15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 2003.

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

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

REMARKS.--Probe installed on April 30. Missing record from July 23-29 and August 1-25 due to buried probe. 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 August 26. No variation was found in the temperature cross sections. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 10.0°C, June 5, July 12, 18, and 30; minimum recorded, 5.5°C May 1, 4, and 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Locatn 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)
AUG								
26...	1815	14.0	85	7.3	9.5	754	11.1	98
26...	1816	42.0	85	7.3	9.5	754	10.9	96
26...	1817	70.0	85	7.3	9.5	754	11.0	97
26...	1818	98.0	85	7.3	9.5	754	11.0	97
26...	1819	126	85	7.3	9.5	754	11.0	97

TEMPERATURE WATER, (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	---	---	---	---	---	---	---	---	---	5.5	3.5	4.5
2	---	---	---	---	---	---	---	---	---	6.0	2.5	4.5
3	---	---	---	---	---	---	---	---	---	6.0	2.5	4.0
4	---	---	---	---	---	---	---	---	---	5.5	2.5	4.0
5	---	---	---	---	---	---	---	---	---	6.5	3.0	4.5
6	---	---	---	---	---	---	---	---	---	7.0	3.5	5.0
7	---	---	---	---	---	---	---	---	---	7.5	4.0	5.5
8	---	---	---	---	---	---	---	---	---	8.0	4.0	6.0
9	---	---	---	---	---	---	---	---	---	8.0	4.5	6.0
10	---	---	---	---	---	---	---	---	---	8.0	4.0	6.0
11	---	---	---	---	---	---	---	---	---	8.0	4.0	6.0
12	---	---	---	---	---	---	---	---	---	6.5	4.5	5.0
13	---	---	---	---	---	---	---	---	---	6.0	4.0	5.0
14	---	---	---	---	---	---	---	---	---	6.0	4.0	5.0
15	---	---	---	---	---	---	---	---	---	6.0	4.5	5.0
16	---	---	---	---	---	---	---	---	---	7.0	4.5	5.5
17	---	---	---	---	---	---	---	---	---	8.0	5.0	6.5
18	---	---	---	---	---	---	---	---	---	8.0	5.0	6.5
19	---	---	---	---	---	---	---	---	---	8.5	5.0	6.5
20	---	---	---	---	---	---	---	---	---	8.5	4.5	6.5
21	---	---	---	---	---	---	---	---	---	7.5	5.0	5.5
22	---	---	---	---	---	---	---	---	---	7.0	5.0	6.0
23	---	---	---	---	---	---	---	---	---	6.5	5.0	5.5
24	---	---	---	---	---	---	---	---	---	6.5	4.5	5.5
25	---	---	---	---	---	---	---	---	---	5.5	4.5	5.0
26	---	---	---	---	---	---	---	---	---	7.0	4.5	5.5
27	---	---	---	---	---	---	---	---	---	7.0	4.5	5.5
28	---	---	---	---	---	---	---	---	---	7.5	5.0	6.5
29	---	---	---	---	---	---	---	---	---	7.5	5.0	6.5
30	---	---	---	---	---	---	---	---	---	8.0	4.5	6.5
31	---	---	---	---	---	---	---	---	---	8.5	5.5	7.0
MONTH	---	---	---	---	---	---	---	---	---	8.5	2.5	5.6

15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.0	5.0	6.0	7.0	5.5	6.0	---	---	---	7.0	6.0	6.5
2	8.5	5.0	6.5	7.0	6.0	6.5	---	---	---	8.0	6.5	7.0
3	9.0	4.5	7.0	7.5	6.0	6.5	---	---	---	8.0	6.0	7.0
4	8.5	5.5	7.0	8.0	5.5	6.5	---	---	---	7.5	6.0	6.5
5	10.0	6.0	8.0	8.5	5.5	7.0	---	---	---	7.0	6.5	6.5
6	9.5	5.5	7.5	8.0	6.0	7.0	---	---	---	7.5	6.5	7.0
7	9.0	5.0	7.0	9.5	6.0	7.5	---	---	---	7.0	6.0	6.5
8	9.0	4.5	7.0	8.5	6.0	7.0	---	---	---	7.0	6.0	6.5
9	9.5	5.0	7.0	9.5	6.0	7.5	---	---	---	7.0	6.0	6.5
10	9.5	5.0	7.5	9.5	6.0	8.0	---	---	---	7.0	6.0	6.5
11	8.5	5.5	7.0	9.5	6.0	8.0	---	---	---	7.0	6.5	6.5
12	7.5	5.5	6.5	10.0	6.0	8.0	---	---	---	8.0	6.5	7.0
13	7.0	5.0	6.5	8.5	6.0	7.0	---	---	---	7.0	6.5	6.5
14	7.5	5.0	6.5	7.5	6.0	6.5	---	---	---	7.0	6.5	7.0
15	6.5	5.0	5.5	7.0	6.0	6.5	---	---	---	7.5	6.0	7.0
16	7.5	5.0	6.5	7.0	6.0	6.5	---	---	---	8.0	6.0	7.0
17	7.0	6.0	6.5	7.5	6.0	6.5	---	---	---	7.0	5.5	6.5
18	8.0	5.5	6.5	10.0	6.0	7.5	---	---	---	6.5	5.5	6.0
19	7.5	5.0	6.0	8.5	6.0	7.5	---	---	---	7.0	6.0	6.5
20	8.5	5.5	7.0	7.5	6.5	7.0	---	---	---	6.5	6.0	6.0
21	8.5	5.5	7.0	7.5	6.0	6.5	---	---	---	6.5	6.0	6.5
22	9.0	6.0	7.5	7.5	6.0	6.5	---	---	---	7.5	6.0	6.5
23	8.5	6.0	7.0	---	---	---	---	---	---	6.5	5.5	6.0
24	7.5	6.0	6.5	---	---	---	---	---	---	6.0	5.5	6.0
25	7.0	6.0	6.5	---	---	---	---	---	---	7.0	6.0	6.5
26	8.5	6.0	7.0	---	---	---	9.5	---	---	6.5	6.0	6.5
27	7.5	5.5	6.5	---	---	---	8.5	6.5	7.5	7.0	6.0	6.5
28	7.5	5.5	6.5	---	---	---	9.0	6.5	8.0	8.0	6.0	7.0
29	8.0	5.5	6.5	---	---	---	9.5	6.5	8.0	7.5	6.0	7.0
30	7.0	6.0	6.5	10.0	6.0	---	8.5	6.5	7.0	7.5	5.5	6.5
31	---	---	---	9.0	6.5	7.5	7.0	6.0	6.5	---	---	---
MONTH	10.0	4.5	6.8	---	---	---	---	---	---	8.0	5.5	6.6

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Meduim code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (84398)	Sampler type, code (84164)	Specif. conductance, wat unf uS/cm 25 deg C (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00030)	Temperature, water deg C (00010)	Barometric pressure, mm Hg (00025)
AUG 26...	1800	9	9	136	23.77	5320	10	8010	85	7.3	14.0	9.5	754

Date	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Specif.pH Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd mg/L (00955)
AUG 26...	11.0	97	35	12.3	1.09	1.28	.70	31	25	12.6	.26	<.2	3.06

15015595 UNUK RIVER BELOW BLUE RIVER NEAR WRANGELL—Continued

Date	Residue on evap. at 180 deg C wat flt mg/L (70300)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phos-phorus, water unfltrd mg/L (00665)	Phos-phorus, water, fltrd, mg/L (00666)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Iron, water, fltrd, ug/L (01046)	Manga-nese, water, fltrd, ug/L (01056)	Organic carbon, water, fltrd, mg/L (00681)
AUG 26...	59	47	<.002	.025	<.015	E.05	<.10	.044	<.004	<.007	<8	11.2	.5

Date	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Total carbon, suspnd sedimnt total, mg/L (00694)	Partic-ulate nitro-gen, susp, water, mg/L (49570)
AUG 26...	<.1	<.1	<.1	<.02

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.--Records fair, except for estimated daily discharges and 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	6.6	84	5.8	18	0.00	0.00	0.00	284	137	22	99
2	122	4.2	66	6.0	13	0.00	0.00	0.00	277	129	22	262
3	105	e3.2	49	5.6	10	0.00	0.00	0.00	261	137	24	269
4	86	2.2	33	21	7.0	0.00	0.00	0.00	240	178	19	217
5	74	1.3	20	62	4.7	0.00	0.00	0.00	237	186	13	181
6	115	4.9	12	226	3.0	0.00	0.00	0.00	270	168	9.2	184
7	127	9.3	14	269	1.7	0.00	0.00	0.00	303	148	6.6	197
8	132	9.2	47	229	0.70	0.00	0.00	0.00	303	132	5.2	201
9	132	7.3	128	178	0.19	0.00	0.00	0.00	289	115	4.2	168
10	116	5.9	153	135	0.00	0.00	0.00	0.00	283	101	3.1	205
11	94	4.3	143	103	0.00	0.00	0.00	0.00	283	93	1.8	283
12	76	10	164	78	0.00	0.00	0.00	0.00	291	86	0.89	246
13	72	40	167	58	0.00	0.00	0.00	0.00	313	87	0.54	303
14	65	68	140	42	0.00	0.00	0.00	0.13	304	85	0.34	422
15	60	76	132	28	0.00	0.00	0.00	0.37	314	74	1.2	381
16	55	74	119	20	0.00	0.00	0.00	0.51	304	74	5.1	315
17	51	63	97	26	0.00	0.00	0.00	0.74	299	91	10	248
18	43	54	76	33	0.00	0.00	0.00	1.5	336	88	25	270
19	39	78	58	38	0.00	0.00	0.00	2.8	331	78	40	332
20	61	107	42	48	0.00	0.00	0.00	4.7	298	79	44	308
21	60	290	28	42	0.00	0.00	0.00	9.6	256	96	54	363
22	51	257	18	32	0.00	0.00	0.00	44	220	106	54	354
23	42	201	25	23	0.00	0.00	0.00	122	193	91	47	291
24	32	152	40	17	0.00	0.00	0.00	290	166	75	39	349
25	23	120	39	13	0.00	0.00	0.00	347	152	62	29	437
26	16	147	33	21	0.00	0.00	0.00	349	157	53	20	382
27	24	148	24	34	0.00	0.00	0.00	314	146	48	14	315
28	26	128	17	29	0.00	0.00	0.00	287	143	44	11	258
29	20	107	12	28	---	0.00	0.00	303	149	39	8.2	207
30	15	97	8.8	28	---	0.00	0.00	284	142	33	13	162
31	10	---	6.7	24	---	0.00	---	279	---	26	49	---
TOTAL	2049	2275.4	1995.5	1902.4	58.29	0.00	0.00	2639.35	7544	2939	595.37	8209
MEAN	66.1	75.8	64.4	61.4	2.08	0.000	0.000	85.1	251	94.8	19.2	274
MAX	132	290	167	269	18	0.00	0.00	349	336	186	54	437
MIN	10	1.3	6.7	5.6	0.00	0.00	0.00	0.00	142	26	0.34	99
AC-FT	4060	4510	3960	3770	116	0.00	0.00	5240	14960	5830	1180	16280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)#

MEAN	153	48.8	14.0	6.55	0.21	0.000	2.89	69.9	265	182	112	190
MAX	264	108	64.4	61.4	2.08	0.000	24.8	247	367	305	216	298
(WY)	2000	1993	2003	2003	2003	1993	1993	1993	1999	1999	2000	2001
MIN	66.1	5.10	0.000	0.000	0.000	0.000	0.000	0.000	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.
e Estimated

15019990 TYEE LAKE OUTLET NEAR WRANGELL—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003#	
ANNUAL TOTAL	36708.60		30207.31			
ANNUAL MEAN	101		82.8		86.7	
HIGHEST ANNUAL MEAN					113	2001
LOWEST ANNUAL MEAN					56.5	1995
HIGHEST DAILY MEAN	553	Aug 27	437	Sep 25	710	Oct 27 1993
LOWEST DAILY MEAN	a0.00	Jan 1	b0.00	Feb 10	c0.00	Dec 30 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Feb 10	0.00	Dec 30 1992
MAXIMUM PEAK FLOW			452	Sep 25	d975	Oct 26 1993
MAXIMUM PEAK STAGE			23.97	Sep 25	28.62	Oct 26 1993
INSTANTANEOUS LOW FLOW			b0.00	Feb 10	c0.00	Dec 30 1992
ANNUAL RUNOFF (AC-FT)	72810		59920		62790	
10 PERCENT EXCEEDS	318		283		276	
50 PERCENT EXCEEDS	26		33		19	
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	f1.4	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	

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. The 2003 WY is complete when sensor was lowered below the PZF.

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 elev 1368.80 ft. Water for 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,1383.02 ft. Oct.26,1993:minimum observed unknown until 2003 wy

EXTREMES FOR CURRENT YEAR.-- Maximum elevation,1378.37 ft. September 25,2003; minimum 1357.51 ft.April 14,2003

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1373.06	1369.94	1372.42	1369.87	1370.60	1364.28	1359.83	1363.57	1376.05	1373.60	1370.78	1372.76
2	1373.28	1369.68	1371.97	1369.89	1370.41	1364.08	1359.68	1364.05	1375.95	1373.42	1370.78	1375.70
3	1372.91	1369.58	1371.52	1369.85	1370.21	1363.84	1359.49	1364.32	1375.70	1373.59	1370.83	1375.82
4	1372.46	1369.40	1371.09	1370.63	1369.98	1363.65	1359.29	1364.47	1375.37	1374.36	1370.65	1375.00
5	1372.19	1369.23	1370.70	1371.87	1369.75	1363.48	1359.07	1364.52	1375.32	1374.48	1370.41	1374.41
6	1373.12	1369.72	1370.35	1375.12	1369.53	1363.22	1358.87	1364.58	1375.84	1374.17	1370.15	1374.45
7	1373.38	1370.16	1370.41	1375.83	1369.32	1362.93	1358.70	1364.64	1376.34	1373.82	1369.94	1374.67
8	1373.49	1370.15	1371.44	1375.19	1369.08	1362.62	1358.50	1364.78	1376.34	1373.49	1369.81	1374.74
9	1373.49	1370.01	1373.40	1374.35	1368.85	1362.31	1358.29	1365.07	1376.12	1373.13	1369.69	1374.17
10	1373.15	1369.88	1373.92	1373.56	1368.61	1361.99	1358.09	1365.51	1376.04	1372.83	1369.54	1374.80
11	1372.66	1369.70	1373.71	1372.86	1368.38	1361.69	1357.90	1366.08	1376.04	1372.64	1369.34	1376.03
12	1372.23	1370.19	1374.10	1372.28	1368.14	1361.39	1357.72	1367.10	1376.15	1372.48	1369.13	1375.47
13	1372.12	1371.28	1374.15	1371.77	1367.91	1361.22	1357.59	1368.32	1376.48	1372.49	1369.03	1376.32
14	1371.96	1372.02	1373.66	1371.31	1367.67	1361.21	1357.53	1368.79	1376.35	1372.45	1368.95	1378.01
15	1371.83	1372.24	1373.50	1370.96	1367.46	1361.09	1357.58	1368.96	1376.49	1372.17	1369.15	1377.45
16	1371.69	1372.18	1373.21	1370.69	1367.27	1361.00	1357.76	1369.02	1376.35	1372.17	1369.80	1376.50
17	1371.58	1371.91	1372.72	1370.88	1367.10	1360.84	1357.79	1369.10	1376.28	1372.58	1370.22	1375.49
18	1371.35	1371.68	1372.23	1371.10	1366.91	1360.69	1357.72	1369.28	1376.81	1372.52	1370.83	1375.83
19	1371.23	1372.27	1371.77	1371.23	1366.76	1360.49	1357.66	1369.50	1376.74	1372.28	1371.28	1376.76
20	1371.85	1372.91	1371.34	1371.50	1366.56	1360.31	1357.65	1369.76	1376.25	1372.30	1371.40	1376.41
21	1371.81	1376.14	1370.94	1371.33	1366.30	1360.17	1357.72	1370.16	1375.63	1372.70	1371.67	1377.19
22	1371.59	1375.64	1370.63	1371.04	1366.03	1360.04	1357.86	1371.37	1375.05	1372.92	1371.65	1377.07
23	1371.33	1374.74	1370.84	1370.79	1365.76	1359.89	1357.90	1373.23	1374.60	1372.59	1371.47	1376.15
24	1371.06	1373.89	1371.28	1370.58	1365.49	1359.62	1358.03	1376.13	1374.15	1372.19	1371.26	1376.98
25	1370.79	1373.25	1371.25	1370.38	1365.28	1359.36	1358.72	1376.97	1373.90	1371.88	1370.98	1378.18
26	1370.56	1373.78	1371.08	1370.70	1365.03	1359.09	1359.98	1377.00	1373.98	1371.65	1370.70	1377.46
27	1370.82	1373.81	1370.83	1371.12	1364.78	1358.83	1360.87	1376.49	1373.77	1371.49	1370.46	1376.51
28	1370.88	1373.40	1370.59	1370.99	1364.52	1358.58	1361.47	1376.10	1373.71	1371.37	1370.26	1375.65
29	1370.70	1372.94	1370.35	1370.95	---	1358.55	1362.08	1376.34	1373.84	1371.24	1370.07	1374.84
30	1370.47	1372.73	1370.12	1370.96	---	1359.23	1362.82	1376.06	1373.69	1371.08	1370.32	1374.08
31	1370.21	---	1369.96	1370.82	---	1359.87	---	1375.98	---	1370.90	1371.53	---
MEAN	1371.91	1371.82	1371.79	1371.63	1367.63	1361.15	1358.81	1369.59	1375.51	1372.61	1370.39	1375.83
MAX	1373.49	1376.14	1374.15	1375.83	1370.60	1364.28	1362.82	1377.00	1376.81	1374.48	1371.67	1378.18
MIN	1370.21	1369.23	1369.96	1369.85	1364.52	1358.55	1357.53	1363.57	1373.69	1370.90	1368.95	1372.76

\# Record for 1980 & 1981 water years, prior to diversion of 1984, not included. See PERIOD OF RECORD
a Jan.1 to Jun. 2,2002
b Feb. 10 to May 13
c No flow many days during winter months most years
d From rating extended above 400 cfs
f Apr. 2-3 1980

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 current year.

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 YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov.21	0430	6290	10.43	Sept.14	0230	*6950	*10.87
Jan 06	0700	4250	9.00	Sept 21	2030	4310	9.04
Sept 02	0515	6850	10.80	Sept 24	1145	5420	9.83

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	716	194	600	327	280	99	391	949	1360	1250	671	2420
2	1360	174	416	436	244	128	269	716	1290	1190	1130	5150
3	611	160	332	403	349	128	204	527	937	1510	1040	1740
4	454	150	277	1130	265	185	166	398	833	2960	638	905
5	561	175	239	1360	216	242	142	326	1090	1580	499	866
6	2520	546	217	2760	189	169	125	302	1680	1110	432	1160
7	2620	525	526	1720	172	e140	140	298	1630	922	464	1200
8	2880	315	1150	733	161	e125	156	330	1250	929	509	1130
9	1850	247	1580	473	150	e114	151	431	1080	859	542	677
10	935	220	1060	368	143	e106	142	566	1190	853	488	1360
11	593	217	724	308	137	e100	157	668	1210	950	409	3070
12	488	461	1040	268	130	e94	178	1160	1120	906	398	1540
13	758	912	934	235	123	e105	208	1220	1260	1080	459	3050
14	620	1070	605	208	113	e118	267	770	1180	962	518	4930
15	633	794	608	193	111	e135	334	560	1400	756	822	2100
16	747	571	520	193	107	e250	504	444	1070	1870	1240	1000
17	997	535	466	655	120	175	406	383	1300	2200	1180	645
18	601	507	385	643	158	212	328	431	2320	1270	984	1390
19	572	978	324	692	263	209	275	481	1800	934	1040	2230
20	1130	1100	272	823	237	183	273	510	1150	1300	1200	1750
21	678	3540	232	463	145	229	339	556	867	1880	1260	3230
22	528	988	219	306	e140	278	400	955	790	1490	774	1730
23	434	586	654	261	e128	292	332	1520	797	833	546	845
24	359	430	614	251	e116	213	394	2740	712	669	471	3140
25	305	414	440	247	e108	181	1250	1850	906	658	412	4210
26	268	2350	354	476	101	166	1550	1620	1300	692	388	2090
27	558	1220	290	512	101	158	1180	1120	957	783	380	1320
28	440	830	251	354	97	180	914	1120	1210	816	343	945
29	318	588	221	372	---	465	854	1740	1230	716	370	777
30	259	724	202	495	---	1200	929	1180	1030	670	929	629
31	221	---	208	385	---	773	---	1300	---	623	2060	---
TOTAL	26014	21521	15960	18050	4604	7152	12958	27171	35949	35221	22596	57229
MEAN	839	717	515	582	164	231	432	876	1198	1136	729	1908
MAX	2880	3540	1580	2760	349	1200	1550	2740	2320	2960	2060	5150
MIN	221	150	202	193	97	94	125	298	712	623	343	629
MED	601	541	416	403	141	175	301	668	1190	934	542	1470
AC-FT	51600	42690	31660	35800	9130	14190	25700	53890	71300	69860	44820	113500
CFSM	12.5	10.6	7.64	8.64	2.44	3.42	6.41	13.0	17.8	16.9	10.8	28.3
IN.	14.36	11.88	8.81	9.96	2.54	3.95	7.15	15.00	19.84	19.44	12.47	31.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)#

MEAN	1074	501	341	259	235	202	361	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1951 - 2003#	
ANNUAL TOTAL	321989.0		284425			
ANNUAL MEAN	882		779		747	
HIGHEST ANNUAL MEAN					921	1992
LOWEST ANNUAL MEAN					558	1995
HIGHEST DAILY MEAN	6190	Aug 23	5150	Sep 2	11400	Oct 14 1961
LOWEST DAILY MEAN	a57	Mar 24	94	Mar 12	b35	Jan 23 1969
ANNUAL SEVEN-DAY MINIMUM	59	Mar 18	107	Feb 23	35	Jan 23 1969
MAXIMUM PEAK FLOW			6950	Sep 14	c15300	Oct 26 1993
MAXIMUM PEAK STAGE			10.87	Sep 14	d16.22	Oct 14 1961
INSTANTANEOUS LOW FLOW			f		35	Jan 23 1969
ANNUAL RUNOFF (AC-FT)	638700		564200		541100	
ANNUAL RUNOFF (CFSM)	13.1		11.6		11.1	
ANNUAL RUNOFF (INCHES)	177.71		156.98		150.56	
10 PERCENT EXCEEDS	2010		1580		1610	
50 PERCENT EXCEEDS	582		561		544	
90 PERCENT EXCEEDS	84		157		110	

\# See Period of Record; partial years used in monthly statistics
a Mar. 24 & Apr. 9
b From Jan. 23 to Feb. 11, 1969
c From rating curve extended above 5,000 ft^3/s on basis of slope-area measurement at gage height, 13.90 ft
d At site then in use
f 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58800	21600	e25500	e12200	e13000	e6000	e10000	51700	112000	120000	122000	88100
2	62700	e19300	e22500	e12200	e12700	e6200	e9000	53700	116000	139000	116000	127000
3	56000	e18900	e18600	e11900	e12400	e6200	e8500	49300	112000	146000	108000	136000
4	49200	e18200	e17000	e14500	e12000	e6100	e8200	43200	103000	153000	96900	108000
5	45500	e18300	e16800	e18200	e11500	e5800	e7900	37200	99100	146000	89900	87700
6	56500	e20700	29500	38900	e11000	e5500	e7900	33000	115000	134000	83500	84000
7	70500	e22000	47600	e37100	e10200	e5200	e9800	30800	141000	130000	86200	93400
8	79900	e21300	e41000	e28000	e9500	e5000	e10000	30100	152000	129000	93100	93800
9	77500	e19700	e37000	21200	e9000	e4800	e9500	31600	151000	133000	99000	77900
10	63400	18600	e29000	e19500	e8600	e4700	e9300	36200	149000	143000	95800	74200
11	52200	17600	e25600	e18000	e8100	e4600	e9200	42300	152000	152000	81200	102000
12	45500	17500	25300	e17000	e7800	e4500	e9100	52200	152000	157000	79800	91000
13	44800	20500	26800	e16000	e7500	e4700	e9000	60900	151000	154000	88500	92300
14	41100	23800	22800	e15500	e7300	e4900	e9950	58000	145000	149000	100000	129000
15	38900	e23900	e19800	e14600	e7000	e5700	e11200	51900	140000	142000	102000	103000
16	40400	e22800	e19300	e14200	e6700	e6800	e12000	e45500	124000	138000	120000	77500
17	45800	e21800	e17900	e15200	e6200	e7600	e12800	e41400	115000	148000	124000	64400
18	45500	e20800	e16700	e17000	e5800	e7300	e12300	e40200	128000	146000	108000	62200
19	46200	e21400	e15100	e20000	e5900	e7000	e12300	42000	133000	142000	98200	69300
20	55500	22500	e13700	e21000	e6100	e7200	e12300	44000	124000	142000	88900	65900
21	56400	36300	e12800	e19000	e5900	e7000	e12600	46500	113000	146000	84600	78300
22	53400	30600	e12400	e18000	e5800	e6900	e14400	51900	107000	141000	75300	79400
23	50200	22400	e13400	e17000	e5600	e6900	e15000	59400	105000	127000	65100	61700
24	44700	18800	e16100	e16000	e5400	e6900	15600	80700	100000	116000	61100	74500
25	39800	17500	e14600	e16000	e5400	e6900	23000	93500	104000	115000	59400	111000
26	35400	28900	e14100	e15200	e5400	e6700	36900	101000	108000	123000	59400	100000
27	35100	34200	e13600	e14800	e5600	e7000	43100	103000	108000	121000	61900	85400
28	33400	34000	e13000	e14100	e5800	e7200	44600	95800	105000	116000	62400	82100
29	30100	28100	e12300	e14000	---	e8500	43700	96200	108000	115000	62900	87300
30	27600	26400	e11700	e13800	---	e10300	46600	98700	106000	120000	70200	89700
31	24600	---	e11600	e13300	---	e11600	---	104000	---	119000	86600	---
TOTAL	1506600	688400	633100	553400	223200	201700	495750	1805900	3678100	4202000	2729900	2676100
MEAN	48600	22950	20420	17850	7971	6506	16520	58250	122600	135500	88060	89200
MAX	79900	36300	47600	38900	13000	11600	46600	104000	152000	157000	124000	136000
MIN	24600	17500	11600	11900	5400	4500	7900	30100	99100	115000	59400	61700
MED	45800	21500	17000	16000	7150	6700	11600	51700	115000	139000	88500	87500
AC-FT	2988000	1365000	1256000	1098000	442700	400100	983300	3582000	7296000	8335000	5415000	5308000
CFSM	2.44	1.15	1.03	0.90	0.40	0.33	0.83	2.92	6.15	6.80	4.42	4.48
IN.	2.81	1.29	1.18	1.03	0.42	0.38	0.93	3.37	6.87	7.85	5.10	5.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)#

MEAN	57070	24640	14150	11720	9254	10000	16490	66170	134600	134400	107200	80630
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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003#	
ANNUAL TOTAL	19314770		19394150			
ANNUAL MEAN	52920		53130		55710	
HIGHEST ANNUAL MEAN					72870	1981
LOWEST ANNUAL MEAN					42100	1978
HIGHEST DAILY MEAN	226000	Aug 28	157000	Jul 12	324000	Sep 23 1994
LOWEST DAILY MEAN	a5300	Mar 23	4500	Mar 12	4000	Feb 12 1988
ANNUAL SEVEN-DAY MINIMUM	5310	Apr 5	4740	Mar 8	4090	Mar 8 1999
MAXIMUM PEAK FLOW			158000	Jul 12	351000	Sep 23 1994
MAXIMUM PEAK STAGE			22.08	Jul 12	30.60	Sep 23 1994
ANNUAL RUNOFF (AC-FT)	38310000		38470000		40360000	
ANNUAL RUNOFF (CFSM)	2.66		2.67		2.80	
ANNUAL RUNOFF (INCHES)	36.07		36.22		38.00	
10 PERCENT EXCEEDS	132000		125000		136000	
50 PERCENT EXCEEDS	27700		36900		31600	
90 PERCENT EXCEEDS	6000		7000		7200	

See Period of Record; partial years used in monthly statistics
a Mar. 23-24,Apr. 6-11

15039900 DOROTHY LAKE OUTLET NEAR JUNEAU

LOCATION.--Lat 58°14'56", long 133°58'54", in NE$^1/_4$ NW$^1/_4$ sec. 9, T. 42 S., R. 70 E.(Taku River A-6 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on right bank 3 mi upstream from mouth at Taku Inlet, and 16.4 mi east of Juneau.

