10.0 | --- | --- | --- | 16.5 | 15.0 | 16.0 | 10.5 | 9.5 | 10.0 |
| 11 | 9.5 | 8.5 | 9.0 | --- | --- | --- | 16.0 | 14.0 | 15.0 | 10.5 | 9.5 | 10.0 |
| 12 | 11.0 | 9.0 | 10.5 | --- | --- | --- | 15.0 | 13.5 | 14.0 | 11.0 | 10.0 | 10.5 |
| 13 | 10.5 | 10.0 | 10.5 | 15.0 | --- | --- | 15.0 | 13.0 | 14.0 | 11.0 | 10.5 | 11.0 |
| 14 | 12.0 | 9.5 | 11.0 | 15.5 | 13.5 | 14.5 | 15.5 | 13.0 | 14.5 | 11.0 | 10.5 | 10.5 |
| 15 | 11.5 | 9.5 | 10.5 | 16.5 | 13.5 | 15.0 | 16.5 | 14.5 | 15.5 | 10.5 | 9.5 | 10.0 |
| 16 | 13.0 | 10.0 | 11.5 | 16.0 | 14.0 | 15.0 | 17.0 | 15.5 | 16.0 | 9.5 | 8.0 | 9.0 |
| 17 | 14.5 | 10.5 | 12.5 | 15.5 | 14.0 | 14.5 | 16.0 | 15.5 | 15.5 | 10.0 | 8.5 | 9.5 |
| 18 | 16.5 | 12.0 | 14.5 | 15.5 | 13.0 | 14.5 | 16.5 | 15.0 | 15.5 | 10.0 | 8.5 | 9.5 |
| 19 | 18.0 | 14.0 | 16.0 | 15.5 | 14.5 | 15.0 | 15.5 | 15.0 | 15.5 | 9.0 | 8.0 | 8.5 |
| 20 | 18.5 | 14.5 | 16.5 | 15.5 | 14.0 | 15.0 | 15.5 | 14.5 | 15.0 | 11.0 | 8.5 | 9.0 |
| 21 | 18.0 | 15.0 | 16.5 | 15.0 | 13.5 | 14.5 | 16.0 | 14.5 | 15.5 | 11.5 | 10.5 | 11.0 |
| 22 | 17.0 | 15.0 | 16.0 | 16.0 | 13.0 | 14.5 | 15.5 | 14.5 | 15.0 | 10.5 | 10.0 | 10.0 |
| 23 | --- | --- | --- | 15.5 | 13.0 | 14.5 | 14.5 | 12.5 | 13.5 | 10.5 | 10.0 | 10.5 |
| 24 | 16.0 | 14.0 | 15.0 | 15.5 | 13.5 | 14.5 | 13.5 | 11.5 | 12.5 | 10.5 | 10.0 | 10.5 |
| 25 | 14.0 | 13.5 | 14.0 | 13.5 | 13.0 | 13.0 | 13.0 | 11.5 | 12.5 | 10.0 | 8.0 | 9.0 |
| 26 | 13.5 | 13.0 | 13.5 | 14.0 | 12.5 | 13.5 | 13.5 | 12.5 | 13.0 | 9.5 | 8.5 | 9.0 |
| 27 | 13.0 | --- | --- | 15.5 | 13.5 | 14.5 | 13.5 | 13.0 | 13.0 | 10.0 | 9.0 | 10.0 |
| 28 | --- | --- | --- | 15.0 | 14.0 | 14.5 | 13.5 | 12.5 | 13.5 | 9.0 | 7.0 | 8.0 |
| 29 | --- | --- | --- | 14.0 | 13.5 | 13.5 | 14.0 | 12.5 | 13.0 | 9.5 | 8.5 | 9.0 |
| 30 | --- | --- | --- | 14.0 | 13.0 | 13.5 | 13.5 | 12.0 | 13.0 | 9.5 | 8.5 | 9.0 |
| 31 | --- | --- | --- | 14.5 | 13.0 | 13.5 | 13.0 | 11.0 | 12.0 | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | 17.0 | 11.0 | 14.1 | 13.5 | 7.0 | 10.4 |

## 15085l00 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in NW¼ SW¼ sec. 6, T. 75 S., R. 86 E. (Craig B-2 quad) Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi downstream from unnamed tributary, and 10 mi south of Kasaan.

DRAINAGE AREA.--5.90 $mi^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

REVISED RECORDS.--WDR AK-85-1: 1950-1983 (P), 1984.

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 $ft^3/s$ and maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) |
|---|---|---|---|---|---|---|---|
| Oct 26 | 0245 | 717 | 4.97 | Dec 23 | 0030 | *983 | *5.68 |
| Dec 02 | 0700 | 564 | 4.58 | Feb 17 | 1600 | 745 | 5.07 |
| Dec 15 | 1630 | *983 | *5.68 | Mar 29 | 1745 | 478 | 4.33 |
| Dec 18 | 2315 | 932 | 5.55 | Sep 24 | 0445 | 612 | 4.72 |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13 | 21 | 173 | 13 | e6.0 | 11 | 30 | 16 | 26 | 3.9 | 2.3 | 3.7 |
| 2 | 11 | 18 | 212 | e11 | e6.0 | 9.7 | 91 | 17 | 22 | 3.9 | 11 | 3.4 |
| 3 | 10 | 15 | 57 | e8.5 | e6.2 | 12 | 63 | 34 | 17 | 3.5 | 10 | 14 |
| 4 | 9.2 | 13 | 42 | e7.2 | e7.0 | 13 | 41 | 22 | 13 | 3.2 | 7.2 | 29 |
| 5 | 32 | 12 | 60 | e6.8 | e100 | 27 | 29 | 18 | 13 | 5.8 | 6.0 | 11 |
| 6 | 61 | 11 | 52 | e6.6 | 37 | 53 | 26 | 14 | 11 | 23 | 4.7 | 7.9 |
| 7 | 27 | 9.4 | 33 | e12 | 21 | 163 | 57 | 12 | 9.6 | 11 | 3.9 | 6.2 |
| 8 | 24 | 8.4 | 25 | e30 | 35 | 161 | 31 | 11 | 8.2 | 13 | 3.7 | 5.5 |
| 9 | 19 | 8.8 | 19 | e150 | 73 | 69 | 23 | 10 | 7.0 | 9.1 | 3.3 | 4.6 |
| 10 | 19 | 10 | 16 | 146 | 65 | 36 | 43 | 9.4 | 6.5 | 6.9 | 3.0 | 4.1 |
| 11 | 21 | 14 | 24 | 52 | 37 | 39 | 41 | 9.0 | 6.2 | 6.0 | 2.5 | 4.2 |
| 12 | 17 | 96 | 31 | 113 | 30 | 39 | 32 | 8.5 | 71 | 5.1 | 2.4 | 38 |
| 13 | 20 | 244 | 25 | 245 | 37 | 26 | 24 | 8.2 | 54 | 4.5 | 2.2 | 72 |
| 14 | 23 | 104 | 18 | 200 | 30 | 23 | 20 | 7.8 | 24 | 3.9 | 2.0 | 23 |
| 15 | 16 | 194 | 530 | 83 | 20 | 37 | 17 | 7.7 | 17 | 3.6 | 1.9 | 18 |
| 16 | 56 | 89 | 194 | 54 | 28 | 58 | 14 | 7.3 | 13 | 4.0 | 1.9 | 13 |
| 17 | 73 | 64 | 105 | 210 | 427 | 32 | 12 | 6.9 | 11 | 3.8 | 2.0 | 9.5 |
| 18 | 62 | 46 | 293 | 197 | 238 | 22 | 12 | 6.8 | 9.2 | 3.6 | 1.9 | 8.3 |
| 19 | 40 | 31 | 615 | 64 | 68 | 17 | 11 | 7.0 | 7.8 | 3.6 | e2.1 | 6.6 |
| 20 | 28 | 23 | 220 | 89 | 66 | 30 | 10 | 7.3 | 6.9 | 5.4 | e2.5 | 7.2 |
| 21 | 90 | 18 | 287 | 68 | 55 | 27 | 9.3 | 7.5 | 6.2 | 6.7 | e2.6 | 80 |
| 22 | 56 | 20 | 596 | 64 | 36 | 31 | 22 | 7.3 | 5.5 | 4.3 | e2.1 | 42 |
| 23 | 53 | 24 | 394 | 39 | 48 | 30 | 22 | 6.8 | 4.8 | 3.3 | e2.0 | 63 |
| 24 | 92 | 31 | 146 | 26 | 39 | 34 | 34 | 7.4 | 4.3 | 2.8 | e2.0 | 241 |
| 25 | 413 | 48 | 107 | 18 | 25 | 43 | 103 | 8.0 | 4.1 | 2.6 | e2.0 | 54 |
| 26 | 387 | 32 | 46 | e11 | 20 | 25 | 97 | 7.3 | 4.1 | 2.4 | e2.6 | 27 |
| 27 | 109 | 26 | 31 | e8.0 | 15 | 20 | 40 | 6.9 | 4.9 | 2.4 | 3.1 | 24 |
| 28 | 101 | 20 | 21 | e6.5 | 13 | 156 | 26 | 7.4 | 4.3 | 2.4 | 3.6 | 18 |
| 29 | 54 | 26 | 16 | e7.0 | 12 | 259 | 20 | 14 | 4.0 | 2.4 | 3.8 | 14 |
| 30 | 35 | 94 | 15 | e6.8 | --- | 123 | 17 | 19 | 3.9 | 2.2 | 4.0 | 11 |
| 31 | 27 | --- | 14 | e6.6 | --- | 45 | --- | 22 | --- | 2.0 | 4.3 | --- |
| TOTAL | 1998.2 | 1370.6 | 4417 | 1959.0 | 1600.2 | 1670.7 | 1017.3 | 353.5 | 399.5 | 160.3 | 108.6 | 863.2 |
| MEAN | 64.5 | 45.7 | 142 | 63.2 | 55.2 | 53.9 | 33.9 | 11.4 | 13.3 | 5.17 | 3.50 | 28.8 |
| MAX | 413 | 244 | 615 | 245 | 427 | 259 | 103 | 34 | 71 | 23 | 11 | 241 |
| MIN | 9.2 | 8.4 | 14 | 6.5 | 6.0 | 9.7 | 9.3 | 6.8 | 3.9 | 2.0 | 1.9 | 3.4 |
| AC-FT | 3960 | 2720 | 8760 | 3890 | 3170 | 3310 | 2020 | 701 | 792 | 318 | 215 | 1710 |
| CFSM | 10.9 | 7.74 | 24.1 | 10.7 | 9.35 | 9.13 | 5.75 | 1.93 | 2.26 | 0.88 | 0.59 | 4.88 |
| IN. | 12.60 | 8.64 | 27.85 | 12.35 | 10.09 | 10.53 | 6.41 | 2.23 | 2.52 | 1.01 | 0.68 | 5.44 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 70.0 | 65.9 | 60.6 | 50.1 | 45.2 | 39.0 | 47.8 | 42.4 | 25.9 | 13.0 | 15.2 | 32.6 |
| MAX | 163 | 166 | 142 | 128 | 117 | 86.3 | 122 | 99.1 | 56.1 | 31.0 | 50.9 | 93.6 |
| (WY) | 1978 | 2000 | 2004 | 1992 | 1998 | 1984 | 1980 | 1999 | 1950 | 1991 | 2001 | 2001 |
| MIN | 23.0 | 17.1 | 8.29 | 3.00 | 5.00 | 10.1 | 19.1 | 11.4 | 5.45 | 2.66 | 1.81 | 2.69 |
| (WY) | 2003 | 1966 | 1984 | 1950 | 1950 | 1956 | 1967 | 2004 | 1958 | 1958 | 1993 | 1965 |

\# See Period of Record; partial years used in monthly summary statistics
e Estimated

## 15085l00 OLD TOM CREEK NEAR KASAAN—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1949 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 19689.8 | | 15918.1 | | | |
| ANNUAL MEAN | 53.9 | | 43.5 | | 42.3 | |
| HIGHEST ANNUAL MEAN | | | | | 63.1 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 25.2 | 1951 |
| HIGHEST DAILY MEAN | 615 | Dec 19 | 615 | Dec 19 | 858 | Oct 23 1990 |
| LOWEST DAILY MEAN | 1.4 | Aug 13 | a1.9 | Aug 15 | 0.28 | Nov 14 1965 |
| ANNUAL SEVEN-DAY MINIMUM | 1.7 | Aug 8 | 2.0 | Aug 13 | 0.55 | Nov 13 1965 |
| MAXIMUM PEAK FLOW | | | b983 | Dec 15 | c1490 | Apr 16 1952 |
| MAXIMUM PEAK STAGE | | | 5.68 | Dec 15 | 6.96 | Apr 16 1952 |
| INSTANTANEOUS LOW FLOW | | | 1.4 | Aug 16 | 0.16 | Nov 15 1965 |
| ANNUAL RUNOFF (AC-FT) | 39050 | | 31570 | | 30620 | |
| ANNUAL RUNOFF (CFSM) | 9.14 | | 7.37 | | 7.16 | |
| ANNUAL RUNOFF (INCHES) | 124.15 | | 100.36 | | 97.34 | |
| 10 PERCENT EXCEEDS | 118 | | 100 | | 94 | |
| 50 PERCENT EXCEEDS | 23 | | 18 | | 24 | |
| 90 PERCENT EXCEEDS | 6.2 | | 3.7 | | 6.5 | |

\# See Period of Record; partial years used in monthly summary statistics
a August 15, 16, and 18
b December 15 and 23
c From rating curve extended above 330 $ft^3/s$

## 15085l00 OLD TOM CREEK NEAR KASAAN—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for 15-minute recording interval since April 11,1996.

REMARKS.--Records represent water-temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on October 28 and January 13. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 18.5°C, July 3, 1998, and June 23, 2004; minimum, 0.0°C, on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 18.5°C, June 23; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Sample location, cross section ft from rt bank (72103) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| OCT | | | | | | | |
| 28... | 1429 | 41.5 | 1.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1430 | 41.5 | 6.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1431 | 41.5 | 11.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1432 | 41.5 | 16.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1433 | 41.5 | 21.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1434 | 41.5 | 26.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1435 | 41.5 | 31.0 | 2.74 | 101 | 7.5 | 6.0 |
| 28... | 1436 | 41.5 | 36.0 | 2.74 | 101 | 7.5 | 6.0 |
| JAN | | | | | | | |
| 13... | 1121 | 47.0 | 42.0 | 3.48 | 236 | 2.5 | 3.0 |
| 13... | 1122 | 47.0 | 33.0 | 3.48 | 236 | 2.5 | 3.0 |
| 13... | 1123 | 47.0 | 24.0 | 3.48 | 236 | 2.5 | 3.0 |
| 13... | 1124 | 47.0 | 15.0 | 3.48 | 236 | 2.5 | 3.0 |
| 13... | 1125 | 47.0 | 6.0 | 3.48 | 236 | 2.5 | 3.0 |

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 10.5 | 9.5 | 10.0 | 5.0 | 4.5 | 5.0 | 3.5 | 2.5 | 3.0 | 1.5 | 1.0 | 1.5 |
| 2 | 10.5 | 9.5 | 10.0 | 5.0 | 4.0 | 4.5 | 3.5 | 3.0 | 3.0 | 1.0 | 0.0 | 0.5 |
| 3 | 10.5 | 9.5 | 10.0 | 4.5 | 3.5 | 4.0 | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 4 | 10.5 | 9.5 | 10.0 | 3.5 | 2.5 | 3.0 | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 5 | 10.0 | 9.0 | 9.5 | 2.5 | 2.0 | 2.5 | 3.0 | 2.5 | 3.0 | 0.0 | 0.0 | 0.0 |
| 6 | 10.5 | 9.5 | 10.0 | 2.0 | 1.5 | 2.0 | 3.5 | 3.0 | 3.0 | 0.0 | 0.0 | 0.0 |
| 7 | 10.0 | 9.0 | 9.5 | 2.0 | 2.0 | 2.0 | 3.5 | 2.5 | 3.0 | 0.0 | 0.0 | 0.0 |
| 8 | 9.5 | 9.0 | 9.0 | 3.0 | 2.0 | 2.5 | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 9 | 9.5 | 9.0 | 9.0 | 3.5 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 10 | 9.0 | 8.0 | 8.5 | 4.0 | 3.0 | 3.5 | 2.0 | 1.5 | 1.5 | 1.5 | 0.0 | 1.0 |
| 11 | 8.5 | 8.0 | 8.0 | 4.5 | 3.5 | 4.0 | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 |
| 12 | 8.5 | 7.5 | 8.0 | 6.0 | 4.5 | 5.5 | 2.5 | 2.0 | 2.5 | 2.0 | 1.5 | 1.5 |
| 13 | 8.0 | 7.5 | 8.0 | 6.5 | 5.0 | 6.0 | 2.5 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 |
| 14 | 8.0 | 7.0 | 7.5 | 5.0 | 4.5 | 5.0 | 2.0 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 |
| 15 | 7.5 | 6.5 | 7.0 | 5.5 | 5.0 | 5.0 | 3.0 | 1.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 16 | 8.0 | 7.0 | 7.5 | 5.0 | 5.0 | 5.0 | 3.0 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 |
| 17 | 8.5 | 8.0 | 8.0 | 5.0 | 4.0 | 4.5 | 3.0 | 3.0 | 3.0 | 3.0 | 2.0 | 2.5 |
| 18 | 9.0 | 8.0 | 8.5 | 4.0 | 3.5 | 4.0 | 3.5 | 3.0 | 3.5 | 3.0 | 2.5 | 3.0 |
| 19 | 8.5 | 8.0 | 8.5 | 3.5 | 3.0 | 3.5 | 4.0 | 3.5 | 4.0 | 3.0 | 2.5 | 3.0 |
| 20 | 8.0 | 7.0 | 7.5 | 3.0 | 1.5 | 2.5 | 3.5 | 3.0 | 3.5 | 3.0 | 3.0 | 3.0 |
| 21 | 8.5 | 7.5 | 8.0 | 2.0 | 1.0 | 1.5 | 4.0 | 3.0 | 3.5 | 3.5 | 3.0 | 3.5 |
| 22 | 8.0 | 8.0 | 8.0 | 2.5 | 1.5 | 2.0 | 4.5 | 4.0 | 4.0 | 3.5 | 3.0 | 3.5 |
| 23 | 8.0 | 7.5 | 7.5 | 2.5 | 2.5 | 2.5 | 4.5 | 4.0 | 4.0 | 3.0 | 2.5 | 3.0 |
| 24 | 8.0 | 7.5 | 8.0 | 3.0 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 2.5 | 1.0 | 2.0 |
| 25 | 9.0 | 8.0 | 8.5 | 3.0 | 2.5 | 3.0 | 4.0 | 3.0 | 3.5 | 1.0 | 0.0 | 0.5 |
| 26 | 9.0 | 8.5 | 9.0 | 3.0 | 2.0 | 2.5 | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 27 | 8.5 | 8.5 | 8.5 | 2.5 | 1.5 | 2.0 | 2.5 | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 28 | 8.5 | 7.0 | 7.5 | 2.5 | 1.5 | 2.0 | 2.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 29 | 7.0 | 5.5 | 6.0 | 2.5 | 2.0 | 2.0 | 1.0 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 30 | 5.5 | 4.5 | 5.0 | 2.5 | 2.0 | 2.5 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 31 | 5.0 | 4.0 | 4.5 | --- | --- | --- | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| MONTH | 10.5 | 4.0 | 8.2 | 6.5 | 1.0 | 3.3 | 4.5 | 0.5 | 2.6 | 3.5 | 0.0 | 1.3 |

## 15085100 OLD TOM CREEK NEAR KASAAN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 0.0 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 4.0 | 2.5 | 3.5 | 9.0 | 7.5 | 8.0 |
| 2 | 0.0 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 4.0 | 3.5 | 3.5 | 8.0 | 7.0 | 7.5 |
| 3 | 0.0 | 0.0 | 0.0 | 3.0 | 2.0 | 2.5 | 4.5 | 3.5 | 4.0 | 7.5 | 6.5 | 7.0 |
| 4 | 0.0 | 0.0 | 0.0 | 3.0 | 2.0 | 2.5 | 4.5 | 3.5 | 4.0 | 9.0 | 6.0 | 7.5 |
| 5 | 0.5 | 0.0 | 0.0 | 2.5 | 1.5 | 2.0 | 5.0 | 3.5 | 4.0 | 9.5 | 6.5 | 7.5 |
| 6 | 1.5 | 0.5 | 1.0 | 2.5 | 2.0 | 2.0 | 5.5 | 4.0 | 4.5 | 9.5 | 6.0 | 7.5 |
| 7 | 2.0 | 1.0 | 1.5 | 3.0 | 2.5 | 2.5 | 5.5 | 4.0 | 4.5 | 9.5 | 6.0 | 7.5 |
| 8 | 2.0 | 1.5 | 1.5 | 3.0 | 3.0 | 3.0 | 6.0 | 4.0 | 4.5 | 8.5 | 7.0 | 8.0 |
| 9 | 2.0 | 1.0 | 1.5 | 3.0 | 2.5 | 2.5 | 5.0 | 4.5 | 5.0 | 9.0 | 7.5 | 8.0 |
| 10 | 2.0 | 1.5 | 2.0 | 3.5 | 2.5 | 3.0 | 5.0 | 4.5 | 5.0 | 10.5 | 7.5 | 8.5 |
| 11 | 2.0 | 1.5 | 2.0 | 3.5 | 3.0 | 3.0 | 6.0 | 5.0 | 5.5 | 11.0 | 7.0 | 8.5 |
| 12 | 2.5 | 2.0 | 2.5 | 3.0 | 2.5 | 3.0 | 6.5 | 5.0 | 5.5 | 11.0 | 7.5 | 9.0 |
| 13 | 3.0 | 2.0 | 2.5 | 3.0 | 2.5 | 3.0 | 6.5 | 4.5 | 5.0 | 11.0 | 8.0 | 9.5 |
| 14 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 2.5 | 6.5 | 4.0 | 5.0 | 12.0 | 8.5 | 10.0 |
| 15 | 2.0 | 2.0 | 2.0 | 3.5 | 2.5 | 3.0 | 6.5 | 4.0 | 5.0 | 10.5 | 9.0 | 9.5 |
| 16 | 2.5 | 2.0 | 2.5 | 3.5 | 3.0 | 3.0 | 6.0 | 4.0 | 5.0 | 10.5 | 9.0 | 9.5 |
| 17 | 2.5 | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 5.5 | 4.5 | 5.0 | 11.0 | 8.0 | 9.5 |
| 18 | 3.0 | 2.5 | 2.5 | 3.0 | 2.5 | 2.5 | 5.5 | 4.0 | 4.5 | 12.5 | 8.5 | 10.0 |
| 19 | 3.0 | 2.5 | 3.0 | 2.5 | 2.0 | 2.5 | 6.0 | 3.5 | 4.5 | 13.0 | 9.0 | 10.5 |
| 20 | 3.0 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 | 7.5 | 4.0 | 5.5 | 14.0 | 10.0 | 11.5 |
| 21 | 3.5 | 2.5 | 3.0 | 3.0 | 2.5 | 3.0 | 7.5 | 4.0 | 5.5 | 14.0 | 10.5 | 12.0 |
| 22 | 3.0 | 2.5 | 3.0 | 3.5 | 3.0 | 3.0 | 6.0 | 5.0 | 5.5 | 13.5 | 9.5 | 11.0 |
| 23 | 3.5 | 3.0 | 3.0 | 3.5 | 3.0 | 3.5 | 6.0 | 4.5 | 5.0 | 13.5 | 9.5 | 11.0 |
| 24 | 3.0 | 2.5 | 3.0 | 4.0 | 3.5 | 3.5 | 5.5 | 5.0 | 5.0 | 11.5 | 10.5 | 11.0 |
| 25 | 3.5 | 2.5 | 2.5 | 4.0 | 3.5 | 3.5 | 6.0 | 5.0 | 5.5 | 11.5 | 10.5 | 11.0 |
| 26 | 2.5 | 2.0 | 2.0 | 4.0 | 3.0 | 3.5 | 7.0 | 5.5 | 6.0 | 12.0 | 10.0 | 11.0 |
| 27 | 2.0 | 1.5 | 2.0 | 4.0 | 3.5 | 4.0 | 8.0 | 5.5 | 6.5 | 11.0 | 9.5 | 10.0 |
| 28 | 2.5 | 1.5 | 2.0 | 4.0 | 3.5 | 4.0 | 8.5 | 5.5 | 6.5 | 11.0 | 9.5 | 10.0 |
| 29 | 3.0 | 2.5 | 2.5 | 4.0 | 3.5 | 4.0 | 9.0 | 5.5 | 7.0 | 9.5 | 8.5 | 9.5 |
| 30 | --- | --- | --- | 4.0 | 3.0 | 3.5 | 9.5 | 6.0 | 7.5 | 9.5 | 8.5 | 9.0 |
| 31 | --- | --- | --- | 4.0 | 2.5 | 3.5 | --- | --- | --- | 9.5 | 8.5 | 9.0 |
| MONTH | 3.5 | 0.0 | 1.9 | 4.0 | 1.5 | 2.9 | 9.5 | 2.5 | 5.1 | 14.0 | 6.0 | 9.3 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 9.0 | 8.0 | 8.5 | 14.5 | 13.0 | 14.0 | 14.0 | 12.5 | 13.5 | 13.0 | 11.0 | 12.0 |
| 2 | 9.0 | 8.0 | 8.5 | 14.5 | 13.0 | 13.5 | 13.0 | 12.5 | 13.0 | 12.5 | 11.0 | 11.5 |
| 3 | 11.0 | 8.0 | 9.5 | 14.5 | 13.0 | 13.5 | 13.0 | 12.0 | 12.5 | 12.5 | 11.5 | 12.0 |
| 4 | 10.5 | 9.0 | 10.0 | 13.5 | 12.0 | 13.0 | 14.0 | 12.0 | 12.5 | 12.5 | 11.5 | 12.0 |
| 5 | 12.0 | 9.5 | 10.5 | 13.5 | 12.0 | 13.0 | 14.5 | 12.5 | 13.0 | 12.0 | 11.0 | 11.5 |
| 6 | 11.0 | 9.5 | 10.5 | 12.0 | 11.0 | 11.5 | 15.0 | 12.5 | 13.5 | 12.0 | 10.5 | 11.5 |
| 7 | 13.5 | 10.0 | 11.5 | 12.5 | 11.0 | 11.5 | 15.0 | 12.0 | 13.0 | 12.5 | 11.5 | 12.0 |
| 8 | 13.5 | 11.0 | 12.0 | 13.5 | 11.0 | 12.0 | 14.5 | 13.0 | 13.5 | 12.5 | 11.0 | 11.5 |
| 9 | 13.0 | 10.5 | 11.5 | 15.0 | 12.0 | 13.0 | 16.0 | 12.5 | 13.5 | 12.0 | 11.0 | 11.5 |
| 10 | 11.0 | 9.5 | 10.5 | 13.0 | 12.5 | 13.0 | 15.5 | 13.0 | 14.0 | 11.5 | 10.0 | 10.5 |
| 11 | 11.0 | 9.5 | 10.0 | 13.5 | 12.5 | 13.0 | 16.0 | 13.5 | 14.5 | 11.5 | 10.0 | 10.5 |
| 12 | 10.0 | 9.0 | 9.5 | 15.5 | 11.5 | 13.0 | 16.0 | 13.0 | 14.0 | 11.0 | 10.0 | 10.5 |
| 13 | 9.5 | 9.0 | 9.0 | 16.0 | 12.0 | 14.0 | 15.5 | 13.0 | 14.0 | 11.5 | 10.5 | 11.0 |
| 14 | 10.5 | 9.0 | 9.5 | 17.0 | 13.0 | 14.5 | 16.5 | 13.0 | 14.5 | 11.5 | 10.5 | 11.0 |
| 15 | 11.5 | 9.5 | 10.5 | 17.5 | 13.5 | 15.0 | 16.0 | 14.0 | 15.0 | 11.0 | 10.0 | 10.5 |
| 16 | 13.5 | 10.0 | 11.0 | 15.0 | 14.0 | 14.5 | 17.0 | 14.0 | 15.0 | 10.5 | 9.5 | 10.0 |
| 17 | 14.5 | 10.5 | 12.0 | 16.0 | 13.5 | 14.5 | 15.5 | 14.5 | 15.0 | 10.0 | 9.0 | 9.5 |
| 18 | 16.0 | 11.5 | 13.5 | 16.5 | 13.0 | 14.5 | 16.5 | 14.5 | 15.0 | 11.0 | 9.5 | 10.0 |
| 19 | 17.0 | 13.0 | 14.5 | 15.0 | 14.0 | 14.5 | --- | 14.5 | --- | 10.0 | 8.5 | 9.0 |
| 20 | 17.5 | 13.5 | 15.0 | 15.0 | 13.0 | 14.0 | --- | --- | --- | 10.0 | 9.0 | 9.0 |
| 21 | 17.5 | 14.0 | 15.5 | 14.0 | 12.5 | 13.5 | --- | --- | --- | 11.0 | 10.0 | 10.5 |
| 22 | 18.0 | 14.5 | 16.0 | 16.0 | 12.0 | 13.5 | --- | --- | --- | 11.0 | 10.5 | 10.5 |
| 23 | 18.5 | 14.5 | 16.0 | 16.5 | 12.5 | 14.0 | --- | --- | --- | 11.0 | 10.5 | 10.5 |
| 24 | 17.5 | 14.5 | 15.5 | 16.0 | 13.5 | 14.5 | --- | --- | --- | 11.5 | 10.5 | 11.0 |
| 25 | 15.0 | 14.0 | 14.5 | 14.5 | 13.5 | 14.0 | --- | --- | --- | 10.5 | 9.5 | 10.0 |
| 26 | 14.0 | 13.5 | 14.0 | 14.5 | 13.0 | 14.0 | 13.0 | --- | --- | 10.5 | 9.5 | 10.0 |
| 27 | 14.0 | 13.0 | 13.5 | 16.5 | 13.5 | 14.5 | 13.5 | 12.5 | 13.0 | 10.5 | 10.0 | 10.5 |
| 28 | 13.5 | 12.5 | 13.0 | 15.5 | 14.0 | 15.0 | 13.5 | 12.0 | 12.5 | 10.0 | 8.5 | 9.0 |
| 29 | 14.0 | 13.0 | 13.5 | 15.0 | 14.0 | 14.5 | 13.5 | 12.0 | 12.5 | 10.0 | 8.5 | 9.5 |
| 30 | 14.5 | 13.0 | 13.5 | 14.5 | 13.5 | 14.0 | 13.0 | 12.0 | 12.5 | 9.5 | 8.5 | 9.0 |
| 31 | --- | --- | --- | 14.5 | 12.0 | 13.5 | 13.0 | 11.0 | 12.0 | --- | --- | --- |
| MONTH | 18.5 | 8.0 | 12.1 | 17.5 | 11.0 | 13.7 | --- | --- | --- | 13.0 | 8.5 | 10.6 |

## 15085800 MAYBESO CREEK NEAR HOLLIS

LOCATION.-- Lat 55°29'26", long 132°40'31", in $SW^1/_4SE^1/_4SE^1/_4$ sec. 32 T. 73 S., R. 84 E. (Craig B-3 quad), on Prince of Wales Island, on right bank 600 ft downstream from unamed tributary, 2,400 ft upstream from mouth, and 1/2 mi northwest of Hollis.

DRAINAGE AREA.-- 15.1 $mi^2$.

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949, 1956, 1959, and 2004.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 2003 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since October 2003, set for 15-minute recording interval.