DRAINAGE AREA.--11.0 mi^2.

PERIOD OF RECORD.--October 1986 to January 2003 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 2,410.78 ft above sea level.

REMARKS.--Records fair, except for discharges under 50 ft^3/s and estimated discharges, which are poor. Gage discontinued on Jan.3,2003.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 907 ft^3/s, October 22, 2002, gage height, 12.58 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO JANUARY 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	81	199	31	---	---	---	---	---	---	---	---
2	144	69	156	29	---	---	---	---	---	---	---	---
3	126	e61	122	---	---	---	---	---	---	---	---	---
4	111	52	e98	---	---	---	---	---	---	---	---	---
5	102	48	e78	---	---	---	---	---	---	---	---	---
6	153	54	69	---	---	---	---	---	---	---	---	---
7	220	60	70	---	---	---	---	---	---	---	---	---
8	258	53	104	---	---	---	---	---	---	---	---	---
9	236	49	159	---	---	---	---	---	---	---	---	---
10	e188	48	171	---	---	---	---	---	---	---	---	---
11	151	49	140	---	---	---	---	---	---	---	---	---
12	135	45	136	---	---	---	---	---	---	---	---	---
13	133	58	e101	---	---	---	---	---	---	---	---	---
14	116	73	86	---	---	---	---	---	---	---	---	---
15	113	71	87	---	---	---	---	---	---	---	---	---
16	192	62	77	---	---	---	---	---	---	---	---	---
17	370	55	67	---	---	---	---	---	---	---	---	---
18	323	51	e61	---	---	---	---	---	---	---	---	---
19	290	50	e59	---	---	---	---	---	---	---	---	---
20	396	48	e40	---	---	---	---	---	---	---	---	---
21	692	49	e35	---	---	---	---	---	---	---	---	---
22	850	45	e31	---	---	---	---	---	---	---	---	---
23	609	40	43	---	---	---	---	---	---	---	---	---
24	415	34	46	---	---	---	---	---	---	---	---	---
25	296	39	43	---	---	---	---	---	---	---	---	---
26	238	114	e40	---	---	---	---	---	---	---	---	---
27	214	e202	e31	---	---	---	---	---	---	---	---	---
28	178	193	e30	---	---	---	---	---	---	---	---	---
29	143	165	e29	---	---	---	---	---	---	---	---	---
30	116	210	29	---	---	---	---	---	---	---	---	---
31	96	---	29	---	---	---	---	---	---	---	---	---
TOTAL	7733	2228	2466	---	---	---	---	---	---	---	---	---
MEAN	249	74.3	79.5	---	---	---	---	---	---	---	---	---
MAX	850	210	199	---	---	---	---	---	---	---	---	---
MIN	96	34	29	---	---	---	---	---	---	---	---	---
AC-FT	15340	4420	4890	---	---	---	---	---	---	---	---	---
CFSM	22.7	6.75	7.23	---	---	---	---	---	---	---	---	---
IN.	26.15	7.53	8.34	---	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)#

MEAN	164	49.6	37.6	21.5	20.7	17.3	18.8	86.2	218	271	264	261
MAX	249	88.7	80.8	38.1	40.8	59.2	36.9	140	275	364	417	387
(WY)	2003	1994	2000	2000	1993	1992	1994	1993	2002	2000	2002	1991
MIN	90.9	21.2	16.9	9.25	11.3	4.65	4.88	35.5	181	210	194	177
(WY)	1993	1996	1995	1997	1998	1989	2002	2001	1996	1993	1995	1992

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		WATER YEARS 1987 - 2003#	
ANNUAL TOTAL	52347.7			
ANNUAL MEAN	143		119	
HIGHEST ANNUAL MEAN			141	1990
LOWEST ANNUAL MEAN			97.6	1996
HIGHEST DAILY MEAN	850	Oct 22	915	Sep 11 1995
LOWEST DAILY MEAN	a4.3	Apr 14	4.2	Mar 13 1989
ANNUAL SEVEN-DAY MINIMUM	4.4	Apr 13	4.2	Mar 10 1989
MAXIMUM PEAK FLOW			b990	Sep 10 1995
MAXIMUM PEAK STAGE			13.05	Sep 10 1995
INSTANTANEOUS LOW FLOW			c	
ANNUAL RUNOFF (AC-FT)	103800		86080	
ANNUAL RUNOFF (CFSM)	13.0		10.8	
ANNUAL RUNOFF (INCHES)	177.03		146.77	
10 PERCENT EXCEEDS	329		286	
50 PERCENT EXCEEDS	77		54	
90 PERCENT EXCEEDS	6.4		12	

\# See Period of Record; partial years used in monthly statistics
a Apr. 16-17 and 19th
b From rating curve extended above 350 cfs
c Not determined;see lowest daily mean
e Estimated

15040000 DOROTHY CREEK NEAR JUNEAU

LOCATION.--Lat 58°13'40", long 134°02'25", in NW$^1/_4$ SW$^1/_4$ sec.18, T. 42 S., R. 70 E.(Juneau A-1 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on right bank 0.7 mi downstream from Bart lake, 0.8 mi upstream from the mouth at Taku Inlet, and 14.4 mi east of Juneau.

DRAINAGE AREA.--15.2 mi^2.

PERIOD OF RECORD.--Station orginally established 100ft upstream from mouth Oct 1,1929 by private company and operated by the U.S.Forest Service until USGS assumed operations in 1946. Station was discontinued in 1967. Restablished on Dec 21,2001 by the USGS and discontinued on Nov.5,2003

GAGE.--Water-stage recorder. Altitude of gage is 350 ft. (from topographic map).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e180	179	205	48	40	16	20	82	209	289	277	224
2	e190	160	204	47	39	16	20	83	215	282	287	306
3	e165	132	193	45	39	16	19	82	216	283	293	387
4	e147	109	180	52	39	18	19	80	210	299	292	422
5	e133	98	163	59	38	17	18	77	205	312	288	392
6	e117	91	147	79	36	16	18	73	212	314	278	363
7	e160	86	132	78	34	15	18	70	224	306	268	338
8	e200	80	139	76	33	15	18	67	230	294	256	382
9	e290	75	161	74	31	14	17	66	231	282	245	444
10	e260	70	176	71	30	14	18	66	230	275	235	421
11	e215	68	180	68	28	13	18	67	232	275	224	405
12	e180	66	200	64	27	12	20	83	237	276	211	392
13	e154	71	194	59	26	13	21	88	244	276	202	418
14	e146	76	180	54	24	13	21	96	248	277	200	498
15	e140	76	168	51	23	13	23	95	251	275	229	468
16	e220	75	156	48	22	13	24	92	249	273	275	395
17	e405	74	142	49	21	13	24	90	245	271	355	339
18	e380	71	126	53	20	14	23	87	247	267	403	297
19	e345	71	112	58	19	14	24	85	257	263	391	273
20	e320	71	100	63	18	14	25	83	270	260	375	264
21	e500	73	90	60	17	14	25	83	275	265	378	276
22	e760	69	82	58	17	15	26	84	274	274	358	273
23	e900	66	79	55	16	15	28	93	268	277	321	262
24	e640	61	75	53	16	15	32	116	263	273	290	279
25	e490	62	71	51	16	15	42	155	263	266	268	295
26	e360	91	66	49	16	15	51	182	276	257	250	325
27	e390	115	62	48	16	14	59	196	297	250	230	411
28	e330	141	58	46	15	15	67	199	308	244	212	485
29	e270	154	54	44	---	18	72	204	308	263	196	453
30	e240	189	52	43	---	24	78	206	299	273	186	396
31	e200	---	50	42	---	21	---	207	---	275	190	---
TOTAL	9427	2820	3997	1745	716	470	888	3337	7493	8566	8463	10883
MEAN	304	94.0	129	56.3	25.6	15.2	29.6	108	250	276	273	363
MAX	900	189	205	79	40	24	78	207	308	314	403	498
MIN	117	61	50	42	15	12	17	66	205	244	186	224
MED	240	75	139	53	23	15	23	85	248	275	268	384
AC-FT	18700	5590	7930	3460	1420	932	1760	6620	14860	16990	16790	21590
CFSM	20.0	6.18	8.48	3.70	1.68	1.00	1.95	7.08	16.4	18.2	18.0	23.9
IN.	23.07	6.90	9.78	4.27	1.75	1.15	2.17	8.17	18.34	20.96	20.71	26.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2003, BY WATER YEAR (WY)#

MEAN	228	107	51.1	28.2	22.8	22.6	26.7	92.4	245	306	310	282
MAX	455	355	129	59.3	70.9	85.9	62.3	140	336	419	465	432
(WY)	1937	1950	2003	1957	1931	1947	1943	1946	1944	1961	1961	1967
MIN	97.5	31.7	14.3	10.0	10.0	10.2	13.0	51.8	150	241	198	142
(WY)	1951	1951	1951	1934	1935	1933	1967	1964	1933	1954	1954	1964

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

15040000 DOROTHY CREEK NEAR JUNEAU—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1930 - 2003#	
ANNUAL TOTAL	62537		58805			
ANNUAL MEAN	171		161		144	
HIGHEST ANNUAL MEAN					184	1937
LOWEST ANNUAL MEAN					108	1933
HIGHEST DAILY MEAN	900	Aug 28	900	Oct 23	1690	Nov 3 1949
LOWEST DAILY MEAN	a12	Apr 8	12	Mar 12	6.0	Mar 23 1933
ANNUAL SEVEN-DAY MINIMUM	13	Apr 12	13	Mar 11	6.6	Mar 23 1933
MAXIMUM PEAK FLOW			b		d1780	Nov 3 1949
MAXIMUM PEAK STAGE					5.85	Nov 3 1949
INSTANTANEOUS LOW FLOW			c12	Mar 12	f6.0	Mar 23 1933
ANNUAL RUNOFF (AC-FT)	124000		116600		104200	
ANNUAL RUNOFF (CFSM)	11.3		10.6		9.46	
ANNUAL RUNOFF (INCHES)	153.05		143.92		128.55	
10 PERCENT EXCEEDS	362		327		326	
50 PERCENT EXCEEDS	132		126		92	
90 PERCENT EXCEEDS	15		18		16	

WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	193	---	---	---	---	---	---	---	---	---	---
2	315	170	---	---	---	---	---	---	---	---	---	---
3	289	150	---	---	---	---	---	---	---	---	---	---
4	268	130	---	---	---	---	---	---	---	---	---	---
5	257	---	---	---	---	---	---	---	---	---	---	---
6	252	---	---	---	---	---	---	---	---	---	---	---
7	254	---	---	---	---	---	---	---	---	---	---	---
8	253	---	---	---	---	---	---	---	---	---	---	---
9	249	---	---	---	---	---	---	---	---	---	---	---
10	239	---	---	---	---	---	---	---	---	---	---	---
11	224	---	---	---	---	---	---	---	---	---	---	---
12	203	---	---	---	---	---	---	---	---	---	---	---
13	184	---	---	---	---	---	---	---	---	---	---	---
14	172	---	---	---	---	---	---	---	---	---	---	---
15	156	---	---	---	---	---	---	---	---	---	---	---
16	141	---	---	---	---	---	---	---	---	---	---	---
17	125	---	---	---	---	---	---	---	---	---	---	---
18	113	---	---	---	---	---	---	---	---	---	---	---
19	115	---	---	---	---	---	---	---	---	---	---	---
20	120	---	---	---	---	---	---	---	---	---	---	---
21	115	---	---	---	---	---	---	---	---	---	---	---
22	114	---	---	---	---	---	---	---	---	---	---	---
23	111	---	---	---	---	---	---	---	---	---	---	---
24	109	---	---	---	---	---	---	---	---	---	---	---
25	152	---	---	---	---	---	---	---	---	---	---	---
26	200	---	---	---	---	---	---	---	---	---	---	---
27	249	---	---	---	---	---	---	---	---	---	---	---
28	264	---	---	---	---	---	---	---	---	---	---	---
29	256	---	---	---	---	---	---	---	---	---	---	---
30	241	---	---	---	---	---	---	---	---	---	---	---
31	218	---	---	---	---	---	---	---	---	---	---	---
TOTAL	6317	---	---	---	---	---	---	---	---	---	---	---
MEAN	204	---	---	---	---	---	---	---	---	---	---	---
MAX	359	---	---	---	---	---	---	---	---	---	---	---
MIN	109	---	---	---	---	---	---	---	---	---	---	---
MED	218	---	---	---	---	---	---	---	---	---	---	---
AC-FT	12530	---	---	---	---	---	---	---	---	---	---	---
CFSM	13.4	---	---	---	---	---	---	---	---	---	---	---
IN.	15.46	---	---	---	---	---	---	---	---	---	---	---

\# See period of Record;partial years used in monthly statistics
a Apr. 8, 12, 15-19
b Not determined; see highest daily mean
c Mar. 12-13
d From a rating curve extended above 560 ft^3/s
e Estimated
f Mar. 23, 25 and 28, 1933

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)
Aug 11	0345	*70,700	*40.95

DISCHARGE, in CFS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10800	7410	11400	e2300	e2800	e1400	e2150	16800	33400	24700	25100	15400
2	11000	6980	9170	e2200	e2700	e1400	e2050	16500	24400	29000	24300	23700
3	10300	6620	7300	e2100	e2600	e1400	e1900	13900	20200	31100	22500	30000
4	9490	6490	e5500	e2700	e2700	e1400	e1700	11700	18500	32800	20800	25200
5	8740	6350	e4540	e4600	e2600	e1400	e1650	10300	18600	30700	19300	18800
6	9650	6330	e4550	e6200	e2400	e1400	e1600	9290	24900	29600	19700	16400
7	13200	6300	e4600	e7100	e2100	e1300	e1600	8700	31800	28000	21800	16800
8	17900	5930	e5900	e5600	e1960	e1300	e1850	8460	30700	28600	26800	17900
9	16600	5670	e8600	e5000	e1900	e1300	1990	8990	28500	31600	37400	17000
10	12900	5390	e10000	e4400	e1800	e1200	2020	10200	28700	34000	57700	14500
11	10600	5110	e6700	e4200	e1900	e1200	2110	11400	30300	35200	44800	14900
12	9960	4880	e7200	e4000	e1800	e1200	2270	13300	30600	36000	20800	15500
13	9950	4870	e6100	e3900	e1800	e1200	2430	13900	31500	35000	22000	17600
14	9230	4980	e5500	e3600	e1700	e1200	2610	12800	31700	35400	23800	20700
15	8980	5020	e5000	e3100	e1700	e1300	2860	11500	27400	34600	27700	15800
16	12300	4880	e4700	e2700	e1700	e1400	3230	10500	25000	33100	37800	12500
17	23200	4830	e4300	e3000	e1600	e1400	3380	9980	23700	31900	37800	10800
18	21900	4860	e4100	e3400	e1500	e1500	3490	9790	25500	31800	28400	9950
19	17300	4650	e3900	e4000	e1500	e1440	3450	10000	25400	30700	23700	9670
20	17600	4600	e3600	e4600	e1500	e1440	3530	10500	22200	31500	20900	9890
21	25300	4910	e3400	e4400	e1400	e1450	3760	11300	19900	32600	18700	12100
22	28100	4740	e3200	e4100	e1400	e1440	4030	12300	19600	30400	16000	11600
23	21700	4150	e3400	e3800	e1400	e1420	4120	15300	19900	26500	14200	10200
24	16400	3730	e3500	e3600	e1300	e1400	5060	16800	19600	24900	13100	10600
25	13500	3530	e3400	e3400	e1300	e1400	7250	20000	19700	25600	13200	14900
26	12100	6720	e3100	e3300	e1300	e1390	10200	19800	21600	26000	13000	20300
27	11800	16100	e2800	e3100	e1300	e1400	12400	18100	21200	25400	13500	19600
28	10900	15200	e2600	e3000	e1400	e1450	13300	17300	19600	25300	14000	24400
29	9920	11500	e2400	e3000	---	e1600	13600	17800	20300	26800	14200	24800
30	8970	11600	e2200	e2900	---	e1900	14900	20700	22200	28100	14800	22700
31	8000	---	e2200	e2900	---	e2200	---	24900	---	25400	15800	---
TOTAL	428290	194330	154860	116200	51060	43830	136490	422810	736600	932300	723600	504210
MEAN	13820	6478	4995	3748	1824	1414	4550	13640	24550	30070	23340	16810
MAX	28100	16100	11400	7100	2800	2200	14900	24900	33400	36000	57700	30000
MIN	8000	3530	2200	2100	1300	1200	1600	8460	18500	24700	13000	9670
AC-FT	849500	385500	307200	230500	101300	86940	270700	838600	1461000	1849000	1435000	1000000
CFSM	2.09	0.98	0.76	0.57	0.28	0.21	0.69	2.07	3.72	4.56	3.54	2.55
IN.	2.41	1.10	0.87	0.65	0.29	0.25	0.77	2.38	4.15	5.25	4.08	2.84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2003, BY WATER YEAR (WY)#

MEAN	11630	4729	3451	2288	1930	2501	4291	19540	33680	31620	26310	19130
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 yearsused in monthly statistics
e Estimated

15041200 TAKU RIVER NEAR JUNEAU—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1988 - 2003#	
ANNUAL TOTAL	4685750		4444580			
ANNUAL MEAN	12840		12180		13490	
HIGHEST ANNUAL MEAN					16820	1992
LOWEST ANNUAL MEAN					10800	1996
HIGHEST DAILY MEAN	69200	Aug 17	57700	Aug 10	93100	Jul 26 2000
LOWEST DAILY MEAN	a1300	Mar 23	b1200	Mar 10	710	Feb 12 1988
ANNUAL SEVEN-DAY MINIMUM	1300	Apr 5	1230	Mar 8	721	Feb 8 1988
MAXIMUM PEAK FLOW			c70700	Aug 11	c110000	Aug 17 1989
MAXIMUM PEAK STAGE			40.95	Aug 11	44.13	Aug 17 1989
INSTANTANEOUS LOW FLOW			d		710	Feb 12 1989
ANNUAL RUNOFF (AC-FT)	9294000		8816000		9773000	
ANNUAL RUNOFF (CFSM)	1.95		1.84		2.04	
ANNUAL RUNOFF (INCHES)	26.41		25.05		27.77	
10 PERCENT EXCEEDS	30500		28200		33000	
50 PERCENT EXCEEDS	7300		9790		7290	
90 PERCENT EXCEEDS	1470		1500		1600	

\# See Period of Record; partial years used in monthly statistics
a Mar. 23 and Apr. 6 to 11
b Mar. 10 to 14
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. Temperature at the sensor was compared with the average ofr the river by cross sections on April 9, May 20, June 18, August 10, and September 29. The outburst peak of the lake dammed by Tulsequah Glacier occurred on August 10-11. The temperature cross sections showed variations of 2.0°C during sampling on August 10 and 1.0°C on April 9th.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

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)
APR								
09...	1658	50.0	219	7.9	3.0	751	11.5	87
09...	1707	200	237	8.0	2.5	751	11.4	85
09...	1710	240	242	8.1	2.0	751	11.7	86
09...	1715	278	244	8.1	2.0	751	11.4	84
09...	1720	305	247	8.1	2.0	751	11.4	84
MAY								
20...	1050	55.0	175	7.8	7.5	747	10.6	90
20...	1051	165	175	7.9	7.5	747	10.6	90
20...	1052	275	175	7.9	7.5	747	10.5	89
20...	1053	385	175	7.9	7.5	747	10.5	89
20...	1054	495	175	7.9	7.5	747	10.5	89
JUN								
18...	1234	70.0	124	7.9	9.0	734	10.6	95
18...	1236	210	124	7.8	9.0	734	10.6	95
18...	1238	350	125	7.8	9.0	734	10.6	95
18...	1240	490	125	7.8	9.0	734	10.6	95
18...	1241	630	124	7.8	9.0	734	10.7	96
AUG								
10...	1941	450	64	8.2	3.5	759	12.6	95
10...	1943	397	65	8.1	3.5	759	12.6	95
10...	1945	286	65	8.1	3.5	759	12.5	94
10...	1947	126	68	8.1	4.5	759	12.4	96
10...	1948	48.0	71	8.0	5.5	759	12.2	97
SEP								
29...	0940	75.0	113	8.2	6.0	765	12.0	96
29...	0941	150	113	8.2	6.0	765	11.9	95
29...	0942	225	113	8.2	6.0	765	11.8	94
29...	0943	300	113	8.2	6.0	765	11.8	94
29...	0944	375	114	8.3	6.0	765	11.8	94

Date	Time	Medium Code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instan-taneous discharg e, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C)00010)	Baro-metric pressure , mm Hg (00025)
DEC													
05...	1530	9	9	330	--	4540	8010	8010	186	8.4	--	.5	766
APR													
09...	1645	9	9	305	28.82	1950	10	3053	238	8.0	6.5	2.5	751
MAY													
20...	1120	9	9	567	31.94	10900	20	3053	175	7.9	--	7.5	747
JUN													
18...	1200	9	9	680	35.42	26500	20	3053	124	7.8	--	9.0	734
JUL													
11...	9050	9	9	600	36.95	36600	20	3053	111	7.7	--	10.5	750
AUG													
10...	1115	9	9	774	40.41	65200	20	3053	67	8.1	17.5	4.0	759
11...	1115	9	9	726	38.04	45500	20	3053	85	7.8	20.0	5.5	773
SEP													
29...	0950	9	9	525	35.35	25400	10	3044	113	8.2	12.0	6.0	765

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water unfltrd recover-able, mg/L (00916)	Calcium water fltrd, mg/L (00915)	Magnes-ium, water, unfltrd recover-able, mg/L (00927)	Magnes-ium, water, fltrd, mg/L (00925)	Sodium, water, unfltrd recover-able, mg/L (00929)	Sodium, water, fltrd, mg/L (00930)	Potas-sium, water, unfltrd recover-able, mg/L (00937)	Potas-sium, water, fltrd, mg/L (00935)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)
DEC													
05...	12.7	88	86	--	26.0	--	5.1	--	2.6	--	.9	71	58
APR													
09...	11.5	86	110	33.2	32.0	8.5	8.1	4.7	4.6	.9	.92	187	153
MAY													
20...	10.5	89	86	27.0	25.1	6.1	5.70	2.5	2.54	.8	.79	88	72
JUN													
18...	10.5	94	59	19.1	17.8	5.0	3.53	1.7	1.57	1.1	.73	64	52
JUL													
11...	10.7	97	51	19.7	15.8	7.1	2.91	1.9	1.30	1.7	.73	56	46
AUG													
10...	12.5	96	31	17.3	9.8	9.4	1.44	1.9	.65	3.1	.78	29	24
11...	11.9	93	41	16.0	12.9	6.2	2.17	1.5	.84	2.1	.86	41	34
SEP													
29...	11.9	95	61	21.7	19.1	6.8	3.22	2.3	1.52	2.2	.85	59	49

Date	Sulfate water, fltrd, mg/L (00945)	Sulfate water unfltrd mg/L (00946)	Chlor-ide, water, fltrd, mg/L (00940)	Chlor-ide, water, unfltrd mg/L (99220)	Fluor-ide, water, fltrd, mg/L (00950)	Fluor-ide, water, unfltrd mg/L (00951)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Nitrite + nitrate water unfltrd mg/L as N (00630)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ammonia water, unfltrd mg/L as N (00610)	Ammonia water, fltrd, mg/L as N (00608)	Phos-phorus, water, unfltrd mg/L (00665)	Alum-inum, water, unfltrd recover-able, ug/L (01105)
DEC													
05...	--	16.8	--	1.71	--	.1	--	.266	--	.060	--	.018	773
APR													
09...	19.5	19.8	4.0	4.2	<.10	<.1	162	.155	.154	<.040	<.040	.019	269
MAY													
20...	14.4	14.4	.7	.70	.10	.1	93	.182	--	.074	--	.029	546
JUN													
18...	--	11.2	--	.30	--	.1	--	.046	--	.027	--	.099	2120
JUL													
11...	8.0	8.1	.2	.20	<.10	<.1	57	.034	.033	<.050	--	.443	5750
AUG													
10...	8.4	8.3	.4	.20	.05	.1	36	.031	.024	<.050	--	.723	12000
11...	9.6	9.6	.3	.30	.05	.1	47	.033	.030	<.050	--	.433	6300
SEP													
29...	--	10.3	--	.40	--	.1	--	.091	--	<.100	--	.315	6150

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alum-inum, water, fltrd, ug/L (01106)	Arsenic water unfltrd ug/L (01002)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recover-able, ug/L (01007)	Barium, water, fltrd, ug/L (01005)	Cadmium water, unfltrd ug/L (01027)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Chrom-ium, water, fltrd, ug/L (01030)	Copper, water, unfltrd recover-able, ug/L (01042)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover-able, ug/L (01045)	Iron, water, fltrd, ug/L (01046)
DEC													
05...	40	1	.6	49.4	36.4	<.10	<.10	1	--	2.3	<1.0	970	20
APR													
09...	30	1	.4	51.2	44.0	<.10	<.10	1	<1.0	1.8	<1.0	745	<50
MAY													
20...	43	1.4	1.2	39.9	33.0	<.10	<.10	1	<1.0	2.1	<1.0	740	20
JUN													
18...	38	1.9	1.2	62.2	39.0	<.10	<.10	4	<.1.0	6.1	<1.0	3140	<10
JUL													
11...	45	4.7	.73	122	24.5	.17	<.10	12	<1.0	15.1	<1	8720	<10
AUG													
10...	48	9.7	1.1	267	21.1	.45	<.10	22	<1.0	35.8	<1.0	17500	<10
11...	50	6	.5	157	24.7	.23	<.10	11	<1.0	19.2	<1.0	9610	<10
SEP													
29...	51	5	1.2	130	28.8	.19	<.10	9	<1.0	12.4	<1.0	8370	<10

Date	Lead, water, unfltrd recover-able, ug/L (01051)	Lead water, fltrd, ug/L (01049)	Mangan-ese, water, unfltrd recovera ble, ug/L (01055)	Mangan-ese, water, fltrd, ug/L (01056)	Nickel, water, unfltrd recover-able, ug/L (01067)	Nickel, water, fltrd ug/L (01065)	Silver, water, unfltrd recover-able, ug/L (01077)	Silver, water, fltrd, ug/L (01075)	Zinc, water, unfltrd recover-able, ug/L (01092)	Zinc, water, fltrd, ug/L (01090)	Organic carbon, water, unfltrd, mg/L (00680)	Organic carbon, water, fltrd, mg/L (00681)
DEC												
05...	.7	<.10	40	20	2.7	.77	<.10	<.1	5	<4	1.9	1.8
APR												
09...	.5	<.10	52	40.1	2	.62	<.10	<.10	4	<4	.8	.7
MAY												
20...	.5	<.10	5	5.3	3	.86	<.10	<.10	<4	<4	2.2	2.0
JUN												
18...	2	<.10	88	4.4	7	.48	.10	<.10	11	<4	<.5	--
JUL												
11...	6	.29	259	5.3	15	.41	.17	<.10	26	<4	1.4	.9
AUG												
10...	12	<.10	502	6.7	31.7	.31	.25	<.1	69	<4	.9	.6
11...	6	<.10	257	9.1	15	.44	.16	<.10	40	<4	.7	.7
SEP												
29...	7	<.10	245	6.5	12	.50	.10	<.10	32	<4	<1.0	<1.0

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

WATER TEMPERATURE in (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	5.5	5.0	5.5	1.5	1.0	1.0	2.0	1.0	1.5	1.0	0.5	0.5
2	6.0	5.5	5.5	1.5	1.0	1.0	1.5	0.5	1.0	1.0	0.5	0.5
3	5.5	4.5	5.0	1.5	1.0	1.5	0.5	0.0	0.0	0.5	0.5	0.5
4	5.5	4.5	5.0	2.0	1.5	2.0	0.5	0.0	0.5	0.5	0.5	0.5
5	4.5	4.0	4.0	2.5	2.0	2.0	0.5	0.0	0.5	0.5	0.0	0.5
6	6.0	4.0	5.0	3.0	2.5	2.5	0.5	0.5	0.5	0.5	0.0	0.0
7	6.5	6.0	6.0	3.0	2.5	2.5	0.5	0.0	0.5	0.5	0.0	0.0
8	6.5	5.5	6.0	2.5	2.0	2.0	0.5	0.0	0.0	0.5	0.0	0.5
9	5.5	4.5	5.0	2.5	2.0	2.0	0.0	0.0	0.0	0.5	0.0	0.5
10	4.5	3.0	3.5	2.0	1.5	1.5	0.0	0.0	0.0	0.5	0.0	0.5
11	3.5	2.5	3.0	1.5	1.5	1.5	0.0	0.0	0.0	0.5	0.5	0.5
12	4.0	3.5	3.5	1.5	1.0	1.5	0.0	0.0	0.0	0.5	0.5	0.5
13	5.0	4.0	4.5	2.0	1.5	1.5	0.5	0.0	0.5	0.5	0.0	0.5
14	5.0	4.5	4.5	2.0	1.5	2.0	1.0	0.5	0.5	0.5	0.0	0.5
15	5.0	4.5	4.5	2.0	2.0	2.0	1.0	0.5	0.5	0.5	0.5	0.5
16	6.0	5.0	5.5	2.0	1.5	2.0	1.0	0.5	0.5	0.5	0.5	0.5
17	6.5	5.5	6.0	2.0	2.0	2.0	1.0	0.5	0.5	0.5	0.0	0.5
18	6.0	4.5	5.0	2.0	1.5	2.0	1.0	0.5	0.5	0.5	0.5	0.5
19	4.5	4.5	4.5	1.5	0.0	0.5	1.0	0.5	0.5	0.5	0.0	0.5
20	5.0	4.5	4.5	1.0	0.5	1.0	0.5	0.5	0.5	0.5	0.0	0.0
21	5.0	4.5	5.0	1.5	1.0	1.0	0.5	0.5	0.5	0.0	0.0	0.0
22	5.0	4.5	4.5	1.5	1.0	1.5	0.5	0.5	0.5	0.0	0.0	0.0
23	5.0	4.5	5.0	1.5	0.5	1.0	0.5	0.5	0.5	0.0	0.0	0.0
24	4.5	4.0	4.0	1.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0
25	4.0	3.5	3.5	1.0	0.5	1.0	0.5	0.5	0.5	0.0	0.0	0.0
26	4.0	3.5	4.0	1.5	0.0	0.5	0.5	0.5	0.5	0.5	0.0	0.0
27	4.5	4.0	4.0	2.0	0.5	1.5	0.5	0.5	0.5	0.0	0.0	0.0
28	4.5	4.0	4.0	2.0	1.5	1.5	0.5	0.5	0.5	0.0	0.0	0.0
29	4.0	2.5	3.0	2.0	1.5	2.0	0.5	0.5	0.5	0.0	0.0	0.0
30	3.0	1.5	2.0	2.0	1.5	2.0	1.0	0.0	0.5	0.0	0.0	0.0
31	1.5	1.0	1.5	---	---	---	0.5	0.5	0.5	0.5	0.0	0.0
MONTH	6.5	1.0	4.4	3.0	0.0	1.6	2.0	0.0	0.5	1.0	0.0	0.3

15041200 TAKU RIVER NEAR JUNEAU—Continued

WATER TEMPERATURE, in (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	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.0	0.0	7.0	5.0	6.0
2	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.0	0.0	6.0	4.5	5.0
3	0.5	0.0	0.0	0.5	0.0	0.0	1.5	0.0	0.5	6.0	4.0	5.0
4	0.5	0.0	0.0	0.5	0.0	0.0	1.5	0.0	0.5	6.0	3.5	4.5
5	0.5	0.0	0.0	0.5	0.0	0.0	2.0	0.0	1.0	6.0	4.0	5.0
6	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.5	1.0	7.5	5.0	6.0
7	0.0	0.0	0.0	0.5	0.0	0.0	3.5	0.5	2.0	8.0	5.5	6.5
8	0.0	0.0	0.0	0.5	0.0	0.5	4.0	1.5	2.5	9.0	6.0	7.5
9	0.5	0.0	0.0	0.5	0.0	0.5	3.5	2.0	2.5	9.5	6.5	8.0
10	0.5	0.0	0.0	0.5	0.0	0.0	5.0	2.0	3.0	9.5	7.0	8.5
11	0.5	0.0	0.0	0.5	0.0	0.0	4.5	2.0	3.0	9.0	6.5	7.0
12	0.5	0.0	0.5	0.5	0.0	0.0	5.0	2.5	3.5	7.0	6.5	6.5
13	0.5	0.0	0.5	0.5	0.0	0.0	5.5	2.5	3.5	7.5	6.0	7.0
14	0.5	0.0	0.0	0.0	0.0	0.0	5.0	2.5	3.5	7.5	6.0	6.5
15	0.5	0.0	0.0	0.0	0.0	0.0	4.5	3.0	3.5	8.0	6.0	7.0
16	0.5	0.0	0.0	0.5	0.0	0.0	4.0	3.0	3.5	8.5	6.0	7.5
17	0.5	0.0	0.0	0.5	0.0	0.0	5.0	2.5	3.5	9.0	6.0	7.5
18	0.5	0.0	0.0	1.0	0.0	0.0	4.0	3.0	3.5	10.0	7.0	8.5
19	0.0	0.0	0.0	1.0	0.0	0.5	5.0	2.5	3.5	10.0	7.5	9.0
20	0.0	0.0	0.0	1.0	0.0	0.5	5.5	3.0	4.5	10.5	7.5	9.0
21	0.0	0.0	0.0	1.0	0.0	0.5	5.0	3.5	4.5	10.0	8.0	9.0
22	0.5	0.0	0.0	1.0	0.0	0.0	4.5	3.5	4.0	10.0	8.5	9.5
23	0.5	0.0	0.0	1.0	0.0	0.0	6.0	3.5	4.5	10.0	8.0	8.5
24	0.5	0.0	0.0	1.0	0.0	0.0	6.5	4.0	5.5	8.5	7.0	8.0
25	0.5	0.0	0.5	1.5	0.0	0.5	6.0	4.0	5.0	8.5	7.5	8.0
26	0.5	0.0	0.5	1.5	0.0	0.5	5.0	3.0	4.0	9.0	7.0	8.0
27	0.5	0.0	0.0	1.0	0.5	0.5	5.5	3.0	4.5	9.5	7.0	8.5
28	0.5	0.0	0.0	1.5	0.0	0.5	6.0	3.5	4.5	9.5	7.5	8.5
29	---	---	---	1.0	0.0	0.5	7.0	4.0	5.5	10.0	7.5	8.5
30	---	---	---	1.0	0.0	0.0	7.0	4.5	6.0	10.5	7.5	9.0
31	---	---	---	0.5	0.0	0.0	---	---	---	9.5	7.5	8.5
MONTH	0.5	0.0	0.1	1.5	0.0	0.2	7.0	0.0	3.2	10.5	3.5	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.5	6.0	7.0	12.0	8.0	9.5	10.5	9.0	9.5	7.0	6.5	6.5
2	10.0	7.0	8.0	11.0	9.5	10.0	10.0	9.0	9.5	7.0	6.0	6.5
3	10.5	7.5	9.0	10.0	9.5	9.5	11.5	9.0	10.0	7.5	6.0	6.5
4	10.0	7.5	9.0	9.5	8.5	9.0	11.0	9.0	9.5	8.0	6.5	7.0
5	11.0	8.5	9.5	10.0	8.0	9.0	11.0	8.5	9.5	7.5	6.0	7.0
6	11.0	9.0	10.0	10.5	9.0	9.5	11.0	9.0	10.0	7.0	6.5	7.0
7	10.5	8.5	9.5	12.0	8.5	10.0	10.5	8.5	9.5	8.0	6.5	7.0
8	11.0	8.5	9.5	11.5	9.5	10.5	9.5	7.5	8.5	8.0	7.0	7.5
9	11.5	8.5	10.0	12.5	9.5	10.5	7.5	5.5	6.5	8.0	7.0	7.5
10	12.0	9.0	10.5	12.5	10.0	11.0	6.5	4.5	5.0	7.5	6.5	7.0
11	11.5	9.0	10.0	12.0	10.5	11.0	9.0	4.0	6.0	7.5	6.5	7.0
12	11.0	9.0	9.5	12.5	10.0	11.0	10.0	8.0	9.0	8.0	7.0	7.5
13	9.5	8.0	9.0	12.5	10.0	11.0	10.0	9.0	9.5	7.5	6.5	7.0
14	9.5	8.0	8.5	12.0	10.0	11.0	10.0	8.5	8.5	6.5	6.0	6.5
15	10.0	8.0	9.0	11.5	10.5	11.0	8.5	7.5	8.0	6.5	5.5	6.0
16	11.0	8.5	9.5	11.5	10.5	10.5	8.0	7.0	7.0	6.0	5.0	5.5
17	10.5	9.0	9.5	11.0	10.0	10.5	8.0	6.5	7.0	6.0	5.0	5.5
18	9.5	8.5	9.0	12.5	10.0	11.0	8.5	7.0	7.5	6.0	5.5	5.5
19	9.5	8.0	8.0	12.0	10.0	11.0	8.5	7.5	8.0	6.5	5.5	6.0
20	8.5	7.0	7.5	11.0	10.0	10.5	8.5	7.0	7.5	6.5	6.0	6.0
21	10.0	7.5	8.5	10.5	9.5	10.0	9.0	7.0	7.5	6.5	6.0	6.0
22	11.5	8.5	10.0	11.0	9.5	10.0	9.0	7.0	8.0	6.5	5.0	6.0
23	11.0	9.0	9.5	12.0	9.0	10.5	8.5	7.0	7.5	6.0	4.5	5.0
24	10.0	9.0	9.5	12.0	9.5	10.5	8.0	7.0	7.5	5.5	5.0	5.0
25	9.5	8.5	9.0	12.0	10.0	11.0	8.5	7.0	8.0	6.0	5.0	5.5
26	9.0	8.0	8.0	11.5	10.0	10.5	9.5	6.5	8.0	6.0	5.5	6.0
27	9.5	8.0	8.5	10.5	9.5	10.0	9.0	8.0	8.0	6.0	5.5	5.5
28	10.0	8.0	9.0	10.5	9.5	10.0	9.5	7.5	8.5	7.0	5.5	6.0
29	11.5	8.5	10.0	10.5	9.5	10.0	9.0	7.5	8.5	7.5	6.0	6.5
30	11.0	8.5	9.5	11.5	9.0	10.0	8.5	7.5	8.0	7.0	6.0	6.5
31	---	---	---	11.0	9.0	10.0	8.0	7.0	7.5	---	---	---
MONTH	12.0	6.0	9.1	12.5	8.0	10.3	11.5	4.0	8.1	8.0	4.5	6.3

15050000 GOLD CREEK AT JUNEAU

LOCATION.--Lat 58°18'25", long 134°24'05", in NW$^1/_4$ NE$^1/_4$ 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 16	1945	1200	4.95	Sept 08	0645	*1490	*5.44
Oct 21	0930	1200	4.94	Sept 25	1630	918	4.43
Nov 26	1115	1480	5.43	Sept 27	1615	1280	5.09

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	207	27	201	13	15	8.0	8.8	81	130	118	88	312
2	137	23	130	14	15	7.7	7.9	56	165	136	146	420
3	95	19	86	13	15	8.0	7.5	38	111	354	97	238
4	91	17	62	70	19	9.8	7.2	26	88	207	102	166
5	96	21	45	113	16	8.8	7.0	21	137	130	106	124
6	221	27	37	205	14	e7.0	7.0	17	190	104	78	140
7	344	21	83	137	13	e2.6	7.0	16	116	91	65	175
8	312	15	237	70	12	e1.5	7.0	17	76	91	57	883
9	183	14	288	42	11	e1.6	7.2	21	88	89	47	298
10	120	13	180	31	11	e1.5	7.0	24	99	83	36	195
11	93	14	125	23	11	e1.7	7.1	36	108	89	30	281
12	223	13	165	20	11	e1.5	7.3	139	96	75	36	203
13	180	26	125	17	10	e1.4	7.8	87	108	69	48	417
14	162	41	81	15	9.8	e2.5	8.5	57	78	81	152	274
15	213	27	71	14	9.4	e3.1	10	41	64	55	252	167
16	747	19	55	15	8.9	e3.7	10	30	56	83	391	114
17	632	20	42	75	8.7	e4.5	9.9	25	94	200	282	85
18	264	23	33	98	8.5	e5.2	9.5	26	151	108	144	90
19	223	37	24	145	8.0	5.6	9.9	27	208	68	112	98
20	405	45	21	122	e6.0	5.8	11	28	180	75	241	294
21	864	47	19	58	e5.0	6.1	11	32	112	162	164	228
22	682	33	19	36	e4.8	6.1	12	61	92	99	106	134
23	284	24	20	25	e5.3	5.7	15	136	73	57	83	98
24	168	24	27	22	e6.5	5.6	44	286	113	45	90	388
25	124	71	21	20	e7.0	5.6	184	224	189	36	70	607
26	136	841	17	18	7.6	5.5	194	168	211	83	53	280
27	131	431	15	17	7.1	5.6	158	110	145	129	70	633
28	86	293	14	15	6.9	5.9	122	112	143	81	52	345
29	61	217	13	16	---	8.3	99	172	111	246	44	204
30	44	391	12	26	---	16	93	136	106	106	173	137
31	33	---	13	18	---	11	---	144	---	78	221	---
TOTAL	7561	2834	2281	1523	282.5	172.9	1096.6	2394	3638	3428	3636	8028
MEAN	244	94.5	73.6	49.1	10.1	5.58	36.6	77.2	121	111	117	268
MAX	864	841	288	205	19	16	194	286	211	354	391	883
MIN	33	13	12	13	4.8	1.4	7.0	16	56	36	30	85
MED	180	25	42	23	9.6	5.6	9.7	41	111	89	90	216
AC-FT	15000	5620	4520	3020	560	343	2180	4750	7220	6800	7210	15920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2003, BY WATER YEAR (WY)#

MEAN	160	82.4	37.3	22.7	14.4	12.3	24.5	125	224	226	191	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	0.055	3.78	64.5	121	111	85.4	73.7
(WY)	1952	1976	1956	1974	1972	1974	1954	1920	2003	2003	1968	1978

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

15050000 GOLD CREEK AT JUNEAU—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1916 - 2003#	
ANNUAL TOTAL	55229.8		36875.0			
ANNUAL MEAN	151		101		109	
HIGHEST ANNUAL MEAN					155	2000
LOWEST ANNUAL MEAN					77.5	1951
HIGHEST DAILY MEAN	901	Aug 21	883	Sep 8	1830	Aug 12 1961
LOWEST DAILY MEAN	3.2	Apr 9	a1.4	Mar 13	b0.00	Mar 4 1951
ANNUAL SEVEN-DAY MINIMUM	3.6	Apr 5	1.7	Mar 8	0.00	Mar 4 1951
MAXIMUM PEAK FLOW			1490	Sep 8	2950	Sep 25 1996
MAXIMUM PEAK STAGE			5.44	Sep 8	8.14	Sep 25 1996
INSTANTANEOUS LOW FLOW			c		b0.00	Mar 4 1951
ANNUAL RUNOFF (AC-FT)	109500		73140		79130	
10 PERCENT EXCEEDS	379		232		265	
50 PERCENT EXCEEDS	79		61		67	
90 PERCENT EXCEEDS	6.9		7.1		5.0	

\# See Period of Record; partial years used in monthly statistics
a May have been lower during period of ice affect
b No flow at times during winter
c Not determined, see lowest daily discharge

15051010 SALMON CREEK NEAR JUNEAU

LOCATION.--Lat 58°19'57", long 134°27'57", in NE$^1/_4$ SE$^1/_4$ NW$^1/_4$ 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	29	67	18	15	15	e11	e16	37	21	22	69
2	55	27	46	18	18	12	e9.5	21	70	22	36	84
3	38	25	37	16	19	13	e8.2	18	40	50	29	46
4	35	23	30	48	21	19	e7.4	15	33	40	29	36
5	36	20	27	62	18	14	e7.4	13	37	26	30	28
6	59	20	25	98	16	e10	e7.3	12	45	22	22	28
7	59	19	31	58	14	e7.0	e7.3	12	32	18	18	28
8	69	17	58	37	13	e6.8	e8.2	12	25	16	18	160
9	58	16	91	29	13	e6.4	e8.7	14	27	15	17	70
10	40	16	55	24	13	e6.0	e8.2	16	27	14	16	45
11	35	16	46	22	12	e6.0	e8.0	21	27	15	14	50
12	78	15	78	19	12	e5.7	e8.7	57	25	16	13	45
13	66	18	56	17	11	e5.6	e9.9	43	28	15	14	111
14	51	21	39	16	11	e6.6	e12	34	23	15	28	73
15	53	21	36	16	10	e7.4	e13	27	20	13	43	47
16	146	18	32	18	9.8	e7.3	e14	22	18	13	71	36
17	134	20	30	49	9.4	e7.3	e12	20	23	21	54	31
18	66	23	27	46	9.2	e6.9	e10	19	34	20	34	30
19	60	39	23	61	8.5	e6.8	e10	20	49	17	27	30
20	101	34	21	51	e7.5	e6.5	e11	22	48	15	41	67
21	245	32	19	31	e7.0	e6.8	e12	23	31	30	36	65
22	166	26	21	25	e6.5	e6.9	e14	31	26	28	26	45
23	80	22	26	e20	e6.5	e6.4	e18	46	22	16	22	36
24	59	23	34	e18	e7.1	e6.2	e23	71	25	13	21	75
25	50	43	26	e16	e7.1	e6.1	e36	58	35	13	18	134
26	50	245	21	e14	8.3	e6.2	e34	45	38	19	15	66
27	52	173	19	e13	9.5	e6.2	e25	34	29	25	15	164
28	43	88	18	e15	10	e9.0	e23	35	30	20	15	101
29	38	62	16	18	---	e11	e27	45	24	61	13	56
30	34	135	15	25	---	e20	e26	37	22	28	30	42
31	31	---	15	18	---	e16	---	39	---	23	36	---
TOTAL	2145	1286	1085	936	322.4	276.1	429.8	898	950	680	823	1898
MEAN	69.2	42.9	35.0	30.2	11.5	8.91	14.3	29.0	31.7	21.9	26.5	63.3
MAX	245	245	91	98	21	20	36	71	70	61	71	164
MIN	31	15	15	13	6.5	5.6	7.3	12	18	13	13	28
AC-FT	4250	2550	2150	1860	639	548	853	1780	1880	1350	1630	3760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2003, BY WATER YEAR (WY)#

MEAN	63.4	30.9	27.0	19.1	21.0	16.2	23.0	47.7	54.6	44.3	38.7	62.0
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	36.2	16.3	12.7	9.65	9.16	8.91	9.52	29.0	31.7	21.9	18.2	41.0
(WY)	1997	1991	1997	1997	1999	2003	2002	2003	2003	2003	1994	1997

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1991 - 2003#	
ANNUAL TOTAL	14327.7		11729.3			
ANNUAL MEAN	39.3		32.1		37.4	
HIGHEST ANNUAL MEAN					48.6	1992
LOWEST ANNUAL MEAN					29.7	1995
HIGHEST DAILY MEAN	245	Oct 21	245	Oct 21	954	Oct 20 1998
LOWEST DAILY MEAN	7.7	Apr 15	5.6	Mar 13	5.6	Mar 13 2003
ANNUAL SEVEN-DAY MINIMUM	8.1	Apr 10	6.2	Mar 8	6.2	Mar 8 2003
MAXIMUM PEAK FLOW			400	Nov 26	1930	Sep 25 1996
MAXIMUM PEAK STAGE			3.16	Nov 26	a4.65	Sep 25 1996
INSTANTANEOUS LOW FLOW			b			
ANNUAL RUNOFF (AC-FT)	28420		23270		27090	
10 PERCENT EXCEEDS	78		61		71	
50 PERCENT EXCEEDS	34		23		28	
90 PERCENT EXCEEDS	8.7		8.4		9.8	

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

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.