REMARKS.--Daily discharge not published for 2004 due to lack of rating developement. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on April 1, 2004. No variation was found within the cross section, or between mean stream temperature and sensor temperature. Missing record January 23 to May 5, and September 14 due to recorder malfunction.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 17.5°C, June 23-24; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Location in X-sect. looking dwnstrm ft from l bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| APR | | | | | | | |
| 01... | 1710 | 60.0 | 5.00 | 2.45 | 70 | 3.5 | 5.0 |
| 01... | 1711 | 60.0 | 15.0 | 2.45 | 70 | 3.5 | 5.0 |
| 01... | 1712 | 60.0 | 25.0 | 2.45 | 70 | 3.5 | 5.0 |
| 01... | 1713 | 60.0 | 35.0 | 2.45 | 70 | 3.5 | 5.0 |
| 01... | 1714 | 60.0 | 45.0 | 2.45 | 70 | 3.5 | 5.0 |
| 01... | 1715 | 60.0 | 55.0 | 2.45 | 70 | 3.5 | 5.0 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | --- | --- | --- | 4.5 | 4.0 | 4.5 | 2.0 | 1.0 | 2.0 | 1.5 | 0.5 | 1.5 |
| 2 | --- | --- | --- | 4.5 | 3.5 | 4.0 | 2.5 | 2.0 | 2.0 | 0.5 | 0.0 | 0.0 |
| 3 | --- | --- | --- | 4.0 | 3.0 | 3.5 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 4 | --- | --- | --- | 3.5 | 2.5 | 3.0 | 2.5 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 5 | --- | --- | --- | 2.5 | 2.0 | 2.5 | 2.5 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 6 | --- | --- | --- | 2.5 | 1.5 | 2.0 | 2.5 | 2.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 7 | --- | --- | --- | 3.0 | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 |
| 8 | --- | --- | --- | 3.0 | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 0.5 | 0.0 | 0.0 |
| 9 | --- | --- | --- | 3.5 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 10 | --- | --- | --- | 3.5 | 2.5 | 3.0 | 2.0 | 1.0 | 1.5 | 0.5 | 0.0 | 0.0 |
| 11 | --- | --- | --- | 4.0 | 3.0 | 3.5 | 2.5 | 1.5 | 2.0 | 1.5 | 0.5 | 1.0 |
| 12 | --- | --- | --- | 6.0 | 4.0 | 5.0 | 2.0 | 1.5 | 2.0 | 1.5 | 1.0 | 1.5 |
| 13 | --- | --- | --- | 6.5 | 4.5 | 6.0 | 2.0 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 |
| 14 | --- | --- | --- | 5.0 | 4.5 | 4.5 | 1.5 | 1.0 | 1.0 | 2.0 | 2.0 | 2.0 |
| 15 | --- | --- | --- | 5.0 | 4.5 | 4.5 | 1.5 | 1.0 | 1.5 | 2.0 | 2.0 | 2.0 |
| 16 | --- | --- | --- | 5.0 | 4.5 | 4.5 | 2.0 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 |
| 17 | --- | --- | --- | 4.5 | 3.0 | 4.0 | 2.0 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 |
| 18 | --- | --- | --- | 3.5 | 3.0 | 3.0 | 2.5 | 2.0 | 2.5 | 2.5 | 2.0 | 2.5 |
| 19 | --- | --- | --- | 3.0 | 2.0 | 3.0 | 2.5 | 2.0 | 2.5 | 3.0 | 2.0 | 2.5 |
| 20 | --- | --- | --- | 2.0 | 1.0 | 2.0 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 |
| 21 | --- | --- | --- | 2.0 | 1.0 | 1.5 | 3.0 | 2.5 | 2.5 | 3.5 | 3.0 | 3.0 |
| 22 | --- | --- | --- | 2.0 | 1.0 | 1.5 | 3.0 | 3.0 | 3.0 | 3.5 | 3.0 | 3.0 |
| 23 | --- | --- | --- | 2.0 | 1.0 | 1.5 | 3.5 | 3.0 | 3.0 | --- | --- | --- |
| 24 | --- | --- | --- | 2.0 | 1.5 | 1.5 | 3.5 | 3.0 | 3.5 | --- | --- | --- |
| 25 | --- | --- | --- | 1.5 | 1.0 | 1.5 | 3.5 | 2.0 | 2.5 | --- | --- | --- |
| 26 | --- | --- | --- | 2.0 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | --- | --- | --- |
| 27 | --- | --- | --- | 2.0 | 0.5 | 1.5 | 2.0 | 1.5 | 2.0 | --- | --- | --- |
| 28 | --- | --- | --- | 1.5 | 0.5 | 1.5 | 1.5 | 0.5 | 1.0 | --- | --- | --- |
| 29 | --- | --- | --- | 1.5 | 1.0 | 1.0 | 1.5 | 0.5 | 1.0 | --- | --- | --- |
| 30 | --- | --- | --- | 1.5 | 0.0 | 1.0 | 1.5 | 1.0 | 1.0 | --- | --- | --- |
| 31 | 4.5 | 3.5 | 4.0 | --- | --- | --- | 2.0 | 1.5 | 1.5 | --- | --- | --- |
| MONTH | --- | --- | --- | 6.5 | 0.0 | 2.8 | 3.5 | 0.5 | 2.1 | --- | --- | --- |

## 15085800 MAYBESO CREEK NEAR HOLLIS—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 5.0 | 7.0 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 5.5 | 7.0 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 7.5 | 6.0 | 6.5 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.0 | 6.5 | 7.0 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 6.0 | 7.5 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 6.0 | 7.5 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 6.0 | 8.0 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 7.0 | 8.5 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 7.0 | 8.5 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 7.5 | 8.5 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 7.5 | 8.5 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 7.0 | 8.5 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 7.5 | 9.0 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 7.5 | 9.5 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.0 | 8.0 | 10.0 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.0 | 8.5 | 10.0 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 8.0 | 10.0 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.0 | 8.0 | 10.0 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 9.0 | 9.5 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 8.5 | 9.5 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 8.5 | 9.0 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 7.5 | 8.5 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 8.0 | 9.0 |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 8.0 | 8.5 |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 7.5 | 8.5 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 8.0 | 8.0 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 9.0 | 7.5 | 8.0 | 15.0 | 13.0 | 14.0 | 14.0 | 12.5 | 13.0 | 12.5 | 10.5 | 11.5 |
| 2 | 9.5 | 7.5 | 8.5 | 14.5 | 13.0 | 13.5 | 13.0 | 12.5 | 12.5 | 12.0 | 10.5 | 11.5 |
| 3 | 11.0 | 7.0 | 9.0 | 15.0 | 13.0 | 14.0 | 13.5 | 12.0 | 13.0 | 12.0 | 11.5 | 12.0 |
| 4 | 9.5 | 8.5 | 9.0 | 14.0 | 12.5 | 13.5 | 14.5 | 12.0 | 13.5 | 12.5 | 11.0 | 11.5 |
| 5 | 11.0 | 8.5 | 10.0 | 14.0 | 11.5 | 13.0 | 15.0 | 12.5 | 13.5 | 11.5 | 10.0 | 11.0 |
| 6 | 10.5 | 8.5 | 9.5 | 11.5 | 11.0 | 11.0 | 15.0 | 12.5 | 13.5 | 11.5 | 10.5 | 11.0 |
| 7 | 13.5 | 9.0 | 11.0 | 12.5 | 11.0 | 11.5 | 15.0 | 12.0 | 13.5 | 12.0 | 11.0 | 11.5 |
| 8 | 12.5 | 9.5 | 11.0 | 13.0 | 11.0 | 12.0 | 14.0 | 12.5 | 13.0 | 12.0 | 10.5 | 11.0 |
| 9 | 12.0 | 10.0 | 10.5 | 15.0 | 11.5 | 13.0 | 15.0 | 12.0 | 13.5 | 11.5 | 10.5 | 11.0 |
| 10 | 11.0 | 9.0 | 10.0 | 13.5 | 12.5 | 13.0 | 15.5 | 12.5 | 14.0 | 11.0 | 9.5 | 10.5 |
| 11 | 10.0 | 9.0 | 9.5 | 13.5 | 12.0 | 12.5 | 15.0 | 13.0 | 14.0 | 11.5 | 10.0 | 10.5 |
| 12 | 10.5 | 9.0 | 9.5 | 15.0 | 11.0 | 13.0 | 15.5 | 12.5 | 14.0 | 10.5 | 10.0 | 10.5 |
| 13 | 10.0 | 9.0 | 9.5 | 16.0 | 11.5 | 13.5 | 15.5 | 12.5 | 14.0 | 11.0 | 10.5 | 10.5 |
| 14 | 10.0 | 9.0 | 9.5 | 16.0 | 12.5 | 14.5 | 15.5 | 12.5 | 14.0 | --- | --- | --- |
| 15 | 11.5 | 8.5 | 10.0 | 17.0 | 13.0 | 15.0 | 16.0 | 13.5 | 14.5 | 10.5 | 9.0 | 10.0 |
| 16 | 13.5 | 9.0 | 11.0 | 15.5 | 14.0 | 15.0 | 16.5 | 14.0 | 15.0 | 10.0 | 9.0 | 9.5 |
| 17 | 14.5 | 10.0 | 12.0 | 15.0 | 14.0 | 14.5 | 15.0 | 14.5 | 14.5 | 10.5 | 8.5 | 9.5 |
| 18 | 15.5 | 11.0 | 13.0 | 16.5 | 13.0 | 14.5 | 16.0 | 14.0 | 15.0 | 10.5 | 9.0 | 9.5 |
| 19 | 16.5 | 12.0 | 14.0 | 14.5 | 13.5 | 14.0 | 15.0 | 14.0 | 14.5 | 10.0 | 8.0 | 9.0 |
| 20 | 17.0 | 12.5 | 15.0 | 15.0 | 13.0 | 14.0 | 15.5 | 14.0 | 14.5 | 10.0 | 8.5 | 9.0 |
| 21 | 17.0 | 13.5 | 15.0 | 15.5 | 13.0 | 14.0 | 15.5 | 13.5 | 14.5 | 10.5 | 9.5 | 10.0 |
| 22 | 17.0 | 14.0 | 15.5 | 16.0 | 12.5 | 14.0 | 15.5 | 13.5 | 14.5 | 10.0 | 9.5 | 9.5 |
| 23 | 17.5 | 14.0 | 16.0 | 16.5 | 13.0 | 14.5 | 14.5 | 12.5 | 13.5 | 10.0 | 9.5 | 10.0 |
| 24 | 17.5 | 14.5 | 16.0 | 15.5 | 13.5 | 14.5 | 14.5 | 11.5 | 13.0 | 10.0 | 9.0 | 10.0 |
| 25 | 15.5 | 14.5 | 15.0 | 15.0 | 13.5 | 14.0 | 14.0 | 11.5 | 13.0 | 9.5 | 8.5 | 9.0 |
| 26 | 14.5 | 13.5 | 14.0 | 14.5 | 13.0 | 13.5 | 13.5 | 11.5 | 12.5 | 9.0 | 8.5 | 9.0 |
| 27 | 14.0 | 13.0 | 13.5 | 15.5 | 13.0 | 14.0 | 13.5 | 12.5 | 13.0 | 10.0 | 9.0 | 9.5 |
| 28 | 14.0 | 12.5 | 13.5 | 15.0 | 14.0 | 14.5 | 13.5 | 12.0 | 12.5 | 9.0 | 8.0 | 8.5 |
| 29 | 13.5 | 13.0 | 13.0 | 15.0 | 13.0 | 14.0 | 13.0 | 11.5 | 12.5 | 9.0 | 8.0 | 8.5 |
| 30 | 14.5 | 12.5 | 13.5 | 14.5 | 13.0 | 13.5 | 13.0 | 11.5 | 12.0 | 9.0 | 8.0 | 8.5 |
| 31 | --- | --- | --- | 14.5 | 12.0 | 13.5 | 13.0 | 11.0 | 12.0 | --- | --- | --- |
| MONTH | 17.5 | 7.0 | 11.8 | 17.0 | 11.0 | 13.6 | 16.5 | 11.0 | 13.5 | --- | --- | --- |

## 15087080 UPPER EARL WEST CREEK NEAR WRANGELL

LOCATION.--Lat 56°17'09", long 132°07'51", in SW¼ SE¼ SE¼ sec. 27, T. 64 S., R. 86 E. (Petersburg B-1 quad.)
Hydrologic Unit 19010202, on right bank 150 ft upstream from the bridge on USFS road #6270, 5.0 mi upstream from the mouth, 26.6 mi south of Wrangell.

DRAINAGE AREA.--3.3 $mi^2$

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2003 to September 2004.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 2003 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since October 2003, set for 15-minute recording interval.

REMARKS.--Probe installed on October 13. Water-discharge records are computed daily. Missing record October 13-30, January 27-Febuary 11, 14, and May 18-June 29 due to recorder malfunction. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on October 13, and June 29. No variation was found within the cross sections. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 20.5°C, July 15; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Medium code | Stream width, feet (00004) | Location in X-sect. looking dwnstrm ft from l bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | |
| 13... | 1100 | 9 | 26.5 | 25.0 | 8.56 | 9.9 | 6.0 | 5.5 |
| 13... | 1101 | 9 | 26.5 | 23.0 | 8.56 | 9.2 | 6.0 | 5.5 |
| 13... | 1102 | 9 | 26.5 | 21.0 | 8.56 | 9.9 | 6.0 | 5.5 |
| 13... | 1103 | 9 | 26.5 | 19.0 | 8.56 | 9.9 | 6.0 | 5.5 |
| 13... | 1104 | 9 | 26.5 | 13.0 | 8.56 | 9.9 | 6.0 | 5.5 |
| 13... | 1105 | 9 | 26.5 | 9.00 | 8.56 | 9.9 | 6.0 | 5.5 |
| 13... | 1106 | 9 | 26.5 | 5.00 | 8.56 | 9.9 | 6.0 | 5.5 |
| 13... | 1107 | 9 | 26.5 | 1.00 | 8.56 | 9.9 | 6.0 | 5.5 |
| JUN | | | | | | | | |
| 29... | 1447 | 9 | -- | 1.00 | 8.10 | .64 | 17.5 | 16.2 |
| 29... | 1448 | 9 | -- | 5.00 | 8.10 | .64 | 17.5 | 16.2 |
| 29... | 1449 | 9 | -- | 9.00 | 8.10 | .64 | 17.5 | 16.2 |
| 29... | 1450 | 9 | -- | 13.0 | 8.10 | .64 | 17.5 | 16.2 |
| 29... | 1451 | 9 | -- | 17.0 | 8.10 | .64 | 17.5 | 16.2 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | --- | --- | --- | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | --- | --- | --- | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | --- | --- | --- | 1.5 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | --- | --- | --- | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 7 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | --- | --- | --- | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12 | --- | --- | --- | 3.0 | 0.5 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 13 | --- | --- | --- | 4.0 | 2.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 |
| 14 | --- | --- | --- | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 |
| 15 | --- | --- | --- | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 |
| 16 | --- | --- | --- | 3.0 | 2.5 | 2.5 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 |
| 17 | --- | --- | --- | 3.0 | 1.0 | 2.0 | 0.5 | 0.0 | 0.5 | 1.0 | 0.5 | 1.0 |
| 18 | --- | --- | --- | 1.0 | 0.5 | 0.5 | 1.0 | 0.0 | 0.5 | 1.0 | 0.5 | 1.0 |
| 19 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 1.5 | 1.0 | 1.0 |
| 20 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 |
| 21 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.0 | 1.5 | 1.0 | 1.5 |
| 22 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 1.5 | 1.0 | 1.5 |
| 23 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 | 1.5 | 0.5 | 1.0 |
| 24 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 1.5 | 1.0 | 1.5 | 1.0 | 0.0 | 0.5 |
| 25 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 26 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 27 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- | --- | --- |
| 28 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- | --- | --- |
| 29 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- | --- | --- |
| 30 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | --- | --- | --- |
| 31 | 2.0 | 1.0 | 1.5 | --- | --- | --- | 0.0 | 0.0 | 0.0 | --- | --- | --- |
| MONTH | --- | --- | --- | 4.0 | 0.0 | 0.6 | 1.5 | 0.0 | 0.2 | --- | --- | --- |

## 15087080 UPPER EARL WEST CREEK NEAR WRANGELL—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | --- | --- | --- | 1.5 | 0.0 | 0.5 | 2.5 | 1.0 | 2.0 | 0.5 | 0.5 | 0.5 |
| 2 | --- | --- | --- | 1.0 | 0.0 | 0.5 | 2.5 | 1.0 | 1.5 | 0.5 | 0.5 | 0.5 |
| 3 | --- | --- | --- | 0.5 | 0.0 | 0.5 | 2.0 | 1.0 | 1.5 | 0.5 | 0.5 | 0.5 |
| 4 | --- | --- | --- | 1.0 | 0.0 | 0.5 | 2.5 | 1.0 | 1.5 | 0.5 | 0.5 | 0.5 |
| 5 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 3.0 | 1.0 | 2.0 | 0.5 | 0.0 | 0.5 |
| 6 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 4.0 | 1.0 | 2.5 | 0.5 | 0.0 | 0.5 |
| 7 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 3.0 | 1.5 | 2.0 | 0.5 | 0.5 | 0.5 |
| 8 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 4.0 | 1.5 | 2.0 | 0.5 | 0.5 | 0.5 |
| 9 | --- | --- | --- | 1.0 | 0.0 | 0.5 | 2.5 | 1.5 | 2.0 | 0.5 | 0.5 | 0.5 |
| 10 | --- | --- | --- | 0.5 | 0.0 | 0.5 | 2.5 | 1.5 | 2.0 | 1.0 | 0.5 | 0.5 |
| 11 | --- | 0.0 | --- | 1.0 | 0.5 | 0.5 | 3.5 | 1.5 | 2.0 | 1.0 | 0.5 | 0.5 |
| 12 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 1.0 | 2.5 | 1.5 | 2.0 | 1.0 | 0.5 | 0.5 |
| 13 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 | 0.5 | 4.0 | 1.5 | 2.5 | 1.0 | 0.5 | 0.5 |
| 14 | 0.5 | 0.0 | 0.0 | 1.5 | 0.5 | 1.0 | 5.0 | 1.5 | 2.5 | 1.0 | 0.5 | 0.5 |
| 15 | 0.5 | 0.0 | 0.0 | 1.0 | 0.0 | 0.5 | 4.0 | 1.0 | 2.5 | 0.5 | 0.5 | 0.5 |
| 16 | 1.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.5 | 4.5 | 1.0 | 3.0 | 0.5 | 0.5 | 0.5 |
| 17 | 1.0 | 0.5 | 0.5 | 1.5 | 0.0 | 0.5 | 4.0 | 2.0 | 3.0 | 0.5 | 0.5 | 0.5 |
| 18 | 1.0 | 0.5 | 0.5 | 1.0 | 0.5 | 0.5 | 3.5 | 2.0 | 3.0 | --- | 0.5 | --- |
| 19 | 1.0 | 0.5 | 0.5 | 1.5 | 0.0 | 0.5 | 4.5 | 1.5 | 3.0 | --- | --- | --- |
| 20 | 1.0 | 0.5 | 1.0 | 2.5 | 0.5 | 1.0 | 5.5 | 1.5 | 3.0 | --- | --- | --- |
| 21 | 1.5 | 0.5 | 1.0 | 2.5 | 0.5 | 1.5 | 5.0 | 1.5 | 3.0 | --- | --- | --- |
| 22 | 1.5 | 0.5 | 1.0 | 3.0 | 1.0 | 2.0 | 3.0 | 2.0 | 2.5 | --- | --- | --- |
| 23 | 2.0 | 1.0 | 1.5 | 3.0 | 0.0 | 1.5 | 3.5 | 1.5 | 2.5 | --- | --- | --- |
| 24 | 1.5 | 0.5 | 1.0 | 3.0 | 1.0 | 2.0 | 2.5 | 2.0 | 2.5 | --- | --- | --- |
| 25 | 1.0 | 0.0 | 0.5 | 2.5 | 1.0 | 1.5 | 2.5 | 2.0 | 2.0 | --- | --- | --- |
| 26 | 1.5 | 0.0 | 0.5 | 2.5 | 0.5 | 1.5 | 3.0 | 0.0 | 2.0 | --- | --- | --- |
| 27 | 1.0 | 0.0 | 0.5 | 2.0 | 1.0 | 1.5 | 0.5 | 0.0 | 0.5 | --- | --- | --- |
| 28 | 1.0 | 0.0 | 0.5 | 1.0 | 0.5 | 1.0 | 0.5 | 0.0 | 0.5 | --- | --- | --- |
| 29 | 1.5 | 0.0 | 0.5 | 1.5 | 1.0 | 1.0 | 0.5 | 0.0 | 0.5 | --- | --- | --- |
| 30 | --- | --- | --- | 1.5 | 0.5 | 1.0 | 0.5 | 0.0 | 0.5 | --- | --- | --- |
| 31 | --- | --- | --- | 2.0 | 0.0 | 1.0 | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | 3.0 | 0.0 | 0.8 | 5.5 | 0.0 | 2.1 | --- | --- | --- |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | --- | --- | --- | 17.5 | 15.5 | 16.5 | 16.0 | 13.5 | 15.0 | 15.0 | 11.0 | 13.0 |
| 2 | --- | --- | --- | 17.0 | 16.0 | 16.5 | 15.0 | 12.5 | 13.5 | 14.0 | 12.0 | 12.5 |
| 3 | --- | --- | --- | 18.0 | 15.0 | 16.5 | 14.0 | 12.5 | 13.5 | 12.5 | 11.5 | 12.0 |
| 4 | --- | --- | --- | 18.0 | 15.5 | 16.5 | 16.5 | 12.5 | 14.5 | 12.0 | 11.0 | 11.5 |
| 5 | --- | --- | --- | 17.0 | 15.5 | 16.0 | 15.0 | 13.0 | 13.5 | 12.0 | 10.0 | 11.0 |
| 6 | --- | --- | --- | 15.5 | 11.0 | 11.5 | 13.5 | 12.5 | 13.0 | 12.0 | 11.5 | 11.5 |
| 7 | --- | --- | --- | 12.0 | 11.0 | 11.5 | 14.5 | 12.0 | 13.0 | 11.5 | 10.5 | 11.0 |
| 8 | --- | --- | --- | 13.5 | 11.0 | 12.0 | 15.0 | 12.0 | 13.5 | 12.0 | 9.5 | 10.5 |
| 9 | --- | --- | --- | 16.5 | 13.0 | 14.0 | 17.5 | 13.0 | 15.0 | 12.0 | 9.5 | 10.5 |
| 10 | --- | --- | --- | 15.0 | 14.0 | 14.5 | 18.0 | 14.5 | 16.0 | 11.5 | 8.5 | 10.0 |
| 11 | --- | --- | --- | 14.0 | 13.0 | 13.5 | 17.5 | 15.0 | 16.0 | 11.0 | 9.5 | 10.0 |
| 12 | --- | --- | --- | 15.5 | 12.0 | 13.5 | 17.5 | 14.0 | 16.0 | 10.5 | 9.5 | 10.0 |
| 13 | --- | --- | --- | 18.5 | 13.0 | 15.5 | 18.5 | 14.0 | 16.0 | 10.5 | 9.5 | 10.0 |
| 14 | --- | --- | --- | 18.5 | 14.5 | 16.5 | 19.0 | 14.5 | 17.0 | 10.0 | 9.0 | 9.5 |
| 15 | --- | --- | --- | 20.5 | 14.5 | 17.5 | 20.0 | 16.0 | 18.0 | 9.5 | 8.5 | 9.0 |
| 16 | --- | --- | --- | 19.0 | 16.5 | 17.5 | 19.0 | 17.0 | 18.0 | 10.0 | 8.0 | 8.5 |
| 17 | --- | --- | --- | 17.5 | 15.5 | 16.5 | 18.5 | 16.5 | 17.5 | 9.5 | 7.0 | 8.0 |
| 18 | --- | --- | --- | 17.0 | 14.0 | 15.5 | 19.5 | 16.5 | 18.0 | 11.0 | 8.5 | 9.5 |
| 19 | --- | --- | --- | 16.0 | 14.5 | 15.0 | 18.5 | 16.5 | 17.5 | 9.5 | 7.5 | 8.5 |
| 20 | --- | --- | --- | 17.0 | 14.5 | 15.5 | 17.5 | 15.0 | 16.0 | 9.0 | 7.5 | 8.0 |
| 21 | --- | --- | --- | 15.0 | 13.5 | 14.5 | 17.5 | 14.0 | 15.5 | 9.5 | 9.0 | 9.0 |
| 22 | --- | --- | --- | 18.0 | 13.5 | 15.5 | 17.5 | 14.5 | 15.5 | 9.0 | 8.5 | 9.0 |
| 23 | --- | --- | --- | 19.5 | 14.5 | 17.0 | 16.0 | 13.0 | 14.5 | 9.5 | 8.5 | 9.0 |
| 24 | --- | --- | --- | 17.5 | 15.5 | 16.5 | 15.5 | 12.5 | 14.0 | 9.5 | 9.0 | 9.5 |
| 25 | --- | --- | --- | 17.0 | 15.5 | 16.0 | 16.0 | 12.0 | 14.0 | 9.0 | 8.0 | 8.5 |
| 26 | --- | --- | --- | 16.5 | 14.5 | 15.5 | 14.5 | 12.5 | 13.5 | 8.5 | 7.5 | 8.0 |
| 27 | --- | --- | --- | 19.0 | 14.5 | 16.5 | 14.0 | 12.0 | 13.0 | 9.5 | 8.5 | 9.0 |
| 28 | --- | --- | --- | 18.0 | 13.5 | 15.0 | 13.5 | 12.0 | 13.0 | 8.5 | 6.5 | 7.5 |
| 29 | --- | --- | --- | 15.0 | 13.0 | 14.0 | 14.0 | 12.5 | 13.5 | 8.5 | 7.0 | 8.0 |
| 30 | 17.0 | 16.0 | 16.5 | 15.0 | 13.5 | 14.5 | 15.0 | 12.5 | 13.5 | 9.5 | 7.5 | 8.5 |
| 31 | --- | --- | --- | 17.0 | 13.0 | 15.0 | 14.5 | 11.5 | 13.0 | --- | --- | --- |
| MONTH | --- | --- | --- | 20.5 | 11.0 | 15.2 | 20.0 | 11.5 | 15.0 | 15.0 | 6.5 | 9.7 |

## 15087300 FALLS CREEK NEAR PETERSBURG

LOCATION.--Lat 56°40'56", long 132°55'20", in NW¼ SE¼ sec. 11, T. 60 S., R. 79 E. (Petersburg C-3 quad.) Hydrologic Unit 19010202, on left bank 50 ft upstream from the bridge on Mitkof Highway, 1000 ft upstream from the mouth, 10.7 mi south of Petersburg, 4.1 mi north of Blind Island Campground

DRAINAGE AREA.--17.4 $mi^2$

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2004 to September 2004.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 2004 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since May 2004, set for 15-minute recording interval.

REMARKS.--Water-discharge records are computed daily. Probe installed on April 30. Records represent water temperature at sensor within 0.5°C. No temperature cross sections were taken in the 2004 water year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 22.0°C, June 24-25; minimum recorded, 6.0°C, April 30, partial year of record.

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.5 | 8.0 | 8.5 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.5 | 7.5 | 8.0 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 8.0 | 7.5 | 7.5 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 7.5 | 8.0 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 7.0 | 8.0 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 6.5 | 7.5 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.0 | 7.0 | 8.0 |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 8.0 | 8.5 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 9.5 | 8.5 | 9.0 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.0 | 8.0 | 8.5 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 7.5 | 9.0 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 8.5 | 9.5 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 9.0 | 10.0 |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 9.5 | 10.5 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.0 | 10.0 | 10.5 |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 10.5 | 10.0 | 10.0 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 10.5 |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.5 | 10.5 | 11.0 |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.0 | 10.5 | 11.5 |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.5 | 11.5 | 12.0 |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.0 | 12.0 | 13.0 |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.5 | 11.5 | 12.5 |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.0 | 11.5 | 12.5 |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.5 | 13.0 | 13.0 |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 13.0 | 11.0 | 11.5 |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 10.0 | 10.5 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 10.5 |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 11.0 |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.5 | 10.0 | 10.5 |
| 30 | --- | --- | --- | --- | --- | --- | 8.5 | 6.0 | 7.0 | 11.0 | 10.0 | 10.0 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 11.0 | 9.5 | 10.0 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.5 | 6.5 | 10.0 |

## 15087300 FALLS CREEK NEAR PETERSBURG—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 10.5 | 9.5 | 10.0 | 16.5 | 15.0 | 16.0 | 15.0 | 14.0 | 14.5 | 13.0 | 11.5 | 12.0 |
| 2 | 11.0 | 9.5 | 10.0 | 16.5 | 15.5 | 16.0 | 14.5 | 13.5 | 14.0 | 12.5 | 11.5 | 12.0 |
| 3 | 11.0 | 9.0 | 10.0 | 16.5 | 15.0 | 15.5 | 14.0 | 13.5 | 13.5 | 12.0 | 11.5 | 11.5 |
| 4 | 11.5 | 10.0 | 10.5 | 17.0 | 15.5 | 16.0 | 15.0 | 13.5 | 14.0 | 12.0 | 11.5 | 12.0 |
| 5 | 12.0 | 10.5 | 11.0 | 16.5 | 15.0 | 15.5 | 15.5 | 14.0 | 14.5 | 12.0 | 11.5 | 12.0 |
| 6 | 12.5 | 11.0 | 12.0 | 15.5 | 11.5 | 13.5 | 14.5 | 13.5 | 14.0 | 12.5 | 11.5 | 12.0 |
| 7 | 14.0 | 11.0 | 12.0 | 12.5 | 11.5 | 12.0 | 14.0 | 13.0 | 13.5 | 12.5 | 11.5 | 12.0 |
| 8 | 14.5 | 13.0 | 13.5 | 13.0 | 11.5 | 12.0 | 14.5 | 13.0 | 13.5 | 12.0 | 10.0 | 11.0 |
| 9 | 15.0 | 13.0 | 13.5 | 14.5 | 13.0 | 13.5 | 15.0 | 13.5 | 14.0 | 11.0 | 10.0 | 10.5 |
| 10 | 14.0 | 11.5 | 12.5 | 15.0 | 14.5 | 14.5 | 16.0 | 14.0 | 15.0 | 11.0 | 9.5 | 10.0 |
| 11 | 12.5 | 11.5 | 12.0 | 14.5 | 13.5 | 14.0 | 16.5 | 15.5 | 15.5 | 10.5 | 9.5 | 10.0 |
| 12 | 12.0 | 11.5 | 11.5 | 15.0 | 13.0 | 14.0 | 17.0 | 15.0 | 15.5 | 10.5 | 10.0 | 10.0 |
| 13 | 12.0 | 11.5 | 12.0 | 16.0 | 14.0 | 14.5 | 16.5 | 14.5 | 15.5 | 10.5 | 10.0 | 10.0 |
| 14 | 12.0 | 10.5 | 11.0 | 17.5 | 15.5 | 16.0 | 16.5 | 14.5 | 15.5 | 11.0 | 10.0 | 10.5 |
| 15 | 12.0 | 10.0 | 10.5 | 18.0 | 16.0 | 17.0 | 16.5 | 15.0 | 15.5 | 10.5 | 10.0 | 10.0 |
| 16 | 13.0 | 10.5 | 12.0 | 19.0 | 16.5 | 17.5 | 17.0 | 15.5 | 16.5 | 10.5 | 9.5 | 10.0 |
| 17 | 14.5 | 12.0 | 13.0 | 17.0 | 15.5 | 16.0 | 17.5 | 16.0 | 16.5 | 10.0 | 8.0 | 9.0 |
| 18 | 16.0 | 13.5 | 14.5 | 17.5 | 15.5 | 16.0 | 18.5 | 16.5 | 17.0 | 9.0 | 8.0 | 8.5 |
| 19 | 18.0 | 15.0 | 16.0 | 18.0 | 15.5 | 16.5 | 18.5 | 17.0 | 17.5 | 9.0 | 7.5 | 8.0 |
| 20 | 19.0 | 16.0 | 17.0 | 16.0 | 15.0 | 15.5 | 18.0 | 16.5 | 17.0 | 8.0 | 7.5 | 7.5 |
| 21 | 19.5 | 16.5 | 17.5 | 16.5 | 15.5 | 16.0 | 17.5 | 15.5 | 16.5 | 10.0 | 8.0 | 9.0 |
| 22 | 19.5 | 17.0 | 18.0 | 17.0 | 15.0 | 16.0 | 17.0 | 15.0 | 16.0 | 10.0 | 9.5 | 10.0 |
| 23 | 20.5 | 16.5 | 18.5 | 17.5 | 15.0 | 16.5 | 16.5 | 13.5 | 15.0 | 9.5 | 9.5 | 9.5 |
| 24 | 22.0 | 17.0 | 19.0 | 17.5 | 16.0 | 16.5 | 15.5 | 12.5 | 13.5 | 10.0 | 9.5 | 10.0 |
| 25 | 22.0 | 16.5 | 19.0 | 17.0 | 15.5 | 16.0 | 14.5 | 12.0 | 13.0 | 10.0 | 9.0 | 9.5 |
| 26 | 21.0 | 17.0 | 18.5 | 16.5 | 15.0 | 16.0 | 14.0 | 12.5 | 13.0 | 9.5 | 9.0 | 9.0 |
| 27 | 19.0 | 16.5 | 17.0 | 16.5 | 15.5 | 15.5 | 13.0 | 13.0 | 13.0 | 10.0 | 9.0 | 9.5 |
| 28 | 17.0 | 15.0 | 16.0 | 17.0 | 15.0 | 16.0 | 13.5 | 12.5 | 13.0 | 10.0 | 8.5 | 9.0 |
| 29 | 17.0 | 15.0 | 16.0 | 15.0 | 13.5 | 14.0 | 13.5 | 12.5 | 13.0 | 9.0 | 8.0 | 8.5 |
| 30 | 16.5 | 15.0 | 15.5 | 14.5 | 13.5 | 14.0 | 13.5 | 13.0 | 13.0 | 9.0 | 8.5 | 8.5 |
| 31 | --- | --- | --- | 15.0 | 14.0 | 14.5 | 14.0 | 12.0 | 13.0 | --- | --- | --- |
| MONTH | 22.0 | 9.0 | 14.0 | 19.0 | 11.5 | 15.2 | 18.5 | 12.0 | 14.7 | 13.0 | 7.5 | 10.0 |

## 15087500 EAST FORK HOBO CREEK NEAR PETERSBURG

LOCATION.--Lat 56°47'38", long 132°52'23", in NW¼ NE¼ NE¼ sec. 06, T. 59 S., R. 80 E. (Petersburg D-3 quad.) Hydrologic Unit 19010202, on left bank 50 ft upstream from the culvert on Fredrick Point Road, 4.5 mi east of Petersburg, 1000 ft upstream from the mouth.

DRAINAGE AREA.--0.45 square miles

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2003 to September 2004.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 2003 to September 2004.

INSTRUMENTATION.-- Electronic water-temperature recorder since November 2004. Recording interval changed to 15-minutes.