EXTREMES FOR WATER YEAR 2002.--Maximum discharge during period May to September, 2,750 ft^3/s, August 12, gage height, 11.58 ft, believed to be the maximum discharge for the 2002 water year; minimum not determined.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e25	231	376	312	501
2	---	---	---	---	---	---	---	e23	246	589	305	391
3	---	---	---	---	---	---	---	e20	244	427	277	350
4	---	---	---	---	---	---	---	e18	323	463	286	281
5	---	---	---	---	---	---	---	e16	349	444	280	215
6	---	---	---	---	---	---	---	e14	286	348	270	210
7	---	---	---	---	---	+3.8	---	13	252	322	767	361
8	---	---	---	---	---	---	---	15	268	332	1360	371
9	---	---	---	---	---	---	---	18	332	336	1210	346
10	---	---	---	---	---	---	---	27	487	341	810	325
11	---	---	---	---	---	---	---	27	420	352	616	317
12	---	---	---	---	---	---	---	29	295	326	1600	257
13	---	---	---	---	---	---	---	49	272	323	1320	188
14	---	---	---	---	---	---	---	44	347	453	702	174
15	---	---	---	---	---	---	---	42	435	443	373	299
16	---	---	---	---	---	---	---	58	421	390	244	305
17	---	---	---	---	---	---	---	78	399	455	190	321
18	---	---	---	---	---	---	---	76	364	471	273	482
19	---	---	---	---	---	---	---	121	322	409	318	339
20	---	---	---	---	---	---	---	208	351	299	424	333
21	---	---	---	---	---	---	---	247	282	367	859	302
22	---	---	---	---	---	---	---	205	261	436	845	184
23	---	---	---	---	---	---	---	190	310	460	981	194
24	---	---	---	---	---	---	---	149	343	709	554	219
25	---	---	---	---	---	---	---	156	529	803	383	231
26	---	---	---	---	---	---	---	179	537	795	603	244
27	---	---	---	---	---	---	---	178	433	620	1090	359
28	---	---	---	---	---	---	---	274	360	564	1260	304
29	---	---	---	---	---	---	---	352	331	407	1030	185
30	---	---	---	---	---	---	---	327	314	328	620	122
31	---	---	---	---	---	---	---	256	---	314	564	---
TOTAL	---	---	---	---	---	---	---	3434	10344	13702	20726	8710
MEAN	---	---	---	---	---	---	---	111	345	442	669	290
MAX	---	---	---	---	---	---	---	352	537	803	1600	501
MIN	---	---	---	---	---	---	---	13	231	299	190	122
AC-FT	---	---	---	---	---	---	---	6810	20520	27180	41110	17280
CFSM	---	---	---	---	---	---	---	9.15	28.5	36.5	55.3	24.0
IN.	---	---	---	---	---	---	---	10.56	31.80	42.13	63.72	26.78

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

MEAN	147	49.2	17.6	8.00	5.49	5.76	12.9	86.5	265	419	464	356
MAX	350	129	67.0	25.8	13.6	23.5	23.4	189	382	557	718	544
(WY)	1953	1970	1963	1965	1968	1968	1969	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

\+ Result of discharge measurement
e Estimated

15052000 LEMON CREEK NEAR JUNEAU—Continued

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	195	57	168	21	17	e9.1	e9.0	e115	e185	366	379	918
2	191	50	101	21	17	e9.8	e8.2	e90	e210	341	497	1300
3	121	44	74	19	19	e12	e7.5	e75	e175	463	342	660
4	96	40	61	76	24	e14	e7.2	e60	168	504	328	387
5	87	44	53	71	18	e12	e7.0	e50	228	359	331	323
6	370	93	48	98	16	e9.4	e6.8	e43	323	310	332	475
7	661	72	84	65	15	e7.2	e6.8	e42	273	330	356	508
8	552	47	198	39	14	e6.3	e7.0	e48	232	396	387	975
9	308	41	268	29	14	e6.0	e7.1	e60	250	417	410	498
10	188	44	156	e24	16	e5.5	e7.3	e70	272	358	320	429
11	135	48	104	e21	21	e5.3	e8.0	e80	274	380	285	644
12	147	45	117	e19	17	e5.1	e9.0	e107	267	385	295	554
13	127	62	83	e18	15	e5.0	e11	e98	311	350	451	1150
14	99	65	64	e17	15	e5.4	e14	e82	278	324	823	470
15	175	46	64	e16	14	e5.8	e18	e70	248	325	1690	204
16	918	33	57	e15	14	e6.2	e17	e60	238	315	1480	129
17	1210	34	46	e41	13	e6.0	e15	e56	316	416	1000	103
18	522	37	38	e58	13	e5.8	e14	e60	362	400	459	110
19	585	55	33	e73	12	e5.8	e15	e62	377	411	387	104
20	1120	55	28	e50	e12	e6.0	e16	e68	396	419	531	264
21	2500	46	27	39	e11	e6.4	e18	e77	304	522	390	307
22	1160	32	29	e32	e11	e6.2	e21	e100	283	484	266	154
23	454	27	32	e27	e10	e6.0	e32	e153	232	340	205	114
24	320	29	40	e24	e10	e5.6	e83	e282	242	288	277	366
25	215	69	28	e21	e9.8	e5.5	e250	e186	330	264	298	686
26	236	376	24	e19	e9.2	e5.6	e210	e140	456	312	241	433
27	212	355	23	e17	e8.9	e5.8	e160	e114	366	434	250	1020
28	139	178	22	18	e8.7	e6.4	e150	e129	351	441	271	817
29	98	140	20	22	---	e8.0	e138	e137	281	989	320	647
30	77	317	18	26	---	e15	e140	e152	310	540	536	436
31	64	---	19	19	---	e12	---	e194	---	374	560	---
TOTAL	13282	2581	2127	1055	394.6	230.2	1412.9	3060	8538	12557	14697	15185
MEAN	428	86.0	68.6	34.0	14.1	7.43	47.1	98.7	285	405	474	506
MAX	2500	376	268	98	24	15	250	282	456	989	1690	1300
MIN	64	27	18	15	8.7	5.0	6.8	42	168	264	205	103
AC-FT	26340	5120	4220	2090	783	457	2800	6070	16940	24910	29150	30120
CFSM	35.4	7.11	5.67	2.81	1.16	0.61	3.89	8.16	23.5	33.5	39.2	41.8
IN.	40.83	7.93	6.54	3.24	1.21	0.71	4.34	9.41	26.25	38.60	45.18	46.68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)#

MEAN	159	50.8	19.9	9.18	5.88	5.84	14.4	87.0	266	419	464	362
MAX	428	129	68.6	34.0	14.1	23.5	47.1	189	382	557	718	544
(WY)	2003	1970	2003	2003	2003	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 WATER YEAR		WATER YEARS 1951 - 2003#	
ANNUAL TOTAL	75119.7			
ANNUAL MEAN	206		156	
HIGHEST ANNUAL MEAN			206	2003
LOWEST ANNUAL MEAN			122	1952
HIGHEST DAILY MEAN	2500	Oct 21	2660	Aug 13 1961
LOWEST DAILY MEAN	5.0	Mar 13	0.70	Feb 13 1966
ANNUAL SEVEN-DAY MINIMUM	5.4	Mar 9	0.73	Feb 13 1966
MAXIMUM PEAK FLOW	2960	Oct 21	a5900	Oct 20 1998
MAXIMUM PEAK STAGE	11.71	Oct 21	b	
ANNUAL RUNOFF (AC-FT)	149000		113200	
ANNUAL RUNOFF (CFSM)	17.0		12.9	
ANNUAL RUNOFF (INCHES)	230.95		175.45	
10 PERCENT EXCEEDS	472		436	
50 PERCENT EXCEEDS	93		42	
90 PERCENT EXCEEDS	9.0		4.0	

\# See Period of Record, partial years used in monthly summary statistics
a From rating curve extended above 1,200 ft^3/s, from flood marks, at datum then in use
b Not determined
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 current year. 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, and January 15, 1997.

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	7.7	8.2	27	6.1	e4.4	e4.8	e1.6	2.0	1.2	1.3	2.6	7.6
2	e9.9	7.4	17	6.3	e6.3	e4.2	e1.4	1.8	2.3	1.2	4.6	21
3	6.3	6.7	13	5.0	e7.9	e3.7	e1.3	1.7	1.2	3.9	3.6	9.5
4	5.8	6.1	11	15	e7.1	e5.6	e1.2	1.6	0.88	3.3	2.9	6.9
5	7.1	5.8	8.9	21	e5.4	e5.1	e1.0	1.5	0.80	2.3	2.6	5.4
6	19	5.6	7.9	24	e4.5	e3.6	e1.0	1.3	1.2	2.0	2.2	5.5
7	18	5.1	7.9	16	e4.1	e2.1	e0.90	1.3	0.80	1.8	2.0	5.4
8	19	4.7	9.0	10	e3.7	e0.80	e0.90	1.1	0.69	1.5	1.8	26
9	19	4.3	15	8.1	e3.5	e1.0	e0.80	0.89	0.59	1.3	1.6	22
10	10	4.0	10	6.7	e3.6	e1.0	e0.90	0.77	0.49	1.1	1.3	11
11	8.4	4.0	8.9	5.7	e3.6	e0.90	e0.90	0.77	0.39	0.97	1.1	19
12	12	3.7	19	5.1	e3.4	e0.90	e0.90	1.4	0.35	0.85	1.0	15
13	13	4.0	17	4.8	e3.2	e0.90	e1.0	2.5	0.81	0.75	1.3	29
14	8.6	3.5	10	e4.4	e3.0	e1.5	e1.1	5.5	0.47	0.83	1.8	32
15	8.9	3.4	9.6	3.9	e2.9	e1.9	e1.3	5.3	0.34	0.71	3.1	19
16	34	3.1	8.7	4.5	e2.8	e2.3	e1.4	3.0	0.34	0.69	3.8	13
17	84	4.0	8.4	11	e2.7	e2.6	e1.4	2.2	0.41	0.97	6.5	9.8
18	32	6.3	7.2	9.3	e2.0	e3.1	e1.4	1.8	1.8	0.79	3.3	9.2
19	25	16	6.3	12	e1.8	e2.6	e1.4	1.6	6.7	0.56	2.6	8.8
20	27	11	5.4	17	e1.6	e2.9	e1.4	1.5	5.6	0.47	4.4	10
21	89	11	4.5	8.3	e1.3	e3.2	e1.2	1.4	2.7	0.91	4.5	11
22	82	7.4	4.4	e5.0	e1.1	e3.1	e1.5	1.4	2.1	1.3	3.1	9.7
23	40	6.2	9.8	e3.5	e1.0	e2.5	e1.9	1.4	1.8	0.71	2.6	7.5
24	27	6.0	12	e2.8	e1.0	e1.9	1.9	1.5	1.8	0.52	2.6	19
25	21	7.0	7.7	e1.8	e1.1	e1.5	3.2	1.3	2.0	0.43	2.4	18
26	18	43	6.0	e1.5	e1.2	e1.3	3.4	1.2	2.3	0.82	2.1	13
27	20	28	5.2	e1.3	e2.2	e1.3	2.9	1.1	1.9	2.0	2.5	52
28	15	21	4.8	2.0	e2.3	e1.3	2.6	1.0	2.5	1.1	2.5	44
29	12	15	4.5	e3.9	---	e1.8	2.3	1.0	1.9	14	2.0	21
30	10	50	4.2	e6.3	---	e2.4	2.2	0.87	2.4	4.5	4.6	16
31	9.1	---	4.0	e5.3	---	e2.2	---	0.87	---	2.7	5.9	---
TOTAL	717.8	311.5	294.3	237.6	88.7	74.00	46.30	52.57	48.76	56.28	88.9	496.3
MEAN	23.2	10.4	9.49	7.66	3.17	2.39	1.54	1.70	1.63	1.82	2.87	16.5
MAX	89	50	27	24	7.9	5.6	3.4	5.5	6.7	14	6.5	52
MIN	5.8	3.1	4.0	1.3	1.0	0.80	0.80	0.77	0.34	0.43	1.0	5.4
AC-FT	1420	618	584	471	176	147	92	104	97	112	176	984
CFSM	8.91	3.99	3.65	2.95	1.22	0.92	0.59	0.65	0.63	0.70	1.10	6.36
IN.	10.27	4.46	4.21	3.40	1.27	1.06	0.66	0.75	0.70	0.81	1.27	7.10

e Estimated

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)#

MEAN	17.7	8.40	10.3	6.39	2.73	2.94	4.37	6.92	4.63	4.89	7.01	14.0
MAX	23.2	11.2	20.8	11.3	5.25	4.74	12.1	13.7	10.2	8.49	15.0	18.7
(WY)	2003	2000	2000	1999	2001	2001	1999	1999	1999	2000	2002	1999
MIN	11.1	4.21	2.67	3.52	0.47	1.62	0.72	1.70	1.63	1.82	1.79	7.68
(WY)	1998	1999	1999	1998	1999	1998	2002	2003	2003	2003	2001	1997

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003#	
ANNUAL TOTAL	3004.02		2513.01			
ANNUAL MEAN	8.23		6.88		7.61	
HIGHEST ANNUAL MEAN					9.87	2000
LOWEST ANNUAL MEAN					5.95	2001
HIGHEST DAILY MEAN	89	Oct 21	89	Oct 21	129	Dec 28 1999
LOWEST DAILY MEAN	a0.00	Apr 8	b0.34	Jun 15	c0.00	Mar 3 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 8	0.44	Jun 11	0.00	Mar 3 1999
MAXIMUM PEAK FLOW			114	Oct 17	149	Dec 28 1999
MAXIMUM PEAK STAGE			6.93	Oct 17	7.59	Dec 28 1999
INSTANTANEOUS LOW FLOW			d0.31	Jun 16	c0.00	Mar 3 1999
ANNUAL RUNOFF (AC-FT)	5960		4980		5510	
ANNUAL RUNOFF (CFSM)	3.17		2.65		2.93	
ANNUAL RUNOFF (INCHES)	42.98		35.96		39.78	
10 PERCENT EXCEEDS	19		17		17	
50 PERCENT EXCEEDS	5.2		3.3		4.9	
90 PERCENT EXCEEDS	1.3		0.90		1.1	

\# See Period of Record; partial year used in monthly statistics
a Apr. 8 to Apr. 18
b Jun. 15 and Jun. 16
c Mar. 3 to Mar. 9, 1999 and Apr. 8 to Apr. 18, 2002
d Jun. 16 and Jun. 17

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.-- Record is missing from February 21 to April 28 due to recorder malfunction, and August 26, 29-30, September 2, and 12-16, due to thermistor malfunction. Partial days of record retained February 21, 27, April 28, and August 26. Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 15.5°C, on June 10 and July 12, 2003, ; minimum, 0°C, many days during winters.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum, 15.5°C, June 10 and July 12; minimum, 0°C, many days during winter.

WATER TEMPERATURE, in (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	4.0	4.5	5.5	4.5	5.0	1.5	0.5	1.5
2	7.5	7.0	7.0	5.0	5.0	5.0	4.5	3.0	3.5	2.0	1.5	2.0
3	7.5	6.5	7.0	5.0	4.0	4.5	3.0	2.0	2.5	2.5	2.0	2.0
4	7.0	6.5	7.0	5.0	4.5	5.0	2.0	1.5	2.0	2.5	1.5	2.0
5	7.0	6.0	6.0	6.0	5.0	5.5	2.5	1.5	2.0	2.5	1.5	2.0
6	7.5	6.0	7.0	6.5	5.5	6.0	2.5	2.0	2.5	3.5	2.5	3.0
7	8.0	7.5	7.5	6.0	4.0	5.0	3.5	2.5	3.0	3.5	2.5	3.0
8	8.0	7.0	7.5	4.0	3.0	3.5	4.5	3.5	4.0	2.5	1.5	2.0
9	7.0	5.5	6.5	4.5	3.0	4.0	5.0	4.5	5.0	1.5	0.5	1.0
10	5.5	4.0	4.5	4.5	4.5	4.5	5.0	4.5	5.0	1.0	0.0	0.5
11	6.0	5.0	5.5	4.5	4.5	4.5	5.0	4.5	4.5	1.0	0.5	1.0
12	6.0	6.0	6.0	4.5	4.0	4.5	4.5	4.0	4.5	2.0	0.5	1.5
13	7.0	6.0	6.5	5.5	4.5	5.0	4.0	3.0	4.0	2.5	1.5	2.0
14	7.0	6.0	6.5	6.0	5.5	5.5	3.0	2.5	3.0	1.5	0.0	0.5
15	7.0	6.5	7.0	5.5	4.5	5.5	3.5	2.5	3.0	2.0	1.0	1.5
16	8.0	7.0	7.5	4.5	3.5	4.0	3.0	2.5	3.0	2.5	2.0	2.0
17	8.0	7.5	8.0	4.5	3.5	4.0	3.5	3.0	3.0	2.5	1.0	1.5
18	7.5	6.5	7.0	4.5	4.0	4.0	3.5	3.0	3.5	3.0	2.0	3.0
19	8.0	7.5	7.5	4.5	4.0	4.0	3.0	1.0	2.0	3.0	2.5	3.0
20	8.5	8.0	8.5	5.0	4.5	5.0	1.0	0.5	0.5	3.0	2.0	2.5
21	8.5	8.0	8.5	5.0	4.5	5.0	0.5	0.0	0.5	2.0	0.0	1.0
22	8.5	8.0	8.0	4.5	3.5	4.0	2.0	0.5	1.0	0.5	0.0	0.0
23	8.0	7.0	7.5	3.5	2.5	3.0	2.0	1.0	1.5	0.5	0.0	0.0
24	7.5	6.5	7.0	4.5	2.5	3.0	2.0	1.0	1.5	0.0	0.0	0.0
25	7.0	6.5	6.5	5.0	4.5	5.0	2.0	1.0	1.5	0.5	0.0	0.0
26	7.0	7.0	7.0	7.0	5.0	6.0	2.5	1.5	2.0	1.0	0.0	0.5
27	7.0	6.5	7.0	7.0	5.5	6.0	1.5	1.5	1.5	1.0	0.0	0.5
28	7.0	6.0	6.5	5.5	5.0	5.5	1.5	1.0	1.0	2.0	1.0	1.5
29	6.0	4.5	5.0	6.5	5.0	6.0	1.0	1.0	1.0	2.0	1.5	2.0
30	4.5	3.5	4.0	6.5	5.5	6.0	1.0	0.5	1.0	2.0	1.5	2.0
31	4.0	3.5	4.0	---	---	---	1.5	0.5	1.0	1.5	1.0	1.5
MONTH	8.5	3.5	6.7	7.0	2.5	4.8	5.5	0.0	2.5	3.5	0.0	1.5

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

WATER TEMPERATURE, in (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	2.0	1.5	2.0	---	---	---	---	---	---	8.5	6.0	7.5
2	2.5	1.5	2.0	---	---	---	---	---	---	7.5	4.0	5.5
3	2.0	1.5	2.0	---	---	---	---	---	---	7.0	4.0	5.5
4	2.5	2.0	2.0	---	---	---	---	---	---	6.5	3.0	5.0
5	2.0	1.5	2.0	---	---	---	---	---	---	6.5	3.0	5.0
6	2.0	1.0	1.5	---	---	---	---	---	---	6.5	5.0	5.5
7	2.5	1.5	2.0	---	---	---	---	---	---	8.0	3.5	5.5
8	2.5	2.0	2.5	---	---	---	---	---	---	9.0	4.5	7.0
9	3.0	2.0	2.5	---	---	---	---	---	---	10.0	5.5	8.0
10	3.0	2.5	2.5	---	---	---	---	---	---	9.5	7.0	8.0
11	3.5	2.5	3.0	---	---	---	---	---	---	8.5	7.0	7.5
12	3.0	2.0	2.5	---	---	---	---	---	---	7.0	6.0	6.5
13	2.5	2.0	2.5	---	---	---	---	---	---	6.0	5.0	6.0
14	2.0	0.5	1.0	---	---	---	---	---	---	5.5	4.0	5.0
15	2.0	1.5	2.0	---	---	---	---	---	---	7.0	3.5	5.5
16	2.0	1.5	1.5	---	---	---	---	---	---	8.0	4.5	6.5
17	2.0	1.5	1.5	---	---	---	---	---	---	8.5	4.5	6.5
18	1.5	1.0	1.5	---	---	---	---	---	---	9.0	5.0	7.0
19	1.5	0.0	0.5	---	---	---	---	---	---	9.5	5.5	8.0
20	0.0	0.0	0.0	---	---	---	---	---	---	10.0	6.0	8.5
21	---	0.0	---	---	---	---	---	---	---	10.5	7.0	8.5
22	---	---	---	---	---	---	---	---	---	10.0	8.5	9.0
23	---	---	---	---	---	---	---	---	---	9.5	8.5	8.5
24	---	---	---	---	---	---	---	---	---	10.0	8.0	9.0
25	---	---	---	---	---	---	---	---	---	9.5	8.0	8.5
26	---	---	---	---	---	---	---	---	---	10.0	7.5	8.5
27	---	0.0	---	---	---	---	---	---	---	10.0	7.5	8.5
28	---	---	---	---	---	---	8.0	---	---	10.5	8.0	9.5
29	---	---	---	---	---	---	8.5	4.5	7.0	11.5	9.5	10.5
30	---	---	---	---	---	---	9.0	5.0	7.0	12.5	9.5	11.0
31	---	---	---	---	---	---	---	---	---	12.0	10.0	11.0
MONTH	---	---	---	---	---	---	---	---	---	12.5	3.0	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.0	8.5	9.5	14.0	10.5	12.0	11.0	10.0	10.5	9.5	9.0	9.5
2	10.5	8.0	9.0	13.0	11.0	12.0	10.5	9.5	10.0	---	---	---
3	12.0	8.5	10.0	11.0	9.5	10.0	11.0	9.0	10.0	10.0	9.5	9.5
4	11.5	8.5	10.0	10.5	9.5	10.0	10.5	9.5	10.0	10.0	9.0	9.5
5	12.5	10.0	11.5	10.5	9.5	10.0	11.5	9.0	10.0	9.5	7.5	8.5
6	13.5	11.0	12.0	11.0	9.5	10.5	11.5	8.5	10.0	9.0	8.5	8.5
7	12.0	10.5	11.0	12.0	8.5	10.5	11.5	9.0	10.0	9.5	8.5	9.0
8	13.5	9.0	11.0	13.5	10.5	12.0	12.0	9.0	10.5	9.5	9.0	9.5
9	14.5	9.5	11.5	15.0	12.0	13.0	12.5	9.5	11.0	9.5	9.0	9.5
10	15.5	10.5	12.5	14.5	11.0	12.5	11.5	9.0	10.5	9.5	8.5	9.0
11	13.5	11.5	12.5	14.0	12.0	13.0	12.0	9.0	10.5	9.5	7.5	9.0
12	12.5	11.5	12.0	15.5	11.5	13.5	11.5	11.0	11.0	---	---	---
13	13.5	11.0	12.0	15.0	12.0	13.0	11.5	10.5	11.0	---	---	---
14	13.5	11.0	12.0	13.5	12.0	12.5	11.5	11.0	11.0	---	---	---
15	12.0	11.0	11.5	13.0	11.5	12.0	12.5	11.5	12.0	---	---	---
16	14.5	10.0	12.0	12.0	11.0	11.5	12.0	11.0	11.5	---	---	---
17	13.0	11.5	12.0	11.5	10.5	11.0	11.5	10.5	11.0	7.5	6.0	7.0
18	11.5	9.5	10.5	14.5	10.5	12.0	11.0	9.5	10.5	7.5	7.0	7.0
19	9.5	8.5	9.0	14.0	11.0	12.5	11.0	9.5	10.5	7.5	6.5	7.0
20	9.5	8.5	9.0	13.5	12.5	13.0	10.0	9.5	10.0	8.0	7.5	7.5
21	10.5	8.5	9.5	13.0	11.5	12.5	10.0	9.0	9.5	8.0	7.5	7.5
22	11.0	9.0	10.0	12.5	10.5	11.5	10.5	8.5	9.5	8.0	7.0	7.5
23	10.5	9.5	10.0	13.0	10.5	12.0	9.5	8.0	9.0	7.5	6.0	7.0
24	10.0	9.0	9.5	12.5	11.5	12.0	10.0	9.0	9.5	8.0	7.0	7.0
25	10.0	9.0	9.5	12.5	11.0	12.0	10.5	9.0	10.0	8.5	8.0	8.0
26	9.5	9.0	9.0	12.0	11.0	11.5	---	7.5	---	8.5	7.5	8.0
27	10.0	8.5	9.0	11.5	10.5	11.0	10.0	8.5	9.5	8.5	7.5	8.0
28	10.0	8.5	9.5	11.5	10.0	11.0	10.0	6.5	9.0	9.0	8.0	8.5
29	11.0	8.0	9.5	11.0	10.5	11.0	---	---	---	8.5	7.0	8.0
30	12.0	9.5	10.5	11.5	10.0	10.5	---	---	---	8.5	7.0	7.5
31	---	---	---	12.0	9.5	10.5	10.0	9.5	9.5	---	---	---
MONTH	15.5	8.0	10.6	15.5	8.5	11.7	---	---	---	---	---	---

15052495 NUGGET CREEK ABOVE DIVERSION NEAR AUKE BAY

LOCATION.--Lat 58°25'25", long 134°31'25", in SE¼ SE¼ SW¼ sec. 4, T. 40 S., R. 66 E. (Juneau B-2 NW quad), Hydrologic Unit 19010301, City and Borough of Juneau, on left bank, 1,200 ft upstream from old diversion dam, 3,000 ft upstream from mouth at Mendenhall Lake and 5.2 mi northeast of Auke Bay.