REMARKS.--Water-discharge records are computed daily. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on February 10, 2004. No variation was found within the cross section, or between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 14.0°C, August 17-18, 2004 ; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Sample location, cross section ft from rt bank (72103) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| FEB | | | | | | | |
| 10... | 1646 | 10.1 | 1.6 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1647 | 10.1 | 2.5 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1648 | 10.1 | 3.5 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1649 | 10.1 | 4.5 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1650 | 10.1 | 6.5 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1651 | 10.1 | 7.5 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1652 | 10.1 | 8.5 | 10.36 | 5.0 | 1.0 | 3.0 |
| 10... | 1653 | 10.1 | 9.5 | 10.36 | 5.0 | 1.0 | 3.0 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | --- | --- | --- | --- | --- | --- | 1.5 | 0.5 | 1.0 | 0.5 | 0.0 | 0.5 |
| 2 | --- | --- | --- | --- | --- | --- | 1.5 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 |
| 3 | --- | --- | --- | 2.0 | 1.5 | 2.0 | 1.5 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 |
| 4 | --- | --- | --- | 1.5 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 |
| 5 | --- | --- | --- | 1.0 | 0.5 | 0.5 | 1.5 | 1.5 | 1.5 | 1.0 | 0.5 | 1.0 |
| 6 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 1.5 | 1.5 | 1.5 | 1.0 | 0.5 | 1.0 |
| 7 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 1.5 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 |
| 8 | --- | --- | --- | 1.5 | 0.5 | 1.0 | 1.0 | 0.0 | 0.5 | 0.5 | 0.0 | 0.0 |
| 9 | --- | --- | --- | 2.0 | 1.5 | 2.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10 | --- | --- | --- | 2.5 | 2.0 | 2.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11 | --- | --- | --- | 2.5 | 2.0 | 2.5 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 12 | --- | --- | --- | 3.5 | 2.5 | 3.0 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 13 | --- | --- | --- | 3.5 | 3.0 | 3.0 | 1.0 | 0.5 | 0.5 | 1.0 | 0.0 | 0.5 |
| 14 | --- | --- | --- | 3.0 | 3.0 | 3.0 | 0.5 | 0.0 | 0.0 | 1.0 | 0.5 | 1.0 |
| 15 | --- | --- | --- | 3.5 | 3.0 | 3.5 | 1.0 | 0.0 | 0.5 | 1.0 | 1.0 | 1.0 |
| 16 | --- | --- | --- | 3.5 | 3.0 | 3.5 | 1.5 | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 |
| 17 | --- | --- | --- | 3.5 | 1.5 | 3.0 | 1.5 | 1.0 | 1.5 | 1.5 | 1.0 | 1.0 |
| 18 | --- | --- | --- | 2.0 | 1.5 | 2.0 | 1.5 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 |
| 19 | --- | --- | --- | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 |
| 20 | --- | --- | --- | 1.5 | 0.0 | 0.5 | 1.5 | 1.5 | 1.5 | 2.0 | 1.5 | 2.0 |
| 21 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 2.5 | 2.0 | 2.0 |
| 22 | --- | --- | --- | 0.5 | 0.0 | 0.0 | 2.0 | 1.5 | 1.5 | 2.5 | 2.0 | 2.5 |
| 23 | --- | --- | --- | 1.5 | 0.5 | 1.0 | 2.0 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 |
| 24 | --- | --- | --- | 1.5 | 0.5 | 1.0 | 2.0 | 2.0 | 2.0 | 2.0 | 0.5 | 1.0 |
| 25 | --- | --- | --- | 1.5 | 1.5 | 1.5 | 2.0 | 1.5 | 2.0 | 1.0 | 0.5 | 1.0 |
| 26 | --- | --- | --- | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 |
| 27 | --- | --- | --- | 1.5 | 1.5 | 1.5 | 1.5 | 0.5 | 1.0 | 1.0 | 1.0 | 1.0 |
| 28 | --- | --- | --- | 1.5 | 0.0 | 1.0 | 0.5 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 |
| 29 | --- | --- | --- | 1.0 | 0.5 | 1.0 | 0.5 | 0.0 | 0.5 | 1.0 | 1.0 | 1.0 |
| 30 | --- | --- | --- | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 |
| 31 | --- | --- | --- | --- | --- | --- | 0.5 | 0.0 | 0.5 | 1.0 | 1.0 | 1.0 |
| MONTH | --- | --- | --- | --- | --- | --- | 2.0 | 0.0 | 1.0 | 2.5 | 0.0 | 0.9 |

## 15087500 EAST FORK HOBO CREEK NEAR PETERSBURG—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 2.0 | 1.5 | 2.0 | 5.5 | 5.0 | 5.5 |
| 2 | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 2.5 | 2.0 | 2.5 | 5.0 | 4.5 | 5.0 |
| 3 | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 1.0 | 2.5 | 2.5 | 2.5 | 5.0 | 4.5 | 5.0 |
| 4 | 1.0 | 0.5 | 1.0 | 1.5 | 1.0 | 1.0 | 2.5 | 2.5 | 2.5 | 5.5 | 4.5 | 5.0 |
| 5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 3.0 | 2.5 | 2.5 | 5.5 | 4.5 | 5.0 |
| 6 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 3.5 | 2.5 | 3.0 | 6.0 | 4.5 | 5.5 |
| 7 | 1.0 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 3.5 | 3.0 | 3.5 | 6.0 | 5.0 | 5.5 |
| 8 | 0.5 | 0.5 | 0.5 | 1.0 | 1.0 | 1.0 | 3.0 | 3.0 | 3.0 | 6.0 | 5.0 | 5.5 |
| 9 | 0.5 | 0.5 | 0.5 | 1.5 | 1.0 | 1.0 | 3.5 | 3.0 | 3.5 | 5.5 | 5.0 | 5.5 |
| 10 | 1.0 | 0.5 | 1.0 | 1.0 | 0.5 | 1.0 | 3.5 | 3.0 | 3.5 | 6.0 | 5.0 | 5.5 |
| 11 | 1.0 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 | 3.5 | 3.0 | 3.5 | 6.0 | 5.0 | 5.5 |
| 12 | 1.0 | 1.0 | 1.0 | 1.5 | 1.0 | 1.5 | 3.5 | 3.0 | 3.5 | 6.5 | 5.5 | 6.0 |
| 13 | 1.5 | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 3.5 | 3.0 | 3.5 | 7.0 | 5.5 | 6.5 |
| 14 | 1.5 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 | 3.5 | 3.0 | 3.5 | 7.0 | 6.0 | 6.5 |
| 15 | 1.0 | 0.5 | 1.0 | 1.0 | 1.0 | 1.0 | 3.5 | 3.0 | 3.0 | 6.5 | 5.5 | 6.0 |
| 16 | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 | 4.0 | 2.5 | 3.0 | 7.0 | 6.0 | 6.5 |
| 17 | 2.0 | 1.5 | 1.5 | 1.5 | 1.0 | 1.0 | 4.0 | 3.5 | 4.0 | 7.0 | 6.0 | 6.5 |
| 18 | 2.0 | 1.5 | 1.5 | 1.5 | 1.0 | 1.0 | 4.0 | 3.5 | 3.5 | 7.0 | 6.0 | 6.5 |
| 19 | 1.5 | 1.0 | 1.5 | 1.0 | 0.5 | 0.5 | 4.0 | 3.0 | 3.5 | 7.0 | 6.0 | 6.5 |
| 20 | 1.5 | 1.0 | 1.5 | 1.5 | 1.0 | 1.0 | 4.0 | 3.0 | 3.5 | 7.5 | 6.5 | 7.0 |
| 21 | 2.0 | 1.5 | 2.0 | 1.5 | 1.0 | 1.5 | 4.5 | 3.5 | 4.0 | 8.0 | 7.0 | 7.5 |
| 22 | 2.0 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 | 5.0 | 4.0 | 4.5 | 8.0 | 6.5 | 7.5 |
| 23 | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 | 4.5 | 3.5 | 4.0 | 8.5 | 7.0 | 7.5 |
| 24 | 2.0 | 1.5 | 1.5 | 2.0 | 1.5 | 2.0 | 4.0 | 4.0 | 4.0 | 8.0 | 7.5 | 8.0 |
| 25 | 2.0 | 1.5 | 1.5 | 2.5 | 2.0 | 2.0 | 4.0 | 4.0 | 4.0 | 7.5 | 7.0 | 7.5 |
| 26 | 1.5 | 1.0 | 1.5 | 2.5 | 2.0 | 2.0 | 4.0 | 3.5 | 4.0 | 7.5 | 7.0 | 7.5 |
| 27 | 1.0 | 1.0 | 1.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.5 | 4.0 | 8.0 | 7.0 | 7.5 |
| 28 | 1.5 | 0.5 | 1.0 | 2.5 | 2.0 | 2.0 | 5.0 | 4.0 | 4.0 | 8.0 | 7.0 | 7.5 |
| 29 | 1.5 | 1.0 | 1.0 | 2.5 | 2.0 | 2.0 | 4.5 | 3.5 | 4.0 | 8.0 | 7.0 | 7.5 |
| 30 | --- | --- | --- | 2.5 | 1.5 | 2.0 | 5.5 | 4.0 | 5.0 | 8.0 | 7.0 | 7.5 |
| 31 | --- | --- | --- | 2.0 | 1.5 | 1.5 | --- | --- | --- | 7.5 | 7.5 | 7.5 |
| MONTH | 2.5 | 0.5 | 1.2 | 2.5 | 0.5 | 1.3 | 5.5 | 1.5 | 3.5 | 8.5 | 4.5 | 6.4 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 7.5 | 7.0 | 7.5 | 12.5 | 11.5 | 12.0 | 12.0 | 11.0 | 11.5 | 11.0 | 10.0 | 10.5 |
| 2 | 8.0 | 7.0 | 7.5 | 12.0 | 11.5 | 11.5 | 12.0 | 11.5 | 11.5 | 11.0 | 10.0 | 10.5 |
| 3 | 8.0 | 7.0 | 7.5 | 12.0 | 11.0 | 11.5 | 12.0 | 11.5 | 11.5 | 11.5 | 11.0 | 11.5 |
| 4 | 8.5 | 7.5 | 8.0 | 12.0 | 11.0 | 11.5 | 12.0 | 11.0 | 11.5 | 11.5 | 11.0 | 11.0 |
| 5 | 9.5 | 8.5 | 8.5 | 12.0 | 11.0 | 11.5 | 12.0 | 11.5 | 11.5 | 11.0 | 10.5 | 11.0 |
| 6 | 9.0 | 8.5 | 8.5 | 11.0 | 10.5 | 10.5 | 12.0 | 11.5 | 11.5 | 11.0 | 10.5 | 11.0 |
| 7 | 10.5 | 8.5 | 9.5 | 10.5 | 10.0 | 10.5 | 12.0 | 11.0 | 11.5 | 11.0 | 10.0 | 10.5 |
| 8 | 10.5 | 9.5 | 10.0 | 11.5 | 10.0 | 10.5 | 12.0 | 11.0 | 11.5 | 10.0 | 9.0 | 9.5 |
| 9 | 9.5 | 9.0 | 9.5 | 11.5 | 10.5 | 11.0 | 12.5 | 11.0 | 12.0 | 10.0 | 9.0 | 9.5 |
| 10 | 9.5 | 8.0 | 9.0 | 11.5 | 11.0 | 11.0 | 13.5 | 11.5 | 12.5 | 9.5 | 8.5 | 9.0 |
| 11 | 9.5 | 8.5 | 9.0 | 11.5 | 11.0 | 11.5 | 13.0 | 12.5 | 13.0 | 9.5 | 9.0 | 9.5 |
| 12 | 9.5 | 8.5 | 9.0 | 12.0 | 11.0 | 11.5 | 12.5 | 11.5 | 12.0 | 10.0 | 9.5 | 9.5 |
| 13 | 9.5 | 9.0 | 9.0 | 12.5 | 11.0 | 12.0 | 12.5 | 11.5 | 12.0 | 10.0 | 9.5 | 10.0 |
| 14 | 9.0 | 8.5 | 9.0 | 13.0 | 11.5 | 12.0 | 12.5 | 11.0 | 12.0 | 10.0 | 9.5 | 9.5 |
| 15 | 9.0 | 8.5 | 9.0 | 13.0 | 11.5 | 12.5 | 13.5 | 12.0 | 12.5 | 9.5 | 9.0 | 9.0 |
| 16 | 10.0 | 8.5 | 9.0 | 13.0 | 12.0 | 12.5 | 13.5 | 12.5 | 13.0 | 9.0 | 8.5 | 8.5 |
| 17 | 10.5 | 8.5 | 9.5 | 12.5 | 12.0 | 12.0 | 14.0 | 13.0 | 13.5 | 8.5 | 8.0 | 8.5 |
| 18 | 11.5 | 9.5 | 10.5 | 12.5 | 11.5 | 12.0 | 14.0 | 13.0 | 13.5 | 8.5 | 8.0 | 8.5 |
| 19 | 12.5 | 10.5 | 11.5 | 12.5 | 11.5 | 12.0 | 13.5 | 12.5 | 13.0 | 8.0 | 7.5 | 8.0 |
| 20 | 13.0 | 11.0 | 12.0 | 12.5 | 12.0 | 12.0 | 13.0 | 12.5 | 13.0 | 9.0 | 8.0 | 8.5 |
| 21 | 13.0 | 11.0 | 12.0 | 12.5 | 12.0 | 12.0 | 13.0 | 12.0 | 12.5 | 9.5 | 9.0 | 9.0 |
| 22 | 13.0 | 11.5 | 12.5 | 12.5 | 11.5 | 12.0 | 12.5 | 11.5 | 12.0 | 9.5 | 9.0 | 9.0 |
| 23 | 13.5 | 11.5 | 12.5 | 12.5 | 11.0 | 12.0 | 12.0 | 10.5 | 11.0 | 9.5 | 9.0 | 9.0 |
| 24 | 13.5 | 12.0 | 12.5 | 13.0 | 11.5 | 12.5 | 11.0 | 10.0 | 10.5 | 9.5 | 9.0 | 9.5 |
| 25 | 13.5 | 11.5 | 12.5 | 12.5 | 12.0 | 12.5 | 11.0 | 9.5 | 10.5 | 9.0 | 8.5 | 9.0 |
| 26 | 13.0 | 12.5 | 13.0 | 12.0 | 11.5 | 12.0 | 12.0 | 10.0 | 11.0 | 9.0 | 8.5 | 8.5 |
| 27 | 12.5 | 12.0 | 12.5 | 13.0 | 11.5 | 12.0 | 12.5 | 11.5 | 12.0 | 9.0 | 9.0 | 9.0 |
| 28 | 12.0 | 11.5 | 12.0 | 13.0 | 12.5 | 12.5 | 12.5 | 12.0 | 12.0 | 9.0 | 8.0 | 8.5 |
| 29 | 12.0 | 11.5 | 11.5 | 12.5 | 12.0 | 12.5 | 12.0 | 11.5 | 12.0 | 8.5 | 8.0 | 8.5 |
| 30 | 12.0 | 11.0 | 11.5 | 12.5 | 12.0 | 12.0 | 12.0 | 11.0 | 11.5 | 9.0 | 8.5 | 8.5 |
| 31 | --- | --- | --- | 12.5 | 11.5 | 12.0 | 11.5 | 10.5 | 11.0 | --- | --- | --- |
| MONTH | 13.5 | 7.0 | 10.2 | 13.0 | 10.0 | 11.8 | 14.0 | 9.5 | 11.9 | 11.5 | 7.5 | 9.4 |

## 15087618 STARRIGAVIN CREEK AT UPPER BRIDGE NEAR SITKA

LOCATION.--Lat 57°07'31", long 135°19'54", in SW$^1/_4$ SW$^1/_4$ NE$^1/_4$ sec. 1, T. 55 S., R. 63 E. (Sitka A-4 quad), Hydrologic Unit 19010203, on Baranof Island, in Tongass National Forest, on right bank 2.3 mi upstream from mouth, and 4.3 mi north of Sitka.

DRAINAGE AREA.--4.29 mi$^2$.

PERIOD OF RECORD.-- October 2003 to September 2004.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above sea level, from topographic map.

REMARKS.-- Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.-- Maximum discharge 1320 ft$^3$/s, November 12, gage-height 14.89 ft; minimum discharge 2.4 ft$^3$/s, July 19-20, gage-height 9.86 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | --- | 17 | 118 | 12 | 6.4 | 10 | 15 | 54 | 16 | 3.9 | 19 | 6.9 |
| 2 | --- | 14 | 96 | 9.1 | 5.8 | 9.8 | 55 | 46 | 17 | 3.7 | 16 | 53 |
| 3 | --- | 12 | 34 | 8.1 | 5.3 | 10 | 95 | 41 | 15 | 3.7 | 13 | 76 |
| 4 | --- | 11 | 21 | 7.1 | 7.6 | 14 | 65 | 41 | 17 | 3.4 | 10 | 86 |
| 5 | --- | 9.3 | 17 | 6.5 | 12 | 12 | 33 | 37 | 20 | 4.0 | 8.9 | 32 |
| 6 | --- | 8.7 | 14 | 6.0 | 21 | 11 | 28 | 31 | 16 | 22 | 7.9 | 21 |
| 7 | --- | 8.3 | 12 | 5.8 | 88 | 51 | 44 | 27 | 16 | 10 | 7.1 | 16 |
| 8 | --- | 8.2 | 11 | 6.2 | 223 | 119 | 34 | 23 | 14 | 6.5 | 6.3 | 12 |
| 9 | --- | 69 | 9.7 | 10 | 207 | 46 | 34 | 24 | 13 | 5.0 | 5.7 | 10 |
| 10 | --- | 32 | 8.6 | 14 | 107 | 128 | 38 | 29 | 13 | 4.5 | 5.2 | 8.6 |
| 11 | --- | 120 | 8.3 | 16 | 55 | 81 | 37 | 30 | 11 | 4.7 | 4.8 | 8.6 |
| 12 | --- | 542 | 10 | 19 | 56 | 36 | 51 | 30 | 11 | 4.0 | 4.5 | 11 |
| 13 | --- | 77 | 10 | 87 | 41 | 25 | 40 | 32 | 11 | 3.5 | 4.0 | 14 |
| 14 | --- | 40 | 8.2 | 151 | 36 | 24 | 34 | 29 | 11 | 3.2 | 3.9 | 21 |
| 15 | --- | 59 | 11 | 57 | 26 | 31 | 27 | 24 | 9.3 | 2.9 | 3.8 | 19 |
| 16 | --- | 30 | 27 | 32 | 22 | 61 | 20 | 21 | 8.9 | 2.7 | 3.6 | 15 |
| 17 | --- | 20 | 44 | 133 | 18 | 27 | 18 | 20 | 9.2 | 2.6 | 3.4 | 11 |
| 18 | --- | 14 | 49 | 165 | 19 | 19 | 16 | 24 | 9.8 | 2.6 | 3.4 | 9.4 |
| 19 | --- | 10 | 85 | 59 | 44 | 15 | 14 | 29 | 9.9 | 2.5 | 3.6 | 8.2 |
| 20 | --- | 8.5 | 46 | 75 | 83 | 12 | 16 | 28 | 9.4 | 2.5 | 4.0 | 167 |
| 21 | --- | 8.1 | 82 | 92 | 178 | 11 | 17 | 30 | 8.0 | 2.7 | 3.7 | 260 |
| 22 | --- | 50 | 213 | 79 | 86 | 14 | 24 | 27 | 7.1 | e2.6 | 3.6 | 135 |
| 23 | 63 | 21 | 81 | 56 | 38 | 14 | 30 | 23 | 6.7 | e2.5 | 3.5 | 244 |
| 24 | 33 | 62 | 49 | 26 | 25 | 14 | 44 | 36 | 6.3 | e2.6 | 3.4 | 119 |
| 25 | 189 | 34 | 37 | 15 | 19 | 24 | 66 | 50 | 5.8 | e2.8 | 3.3 | 55 |
| 26 | 188 | 18 | 23 | 11 | 16 | 27 | 100 | 64 | 5.3 | e3.1 | 3.2 | 61 |
| 27 | 95 | 13 | 17 | 10 | 13 | 22 | 44 | 35 | 4.9 | e8.8 | 17 | 120 |
| 28 | 99 | 13 | 14 | 9.2 | 12 | 39 | 29 | 23 | 5.1 | e88 | 24 | 59 |
| 29 | 41 | 14 | 13 | 8.5 | 11 | 28 | 26 | 19 | 4.6 | 81 | 14 | 79 |
| 30 | 26 | 55 | 14 | 7.5 | --- | 19 | 43 | 18 | 4.2 | 46 | 11 | 54 |
| 31 | 20 | --- | 18 | 7.0 | --- | 15 | --- | 17 | --- | 25 | 9.2 | --- |
| TOTAL | --- | 1398.1 | 1200.8 | 1200.0 | 1481.1 | 968.8 | 1137 | 962 | 315.5 | 363.0 | 234.0 | 1791.7 |
| MEAN | --- | 46.6 | 38.7 | 38.7 | 51.1 | 31.3 | 37.9 | 31.0 | 10.5 | 11.7 | 7.55 | 59.7 |
| MAX | | 542 | 213 | 165 | 223 | 128 | 100 | 64 | 20 | 88 | 24 | 260 |
| MIN | | 8.1 | 8.2 | 5.8 | 5.3 | 9.8 | 14 | 17 | 4.2 | 2.5 | 3.2 | 6.9 |
| AC-FT | --- | 2770 | 2380 | 2380 | 2940 | 1920 | 2260 | 1910 | 626 | 720 | 464 | 3550 |
| CFSM | --- | 10.9 | 9.03 | 9.02 | 11.9 | 7.28 | 8.83 | 7.23 | 2.45 | 2.73 | 1.76 | 13.9 |
| IN. | --- | 12.12 | 10.41 | 10.41 | 12.84 | 8.40 | 9.86 | 8.34 | 2.74 | 3.15 | 2.03 | 15.54 |

e Estimated

## 15087690 INDIAN RIVER NEAR SITKA

LOCATION.--Lat 57°04'01", long 135°17'42", in SW$^1/_4$ SE$^1/_4$ sec. 30, T. 55 S., R. 64 E. (Sitka A-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Baranof Island, on right bank 2 mi upstream from mouth, and 1 mi northeast of Sitka.

DRAINAGE AREA.--10.1 mi$^2$

PERIOD OF RECORD.--August 1980 to September 1993. October 1998 to current year.

REVISED RECORD.--WDR-82-1: 1980-81.
GAGE.--Water-stage recorder. Elevation of gage is 125 ft above sea level, from topographic map. Prior to October 1998, at site 200 ft upstream and at different datum

REMARKS.-- Records fair except for Jan. 6-9, Sept. 2-9, and estimated daily discharges which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of November 19, 1993, reached a stage of 14.04 ft, site and datum then in use, from recorder, discharge, 6,460 ft$^3$/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1200 ft$^3$/s and maximum(*):

| Date | Time | Discharge (ft$^3$/s) | Gage height (ft) | Date | Time | Discharge (ft$^3$/s) | Gage height (ft) |
|---|---|---|---|---|---|---|---|
| Nov 12 | 0630 | *4350 | *13.93 | Sep 21 | 0230 | 2220 | 12.27 |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 78 | 73 | 154 | 47 | 35 | 40 | 54 | 119 | 53 | e16 | e37 | e14 |
| 2 | 68 | 65 | 164 | 40 | 32 | 36 | 101 | 102 | 50 | e16 | e33 | e50 |
| 3 | 59 | 58 | 97 | 35 | 29 | 37 | 150 | 99 | 47 | e15 | e29 | 103 |
| 4 | 70 | 52 | 80 | 32 | 29 | 46 | 127 | 90 | 53 | e15 | e26 | 132 |
| 5 | 62 | 47 | 74 | 29 | 34 | 40 | 88 | 82 | 62 | e18 | e24 | 72 |
| 6 | 58 | 43 | 65 | 27 | 43 | 37 | 84 | 73 | 52 | e43 | e22 | 75 |
| 7 | 67 | 39 | 59 | 25 | 114 | 87 | 105 | 67 | 49 | e28 | e21 | 65 |
| 8 | 58 | 37 | 55 | 25 | 254 | 120 | 93 | 63 | 46 | e21 | e18 | 57 |
| 9 | 50 | 100 | 49 | 27 | 285 | 79 | 85 | 66 | 42 | e18 | e17 | 53 |
| 10 | 48 | 78 | 45 | 35 | 184 | 148 | 89 | 75 | 41 | e17 | e15 | 48 |
| 11 | 45 | 207 | 42 | 37 | 118 | 115 | 92 | 74 | 37 | e16 | e14 | 45 |
| 12 | 40 | 1280 | 44 | 44 | 122 | 80 | 129 | 73 | 36 | e15 | e14 | 45 |
| 13 | 65 | 181 | 46 | 115 | 106 | 71 | 100 | 77 | 39 | e15 | e13 | 50 |
| 14 | 71 | 138 | 37 | 199 | 96 | 67 | 86 | 72 | 37 | e15 | e13 | 61 |
| 15 | 48 | 155 | 50 | 104 | 78 | 81 | 76 | 59 | 33 | e14 | e13 | 62 |
| 16 | 41 | 112 | 88 | 74 | 67 | 117 | 66 | 55 | 31 | e14 | e13 | 50 |
| 17 | 37 | 96 | 83 | 135 | 60 | 71 | 61 | 52 | 31 | e13 | e13 | 41 |
| 18 | 43 | 80 | 98 | 198 | 58 | 57 | 57 | 62 | 34 | e13 | e12 | 36 |
| 19 | 73 | 69 | 137 | 121 | 79 | 49 | 51 | 72 | 35 | e13 | e12 | 33 |
| 20 | 66 | 61 | 105 | 117 | 119 | 45 | 48 | 67 | 33 | e13 | e12 | 389 |
| 21 | 50 | 56 | 157 | 148 | 196 | 42 | 48 | 66 | 30 | e13 | e12 | 572 |
| 22 | 68 | 131 | 373 | 182 | 132 | 44 | 58 | 62 | e27 | e13 | e11 | 215 |
| 23 | 104 | 88 | 178 | 150 | 89 | 42 | 74 | 55 | e25 | e12 | e11 | 377 |
| 24 | 64 | 144 | 130 | 100 | 75 | 43 | 82 | 80 | e25 | e13 | e11 | 201 |
| 25 | 387 | 105 | 114 | 78 | 66 | 57 | 96 | 126 | e23 | e14 | e11 | 146 |
| 26 | 404 | 75 | 89 | 63 | 58 | 63 | 121 | 154 | e21 | e15 | e12 | 117 |
| 27 | 233 | 63 | 75 | 56 | 53 | 59 | 84 | 87 | e20 | e26 | e26 | 204 |
| 28 | 259 | 60 | 64 | 52 | 48 | 92 | 70 | 64 | e19 | e122 | e51 | 144 |
| 29 | 120 | 59 | 59 | 47 | 43 | 66 | 66 | 57 | e18 | e106 | e22 | 243 |
| 30 | 93 | 102 | 59 | 42 | --- | 55 | 100 | 57 | e17 | e75 | e15 | 150 |
| 31 | 81 | --- | 62 | 38 | --- | 48 | --- | 55 | --- | e46 | e14 | --- |
| TOTAL | 3010 | 3854 | 2932 | 2422 | 2702 | 2034 | 2541 | 2362 | 1066 | 803 | 567 | 3850 |
| MEAN | 97.1 | 128 | 94.6 | 78.1 | 93.2 | 65.6 | 84.7 | 76.2 | 35.5 | 25.9 | 18.3 | 128 |
| MAX | 404 | 1280 | 373 | 199 | 285 | 148 | 150 | 154 | 62 | 122 | 51 | 572 |
| MIN | 37 | 37 | 37 | 25 | 29 | 36 | 48 | 52 | 17 | 12 | 11 | 14 |
| AC-FT | 5970 | 7640 | 5820 | 4800 | 5360 | 4030 | 5040 | 4690 | 2110 | 1590 | 1120 | 7640 |
| CFSM | 9.61 | 12.7 | 9.36 | 7.74 | 9.22 | 6.50 | 8.39 | 7.54 | 3.52 | 2.56 | 1.81 | 12.7 |
| IN. | 11.09 | 14.19 | 10.80 | 8.92 | 9.95 | 7.49 | 9.36 | 8.70 | 3.93 | 2.96 | 2.09 | 14.18 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 184 | 102 | 99.1 | 97.6 | 80.4 | 61.8 | 66.3 | 103 | 85.8 | 61.5 | 85.6 | 168 |
| MAX | 293 | 218 | 207 | 184 | 154 | 122 | 111 | 167 | 166 | 111 | 238 | 295 |
| (WY) | 1988 | 1990 | 1990 | 1984 | 1993 | 1986 | 1983 | 1983 | 1985 | 1985 | 1983 | 1991 |
| MIN | 97.1 | 37.0 | 21.7 | 46.3 | 24.8 | 19.9 | 29.0 | 37.1 | 28.8 | 20.6 | 18.3 | 52.8 |
| (WY) | 2004 | 1999 | 1984 | 1988 | 1999 | 1989 | 2002 | 2003 | 1993 | 1993 | 2004 | 1986 |

\# See period of record; partial years used in monthly summary statistics and break in record
e Estimated

## 15087690 INDIAN RIVER NEAR SITKA—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1980 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 27031 | | 28143 | | | |
| ANNUAL MEAN | 74.1 | | 76.9 | | 99.9 | |
| HIGHEST ANNUAL MEAN | | | | | 123 | 1987 |
| LOWEST ANNUAL MEAN | | | | | 76.3 | 2003 |
| HIGHEST DAILY MEAN | 1280 | Nov 12 | 1280 | Nov 12 | 2000 | Oct 12 1982 |
| LOWEST DAILY MEAN | 17 | Aug 11 | a11 | Aug 22 | 8.6 | Jan 18 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 18 | Aug 8 | 11 | Aug 19 | 10 | Jan 13 1989 |
| MAXIMUM PEAK FLOW | | | b4350 | Nov 12 | c5710 | Sep 4 1990 |
| MAXIMUM PEAK STAGE | | | 13.93 | Nov 12 | d13.51 | Sep 4 1990 |
| INSTANTANEOUS LOW FLOW | | | f | | 8.2 | Jan 19 1989 |
| ANNUAL RUNOFF (AC-FT) | 53620 | | 55820 | | 72380 | |
| ANNUAL RUNOFF (CFSM) | 7.33 | | 7.61 | | 9.89 | |
| ANNUAL RUNOFF (INCHES) | 99.56 | | 103.66 | | 134.40 | |
| 10 PERCENT EXCEEDS | 130 | | 140 | | 181 | |
| 50 PERCENT EXCEEDS | 50 | | 59 | | 67 | |
| 90 PERCENT EXCEEDS | 28 | | 15 | | 28 | |

\# See period of record; partial years used in monthly summary statistics and break in record
a Aug 22-25
b From rating curve extended above 500 $ft^3/s$
c From rating curve extended above 3,100 $ft^3/s$, at site and datum then in use
d At site and datum then in use
f Not determined, see lowest daily mean

## 15088000 SAWMILL CREEK NEAR SITKA

LOCATION.--Lat 57°03'05", long 135°13'40", in NE$^1/_4$ SW$^1/_4$ sec. 34, T. 55 S., R. 64 E. (Sitka A-4 quad.), Hydrologic Unit 19010401, on Baranof Island, in Tongass National Forest, on left bank 500 ft upstream from mouth, 1.6 mi downstream from Blue Lake, and 4.0 mi east of Sitka.

DRAINAGE AREA.--39.0 mi$^2$.

PERIOD OF RECORD.-- September 1920 to December 1923, February 1928 to September 1942, October 1945 to September 1957, 1994 (peak discharge only, published in WRD AK 95-1), and May 2001 to current year. Records prior to 1945 furnished by U.S. Forest Service.

REVISED RECORDS.-- WSP 1372: 1921-22 and 1928-36.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is sea level, from topographic map. Prior to April 1947, staff gages or water-stage recorders at several sites within 1,700 ft of present site at various datums. April 1947 to September 1957 at site about 200 ft upstream at different datum.

REMARKS.--Records good, except estimated daily discharges, which are poor. Minor regulation above station by Sitka Public Utilities hydroelectric plant during periods 1920-23 and 1937-42. In 1959, Blue Lake Dam, 1.6 mi upstream, was completed. The area of the lake is 1225 acres. The dam is concrete with a spillway elevation of 342.0 ft above sea level. In 1960, the Blue Lake Hydro plant, located 400 ft downstream from gage, was put into operation. Water is taken from Blue Lake and piped via a penstock to Blue Lake hydro, through 2-3,000 kw turbines and discharged back into Sawmill Creek just below high tide level. This penstock also provides water for the City of Sitka and for the filter plant for the Sitka Sawmill. In the years following, Campground Hydro, a smaller generation plant was constructed about 1,000 ft below Blue Lake Dam. It also has a penstock from Blue Lake and discharges directly into Sawmill Creek. A fish bypass valve has been installed at Campground Hydro that automatically releases 50 ft$^3$/s to the tailrace anytime the hydro plant is shut down. Another small generator was installed just above the Sawmill Filter Plant diversion from Blue Lake Hydro penstock with the capability of bypassing the filter plant and discharging back into Sawmill Creek above the gage site. Water that went to the filter plant was piped to the sawmill and eventually discharged directly into Silver Bay. The sawmill has since closed and water is now supplied to Sawmill Cove Industrial Park. Flow is constantly regulated except when Blue Lake is spilling.

EXTREMES OUTSIDE PERIOD OF RECORD.-- It was reported that in October 1972, a storm produced a peak elevation at Blue Lake of 353.0 ft or 11.0 ft of spill at the spillway. Extending the spillway rating, this flood was estimated to be 17,000 ft$^3$/s. It was reported to have been the largest since 1921.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | e400 | 110 | 135 | 109 | 105 | 108 | 88 | 115 | 117 | 124 | 129 | 107 |
| 2 | e200 | 108 | 147 | 82 | 105 | 72 | 129 | 112 | 117 | 122 | 126 | 124 |
| 3 | e108 | 106 | 121 | 63 | 105 | 53 | 145 | 112 | 117 | 123 | 123 | 135 |
| 4 | 109 | 106 | 114 | 63 | 105 | 71 | 141 | 112 | 117 | 123 | 121 | 144 |
| 5 | 118 | 105 | 113 | 63 | 102 | 79 | 122 | 112 | 118 | 124 | 120 | 120 |
| 6 | 109 | 104 | 111 | 63 | 110 | 62 | 118 | 111 | 118 | 132 | 119 | 117 |
| 7 | 112 | 104 | 110 | 93 | 112 | 80 | 120 | 111 | 118 | 128 | 119 | 114 |
| 8 | 115 | 104 | 109 | 105 | 133 | 93 | 118 | 111 | 77 | 126 | 116 | 110 |
| 9 | 109 | 113 | 108 | 106 | 115 | 110 | 115 | 111 | 100 | 124 | 116 | 109 |
| 10 | 108 | 120 | 107 | 109 | 73 | 137 | 114 | 112 | 120 | 124 | 115 | 108 |
| 11 | 103 | 138 | 106 | 109 | 62 | 137 | 118 | 112 | 120 | 124 | 114 | 108 |
| 12 | 64 | 1550 | 106 | 109 | 66 | 125 | 108 | 112 | 120 | 124 | 114 | 109 |
| 13 | 69 | 1500 | 107 | 118 | 74 | 120 | 89 | 112 | 120 | 124 | 113 | 112 |
| 14 | 71 | 654 | 105 | 141 | 72 | 116 | 113 | 112 | 121 | 124 | 113 | 117 |
| 15 | 85 | 335 | 106 | 124 | 70 | 119 | 111 | 111 | 122 | 124 | 113 | 115 |
| 16 | 107 | 188 | 117 | 116 | 68 | 130 | 109 | 111 | 121 | 124 | 112 | 111 |
| 17 | 109 | 125 | 122 | 131 | 67 | 120 | 109 | 111 | 121 | 125 | 112 | 108 |
| 18 | 113 | 114 | 135 | 139 | 68 | 115 | 109 | 111 | 121 | 124 | 110 | 107 |
| 19 | 121 | 109 | 138 | 122 | 98 | 113 | 91 | 111 | 121 | 124 | 110 | 107 |
| 20 | 212 | 108 | 124 | 121 | 122 | 111 | 59 | 112 | 121 | 125 | 110 | 221 |
| 21 | 216 | 108 | 134 | 125 | 141 | 111 | 76 | 112 | 121 | 125 | 110 | 1190 |
| 22 | 337 | 140 | 189 | 146 | 129 | 110 | 94 | 113 | 122 | 124 | 110 | 1760 |
| 23 | 352 | 120 | 151 | 136 | 118 | 110 | 70 | 113 | 122 | 124 | 109 | 2490 |
| 24 | 304 | 139 | 131 | 119 | 114 | 111 | 71 | 115 | 122 | 124 | 109 | 2200 |
| 25 | 1710 | 128 | 125 | 112 | 112 | 113 | 74 | 125 | 123 | 124 | 108 | 1330 |
| 26 | 2500 | 117 | 116 | 104 | 110 | 115 | 78 | 139 | 123 | 123 | 108 | 665 |
| 27 | 1430 | 112 | 113 | 106 | 109 | 115 | 73 | 124 | 124 | 125 | 116 | 1210 |
| 28 | 1120 | 111 | 111 | 107 | 109 | 126 | 97 | 91 | 124 | 135 | 122 | 1070 |
| 29 | 539 | 110 | 110 | 106 | 109 | 84 | 110 | 119 | 124 | 151 | 112 | 1540 |
| 30 | 215 | 116 | 110 | 106 | --- | 102 | 117 | 118 | 124 | 146 | 109 | 1320 |
| 31 | 122 | --- | 111 | 105 | --- | 97 | --- | 118 | --- | 134 | 107 | --- |
| TOTAL | 11387 | 7102 | 3742 | 3358 | 2883 | 3265 | 3086 | 3521 | 3556 | 3927 | 3545 | 17178 |
| MEAN | 367 | 237 | 121 | 108 | 99.4 | 105 | 103 | 114 | 119 | 127 | 114 | 573 |
| MAX | 2500 | 1550 | 189 | 146 | 141 | 137 | 145 | 139 | 124 | 151 | 129 | 2490 |
| MIN | 64 | 104 | 105 | 63 | 62 | 53 | 59 | 91 | 77 | 122 | 107 | 107 |
| AC-FT | 22590 | 14090 | 7420 | 6660 | 5720 | 6480 | 6120 | 6980 | 7050 | 7790 | 7030 | 34070 |
| CFSM | 9.42 | 6.07 | 3.10 | 2.78 | 2.55 | 2.70 | 2.64 | 2.91 | 3.04 | 3.25 | 2.93 | 14.7 |
| IN. | 10.86 | 6.77 | 3.57 | 3.20 | 2.75 | 3.11 | 2.94 | 3.36 | 3.39 | 3.75 | 3.38 | 16.39 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 732 | 465 | 255 | 171 | 164 | 127 | 199 | 520 | 686 | 640 | 646 | 739 |
| MAX | 1204 | 998 | 818 | 500 | 644 | 365 | 663 | 861 | 1179 | 976 | 1235 | 1287 |
| (WY) | 1938 | 1936 | 1931 | 1942 | 1935 | 1947 | 1936 | 1936 | 1936 | 1935 | 1939 | 1947 |
| MIN | 354 | 78.5 | 50.1 | 29.9 | 33.1 | 24.8 | 61.5 | 60.3 | 53.9 | 87.0 | 114 | 359 |
| (WY) | 1923 | 2002 | 1951 | 1956 | 1951 | 1922 | 1948 | 2002 | 2002 | 2003 | 2004 | 1941 |

\# See Period of Record; partial years used in monthly statistics
e Estimated

## 15088000 SAWMILL CREEK NEAR SITKA—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1920 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 55549 | | 66550 | | | |
| ANNUAL MEAN | 152 | | 182 | | 451 | |
| HIGHEST ANNUAL MEAN | | | | | 715 | 1936 |
| LOWEST ANNUAL MEAN | | | | | 182 | 2004 |
| HIGHEST DAILY MEAN | 2540 | Sep 25 | 2500 | Oct 26 | 5500 | Oct 22 1937 |
| LOWEST DAILY MEAN | 51 | Jan 2 | 53 | Mar 3 | 11 | Mar 30 1922 |
| ANNUAL SEVEN-DAY MINIMUM | 63 | May 4 | 68 | Feb 11 | 12 | Mar 25 1922 |
| MAXIMUM PEAK FLOW | | | 3420 | Sep 23 | a10700 | Nov 19 1993 |
| MAXIMUM PEAK STAGE | | | 16.22 | Sep 23 | 18.26 | Aug 12 2002 |
| INSTANTANEOUS LOW FLOW | | | 41 | Apr 20 | b | |
| ANNUAL RUNOFF (AC-FT) | 110200 | | 132000 | | 326800 | |
| ANNUAL RUNOFF (CFSM) | 3.90 | | 4.66 | | 11.6 | |
| ANNUAL RUNOFF (INCHES) | 52.99 | | 63.48 | | 157.17 | |
| 10 PERCENT EXCEEDS | 143 | | 144 | | 930 | |
| 50 PERCENT EXCEEDS | 80 | | 114 | | 325 | |
| 90 PERCENT EXCEEDS | 65 | | 91 | | 66 | |

\# See Period of Record; partial years used in monthly statistics
a On the basis of a slope-area computation of peak flow below Campground Hydro and adding diversion values at the time of peak between Campground Hydro and gage; peak flow below Blue Lake Tailrace was computed to be 11,100 $ft^3/s$.
b Undetermined

## 15088200 SILVER BAY TRIBUTARY AT BEAR COVE NEAR SITKA

LOCATION.--Lat 57°01'09", long 135°09'45", in SW¼ NW¼ NE¼ sec. 13, T. 56 S., R. 64 E. (Sitka A-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Baranof Island, on right bank 350 ft upstream from mouth, and 6.5 mi southwest of Sitka.

DRAINAGE AREA.--0.38 $mi^2$.

PERIOD OF RECORD.-- October 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 110 ft above sea level, from topographic map.

REMARKS.-- Records poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.34 | 0.74 | 17 | 0.23 | 0.10 | 0.40 | 1.1 | 6.1 | 0.60 | 0.18 | 0.36 | 0.07 |
| 2 | 0.24 | 0.36 | 11 | 0.15 | 0.10 | 0.32 | 18 | 4.4 | 0.62 | 0.18 | 0.28 | 5.4 |
| 3 | 0.40 | 0.26 | 0.91 | 0.12 | 0.09 | 0.34 | 14 | 3.2 | 0.67 | 0.16 | 0.16 | 4.4 |
| 4 | 0.69 | 0.19 | 0.48 | 0.10 | 0.15 | 0.47 | 5.8 | 4.8 | 1.3 | 0.14 | 0.10 | 5.6 |
| 5 | 0.43 | 0.16 | 0.40 | 0.09 | 1.1 | 0.40 | 3.6 | 3.7 | 1.2 | 0.68 | 0.08 | 0.44 |
| 6 | 1.1 | 0.13 | 0.31 | 0.09 | 1.0 | 0.38 | 4.6 | 2.8 | 0.72 | 6.9 | 0.09 | 0.29 |
| 7 | 2.0 | 0.12 | 0.27 | 0.09 | 5.4 | 4.7 | 9.1 | 1.9 | 0.74 | 1.1 | 0.09 | 0.22 |
| 8 | 0.85 | 0.25 | 0.24 | 0.09 | 17 | 18 | 3.9 | 1.2 | 0.43 | 0.40 | 0.08 | 0.09 |
| 9 | 0.85 | 4.7 | 0.20 | 0.61 | 19 | 2.1 | 4.5 | 1.1 | 0.54 | 0.26 | 0.07 | 0.07 |
| 10 | 0.96 | 3.5 | 0.18 | 1.9 | 7.7 | 6.8 | 4.8 | 1.9 | 0.67 | 0.21 | 0.06 | 0.06 |
| 11 | 0.58 | 18 | 0.20 | 0.92 | 1.9 | 3.8 | 8.7 | 2.6 | 0.40 | 0.18 | 0.05 | 0.06 |
| 12 | 0.31 | 41 | 0.32 | 1.6 | 2.8 | 1.1 | 13 | 3.0 | 0.57 | 0.16 | 0.03 | 0.27 |
| 13 | 5.4 | 2.8 | 0.34 | 14 | 2.9 | 0.81 | 4.3 | 3.1 | 0.63 | 0.15 | 0.00 | 3.1 |
| 14 | 2.8 | 2.1 | 0.20 | 23 | 1.6 | 0.73 | 4.4 | e2.4 | 0.62 | 0.13 | 0.00 | 4.1 |
| 15 | 0.68 | 5.2 | 0.95 | 2.0 | 0.66 | 0.89 | 3.4 | e2.1 | 0.47 | 0.13 | 0.00 | 1.5 |
| 16 | 0.42 | 1.0 | 4.3 | 0.80 | 0.42 | 1.8 | 2.3 | e1.8 | 0.43 | 0.12 | 0.00 | 0.39 |
| 17 | 0.44 | 0.70 | 3.4 | 21 | 0.33 | 0.73 | 1.9 | e1.4 | 0.44 | 0.10 | 0.00 | 0.12 |
| 18 | 5.6 | 0.38 | 18 | 8.4 | 0.70 | 0.49 | 1.7 | e1.7 | 0.48 | 0.09 | 0.00 | 0.08 |
| 19 | 11 | 0.25 | 15 | 1.4 | 2.3 | 0.36 | 1.5 | e2.9 | 0.51 | 0.09 | 0.00 | 0.07 |
| 20 | 2.9 | 0.18 | 2.6 | 6.2 | 6.1 | 0.33 | 2.8 | 3.7 | 0.42 | 0.09 | 0.01 | 31 |
| 21 | 4.7 | 0.16 | 25 | 8.6 | 20 | 0.35 | 2.1 | 4.3 | 0.31 | 0.11 | 0.00 | 24 |
| 22 | 4.9 | 7.4 | 39 | 17 | 2.9 | 0.72 | 2.8 | 3.2 | 0.29 | 0.11 | 0.00 | 6.2 |
| 23 | 4.1 | 1.1 | 5.3 | 3.7 | 1.2 | 1.1 | 1.5 | 2.4 | 0.31 | 0.08 | 0.00 | 26 |
| 24 | 1.6 | 4.0 | 2.3 | 0.67 | 0.81 | 1.5 | 2.5 | 5.1 | 0.28 | 0.17 | 0.00 | 4.5 |
| 25 | 20 | 1.3 | 1.4 | 0.26 | 0.59 | 2.3 | 5.5 | 9.1 | 0.25 | 0.63 | 0.00 | 1.8 |
| 26 | 21 | 0.56 | 0.54 | 0.17 | 0.57 | 2.0 | 3.7 | 13 | 0.20 | 0.72 | 0.03 | 8.5 |
| 27 | 13 | 0.37 | 0.34 | 0.13 | 0.65 | 1.4 | 1.6 | 2.6 | 0.18 | 0.54 | 1.2 | 12 |
| 28 | 9.3 | 0.34 | 0.27 | 0.12 | 0.57 | 7.4 | 1.2 | 1.3 | 0.20 | 1.4 | 3.3 | 1.9 |
| 29 | 1.2 | 0.38 | 0.24 | 0.11 | 0.41 | 1.5 | 3.2 | 0.98 | 0.19 | 15 | 0.33 | 28 |
| 30 | 0.55 | 6.5 | 0.28 | 0.11 | --- | 0.86 | 10 | 0.82 | 0.18 | 5.1 | 0.18 | 3.8 |
| 31 | 0.58 | --- | 0.46 | 0.11 | --- | 0.62 | --- | 0.70 | --- | 0.76 | 0.09 | --- |
| TOTAL | 118.92 | 104.13 | 151.43 | 113.77 | 99.05 | 64.70 | 147.5 | 99.30 | 14.85 | 36.07 | 6.59 | 174.03 |
| MEAN | 3.84 | 3.47 | 4.88 | 3.67 | 3.42 | 2.09 | 4.92 | 3.20 | 0.49 | 1.16 | 0.21 | 5.80 |
| MAX | 21 | 41 | 39 | 23 | 20 | 18 | 18 | 13 | 1.3 | 15 | 3.3 | 31 |
| MIN | 0.24 | 0.12 | 0.18 | 0.09 | 0.09 | 0.32 | 1.1 | 0.70 | 0.18 | 0.08 | 0.00 | 0.06 |
| MED | 1.1 | 0.63 | 0.48 | 0.61 | 1.0 | 0.86 | 3.7 | 2.6 | 0.45 | 0.18 | 0.05 | 1.9 |
| AC-FT | 236 | 207 | 300 | 226 | 196 | 128 | 293 | 197 | 29 | 72 | 13 | 345 |
| CFSM | 10.1 | 9.13 | 12.9 | 9.66 | 8.99 | 5.49 | 12.9 | 8.43 | 1.30 | 3.06 | 0.56 | 15.3 |
| IN. | 11.64 | 10.19 | 14.82 | 11.14 | 9.70 | 6.33 | 14.44 | 9.72 | 1.45 | 3.53 | 0.65 | 17.04 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 6.02 | 3.46 | 4.31 | 2.92 | 2.42 | 1.85 | 2.71 | 4.37 | 3.31 | 2.39 | 2.49 | 5.21 |
| MAX | 7.64 | 4.56 | 7.73 | 3.67 | 3.42 | 2.78 | 4.92 | 6.85 | 6.20 | 4.93 | 5.96 | 6.36 |
| (WY) | 2002 | 2000 | 2000 | 2004 | 2004 | 2001 | 2004 | 2002 | 2000 | 2000 | 2002 | 2000 |
| MIN | 3.84 | 2.85 | 2.49 | 1.68 | 1.12 | 0.82 | 1.48 | 0.94 | 0.50 | 0.75 | 0.21 | 3.04 |
| (WY) | 2004 | 2001 | 2003 | 2000 | 2000 | 2002 | 2003 | 2003 | 2004 | 2003 | 2004 | 2002 |

e Estimated

## 15088200 SILVER BAY TRIBUTARY AT BEAR COVE NEAR SITKA—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 2000 - 2004 | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 919.53 | | 1130.34 | | | |
| ANNUAL MEAN | 2.52 | | 3.09 | | 3.46 | |
| HIGHEST ANNUAL MEAN | | | | | 4.54 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 2.46 | 2003 |
| HIGHEST DAILY MEAN | 41 | Nov 12 | 41 | Nov 12 | 51 | Aug 12 2002 |
| LOWEST DAILY MEAN | 0.00 | Jul 17 | a0.00 | Aug 13 | b0.00 | Jul 17 2003 |
| ANNUAL SEVEN-DAY MINIMUM | 0.08 | Jul 14 | 0.00 | Aug 13 | 0.00 | Aug 13 2004 |
| MAXIMUM PEAK FLOW | | | 140 | Sep 20 | 264 | Aug 12 2002 |
| MAXIMUM PEAK STAGE | | | 19.48 | Sep 20 | 19.68 | Aug 12 2002 |
| INSTANTANEOUS LOW FLOW | | | c0.00 | Aug 12 | d0.00 | Dec 2 2001 |
| ANNUAL RUNOFF (AC-FT) | 1820 | | 2240 | | 2510 | |
| ANNUAL RUNOFF (CFSM) | 6.63 | | 8.13 | | 9.11 | |
| ANNUAL RUNOFF (INCHES) | 90.02 | | 110.65 | | 123.73 | |
| 10 PERCENT EXCEEDS | 5.6 | | 8.5 | | 8.1 | |
| 50 PERCENT EXCEEDS | 1.0 | | 0.73 | | 1.9 | |
| 90 PERCENT EXCEEDS | 0.27 | | 0.09 | | 0.29 | |

a Aug. 13-19, 21-25
b Jul. 17-18, Aug. 10,2003, and Aug. 13-19, 21-25, 2004
c Aug. 12-26
d Dec. 2-3, 2001, Jul. 16-19 and Aug. 10-11, 2003, and Aug. 12-26, 2004

## 15090000 GREEN LAKE NEAR SITKA

LOCATION.--Lat 56°59'14", long 135°06'37", in SW$^1/_4$ NE$^1/_4$ sec. 29, T. 56 S., R. 65 E. (Port Alexander D-4 quad), Hydrologic Unit 19010203, Greater Sitka Borough, on Baranof Island, in Tongass National Forest, 0.4 mi upstream from mouth at Silver Bay, and 9.4 mi southeast of Sitka.

DRAINAGE AREA.--28.8 mi$^2$.

PERIOD OF RECORD.--September 1915 to September 1925 (published as "Green Lake Outlet"); monthly discharges only published in WSP 1372. October 1983 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: 1916, 1917, 1922 (monthly discharge). WDR AK-84-1: Drainage area. WDR AK-86-1: 1984, 1985 (month-end reservoir contents, change in month-end and yearly contents, adjusted mean monthly discharges, and extremes). WRD AK-00-01: 1998-1999 (M m).

GAGE.--Staff gage on upstream face of dam. Datum of gage is at mean low water, which is about 5 ft below sea level. Totalizing MWH meters are on the two turbines in Green Lake powerhouse. September 1915 to September 1925, recording gage at site of present day dam, elevation of gage was 220 ft above sea level, by barometer; prior to December 27, 1916 at datum 1 ft higher. Water years 1983-88, nonrecording remote lake-level indicator at Blue Lake powerhouse (6 mi northwest of gage).

REMARKS.--Reservoir is formed by concrete arch dam located at the outlet of Green Lake, construction began in 1978 and was completed in 1982. Total and usable capacity below spillway crest elevation of 395 ft is 88,000 and 75,000 acre-ft, respectively. Reservoir is used for power. Discharge released through the turbines is computed from relation between discharge, head, and power generation; release flow empties directly into Silver Bay and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above the crest of the 100 ft wide spillway. Turbine and spillway ratings and reservoir capacity table furnished by City and Borough of Sitka in 1983. Corrected reservoir capacity table furnished in April 1987.

COOPERATION.--Daily reservoir elevations and MWH power generation provided by City and Borough of Sitka.

AVERAGE DISCHARGE.--30 years (water years, 1916-25, 1985-2004), 310 ft$^3$/s, 146.2in/yr, 224,600 acre-ft/yr. Mean discharge for water years 1985-2004 adjusted for change in contents of Green Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 93,780 acre-ft, September 22-23, 1994, elevation, 400.5 ft; minimum contents observed, 23,170 acre-ft, June 1, 1996, elevation, 307.6 ft; Maximum daily discharge, 5,020 ft$^3$/s, September 22-23, 1994; no flow released, February 5-8, 1987 , November 27-29, 1988 and June 19, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed,91,890 acre-ft, September 23, elevation 398.7 ft; minimum contents observed, 65,680 acre-ft, April 1-2, elevation 370.5 ft; Maximum daily discharge (not adjusted for storage) 309 ft$^3$/s, April 1; minimum daily discharge, 0 ft$^3$/s, June 19.

CORRECTIONS.--Monthly and annual discharge for Water Year 2003 have been corrected and are listed in the table below; the previously published values are incorrect.

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

| MONTH | RELEASE | SPILL | TOTAL | ADJUSTED |
|---|---|---|---|---|
| OCT | 162 | 485 | 647 | 634 |
| NOV | 198 | 74 | 272 | 274 |
| DEC | 170 | 110 | 280 | 285 |
| JAN | 192 | 22 | 214 | 192 |
| FEB | 207 | 0 | 207 | 52 |
| MAR | 249 | 0 | 249 | 79 |
| APR | 213 | 0 | 213 | 126 |
| MAY | 165 | 0 | 165 | 247 |
| JUN | 148 | 0 | 148 | 327 |
| JUL | 153 | 0 | 153 | 213 |
| AUG | 142 | 0 | 142 | 230 |
| SEP | 141 | 341 | 482 | 534 |
| CAL YR 2002 | 229 | 65.7 | 294 | 310 |
| WTR YR 2003 | 178 | 86.5 | 265 | 267 |

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DATE | ELEVATION | CONTENTS | CHANGE IN CONTENTS |
|---|---|---|---|
| Sep 30 | 395.4 | 88,420 | |
| Oct 31 | 394.8> | 87,810 | -610 |
| Nov 30 | 391.3 | 84,490 | -3320 |
| Dec 31 | 387.8 | 81,160 | -3330 |
| Jan 31 | 381.3 | 75,170 | -5990 |
| Feb 29 | 378.8 | 72,920 | -2250 |
| Mar 31 | 370.9 | 66,020 | -6900 |
| Apr 30 | 371.4 | 66,440 | +420 |
| May 31 | 385.4 | 78,880 | +12,440 |
| Jun 30 | 395.5 | 88,530 | +9650 |
| Jul 31 | 395.5 | 88,530 | 0 |
| Aug 31 | 395.0 | 88,000 | -530 |
| Sep 30 | 396.4 | 89,470 | +1470 |
| | | CAL YR 2003 | -4940 |
| | | WTR YR 2004 | +1050 |

15090000 GREEN LAKE NEAR SITKA—Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
MEAN VALUES

| MONTH | RELEASE | SPILL | TOTAL | ADJUSTED |
|---|---|---|---|---|
| OCT | 153 | 129 | 282 | 272 |
| NOV | 195 | 42 | 237 | 181 |
| DEC | 244 | 0 | 244 | 190 |
| JAN | 241 | 0 | 241 | 144 |
| FEB | 219 | 0 | 219 | 180 |
| MAR | 236 | 0 | 236 | 124 |
| APR | 187 | 0 | 187 | 194 |
| MAY | 142 | 0 | 142 | 344 |
| JUN | 136 | 108 | 244 | 406 |
| JUL | 142 | 146 | 288 | 288 |
| AUG | 147 | 45 | 192 | 183 |
| SEP | 131 | 480 | 611 | 636 |
| CAL YR 2003 | 176 | 25 | 201 | 194 |
| WTR YR 2004 | 181 | 79 | 260 | 261 |

## 15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU

LOCATION.--Lat 58°05'00", long 134°37'54", in NW$^1/_4$ SE$^1/_4$ sec. 4, T. 44 S., R. 66 E. (Juneau A-2 quad), Hydrologic Unit 19010204, on Admiralty Island, in Admiralty Island National Monument, Tongass National Forest, on right bank, 100 ft upstream from mine portal, 0.3 mi downstream from Big Sore Creek, 7.0 mi upstream from mouth at Hawk Inlet, and 19 mi southwest of Juneau.

DRAINAGE AREA.--8.62 mi$^2$.

PERIOD OF RECORD.--August 1989 to current year.

REVISED RECORD.--WRD AK-99-1, 1990-1994(M), 1996-1998(M).

GAGE.--Water-stage recorder. Datum of gage is 890.16 ft above sea level (levels by Greens Creek Mining Company). Prior to February 16, 1999, recording gage at site 30 ft upstream at datum 9.84 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Greens Creek Mining Company pumps water from gage pool for use in mill. Diversion flow is recorded on totalizing meters in gage house. Pump records are available from Greens Creek Mining Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | e43 | e34 | e15 | e11 | e9.0 | 12 | 9.6 | 98 | 90 | 38 | 25 | 10 |
| 2 | e38 | e33 | e21 | e10 | e9.5 | 11 | 20 | 100 | 88 | 37 | 24 | 13 |
| 3 | e34 | e30 | e15 | e9.8 | e9.5 | 11 | 50 | 101 | 85 | 42 | 27 | 19 |
| 4 | e39 | e27 | e14 | e9.6 | e10 | 10 | 28 | 98 | 87 | 36 | 25 | 20 |
| 5 | e37 | e25 | 14 | e9.4 | e12 | 10 | 22 | 89 | 97 | 41 | 23 | 19 |
| 6 | e39 | e23 | 13 | e9.6 | 15 | 9.7 | 21 | 84 | 96 | 57 | 22 | 26 |
| 7 | e43 | e22 | 13 | e9.0 | 12 | 11 | 25 | 86 | 106 | 40 | 20 | 25 |
| 8 | e38 | e20 | 12 | e9.5 | 17 | 34 | 27 | 87 | 98 | 35 | 19 | 20 |
| 9 | e34 | e23 | e12 | 13 | 63 | 19 | 26 | 86 | 90 | 32 | 18 | 17 |
| 10 | e33 | e22 | e11 | 21 | 46 | 15 | 27 | 87 | 88 | 29 | 18 | 16 |
| 11 | e31 | e28 | 12 | 18 | 27 | 15 | 27 | 90 | 84 | 28 | 21 | 15 |
| 12 | e29 | e68 | 11 | 15 | 31 | 13 | 29 | 94 | 89 | 26 | 18 | 23 |
| 13 | e29 | e59 | 11 | 29 | 26 | 12 | 28 | 98 | 88 | 25 | 16 | 59 |
| 14 | e25 | e41 | 11 | 113 | 23 | 11 | 28 | 101 | 88 | 33 | 16 | 30 |
| 15 | e23 | e38 | 11 | 43 | 19 | 10 | 25 | 98 | 80 | 27 | 15 | 25 |
| 16 | e22 | e36 | 11 | 22 | 16 | 10 | 23 | 94 | 78 | 25 | 14 | 22 |
| 17 | e20 | e34 | 12 | 21 | 15 | 9.3 | 22 | 91 | 84 | 25 | 14 | 20 |
| 18 | e29 | e32 | 15 | 32 | 14 | 8.9 | 22 | 96 | 92 | 23 | 13 | 18 |
| 19 | e40 | e30 | 31 | 26 | 15 | 10 | 20 | 102 | 96 | 21 | 14 | 17 |
| 20 | e43 | e29 | 22 | 33 | 18 | 8.8 | 21 | 105 | 94 | 21 | 16 | 42 |
| 21 | e38 | e27 | 21 | 45 | 35 | 9.6 | 22 | 108 | 89 | 25 | 14 | 101 |
| 22 | e36 | e26 | 79 | 54 | 39 | 7.8 | 35 | 102 | 86 | 22 | 12 | 86 |
| 23 | e39 | e24 | 41 | 32 | 24 | 7.5 | 29 | 97 | 86 | 20 | 11 | 112 |
| 24 | e43 | e24 | 27 | e24 | 20 | 7.9 | 25 | 107 | 85 | 26 | 11 | 107 |
| 25 | e92 | e22 | 24 | e18 | 17 | 19 | 48 | 114 | 82 | 30 | 10 | 86 |
| 26 | e124 | e19 | 19 | e14 | 16 | 17 | 56 | 112 | 75 | 23 | 11 | 69 |
| 27 | e82 | e18 | e15 | e15 | 14 | 14 | 36 | 99 | 67 | 24 | 15 | 106 |
| 28 | e54 | e17 | e12 | e13 | 14 | 15 | 33 | 90 | 56 | 38 | 15 | 86 |
| 29 | e44 | e15 | e13 | e11 | 13 | 14 | 36 | 91 | 45 | 35 | 14 | 68 |
| 30 | e38 | e14 | e13 | e9.7 | --- | 12 | 67 | 92 | 41 | 31 | 13 | 59 |
| 31 | e36 | --- | e12 | e8.6 | --- | 10 | --- | 92 | --- | 27 | 11 | --- |
| TOTAL | 1295 | 860 | 563 | 708.2 | 599.0 | 384.5 | 887.6 | 2989 | 2510 | 942 | 515 | 1336 |
| MEAN | 41.8 | 28.7 | 18.2 | 22.8 | 20.7 | 12.4 | 29.6 | 96.4 | 83.7 | 30.4 | 16.6 | 44.5 |
| MAX | 124 | 68 | 79 | 113 | 63 | 34 | 67 | 114 | 106 | 57 | 27 | 112 |
| MIN | 20 | 14 | 11 | 8.6 | 9.0 | 7.5 | 9.6 | 84 | 41 | 20 | 10 | 10 |
| AC-FT | 2570 | 1710 | 1120 | 1400 | 1190 | 763 | 1760 | 5930 | 4980 | 1870 | 1020 | 2650 |
| CFSM | 4.85 | 3.33 | 2.11 | 2.65 | 2.40 | 1.44 | 3.43 | 11.2 | 9.71 | 3.53 | 1.93 | 5.17 |
| IN. | 5.59 | 3.71 | 2.43 | 3.06 | 2.59 | 1.66 | 3.83 | 12.90 | 10.83 | 4.07 | 2.22 | 5.77 |
| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)# | | | | | | | | | | | | |
| MEAN | 60.3 | 30.1 | 25.4 | 16.1 | 13.6 | 11.3 | 28.4 | 78.6 | 86.0 | 52.5 | 39.0 | 61.0 |
| MAX | 97.9 | 49.5 | 65.7 | 26.5 | 36.9 | 27.2 | 49.6 | 107 | 147 | 90.5 | 69.7 | 95.0 |
| (WY) | 1999 | 1994 | 1990 | 2003 | 1992 | 1992 | 1994 | 1992 | 1992 | 2000 | 1991 | 1991 |
| MIN | 34.7 | 14.6 | 8.27 | 5.50 | 3.43 | 2.82 | 3.56 | 51.7 | 50.7 | 20.8 | 16.6 | 33.3 |
| (WY) | 1994 | 1991 | 1997 | 1997 | 1999 | 2002 | 2002 | 2003 | 2003 | 2003 | 2004 | 1995 |

\# See Period of Record, partial years used in monthly statistics
e Estimated

## 15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1989 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 11965.9 | | 13589.3 | | | |
| ANNUAL MEAN | 32.8 | | 37.1 | | 42.1 | |
| HIGHEST ANNUAL MEAN | | | | | 60.1 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 31.8 | 1998 |
| HIGHEST DAILY MEAN | 164 | Sep 14 | 124 | Oct 26 | 465 | Oct 20 1998 |
| LOWEST DAILY MEAN | 4.6 | Mar 25 | 7.5 | Mar 23 | a1.2 | Apr 3 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 5.0 | Mar 21 | 8.6 | Mar 18 | 1.2 | Apr 8 2002 |
| MAXIMUM PEAK FLOW | | | b164 | Sep 23 | c710 | Oct 20 1998 |
| MAXIMUM PEAK STAGE | | | 2.65 | Sep 23 | d14.79 | Oct 20 1998 |
| INSTANTANEOUS LOW FLOW | | | 5.7 | Mar 23 | f0.98 | Mar 20 2002 |
| ANNUAL RUNOFF (AC-FT) | 23730 | | 26950 | | 30470 | |
| ANNUAL RUNOFF (CFSM) | 3.80 | | 4.31 | | 4.88 | |
| ANNUAL RUNOFF (INCHES) | 51.64 | | 58.65 | | 66.30 | |
| 10 PERCENT EXCEEDS | 76 | | 91 | | 91 | |
| 50 PERCENT EXCEEDS | 23 | | 25 | | 30 | |
| 90 PERCENT EXCEEDS | 8.8 | | 11 | | 6.6 | |

\# See Period of Record, partial years used in monthly statistics
a Apr. 3-4, 8, and 11-14
b May have been higher during period of estimated discarge.
c From rating curve extended above 140 $ft^3/s$ on basis of slope area measurement of peak flow
d Same site, different datum
f Mar. 20, and Apr. 7-11

## 15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°39'46", long 135°11'06", in NW¼ SE¼ sec. 34, T. 48 S., R. 63 E. (Sitka C-4 quad), Greater Sitka Borough, Hydrologic Unit 19010203, on Chichagof Island, in Tongass National Forest, on right bank 0.6 mi upstream from Hook Creek, 3.5 mi upstream from mouth at Kadashan Bay, and 9 mi south of Tenakee.