DRAINAGE AREA.-- 15.8 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 590 ft above sea level, from topographic map.

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

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	216	71	192	29	29	17	15	129	173	251	218	471
2	184	63	125	29	28	17	14	101	201	242	277	610
3	128	57	96	27	28	18	14	84	146	435	204	413
4	113	55	77	89	31	26	13	70	130	435	188	257
5	116	57	67	101	28	20	13	62	171	263	178	201
6	394	81	61	155	25	e16	12	56	253	210	179	241
7	714	64	105	102	24	e12	13	54	188	193	187	233
8	520	49	180	64	23	e12	13	60	161	204	198	802
9	278	44	230	49	22	e11	13	73	177	216	190	326
10	175	45	144	44	22	e11	13	80	198	225	158	245
11	139	48	106	39	25	e10	14	82	197	238	147	255
12	190	45	148	36	23	e10	15	128	190	233	153	196
13	160	56	109	32	21	e10	18	105	231	211	258	e623
14	144	56	82	30	20	e11	21	94	180	201	491	e338
15	217	51	76	31	19	e11	27	82	156	203	676	e186
16	1320	43	66	32	19	12	26	73	153	207	816	e126
17	1150	44	59	122	18	11	22	72	214	295	579	e100
18	382	54	52	130	18	11	21	75	277	263	262	e103
19	385	81	45	143	16	11	22	78	326	240	222	e104
20	690	77	40	116	14	11	23	83	338	248	379	e249
21	1540	77	39	67	e13	12	25	90	232	340	238	e239
22	932	57	42	54	e12	12	28	112	209	299	168	e150
23	325	47	43	43	e12	11	40	157	175	192	138	e113
24	203	55	52	e38	e13	11	78	282	193	165	179	e327
25	159	125	42	e34	e14	11	258	205	252	149	160	e540
26	179	1220	36	e32	15	11	236	159	348	204	133	e330
27	167	444	34	e30	15	11	197	124	249	287	156	e682
28	130	241	32	32	14	12	150	134	240	254	152	e497
29	103	179	30	35	---	15	134	158	193	712	161	e378
30	89	470	27	41	---	26	136	156	220	301	291	e266
31	77	---	28	33	---	20	---	184	---	217	303	---
TOTAL	11519	4056	2465	1839	561	420	1624	3402	6371	8133	8039	9601
MEAN	372	135	79.5	59.3	20.0	13.5	54.1	110	212	262	259	320
MAX	1540	1220	230	155	31	26	258	282	348	712	816	802
MIN	77	43	27	27	12	10	12	54	130	149	133	100
MED	190	57	61	39	20	11	22	90	197	238	190	256
AC-FT	22850	8050	4890	3650	1110	833	3220	6750	12640	16130	15950	19040
CFSM	23.5	8.56	5.03	3.75	1.27	0.86	3.43	6.95	13.4	16.6	16.4	20.3
IN.	27.12	9.55	5.80	4.33	1.32	0.99	3.82	8.01	15.00	19.15	18.93	22.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)#

MEAN	250	91.4	55.6	47.6	23.0	15.4	28.9	133	359	426	397	332
MAX	372	135	79.5	59.3	37.3	22.3	54.1	183	476	586	575	438
(WY)	2003	2003	2003	2003	2001	2001	2003	2002	2000	2000	2002	2000
MIN	143	35.7	26.6	28.5	11.5	10.4	12.6	95.2	212	262	259	243
(WY)	2002	2002	2002	2002	2002	2002	2002	2001	2003	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003#	
ANNUAL TOTAL	73552.2		58030			
ANNUAL MEAN	202		159		169	
HIGHEST ANNUAL MEAN					178	2001
LOWEST ANNUAL MEAN					159	2003
HIGHEST DAILY MEAN	1610	Aug 12	1540	Oct 21	1610	Aug 12 2002
LOWEST DAILY MEAN	6.4	Mar 22	a10	Mar 11	6.4	Mar 22 2002
ANNUAL SEVEN-DAY MINIMUM	6.7	Mar 18	11	Mar 9	6.7	Mar 18 2002
MAXIMUM PEAK FLOW			2240	Nov 26	2940	Aug 12 2002
MAXIMUM PEAK STAGE			24.88	Nov 26	25.57	Aug 12 2002
ANNUAL RUNOFF (AC-FT)	145900		115100		122400	
ANNUAL RUNOFF (CFSM)	12.8		10.1		10.7	
ANNUAL RUNOFF (INCHES)	173.17		136.63		145.27	
10 PERCENT EXCEEDS	484		326		413	
50 PERCENT EXCEEDS	96		109		80	
90 PERCENT EXCEEDS	8.9		14		13	

\# See period of Record; partial years used in monthly statistics
a Mar. 11-13
e Estimated

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'47", long 134°34'22", in NW$^1/_4$ SE$^1/_4$ 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)
Oct 17	1100	5770	7.03	Sept 03	0915	6130	7.21
*Oct 22	0445	*11000	*9.23	Sept 08	2215	5450	6.86
Jul 29	1830	5600	6.94	Sept 13	1930	4630	6.41
Aug 17	0000	10800	9.14	Sept 27	2030	4810	6.51

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	1090	532	1550	143	164	74	72	687	1520	3370	3250	3460
2	1390	467	1290	146	156	83	68	676	1590	3320	3150	4840
3	1430	410	1150	139	154	87	64	680	1450	3490	2800	6010
4	1160	363	751	161	158	104	62	725	1330	4210	2540	4760
5	838	e346	505	267	151	111	60	811	1420	3220	2320	2860
6	1010	e340	421	407	137	94	58	674	1920	2760	2450	2790
7	1790	e300	430	447	123	82	57	479	1940	2630	2930	3210
8	3540	e250	638	361	111	72	59	451	1660	2980	3240	4660
9	3310	e200	1030	289	103	65	61	485	1730	3300	3430	4240
10	2530	e180	1170	251	97	59	63	513	2020	3350	2850	2790
11	2170	e160	1250	239	97	55	66	515	2270	3650	2550	3270
12	1820	e140	1320	232	97	51	71	579	2210	3610	2680	3840
13	1430	e160	1100	231	95	55	77	654	2280	3600	2830	4160
14	1090	e160	683	217	91	54	86	632	2150	3300	3610	3280
15	1000	e140	513	189	88	51	97	562	1980	3000	6330	1980
16	2320	e120	435	167	86	49	106	490	1910	2790	9780	1310
17	5320	e140	381	201	83	46	106	462	2130	3050	9560	1020
18	4380	e190	340	308	81	46	105	467	2710	3440	5010	944
19	4090	e210	291	385	80	46	105	494	3230	3490	3710	932
20	5110	e210	238	484	77	47	109	537	3320	3820	3950	1150
21	8820	e180	205	386	e75	50	117	595	2450	4120	3380	1620
22	9120	e170	189	308	e71	54	126	669	2200	3980	2480	1700
23	4760	e160	202	267	e67	54	137	760	2090	3000	2120	1270
24	2780	e220	208	253	65	52	165	1050	1910	2950	1970	1380
25	1940	e400	205	255	69	51	289	1260	2110	2670	2260	2180
26	1760	1540	189	247	66	49	524	1440	2760	2500	2100	3290
27	1950	1980	174	222	69	48	596	1480	2940	3200	1950	3840
28	1540	2080	164	192	68	50	595	1490	2630	3440	2160	4600
29	994	1520	156	174	---	55	587	1560	2390	5040	2270	4490
30	762	1750	144	176	---	65	636	1450	2540	4760	2770	3460
31	627	---	139	176	---	74	---	1510	---	3370	3660	---
TOTAL	81871	15018	17461	7920	2779	1933	5324	24837	64790	105410	106090	89336
MEAN	2641	501	563	255	99.2	62.4	177	801	2160	3400	3422	2978
MAX	9120	2080	1550	484	164	111	636	1560	3320	5040	9780	6010
MIN	627	120	139	139	65	46	57	451	1330	2500	1950	932
AC-FT	162400	29790	34630	15710	5510	3830	10560	49260	128500	209100	210400	177200
CFSM	31.0	5.88	6.62	3.00	1.17	0.73	2.09	9.41	25.4	40.0	40.2	35.0
IN.	35.79	6.56	7.63	3.46	1.21	0.84	2.33	10.86	28.32	46.08	46.38	39.05

e Estimated

15052500 MENDENHALL RIVER NEAR AUKE BAY—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1374	350	167	117	90.8	91.0	139	652	1888	3017	3360	2673
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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003#	
ANNUAL TOTAL	511311		522769			
ANNUAL MEAN	1401		1432		1172	
HIGHEST ANNUAL MEAN					1547	1990
LOWEST ANNUAL MEAN					758	1985
HIGHEST DAILY MEAN	10100	Aug 13	9780	Aug 16	13700	Sep 8 1981
LOWEST DAILY MEAN	28	Mar 22	a46	Mar 17	19	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	29	Mar 19	48	Mar 15	19	Mar 5 1974
MAXIMUM PEAK FLOW			11000	Oct 22	16000	Sep 11 1995
MAXIMUM PEAK STAGE			9.23	Oct 22	b11.18	Sep 11 1995
INSTANTANEOUS LOW FLOW			c44	Mar 12	d19	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	1014000		1037000		848900	
ANNUAL RUNOFF (CFSM)	16.5		16.8		13.8	
ANNUAL RUNOFF (INCHES)	223.51		228.52		187.08	
10 PERCENT EXCEEDS	3260		3490		3230	
50 PERCENT EXCEEDS	524		669		392	
90 PERCENT EXCEEDS	44		69		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. 12, 17, and 19
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 SE$^1/_4$ SW$^1/_4$ 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 16	1615	1700	15.57	Sep 2	0045	1020	14.45
Oct 21	0500	1120	14.67	Sep 8	0830	910	14.18
Nov 26	1415	*1820	*15.73	Sep 27	1730	1450	15.23
Nov 30	0730	1060	14.55				

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	171	43	184	64	40	84	39	76	88	70	69	213
2	175	38	118	74	39	105	43	60	112	71	79	464
3	77	33	90	46	58	64	40	50	73	199	64	243
4	63	31	e69	115	97	123	28	42	61	198	53	126
5	67	30	e54	142	61	69	20	38	65	96	49	87
6	195	33	e40	225	46	112	16	35	118	73	43	83
7	289	31	e47	146	e34	51	17	32	81	62	41	84
8	297	26	e130	73	e28	25	20	33	60	59	39	594
9	217	23	355	54	e30	e15	25	37	63	56	38	253
10	104	23	166	e47	e36	e15	26	43	71	54	34	127
11	76	27	111	e42	e40	e14	33	43	74	53	31	239
12	218	25	192	e37	e30	e14	36	77	64	50	32	156
13	148	32	154	33	e27	e13	39	104	76	46	42	287
14	93	30	87	e30	26	e14	41	115	66	47	119	205
15	107	34	74	e33	24	e15	52	90	57	43	159	124
16	942	27	68	38	23	e15	54	56	53	40	216	83
17	719	37	60	217	21	e16	40	47	60	64	239	66
18	201	112	54	159	21	e16	34	43	152	61	99	63
19	236	173	46	209	e18	e25	35	43	286	48	74	68
20	399	96	41	220	e16	42	41	43	257	44	218	315
21	944	95	e36	95	e15	47	41	48	134	89	132	258
22	531	54	e50	e70	19	52	45	57	101	94	80	144
23	191	37	70	e50	25	47	50	85	79	59	64	93
24	126	43	95	e33	30	34	68	100	72	47	62	326
25	95	108	59	e35	33	28	122	87	96	39	57	560
26	101	935	44	e36	33	21	127	79	167	39	49	216
27	152	480	38	e41	41	18	108	63	102	97	49	629
28	109	298	37	e47	38	21	89	56	103	64	49	263
29	73	168	35	90	---	34	79	78	82	289	46	139
30	57	533	33	107	---	73	80	74	69	105	145	103
31	48	---	33	63	---	53	---	85	---	69	126	---
TOTAL	7221	3655	2670	2671	949	1275	1488	1919	2942	2425	2597	6611
MEAN	233	122	86.1	86.2	33.9	41.1	49.6	61.9	98.1	78.2	83.8	220
MAX	944	935	355	225	97	123	127	115	286	289	239	629
MIN	48	23	33	30	15	13	16	32	53	39	31	63
AC-FT	14320	7250	5300	5300	1880	2530	2950	3810	5840	4810	5150	13110
CFSM	16.5	8.64	6.11	6.11	2.40	2.92	3.52	4.39	6.96	5.55	5.94	15.6
IN.	19.05	9.64	7.04	7.05	2.50	3.36	3.93	5.06	7.76	6.40	6.85	17.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)#

MEAN	162	75.9	47.2	45.4	38.7	47.5	52.3	128	160	144	159	167
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	69.2	70.9
(WY)	1969	1986	1972	1974	1972	1974	2002	2003	1971	1971	1968	1984

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

15052800 MONTANA CREEK NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003#	
ANNUAL TOTAL	40620.4		36423			
ANNUAL MEAN	111		99.8		103	
HIGHEST ANNUAL MEAN					131	1975
LOWEST ANNUAL MEAN					80.8	1971
HIGHEST DAILY MEAN	944	Oct 21	944	Oct 21	1350	Sep 29 1970
LOWEST DAILY MEAN	9.1	Apr 10	13	Mar 13	3.4	Feb 8 1972
ANNUAL SEVEN-DAY MINIMUM	9.5	Apr 7	14	Mar 9	3.5	Jan 13 1974
MAXIMUM PEAK FLOW			1820	Nov 26	3800	Oct 20 1998
MAXIMUM PEAK STAGE			15.73	Nov 26	17.36	Oct 20 1998
INSTANTANEOUS LOW FLOW			a		3.2	Feb 8 1972
ANNUAL RUNOFF (AC-FT)	80570		72250		74920	
ANNUAL RUNOFF (CFSM)	7.89		7.08		7.33	
ANNUAL RUNOFF (INCHES)	107.17		96.09		99.65	
10 PERCENT EXCEEDS	223		216		222	
50 PERCENT EXCEEDS	76		62		75	
90 PERCENT EXCEEDS	13		27		14	

a Not determined, see lowest daily mean
See Period of Record, partial years used in monthly statistics

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 current year.

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

REMARKS.--Records fair except for estimated record, which is poor.

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	5.7	3.5	12	3.8	3.1	3.7	e1.0	e0.63	0.93	1.5	2.2	4.8
2	6.7	3.6	9.0	4.3	4.2	3.7	e0.80	e0.63	1.3	1.5	2.7	7.2
3	5.4	3.0	6.7	3.6	5.6	3.1	e0.68	e0.58	1.2	2.1	2.5	5.7
4	3.9	3.2	5.3	8.9	5.5	4.3	e0.58	e0.58	1.1	2.2	2.2	5.0
5	4.4	3.1	4.2	13	4.2	3.9	e0.45	e0.51	0.99	1.9	2.0	4.3
6	8.1	2.7	3.6	14	3.4	2.8	e0.40	e0.49	1.1	1.7	1.7	4.1
7	10	2.4	3.6	9.8	3.0	1.7	e0.36	0.45	1.1	1.6	1.6	4.1
8	12	2.6	4.3	6.8	2.7	e1.2	e0.36	0.40	1.1	1.5	1.5	14
9	12	2.3	6.4	5.4	2.5	e0.85	e0.31	0.38	1.1	1.4	1.5	12
10	7.6	2.0	5.4	4.6	2.5	e0.66	e0.31	0.36	0.99	1.3	1.5	8.0
11	5.0	2.3	5.1	3.9	2.5	e0.52	e0.31	0.36	0.91	1.2	1.4	9.8
12	6.2	2.1	15	3.5	2.4	e0.50	0.34	0.58	0.89	1.1	1.2	8.4
13	7.5	2.7	18	3.3	2.2	e0.59	0.38	1.3	0.99	1.0	1.3	14
14	6.0	1.7	10	2.9	2.0	e0.75	0.46	2.5	0.95	1.1	1.6	14
15	5.7	2.1	7.0	2.8	1.9	e1.0	0.58	2.2	0.97	1.1	2.2	10
16	15	1.9	5.0	4.0	1.9	1.3	0.73	1.6	0.92	1.0	2.4	7.7
17	24	2.5	5.8	11	1.8	1.6	0.76	1.4	0.95	1.1	2.9	6.5
18	13	4.2	4.5	7.4	1.7	2.0	0.71	1.2	1.2	1.0	2.7	6.2
19	11	8.5	e3.0	8.1	1.6	1.8	0.75	1.1	1.9	0.95	2.4	6.0
20	11	6.2	e2.9	9.7	1.5	1.9	0.77	1.0	2.2	0.95	3.1	7.2
21	22	6.3	e2.8	6.4	1.3	2.1	0.62	1.0	1.8	1.1	3.1	8.4
22	24	4.9	4.3	4.8	1.1	2.2	0.76	0.99	1.6	1.2	2.7	7.7
23	15	4.4	8.5	3.9	0.95	1.7	0.76	0.95	1.5	1.2	2.3	6.7
24	10	3.7	8.5	e3.1	0.90	1.3	e0.80	0.95	1.5	1.1	2.2	13
25	8.1	4.6	6.2	e2.8	1.1	0.92	e0.90	0.93	1.6	1.0	2.0	12
26	7.7	15	4.7	e2.6	0.99	0.71	e1.3	0.89	1.7	1.1	1.8	9.7
27	9.2	13	3.8	e2.4	1.8	0.64	e1.0	0.85	1.6	1.2	1.8	22
28	7.7	15	3.3	e2.2	1.8	0.59	e0.82	0.80	1.8	1.3	1.9	17
29	6.5	8.3	2.9	2.3	---	0.88	e0.68	0.81	1.6	3.9	1.7	10
30	5.1	18	2.7	4.3	---	1.5	e0.63	0.78	1.5	2.9	3.1	7.1
31	4.0	---	2.6	4.0	---	e1.4	---	0.77	---	2.3	3.9	---
TOTAL	299.5	155.8	187.1	169.6	66.14	51.81	19.31	27.97	38.99	45.50	67.1	272.6
MEAN	9.66	5.19	6.04	5.47	2.36	1.67	0.64	0.90	1.30	1.47	2.16	9.09
MAX	24	18	18	14	5.6	4.3	1.3	2.5	2.2	3.9	3.9	22
MIN	3.9	1.7	2.6	2.2	0.90	0.50	0.31	0.36	0.89	0.95	1.2	4.1
AC-FT	594	309	371	336	131	103	38	55	77	90	133	541
CFSM	7.43	3.99	4.64	4.21	1.82	1.29	0.50	0.69	1.00	1.13	1.67	6.99
IN.	8.57	4.46	5.35	4.85	1.89	1.48	0.55	0.80	1.12	1.30	1.92	7.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)#

MEAN	9.38	4.90	5.29	2.92	2.37	2.34	2.66	2.61	2.16	2.72	3.96	8.09
MAX	18.1	10.3	12.2	5.47	3.97	5.08	6.16	4.97	3.47	4.23	7.66	14.5
(WY)	2000	2000	2000	2003	2002	1994	1999	1999	1999	1997	2002	2000
MIN	5.29	2.36	1.95	0.85	0.79	0.94	0.64	0.86	1.20	1.47	1.31	3.81
(WY)	1998	1996	1996	1997	1999	1995	2003	2002	1998	2003	1994	1997

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003#	
ANNUAL TOTAL	1614.57		1401.42			
ANNUAL MEAN	4.42		3.84		4.12	
HIGHEST ANNUAL MEAN					6.90	2000
LOWEST ANNUAL MEAN					3.26	1995
HIGHEST DAILY MEAN	24	Oct 17	a24	Oct 17	68	Dec 28 1999
LOWEST DAILY MEAN	0.25	May 7	b0.31	Apr 9	0.19	Mar 15 2000
ANNUAL SEVEN-DAY MINIMUM	0.32	May 3	0.34	Apr 7	0.26	Mar 10 2000
MAXIMUM PEAK FLOW			35	Sep 27	80	Dec 28 1999
MAXIMUM PEAK STAGE			5.98	Sep 27	c7.59	Sep 25 1996
INSTANTANEOUS LOW FLOW			d		f0.18	Mar 8 1999
ANNUAL RUNOFF (AC-FT)	3200		2780		2980	
ANNUAL RUNOFF (CFSM)	3.40		2.95		3.17	
ANNUAL RUNOFF (INCHES)	46.20		40.10		43.04	
10 PERCENT EXCEEDS	10		9.7		8.6	
50 PERCENT EXCEEDS	2.9		2.2		2.6	
90 PERCENT EXCEEDS	0.94		0.72		0.96	

\# See period of Record; partial years used in monthly summary statistics
a Oct. 17 and 22
b Apr. 9-11
c Backwater caused by culvert, which was removed Apr. 1998
d Undertermined, see lowest daily mean
e Estimated
f Mar. 8, 1999 and Mar. 14 and 15, 2000

15055500 ANTLER RIVER BELOW ANTLER LAKE NEAR AUKE BAY

LOCATION.--Lat 58°51'07", long 134°42'31", in NE¼ SE¼ NE¼ 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.