DRAINAGE AREA.--10.2 $mi^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1968 to September 1978, October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above sea level, from topographic map. Prior to October 24, 1969, at site 90 ft downstream at different datum; October 24, 1969 to September 30, 1978, at site 75 ft downstream at datum 1.89 ft higher.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

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

| Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) | Date | Time | Discharge ($ft^3/s$) | Gage Height (ft) |
|---|---|---|---|---|---|---|---|
| Oct. 25 | 0345 | 649 | 3.92 | Feb. 09 | 0145 | 868 | 4.33 |
| Nov. 12 | 0515 | *995 | *4.54 | Sept. 21 | 0130 | 569 | 3.75 |
| Dec. 22 | 0415 | 669 | 3.96 | Sept. 23 | 1545 | 741 | 4.10 |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 38 | 39 | 112 | 19 | 19 | 23 | 32 | 145 | 44 | 8.9 | 7.3 | 5.9 |
| 2 | 34 | 33 | 201 | e16 | 17 | 21 | 168 | 139 | 45 | 9.0 | 7.4 | 21 |
| 3 | 31 | 29 | 60 | e14 | 16 | 22 | 207 | 145 | 41 | 9.6 | 6.5 | 68 |
| 4 | 32 | 29 | 42 | e13 | 16 | 22 | 114 | 133 | 38 | 8.4 | 6.1 | 61 |
| 5 | 34 | 26 | 35 | e12 | 55 | 24 | 76 | 99 | 49 | 9.7 | 5.7 | 18 |
| 6 | 65 | 25 | 30 | e11 | 84 | 24 | 78 | 89 | 43 | 33 | 5.9 | 27 |
| 7 | 69 | 24 | 27 | e11 | 72 | 122 | 115 | 82 | 46 | 15 | 5.7 | 29 |
| 8 | 53 | 25 | 24 | e12 | 246 | 264 | 89 | 84 | 38 | 11 | 5.3 | 13 |
| 9 | 35 | 136 | 22 | e12 | 338 | 125 | 91 | 76 | 30 | 9.1 | 5.1 | 9.4 |
| 10 | 33 | 76 | 20 | e13 | 256 | 205 | 103 | 78 | 26 | 8.2 | 4.9 | 7.9 |
| 11 | 29 | 159 | 20 | e17 | 141 | 160 | 90 | 79 | 23 | 7.9 | 4.7 | 7.4 |
| 12 | 24 | 529 | 26 | 24 | 133 | 94 | 90 | 85 | 25 | 7.4 | 4.7 | 16 |
| 13 | 54 | 150 | 42 | 117 | 87 | 60 | 75 | 95 | 27 | 7.0 | 4.5 | 70 |
| 14 | 63 | 117 | 23 | 254 | 88 | 53 | 72 | 96 | 26 | 6.6 | 4.3 | 30 |
| 15 | 37 | 156 | 27 | 82 | 54 | 75 | 57 | 70 | 21 | 6.4 | 4.3 | 24 |
| 16 | 29 | 89 | 86 | 42 | 42 | 69 | 46 | 72 | 19 | 6.1 | 4.1 | 23 |
| 17 | 28 | 63 | 150 | 103 | 36 | 49 | 46 | 74 | 19 | 5.9 | 4.1 | 18 |
| 18 | 46 | 49 | 110 | 133 | 43 | 37 | 45 | 84 | 18 | 5.8 | 4.2 | 13 |
| 19 | 48 | 38 | 199 | 66 | 83 | 30 | 39 | 89 | 17 | 5.6 | 5.3 | 12 |
| 20 | 41 | 30 | 99 | 137 | 157 | 27 | 40 | 81 | 15 | 6.1 | 5.4 | 164 |
| 21 | 32 | 28 | 182 | 159 | 186 | 25 | 44 | 84 | 14 | 7.9 | 4.7 | 317 |
| 22 | 50 | 34 | 392 | 179 | 135 | 25 | 87 | 69 | 13 | 7.0 | 4.3 | 147 |
| 23 | 72 | 31 | 161 | 97 | 81 | 23 | 91 | 60 | 13 | 6.0 | 4.1 | 352 |
| 24 | 74 | 45 | 94 | 63 | 71 | 22 | 120 | 75 | 12 | 6.1 | 4.0 | 182 |
| 25 | 294 | 40 | 67 | e40 | 49 | 40 | 187 | 84 | 11 | 5.9 | 4.0 | 112 |
| 26 | 205 | 29 | 48 | e27 | 38 | 46 | 165 | 70 | 11 | 5.8 | 4.5 | 99 |
| 27 | 173 | 24 | 34 | e19 | 33 | 44 | 98 | 60 | 11 | 6.1 | 10 | 278 |
| 28 | 151 | 21 | 29 | e13 | 29 | 114 | 80 | 50 | 10 | 12 | 7.8 | 98 |
| 29 | 75 | 21 | 26 | e9.0 | 25 | 76 | 77 | 43 | 9.7 | 12 | 9.7 | 99 |
| 30 | 58 | 23 | 24 | e10 | --- | 46 | 109 | 47 | 9.2 | 11 | 12 | 57 |
| 31 | 47 | --- | 23 | e13 | --- | 33 | --- | 47 | --- | 8.3 | 6.9 | --- |
| TOTAL | 2054 | 2118 | 2435 | 1737.0 | 2630 | 2000 | 2731 | 2584 | 723.9 | 274.8 | 177.5 | 2378.6 |
| MEAN | 66.3 | 70.6 | 78.5 | 56.0 | 90.7 | 64.5 | 91.0 | 83.4 | 24.1 | 8.86 | 5.73 | 79.3 |
| MAX | 294 | 529 | 392 | 254 | 338 | 264 | 207 | 145 | 49 | 33 | 12 | 352 |
| MIN | 24 | 21 | 20 | 9.0 | 16 | 21 | 32 | 43 | 9.2 | 5.6 | 4.0 | 5.9 |
| AC-FT | 4070 | 4200 | 4830 | 3450 | 5220 | 3970 | 5420 | 5130 | 1440 | 545 | 352 | 4720 |
| CFSM | 6.50 | 6.92 | 7.70 | 5.49 | 8.89 | 6.33 | 8.92 | 8.17 | 2.37 | 0.87 | 0.56 | 7.77 |
| IN. | 7.49 | 7.72 | 8.88 | 6.33 | 9.59 | 7.29 | 9.96 | 9.42 | 2.64 | 1.00 | 0.65 | 8.67 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 116 | 76.8 | 64.0 | 50.4 | 49.4 | 44.3 | 66.6 | 99.2 | 64.1 | 29.6 | 32.3 | 75.9 |
| MAX | 234 | 152 | 147 | 147 | 118 | 129 | 118 | 182 | 151 | 60.2 | 79.0 | 141 |
| (WY) | 1975 | 1975 | 2000 | 1985 | 1985 | 1994 | 1994 | 1972 | 1972 | 1970 | 1983 | 1981 |
| MIN | 50.6 | 17.7 | 8.05 | 6.15 | 5.95 | 9.21 | 22.7 | 38.3 | 19.8 | 6.41 | 5.73 | 17.5 |
| (WY) | 1970 | 1974 | 1978 | 1969 | 1969 | 1974 | 2002 | 2003 | 1998 | 1989 | 2004 | 1986 |

\# See Period of Record; partial years used in monthly summary statistics
e Estimated

## 15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1968 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 17937.5 | | 21843.8 | | | |
| ANNUAL MEAN | 49.1 | | 59.7 | | 63.9 | |
| HIGHEST ANNUAL MEAN | | | | | 80.8 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 44.1 | 1978 |
| HIGHEST DAILY MEAN | 529 | Nov 12 | 529 | Nov 12 | 1010 | Oct 19 1998 |
| LOWEST DAILY MEAN | 6.7 | Aug 11 | a4.0 | Aug 24 | b3.2 | Jul 28 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 7.2 | Aug 8 | 4.3 | Aug 12 | 4.2 | Jan 13 1974 |
| MAXIMUM PEAK FLOW | | | 995 | Nov 12 | c1970 | Oct 8 1990 |
| MAXIMUM PEAK STAGE | | | 4.54 | Nov 12 | 5.83 | Oct 8 1990 |
| INSTANTANEOUS LOW FLOW | | | d3.8 | Aug 13 | 3.2 | Jul 28 1989 |
| ANNUAL RUNOFF (AC-FT) | 35580 | | 43330 | | 46320 | |
| ANNUAL RUNOFF (CFSM) | 4.82 | | 5.85 | | 6.27 | |
| ANNUAL RUNOFF (INCHES) | 65.42 | | 79.67 | | 85.17 | |
| 10 PERCENT EXCEEDS | 99 | | 145 | | 138 | |
| 50 PERCENT EXCEEDS | 32 | | 37 | | 42 | |
| 90 PERCENT EXCEEDS | 12 | | 6.6 | | 12 | |

\# See Period of Record; partial years used in monthly summary statistics
a Aug. 24 to Aug. 25, 2004
b Jul. 28 to Jul. 29, 1989
c From rating curve extended above 330 $ft^3/s$ on basis of area-velocity study at gage height 4.8 ft and shape of previous rating
d Aug. 13 and Aug. 23 to Aug. 26, 2004

## 15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-72, 1974-77, 1981-1985, and 1987 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1967 to September 1978, December 1981 to December 1984, March 1987 to March 1988, and September 1988 to current year.

INSTRUMENTATION.--Digital water-temperature recorder, November 1967 to December 1984, set for 1-hour punch interval. Electronic water-temperature recorder since March 13, 1987, set for 2-hour recording interval. Electronic water-temperature recorder with 15-minute recording interval since July 11, 1996.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross sections on October 1, and June 22. No variation was found in the temperature cross section on October 1, and a 1.0°C variation on June 22, during low flow and warm weather conditions. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 16.5°C, July 15, 1993; minimum, 0.0°C, on many days during most winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 15.5°C, July 16; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Sample location, cross section ft from rt bank (72103) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| OCT | | | | | | | |
| 01... | 1605 | 47.0 | 4.0 | 1.64 | 38 | 8.5 | 12.0 |
| 01... | 1606 | 47.0 | 11.0 | 1.64 | 38 | 8.5 | 12.0 |
| 01... | 1607 | 47.0 | 18.0 | 1.64 | 38 | 8.5 | 12.0 |
| 01... | 1608 | 47.0 | 25.0 | 1.64 | 38 | 8.5 | 12.0 |
| 01... | 1609 | 47.0 | 32.0 | 1.64 | 38 | 8.5 | 12.0 |
| JUN | | | | | | | |
| 22... | 1140 | 24.0 | 2.0 | 1.32 | 13 | 12.0 | 26.5 |
| 22... | 1141 | 24.0 | 6.0 | 1.32 | 13 | 12.0 | 26.5 |
| 22... | 1142 | 24.0 | 10.0 | 1.32 | 13 | 12.0 | 26.5 |
| 22... | 1143 | 24.0 | 14.0 | 1.32 | 13 | 12.0 | 26.5 |
| 22... | 1144 | 24.0 | 18.0 | 1.32 | 13 | 12.5 | 26.5 |
| 22... | 1145 | 24.0 | 22.0 | 1.32 | 13 | 13.0 | 26.5 |

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 9.0 | 8.0 | 8.5 | 3.5 | 3.0 | 3.5 | 0.5 | 0.0 | 0.5 | 2.0 | 1.0 | 1.5 |
| 2 | 8.0 | 7.5 | 8.0 | 3.5 | 3.0 | 3.0 | 0.5 | 0.0 | 0.5 | 1.0 | 0.5 | 0.5 |
| 3 | 8.5 | 7.5 | 8.0 | 3.0 | 2.0 | 3.0 | 2.0 | 0.5 | 1.5 | 0.5 | 0.0 | 0.5 |
| 4 | 9.0 | 8.0 | 8.5 | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 | 0.5 | 0.0 | 0.0 |
| 5 | 8.5 | 8.0 | 8.5 | 2.5 | 2.0 | 2.5 | 2.0 | 2.0 | 2.0 | 0.5 | 0.0 | 0.0 |
| 6 | 9.0 | 8.0 | 8.5 | 3.0 | 2.5 | 2.5 | 2.0 | 1.5 | 2.0 | 0.5 | 0.0 | 0.0 |
| 7 | 9.0 | 8.5 | 9.0 | 3.0 | 3.0 | 3.0 | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 8 | 8.5 | 7.5 | 8.0 | 3.5 | 3.0 | 3.5 | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 9 | 7.5 | 7.0 | 7.5 | 3.5 | 3.0 | 3.5 | 2.0 | 0.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 10 | 7.0 | 6.5 | 7.0 | 3.5 | 3.0 | 3.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.0 | 0.0 |
| 11 | 6.5 | 5.5 | 6.5 | 3.5 | 3.0 | 3.0 | 1.5 | 1.0 | 1.5 | 1.0 | 0.5 | 0.5 |
| 12 | 6.0 | 5.0 | 5.5 | 4.5 | 3.5 | 4.5 | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 |
| 13 | 6.0 | 5.0 | 5.5 | 4.0 | 3.0 | 3.5 | 1.5 | 1.0 | 1.5 | 1.0 | 0.0 | 0.5 |
| 14 | 6.5 | 5.5 | 6.0 | 3.5 | 2.5 | 3.0 | 1.5 | 1.0 | 1.5 | 1.0 | 0.0 | 0.5 |
| 15 | 6.0 | 4.5 | 5.0 | 3.5 | 3.0 | 3.5 | 1.5 | 0.5 | 1.0 | 1.5 | 0.5 | 1.0 |
| 16 | 5.5 | 4.5 | 5.0 | 4.0 | 3.5 | 3.5 | 1.0 | 1.0 | 1.0 | 1.5 | 1.0 | 1.5 |
| 17 | 6.0 | 5.5 | 5.5 | 3.5 | 3.0 | 3.5 | 1.5 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 18 | 6.5 | 6.0 | 6.5 | 3.0 | 2.0 | 2.5 | 1.5 | 0.0 | 1.0 | 1.5 | 1.0 | 1.5 |
| 19 | 7.0 | 6.5 | 6.5 | 2.0 | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 |
| 20 | 7.0 | 5.5 | 6.5 | 1.0 | 0.5 | 1.0 | 2.0 | 1.5 | 2.0 | 2.0 | 1.5 | 1.5 |
| 21 | 6.0 | 5.0 | 5.5 | 1.5 | 0.5 | 1.0 | 2.5 | 1.5 | 2.0 | 2.0 | 1.5 | 1.5 |
| 22 | 6.5 | 6.0 | 6.0 | 2.0 | 1.5 | 1.5 | 2.0 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 |
| 23 | 6.0 | 5.5 | 6.0 | 2.0 | 1.5 | 2.0 | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 2.0 |
| 24 | 6.5 | 5.5 | 6.0 | 2.0 | 0.5 | 1.5 | 2.5 | 2.0 | 2.5 | 1.5 | 0.5 | 1.0 |
| 25 | 8.0 | 6.5 | 7.0 | 2.0 | 0.5 | 1.5 | 2.5 | 2.0 | 2.5 | 0.5 | 0.0 | 0.0 |
| 26 | 8.0 | 7.0 | 7.5 | 1.5 | 1.5 | 1.5 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 27 | 7.0 | 6.0 | 6.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 28 | 6.0 | 5.0 | 5.0 | 1.5 | 0.0 | 1.0 | 1.5 | 0.5 | 1.0 | 0.0 | 0.0 | 0.0 |
| 29 | 5.0 | 3.5 | 4.5 | 1.0 | 0.5 | 1.0 | 1.5 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 30 | 3.5 | 3.0 | 3.0 | 1.0 | 0.0 | 0.5 | 2.0 | 1.5 | 2.0 | 0.0 | 0.0 | 0.0 |
| 31 | 3.5 | 2.5 | 3.0 | --- | --- | --- | 2.0 | 2.0 | 2.0 | 1.0 | 0.0 | 0.0 |
| MONTH | 9.0 | 2.5 | 6.5 | 4.5 | 0.0 | 2.4 | 2.5 | 0.0 | 1.5 | 2.0 | 0.0 | 0.6 |

## 15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

TEMPERATURE, WATER, DEGREE CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | 0.5 | 1.0 | 2.0 | 1.0 | 1.5 | 1.5 | 1.0 | 1.5 | 4.0 | 3.5 | 4.0 |
| 2 | 1.0 | 0.5 | 0.5 | 1.5 | 1.0 | 1.5 | 1.5 | 0.5 | 1.0 | 4.5 | 3.5 | 4.0 |
| 3 | 1.0 | 0.5 | 1.0 | 1.5 | 0.5 | 1.0 | 2.0 | 1.0 | 1.5 | 5.0 | 3.5 | 4.0 |
| 4 | 1.0 | 1.0 | 1.0 | 2.0 | 1.5 | 1.5 | 3.0 | 1.5 | 2.0 | 5.5 | 3.5 | 4.0 |
| 5 | 1.0 | 0.0 | 0.5 | 1.5 | 0.5 | 1.0 | 3.0 | 2.0 | 2.5 | 5.5 | 3.0 | 4.0 |
| 6 | 0.5 | 0.0 | 0.5 | 1.0 | 0.5 | 1.0 | 3.5 | 2.0 | 2.5 | 5.5 | 3.0 | 4.5 |
| 7 | 0.5 | 0.0 | 0.5 | 1.0 | 0.5 | 0.5 | 3.0 | 2.0 | 2.5 | 5.5 | 3.5 | 4.5 |
| 8 | 0.5 | 0.0 | 0.5 | 1.0 | 0.5 | 0.5 | 3.5 | 1.5 | 2.5 | 6.0 | 4.0 | 5.0 |
| 9 | 1.0 | 0.0 | 0.5 | 1.5 | 0.5 | 1.0 | 3.5 | 2.5 | 3.0 | 5.0 | 4.5 | 4.5 |
| 10 | 1.5 | 0.5 | 1.0 | 1.0 | 0.5 | 1.0 | 3.5 | 2.5 | 3.0 | 6.0 | 3.5 | 4.5 |
| 11 | 2.0 | 1.5 | 1.5 | 2.0 | 1.0 | 1.5 | 4.0 | 2.5 | 3.0 | 6.0 | 3.5 | 5.0 |
| 12 | 2.0 | 1.5 | 1.5 | 2.5 | 1.5 | 2.0 | 3.0 | 2.5 | 3.0 | 6.5 | 4.0 | 5.0 |
| 13 | 2.5 | 1.5 | 2.0 | 2.5 | 2.0 | 2.0 | 4.0 | 2.5 | 3.0 | 6.5 | 4.0 | 5.5 |
| 14 | 2.0 | 1.5 | 2.0 | 2.0 | 1.0 | 2.0 | 4.0 | 2.5 | 3.0 | 6.5 | 4.0 | 5.5 |
| 15 | 2.0 | 1.5 | 1.5 | 1.5 | 1.0 | 1.0 | 3.5 | 2.0 | 2.5 | 6.0 | 4.0 | 5.0 |
| 16 | 2.0 | 1.5 | 2.0 | 1.5 | 0.5 | 1.0 | 3.5 | 1.5 | 2.5 | 6.0 | 5.0 | 5.5 |
| 17 | 2.5 | 2.0 | 2.0 | 2.0 | 1.0 | 1.5 | 4.0 | 3.0 | 3.5 | 6.5 | 5.0 | 5.5 |
| 18 | 2.5 | 2.0 | 2.0 | 1.5 | 1.0 | 1.5 | 3.5 | 2.0 | 3.0 | 6.5 | 5.0 | 6.0 |
| 19 | 2.0 | 1.5 | 2.0 | 1.5 | 0.5 | 1.0 | 4.0 | 2.5 | 3.0 | 7.0 | 5.0 | 6.0 |
| 20 | 2.0 | 1.5 | 1.5 | 2.0 | 1.5 | 1.5 | 4.0 | 2.0 | 3.5 | 7.5 | 4.5 | 6.0 |
| 21 | 2.5 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 | 4.5 | 2.0 | 3.5 | 7.0 | 5.0 | 6.0 |
| 22 | 2.5 | 1.5 | 2.0 | 2.0 | 1.0 | 1.5 | 4.0 | 2.5 | 3.5 | 7.5 | 4.5 | 6.0 |
| 23 | 2.5 | 2.0 | 2.5 | 2.5 | 1.5 | 2.0 | 3.5 | 2.0 | 3.0 | 7.5 | 5.0 | 6.5 |
| 24 | 2.5 | 2.0 | 2.0 | 2.5 | 1.5 | 2.0 | 4.0 | 3.0 | 3.0 | 7.0 | 6.0 | 6.5 |
| 25 | 2.0 | 1.0 | 1.5 | 3.0 | 2.0 | 2.5 | 3.5 | 3.0 | 3.0 | 6.5 | 5.5 | 6.0 |
| 26 | 1.5 | 1.0 | 1.5 | 2.5 | 1.5 | 2.0 | 4.0 | 3.0 | 3.5 | 6.5 | 5.5 | 6.0 |
| 27 | 1.5 | 0.5 | 1.0 | 2.5 | 2.0 | 2.0 | 4.5 | 3.0 | 3.5 | 7.0 | 5.5 | 6.5 |
| 28 | 2.0 | 1.0 | 1.5 | 2.0 | 1.0 | 1.5 | 4.5 | 3.5 | 4.0 | 7.0 | 5.5 | 6.5 |
| 29 | 1.5 | 1.0 | 1.5 | 1.5 | 0.5 | 1.0 | 5.0 | 2.5 | 4.0 | 6.5 | 5.5 | 6.5 |
| 30 | --- | --- | --- | 1.0 | 0.5 | 1.0 | 5.5 | 3.0 | 4.0 | 7.5 | 6.0 | 7.0 |
| 31 | --- | --- | --- | 1.0 | 0.5 | 1.0 | --- | --- | --- | 7.0 | 6.0 | 6.5 |
| MONTH | 2.5 | 0.0 | 1.4 | 3.0 | 0.5 | 1.4 | 5.5 | 0.5 | 2.9 | 7.5 | 3.0 | 5.4 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 7.5 | 6.0 | 7.0 | 12.5 | 11.0 | 12.0 | 12.0 | 11.0 | 11.5 | 11.5 | 10.0 | 11.0 |
| 2 | 7.0 | 6.0 | 6.5 | 12.0 | 11.5 | 12.0 | 13.0 | 11.5 | 12.0 | 11.5 | 10.0 | 10.5 |
| 3 | 8.5 | 6.0 | 7.0 | 13.0 | 11.5 | 12.0 | 13.0 | 12.0 | 12.5 | 11.5 | 11.0 | 11.0 |
| 4 | 8.0 | 6.5 | 7.5 | 12.5 | 11.5 | 12.0 | 14.0 | 11.0 | 12.5 | 11.0 | 10.5 | 11.0 |
| 5 | 8.5 | 7.5 | 8.0 | 12.5 | 11.0 | 11.5 | 13.0 | 11.0 | 12.0 | 11.0 | 10.0 | 10.5 |
| 6 | 9.0 | 7.0 | 8.0 | 12.0 | 11.0 | 11.5 | 12.5 | 12.0 | 12.0 | 10.5 | 10.0 | 10.5 |
| 7 | 10.0 | 7.5 | 8.5 | 12.5 | 11.0 | 12.0 | 13.5 | 12.0 | 12.5 | 10.0 | 8.5 | 9.5 |
| 8 | 9.0 | 7.5 | 8.0 | 14.0 | 11.0 | 12.0 | 13.5 | 11.0 | 12.0 | 8.5 | 7.5 | 8.5 |
| 9 | 8.5 | 7.5 | 8.0 | 13.5 | 11.5 | 12.5 | 14.0 | 11.0 | 12.5 | 8.0 | 6.5 | 7.5 |
| 10 | 8.5 | 7.0 | 8.0 | 12.5 | 12.0 | 12.0 | 14.0 | 11.5 | 13.0 | 8.0 | 6.0 | 7.0 |
| 11 | 8.0 | 7.0 | 7.5 | 13.0 | 11.5 | 12.0 | 14.0 | 12.5 | 13.0 | 8.0 | 7.0 | 7.5 |
| 12 | 8.5 | 7.5 | 8.0 | 14.0 | 11.0 | 12.5 | 14.0 | 11.5 | 12.5 | 8.5 | 8.0 | 8.5 |
| 13 | 8.5 | 7.5 | 8.0 | 14.5 | 11.5 | 13.0 | 14.0 | 11.5 | 12.5 | 9.5 | 8.5 | 9.0 |
| 14 | 8.0 | 7.5 | 8.0 | 14.5 | 12.0 | 13.0 | 14.0 | 11.0 | 12.5 | 9.0 | 8.5 | 9.0 |
| 15 | 9.0 | 7.5 | 8.5 | 15.0 | 12.0 | 13.5 | 14.5 | 12.0 | 13.0 | 8.5 | 8.0 | 8.5 |
| 16 | 10.0 | 7.5 | 9.0 | 15.5 | 12.5 | 14.0 | 14.5 | 12.5 | 13.5 | 8.5 | 7.5 | 8.0 |
| 17 | 11.0 | 8.0 | 9.5 | 14.0 | 13.0 | 13.5 | 15.0 | 13.0 | 14.0 | 7.5 | 6.5 | 7.0 |
| 18 | 12.0 | 9.0 | 10.5 | 14.0 | 12.5 | 13.0 | 14.5 | 13.5 | 14.0 | 7.0 | 5.5 | 6.5 |
| 19 | 12.5 | 10.0 | 11.5 | 13.5 | 11.5 | 12.5 | 14.0 | 13.5 | 13.5 | 7.0 | 5.5 | 6.0 |
| 20 | 13.5 | 10.5 | 12.0 | 13.0 | 12.5 | 12.5 | 14.0 | 13.0 | 13.5 | --- | --- | --- |
| 21 | 13.0 | 10.5 | 12.0 | 13.0 | 12.0 | 12.5 | 14.5 | 12.5 | 13.5 | --- | --- | --- |
| 22 | 14.0 | 11.0 | 12.5 | 14.0 | 12.0 | 13.0 | 14.0 | 12.0 | 13.0 | --- | --- | --- |
| 23 | 14.0 | 11.0 | 12.5 | 13.5 | 12.5 | 13.0 | 13.0 | 10.5 | 12.0 | --- | --- | --- |
| 24 | 14.5 | 11.5 | 13.0 | 14.5 | 12.5 | 13.0 | 13.0 | 10.5 | 12.0 | --- | --- | --- |
| 25 | 15.0 | 12.0 | 13.5 | 13.5 | 12.0 | 12.5 | 12.5 | 10.5 | 11.5 | --- | --- | --- |
| 26 | 13.5 | 12.0 | 12.5 | 12.5 | 12.0 | 12.0 | 12.5 | 11.0 | 12.0 | --- | --- | --- |
| 27 | 12.5 | 11.5 | 12.0 | 12.5 | 12.0 | 12.0 | 12.5 | 11.5 | 12.0 | --- | --- | --- |
| 28 | 12.0 | 11.0 | 11.5 | 13.0 | 12.0 | 12.5 | 12.5 | 11.5 | 12.0 | --- | --- | --- |
| 29 | 11.5 | 11.0 | 11.5 | 12.5 | 12.0 | 12.5 | 12.5 | 11.0 | 12.0 | --- | --- | --- |
| 30 | 12.0 | 11.0 | 11.5 | 13.0 | 11.5 | 12.5 | 12.5 | 11.0 | 11.5 | --- | --- | --- |
| 31 | --- | --- | --- | 12.5 | 11.0 | 12.0 | 12.0 | 10.5 | 11.5 | --- | --- | --- |
| MONTH | 15.0 | 6.0 | 9.7 | 15.5 | 11.0 | 12.5 | 15.0 | 10.5 | 12.5 | --- | --- | --- |

## 15106970 MIDDLE BASIN CREEK NEAR TENAKEE

LOCATION.--Lat 57°41'33", long 135°12'06", in NE¼ NE¼ SE¼ sec. 21, T. 48 S., R. 63 E. (Sitka C-4 quad), Hydrologic Unit 19010203, in Tongass National Forest, on Chichagof Island, on left bank 0.3 mi upstream from confluence with Kadashan River, and about 7 mi south of Tenakee.

DRAINAGE AREA.--0.12 $mi^2$

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to July 1987(unpublished fragmentary records provided by the U.S. Forest Service). July 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 190 ft above sea level, from topographic map.

REMARKS.-- Records fair. No estimated daily discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.1 | 0.75 | 0.84 | 0.49 | 0.49 | 0.64 | 0.52 | 0.77 | 0.69 | 0.22 | 0.12 | 0.05 |
| 2 | 0.98 | 0.67 | 1.4 | 0.42 | 0.44 | 0.64 | 0.98 | 0.99 | 0.62 | 0.22 | 0.14 | 0.07 |
| 3 | 0.89 | 0.60 | 0.66 | 0.38 | 0.42 | 0.66 | 1.2 | 1.1 | 0.63 | 0.21 | 0.13 | 0.13 |
| 4 | 0.86 | 0.55 | 0.61 | 0.37 | 0.44 | 0.65 | 0.87 | 1.2 | 0.62 | 0.20 | 0.12 | 0.10 |
| 5 | 0.80 | 0.50 | 0.59 | 0.34 | 0.58 | 0.65 | 0.74 | 1.3 | 0.63 | 0.20 | 0.12 | 0.06 |
| 6 | 0.81 | 0.46 | 0.53 | 0.33 | 0.54 | 0.60 | 0.69 | 1.3 | 0.57 | 0.25 | 0.12 | 0.08 |
| 7 | 0.79 | 0.44 | 0.46 | 0.36 | 0.48 | 1.2 | 0.69 | 1.2 | 0.56 | 0.21 | 0.11 | 0.07 |
| 8 | 0.71 | 0.42 | 0.42 | 0.35 | 0.79 | 2.1 | 0.63 | 1.2 | 0.49 | 0.20 | 0.09 | 0.05 |
| 9 | 0.63 | 0.61 | 0.39 | 0.39 | 1.6 | 1.0 | 0.63 | 1.1 | 0.44 | 0.20 | 0.10 | 0.04 |
| 10 | 0.57 | 0.53 | 0.37 | 0.40 | 1.7 | 1.6 | 0.65 | 1.1 | 0.41 | 0.20 | 0.12 | 0.04 |
| 11 | 0.54 | 0.65 | 0.43 | 0.39 | 1.5 | 1.5 | 0.66 | 1.1 | 0.38 | 0.19 | 0.10 | 0.05 |
| 12 | 0.48 | 2.4 | 0.45 | 0.41 | 1.5 | 1.00 | 0.67 | 1.1 | 0.39 | 0.18 | 0.09 | 0.08 |
| 13 | 0.52 | 2.1 | 0.43 | 0.54 | 1.6 | 0.89 | 0.67 | 1.2 | 0.36 | 0.19 | 0.09 | 0.13 |
| 14 | 0.50 | 2.1 | 0.38 | 1.1 | 1.1 | 0.83 | 0.66 | 1.3 | 0.32 | 0.19 | 0.10 | 0.09 |
| 15 | 0.46 | 1.6 | 0.43 | 0.71 | 0.96 | 0.87 | 0.61 | 1.3 | 0.31 | 0.19 | 0.11 | 0.08 |
| 16 | 0.47 | 1.4 | 0.59 | 0.62 | 0.99 | 0.83 | 0.54 | 1.3 | 0.30 | 0.19 | 0.12 | 0.07 |
| 17 | 0.45 | 1.2 | 0.78 | 0.84 | 0.96 | 0.74 | 0.56 | 1.2 | 0.31 | 0.18 | 0.11 | 0.05 |
| 18 | 0.46 | 0.97 | 0.89 | 0.97 | 0.90 | 0.69 | 0.52 | 1.1 | 0.32 | 0.18 | 0.10 | 0.04 |
| 19 | 0.43 | 0.85 | 1.2 | 0.79 | 0.90 | 0.58 | 0.52 | 1.1 | 0.32 | 0.17 | 0.10 | 0.04 |
| 20 | 0.41 | 0.74 | 0.84 | 1.1 | 1.0 | 0.53 | 0.50 | 1.1 | 0.32 | 0.17 | 0.10 | 0.29 |
| 21 | 0.38 | 0.70 | 1.6 | 1.2 | 1.1 | 0.53 | 0.46 | 1.2 | 0.31 | 0.15 | 0.10 | 0.60 |
| 22 | 0.43 | 0.72 | 3.5 | 1.6 | 1.1 | 0.54 | 0.50 | 1.2 | 0.30 | 0.14 | 0.09 | 0.33 |
| 23 | 0.42 | 0.62 | 2.1 | 1.2 | 1.1 | 0.52 | 0.46 | 1.1 | 0.29 | 0.16 | 0.08 | 0.73 |
| 24 | 0.46 | 0.63 | 1.9 | 0.96 | 1.0 | 0.52 | 0.50 | 1.1 | 0.28 | 0.15 | 0.09 | 0.66 |
| 25 | 0.93 | 0.59 | 1.4 | 0.76 | 0.92 | 0.55 | 0.63 | 1.1 | 0.28 | 0.13 | 0.08 | 0.61 |
| 26 | 0.96 | 0.53 | 0.99 | 0.58 | 0.83 | 0.53 | 0.65 | 1.1 | 0.25 | 0.11 | 0.08 | 0.61 |
| 27 | 1.2 | 0.48 | 0.75 | 0.64 | 0.73 | 0.49 | 0.62 | 1.0 | 0.22 | 0.13 | 0.12 | 0.75 |
| 28 | 1.5 | 0.48 | 0.65 | 0.58 | 0.69 | 0.69 | 0.66 | 0.92 | 0.21 | 0.16 | 0.09 | 0.63 |
| 29 | 1.2 | 0.44 | 0.65 | 0.55 | 0.68 | 0.71 | 0.67 | 0.86 | 0.22 | 0.13 | 0.07 | 0.62 |
| 30 | 1.0 | 0.49 | 0.69 | 0.52 | --- | 0.62 | 0.69 | 0.78 | 0.23 | 0.13 | 0.07 | 0.56 |
| 31 | 0.87 | --- | 0.61 | 0.52 | --- | 0.52 | --- | 0.73 | --- | 0.12 | 0.06 | --- |
| TOTAL | 22.21 | 25.22 | 27.53 | 20.41 | 27.04 | 24.42 | 19.35 | 34.15 | 11.58 | 5.45 | 3.12 | 7.71 |
| MEAN | 0.72 | 0.84 | 0.89 | 0.66 | 0.93 | 0.79 | 0.65 | 1.10 | 0.39 | 0.18 | 0.10 | 0.26 |
| MAX | 1.5 | 2.4 | 3.5 | 1.6 | 1.7 | 2.1 | 1.2 | 1.3 | 0.69 | 0.25 | 0.14 | 0.75 |
| MIN | 0.38 | 0.42 | 0.37 | 0.33 | 0.42 | 0.49 | 0.46 | 0.73 | 0.21 | 0.11 | 0.06 | 0.04 |
| MED | 0.63 | 0.62 | 0.65 | 0.55 | 0.92 | 0.65 | 0.64 | 1.1 | 0.32 | 0.18 | 0.10 | 0.08 |
| AC-FT | 44 | 50 | 55 | 40 | 54 | 48 | 38 | 68 | 23 | 11 | 6.2 | 15 |
| CFSM | 5.97 | 7.01 | 7.40 | 5.49 | 7.77 | 6.56 | 5.38 | 9.18 | 3.22 | 1.47 | 0.84 | 2.14 |
| IN. | 6.89 | 7.82 | 8.53 | 6.33 | 8.38 | 7.57 | 6.00 | 10.59 | 3.59 | 1.69 | 0.97 | 2.39 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.50 | 1.24 | 1.39 | 0.68 | 0.56 | 0.45 | 0.37 | 0.71 | 0.70 | 0.33 | 0.25 | 0.80 |
| MAX | 2.98 | 2.65 | 3.75 | 0.97 | 0.93 | 0.79 | 0.65 | 1.10 | 1.31 | 0.65 | 0.40 | 1.34 |
| (WY) | 2000 | 2000 | 2000 | 2003 | 2004 | 2004 | 2004 | 2004 | 2002 | 1999 | 2002 | 2000 |
| MIN | 0.72 | 0.83 | 0.45 | 0.47 | 0.30 | 0.26 | 0.17 | 0.42 | 0.24 | 0.18 | 0.10 | 0.26 |
| (WY) | 2004 | 2001 | 2002 | 2000 | 2000 | 2002 | 2002 | 2003 | 2003 | 2004 | 2004 | 2004 |