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	86	292	40	38	17	22	162	199	224	213	166
2	91	77	213	39	36	17	21	152	188	238	202	254
3	84	69	162	37	36	17	20	135	174	230	194	281
4	77	62	130	48	35	17	19	118	164	239	181	249
5	71	58	108	84	34	17	19	103	163	223	168	211
6	72	59	93	134	33	17	18	91	215	204	165	186
7	92	63	85	153	31	16	18	83	241	196	168	178
8	143	60	101	133	30	16	18	80	221	200	174	168
9	150	56	138	111	28	15	18	83	218	209	175	160
10	134	55	156	94	27	15	18	90	239	218	169	148
11	116	54	142	81	26	14	18	94	263	229	161	167
12	114	52	138	71	25	14	19	109	257	225	156	183
13	121	54	144	63	25	14	19	123	270	223	149	215
14	112	58	125	56	23	15	20	120	261	220	156	241
15	107	57	110	51	22	14	22	110	236	210	330	220
16	182	55	101	48	22	14	24	99	223	198	465	175
17	335	52	91	52	21	14	e25	91	224	186	467	143
18	314	52	81	71	21	15	e26	87	256	180	354	121
19	270	53	72	84	20	15	e25	87	258	185	268	110
20	375	56	63	92	20	14	e26	90	255	195	226	114
21	769	59	57	87	19	15	27	95	235	208	199	165
22	743	58	53	76	18	15	27	107	220	213	169	167
23	469	54	58	67	18	15	29	124	216	198	149	145
24	310	51	59	59	18	15	36	173	200	187	135	179
25	224	53	58	54	18	15	58	226	193	173	126	283
26	182	147	54	51	18	15	97	269	223	162	119	326
27	168	378	50	49	17	15	126	232	224	164	116	330
28	146	360	46	45	17	15	142	196	210	170	115	274
29	126	266	43	42	---	15	145	181	202	233	118	257
30	109	323	40	42	---	19	153	182	200	250	131	237
31	96	---	39	40	---	23	---	193	---	223	156	---
TOTAL	6395	2937	3102	2154	696	484	1255	4085	6648	6413	6074	6053
MEAN	206	97.9	100	69.5	24.9	15.6	41.8	132	222	207	196	202
MAX	769	378	292	153	38	23	153	269	270	250	467	330
MIN	71	51	39	37	17	14	18	80	163	162	115	110
AC-FT	12680	5830	6150	4270	1380	960	2490	8100	13190	12720	12050	12010
CFSM	7.93	3.77	3.85	2.67	0.96	0.60	1.61	5.07	8.52	7.96	7.54	7.76
IN.	9.15	4.20	4.44	3.08	1.00	0.69	1.80	5.84	9.51	9.18	8.69	8.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	172	66.8	72.5	43.1	24.4	19.7	38.1	137	301	265	227	221
MAX	240	97.9	134	69.5	35.0	29.1	55.8	204	330	327	317	271
(WY)	1999	2003	2000	2003	2001	2001	1999	1998	1999	2000	2002	1999
MIN	104	39.4	30.6	21.2	11.5	14.6	14.5	90.1	222	207	189	160
(WY)	1998	2002	2002	1999	1999	1999	2002	2001	2003	2003	1998	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003#	
ANNUAL TOTAL	51039		46296			
ANNUAL MEAN	140		127		132	
HIGHEST ANNUAL MEAN					147	2000
LOWEST ANNUAL MEAN					121	2002
HIGHEST DAILY MEAN	869	Aug 13	769	Oct 21	993	Oct 20 1998
LOWEST DAILY MEAN	a13	Mar 20	b14	Mar 11	7.8	Mar 9 1999
ANNUAL SEVEN-DAY MINIMUM	13	Apr 5	14	Mar 11	8.0	Mar 5 1999
MAXIMUM PEAK FLOW			889	Oct 21	c1300	Oct 20 1998
MAXIMUM PEAK STAGE			33.24	Oct 21	34.07	Oct 20 1998
INSTANTANEOUS LOW FLOW			10	Mar 12	7.8	Mar 9 1999
ANNUAL RUNOFF (AC-FT)	101200		91830		95990	
ANNUAL RUNOFF (CFSM)	5.38		4.88		5.10	
ANNUAL RUNOFF (INCHES)	73.03		66.24		69.24	
10 PERCENT EXCEEDS	313		241		305	
50 PERCENT EXCEEDS	92		110		88	
90 PERCENT EXCEEDS	15		18		18	

\# See period of record; partial years used in monthly statistics
a Mar. 20-24 and Apr. 5-18
b Mar. 11-13, 15-17 and 20
c From rating curve extended above 600 cfs on basis of slope-area measurement at gage height 34.07 ft.
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. 21	0800	176	a8.63	Jul. 21	0130	67	11.43
Nov. 26	1600	253	a8.79	Aug. 15	unknown	*313	*12.49
May 24	0400	64	11.41	Sep. 04	1545	92	11.62
Jul. 13	1700	67	11.43	Sep. 20	2230	51	11.40

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	8.5	6.3	8.7	2.6	1.8	0.91	0.80	e14	19	37	e19	e34
2	6.3	6.4	7.5	2.9	1.8	0.95	e0.78	e11	15	40	e25	e40
3	5.7	6.2	e7.0	2.5	1.9	0.94	e0.77	e7.8	15	45	e18	43
4	6.1	8.8	e6.6	5.8	1.9	0.96	e0.76	e5.9	16	39	e15	36
5	5.5	8.7	e6.3	5.2	1.8	0.90	e0.78	e4.4	23	36	e13	e26
6	9.9	8.6	7.3	7.0	1.7	e0.85	e0.80	e3.3	34	33	e14	29
7	9.6	5.6	9.2	5.1	1.6	e0.80	e0.86	e2.8	25	36	e15	31
8	8.4	4.4	12	3.3	1.6	e0.75	e0.89	e2.8	24	39	e16	33
9	7.1	3.5	13	2.8	1.5	e0.72	0.94	e2.9	27	44	e14	28
10	8.5	3.4	9.9	2.7	1.5	e0.68	1.0	e3.0	30	46	e12	25
11	9.1	3.5	8.7	2.7	1.5	e0.65	1.2	e3.6	34	46	e11	27
12	11	5.2	9.3	2.5	1.4	e0.63	1.4	e4.5	36	48	e10	24
13	9.5	4.2	8.0	2.3	1.3	e0.64	1.6	e5.8	40	49	e12	41
14	9.2	4.5	6.5	2.2	1.3	e0.66	1.7	e6.8	31	46	e30	27
15	12	4.3	6.3	2.2	1.3	e0.68	1.8	e5.2	26	42	e90	20
16	21	4.6	5.9	2.3	1.3	e0.70	1.4	4.4	25	36	56	15
17	19	4.0	5.3	3.3	e1.2	0.75	1.3	4.3	35	33	33	12
18	16	3.9	5.1	4.6	e1.2	0.72	1.3	5.6	38	35	22	10
19	37	3.4	4.4	4.2	e1.1	0.71	1.5	8.7	30	40	23	8.4
20	73	3.7	3.6	3.4	e1.0	0.72	2.2	9.6	28	47	24	13
21	111	3.5	e3.3	2.5	e0.96	0.74	2.8	11	25	51	22	15
22	44	3.1	e3.1	e2.3	e0.93	0.73	3.8	14	24	40	e19	8.0
23	27	3.0	e3.0	e2.1	e0.93	0.72	e3.5	26	22	34	e16	7.8
24	17	3.0	3.8	e1.9	e0.94	0.73	e3.7	43	22	35	e13	15
25	15	4.7	3.5	e1.7	e0.94	0.71	e4.5	29	31	32	e11	26
26	18	60	3.1	e1.7	0.93	0.73	e11	21	34	32	8.8	17
27	14	29	e2.7	e1.8	0.93	0.74	e30	18	26	40	9.3	31
28	10	12	e2.5	e1.8	0.87	0.80	e21	17	28	38	10	33
29	8.4	12	e2.3	1.9	---	0.89	e15	19	26	e69	13	30
30	7.1	17	e2.3	2.0	---	0.99	e15	19	28	e50	25	28
31	6.5	---	2.5	1.8	---	0.83	---	22	---	e17	23	---
TOTAL	570.4	250.5	182.7	91.1	37.13	23.93	134.08	355.4	817	1255	642.1	733.2
MEAN	18.4	8.35	5.89	2.94	1.33	0.77	4.47	11.5	27.2	40.5	20.7	24.4
MAX	111	60	13	7.0	1.9	0.99	30	43	40	69	90	43
MIN	5.5	3.0	2.3	1.7	0.87	0.63	0.76	2.8	15	17	8.8	7.8
AC-FT	1130	497	362	181	74	47	266	705	1620	2490	1270	1450
CFSM	12.0	5.46	3.85	1.92	0.87	0.50	2.92	7.49	17.8	26.5	13.5	16.0
IN.	13.87	6.09	4.44	2.21	0.90	0.58	3.26	8.64	19.86	30.51	15.61	17.83

a At site 300 ft. downstream, at different datum
e Estimated

15056030 KAKUHAN CREEK NEAR HAINES—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)#

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	10.9	3.89	3.34	1.54	1.02	1.02	2.43	8.16	23.0	31.9	28.2	18.5
MAX	18.4	8.35	5.89	2.94	1.33	1.76	4.47	11.5	27.2	40.5	43.9	24.4
(WY)	2003	2003	2003	2003	2003	1999	2003	2003	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	20.7	11.7
(WY)	1998	2002	2002	2002	2002	2002	2002	2001	2000	2002	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003#	
ANNUAL TOTAL	4512.79		5092.54			
ANNUAL MEAN	12.4		14.0		11.3	
HIGHEST ANNUAL MEAN					14.0	2003
LOWEST ANNUAL MEAN					9.66	1998
HIGHEST DAILY MEAN	155	Aug 13	111	Oct 21	155	Aug 13 2002
LOWEST DAILY MEAN	0.40	Mar 22	0.63	Mar 12	0.36	Feb 24 2001
ANNUAL SEVEN-DAY MINIMUM	0.42	Mar 18	0.66	Mar 10	0.41	Feb 19 2001
MAXIMUM PEAK FLOW			b313	Aug 15	c415	Aug 31 1998
MAXIMUM PEAK STAGE			12.49	Aug 15	a8.77	Aug 31 1998
ANNUAL RUNOFF (AC-FT)	8950		10100		8180	
ANNUAL RUNOFF (CFSM)	8.08		9.12		7.38	
ANNUAL RUNOFF (INCHES)	109.72		123.82		100.26	
10 PERCENT EXCEEDS	28		36		31	
50 PERCENT EXCEEDS	6.5		7.8		4.3	
90 PERCENT EXCEEDS	0.51		0.92		0.75	

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

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.Sensor was moved upstream 200ft on May 15,2003.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 15.0°C, August 1-2, 1999; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 14.5°C, July 10 and July 12; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

TEMPERATURE, WATER (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	8.0	6.5	7.0	4.0	3.5	3.5	4.5	3.0	4.0	0.5	0.0	0.5
2	7.5	5.5	6.5	4.0	3.0	3.5	3.0	2.0	2.5	0.5	0.5	0.5
3	7.5	5.5	6.5	4.0	3.5	3.5	2.5	1.5	2.0	0.5	0.5	0.5
4	6.5	5.5	6.5	4.5	3.5	4.0	1.5	0.5	1.0	2.0	0.5	1.0
5	5.5	4.5	5.0	5.5	4.5	5.0	0.5	0.5	0.5	2.5	1.0	1.5
6	8.5	5.0	7.0	7.0	5.5	6.5	1.5	0.5	1.0	3.0	2.5	3.0
7	8.5	7.0	8.0	6.5	5.0	5.5	4.0	1.5	2.5	3.0	1.5	2.5
8	7.0	5.5	6.5	5.0	3.5	4.0	5.0	4.0	4.0	1.5	1.0	1.5
9	5.5	3.0	4.5	3.5	2.5	3.0	5.0	4.5	4.5	1.0	0.5	0.5
10	4.0	2.0	3.0	3.0	2.5	2.5	5.0	4.5	4.5	0.5	0.0	0.5
11	5.0	3.5	4.5	4.0	2.5	3.5	4.5	3.5	4.0	0.5	0.0	0.5
12	6.0	5.0	5.5	4.5	3.5	4.0	4.0	2.5	3.5	1.0	0.5	1.0
13	6.5	5.5	6.0	5.0	3.5	4.5	3.0	2.0	2.5	1.0	0.5	1.0
14	7.0	6.0	6.5	5.5	5.0	5.5	2.0	1.5	1.5	0.5	0.0	0.0
15	8.5	6.5	7.5	5.0	4.0	5.0	2.0	1.5	1.5	0.5	0.0	0.5
16	8.5	8.0	8.5	4.0	3.5	3.5	2.5	2.0	2.0	1.5	0.5	1.0
17	8.5	7.5	8.0	4.0	3.0	3.5	2.5	2.0	2.0	2.5	1.5	2.0
18	8.0	6.0	7.0	4.5	4.0	4.0	2.5	2.0	2.0	3.0	2.5	3.0
19	8.5	7.5	8.0	4.0	2.5	3.5	2.0	0.5	1.5	3.5	3.0	3.0
20	8.0	5.5	7.0	4.5	4.0	4.5	0.5	0.5	0.5	3.5	1.0	3.0
21	6.5	5.5	6.0	4.5	4.0	4.0	0.5	0.5	0.5	1.0	0.0	0.5
22	7.5	6.5	7.0	4.5	3.0	4.0	0.5	0.0	0.5	0.5	0.0	0.0
23	9.0	6.0	7.0	3.0	2.5	2.5	0.5	0.0	0.5	0.5	0.0	0.5
24	7.5	5.5	6.5	4.5	2.5	3.5	0.5	0.5	0.5	0.5	0.0	0.0
25	7.0	6.5	6.5	5.0	4.5	5.0	0.5	0.5	0.5	0.5	0.0	0.5
26	7.0	6.0	6.5	6.5	3.5	5.5	0.5	0.5	0.5	0.5	0.0	0.0
27	7.0	6.0	6.5	6.0	5.0	5.0	0.5	0.0	0.5	0.5	0.0	0.0
28	6.5	4.5	5.5	5.0	4.5	4.5	0.5	0.0	0.5	0.5	0.0	0.0
29	5.5	3.5	4.5	6.0	3.5	5.0	0.5	0.0	0.5	0.5	0.5	0.5
30	4.0	3.0	3.5	5.5	4.5	5.5	0.5	0.5	0.5	1.0	0.5	1.0
31	3.5	3.0	3.0	---	---	---	0.5	0.0	0.5	1.0	0.5	1.0
MONTH	9.0	2.0	6.2	7.0	2.5	4.2	5.0	0.0	1.7	3.5	0.0	1.0

15056030 KAKUHAN CREEK NEAR HAINES—Continued

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	1.0	1.0	0.5	1.0	0.5	0.5	0.5	6.5	4.0	5.0
2	1.5	1.0	1.0	1.0	1.0	1.0	0.5	0.5	0.5	6.0	3.0	4.0
3	2.0	1.0	1.5	1.5	1.0	1.5	0.5	0.5	0.5	5.0	3.0	3.5
4	2.0	2.0	2.0	1.5	1.0	1.5	0.5	0.5	0.5	4.5	1.5	3.0
5	2.0	1.5	2.0	1.0	0.0	0.5	0.5	0.5	0.5	5.0	2.5	3.5
6	2.0	1.5	2.0	0.5	0.0	0.5	0.5	0.5	0.5	5.5	3.0	4.0
7	2.0	1.0	1.5	0.5	0.5	0.5	1.0	0.5	0.5	6.5	3.0	4.5
8	1.5	1.0	1.5	0.5	0.5	0.5	1.5	1.0	1.0	8.0	4.0	5.5
9	2.0	1.5	1.5	0.5	0.0	0.5	1.5	1.0	1.5	8.5	4.5	6.0
10	2.5	1.5	2.0	0.5	0.5	0.5	2.5	1.5	2.0	6.5	5.0	6.0
11	3.0	2.5	2.5	0.5	0.5	0.5	3.0	2.0	2.5	6.5	5.5	6.0
12	2.5	2.0	2.0	0.5	0.5	0.5	3.5	2.0	2.5	6.0	4.5	5.5
13	2.0	1.0	1.5	0.5	0.5	0.5	4.0	2.0	2.5	---	---	---
14	1.5	1.0	1.0	0.5	0.5	0.5	4.0	2.0	3.0	---	---	---
15	1.0	0.5	1.0	0.5	0.5	0.5	3.5	2.5	3.0	5.5	3.0	4.0
16	0.5	0.0	0.5	0.5	0.5	0.5	2.5	2.5	2.5	6.5	3.0	4.5
17	0.5	0.0	0.5	0.5	0.5	0.5	4.0	2.0	3.0	7.0	3.0	4.5
18	0.5	0.0	0.5	0.5	0.5	0.5	3.5	2.5	3.0	7.5	4.0	5.5
19	0.5	0.0	0.5	0.5	0.5	0.5	5.0	2.5	3.5	7.5	4.0	5.5
20	0.5	0.0	0.5	1.0	0.5	0.5	5.5	3.0	4.0	7.5	3.5	5.5
21	0.5	0.5	0.5	1.0	0.5	1.0	5.5	3.5	4.5	8.5	4.0	6.0
22	0.5	0.0	0.5	1.0	1.0	1.0	6.0	4.0	4.5	8.0	5.5	6.5
23	0.5	0.0	0.5	1.0	0.5	1.0	7.5	4.0	5.0	6.0	5.0	5.5
24	0.5	0.0	0.5	1.5	1.0	1.0	8.5	4.0	5.5	6.5	5.0	5.5
25	0.5	0.0	0.5	1.0	0.5	1.0	9.0	5.0	6.5	6.0	4.5	5.5
26	0.5	0.5	0.5	1.0	0.5	1.0	8.5	4.5	6.0	7.0	5.0	6.0
27	0.5	0.5	0.5	1.5	1.0	1.5	7.5	4.5	6.0	8.0	4.5	6.0
28	1.0	0.5	0.5	1.5	1.5	1.5	8.0	4.0	5.5	8.5	5.0	6.5
29	---	---	---	2.0	1.5	1.5	8.0	4.5	5.5	7.5	6.0	7.0
30	---	---	---	2.5	1.5	2.0	8.5	5.0	6.0	9.5	6.0	7.0
31	---	---	---	1.5	0.5	1.0	---	---	---	8.5	6.0	7.0
MONTH	3.0	0.0	1.1	2.5	0.0	0.9	9.0	0.5	3.1	---	---	---

		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.0	5.5	6.0	13.5	8.5	11.0	12.5	8.5	10.0	8.0	7.5	7.5
2	7.5	5.5	6.5	10.0	8.0	9.0	10.5	8.0	9.0	9.0	8.0	8.5
3	9.0	5.0	6.5	9.0	7.5	8.0	10.5	8.0	9.0	9.0	7.5	8.0
4	9.0	5.5	7.0	10.0	7.0	8.0	9.0	8.0	8.5	10.0	7.0	8.5
5	10.0	7.0	8.0	9.5	8.0	8.5	12.0	7.5	9.5	11.0	6.0	8.0
6	10.0	6.5	8.0	11.5	7.0	9.0	13.0	8.0	10.0	10.0	8.0	9.0
7	9.0	6.0	7.5	14.0	8.0	10.0	14.0	8.5	10.5	10.0	8.0	8.5
8	10.5	5.0	7.5	14.0	9.5	11.0	13.5	9.0	10.5	9.0	7.5	8.0
9	11.5	6.0	8.5	14.0	9.0	11.5	11.5	7.5	9.0	9.0	7.0	8.0
10	12.0	7.0	9.0	14.5	9.0	11.5	12.0	6.5	9.0	9.0	7.0	8.0
11	10.5	7.0	8.5	11.5	10.5	11.0	13.5	7.5	10.0	9.0	7.0	8.0
12	11.0	6.5	8.5	14.5	10.0	11.5	10.5	9.0	9.5	9.0	7.5	8.0
13	9.5	7.0	7.5	14.0	9.0	11.5	11.5	9.0	10.0	8.0	6.0	7.0
14	10.5	6.5	8.0	11.0	9.5	10.0	10.5	9.0	9.5	6.0	4.0	5.0
15	8.5	6.5	7.5	10.5	9.0	9.5	10.5	8.5	9.5	5.0	3.0	4.0
16	10.0	6.5	8.0	9.5	8.5	9.0	8.5	8.0	8.5	5.5	2.5	3.5
17	9.5	7.5	8.5	10.5	9.0	9.5	10.0	7.5	8.5	5.5	3.0	4.0
18	8.0	6.0	7.0	13.0	8.5	10.5	10.0	7.0	8.0	5.0	4.0	4.5
19	7.0	6.0	6.5	14.0	8.5	11.0	9.0	7.0	8.0	6.0	4.0	4.5
20	9.0	6.0	7.0	12.0	9.0	10.5	9.0	7.0	7.5	7.5	5.5	6.5
21	10.5	7.0	8.0	9.5	7.5	8.5	9.5	6.5	7.5	6.5	5.0	5.5
22	10.5	7.0	8.5	9.5	7.5	8.0	10.0	6.0	7.5	6.5	4.5	5.5
23	9.0	7.0	8.0	12.0	7.5	9.5	10.5	7.5	8.5	6.0	4.5	5.5
24	8.5	7.5	8.0	10.0	9.0	9.5	10.5	8.0	9.0	6.5	3.0	4.5
25	8.5	7.5	8.0	9.5	8.5	9.0	10.5	8.0	9.0	8.5	6.5	7.0
26	7.5	6.5	7.0	9.5	8.5	8.5	9.5	7.0	8.5	7.5	6.5	7.0
27	8.5	6.0	7.0	9.0	8.0	8.5	9.5	8.5	9.0	7.0	6.0	6.5
28	9.5	6.5	7.5	9.5	8.0	8.5	12.0	8.0	9.5	12.0	7.0	9.0
29	11.5	6.5	9.0	10.0	8.0	9.0	10.5	8.5	9.5	11.0	8.5	9.5
30	13.0	8.5	10.0	10.0	7.5	8.5	9.5	7.5	9.0	10.0	8.5	9.0
31	---	---	---	11.0	7.5	9.0	8.0	7.5	8.0	---	---	---
MONTH	13.0	5.0	7.8	14.5	7.0	9.6	14.0	6.0	9.0	12.0	2.5	6.9

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

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

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 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	40	165	20	28	e49	e18	71	49	40	44	135
2	44	35	93	26	29	e33	e14	58	45	35	39	244
3	39	31	63	20	43	e40	e11	48	37	63	32	154
4	37	29	48	165	46	e48	e8.2	40	33	52	28	92
5	42	27	39	132	35	e28	e8.0	35	32	37	27	63
6	102	37	34	168	28	e18	e10	32	46	33	23	49
7	235	34	35	85	25	e10	e12	30	36	30	21	46
8	211	26	91	52	22	e9.0	e15	30	32	27	19	136
9	118	24	155	e40	21	e8.3	20	32	29	24	17	81
10	74	23	90	e34	30	e7.6	20	34	27	22	16	60
11	58	25	73	e30	37	e7.3	20	34	26	20	15	67
12	68	24	109	e27	28	e7.0	19	41	24	19	15	79
13	66	28	68	e25	27	e7.2	20	41	25	17	17	158
14	53	30	48	e23	23	e7.4	21	49	23	17	19	115
15	51	32	45	e22	20	e7.5	23	43	21	16	21	80
16	273	27	41	23	19	e7.7	23	34	20	16	21	56
17	282	46	35	128	17	e8.0	26	30	28	15	27	44
18	155	49	32	132	16	e8.5	24	28	79	14	24	43
19	146	95	28	122	15	e9.5	26	27	73	13	22	46
20	278	61	e24	e80	e14	e11.5	31	28	67	13	36	75
21	549	55	e21	e55	e13	e13	28	29	55	29	36	113
22	321	41	e18	e37	e13	e14	26	33	49	35	29	72
23	138	35	e26	e32	e12	e12	28	99	46	35	27	60
24	82	41	34	e28	e12	e10	34	210	44	25	26	215
25	58	80	26	e24	e13	e9.7	68	131	55	23	30	169
26	86	802	22	e22	e14	e9.6	112	111	141	23	25	137
27	119	463	20	e20	e15	e9.5	128	75	92	27	30	294
28	95	274	19	e19	e20	e19	109	57	78	31	28	154
29	68	173	e17	27	---	e47	87	48	68	141	25	89
30	54	283	e16	60	---	e48	78	43	49	69	66	62
31	45	---	17	39	---	e27	---	49	---	50	59	---
TOTAL	3997	2970	1552	1717	635	551.3	1067.2	1650	1429	1011	864	3188
MEAN	129	99.0	50.1	55.4	22.7	17.8	35.6	53.2	47.6	32.6	27.9	106
MAX	549	802	165	168	46	49	128	210	141	141	66	294
MIN	37	23	16	19	12	7.0	8.0	27	20	13	15	43
MED	82	36	35	32	21	10	23	41	45	27	26	80
AC-FT	7930	5890	3080	3410	1260	1090	2120	3270	2830	2010	1710	6320
CFSM	12.8	9.80	4.96	5.48	2.25	1.76	3.52	5.27	4.72	3.23	2.76	10.5
IN.	14.72	10.94	5.72	6.32	2.34	2.03	3.93	6.08	5.26	3.72	3.18	11.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)#

MEAN	98.6	56.6	58.8	34.8	19.0	17.3	28.2	77.2	88.7	63.0	61.9	99.5
MAX	129	99.0	128	55.4	23.4	22.7	37.8	107	114	79.1	131	128
(WY)	2003	2003	2000	2003	2001	2000	2000	2002	2000	2000	2002	1999
MIN	67.7	22.8	20.6	18.7	11.0	8.67	15.2	53.2	47.6	32.6	26.7	77.5
(WY)	2002	2002	2002	2000	2000	2002	2002	2003	2003	2003	2001	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003#	
ANNUAL TOTAL	25431.2		20631.5			
ANNUAL MEAN	69.7		56.5		58.3	
HIGHEST ANNUAL MEAN					70.3	2000
LOWEST ANNUAL MEAN					50.5	2001
HIGHEST DAILY MEAN	802	Nov 26	802	Nov 26	1110	Dec 27 1999
LOWEST DAILY MEAN	5.5	Mar 24	7.0	Mar 12	5.0	Mar 10 2000
ANNUAL SEVEN-DAY MINIMUM	5.8	Mar 18	7.4	Mar 10	5.8	Mar 18 2002
MAXIMUM PEAK FLOW			a1510	Nov 26	a1650	Dec 27 1999
MAXIMUM PEAK STAGE			30.41	Nov 26	30.52	Dec 27 1999
INSTANTANEOUS LOW FLOW			b		5.0	Mar 10 2000
ANNUAL RUNOFF (AC-FT)	50440		40920		42200	
ANNUAL RUNOFF (CFSM)	6.90		5.60		5.77	
ANNUAL RUNOFF (INCHES)	93.67		75.99		78.37	
10 PERCENT EXCEEDS	166		128		128	
50 PERCENT EXCEEDS	40		34		36	
90 PERCENT EXCEEDS	8.1		14		11	

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

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.--46 years (water years 1917-25, 1928-33, 1947-59, 1985-2003), 445 ft^3/s, 165.6 in/yr, 322,402 acre-ft/yr. Mean discharge for water years 1985-2002 adjusted for change in contents of Swan Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 133,256 acre-ft, January 7, 2003, elevation, 334.9 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, 133,256 acre-ft, January 7, 2003, elevation, 334.90 ft; minimum contents observed, 91,594 acre-ft, August 30, 2003, elevation, 306.1 ft. Maximum release from reservoir (mean daily, not adjusted for changes in storage),2,659 ft^3/s, January 6, 2003; minimum release, 240.0 ft^3/s, June 9, 2003.