# See Period of Record; partial years used in monthly statistics

## 15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1999 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 192.05 | | 228.19 | | | |
| ANNUAL MEAN | 0.53 | | 0.62 | | 0.74 | |
| HIGHEST ANNUAL MEAN | | | | | 1.20 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 0.61 | 2003 |
| HIGHEST DAILY MEAN | 3.5 | Dec 22 | 3.5 | Dec 22 | 31 | Dec 27 1999 |
| LOWEST DAILY MEAN | 0.06 | Aug 28 | a0.04 | Sep 9 | a0.04 | Sep 9 2004 |
| ANNUAL SEVEN-DAY MINIMUM | 0.07 | Aug 23 | 0.06 | Sep 5 | 0.06 | Sep 5 2004 |
| MAXIMUM PEAK FLOW | | | 6.1 | Dec 22 | b66 | Dec 27 1999 |
| MAXIMUM PEAK STAGE | | | 4.39 | Dec 22 | 5.16 | Dec 27 1999 |
| INSTANTANEOUS LOW FLOW | | | a0.03 | Sep 9 | a0.03 | Sep 9 2004 |
| ANNUAL RUNOFF (AC-FT) | 381 | | 453 | | 536 | |
| ANNUAL RUNOFF (CFSM) | 4.38 | | 5.20 | | 6.16 | |
| ANNUAL RUNOFF (INCHES) | 59.54 | | 70.74 | | 83.70 | |
| 10 PERCENT EXCEEDS | 0.97 | | 1.2 | | 1.2 | |
| 50 PERCENT EXCEEDS | 0.39 | | 0.56 | | 0.50 | |
| 90 PERCENT EXCEEDS | 0.15 | | 0.11 | | 0.19 | |

\# See Period of Record; partial years used in monthly statistics
a Sept. 9,10,18 and 19.
b From rating curve extended above 3.0 $ft^3/s$

## 15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1981 to July 1987 (unpublished fragmentary records provided by the U.S. Forest Service), July 2000 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 2000 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder with 15-minute recording interval since July 09, 2000.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with stream average by cross section on January 23 and August 24, 2004. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 11.0°C, August 16, 2004; minimum, 0.0°C, on many days during most winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 11.0°C, August 16; minimum, 0.0°C, on January 6 and 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Location in X-sect. looking dwnstrm ft from l bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| JAN | | | | | | | |
| 23... | 1148 | 3.50 | 1.50 | 4.01 | 1.1 | 2.5 | 1.5 |
| 23... | 1149 | 3.50 | 2.00 | 4.01 | 1.1 | 2.5 | 1.5 |
| 23... | 1150 | 3.50 | 3.00 | 4.01 | 1.1 | 2.5 | 1.5 |
| 23... | 1151 | 3.50 | 4.00 | 4.01 | 1.1 | 2.5 | 1.5 |
| AUG | | | | | | | |
| 24... | 1510 | 5.00 | .50 | 3.57 | .10 | 9.5 | 17.5 |
| 24... | 1511 | 5.00 | 1.50 | 3.57 | .10 | 9.5 | 17.5 |
| 24... | 1512 | 5.00 | 2.50 | 3.57 | .10 | 9.5 | 17.5 |
| 24... | 1513 | 5.00 | 3.50 | 3.57 | .10 | 9.5 | 17.5 |
| 24... | 1514 | 5.00 | 9.50 | 3.57 | .10 | 9.5 | 17.5 |

TEMPERATURE, WATER (DEG. CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 7.0 | 7.0 | 7.0 | 4.5 | 4.0 | 4.0 | 2.5 | 2.0 | 2.5 | 2.5 | 1.5 | 2.0 |
| 2 | 7.0 | 6.5 | 7.0 | 4.5 | 4.0 | 4.0 | 3.0 | 2.5 | 2.5 | 1.5 | 1.0 | 1.0 |
| 3 | 7.0 | 6.5 | 7.0 | 4.0 | 3.5 | 4.0 | 3.0 | 2.5 | 2.5 | 1.0 | 1.0 | 1.0 |
| 4 | 7.0 | 7.0 | 7.0 | 3.5 | 3.5 | 3.5 | 3.0 | 2.5 | 3.0 | 1.5 | 1.0 | 1.0 |
| 5 | 7.0 | 7.0 | 7.0 | 3.5 | 3.5 | 3.5 | 3.0 | 2.5 | 3.0 | 1.0 | 0.5 | 1.0 |
| 6 | 7.0 | 7.0 | 7.0 | 3.5 | 3.5 | 3.5 | 3.0 | 2.5 | 2.5 | 1.0 | 0.0 | 0.5 |
| 7 | 7.0 | 7.0 | 7.0 | 4.0 | 3.5 | 4.0 | 3.0 | 2.5 | 2.5 | 1.0 | 0.0 | 0.5 |
| 8 | 7.0 | 6.5 | 7.0 | 4.0 | 4.0 | 4.0 | 3.0 | 2.5 | 3.0 | 1.5 | 0.5 | 1.0 |
| 9 | 6.5 | 6.5 | 6.5 | 4.5 | 4.0 | 4.0 | 3.0 | 2.0 | 2.5 | 1.5 | 1.5 | 1.5 |
| 10 | 6.5 | 6.0 | 6.5 | 4.5 | 4.0 | 4.0 | 2.5 | 1.5 | 2.0 | 2.0 | 1.5 | 1.5 |
| 11 | 6.5 | 6.0 | 6.0 | 4.5 | 4.0 | 4.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 | 2.0 |
| 12 | 6.0 | 5.5 | 6.0 | 5.0 | 4.5 | 5.0 | 3.0 | 2.5 | 2.5 | 2.0 | 2.0 | 2.0 |
| 13 | 6.0 | 5.5 | 6.0 | 4.5 | 4.0 | 4.0 | 3.0 | 2.5 | 2.5 | 2.0 | 2.0 | 2.0 |
| 14 | 6.0 | 6.0 | 6.0 | 4.5 | 4.0 | 4.0 | 2.5 | 2.5 | 2.5 | 2.0 | 1.5 | 2.0 |
| 15 | 6.0 | 5.5 | 5.5 | 4.5 | 4.0 | 4.5 | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 | 2.0 |
| 16 | 6.0 | 5.0 | 5.5 | 4.5 | 4.0 | 4.5 | 2.5 | 2.5 | 2.5 | 2.0 | 1.0 | 2.0 |
| 17 | 6.0 | 6.0 | 6.0 | 4.0 | 3.5 | 4.0 | 3.0 | 2.5 | 2.5 | 2.0 | 1.0 | 1.5 |
| 18 | 6.5 | 6.0 | 6.0 | 3.5 | 2.5 | 3.0 | 3.0 | 2.0 | 2.5 | 2.5 | 2.0 | 2.0 |
| 19 | 6.5 | 6.0 | 6.5 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.5 |
| 20 | 6.5 | 5.5 | 6.0 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 3.0 | 2.5 | 2.5 | 2.5 |
| 21 | 6.5 | 5.5 | 6.0 | 3.0 | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 2.5 | 2.5 |
| 22 | 6.0 | 6.0 | 6.0 | 3.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.5 | 3.0 |
| 23 | 6.0 | 6.0 | 6.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.5 | 2.5 |
| 24 | 6.5 | 6.0 | 6.0 | 3.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 |
| 25 | 7.0 | 6.5 | 6.5 | 3.0 | 2.5 | 3.0 | 3.0 | 2.5 | 3.0 | 1.5 | 0.5 | 0.5 |
| 26 | 7.0 | 6.5 | 6.5 | 3.0 | 2.5 | 3.0 | 2.5 | 2.0 | 2.5 | 0.5 | 0.5 | 0.5 |
| 27 | 6.5 | 6.0 | 6.0 | 3.0 | 2.5 | 2.5 | 2.0 | 1.0 | 1.5 | 0.5 | 0.5 | 0.5 |
| 28 | 6.0 | 5.5 | 5.5 | 2.5 | 2.0 | 2.5 | 2.0 | 1.0 | 1.5 | 0.5 | 0.5 | 0.5 |
| 29 | 5.5 | 4.5 | 5.0 | 2.5 | 2.0 | 2.5 | 2.0 | 2.0 | 2.0 | 1.0 | 0.5 | 1.0 |
| 30 | 4.5 | 4.0 | 4.0 | --- | --- | --- | 2.5 | 2.0 | 2.5 | 1.5 | 0.5 | 1.0 |
| 31 | 4.5 | 4.0 | 4.0 | --- | --- | --- | 2.5 | 2.5 | 2.5 | 1.5 | 1.5 | 1.5 |
| MONTH | 7.0 | 4.0 | 6.1 | --- | --- | --- | 3.0 | 1.0 | 2.5 | 3.0 | 0.0 | 1.5 |

## 15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

TEMPERATURE, WATER (DEG. CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.5 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 | 5.0 | 5.0 | 5.0 |
| 2 | 1.5 | 1.5 | 1.5 | 2.5 | 2.0 | 2.5 | 2.5 | 2.0 | 2.5 | 5.0 | 4.5 | 5.0 |
| 3 | 1.5 | 1.0 | 1.5 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 2.5 | 5.5 | 4.5 | 5.0 |
| 4 | 1.5 | 1.5 | 1.5 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 3.0 | 5.5 | 4.5 | 5.0 |
| 5 | 2.0 | 1.5 | 1.5 | 2.5 | 2.0 | 2.0 | 3.0 | 2.5 | 3.0 | 5.5 | 4.0 | 5.0 |
| 6 | 2.0 | 1.5 | 1.5 | 2.5 | 2.0 | 2.0 | 3.5 | 3.0 | 3.0 | 5.5 | 4.5 | 5.0 |
| 7 | 2.0 | 1.5 | 2.0 | 2.0 | 2.0 | 2.0 | 3.5 | 3.0 | 3.5 | 5.5 | 4.5 | 5.0 |
| 8 | 2.0 | 1.5 | 2.0 | 2.5 | 2.0 | 2.0 | 3.5 | 3.0 | 3.0 | 5.5 | 5.0 | 5.0 |
| 9 | 2.0 | 1.0 | 2.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.5 | 3.5 | 5.5 | 5.0 | 5.0 |
| 10 | 2.5 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.5 | 3.5 | 5.5 | 4.5 | 5.0 |
| 11 | 3.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.5 | 4.0 | 3.5 | 4.0 | 6.0 | 4.5 | 5.0 |
| 12 | 3.0 | 2.5 | 2.5 | 3.0 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 6.0 | 5.0 | 5.5 |
| 13 | 3.0 | 2.5 | 3.0 | 2.5 | 2.5 | 2.5 | 4.0 | 3.5 | 4.0 | 6.0 | 5.0 | 5.5 |
| 14 | 3.0 | 2.5 | 3.0 | 2.5 | 2.5 | 2.5 | 4.0 | 3.5 | 4.0 | 6.0 | 5.0 | 5.5 |
| 15 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 4.0 | 3.0 | 3.5 | 6.0 | 5.0 | 5.5 |
| 16 | 2.5 | 2.5 | 2.5 | 2.5 | 2.0 | 2.0 | 4.0 | 2.5 | 3.5 | 5.5 | 5.0 | 5.5 |
| 17 | 3.0 | 2.5 | 2.5 | 2.5 | 2.0 | 2.5 | 4.0 | 3.5 | 3.5 | 6.0 | 5.0 | 5.5 |
| 18 | 3.0 | 2.5 | 3.0 | 2.5 | 2.0 | 2.0 | 3.5 | 3.0 | 3.5 | 6.0 | 5.5 | 5.5 |
| 19 | 3.0 | 3.0 | 3.0 | 2.0 | 1.5 | 2.0 | 4.0 | 3.0 | 3.5 | 6.5 | 5.5 | 6.0 |
| 20 | 3.0 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.0 | 3.5 | 6.5 | 5.5 | 6.0 |
| 21 | 3.5 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.0 | 3.5 | 6.5 | 5.5 | 6.0 |
| 22 | 3.0 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.5 | 4.0 | 6.5 | 5.5 | 6.0 |
| 23 | 3.5 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 | 4.0 | 3.5 | 3.5 | 6.5 | 5.5 | 6.0 |
| 24 | 3.0 | 3.0 | 3.0 | 2.5 | 2.0 | 2.5 | 4.0 | 3.5 | 4.0 | 6.0 | 5.5 | 6.0 |
| 25 | 3.0 | 2.5 | 2.5 | 3.0 | 2.5 | 2.5 | 4.0 | 4.0 | 4.0 | 6.0 | 5.5 | 6.0 |
| 26 | 2.5 | 2.5 | 2.5 | 3.0 | 2.5 | 2.5 | 4.5 | 4.0 | 4.0 | 6.0 | 5.5 | 5.5 |
| 27 | 2.5 | 2.0 | 2.5 | 3.0 | 2.5 | 2.5 | 4.5 | 4.0 | 4.0 | 6.0 | 5.5 | 5.5 |
| 28 | 2.5 | 2.0 | 2.5 | 3.0 | 2.5 | 2.5 | 4.5 | 4.0 | 4.0 | 6.0 | 5.0 | 5.5 |
| 29 | 2.5 | 2.0 | 2.5 | 2.5 | 2.0 | 2.5 | 5.0 | 3.5 | 4.0 | 6.0 | 5.5 | 5.5 |
| 30 | --- | --- | --- | 2.0 | 2.0 | 2.0 | 5.5 | 4.0 | 4.5 | 6.0 | 5.5 | 6.0 |
| 31 | --- | --- | --- | 2.0 | 2.0 | 2.0 | --- | --- | --- | 6.0 | 5.5 | 6.0 |
| MONTH | 3.5 | 1.0 | 2.4 | 3.0 | 1.5 | 2.2 | 5.5 | 2.0 | 3.5 | 6.5 | 4.0 | 5.5 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 6.0 | 5.5 | 6.0 | 8.5 | 8.5 | 8.5 | 9.0 | 8.5 | 9.0 | 9.5 | 8.5 | 9.0 |
| 2 | 6.0 | 5.5 | 5.5 | 8.5 | 8.5 | 8.5 | 9.5 | 8.5 | 9.0 | 9.5 | 9.0 | 9.0 |
| 3 | 6.5 | 5.5 | 6.0 | 8.5 | 8.5 | 8.5 | 9.5 | 9.0 | 9.0 | 9.5 | 9.0 | 9.5 |
| 4 | 6.5 | 5.5 | 6.0 | 8.5 | 8.0 | 8.5 | 9.5 | 8.5 | 9.0 | 9.5 | 9.0 | 9.0 |
| 5 | 6.5 | 6.0 | 6.5 | 8.5 | 8.0 | 8.5 | 9.5 | 8.5 | 9.0 | 9.0 | 9.0 | 9.0 |
| 6 | 7.0 | 6.0 | 6.5 | 8.5 | 8.0 | 8.5 | 9.5 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 |
| 7 | 7.5 | 6.5 | 7.0 | 9.0 | 8.5 | 8.5 | 9.5 | 9.0 | 9.5 | 9.0 | 8.0 | 8.5 |
| 8 | 7.0 | 6.5 | 6.5 | 9.5 | 8.0 | 8.5 | 10.0 | 8.5 | 9.5 | 8.5 | 8.0 | 8.0 |
| 9 | 6.5 | 6.5 | 6.5 | 9.0 | 8.5 | 8.5 | 10.0 | 9.0 | 9.5 | 8.0 | 6.5 | 7.5 |
| 10 | 6.5 | 6.0 | 6.5 | 8.5 | 8.5 | 8.5 | 10.5 | 9.0 | 9.5 | 8.0 | 6.5 | 7.0 |
| 11 | 6.5 | 6.0 | 6.0 | 9.0 | 8.5 | 8.5 | 10.0 | 9.5 | 9.5 | 8.0 | 7.0 | 7.5 |
| 12 | 7.0 | 6.0 | 6.5 | 9.5 | 8.0 | 8.5 | 10.0 | 9.0 | 9.5 | 8.5 | 8.0 | 8.0 |
| 13 | 6.5 | 6.0 | 6.5 | 9.5 | 8.5 | 9.0 | 10.0 | 9.0 | 9.5 | 8.5 | 8.5 | 8.5 |
| 14 | 6.5 | 6.5 | 6.5 | 9.5 | 8.5 | 9.0 | 10.0 | 9.0 | 9.5 | 8.5 | 8.0 | 8.0 |
| 15 | 7.0 | 6.5 | 6.5 | 9.5 | 8.5 | 9.0 | 10.5 | 9.0 | 10.0 | 8.0 | 7.5 | 8.0 |
| 16 | 7.0 | 6.0 | 6.5 | 10.0 | 8.5 | 9.0 | 11.0 | 9.5 | 10.0 | 8.0 | 7.5 | 8.0 |
| 17 | 7.5 | 6.5 | 7.0 | 9.0 | 9.0 | 9.0 | 10.5 | 9.5 | 10.0 | 8.0 | 6.5 | 7.5 |
| 18 | 8.0 | 7.0 | 7.5 | 9.5 | 8.5 | 9.0 | 10.5 | 10.0 | 10.0 | 7.5 | 6.5 | 7.0 |
| 19 | 8.5 | 7.0 | 7.5 | 9.0 | 8.5 | 9.0 | 10.0 | 10.0 | 10.0 | 7.5 | 6.0 | 7.0 |
| 20 | 8.5 | 7.5 | 8.0 | 9.0 | 9.0 | 9.0 | 10.0 | 10.0 | 10.0 | 8.5 | 7.5 | 8.0 |
| 21 | 8.5 | 7.5 | 8.0 | 9.0 | 9.0 | 9.0 | 10.5 | 9.5 | 10.0 | 9.0 | 8.5 | 8.5 |
| 22 | 9.0 | 7.5 | 8.5 | 9.5 | 8.5 | 9.0 | 10.0 | 9.5 | 10.0 | 8.5 | 8.5 | 8.5 |
| 23 | 9.0 | 8.0 | 8.5 | 9.5 | 9.0 | 9.0 | 10.0 | 8.5 | 9.5 | 9.0 | 8.5 | 8.5 |
| 24 | 9.0 | 8.0 | 8.5 | 9.5 | 9.0 | 9.0 | 10.0 | 9.0 | 9.5 | 8.5 | 8.0 | 8.5 |
| 25 | 9.5 | 8.0 | 8.5 | 9.0 | 9.0 | 9.0 | 10.0 | 9.0 | 9.5 | 8.5 | 8.0 | 8.0 |
| 26 | 9.0 | 8.5 | 8.5 | 9.0 | 8.5 | 9.0 | 10.0 | 9.0 | 9.5 | 8.0 | 8.0 | 8.0 |
| 27 | 8.5 | 8.0 | 8.5 | 9.0 | 8.5 | 9.0 | 9.5 | 9.5 | 9.5 | 8.0 | 7.5 | 8.0 |
| 28 | 8.5 | 8.0 | 8.5 | 9.5 | 9.0 | 9.0 | 9.5 | 9.0 | 9.5 | 7.5 | 7.5 | 7.5 |
| 29 | 8.5 | 8.0 | 8.5 | 9.0 | 9.0 | 9.0 | 9.5 | 9.0 | 9.5 | 7.5 | 7.5 | 7.5 |
| 30 | 8.5 | 8.5 | 8.5 | 9.0 | 8.5 | 9.0 | 9.5 | 9.0 | 9.5 | 7.5 | 7.5 | 7.5 |
| 31 | --- | --- | --- | 9.0 | 8.5 | 9.0 | 9.5 | 9.0 | 9.5 | --- | --- | --- |
| MONTH | 9.5 | 5.5 | 7.2 | 10.0 | 8.0 | 8.8 | 11.0 | 8.5 | 9.5 | 9.5 | 6.0 | 8.1 |

## 15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY

LOCATION.(REVISED)--Lat 58°17'00", long 134°39'54", in SE$^1/_4$ NW$^1/_4$ SW$^1/_4$ sec. 29, T. 41 S., R. 66 E. (Juneau B-2 SW), Hydrologic Unit 19010301, City and Borough of Juneau, on Douglas Island, in Tongass National Forest, on left bank 100 ft downstream from North Fork Peterson Creek, 1.25 mi upstream from mouth, 7.2 mi south of Auke Bay, and 9.6 mi west of Douglas.

DRAINAGE AREA.--4.33 mi$^2$,

PERIOD OF RECORD.--November 1998 to September 2004 (discontinued)

REVISED RECORDS.--WDR AK-00-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 12 | e12 | 9.2 | 4.6 | e1.7 | 4.6 | 7.9 | 22 | 6.2 | 2.7 | e2.8 | e2.1 |
| 2 | 8.7 | e12 | 24 | e3.4 | e1.9 | 4.3 | 26 | 24 | 6.2 | 2.6 | e2.7 | e2.5 |
| 3 | e7.0 | e8.3 | 13 | e3.0 | e2.5 | 4.2 | 43 | 21 | 5.8 | 2.7 | e3.1 | 3.6 |
| 4 | e15 | e7.0 | 9.8 | e2.6 | 3.4 | 4.4 | 26 | 20 | 5.5 | 2.6 | e2.8 | 4.1 |
| 5 | e20 | e6.2 | 6.0 | e2.3 | 5.6 | 4.9 | 17 | 15 | 6.5 | 2.7 | e2.6 | 5.1 |
| 6 | e15 | e5.8 | e4.7 | e2.1 | 6.4 | 4.9 | 12 | 12 | 6.7 | 2.7 | e2.5 | 11 |
| 7 | e35 | e5.7 | e4.6 | e1.9 | 5.0 | 8.0 | 9.9 | 12 | 8.5 | 2.6 | e2.5 | 12 |
| 8 | e24 | e5.4 | e4.4 | e1.8 | 7.5 | 21 | 12 | 13 | 7.1 | 2.5 | e2.4 | 7.3 |
| 9 | e18 | 11 | e4.3 | e2.8 | 47 | 18 | 10 | 12 | 6.5 | 2.3 | e2.3 | 5.2 |
| 10 | e18 | 10 | e4.2 | 5.3 | 33 | 12 | 9.9 | 12 | 5.5 | 2.3 | e2.2 | 4.1 |
| 11 | e14 | 14 | 4.1 | 6.7 | 24 | 11 | 9.4 | 12 | 5.0 | 2.2 | e2.7 | 3.4 |
| 12 | e10 | 93 | 4.1 | 5.9 | 26 | 8.1 | 9.5 | 13 | 4.6 | 2.1 | e3.0 | 3.1 |
| 13 | e10 | 50 | 4.2 | 13 | 18 | 6.7 | 9.3 | 14 | 4.6 | 2.1 | e2.5 | 16 |
| 14 | e9.5 | 29 | 4.1 | 130 | 14 | 5.7 | 8.6 | 15 | 4.9 | 2.0 | e2.3 | 12 |
| 15 | e7.8 | 21 | 4.1 | 37 | 10 | 5.3 | 7.6 | 13 | 4.6 | 2.0 | e2.2 | 9.0 |
| 16 | e7.1 | 15 | 7.0 | 19 | 8.0 | 6.1 | 6.8 | 13 | 4.2 | 2.0 | e2.1 | 6.4 |
| 17 | e6.7 | 9.9 | 20 | 12 | 6.8 | 6.9 | 6.3 | 11 | 4.1 | 1.9 | e2.0 | 4.8 |
| 18 | e10 | 7.2 | 21 | 25 | 6.4 | 5.6 | 5.9 | 11 | 4.2 | 1.9 | e2.2 | 4.0 |
| 19 | e11 | 6.5 | 37 | 24 | 6.9 | 4.7 | 5.4 | 11 | 4.5 | 1.9 | e2.3 | 3.5 |
| 20 | e13 | 5.7 | 24 | 31 | 9.4 | 4.2 | 5.0 | 14 | 4.4 | 1.8 | e2.3 | 7.6 |
| 21 | e11 | 6.3 | 22 | 35 | 14 | 3.9 | 4.9 | 14 | 4.2 | 2.0 | e2.2 | 26 |
| 22 | e14 | 6.5 | 31 | 42 | 28 | 3.9 | 5.4 | 11 | 3.9 | 2.1 | e2.0 | 15 |
| 23 | e16 | 6.5 | 34 | 29 | 18 | 3.9 | 6.2 | 9.4 | 3.7 | 2.1 | e2.0 | 72 |
| 24 | e15 | 9.6 | 25 | 19 | 13 | 4.1 | 6.2 | 12 | 3.5 | 2.3 | e1.8 | 51 |
| 25 | 15 | 9.1 | 22 | e10 | 9.1 | 13 | 6.7 | 15 | 3.4 | 2.9 | e1.8 | 22 |
| 26 | 30 | 6.0 | 15 | e5.5 | 7.1 | 20 | 9.9 | 14 | 3.3 | 2.6 | e1.8 | 13 |
| 27 | 23 | 5.8 | 8.9 | e3.3 | 6.1 | 13 | 8.7 | 9.9 | 3.2 | 2.4 | e2.1 | 12 |
| 28 | 44 | e4.4 | 6.7 | e2.2 | 5.4 | 10 | 7.8 | 7.7 | 3.1 | 3.4 | e2.5 | 10 |
| 29 | e26 | 4.6 | 5.9 | e1.6 | 4.9 | 9.7 | 7.2 | 6.9 | 2.9 | 4.2 | e3.0 | 8.3 |
| 30 | e21 | 5.4 | 5.6 | e1.5 | --- | 11 | 10 | 6.6 | 2.8 | 5.2 | e2.7 | 7.7 |
| 31 | e16 | --- | 5.2 | e1.6 | --- | 9.1 | --- | 6.4 | --- | e3.3 | e2.3 | --- |
| TOTAL | 502.8 | 398.9 | 395.1 | 484.1 | 349.1 | 252.2 | 320.5 | 402.9 | 143.6 | 78.1 | 73.7 | 363.8 |
| MEAN | 16.2 | 13.3 | 12.7 | 15.6 | 12.0 | 8.14 | 10.7 | 13.0 | 4.79 | 2.52 | 2.38 | 12.1 |
| MAX | 44 | 93 | 37 | 130 | 47 | 21 | 43 | 24 | 8.5 | 5.2 | 3.1 | 72 |
| MIN | 6.7 | 4.4 | 4.1 | 1.5 | 1.7 | 3.9 | 4.9 | 6.4 | 2.8 | 1.8 | 1.8 | 2.1 |
| AC-FT | 997 | 791 | 784 | 960 | 692 | 500 | 636 | 799 | 285 | 155 | 146 | 722 |
| CFSM | 3.75 | 3.07 | 2.94 | 3.61 | 2.78 | 1.88 | 2.47 | 3.00 | 1.11 | 0.58 | 0.55 | 2.80 |
| IN. | 4.32 | 3.43 | 3.39 | 4.16 | 3.00 | 2.17 | 2.75 | 3.46 | 1.23 | 0.67 | 0.63 | 3.13 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 19.8 | 12.6 | 16.3 | 11.1 | 7.32 | 6.74 | 9.07 | 12.8 | 10.7 | 7.52 | 8.32 | 16.8 |
| MAX | 29.6 | 19.7 | 43.2 | 16.1 | 12.2 | 8.14 | 19.2 | 18.1 | 14.9 | 15.9 | 16.6 | 22.8 |
| (WY) | 2003 | 2000 | 2000 | 2003 | 2002 | 2004 | 1999 | 1999 | 1999 | 2000 | 2002 | 2003 |
| MIN | 15.9 | 4.99 | 8.30 | 5.57 | 2.00 | 4.14 | 3.02 | 5.79 | 4.01 | 2.52 | 2.38 | 12.1 |
| (WY) | 2001 | 1999 | 2002 | 2000 | 1999 | 2002 | 2002 | 2003 | 2003 | 2004 | 2004 | 2004 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1999 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 3702.2 | | 3764.8 | | | |
| ANNUAL MEAN | 10.1 | | 10.3 | | 11.7 | |
| HIGHEST ANNUAL MEAN | | | | | 15.5 | 2000 |
| LOWEST ANNUAL MEAN | | | | | 9.84 | 2001 |
| HIGHEST DAILY MEAN | 189 | Sep 27 | 130 | Jan 14 | 364 | Dec 27 1999 |
| LOWEST DAILY MEAN | a1.8 | Jul 19 | 1.5 | Jan 30 | 0.90 | Mar 17 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 1.9 | Jul 14 | 1.9 | Jan 28 | 0.97 | Mar 16 2002 |
| MAXIMUM PEAK FLOW | | | 232 | Jan 14 | 616 | Dec 28 1999 |
| MAXIMUM PEAK STAGE | | | 9.46 | Jan 14 | 10.80 | Dec 28 1999 |
| INSTANTANEOUS LOW FLOW | | | b | | b | |
| ANNUAL RUNOFF (AC-FT) | 7340 | | 7470 | | 8440 | |
| ANNUAL RUNOFF (CFSM) | 2.34 | | 2.38 | | 2.69 | |
| ANNUAL RUNOFF (INCHES) | 31.81 | | 32.34 | | 36.56 | |
| 10 PERCENT EXCEEDS | 21 | | 22 | | 22 | |
| 50 PERCENT EXCEEDS | 6.3 | | 6.6 | | 7.4 | |
| 90 PERCENT EXCEEDS | 2.8 | | 2.3 | | 2.7 | |

\# See Period of Record; partial years used in monthly statistics
a Jul. 19 and 20
b Not determined; see lowest daily mean
e Estimated

## 15129000 ALSEK RIVER NEAR YAKUTAT
(International gaging station)

LOCATION.--Lat 59°23'42", long 138°04'55", in NW¼ NE¼ sec. 19, T. 29 S., R. 44 E. (Yakutat B-1 quad), Hydrologic Unit 19010401, in Glacier Bay National Park, on right bank across from terminus of Walker Glacier, 33 mi upstream from Dry Bay, and 55 mi southeast of Yakutat.

DRAINAGE AREA.--10,820 mi$^2$.