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Sep 30	330.2	126,460	
Oct 31	324.4	188,070	-8,390
Nov 30	330.0	126,170	+8,100
Dec 31	329.1	124,860	-1,310
Jan 31	330.1	126,310	+1,450
Feb 28	318.3	109,240	-17,070
Mar 31	313.7	102,590	-6,650
Apr 30	311.1	98,820	-3,760
May 31	319.0	110,260	+11,440
Jun 30	323.1	116,180	+5,920
Jul 31	315.2	104,760	-11,430
Aug 31	306.7	92,460	-12,300
Sep 30	326.3	120,810	+28,350
		CAL YR 2002	+14,310
		WTR YR 2003	-5,650

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

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	417	19	436	300
NOV	424	14	438	574
DEC	435	84	519	498
JAN	426	243	669	693
FEB	434	0	434	127
MAR	435	0	435	327
APR	378	0	378	315
MAY	361	0	361	547
JUN	345	0	345	e300
JUL	59	0	59	e18
AUG	413	0	413	213
SEP	365	0	365	842
CAL YR 2002	318	105	423	443
WTR YR 2003	64	340	404	397

e Estimated

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)
Jan. 7	0330	3200	4.11

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	338	131	293	567	449	145	765	307	459	273	104	522
2	474	122	254	801	428	173	594	299	460	258	99	1140
3	429	115	222	941	379	167	469	276	440	279	97	1300
4	358	109	198	1470	318	162	378	248	384	450	93	897
5	336	109	178	1890	274	176	312	222	335	443	88	666
6	550	158	163	2800	237	172	287	201	305	376	84	626
7	572	155	185	2920	211	154	331	184	288	315	79	617
8	508	152	296	1910	189	136	298	170	273	279	74	595
9	473	145	559	1220	171	121	357	162	256	251	69	527
10	447	138	688	809	156	112	321	160	236	220	64	640
11	382	144	774	598	145	103	283	161	220	198	60	793
12	331	267	1130	470	134	100	267	176	218	177	56	715
13	405	517	944	376	125	238	253	240	226	174	54	714
14	386	781	815	310	117	313	247	313	242	165	51	800
15	350	916	773	275	118	323	248	332	339	152	61	773
16	308	851	669	261	122	327	261	315	447	139	89	686
17	275	786	606	302	149	327	324	285	451	136	123	550
18	242	711	536	321	182	375	338	255	480	133	353	944
19	226	760	429	344	245	335	374	231	486	130	350	1430
20	275	995	352	427	288	348	338	215	467	135	335	1240
21	267	1690	297	404	270	396	324	215	411	166	485	1210
22	242	1270	288	344	237	426	318	298	348	187	464	969
23	218	853	527	292	210	353	304	561	298	185	406	726
24	197	627	655	288	187	301	291	1130	258	174	356	903
25	179	494	642	320	174	279	287	1050	244	159	302	1110
26	165	506	662	635	159	259	298	1090	293	145	257	1010
27	174	498	531	804	151	232	311	886	286	134	220	786
28	172	469	442	739	147	246	318	721	286	125	194	608
29	161	407	367	715	---	411	311	700	293	118	171	470
30	150	342	324	644	---	666	308	605	280	110	190	370
31	140	---	423	545	---	919	---	515	---	103	401	---
TOTAL	9730	15218	15222	24742	5972	8795	10115	12523	10009	6289	5829	24337
MEAN	314	507	491	798	213	284	337	404	334	203	188	811
MAX	572	1690	1130	2920	449	919	765	1130	486	450	485	1430
MIN	140	109	163	261	117	100	247	160	218	103	51	370
MED	308	482	442	567	185	259	312	285	295	174	104	750
AC-FT	19300	30180	30190	49080	11850	17440	20060	24840	19850	12470	11560	48270
CFSM	9.78	15.8	15.3	24.9	6.64	8.84	10.5	12.6	10.4	6.32	5.86	25.3
IN.	11.28	17.64	17.64	28.67	6.92	10.19	11.72	14.51	11.60	7.29	6.76	28.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2003, BY WATER YEAR (WY)#

MEAN	694	567	421	356	316	262	353	503	471	334	333	449
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1915 - 2003#	
ANNUAL TOTAL	156103		148781			
ANNUAL MEAN	428		408		423	
HIGHEST ANNUAL MEAN					556	1992
LOWEST ANNUAL MEAN					302	1978
HIGHEST DAILY MEAN	2260	Aug 28	2920	Jan 7	4410	Oct 15 1961
LOWEST DAILY MEAN	47	Mar 24	51	Aug 14	20	Sep 9 1928
ANNUAL SEVEN-DAY MINIMUM	53	Mar 18	59	Aug 9	23	Sep 5 1928
MAXIMUM PEAK FLOW			3200	Jan 7	a5400	Oct 15 1961
MAXIMUM PEAK STAGE			4.11	Jan 7	b5.85	Oct 15 1961
INSTANTANEOUS LOW FLOW			48	Aug 15	20	Sep 9 1928
ANNUAL RUNOFF (AC-FT)	309600		295100		306100	
ANNUAL RUNOFF (CFSM)	13.3		12.7		13.2	
ANNUAL RUNOFF (INCHES)	180.90		172.42		178.86	
10 PERCENT EXCEEDS	854		796		863	
50 PERCENT EXCEEDS	330		308		320	
90 PERCENT EXCEEDS	116		134		99	

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

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK

LOCATION.--Lat 55°43'58", long 132°58'02", in NE$^1/_4$ NE$^1/_4$ sec. 10, T. 71 S., R. 81 E. (Craig C-4 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, on left bank, immediately upstream from bridge on Forest Road 2050, 6 mi upstream from Middle Fork Staney Creek and 12.4 mi north of Klawock.

DRAINAGE AREA.--3.07 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1990 to September 2003 (discontinued).

REVISED RECORDS.--WDR AK-92-1: 1991. WDR AK-00-1: 1990(M), 1991-92(P), 1993, 1994-99(P).

GAGE.--Water-stage recorder. Elevation of gage is 600 ft above sea level, from topographic map.

REMARKS.--Records fair except for those above 200 ft^3/s which are poor and estimated daily discharges which are poor.

EXTREMES FOR CURRENT YEAR.-- Peak discharges greater than base discharge of 350 ft^3/s (revised) and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 6	0100	357	4.41	Sept 1	1915	362	4.43
Nov 20	1900	380	4.49	Sept 13	1615	*440	*4.69
Jan 6	0115	416	4.61				

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	24	3.0	4.3	47	4.9	15	6.7	4.2	6.7	2.8	1.5	150
2	16	2.8	3.6	52	22	13	4.3	3.3	16	2.5	1.6	122
3	7.2	2.6	3.1	40	14	8.5	3.0	2.5	5.7	16	1.6	47
4	5.7	2.7	2.7	71	6.8	11	2.6	2.0	3.5	13	1.4	13
5	39	8.6	2.6	116	4.7	9.2	2.3	1.7	2.7	5.9	1.2	19
6	86	24	2.7	91	3.5	3.5	4.0	1.6	2.2	3.9	1.2	29
7	17	8.1	9.6	38	2.8	2.5	12	1.5	1.9	3.4	1.1	22
8	20	4.3	25	9.4	2.5	e1.8	12	1.7	1.7	3.0	0.96	9.5
9	22	3.2	29	5.3	2.3	e1.3	9.0	2.0	1.5	2.6	0.91	5.9
10	9.6	2.7	23	4.1	2.2	e1.1	9.2	2.3	1.3	2.1	0.82	78
11	6.1	2.7	26	3.4	2.1	e1.0	10	2.2	1.2	1.9	0.81	41
12	25	30	65	3.0	1.9	e1.1	8.1	39	1.5	1.7	0.81	16
13	22	108	21	2.6	2.1	e1.5	6.5	25	1.8	2.0	0.81	204
14	17	30	24	2.3	2.1	e3.5	6.5	18	1.6	1.8	0.86	60
15	13	24	77	2.7	2.4	e8.0	8.1	11	4.2	1.7	4.4	18
16	7.7	15	17	4.5	2.6	e6.5	6.4	9.7	3.4	4.5	9.2	9.3
17	5.5	17	13	29	11	e7.3	7.0	5.9	48	14	11	6.9
18	4.4	12	10	9.4	15	e9.0	8.0	4.6	19	5.3	8.3	90
19	7.6	42	6.3	25	45	e6.5	13	3.9	12	3.0	3.3	24
20	15	96	4.5	14	11	e10	11	3.0	8.1	4.2	3.8	96
21	7.1	28	3.5	5.7	5.1	e8.0	8.2	5.1	4.6	5.1	5.6	103
22	11	9.5	6.0	3.4	3.3	e6.5	6.2	17	3.4	3.8	5.0	24
23	6.9	5.8	125	2.9	2.6	e5.0	8.7	37	2.9	4.1	26	12
24	4.7	4.3	39	10	2.4	4.5	8.5	24	2.6	2.7	6.2	122
25	3.8	16	35	28	2.4	3.9	12	24	6.9	2.1	3.2	121
26	12	67	14	92	2.5	5.4	8.1	15	7.4	1.8	2.3	22
27	27	43	7.5	36	4.6	6.6	9.2	10	5.2	1.7	1.9	14
28	8.1	18	5.5	12	7.8	15	6.6	11	11	1.7	1.7	8.8
29	5.0	7.9	4.3	20	---	64	5.7	9.9	4.7	1.6	1.6	6.0
30	3.8	5.4	4.3	24	---	115	5.4	5.0	3.0	1.4	45	4.6
31	3.3	---	62	8.7	---	14	---	5.5	---	1.3	46	---
TOTAL	462.5	643.6	675.5	812.4	191.6	369.2	228.3	308.6	195.7	122.6	200.08	1498.0
MEAN	14.9	21.5	21.8	26.2	6.84	11.9	7.61	9.95	6.52	3.95	6.45	49.9
MAX	86	108	125	116	45	115	13	39	48	16	46	204
MIN	3.3	2.6	2.6	2.3	1.9	1.0	2.3	1.5	1.2	1.3	0.81	4.6
AC-FT	917	1280	1340	1610	380	732	453	612	388	243	397	2970
CFSM	4.86	6.99	7.10	8.54	2.23	3.88	2.48	3.24	2.12	1.29	2.10	16.3
IN.	5.60	7.80	8.19	9.84	2.32	4.47	2.77	3.74	2.37	1.49	2.42	18.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)#

MEAN	32.8	23.6	26.6	25.5	20.2	15.5	16.5	14.6	8.79	5.70	10.6	27.3
MAX	61.1	40.2	49.1	48.9	51.7	35.1	29.7	33.8	21.0	11.8	24.8	49.9
(WY)	2000	1994	1991	1997	1993	1994	1997	1999	1999	1997	2002	2003
MIN	14.9	13.0	11.5	11.7	6.84	4.99	7.61	3.87	1.59	1.46	1.80	10.4
(WY)	2003	1997	1997	2002	2003	2002	2003	1998	1993	1993	1993	1993

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

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003#	
ANNUAL TOTAL	6274.9		5708.08			
ANNUAL MEAN	17.2		15.6		19.1	
HIGHEST ANNUAL MEAN					24.7	1994
LOWEST ANNUAL MEAN					15.4	1996
HIGHEST DAILY MEAN	304	Feb 14	204	Sep 13	793	Oct 26 1993
LOWEST DAILY MEAN	1.7	Jul 15	a0.81	Aug 11	0.38	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	1.9	Jul 9	0.85	Aug 8	0.49	Jul 15 1993
MAXIMUM PEAK FLOW			440	Sep 13	b1110	Jan 29 1993
MAXIMUM PEAK STAGE			4.69	Sep 13	6.34	Jan 29 1993
INSTANTANEOUS LOW FLOW			c0.81	Aug 9	d0.37	Jul 20 1993
ANNUAL RUNOFF (AC-FT)	12450		11320		13830	
ANNUAL RUNOFF (CFSM)	5.60		5.09		6.22	
ANNUAL RUNOFF (INCHES)	76.03		69.17		84.50	
10 PERCENT EXCEEDS	37		39		44	
50 PERCENT EXCEEDS	8.1		6.5		9.1	
90 PERCENT EXCEEDS	3.0		1.7		2.2	

\# See Period of Record; partial years used in monthly summary statistics
a Aug. 11 to Aug. 13
b From rating extended above 140 ft^3/s
c Aug. 9 to Aug. 14
d Jul. 20 and 21, 1993

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to September 2003 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: November 1990 to September 2003 (discontinued).

INSTRUMENTATION.--Electronic water temperature recorder since November 20, 1990, set for 2-hour recording interval. New water temperature recorder installed April 11, 1996 with a 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 sections on November 15 and September 16. 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 recorded, 18.5°C, June 30, 1992, July 16, 1993, and July 2-4, 1998; minimum, 0.0°C, on many days during winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE.--Maximum, 17.0°C August 8-9, and 13; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)
Nov							
15...	1011	24.8	10.0	2.38	27.0	6.1	6.7
15...	1012	24.8	15.0	2.38	27.0	6.1	6.7
15...	1013	24.8	20.0	2.38	27.0	6.1	6.7
15...	1014	24.8	25.0	2.38	27.0	6.1	6.7
15...	1015	24.8	30.0	2.38	27.0	6.1	6.7
Sept							
16...	1055	23.9	2.0	2.09	8.6	8.8	6.5
16...	1056	23.9	7.0	2.09	8.6	8.8	6.5
16...	1057	23.9	12.0	2.09	8.6	8.7	6.5
16...	1058	23.9	17.0	2.09	8.6	8.7	6.5

TEMPERATURE, WATER, 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	8.5	7.5	8.0	3.5	2.5	3.0	5.0	4.0	4.5	2.5	1.5	2.0
2	8.5	7.5	8.0	4.0	3.0	3.5	4.0	4.0	4.0	2.5	2.0	2.0
3	7.5	6.0	7.0	4.0	3.0	3.5	4.0	2.0	3.0	3.0	2.5	3.0
4	7.5	6.5	7.0	5.0	4.0	4.5	2.0	1.0	1.5	3.5	3.0	3.5
5	8.5	7.5	7.5	6.0	4.5	5.5	1.5	1.0	1.5	4.0	3.0	3.5
6	9.0	8.5	9.0	7.0	6.0	6.5	2.5	1.5	2.0	4.0	3.5	4.0
7	9.0	8.5	8.5	6.5	6.0	6.0	4.5	2.5	3.5	3.5	2.0	3.0
8	9.0	8.0	8.5	6.0	5.0	5.5	5.5	4.5	5.0	2.0	0.5	1.5
9	8.0	6.5	7.5	5.5	4.5	5.0	6.0	5.5	5.5	1.0	0.5	0.5
10	6.5	5.0	5.5	6.0	5.0	5.5	5.5	5.0	5.5	1.5	0.5	1.0
11	5.5	4.5	5.0	6.5	5.5	6.0	5.0	4.5	4.5	1.0	0.5	1.0
12	6.5	5.5	6.0	6.5	6.0	6.5	5.5	4.0	5.0	1.5	0.5	1.0
13	7.5	6.5	7.0	7.0	6.5	6.5	4.0	3.5	3.5	0.5	0.0	0.5
14	8.0	7.5	7.5	6.5	6.0	6.0	4.0	3.5	4.0	1.0	0.0	0.5
15	8.5	7.5	8.0	6.0	6.0	6.0	4.5	4.0	4.5	2.0	1.0	1.5
16	8.5	8.0	8.5	6.0	5.0	5.5	4.0	3.5	4.0	3.0	2.0	2.5
17	9.0	7.5	8.5	5.5	5.0	5.0	3.5	3.0	3.0	4.0	3.0	3.5
18	8.0	7.0	7.5	5.0	5.0	5.0	3.0	2.5	2.5	4.0	3.5	3.5
19	9.0	8.0	8.5	5.5	5.0	5.5	2.5	2.0	2.0	4.5	4.0	4.0
20	9.0	8.0	8.5	6.5	5.0	5.5	2.0	1.0	1.5	4.0	3.0	3.5
21	9.0	8.5	9.0	6.0	5.0	6.0	1.0	0.5	1.0	3.0	1.0	2.0
22	9.0	8.5	9.0	5.0	3.5	4.5	2.5	1.0	1.5	1.0	0.0	0.5
23	8.5	8.0	8.0	4.0	3.0	3.5	3.5	2.5	3.0	0.5	0.0	0.0
24	8.0	7.5	8.0	4.5	3.5	4.0	4.0	3.0	3.5	1.0	0.0	0.5
25	8.5	7.5	8.0	5.5	4.5	5.0	3.0	2.5	3.0	2.0	1.0	1.5
26	8.0	7.0	7.5	6.5	5.5	6.0	2.5	2.0	2.5	2.5	2.0	2.5
27	7.5	7.0	7.5	6.0	5.5	5.5	2.0	1.0	1.5	3.0	2.5	2.5
28	7.0	5.5	6.0	5.5	5.0	5.5	1.0	0.0	0.5	3.5	2.5	3.0
29	5.5	4.5	5.0	6.0	5.5	5.5	0.5	0.0	0.0	3.5	3.0	3.5
30	4.5	3.5	4.0	5.5	5.0	5.5	1.0	0.0	0.5	3.5	3.0	3.0
31	3.5	2.5	3.0	---	---	---	1.5	0.5	1.0	3.0	2.0	2.5
MONTH	9.0	2.5	7.3	7.0	2.5	5.2	6.0	0.0	2.9	4.5	0.0	2.2

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK—Continued

TEMPERATURE, WATER, 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	2.5	2.0	2.0	2.0	1.5	1.5	3.0	1.0	2.0	7.5	6.0	7.0
2	2.5	2.0	2.5	2.5	1.5	2.0	3.0	0.5	1.5	8.5	4.5	6.5
3	3.0	2.5	3.0	3.0	2.0	2.5	3.0	0.0	1.5	8.0	5.0	6.5
4	3.5	2.5	3.0	3.0	2.5	3.0	2.0	0.5	1.0	7.0	4.0	5.5
5	2.5	1.5	2.0	3.0	1.0	2.0	3.5	0.5	2.0	8.5	4.0	6.0
6	2.0	1.0	1.5	1.5	0.0	0.5	2.0	1.0	1.5	8.5	5.0	7.0
7	2.0	1.0	1.5	0.5	0.0	0.0	2.0	1.0	1.5	10.5	5.5	7.5
8	1.5	1.0	1.0	0.5	0.0	0.0	3.0	1.0	2.0	10.5	5.5	8.0
9	2.0	1.0	1.0	0.5	0.0	0.0	3.0	1.0	2.0	11.0	6.5	8.5
10	2.0	0.5	1.0	0.5	0.0	0.0	4.0	2.0	3.0	11.5	7.5	9.0
11	2.0	1.0	1.5	0.5	0.0	0.0	4.5	3.0	3.5	9.0	8.0	8.0
12	2.0	1.0	1.5	0.0	0.0	0.0	5.0	2.0	3.5	8.0	5.0	6.0
13	2.0	1.0	1.5	0.0	0.0	0.0	5.5	2.0	4.0	6.0	4.5	5.0
14	2.0	0.5	1.5	0.0	0.0	0.0	5.0	2.5	4.0	6.0	4.0	5.0
15	2.5	1.5	2.0	0.5	0.0	0.0	4.5	3.5	4.0	5.5	4.0	5.0
16	2.5	2.0	2.5	0.5	0.0	0.0	4.0	3.0	3.5	6.5	4.0	5.0
17	3.0	2.5	3.0	0.5	0.0	0.0	4.5	2.5	3.5	8.0	4.0	6.0
18	3.0	2.5	2.5	0.5	0.0	0.0	3.5	2.5	3.0	7.5	5.0	6.5
19	3.5	2.5	3.0	0.5	0.0	0.5	5.0	2.5	3.5	8.0	5.0	6.5
20	3.0	2.0	2.5	1.0	0.0	0.5	5.0	2.5	4.0	10.0	5.0	7.5
21	2.0	0.5	1.5	1.0	0.0	0.5	6.0	3.5	4.5	8.0	7.0	7.5
22	1.5	0.0	0.5	1.5	0.5	1.0	5.0	3.5	4.0	7.5	6.0	6.5
23	1.0	0.0	0.5	2.0	0.0	1.0	5.5	4.0	4.5	7.0	6.5	6.5
24	0.5	0.0	0.5	2.5	0.5	1.5	7.5	3.0	5.5	7.5	6.5	7.0
25	1.0	0.5	0.5	2.5	1.0	1.5	8.0	4.0	6.0	7.0	6.0	6.5
26	2.0	0.5	1.0	3.0	1.5	2.0	8.0	4.5	6.0	8.0	6.5	7.0
27	1.5	0.5	1.0	3.0	1.5	2.5	6.5	4.5	5.5	8.5	6.0	7.5
28	2.0	1.0	1.5	2.5	1.5	2.0	7.5	3.5	6.0	9.0	7.5	8.0
29	---	---	---	2.0	1.0	1.5	9.0	4.5	7.0	8.0	7.0	7.5
30	---	---	---	2.0	1.5	2.0	9.0	5.5	7.5	9.5	7.0	8.0
31	---	---	---	2.5	1.0	1.5	---	---	---	10.5	8.5	9.0
MONTH	3.5	0.0	1.7	3.0	0.0	1.0	9.0	0.0	3.7	11.5	4.0	6.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.5	8.0	8.5	11.0	10.0	10.5	14.5	13.5	14.0	10.5	10.0	10.0
2	8.5	7.0	8.0	12.5	10.5	11.0	14.5	13.0	13.5	10.5	10.0	10.5
3	10.0	6.0	8.5	11.0	9.5	10.5	14.5	12.5	13.5	11.0	10.0	10.5
4	10.5	9.0	9.5	10.0	9.0	9.5	13.5	11.0	12.5	11.0	9.5	10.5
5	13.5	9.0	11.5	11.0	9.0	10.0	13.0	11.0	12.0	11.0	10.0	10.5
6	15.0	11.0	13.0	11.5	10.0	11.0	16.0	10.5	13.5	11.0	10.5	10.5
7	15.0	11.5	13.0	14.0	10.5	12.0	16.5	12.0	14.5	11.0	10.0	10.5
8	15.0	10.5	13.0	14.5	12.0	12.5	17.0	12.5	15.0	11.0	10.0	10.5
9	16.0	11.0	13.5	15.5	11.5	13.5	17.0	13.0	15.5	11.0	9.5	10.5
10	16.5	11.5	14.0	16.0	12.5	14.5	16.5	13.0	15.0	10.5	10.0	10.5
11	14.5	12.5	13.5	16.5	13.0	15.0	16.5	12.5	15.0	10.5	9.5	10.0
12	12.5	11.5	12.0	16.5	13.5	15.0	16.5	13.0	14.5	11.0	10.0	10.5
13	11.5	10.0	11.0	15.0	14.0	14.5	17.0	14.5	15.5	10.5	9.5	10.0
14	11.0	9.5	10.0	15.0	13.0	14.0	16.0	14.5	15.5	10.0	9.5	10.0
15	11.5	9.5	10.5	14.0	13.0	13.5	15.0	13.0	14.0	10.0	9.0	9.5
16	11.0	10.0	10.5	13.0	12.0	12.5	13.0	11.5	12.5	9.5	8.0	9.0
17	10.5	8.0	9.5	12.0	10.5	11.0	12.0	11.0	11.5	9.0	8.0	8.5
18	9.0	7.5	8.5	14.5	11.0	12.5	12.5	11.0	11.5	9.0	8.0	8.5
19	10.0	8.0	9.0	13.0	12.0	12.5	13.0	11.0	12.0	9.0	8.0	8.5
20	9.5	8.0	9.0	13.0	12.5	12.5	12.0	11.0	11.5	9.0	8.5	9.0
21	10.0	9.0	9.5	13.0	12.0	12.5	12.0	10.5	11.0	9.0	8.5	9.0
22	10.5	9.0	10.0	12.0	11.0	11.5	11.5	10.5	11.0	9.0	7.5	8.0
23	11.5	9.5	10.5	13.0	11.0	12.0	11.0	9.5	10.5	7.5	6.5	7.0
24	11.0	10.0	10.5	14.5	11.0	13.0	11.5	9.5	10.5	8.5	7.5	8.5
25	11.0	9.5	10.5	15.5	12.0	14.0	12.0	9.0	10.5	9.0	8.5	8.5
26	10.0	9.0	9.5	14.0	13.0	13.5	12.5	9.5	11.0	9.0	8.5	9.0
27	10.0	9.0	9.5	14.5	13.0	13.5	12.0	11.0	11.5	10.0	9.0	9.5
28	11.5	8.5	10.0	16.5	13.0	14.5	13.5	10.0	12.0	11.0	9.5	10.0
29	11.5	9.5	10.5	15.0	13.5	14.5	12.5	10.5	11.5	11.0	8.5	9.5
30	11.0	10.0	10.5	16.5	12.5	14.5	11.5	10.0	10.5	11.0	9.0	10.0
31	---	---	---	15.0	13.0	14.0	10.5	10.0	10.0	---	---	---
MONTH	16.5	6.0	10.6	16.5	9.0	12.8	17.0	9.0	12.7	11.0	6.5	9.6

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 6	0345	8240	14.18	Jan 6	0115	*10800	*15.03
Nov 20	2115	7120	13.75	Sept 13	2115	9910	14.75

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	404	104	105	942	146	213	220	57	141	51	25	1790
2	529	95	85	1310	583	266	157	47	232	45	25	2840
3	237	89	70	530	456	168	108	40	141	188	25	684
4	183	85	56	1280	203	157	84	35	89	259	24	288
5	541	211	55	2830	143	228	69	32	66	145	22	324
6	3070	406	49	3280	108	112	94	30	53	90	21	454
7	633	258	142	701	88	e60	354	29	44	71	20	616
8	664	166	1070	275	74	e40	248	28	39	55	19	254
9	569	134	958	167	65	e35	220	28	35	46	18	155
10	266	113	454	124	59	e32	171	29	33	39	18	1350
11	181	102	544	101	55	e30	157	28	29	35	17	1010
12	252	292	1120	86	51	e32	151	507	29	32	17	389
13	563	1480	640	68	50	e57	124	447	29	32	17	3600
14	312	781	322	65	45	e340	104	433	27	32	18	1960
15	323	597	1720	63	45	309	110	283	68	e27	99	523
16	237	275	425	114	49	324	116	255	76	31	204	261
17	197	453	334	488	114	275	156	161	568	114	166	166
18	165	332	243	223	227	842	156	102	520	86	155	1180
19	184	851	171	360	867	303	236	82	261	47	79	669
20	553	1960	123	389	311	407	209	59	191	45	59	1090
21	247	1050	91	179	147	413	160	53	114	71	84	1280
22	390	249	144	116	88	396	121	176	75	66	74	564
23	266	159	2830	102	71	239	106	611	64	86	286	250
24	187	116	1340	234	66	162	106	528	54	54	140	2060
25	154	138	812	707	67	127	126	787	61	38	70	1860
26	140	1050	397	1710	86	129	121	384	132	32	46	530
27	401	733	210	1140	127	130	95	243	88	30	37	320
28	226	414	155	303	227	169	99	168	135	30	34	216
29	165	192	117	247	---	1030	74	165	95	28	31	156
30	134	134	118	437	---	2030	67	112	61	26	590	116
31	116	---	1270	222	---	442	---	115	---	24	651	---
TOTAL	12489	13019	16170	18793	4618	9497	4319	6054	3550	1955	3091	26955
MEAN	403	434	522	606	165	306	144	195	118	63.1	99.7	898
MAX	3070	1960	2830	3280	867	2030	354	787	568	259	651	3600
MIN	116	85	49	63	45	30	67	28	27	24	17	116
AC-FT	24770	25820	32070	37280	9160	18840	8570	12010	7040	3880	6130	53470
CFSM	7.96	8.58	10.3	12.0	3.26	6.05	2.85	3.86	2.34	1.25	1.97	17.8
IN.	9.18	9.57	11.89	13.82	3.40	6.98	3.18	4.45	2.61	1.44	2.27	19.82
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)#												
MEAN	659	557	592	463	385	337	296	231	121	94.1	198	492
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	79.0	26.5	22.1	26.6	166
(WY)	2003	1997	1997	1998	1994	2002	2003	1998	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003#	
ANNUAL TOTAL	116966		120510			
ANNUAL MEAN	320		330		369	
HIGHEST ANNUAL MEAN					506	1992
LOWEST ANNUAL MEAN					283	1995
HIGHEST DAILY MEAN	3070	Oct 6	3600	Sep 13	14900	Oct 26 1993
LOWEST DAILY MEAN	a27	Mar 24	b17	Aug 11	4.4	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	29	Mar 19	18	Aug 8	6.0	Jul 15 1993
MAXIMUM PEAK FLOW			10800	Jan 6	c19800	Oct 26 1993
MAXIMUM PEAK STAGE			15.03	Jan 6	17.20	Oct 26 1993
INSTANTANEOUS LOW FLOW			d16	Aug 12	4.0	Jul 21 1993
ANNUAL RUNOFF (AC-FT)	232000		239000		267100	
ANNUAL RUNOFF (CFSM)	6.33		6.52		7.29	
ANNUAL RUNOFF (INCHES)	85.99		88.60		98.99	
10 PERCENT EXCEEDS	765		797		881	
50 PERCENT EXCEEDS	175		155		171	
90 PERCENT EXCEEDS	56		32		38	

\# See Period of Record;partial years used in monthly statistics
a Mar. 24 and 25
b Aug. 11-13
c From rating curve extended above 3300 ft^3/sec
d Aug. 12 and 13

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 stream average by cross section on November 15, 2003. No variation was found in the temperature cross section. No variation was found between mean stream temperature and sensor temperature.