PERIOD OF RECORD.--July 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | e49000 | 16300 | e6000 | e5600 | e2900 | e3500 | e3900 | 12500 | 49200 | 123000 | 96000 | 56900 |
| 2 | e43000 | 15800 | e6200 | e5400 | e2900 | e3500 | e4100 | 13700 | 49300 | 119000 | 86000 | 58600 |
| 3 | e36000 | 15300 | e6000 | e5200 | e2900 | e3400 | e4400 | 15500 | 49400 | 120000 | 91000 | 85400 |
| 4 | 41200 | 14500 | e5800 | e5100 | e2900 | e3400 | 5040 | 17400 | 49100 | 114000 | 90300 | 90900 |
| 5 | 42900 | 13600 | e5700 | e5000 | e2900 | e3300 | 4910 | 19200 | 52200 | 109000 | 89400 | 73500 |
| 6 | 42800 | 13400 | e5600 | e4900 | e3000 | e3300 | 4840 | 20400 | 57800 | 103000 | 92400 | 56900 |
| 7 | 42800 | 13200 | e5500 | e4800 | e3000 | e3400 | 5010 | 20900 | 75700 | 102000 | 96000 | 43900 |
| 8 | 41600 | 13000 | e5500 | e3800 | e3100 | e3400 | 5740 | 21400 | 94200 | 105000 | 98300 | 35000 |
| 9 | 39200 | 14500 | e5400 | e4000 | e3200 | e3400 | 5550 | 22600 | 100000 | 108000 | 98600 | 29100 |
| 10 | 36500 | 14000 | e5400 | e4000 | e3300 | e3400 | 5600 | 23200 | 91200 | 106000 | 99300 | 25100 |
| 11 | 33700 | 13100 | e5300 | e3800 | e3300 | e3500 | 5400 | 23600 | 77600 | 100000 | 109000 | 22200 |
| 12 | 30800 | 14000 | e5300 | e3700 | e3500 | e3600 | 5410 | 24500 | 69900 | 99100 | 97700 | 20200 |
| 13 | 28200 | 13800 | e5300 | e3700 | e3600 | e3600 | 5500 | 26100 | 68000 | 100000 | 85100 | 20900 |
| 14 | 26100 | 13200 | e5400 | e3700 | e3700 | e3600 | 5750 | 27900 | 70300 | 99100 | 86600 | 22300 |
| 15 | 24400 | 13100 | e5500 | e3700 | e3800 | e3600 | 6120 | 30200 | 73100 | 101000 | 98400 | 21700 |
| 16 | 23000 | 12400 | e5500 | e3600 | e3900 | e3500 | 6150 | 31900 | 76500 | 105000 | 106000 | 26500 |
| 17 | 21700 | 11400 | e5600 | e3600 | e4000 | e3500 | 6050 | 33900 | 77600 | 107000 | 111000 | 48000 |
| 18 | 20600 | 10100 | e5700 | e3500 | e4300 | e3400 | 6160 | 37000 | 84800 | 106000 | 111000 | 22500 |
| 19 | 20600 | e8700 | e5800 | e3700 | e4300 | e3400 | 6220 | 38500 | 95900 | 103000 | 104000 | 17800 |
| 20 | 20800 | e8300 | e6000 | e3900 | e4400 | e3400 | 6230 | 41000 | 107000 | 98800 | 95800 | 16000 |
| 21 | 20500 | e7700 | e6100 | e4100 | e4400 | e3400 | 6290 | 46300 | 113000 | 102000 | 92000 | 26300 |
| 22 | 20200 | e7500 | e7000 | e4000 | e4400 | e3400 | 6480 | 49700 | 118000 | 103000 | 96400 | 31700 |
| 23 | 20300 | e6900 | e6800 | e3800 | e4400 | e3400 | 6660 | 50700 | 123000 | 100000 | 94500 | 32700 |
| 24 | 19900 | e6600 | e6300 | e3600 | e4200 | e3500 | 6830 | 52100 | 128000 | 98300 | 85500 | 38100 |
| 25 | 21600 | e6300 | e5900 | e3400 | e4100 | e3500 | 7360 | 56400 | 131000 | 95800 | 77900 | 35900 |
| 26 | 23000 | e6100 | e5600 | e3300 | e3900 | e3600 | 8290 | 59400 | 133000 | 90500 | 68400 | 35800 |
| 27 | 22400 | e6000 | e5300 | e3200 | e3800 | e3600 | 9010 | 56000 | 131000 | 88500 | 67000 | 53100 |
| 28 | 20800 | e5900 | e5000 | e3100 | e3900 | e3700 | 9880 | 53300 | 133000 | 104000 | 64200 | 47500 |
| 29 | 19300 | e6000 | e5600 | e3100 | e3600 | e3800 | 10600 | 53300 | 130000 | 113000 | 63200 | 40400 |
| 30 | 17900 | e5800 | e5700 | e3000 | --- | e3900 | 11300 | 52600 | 131000 | 110000 | 61300 | 38000 |
| 31 | 17100 | --- | e5900 | e2900 | --- | e3900 | --- | 50300 | --- | 103000 | 60300 | --- |
| TOTAL | 887900 | 326500 | 177700 | 122200 | 105600 | 108800 | 190780 | 1081500 | 2739800 | 3236100 | 2772600 | 1172900 |
| MEAN | 28640 | 10880 | 5732 | 3942 | 3641 | 3510 | 6359 | 34890 | 91330 | 104400 | 89440 | 39100 |
| MAX | 49000 | 16300 | 7000 | 5600 | 4400 | 3900 | 11300 | 59400 | 133000 | 123000 | 111000 | 90900 |
| MIN | 17100 | 5800 | 5000 | 2900 | 2900 | 3300 | 3900 | 12500 | 49100 | 88500 | 60300 | 16000 |
| AC-FT | 1761000 | 647600 | 352500 | 242400 | 209500 | 215800 | 378400 | 2145000 | 5434000 | 6419000 | 5499000 | 2326000 |
| CFSM | 2.65 | 1.01 | 0.53 | 0.36 | 0.34 | 0.32 | 0.59 | 3.22 | 8.44 | 9.65 | 8.27 | 3.61 |
| IN. | 3.05 | 1.12 | 0.61 | 0.42 | 0.36 | 0.37 | 0.66 | 3.72 | 9.42 | 11.13 | 9.53 | 4.03 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 24490 | 9973 | 7016 | 5123 | 4214 | 4027 | 6508 | 26300 | 68930 | 87430 | 77160 | 48310 |
| MAX | 40300 | 19160 | 12640 | 9118 | 6625 | 6619 | 10870 | 40100 | 91330 | 104400 | 99370 | 76330 |
| (WY) | 1995 | 2003 | 2003 | 2001 | 1993 | 1992 | 1992 | 1993 | 2004 | 2004 | 1994 | 1995 |
| MIN | 12040 | 5828 | 3229 | 3045 | 2707 | 3033 | 4379 | 16770 | 53490 | 73510 | 59750 | 29040 |
| (WY) | 1997 | 1997 | 1997 | 1995 | 1995 | 1995 | 2002 | 2001 | 1996 | 1996 | 1996 | 1992 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1991 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 10647560 | | 12922380 | | | |
| ANNUAL MEAN | 29170 | | 35310 | | 30850 | |
| HIGHEST ANNUAL MEAN | | | | | 35850 | 1993 |
| LOWEST ANNUAL MEAN | | | | | 23920 | 1996 |
| HIGHEST DAILY MEAN | 118000 | Aug 16 | a133000 | Jun 26 | 175000 | Aug 13 2002 |
| LOWEST DAILY MEAN | 2580 | Mar 13 | b2900 | Jan 31 | 2280 | Mar 13 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 2620 | Mar 8 | 2910 | Jan 30 | 2310 | Mar 8 1999 |
| MAXIMUM PEAK FLOW | | | 137000 | Jun 26 | c178000 | Aug 13 2002 |
| MAXIMUM PEAK STAGE | | | 85.87 | Jun 26 | 89.52 | Aug 13 2002 |
| ANNUAL RUNOFF (AC-FT) | 21120000 | | 25630000 | | 22350000 | |
| ANNUAL RUNOFF (CFSM) | 2.70 | | 3.26 | | 2.85 | |
| ANNUAL RUNOFF (INCHES) | 36.61 | | 44.43 | | 38.74 | |
| 10 PERCENT EXCEEDS | 76900 | | 101000 | | 83500 | |
| 50 PERCENT EXCEEDS | 16300 | | 15600 | | 13000 | |
| 90 PERCENT EXCEEDS | 3560 | | 3500 | | 3500 | |

\# See Period of Record; partial years used in monthly summary statistics
a June 26 and 28
b January 31 to February 5
c From rating extended above 100,000 cfs
e Estimated

## 15129500 SITUK RIVER NEAR YAKUTAT

LOCATION.--Lat 59°35'00", long 139°29'31", in SE$^1/_4$ SW$^1/_4$ sec. 9, T. 27 S., R. 35 E. (Yakutat C-4 quad.), Yakutat Borough, Hydrologic Unit 19010401, in Tongass National Forest, on left bank 20 ft downstream from Alsek Road bridge, 3.5 mi downstream from Situk Lake, 8.8 mi northeast of Yakutat, and 10 mi upstream from mouth.

DRAINAGE AREA.--36 mi$^2$, approximately.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level, by U.S. Forest Service.

REMARKS.--Records good, except for estimated daily discharges, which are poor.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft$^3$/s and maximum(*).

| Date | Time | Discharge (ft$^3$/s) | Gage Height (ft) | Date | Time | Discharge (ft$^3$/s) | Gage Height (ft) |
|---|---|---|---|---|---|---|---|
| Dec 22 | 1245 | 1620 | 69.62 | Feb 11 | 1130 | *2030 | *70.34 |
| Feb 09 | 0300 | 1830 | 69.99 | Sept 26 | 2045 | 1000 | 68.24 |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | e184 | 196 | 156 | 182 | 147 | 210 | 217 | 262 | 217 | 129 | 281 | 83 |
| 2 | e164 | 179 | 378 | e170 | 170 | 195 | 394 | 292 | 221 | 124 | 232 | 122 |
| 3 | e204 | 165 | 340 | e160 | 176 | 186 | 777 | 278 | 213 | 124 | 196 | 304 |
| 4 | e263 | 154 | 297 | e150 | 190 | 184 | 753 | 265 | 198 | 124 | 170 | 374 |
| 5 | e260 | 144 | 256 | e150 | 446 | 178 | 585 | 254 | 191 | 128 | 151 | 327 |
| 6 | e326 | 136 | 225 | e140 | 556 | 169 | 478 | 244 | 186 | 126 | 135 | 277 |
| 7 | e382 | 130 | 200 | e130 | 429 | 169 | 422 | 234 | 183 | 121 | 123 | 233 |
| 8 | e366 | 137 | 184 | e130 | 783 | 174 | 422 | 223 | 184 | 116 | 114 | 200 |
| 9 | e327 | 220 | 167 | 149 | 1280 | 172 | 377 | 215 | 187 | 113 | 109 | 176 |
| 10 | e290 | 196 | 155 | 144 | 1010 | 229 | 341 | 207 | 191 | 112 | 103 | 156 |
| 11 | e275 | 193 | 153 | 138 | 1820 | 290 | 302 | 199 | 188 | 107 | 106 | 143 |
| 12 | e246 | 343 | 165 | 133 | 1180 | 301 | 272 | 194 | 181 | 104 | 103 | 145 |
| 13 | e224 | 295 | 193 | 174 | 778 | 283 | 263 | 190 | 172 | 102 | 99 | 159 |
| 14 | e202 | 311 | 189 | 211 | 612 | 258 | 251 | 186 | 167 | 99 | 94 | 155 |
| 15 | e170 | 492 | 181 | 186 | 493 | 264 | 237 | 183 | 162 | 96 | 90 | 165 |
| 16 | 156 | 400 | 203 | 169 | 410 | 261 | 224 | 180 | 158 | 93 | 85 | 149 |
| 17 | 145 | 332 | 253 | 182 | 352 | 236 | 214 | 178 | 154 | 89 | 82 | 133 |
| 18 | 144 | 282 | 292 | 198 | 309 | 214 | 229 | 174 | 150 | 86 | 79 | 121 |
| 19 | 188 | 245 | 729 | 182 | 345 | 193 | 224 | 171 | 150 | 84 | 80 | 113 |
| 20 | 204 | 215 | 663 | 353 | 496 | 176 | 206 | 169 | 154 | 82 | 80 | 167 |
| 21 | 182 | 195 | 665 | 469 | 756 | 164 | 194 | 170 | 156 | 82 | 77 | 372 |
| 22 | 175 | 207 | 1380 | 387 | 637 | 156 | 210 | 171 | 156 | 84 | 74 | 379 |
| 23 | 205 | 211 | 966 | 352 | 509 | 148 | 265 | 173 | 156 | 85 | 72 | 485 |
| 24 | 254 | 195 | 656 | 301 | 448 | 140 | 284 | 187 | 154 | 85 | 70 | 549 |
| 25 | 384 | 178 | 496 | e260 | 379 | 146 | 391 | 250 | 152 | 92 | 69 | 501 |
| 26 | 387 | 166 | 390 | e230 | 327 | 161 | 392 | 320 | 149 | 98 | 75 | 690 |
| 27 | 360 | 154 | 317 | e200 | 283 | 173 | 360 | 332 | 146 | 130 | 93 | 844 |
| 28 | 314 | 148 | 269 | e180 | 253 | 211 | 324 | 298 | 144 | 270 | 101 | 772 |
| 29 | 272 | 145 | 240 | e160 | 230 | 294 | 297 | 266 | 139 | 435 | 102 | 712 |
| 30 | 241 | 139 | 230 | e150 | --- | 268 | 272 | 246 | 134 | 471 | 96 | 677 |
| 31 | 217 | --- | 204 | e140 | --- | 242 | --- | 231 | --- | 351 | 91 | --- |
| TOTAL | 7711 | 6503 | 11192 | 6260 | 15804 | 6445 | 10177 | 6942 | 5093 | 4342 | 3432 | 9683 |
| MEAN | 249 | 217 | 361 | 202 | 545 | 208 | 339 | 224 | 170 | 140 | 111 | 323 |
| MAX | 387 | 492 | 1380 | 469 | 1820 | 301 | 777 | 332 | 221 | 471 | 281 | 844 |
| MIN | 144 | 130 | 153 | 130 | 147 | 140 | 194 | 169 | 134 | 82 | 69 | 83 |
| AC-FT | 15290 | 12900 | 22200 | 12420 | 31350 | 12780 | 20190 | 13770 | 10100 | 8610 | 6810 | 19210 |
| CFSM | 6.91 | 6.02 | 10.0 | 5.61 | 15.1 | 5.78 | 9.42 | 6.22 | 4.72 | 3.89 | 3.08 | 8.97 |
| IN. | 7.97 | 6.72 | 11.57 | 6.47 | 16.33 | 6.66 | 10.52 | 7.17 | 5.26 | 4.49 | 3.55 | 10.01 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 525 | 348 | 381 | 284 | 259 | 231 | 235 | 267 | 225 | 185 | 274 | 481 |
| MAX | 878 | 598 | 739 | 620 | 545 | 516 | 370 | 418 | 345 | 292 | 612 | 838 |
| (WY) | 2000 | 1993 | 2000 | 2001 | 2004 | 1992 | 1998 | 1991 | 1991 | 1991 | 2002 | 1991 |
| MIN | 249 | 173 | 142 | 131 | 81.2 | 54.2 | 73.6 | 160 | 127 | 77.7 | 105 | 261 |
| (WY) | 2004 | 1999 | 1991 | 1996 | 1999 | 1989 | 2002 | 1996 | 1993 | 1993 | 1994 | 2003 |

e Estimated

## 15129500 SITUK RIVER NEAR YAKUTAT—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1989 - 2004# | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 83347 | | 93584 | | | |
| ANNUAL MEAN | 228 | | 256 | | 308 | |
| HIGHEST ANNUAL MEAN | | | | | 382 | 1992 |
| LOWEST ANNUAL MEAN | | | | | 230 | 1996 |
| HIGHEST DAILY MEAN | 1380 | Dec 22 | 1820 | Feb 11 | 2850 | Dec 27 1999 |
| LOWEST DAILY MEAN | 67 | May 9 | 69 | Aug 25 | a47 | Mar 5 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 70 | May 3 | 74 | Aug 20 | 48 | Mar 3 1989 |
| MAXIMUM PEAK FLOW | | | 2030 | Feb 11 | 3840 | Oct 18 1999 |
| MAXIMUM PEAK STAGE | | | 70.34 | Feb 11 | 72.99 | Oct 18 1999 |
| INSTANTANEOUS LOW FLOW | | | b69 | Aug 24 | c47 | Mar 5 1989 |
| ANNUAL RUNOFF (AC-FT) | 165300 | | 185600 | | 223300 | |
| ANNUAL RUNOFF (CFSM) | 6.34 | | 7.10 | | 8.56 | |
| ANNUAL RUNOFF (INCHES) | 86.13 | | 96.70 | | 116.34 | |
| 10 PERCENT EXCEEDS | 369 | | 447 | | 588 | |
| 50 PERCENT EXCEEDS | 190 | | 195 | | 233 | |
| 90 PERCENT EXCEEDS | 91 | | 104 | | 112 | |

\# See Period of Record
a Mar. 5-7 1989
b Aug. 24-26
c Mar. 5, 1989 and Apr. 15 and 17, 2002

## 15129500 SITUK RIVER NEAR YAKUTAT—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to 1973 and 1988 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1970 to September 1973 (fragmentary) and May 1988 to current year.

INSTRUMENTATION.--Water-temperature recorder October 1970 to September 1973, at a site 500 ft downstream. Electronic water-temperature recorder since May 1988, set for 2-hour recording interval. Recording interval changed to 15-minutes on March 6, 1996.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on August 10, 2004. No variation was found within the cross section. No variation was found between mean stream temperature and sensor temperature. Missing record October 1-15 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 20.5°C, June 24 and 25, 2004; minimum, 0.0°C, on many days during winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 20.5°C, June 24 and 25; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date | Time | Stream width, feet (00004) | Location in X-sect. looking dwnstrm ft from l bank (00009) | Gage height, feet (00065) | Instantaneous discharge, cfs (00061) | Temperature, water, deg C (00010) | Temperature, air, deg C (00020) |
|---|---|---|---|---|---|---|---|
| AUG | | | | | | | |
| 10... | 1655 | 57.0 | 10.0 | 65.22 | 101 | 18.0 | 32.0 |
| 10... | 1656 | 57.0 | 20.0 | 65.22 | 101 | 18.0 | 32.0 |
| 10... | 1657 | 57.0 | 30.0 | 65.22 | 101 | 18.0 | 32.0 |
| 10... | 1658 | 57.0 | 40.0 | 65.22 | 101 | 18.0 | 32.0 |
| 10... | 1659 | 57.0 | 50.0 | 65.22 | 101 | 18.0 | 32.0 |

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | --- | --- | --- | 4.5 | 3.5 | 4.0 | 1.5 | 0.0 | 1.0 | 1.0 | 0.0 | 0.5 |
| 2 | --- | --- | --- | 5.0 | 4.0 | 4.5 | 1.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 3 | --- | --- | --- | 4.0 | 3.5 | 3.5 | 2.0 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 4 | --- | --- | --- | 3.5 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 5 | --- | --- | --- | 3.5 | 2.5 | 3.0 | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 6 | --- | --- | --- | 4.5 | 3.0 | 3.5 | 2.0 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 7 | --- | --- | --- | 4.5 | 4.0 | 4.5 | 2.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 |
| 8 | --- | --- | --- | 5.0 | 4.5 | 4.5 | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 0.0 |
| 9 | --- | --- | --- | 4.5 | 3.5 | 4.0 | 2.0 | 1.0 | 1.5 | 1.5 | 0.0 | 0.5 |
| 10 | --- | --- | --- | 4.0 | 3.5 | 3.5 | 2.0 | 1.0 | 1.5 | 2.0 | 1.5 | 1.5 |
| 11 | --- | --- | --- | 4.0 | 3.5 | 3.5 | 2.5 | 2.0 | 2.0 | 1.5 | 1.0 | 1.0 |
| 12 | --- | --- | --- | 4.0 | 3.5 | 4.0 | 2.5 | 2.0 | 2.0 | 1.5 | 1.0 | 1.0 |
| 13 | --- | --- | --- | 4.0 | 3.0 | 3.5 | 2.0 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 |
| 14 | --- | --- | --- | 3.5 | 3.0 | 3.0 | 1.5 | 1.0 | 1.5 | 1.0 | 0.5 | 1.0 |
| 15 | --- | --- | --- | 3.5 | 3.0 | 3.5 | 2.0 | 1.5 | 2.0 | 1.0 | 0.5 | 0.5 |
| 16 | 6.0 | 4.5 | 5.5 | 4.0 | 3.0 | 3.5 | 2.0 | 1.5 | 2.0 | 1.0 | 0.0 | 0.5 |
| 17 | 6.5 | 5.0 | 5.5 | 3.0 | 2.0 | 3.0 | 2.0 | 2.0 | 2.0 | 1.0 | 0.0 | 1.0 |
| 18 | 6.5 | 6.0 | 6.0 | 2.5 | 2.0 | 2.0 | 2.0 | 1.5 | 1.5 | 1.5 | 1.0 | 1.5 |
| 19 | 6.5 | 6.0 | 6.5 | 2.5 | 1.5 | 2.0 | 2.0 | 0.5 | 1.0 | 1.0 | 0.5 | 1.0 |
| 20 | 7.0 | 5.5 | 6.5 | 1.5 | 1.0 | 1.0 | 1.5 | 1.0 | 1.5 | 1.0 | 1.0 | 1.0 |
| 21 | 6.0 | 4.5 | 5.5 | 3.0 | 1.5 | 2.0 | 2.0 | 1.5 | 1.5 | 1.0 | 1.0 | 1.0 |
| 22 | 6.5 | 6.0 | 6.5 | 3.0 | 2.0 | 3.0 | 1.5 | 1.0 | 1.5 | 1.5 | 1.0 | 1.0 |
| 23 | 6.5 | 6.0 | 6.0 | 3.0 | 2.0 | 2.5 | 1.5 | 1.5 | 1.5 | 1.5 | 0.5 | 1.0 |
| 24 | 6.5 | 5.5 | 6.0 | 2.5 | 2.0 | 2.5 | 1.5 | 1.0 | 1.5 | 1.0 | 0.0 | 0.5 |
| 25 | 7.0 | 6.5 | 7.0 | 2.5 | 1.5 | 2.0 | 1.5 | 1.0 | 1.0 | 0.5 | 0.0 | 0.0 |
| 26 | 7.0 | 6.5 | 7.0 | 2.5 | 1.5 | 1.5 | 1.0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| 27 | 6.5 | 5.5 | 6.0 | 1.5 | 0.5 | 1.0 | 0.5 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 28 | 5.5 | 5.0 | 5.5 | 1.0 | 0.0 | 0.5 | 1.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 |
| 29 | 5.0 | 4.5 | 5.0 | 0.5 | 0.0 | 0.5 | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 30 | 5.5 | 4.5 | 5.0 | 1.0 | 0.0 | 0.5 | 1.5 | 1.0 | 1.5 | 0.0 | 0.0 | 0.0 |
| 31 | 5.0 | 4.5 | 5.0 | --- | --- | --- | 1.5 | 1.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| MONTH | --- | --- | --- | 5.0 | 0.0 | 2.8 | 2.5 | 0.0 | 1.4 | 2.0 | 0.0 | 0.5 |

15129500 SITUK RIVER NEAR YAKUTAT—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 1.0 | 0.0 | 0.5 | 3.0 | 1.5 | 2.5 | 3.0 | 0.5 | 2.0 | 7.0 | 5.0 | 6.0 |
| 2 | 1.0 | 1.0 | 1.0 | 3.0 | 1.5 | 2.0 | 2.0 | 1.5 | 2.0 | 7.5 | 5.0 | 6.0 |
| 3 | 1.5 | 0.5 | 1.0 | 3.0 | 2.0 | 2.5 | 1.5 | 1.0 | 1.0 | 10.0 | 4.5 | 7.0 |
| 4 | 1.5 | 0.0 | 0.5 | 2.5 | 2.0 | 2.0 | 2.5 | 1.0 | 1.5 | 10.5 | 5.0 | 7.5 |
| 5 | 1.0 | 0.5 | 0.5 | 2.5 | 1.5 | 2.0 | 3.5 | 1.5 | 2.0 | 10.5 | 5.5 | 7.5 |
| 6 | 1.0 | 0.5 | 0.5 | 2.5 | 1.0 | 2.0 | 4.0 | 1.5 | 2.5 | 11.0 | 6.0 | 8.5 |
| 7 | 1.5 | 1.0 | 1.0 | 3.0 | 1.5 | 2.5 | 3.0 | 2.0 | 2.5 | 9.0 | 7.5 | 8.0 |
| 8 | 1.5 | 0.0 | 1.0 | 2.0 | 0.5 | 1.5 | 4.0 | 1.5 | 2.5 | 8.5 | 7.0 | 8.0 |
| 9 | 1.0 | 0.0 | 0.5 | 2.5 | 0.0 | 1.5 | 3.5 | 2.0 | 2.5 | 10.0 | 7.5 | 8.5 |
| 10 | 1.5 | 1.0 | 1.0 | 1.5 | 0.0 | 0.5 | 5.0 | 1.5 | 3.0 | 10.5 | 7.0 | 8.5 |
| 11 | 1.0 | 0.5 | 0.5 | 2.5 | 1.0 | 2.0 | 5.5 | 1.5 | 3.0 | 12.5 | 7.0 | 9.5 |
| 12 | 1.0 | 0.5 | 1.0 | 3.0 | 1.5 | 2.0 | 4.5 | 2.0 | 3.0 | 13.0 | 8.0 | 10.0 |
| 13 | 1.5 | 1.0 | 1.5 | 3.0 | 1.5 | 2.0 | 5.0 | 2.5 | 3.5 | 13.0 | 7.5 | 10.0 |
| 14 | 1.5 | 1.0 | 1.5 | 1.5 | 0.5 | 1.0 | 6.0 | 2.5 | 4.0 | 10.5 | 8.5 | 9.5 |
| 15 | 1.5 | 1.0 | 1.0 | 2.5 | 0.5 | 1.5 | 6.0 | 2.0 | 4.0 | 10.5 | 8.5 | 9.5 |
| 16 | 2.0 | 1.0 | 1.5 | 3.0 | 1.5 | 2.0 | 5.0 | 2.0 | 3.5 | 9.5 | 8.5 | 9.0 |
| 17 | 2.0 | 1.0 | 1.5 | 3.5 | 1.5 | 2.0 | 5.5 | 3.0 | 4.0 | 12.0 | 8.5 | 10.0 |
| 18 | 2.0 | 1.0 | 1.5 | 2.5 | 0.5 | 1.5 | 4.5 | 3.0 | 3.5 | 11.0 | 9.0 | 10.0 |
| 19 | 2.0 | 1.5 | 1.5 | 2.5 | 0.5 | 1.5 | 5.5 | 2.0 | 3.5 | 13.0 | 9.0 | 10.5 |
| 20 | 2.0 | 1.5 | 1.5 | 3.0 | 0.5 | 1.5 | 7.0 | 2.5 | 4.5 | 15.0 | 9.5 | 11.5 |
| 21 | 1.5 | 1.5 | 1.5 | 4.0 | 0.0 | 2.0 | 6.5 | 3.0 | 4.5 | 15.5 | 10.0 | 12.5 |
| 22 | 2.0 | 1.0 | 1.5 | 3.5 | 1.0 | 2.5 | 4.5 | 3.5 | 4.0 | 15.5 | 10.0 | 12.5 |
| 23 | 2.5 | 1.5 | 2.0 | 4.0 | 1.0 | 2.5 | 4.5 | 3.0 | 3.5 | 13.0 | 11.0 | 11.5 |
| 24 | 2.5 | 1.5 | 2.0 | 3.5 | 1.5 | 2.5 | 4.5 | 3.0 | 4.0 | 11.0 | 10.5 | 11.0 |
| 25 | 2.0 | 1.0 | 1.5 | 2.5 | 1.5 | 2.0 | 4.5 | 3.5 | 4.0 | 10.5 | 9.0 | 10.0 |
| 26 | 2.0 | 1.0 | 1.5 | 3.0 | 1.5 | 2.0 | 5.0 | 3.5 | 4.0 | 10.5 | 9.5 | 10.0 |
| 27 | 2.0 | 0.5 | 1.5 | 3.5 | 1.0 | 2.0 | 5.5 | 3.5 | 4.5 | 11.0 | 10.0 | 10.5 |
| 28 | 3.0 | 2.0 | 2.0 | 2.5 | 2.0 | 2.0 | 5.5 | 4.0 | 5.0 | 12.0 | 10.0 | 11.0 |
| 29 | 3.0 | 2.0 | 2.5 | 3.0 | 1.5 | 2.0 | 8.0 | 3.5 | 5.5 | 13.0 | 9.5 | 11.0 |
| 30 | --- | --- | --- | 2.5 | 0.5 | 1.5 | 9.0 | 4.0 | 6.5 | 11.5 | 9.5 | 10.5 |
| 31 | --- | --- | --- | 2.5 | 0.5 | 1.5 | --- | --- | --- | 12.5 | 9.5 | 11.0 |
| MONTH | 3.0 | 0.0 | 1.3 | 4.0 | 0.0 | 1.9 | 9.0 | 0.5 | 3.5 | 15.5 | 4.5 | 9.6 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 11.0 | 9.5 | 10.5 | 15.5 | 13.5 | 14.5 | 15.5 | 14.0 | 15.0 | 13.5 | 11.0 | 12.5 |
| 2 | 11.0 | 9.5 | 10.0 | 18.5 | 13.0 | 15.5 | 16.0 | 13.5 | 14.5 | 13.0 | 11.5 | 12.0 |
| 3 | 14.5 | 9.0 | 11.5 | 16.5 | 14.0 | 14.5 | 17.5 | 12.5 | 15.0 | 13.5 | 12.0 | 12.5 |
| 4 | 13.5 | 9.5 | 11.5 | 16.0 | 13.5 | 14.5 | 17.5 | 12.5 | 15.0 | 15.0 | 12.5 | 13.5 |
| 5 | 11.5 | 10.5 | 11.0 | 15.5 | 13.5 | 14.5 | 17.5 | 12.5 | 15.0 | 15.5 | 13.0 | 14.0 |
| 6 | 16.0 | 10.5 | 12.5 | 19.0 | 13.0 | 15.5 | 17.5 | 13.5 | 15.5 | 14.5 | 12.0 | 13.5 |
| 7 | 13.0 | 11.5 | 12.0 | 19.5 | 14.0 | 16.5 | 17.5 | 13.0 | 15.0 | 14.0 | 11.0 | 12.5 |
| 8 | 12.0 | 11.0 | 11.5 | 20.0 | 13.5 | 16.5 | 18.0 | 13.0 | 15.5 | 13.5 | 10.0 | 11.5 |
| 9 | 13.0 | 10.5 | 11.5 | 17.5 | 14.5 | 15.5 | 18.0 | 12.5 | 15.5 | 13.0 | 9.5 | 11.0 |
| 10 | 11.5 | 10.0 | 11.0 | 18.5 | 14.0 | 16.0 | 18.0 | 13.0 | 15.5 | 12.0 | 9.0 | 10.5 |
| 11 | 13.0 | 10.0 | 11.0 | 19.0 | 13.5 | 16.0 | 16.5 | 14.0 | 15.0 | 12.0 | 9.5 | 11.0 |
| 12 | 14.0 | 10.0 | 12.0 | 19.5 | 13.5 | 16.5 | 16.5 | 12.0 | 14.5 | 11.5 | 10.0 | 10.5 |
| 13 | 16.5 | 10.0 | 13.0 | 17.5 | 14.5 | 16.0 | 17.5 | 12.5 | 15.0 | 12.0 | 10.0 | 11.0 |
| 14 | 13.5 | 11.5 | 12.0 | 16.5 | 14.0 | 15.0 | 17.0 | 12.5 | 15.0 | 11.0 | 10.0 | 10.5 |
| 15 | 13.0 | 11.0 | 12.0 | 19.0 | 13.5 | 16.0 | 17.5 | 13.0 | 15.0 | 11.5 | 9.5 | 10.5 |
| 16 | 13.0 | 10.0 | 11.5 | 19.5 | 13.5 | 16.5 | 17.5 | 13.0 | 15.5 | 11.5 | 9.5 | 10.5 |
| 17 | 17.0 | 11.0 | 13.5 | 17.5 | 15.0 | 15.5 | 17.5 | 13.5 | 15.5 | 10.5 | 8.0 | 9.0 |
| 18 | 18.0 | 11.5 | 14.5 | 16.0 | 14.0 | 15.0 | 16.0 | 13.5 | 15.0 | 10.0 | 7.0 | 8.5 |
| 19 | 19.5 | 12.0 | 15.5 | 18.0 | 13.0 | 15.5 | 15.0 | 13.5 | 14.0 | 9.5 | 6.5 | 8.0 |
| 20 | 20.0 | 13.0 | 16.5 | 17.5 | 13.5 | 15.5 | 15.5 | 12.5 | 14.0 | 9.5 | 8.5 | 9.0 |
| 21 | 20.0 | 13.5 | 16.5 | 16.5 | 14.5 | 15.5 | 15.5 | 12.0 | 14.0 | 10.5 | 9.0 | 9.5 |
| 22 | 20.0 | 14.0 | 17.0 | 15.0 | 13.5 | 14.0 | 16.0 | 11.5 | 14.0 | 10.5 | 10.0 | 10.0 |
| 23 | 20.0 | 14.5 | 17.0 | 15.0 | 12.5 | 14.0 | 15.5 | 11.5 | 13.5 | 10.0 | 9.5 | 10.0 |
| 24 | 20.5 | 15.0 | 17.5 | 16.5 | 13.0 | 14.5 | 15.0 | 12.0 | 13.5 | 10.5 | 10.0 | 10.0 |
| 25 | 20.5 | 14.5 | 17.5 | 15.0 | 13.5 | 14.5 | 13.5 | 11.5 | 12.0 | 10.0 | 9.5 | 9.5 |
| 26 | 19.0 | 15.5 | 17.0 | 14.5 | 12.5 | 13.5 | 13.0 | 11.5 | 12.0 | 9.5 | 9.5 | 9.5 |
| 27 | 18.0 | 15.0 | 16.5 | 13.5 | 13.0 | 13.5 | 13.5 | 11.5 | 12.5 | 9.5 | 9.5 | 9.5 |
| 28 | 16.0 | 15.0 | 15.5 | 14.0 | 13.0 | 13.5 | 13.0 | 11.5 | 12.5 | 9.5 | 9.0 | 9.0 |
| 29 | 16.5 | 14.0 | 15.0 | 14.5 | 13.5 | 14.0 | 14.5 | 11.5 | 13.0 | 9.5 | 9.0 | 9.0 |
| 30 | 15.0 | 14.0 | 14.5 | 15.0 | 13.5 | 14.0 | 14.5 | 11.0 | 13.0 | 9.5 | 9.0 | 9.5 |
| 31 | --- | --- | --- | 15.5 | 14.0 | 14.5 | 14.0 | 10.5 | 12.5 | --- | --- | --- |
| MONTH | 20.5 | 9.0 | 13.6 | 20.0 | 12.5 | 15.0 | 18.0 | 10.5 | 14.3 | 15.5 | 6.5 | 10.6 |

## 15129510 OLD SITUK RIVER NEAR YAKUTAT

LOCATION.--Lat 59°34'14", long 139°26'18", in NW¼ NE¼ NW¼ sec. 23, T. 27 S., R. 35 E. (Yakutat C-4 quad.), Yakutat Borough, Hydrologic Unit 19010401, in Tongass National Forest, on right bank 100 ft downstream from Forest Hwy. 10, 10.5 mi northeast of Yakutat.

DRAINAGE AREA.--4.78 $mi^2$.

### WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 77 ft above sea level, from topographic map.

REMARKS.--Records fair. No estimated daily discharges.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 26 | 32 | 27 | 36 | 25 | 42 | 28 | 52 | 23 | 13 | 18 | 9.7 |
| 2 | 26 | 31 | 45 | 33 | 28 | 42 | 44 | 55 | 24 | 13 | 17 | 14 |
| 3 | 30 | 30 | 35 | 31 | 27 | 43 | 68 | 51 | 24 | 13 | 17 | 19 |
| 4 | 31 | 29 | 32 | 29 | 27 | 40 | 67 | 49 | 23 | 12 | 16 | 17 |
| 5 | 29 | 28 | 30 | 28 | 43 | 38 | 59 | 47 | 22 | 13 | 15 | 16 |
| 6 | 34 | 28 | 28 | 28 | 48 | 36 | 54 | 46 | 22 | 12 | 15 | 16 |
| 7 | 44 | 27 | 26 | 27 | 43 | 38 | 52 | 46 | 20 | 12 | 14 | 15 |
| 8 | 42 | 28 | 26 | 26 | 79 | 37 | 51 | 44 | 20 | 12 | 13 | 14 |
| 9 | 39 | 33 | 25 | 27 | 127 | 33 | 48 | 43 | 19 | 12 | 13 | 14 |
| 10 | 37 | 28 | 25 | 25 | 117 | 41 | 46 | 41 | 19 | 12 | 13 | 13 |
| 11 | 35 | 29 | 26 | 24 | 189 | 43 | 46 | 39 | 19 | 11 | 13 | 13 |
| 12 | 33 | 43 | 27 | 24 | 137 | 40 | 44 | 36 | 19 | 11 | 12 | 14 |
| 13 | 31 | 37 | 28 | 29 | 104 | 38 | 44 | 35 | 19 | 11 | 12 | 14 |
| 14 | 31 | 39 | 26 | 30 | 89 | 36 | 43 | 33 | 18 | 11 | 12 | 13 |
| 15 | 31 | 48 | 26 | 26 | 75 | 37 | 41 | 32 | 17 | 11 | 12 | 14 |
| 16 | 30 | 43 | 28 | 24 | 67 | 34 | 40 | 31 | 17 | 11 | 12 | 13 |
| 17 | 29 | 40 | 30 | 27 | 60 | 32 | 40 | 30 | 17 | 11 | 11 | 12 |
| 18 | 29 | 36 | 32 | 25 | 56 | 31 | 41 | 29 | 17 | 11 | 11 | 11 |
| 19 | 33 | 33 | 64 | 23 | 61 | 29 | 40 | 28 | 17 | 11 | 11 | 11 |
| 20 | 33 | 32 | 60 | 39 | 72 | 27 | 39 | 27 | 17 | 10 | 11 | 17 |
| 21 | 31 | 31 | 70 | 44 | 102 | 27 | 38 | 26 | 16 | 9.9 | 11 | 24 |
| 22 | 30 | 34 | 139 | 39 | 88 | 27 | 41 | 26 | 16 | 9.9 | 10 | 23 |
| 23 | 31 | 32 | 104 | 38 | 73 | 26 | 44 | 25 | 16 | 9.6 | 10 | 32 |
| 24 | 33 | 31 | 81 | 33 | 69 | 26 | 46 | 27 | 15 | 9.7 | 10 | 31 |
| 25 | 47 | 28 | 67 | 31 | 60 | 26 | 59 | 31 | 15 | 10 | 9.9 | 28 |
| 26 | 45 | 28 | 56 | 29 | 55 | 27 | 63 | 31 | 14 | 9.8 | 11 | 53 |
| 27 | 42 | 26 | 50 | 28 | 50 | 27 | 60 | 29 | 14 | 14 | 11 | 58 |
| 28 | 39 | 26 | 48 | 27 | 47 | 30 | 56 | 27 | 14 | 18 | 11 | 50 |
| 29 | 36 | 25 | 46 | 26 | 45 | 32 | 55 | 26 | 13 | 20 | 11 | 49 |
| 30 | 35 | 24 | 45 | 25 | --- | 30 | 53 | 25 | 13 | 22 | 10 | 53 |
| 31 | 34 | --- | 40 | 25 | --- | 28 | --- | 24 | --- | 20 | 10 | --- |
| TOTAL | 1056 | 959 | 1392 | 906 | 2063 | 1043 | 1450 | 1091 | 539 | 385.9 | 382.9 | 680.7 |
| MEAN | 34.1 | 32.0 | 44.9 | 29.2 | 71.1 | 33.6 | 48.3 | 35.2 | 18.0 | 12.4 | 12.4 | 22.7 |
| MAX | 47 | 48 | 139 | 44 | 189 | 43 | 68 | 55 | 24 | 22 | 18 | 58 |
| MIN | 26 | 24 | 25 | 23 | 25 | 26 | 28 | 24 | 13 | 9.6 | 9.9 | 9.7 |
| AC-FT | 2090 | 1900 | 2760 | 1800 | 4090 | 2070 | 2880 | 2160 | 1070 | 765 | 759 | 1350 |
| CFSM | 7.13 | 6.69 | 9.39 | 6.11 | 14.9 | 7.04 | 10.1 | 7.36 | 3.76 | 2.60 | 2.58 | 4.75 |
| IN. | 8.22 | 7.46 | 10.83 | 7.05 | 16.06 | 8.12 | 11.28 | 8.49 | 4.19 | 3.00 | 2.98 | 5.30 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2004, BY WATER YEAR (WY)#

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 34.1 | 32.0 | 44.9 | 29.2 | 71.1 | 33.6 | 48.3 | 35.2 | 18.0 | 15.0 | 18.8 | 26.1 |
| MAX | 34.1 | 32.0 | 44.9 | 29.2 | 71.1 | 33.6 | 48.3 | 35.2 | 18.0 | 17.5 | 25.3 | 29.4 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2003 | 2003 | 2003 |
| MIN | 34.1 | 32.0 | 44.9 | 29.2 | 71.1 | 33.6 | 48.3 | 35.2 | 18.0 | 12.4 | 12.4 | 22.7 |
| (WY) | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 | 2004 |

| SUMMARY STATISTICS | FOR 2004 WATER YEAR | | WATER YEARS 2003 - 2004# | |
|---|---|---|---|---|
| ANNUAL TOTAL | 11948.5 | | | |
| ANNUAL MEAN | 32.6 | | 32.6 | |
| HIGHEST ANNUAL MEAN | | | 32.6 | 2004 |
| LOWEST ANNUAL MEAN | | | 32.6 | 2004 |
| HIGHEST DAILY MEAN | 189 | Feb 11 | 189 | Feb 11 2004 |
| LOWEST DAILY MEAN | 9.6 | Jul 23 | 9.6 | Jul 23 2004 |
| ANNUAL SEVEN-DAY MINIMUM | 9.8 | Jul 20 | 9.8 | Jul 20 2004 |
| MAXIMUM PEAK FLOW | a214 | Feb 11 | a214 | Feb 11 2004 |
| MAXIMUM PEAK STAGE | 15.14 | Feb 11 | 15.14 | Feb 11 2004 |
| INSTANTANEOUS LOW FLOW | b9.1 | Jul 22 | b9.1 | Jul 22 2004 |
| ANNUAL RUNOFF (AC-FT) | 23700 | | 23650 | |
| ANNUAL RUNOFF (CFSM) | 6.83 | | 6.83 | |
| ANNUAL RUNOFF (INCHES) | 92.99 | | 92.80 | |
| 10 PERCENT EXCEEDS | 55 | | 55 | |
| 50 PERCENT EXCEEDS | 29 | | 29 | |
| 90 PERCENT EXCEEDS | 12 | | 12 | |

\# See Period of record; partial years were used in monthly summary statistics
a From rating curve extended above 58 $ft^3/s$
b Jul. 22-27, Aug. 26, and Sep. 1

## 15129510 OLD SITUK RIVER NEAR YAKUTAT—Continued

### WATER-QUALITY RECORDS

PERIOD OF RECORD.-- June 2003 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 2003 to current year.

INSTRUMENTATION.--Water-temperature recorder set for 15 minute recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. No temperature cross sections were taken in the 2004 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 16.0°C, June 19,2004; minimum, 0.0°C on November 28, 2003, February 4, and March 9-10, 2004.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 16.0°C June 19; minimum, 0.0°C on November 28, February 4, and March 9-10.

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | |
| 1 | 7.5 | 6.0 | 6.5 | 3.5 | 3.0 | 3.5 | 3.0 | 0.5 | 1.5 | 2.5 | 1.5 | 2.0 |
| 2 | 7.5 | 5.5 | 6.5 | 4.5 | 3.5 | 4.0 | 3.0 | 0.5 | 1.5 | 1.5 | 1.0 | 1.0 |
| 3 | 7.0 | 6.0 | 6.5 | 3.5 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 | 1.5 | 1.0 | 1.0 |
| 4 | 7.5 | 6.5 | 7.0 | 3.0 | 2.5 | 3.0 | 3.0 | 2.0 | 2.5 | 1.0 | 1.0 | 1.0 |
| 5 | 7.0 | 6.5 | 6.5 | 3.5 | 2.5 | 3.0 | 3.5 | 3.0 | 3.0 | 1.5 | 1.0 | 1.0 |
| 6 | 7.0 | 6.0 | 6.5 | 4.0 | 3.0 | 3.5 | 3.0 | 2.5 | 2.5 | 1.5 | 0.5 | 1.0 |
| 7 | 7.5 | 6.5 | 7.0 | 4.5 | 3.5 | 4.0 | 3.0 | 2.5 | 3.0 | 1.5 | 1.0 | 1.0 |
| 8 | 7.0 | 6.0 | 6.5 | 5.0 | 4.0 | 4.5 | 3.5 | 3.0 | 3.0 | 2.5 | 1.5 | 2.0 |
| 9 | 6.5 | 5.5 | 6.0 | 5.0 | 3.5 | 4.0 | 3.0 | 2.5 | 3.0 | 3.0 | 1.5 | 3.0 |
| 10 | 6.0 | 5.0 | 5.5 | 3.5 | 3.0 | 3.5 | 3.5 | 2.5 | 3.0 | 3.5 | 3.0 | 3.0 |
| 11 | 6.0 | 4.5 | 5.0 | 4.0 | 3.0 | 3.5 | 3.5 | 3.5 | 3.5 | 3.0 | 2.5 | 2.5 |
| 12 | 5.0 | 3.5 | 4.5 | 4.5 | 3.5 | 4.0 | 3.5 | 3.5 | 3.5 | 3.0 | 2.5 | 2.5 |
| 13 | 5.5 | 4.0 | 4.5 | 4.0 | 2.5 | 3.5 | 3.5 | 3.0 | 3.0 | 3.5 | 3.0 | 3.0 |
| 14 | 5.0 | 3.5 | 4.0 | 3.5 | 2.0 | 2.5 | 3.0 | 2.0 | 2.5 | 3.0 | 2.5 | 2.5 |
| 15 | 4.5 | 3.0 | 4.0 | 4.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.5 | 2.5 | 2.0 | 2.0 |
| 16 | 5.0 | 3.0 | 4.0 | 4.0 | 3.0 | 3.5 | 3.5 | 2.5 | 3.0 | 2.5 | 1.5 | 2.0 |
| 17 | 5.5 | 3.5 | 4.5 | 3.0 | 2.0 | 3.0 | 4.0 | 3.5 | 3.5 | 2.5 | 1.0 | 2.0 |
| 18 | 5.5 | 4.5 | 5.0 | 2.5 | 1.5 | 2.0 | 3.5 | 3.0 | 3.5 | 3.0 | 2.5 | 3.0 |
| 19 | 6.0 | 5.0 | 5.5 | 2.5 | 1.5 | 2.0 | 3.5 | 3.0 | 3.5 | 3.0 | 2.0 | 2.5 |
| 20 | 6.0 | 4.5 | 5.5 | 2.0 | 1.0 | 1.5 | 3.5 | 3.0 | 3.0 | 3.0 | 2.5 | 3.0 |
| 21 | 5.0 | 3.5 | 4.5 | 3.0 | 1.5 | 2.5 | 4.0 | 3.0 | 3.5 | 3.5 | 3.0 | 3.5 |
| 22 | 5.5 | 5.0 | 5.0 | 3.5 | 2.0 | 3.0 | 4.0 | 2.5 | 3.5 | 3.5 | 3.0 | 3.5 |
| 23 | 5.5 | 5.0 | 5.0 | 3.5 | 2.5 | 3.0 | 3.0 | 2.5 | 3.0 | 3.5 | 2.5 | 3.0 |
| 24 | 5.5 | 5.0 | 5.0 | 3.5 | 2.5 | 3.0 | 3.5 | 3.0 | 3.0 | 2.5 | 2.0 | 2.0 |
| 25 | 6.5 | 5.5 | 6.0 | 3.0 | 2.0 | 2.5 | 3.0 | 2.5 | 3.0 | 2.0 | 0.5 | 1.0 |
| 26 | 6.0 | 5.5 | 6.0 | 2.5 | 1.5 | 2.0 | 3.0 | 2.0 | 2.5 | 1.0 | 0.5 | 0.5 |
| 27 | 5.5 | 4.5 | 5.0 | 2.0 | 1.0 | 1.5 | 2.0 | 2.0 | 2.0 | 1.5 | 0.5 | 1.0 |
| 28 | 4.5 | 3.5 | 4.0 | 2.0 | 0.0 | 1.0 | 3.0 | 1.5 | 2.5 | 1.0 | 1.0 | 1.0 |
| 29 | 4.0 | 3.0 | 3.5 | 1.5 | 1.0 | 1.5 | 3.5 | 3.0 | 3.0 | 2.0 | 0.5 | 1.5 |
| 30 | 4.5 | 3.5 | 4.0 | 2.0 | 0.5 | 1.5 | 3.5 | 3.0 | 3.5 | 2.0 | 1.5 | 2.0 |
| 31 | 4.5 | 3.5 | 4.0 | --- | --- | --- | 3.0 | 2.5 | 3.0 | 3.0 | 2.0 | 2.5 |
| MONTH | 7.5 | 3.0 | 5.3 | 5.0 | 0.0 | 2.9 | 4.0 | 0.5 | 2.9 | 3.5 | 0.5 | 2.0 |

15129510 OLD SITUK RIVER NEAR YAKUTAT—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FEBRUARY | | | MARCH | | | APRIL | | | MAY | |
| 1 | 3.0 | 2.0 | 2.5 | 4.5 | 3.0 | 4.0 | 4.5 | 1.5 | 3.0 | 7.0 | 5.5 | 6.0 |
| 2 | 3.0 | 2.0 | 2.5 | 4.0 | 3.5 | 3.5 | 4.0 | 2.5 | 3.5 | 8.5 | 5.0 | 6.5 |
| 3 | 3.0 | 1.5 | 2.5 | 4.0 | 3.5 | 3.5 | 3.5 | 3.0 | 3.5 | 10.0 | 5.0 | 7.0 |
| 4 | 3.0 | 0.0 | 1.5 | 3.5 | 3.0 | 3.5 | 5.0 | 2.5 | 4.0 | 10.0 | 4.5 | 7.0 |
| 5 | 3.0 | 2.0 | 2.5 | 3.5 | 2.5 | 3.0 | 5.0 | 3.0 | 4.0 | 10.0 | 5.0 | 7.0 |
| 6 | 2.5 | 2.0 | 2.5 | 3.5 | 2.5 | 3.0 | 5.5 | 3.5 | 4.5 | 10.0 | 4.5 | 7.0 |
| 7 | 3.0 | 2.0 | 2.5 | 4.0 | 2.5 | 3.5 | 4.5 | 3.5 | 4.0 | 7.0 | 6.0 | 6.5 |
| 8 | 3.0 | 2.5 | 3.0 | 3.0 | 1.0 | 2.5 | 6.0 | 2.5 | 4.5 | 7.0 | 5.5 | 6.0 |
| 9 | 3.0 | 2.0 | 2.5 | 3.5 | 0.0 | 2.0 | 5.5 | 4.0 | 4.5 | 8.5 | 5.5 | 6.5 |
| 10 | 3.5 | 3.0 | 3.0 | 2.5 | 0.0 | 1.5 | 7.0 | 3.0 | 4.5 | 9.0 | 5.0 | 7.0 |
| 11 | 3.0 | 2.5 | 2.5 | 4.0 | 2.0 | 3.0 | 7.0 | 2.5 | 4.5 | 11.0 | 5.0 | 7.5 |
| 12 | 3.0 | 2.5 | 3.0 | 4.0 | 3.0 | 3.5 | 6.0 | 3.5 | 4.5 | 11.0 | 5.5 | 8.0 |
| 13 | 4.0 | 3.0 | 3.5 | 5.0 | 3.0 | 3.5 | 6.5 | 4.0 | 5.0 | 11.0 | 5.5 | 8.0 |
| 14 | 4.0 | 3.5 | 3.5 | 3.0 | 1.5 | 2.5 | 7.5 | 4.0 | 5.5 | 7.5 | 6.5 | 7.0 |
| 15 | 3.5 | 3.0 | 3.0 | 3.5 | 1.5 | 2.5 | 8.0 | 3.0 | 5.0 | 8.5 | 6.0 | 7.0 |
| 16 | 4.0 | 3.0 | 3.5 | 4.5 | 3.0 | 3.5 | 6.5 | 4.0 | 5.0 | 7.5 | 6.0 | 6.5 |
| 17 | 4.0 | 3.0 | 3.5 | 5.0 | 3.0 | 3.5 | 6.5 | 4.5 | 5.0 | 10.0 | 6.0 | 7.5 |
| 18 | 3.5 | 3.0 | 3.5 | 4.5 | 2.0 | 3.0 | 5.5 | 4.0 | 4.5 | 9.0 | 6.5 | 7.5 |
| 19 | 3.5 | 3.0 | 3.5 | 4.0 | 1.5 | 2.5 | 7.0 | 3.0 | 5.0 | 11.0 | 6.5 | 8.5 |
| 20 | 4.0 | 3.5 | 3.5 | 4.5 | 2.0 | 3.0 | 8.0 | 3.5 | 5.5 | 12.5 | 6.5 | 9.0 |
| 21 | 4.0 | 3.5 | 4.0 | 5.5 | 1.5 | 3.0 | 8.0 | 3.5 | 5.5 | 13.0 | 7.0 | 9.5 |
| 22 | 4.0 | 3.0 | 3.5 | 5.5 | 2.5 | 4.0 | 5.0 | 4.0 | 5.0 | 13.0 | 7.0 | 9.5 |
| 23 | 4.0 | 3.5 | 4.0 | 6.0 | 2.5 | 4.0 | 5.0 | 3.5 | 4.5 | 9.0 | 7.0 | 8.0 |
| 24 | 4.5 | 3.5 | 3.5 | 5.0 | 3.0 | 4.0 | 5.0 | 4.0 | 4.5 | 8.0 | 6.5 | 7.0 |
| 25 | 3.5 | 2.5 | 3.0 | 4.0 | 3.0 | 3.5 | 5.5 | 4.0 | 5.0 | 7.5 | 6.5 | 7.0 |
| 26 | 3.5 | 2.5 | 3.0 | 4.5 | 2.5 | 3.5 | 5.5 | 4.5 | 5.0 | 7.5 | 6.5 | 7.0 |
| 27 | 3.5 | 2.0 | 3.0 | 5.0 | 2.0 | 3.5 | 6.5 | 4.0 | 5.0 | 8.0 | 6.5 | 7.0 |
| 28 | 4.5 | 3.0 | 3.5 | 4.0 | 3.0 | 3.5 | 6.0 | 4.5 | 5.5 | 9.5 | 6.0 | 7.5 |
| 29 | 4.5 | 3.5 | 4.0 | 5.0 | 3.5 | 4.0 | 9.0 | 4.0 | 6.0 | 11.0 | 6.0 | 8.0 |
| 30 | --- | --- | --- | 4.0 | 1.5 | 3.0 | 9.5 | 4.5 | 6.5 | 8.5 | 6.0 | 7.0 |
| 31 | --- | --- | --- | 4.0 | 2.0 | 2.5 | --- | --- | --- | 9.0 | 6.0 | 7.5 |
| MONTH | 4.5 | 0.0 | 3.1 | 6.0 | 0.0 | 3.2 | 9.5 | 1.5 | 4.7 | 13.0 | 4.5 | 7.4 |

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 8.0 | 6.0 | 7.0 | 9.5 | 7.0 | 8.0 | 9.5 | 7.0 | 8.0 | 9.0 | 7.0 | 8.0 |
| 2 | 8.0 | 6.0 | 7.0 | 13.5 | 7.0 | 10.0 | 9.5 | 7.0 | 8.0 | 8.5 | 7.5 | 8.0 |
| 3 | 13.0 | 6.0 | 8.5 | 11.0 | 8.5 | 9.0 | 12.0 | 6.5 | 9.0 | 9.5 | 8.0 | 8.5 |
| 4 | 11.0 | 6.5 | 8.5 | 10.5 | 7.5 | 9.0 | 12.5 | 6.5 | 9.0 | 9.0 | 6.0 | 7.5 |
| 5 | 8.5 | 7.0 | 7.5 | 10.0 | 8.0 | 9.0 | 12.5 | 6.5 | 9.5 | 9.5 | 6.0 | 7.5 |
| 6 | 13.5 | 6.5 | 9.5 | 14.0 | 7.5 | 10.0 | 12.0 | 7.5 | 9.5 | 8.0 | 5.5 | 7.0 |
| 7 | 9.5 | 7.5 | 8.0 | 15.0 | 8.5 | 11.5 | 12.0 | 7.0 | 9.5 | 8.5 | 4.5 | 6.0 |
| 8 | 9.0 | 7.0 | 7.5 | 15.0 | 8.5 | 11.5 | 12.5 | 7.0 | 9.5 | 8.0 | 4.0 | 6.0 |
| 9 | 9.0 | 6.0 | 7.5 | 11.5 | 9.5 | 10.5 | 13.0 | 7.0 | 9.5 | 8.0 | 4.0 | 6.0 |
| 10 | 8.0 | 6.5 | 7.0 | 13.0 | 8.5 | 10.0 | 12.5 | 7.0 | 10.0 | 7.5 | 4.5 | 6.0 |
| 11 | 9.0 | 6.0 | 7.5 | 14.5 | 8.0 | 10.5 | 11.0 | 8.5 | 9.5 | 8.0 | 5.0 | 6.5 |
| 12 | 11.5 | 6.5 | 8.5 | 14.5 | 9.0 | 11.0 | 11.0 | 7.0 | 8.5 | 7.0 | 6.0 | 6.0 |
| 13 | 14.0 | 6.5 | 9.5 | 12.5 | 9.5 | 10.5 | 12.5 | 7.0 | 9.5 | 7.5 | 6.0 | 6.5 |
| 14 | 10.0 | 7.5 | 8.0 | 10.0 | 8.5 | 9.0 | 12.5 | 7.0 | 9.5 | 7.5 | 6.0 | 6.5 |
| 15 | 9.5 | 6.5 | 8.0 | 14.5 | 8.0 | 10.5 | 12.0 | 7.5 | 10.0 | 8.0 | 5.5 | 6.5 |
| 16 | 9.5 | 6.5 | 7.5 | 15.0 | 8.5 | 11.5 | 12.5 | 7.5 | 10.0 | 8.0 | 5.5 | 6.5 |
| 17 | 14.0 | 6.5 | 9.5 | 12.0 | 9.5 | 10.5 | 13.0 | 8.0 | 10.0 | 7.5 | 4.0 | 6.0 |
| 18 | 14.5 | 7.5 | 10.5 | 10.5 | 8.5 | 9.5 | 10.5 | 8.0 | 9.5 | 7.0 | 4.0 | 5.5 |
| 19 | 16.0 | 7.5 | 11.0 | 12.0 | 8.0 | 9.5 | 9.5 | 8.0 | 9.0 | 6.5 | 4.0 | 5.5 |
| 20 | 15.5 | 7.5 | 11.0 | 12.5 | 8.0 | 10.0 | 10.5 | 7.5 | 9.0 | 7.0 | 6.0 | 6.5 |
| 21 | 15.5 | 8.0 | 11.0 | 11.5 | 9.5 | 10.5 | 11.0 | 7.5 | 9.0 | 7.5 | 6.5 | 7.0 |
| 22 | 15.0 | 8.0 | 11.0 | 10.0 | 9.0 | 9.5 | 12.5 | 7.0 | 9.0 | 7.0 | 6.0 | 6.5 |
| 23 | 15.0 | 8.0 | 11.0 | 10.0 | 7.5 | 9.0 | 12.0 | 7.0 | 9.5 | 7.5 | 6.5 | 6.5 |
| 24 | 15.5 | 8.5 | 11.5 | 12.0 | 8.0 | 9.5 | 11.5 | 7.5 | 9.5 | 7.0 | 6.0 | 6.5 |
| 25 | 15.0 | 8.5 | 11.5 | 11.0 | 9.0 | 9.5 | 9.0 | 7.5 | 8.0 | 6.0 | 5.5 | 6.0 |
| 26 | 13.0 | 9.0 | 11.0 | 9.5 | 8.0 | 8.5 | 8.5 | 7.5 | 8.0 | 7.5 | 6.0 | 6.5 |
| 27 | 11.5 | 8.5 | 10.0 | 9.5 | 8.5 | 9.0 | 9.5 | 7.5 | 8.5 | 7.0 | 6.0 | 6.5 |
| 28 | 9.5 | 8.0 | 8.5 | 9.5 | 8.5 | 9.0 | 9.0 | 7.5 | 8.5 | 6.0 | 5.5 | 6.0 |
| 29 | 10.5 | 7.5 | 8.5 | 9.5 | 8.0 | 8.5 | 10.0 | 7.0 | 8.5 | 6.5 | 5.5 | 6.0 |
| 30 | 9.0 | 7.5 | 8.0 | 9.5 | 8.0 | 8.5 | 10.5 | 6.5 | 8.5 | 7.0 | 6.0 | 6.5 |
| 31 | --- | --- | --- | 9.5 | 7.0 | 8.5 | 10.5 | 6.5 | 8.0 | --- | --- | --- |
| MONTH | 16.0 | 6.0 | 9.0 | 15.0 | 7.0 | 9.7 | 13.0 | 6.5 | 9.1 | 9.5 | 4.0 | 6.5 |

## 15129600 OPHIR CREEK NEAR YAKUTAT

LOCATION.--Lat 59°31'26", long 139°44'37", in SW¼ NW¼ NE¼ sec. 1, T. 28 S., R. 33 E. (Yakutat C-5 SW quad), Hydrologic Unit 19010401, in Tongass National Forest, on right bank 0.8 mi upstream from Summit Lake and 2 mi south of Yakutat.

DRAINAGE AREA.-- 2.5 $mi^2$, approximately.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 9.05 ft above sea level, determined by levels survey.

REMARKS.--Records fair, except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.8 | 9.1 | 6.5 | 22 | 16 | 23 | 18 | 20 | 3.0 | 1.2 | 1.9 | 1.1 |
| 2 | 8.0 | 8.4 | 15 | 22 | 18 | 22 | 23 | 20 | 3.3 | 1.2 | 1.8 | 1.8 |
| 3 | 9.6 | 7.6 | 12 | 22 | 18 | 22 | 36 | 19 | 3.1 | 1.1 | 1.7 | 2.8 |
| 4 | 12 | 6.9 | 11 | 21 | 19 | 21 | 36 | 18 | 3.0 | 1.1 | 1.5 | 2.4 |
| 5 | 12 | 6.5 | 9.8 | 20 | 29 | 21 | 31 | 17 | 2.9 | 1.2 | 1.5 | 2.0 |
| 6 | 15 | 6.1 | 9.1 | 19 | 35 | 20 | 28 | 16 | 2.8 | 1.0 | 1.3 | 1.8 |
| 7 | 17 | 5.8 | 8.1 | e17 | 28 | 20 | 27 | 15 | 2.7 | 1.0 | 1.3 | 1.5 |
| 8 | 16 | 6.1 | 7.4 | 16 | 42 | 20 | 27 | 14 | 2.3 | 0.98 | 1.2 | 1.6 |
| 9 | 15 | 8.7 | 6.7 | 17 | 60 | 19 | 26 | 13 | 2.2 | 0.94 | 1.2 | 1.5 |
| 10 | 13 | 7.3 | 6.4 | 17 | 56 | 22 | 26 | 12 | 2.2 | 0.92 | 1.1 | 1.3 |
| 11 | 13 | 7.5 | 6.5 | 16 | 74 | 24 | 24 | 12 | 2.0 | 0.83 | 1.2 | 1.3 |
| 12 | 11 | 14 | 8.4 | 15 | 64 | 23 | 23 | 11 | 1.9 | 0.81 | 1.1 | 1.3 |
| 13 | 10 | 12 | 11 | 19 | 52 | 22 | 22 | 10 | 1.9 | 0.73 | 0.99 | 1.3 |
| 14 | 9.6 | 14 | 11 | 22 | 45 | 21 | 22 | 9.2 | 1.9 | 0.72 | 0.94 | 1.2 |
| 15 | 8.8 | 20 | 11 | 19 | 39 | 22 | 22 | 8.5 | 1.8 | 0.66 | 0.91 | 1.3 |
| 16 | 8.2 | 18 | 12 | 18 | 35 | 22 | 21 | 7.7 | 1.8 | 0.62 | 0.84 | 2.0 |
| 17 | 7.4 | 16 | 16 | 19 | 31 | 21 | 20 | 7.7 | 1.8 | 0.62 | 0.73 | 1.7 |
| 18 | 7.2 | 14 | 16 | 20 | 29 | 20 | 21 | 6.1 | 1.8 | 0.61 | 0.65 | 1.4 |
| 19 | 9.6 | 13 | 37 | 18 | 29 | 19 | 21 | 5.5 | 1.7 | 0.52 | 0.68 | 1.3 |
| 20 | 11 | 12 | 36 | 26 | 33 | 18 | 20 | 5.0 | 1.5 | 0.52 | 0.59 | 2.8 |
| 21 | 10 | 11 | 36 | 33 | 45 | 17 | 19 | 5.6 | 1.5 | 0.47 | 0.50 | 6.8 |
| 22 | 9.8 | 11 | 61 | 28 | 42 | 17 | 21 | 4.1 | 1.5 | 0.61 | 0.41 | 5.5 |
| 23 | 10 | 11 | 51 | 26 | 36 | 17 | 23 | 3.6 | 1.4 | 0.45 | 0.32 | 13 |
| 24 | 13 | 10 | 40 | 24 | 35 | 16 | 24 | 3.5 | 1.3 | 0.43 | 0.29 | 12 |
| 25 | 19 | 9.6 | 34 | 21 | 32 | 16 | 30 | 4.1 | 1.3 | 0.36 | 0.19 | 8.6 |
| 26 | 16 | 9.2 | 28 | 20 | 29 | 16 | 29 | 4.3 | 1.3 | 0.37 | 0.40 | 17 |
| 27 | 14 | 8.1 | 26 | 19 | 27 | 16 | 26 | 4.2 | 1.3 | 1.7 | 1.0 | 19 |
| 28 | 13 | 7.7 | 24 | 18 | 26 | 18 | 24 | 3.8 | 1.3 | 3.4 | 1.5 | 16 |
| 29 | 12 | 6.9 | 25 | 17 | 24 | 21 | 23 | 3.5 | 1.2 | 2.9 | 1.5 | 17 |
| 30 | 11 | 6.1 | 27 | 17 | --- | 20 | 21 | 3.4 | 1.2 | 2.5 | 1.3 | 18 |
| 31 | 10 | --- | 24 | 16 | --- | 19 | --- | 3.0 | --- | 2.2 | 1.2 | --- |
| TOTAL | 360.0 | 303.6 | 632.9 | 624 | 1048 | 615 | 734 | 289.8 | 58.9 | 32.67 | 31.74 | 166.3 |
| MEAN | 11.6 | 10.1 | 20.4 | 20.1 | 36.1 | 19.8 | 24.5 | 9.35 | 1.96 | 1.05 | 1.02 | 5.54 |
| MAX | 19 | 20 | 61 | 33 | 74 | 24 | 36 | 20 | 3.3 | 3.4 | 1.9 | 19 |
| MIN | 7.2 | 5.8 | 6.4 | 15 | 16 | 16 | 18 | 3.0 | 1.2 | 0.36 | 0.19 | 1.1 |
| AC-FT | 714 | 602 | 1260 | 1240 | 2080 | 1220 | 1460 | 575 | 117 | 65 | 63 | 330 |
| CFSM | 4.65 | 4.05 | 8.17 | 8.05 | 14.5 | 7.94 | 9.79 | 3.74 | 0.79 | 0.42 | 0.41 | 2.22 |
| IN. | 5.36 | 4.52 | 9.42 | 9.29 | 15.59 | 9.15 | 10.92 | 4.31 | 0.88 | 0.49 | 0.47 | 2.47 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | 29.9 | 24.3 | 23.0 | 19.2 | 17.2 | 15.6 | 15.1 | 12.9 | 6.43 | 4.11 | 8.49 | 17.5 |
| MAX | 60.7 | 43.8 | 49.1 | 42.7 | 36.1 | 38.3 | 28.3 | 34.4 | 19.7 | 9.67 | 19.4 | 30.8 |
| (WY) | 2000 | 2000 | 2000 | 2001 | 2004 | 1992 | 1998 | 1999 | 1999 | 1998 | 1998 | 1998 |
| MIN | 11.6 | 10.1 | 8.96 | 5.13 | 3.31 | 4.13 | 2.68 | 5.26 | 1.96 | 0.66 | 1.02 | 5.54 |
| (WY) | 2004 | 2004 | 1996 | 1993 | 1999 | 1999 | 2002 | 2003 | 2004 | 1993 | 2004 | 2004 |

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1992 - 2004 | |
|---|---|---|---|---|---|---|
| ANNUAL TOTAL | 3750.6 | | 4896.91 | | | |
| ANNUAL MEAN | 10.3 | | 13.4 | | 16.1 | |
| HIGHEST ANNUAL MEAN | | | | | 23.3 | 2001 |
| LOWEST ANNUAL MEAN | | | | | 10.9 | 1993 |
| HIGHEST DAILY MEAN | 61 | Dec 22 | 74 | Feb 11 | e118 | Dec 27 1999 |
| LOWEST DAILY MEAN | a2.1 | Aug 11 | 0.19 | Aug 25 | 0.19 | Aug 25 2004 |
| ANNUAL SEVEN-DAY MINIMUM | 2.3 | Aug 7 | 0.39 | Aug 20 | 0.39 | Aug 20 2004 |
| MAXIMUM PEAK FLOW | | | 79 | Feb 11 | b159 | Oct 18 1999 |
| MAXIMUM PEAK STAGE | | | 11.88 | Feb 11 | b12.55 | Oct 18 1999 |
| INSTANTANEOUS LOW FLOW | | | c0.10 | Aug 25 | d0.10 | Aug 25 2004 |
| ANNUAL RUNOFF (AC-FT) | 7440 | | 9710 | | 11700 | |
| ANNUAL RUNOFF (CFSM) | 4.11 | | 5.35 | | 6.46 | |
| ANNUAL RUNOFF (INCHES) | 55.81 | | 72.87 | | 87.76 | |
| 10 PERCENT EXCEEDS | 19 | | 28 | | 34 | |
| 50 PERCENT EXCEEDS | 8.3 | | 11 | | 12 | |
| 90 PERCENT EXCEEDS | 3.0 | | 1.1 | | 3.1 | |

a Aug. 11 and Aug. 13
b May have been exceeded during period of gage malfunction from Dec. 25 to 28, 1999
c Aug. 25 and 26
d Minimum recorded, Aug. 24 and 25, 2004, but may have been less during period water was below intake Jul. 28, Aug. 2, and Aug. 8 to Aug. 10, 1993
e Estimated