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, 19.5°C, August 8-9; minimum, 0.0°C on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instan-taneous dis-charge, cfs (00061)	Temper-ature, water, deg C (00010)	Temper-ature, air, deg C (00020)
NOV							
15...	0835	109	103	8.94	666	6.5	6.1
15...	0836	109	83.0	8.94	666	6.5	6.1
15...	0837	109	63.0	8.94	666	6.5	6.1
15...	0838	109	43.0	8.94	666	6.5	6.1
15...	0839	109	23.0	8.94	666	6.5	6.1
15...	0840	109	3.00	8.94	666	6.5	6.1

TEMPERATURE, WATER, 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	9.0	8.0	8.5	5.5	3.5	5.0	6.0	5.0	5.5	3.0	2.0	2.5
2	9.0	8.0	8.5	5.5	3.5	4.5	5.5	4.0	5.0	3.0	2.5	3.0
3	8.0	7.0	7.5	5.5	4.0	5.0	5.0	3.5	4.5	4.0	3.0	3.5
4	8.5	7.0	8.0	6.5	5.0	5.5	3.5	2.0	3.0	4.5	4.0	4.5
5	9.5	8.0	8.5	7.0	5.5	6.0	3.0	2.5	3.0	5.0	4.0	4.5
6	10.0	9.5	10.0	7.5	6.5	7.0	3.5	2.5	3.0	5.5	5.0	5.5
7	10.0	9.5	9.5	7.0	6.0	6.5	4.0	3.0	4.0	5.0	3.5	4.5
8	9.5	9.0	9.5	6.5	6.0	6.5	5.5	4.0	4.5	4.0	2.0	3.0
9	9.0	7.5	8.5	6.5	5.0	6.0	6.0	5.5	6.0	2.5	1.0	2.0
10	7.5	6.0	6.5	7.0	5.5	6.5	6.5	6.0	6.0	2.0	0.5	1.5
11	7.0	5.5	6.0	7.0	6.0	7.0	6.0	5.0	5.5	2.0	0.5	0.5
12	7.5	6.5	7.0	7.5	7.0	7.0	6.0	5.0	5.5	1.5	0.0	1.0
13	8.5	7.0	8.0	7.5	7.5	7.5	5.0	4.5	4.5	1.0	0.0	0.5
14	8.5	8.0	8.5	7.5	7.0	7.0	5.0	4.5	4.5	0.5	0.0	0.5
15	9.0	8.0	8.5	7.0	6.5	7.0	5.5	5.0	5.0	2.0	0.5	1.0
16	9.5	8.5	9.0	7.0	5.5	6.5	5.0	4.5	5.0	3.0	2.0	2.0
17	9.0	8.5	9.0	6.5	5.5	6.0	4.5	3.5	4.0	3.5	3.0	3.0
18	8.5	8.0	8.5	6.5	5.0	5.5	4.5	3.0	3.5	3.5	2.5	3.0
19	10.0	8.5	9.0	6.5	6.0	6.0	3.5	2.5	3.0	4.0	3.0	3.5
20	9.5	9.0	9.0	7.0	5.5	6.0	3.5	0.5	2.0	4.0	3.5	3.5
21	9.5	8.5	9.0	7.0	6.5	6.5	1.0	0.0	0.5	3.5	1.0	2.5
22	10.0	9.0	9.5	6.5	5.0	5.5	3.0	0.5	2.0	2.0	0.5	1.0
23	9.5	8.5	9.0	5.5	4.5	5.0	4.0	2.5	3.5	1.5	0.0	0.5
24	8.5	8.0	8.5	6.0	4.0	5.0	4.5	4.0	4.0	2.0	0.5	1.0
25	8.5	8.0	8.0	6.5	5.5	6.0	4.0	3.5	3.5	2.5	1.5	2.0
26	8.5	8.0	8.5	7.0	6.0	6.5	4.0	3.0	3.5	3.5	2.5	3.0
27	8.5	8.0	8.5	6.5	6.5	6.5	3.5	2.0	3.0	3.5	3.0	3.0
28	8.0	6.5	7.0	6.5	6.0	6.0	3.0	1.5	2.0	4.0	3.0	3.5
29	6.5	5.5	6.0	7.0	6.0	6.5	2.0	0.5	1.0	4.5	4.0	4.0
30	5.5	3.5	5.0	6.5	5.5	6.0	2.0	1.0	1.0	4.5	3.5	4.0
31	5.0	3.5	4.5	---	---	---	2.0	1.5	2.0	3.5	2.5	3.0
MONTH	10.0	3.5	8.1	7.5	3.5	6.1	6.5	0.0	3.6	5.5	0.0	2.6

15081497 STANEY CREEK NEAR KLAWOCK—Continued

TEMPERATURE, WATER, 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	3.0	2.5	2.5	4.0	2.5	3.0	4.5	2.0	3.0	10.5	7.5	9.0
2	3.5	3.0	3.0	3.5	2.5	3.0	4.0	1.5	3.0	11.5	6.0	9.0
3	4.0	3.5	3.5	4.5	3.0	4.0	4.0	1.5	3.0	10.0	5.5	8.0
4	4.5	3.5	4.0	5.0	3.5	4.5	4.0	1.5	3.0	10.0	5.5	8.0
5	3.5	2.0	3.0	4.0	2.0	3.5	4.5	1.5	3.5	11.0	5.5	8.5
6	3.0	2.0	2.5	2.0	0.0	1.0	3.5	2.0	3.0	10.5	6.5	8.5
7	3.0	2.0	2.5	0.5	0.0	0.0	3.5	1.5	2.5	12.0	6.5	9.5
8	2.5	1.5	2.0	0.0	0.0	0.0	4.0	2.0	3.0	13.0	7.5	10.5
9	2.5	1.5	2.0	0.0	0.0	0.0	4.5	2.0	3.0	14.5	8.0	11.0
10	2.5	1.0	1.5	0.0	0.0	0.0	6.0	3.5	4.5	15.0	9.5	12.0
11	2.5	1.0	2.0	0.0	0.0	0.0	7.0	4.0	5.5	12.0	9.5	10.0
12	2.5	1.0	2.0	0.0	0.0	0.0	7.5	3.5	5.5	10.0	6.5	8.0
13	2.5	1.0	2.0	0.0	0.0	0.0	7.5	3.5	5.5	8.0	6.0	6.5
14	2.5	0.0	1.0	0.0	0.0	0.0	7.5	3.5	5.5	7.0	5.5	6.0
15	3.0	2.0	2.0	0.5	0.0	0.0	6.5	4.5	5.5	6.5	5.0	6.0
16	3.5	1.5	2.5	0.5	0.0	0.0	5.5	4.0	5.0	7.5	5.0	6.5
17	4.0	3.0	3.5	1.0	0.0	0.0	7.0	4.0	5.0	11.0	5.0	7.5
18	3.5	3.0	3.0	1.0	0.0	0.5	5.0	3.5	4.5	10.0	6.0	8.0
19	4.0	3.5	3.5	2.0	0.0	1.0	6.5	4.0	5.0	11.0	6.5	8.5
20	3.5	2.5	3.0	2.5	1.0	1.5	6.5	4.0	5.5	12.5	6.5	9.5
21	2.5	1.0	2.0	2.5	1.0	1.5	7.5	4.5	5.5	10.0	8.5	9.0
22	1.0	0.0	0.5	3.0	1.5	2.0	6.5	4.5	5.5	9.5	8.0	9.0
23	0.5	0.0	0.0	3.0	1.0	2.0	7.5	5.0	6.0	8.5	8.0	8.5
24	0.5	0.0	0.0	4.0	1.5	2.5	10.5	4.5	7.0	8.5	8.0	8.0
25	2.0	0.0	1.0	4.0	2.0	3.0	12.0	6.5	8.5	8.5	7.5	8.0
26	3.0	1.5	2.0	5.0	2.5	3.5	11.0	6.5	8.5	9.0	7.5	8.0
27	3.0	1.5	2.0	5.5	2.5	4.0	9.0	7.5	8.0	8.5	7.0	7.5
28	3.0	2.0	2.5	4.0	3.0	3.5	11.5	5.5	8.0	8.5	7.0	8.0
29	---	---	---	3.5	2.5	3.0	12.5	6.5	9.5	8.5	7.5	8.0
30	---	---	---	3.0	2.5	3.0	12.5	7.5	10.0	10.5	7.5	8.5
31	---	---	---	3.5	2.0	2.5	---	---	---	11.5	8.0	9.5
MONTH	4.5	0.0	2.2	5.5	0.0	1.7	12.5	1.5	5.3	15.0	5.0	8.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.0	8.5	9.0	11.5	11.0	11.0	15.5	14.5	15.0	11.0	11.0	11.0
2	11.5	8.5	9.5	12.5	11.0	11.5	15.5	14.0	15.0	11.5	11.0	11.5
3	13.0	7.5	9.5	12.5	10.5	11.5	17.0	13.5	15.0	11.5	10.5	11.0
4	10.5	8.5	9.5	11.5	10.5	11.0	16.5	12.5	14.5	11.5	9.5	10.5
5	14.0	9.0	11.5	11.5	9.5	10.5	15.0	13.0	14.0	12.0	9.5	11.0
6	16.0	10.5	13.0	11.5	10.0	11.0	18.0	12.0	15.0	12.0	10.0	11.5
7	16.5	10.5	13.5	15.0	10.5	12.5	19.0	13.5	16.5	12.0	10.5	11.0
8	16.0	10.5	13.0	14.0	11.5	13.0	19.5	14.5	17.0	11.0	10.0	10.5
9	16.5	10.5	13.5	16.5	12.0	14.0	19.5	15.0	17.5	10.5	9.0	10.0
10	16.0	11.5	13.5	17.0	12.5	15.0	18.5	14.0	16.5	11.0	9.5	10.5
11	13.5	12.0	12.5	16.5	13.5	15.0	18.5	14.0	16.5	11.0	10.5	10.5
12	12.0	11.5	12.0	16.0	14.0	15.0	16.5	13.5	15.5	11.5	10.0	10.5
13	13.0	11.0	12.0	15.0	13.5	14.0	17.5	15.5	16.5	11.0	10.5	10.5
14	12.0	11.0	11.5	15.0	13.5	14.5	16.5	15.5	16.0	10.5	10.0	10.5
15	13.5	11.0	11.5	14.5	13.0	13.5	15.5	14.0	15.0	10.5	9.5	10.0
16	11.0	10.0	10.5	13.5	12.5	13.0	14.5	13.0	13.5	10.0	8.5	9.5
17	11.5	10.0	10.5	13.5	12.0	12.5	13.5	12.5	13.0	9.5	8.5	9.0
18	10.0	9.0	9.5	15.0	12.0	13.5	14.0	12.5	13.0	9.5	8.5	9.0
19	11.0	9.0	9.5	14.5	13.0	13.5	14.0	12.0	13.0	10.0	9.0	9.5
20	12.0	9.0	10.0	13.5	13.0	13.0	13.5	12.5	13.0	9.5	9.0	9.5
21	11.5	9.5	10.5	13.0	12.5	13.0	14.0	12.0	13.0	10.0	9.5	9.5
22	12.5	10.0	11.0	12.5	11.5	12.0	13.5	12.0	12.5	9.5	8.0	9.0
23	12.0	10.0	11.0	15.5	11.5	13.5	12.5	11.5	12.0	8.0	7.0	7.5
24	11.0	10.0	10.5	16.0	12.0	14.5	12.5	10.0	11.0	9.5	8.0	9.0
25	12.5	10.0	11.0	17.5	13.5	15.5	13.5	10.0	12.0	9.5	9.0	9.5
26	12.0	10.0	11.0	16.5	14.0	14.5	14.0	10.0	12.0	9.5	9.0	9.5
27	11.0	10.0	10.5	15.0	13.5	14.5	14.0	12.0	13.0	11.0	9.5	10.0
28	12.5	10.0	11.0	19.0	14.0	16.5	14.5	11.0	13.0	11.0	9.5	10.5
29	14.0	10.0	12.0	17.5	15.5	16.5	14.5	11.5	12.5	11.0	9.0	10.0
30	12.0	10.5	11.5	18.0	14.0	16.0	13.0	11.5	12.0	10.5	9.5	10.0
31	---	---	---	16.5	15.0	15.5	11.5	11.0	11.0	---	---	---
MONTH	16.5	7.5	11.2	19.0	9.5	13.6	19.5	10.0	14.0	12.0	7.0	10.1

15081610 THREEMILE CREEK NEAR KLAWOCK

LOCATION.--Lat 55°32'06", long 132°57'17", in SW¼ SW¼ SE¼ sec. 16, T. 73 S., R. 82 E. (Craig C-3 quad), Hydrologic Unit 19010103, on Prince of Wales Island, approximately 2.0 mi upstream from the mouth at Klawock Lake, and 5.2 mi east of the city of Klawock.

DRAINAGE AREA.--6.63 mi^2.

PERIOD OF RECORD.--March 1999 to September 2003 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 295 ft above sea level, from topographic map.

REMARKS.-- Records fair, except for those above 250 ft^3/s and estimated daily discharges, which are poor.

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	121	18	28	122	e27	42	41	39	e46	e31	e13	e111
2	94	18	24	97	e67	50	30	33	e39	e33	e15	e289
3	56	17	21	127	e45	32	25	28	e34	e87	e17	e200
4	46	17	19	245	e30	81	22	25	e31	e100	e13	e83
5	349	19	17	303	e23	55	20	21	e29	e47	e12	e92
6	426	60	19	235	e21	28	46	20	e28	e39	e11	e95
7	148	27	29	137	e19	20	47	18	e26	e39	e10	e131
8	135	22	84	65	e18	16	38	18	e26	e33	e10	e71
9	136	19	159	44	e17	e14	28	20	e25	e30	e9.7	e37
10	65	18	94	34	e16	e12	25	23	e25	e28	e9.3	e180
11	46	18	101	29	16	e11	27	24	e24	e27	e9.0	e170
12	51	87	194	26	15	e10	26	61	e24	e26	e8.7	e98
13	49	187	84	22	14	e80	26	66	e24	e26	e9.3	e260
14	61	114	109	20	14	36	26	55	e25	e25	e28	e148
15	55	85	240	22	18	54	31	47	e34	e25	e59	e87
16	45	73	81	31	17	36	31	39	e34	e27	e86	e46
17	37	89	54	61	59	59	36	30	e165	e52	e75	e55
18	31	59	42	45	43	76	47	27	e102	e44	e64	e115
19	57	111	33	68	96	38	40	25	e99	e27	e57	e129
20	60	179	28	59	39	59	32	24	e92	e31	e49	e100
21	38	121	23	34	25	50	32	37	e52	e48	e52	e146
22	33	61	44	28	20	43	28	77	e38	e47	e51	e84
23	29	41	262	25	17	29	30	273	e33	e54	e87	e53
24	26	32	153	48	16	22	34	123	e30	e27	e61	e206
25	24	45	125	69	27	20	58	118	e33	e18	e30	e120
26	26	140	56	e200	20	21	58	77	e37	e16	e29	e84
27	35	95	37	e120	23	23	57	51	e37	e15	e27	e55
28	27	61	30	e40	54	48	52	71	e31	e18	e26	e44
29	23	40	25	e38	---	129	46	61	e33	e16	e30	e37
30	21	32	26	e70	---	208	44	e38	e31	e14	e36	e34
31	20	---	121	e45	---	66	---	e53	---	e13	e70	---
TOTAL	2370	1905	2362	2509	816	1468	1083	1622	1287	1063	1064.0	3360
MEAN	76.5	63.5	76.2	80.9	29.1	47.4	36.1	52.3	42.9	34.3	34.3	112
MAX	426	187	262	303	96	208	58	273	165	100	87	289
MIN	20	17	17	20	14	10	20	18	24	13	8.7	34
AC-FT	4700	3780	4690	4980	1620	2910	2150	3220	2550	2110	2110	6660
CFSM	11.5	9.58	11.5	12.2	4.40	7.14	5.44	7.89	6.47	5.17	5.18	16.9
IN.	13.30	10.69	13.25	14.08	4.58	8.24	6.08	9.10	7.22	5.96	5.97	18.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)#

MEAN	81.1	62.1	58.4	58.9	32.3	32.3	38.4	68.9	72.4	53.8	55.2	91.8
MAX	113	68.1	76.2	80.9	38.6	47.4	50.1	88.8	108	68.3	90.5	118
(WY)	2000	2000	2003	2003	2002	2003	1999	1999	1999	1999	2002	2002
MIN	59.6	57.8	48.1	36.0	26.8	16.0	25.6	52.3	42.9	34.3	34.3	57.5
(WY)	2001	2002	2001	2000	2000	2002	2002	2003	2003	2003	2003	2000

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003#	
ANNUAL TOTAL	22522.8		20909.0			
ANNUAL MEAN	61.7		57.3		57.4	
HIGHEST ANNUAL MEAN					59.1	2002
LOWEST ANNUAL MEAN					55.8	2000
HIGHEST DAILY MEAN	426	Oct 6	426	Oct 6	482	Oct 21 1999
LOWEST DAILY MEAN	7.9	Mar 20	8.7	Aug 12	7.3	Mar 9 2000
ANNUAL SEVEN-DAY MINIMUM	8.2	Mar 17	9.4	Aug 7	8.2	Mar 17 2002
MAXIMUM PEAK FLOW			a2470	Oct 6	a2470	Oct 6 2002
MAXIMUM PEAK STAGE			11.42	Oct 6	b11.42	Oct 6 2002
INSTANTANEOUS LOW FLOW			c		6.4	Mar 10 2000
ANNUAL RUNOFF (AC-FT)	44670		41470		41590	
ANNUAL RUNOFF (CFSM)	9.31		8.64		8.66	
ANNUAL RUNOFF (INCHES)	126.37		117.32		117.64	
10 PERCENT EXCEEDS	125		121		110	
50 PERCENT EXCEEDS	47		37		48	
90 PERCENT EXCEEDS	15		18		16	

\# See Period of Record
a From rating curve extended above 130 ft^3/s
b Peak stage of 11.55 was recorded on August 21, 2000 due to backwater caused by a log
c Undetermined, see lowest daily mean
e Estimated

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 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	3.1	7.5	131	11	27	17	5.4	18	7.5	e3.2	e150
2	58	2.7	6.0	103	49	30	10	4.7	20	8.0	e3.3	e230
3	16	2.5	5.1	79	28	15	7.3	3.8	11	47	e3.3	e130
4	10	2.7	4.2	171	14	48	5.6	3.2	7.9	52	e3.1	e43
5	174	6.8	3.7	274	9.3	34	5.0	2.9	6.2	18	e3.0	e52
6	262	49	5.1	148	6.9	11	21	2.6	5.0	12	e2.8	e60
7	88	14	16	85	5.6	e8.0	33	2.5	4.2	12	e2.7	e75
8	76	7.2	106	21	4.8	e6.0	26	2.3	3.5	8.3	e2.6	e34
9	75	4.8	124	11	4.6	e4.6	17	2.3	3.1	6.6	e2.5	e13
10	21	3.7	50	7.6	4.3	e3.3	13	2.3	2.7	5.2	e2.4	e140
11	11	3.7	48	6.1	4.7	e2.5	12	2.4	2.4	4.3	e2.4	e110
12	29	69	133	5.5	4.3	e2.0	11	23	2.4	3.7	e2.6	e53
13	30	157	59	4.5	3.8	e50	9.4	37	2.6	3.8	e2.9	e220
14	37	78	63	3.9	3.5	52	8.4	28	3.1	e3.5	e4.1	e110
15	25	43	178	4.1	5.1	33	11	18	9.7	e3.4	e24	e48
16	15	24	51	7.9	5.6	22	12	21	9.1	e6.1	e42	e20
17	9.3	48	29	26	40	33	20	15	111	e26	e37	23
18	6.7	22	17	13	37	62	25	10	57	e16	e29	112
19	35	70	10	46	85	21	23	9.2	51	e5.0	e22	76
20	35	180	7.3	40	27	39	20	6.7	44	e8.2	e18	108
21	13	89	5.7	14	11	40	17	11	20	e18	e21	138
22	11	22	32	6.3	6.9	37	11	41	12	e17	e20	50
23	7.6	11	272	7.2	5.1	19	9.8	161	8.3	e21	e54	26
24	5.8	7.5	107	22	4.2	13	9.9	70	6.6	e5.0	e26	184
25	4.6	31	99	39	13	12	11	64	11	e4.0	e7.0	136
26	7.3	115	32	151	11	15	9.5	27	14	e3.6	e5.8	49
27	19	59	16	96	15	17	8.7	16	12	e3.5	e4.6	28
28	8.9	25	12	24	30	31	7.6	25	13	e3.5	e3.7	18
29	5.8	12	9.3	35	---	98	6.6	27	9.5	e3.3	e6.0	13
30	4.3	9.1	9.4	52	---	187	6.0	13	7.5	e3.1	e20	10
31	3.5	---	144	17	---	46	---	21	---	e3.1	e38	---
TOTAL	1215.8	1171.8	1661.3	1651.1	449.7	1018.4	403.8	678.3	487.8	341.7	419.0	2459.0
MEAN	39.2	39.1	53.6	53.3	16.1	32.9	13.5	21.9	16.3	11.0	13.5	82.0
MAX	262	180	272	274	85	187	33	161	111	52	54	230
MIN	3.5	2.5	3.7	3.9	3.5	2.0	5.0	2.3	2.4	3.1	2.4	10
MED	16	22	29	24	8.1	27	11	13	9.3	6.1	4.6	56
AC-FT	2410	2320	3300	3270	892	2020	801	1350	968	678	831	4880
CFSM	8.29	8.26	11.3	11.3	3.40	6.95	2.85	4.63	3.44	2.33	2.86	17.3
IN.	9.56	9.22	13.07	12.99	3.54	8.01	3.18	5.33	3.84	2.69	3.30	19.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

MEAN	47.8	38.2	50.2	49.6	28.0	28.6	24.9	39.6	34.2	20.8	35.0	66.5
MAX	56.3	39.1	53.6	59.4	40.6	39.7	36.5	59.9	69.3	32.4	61.2	82.0
(WY)	2002	2003	2003	2001	2002	2001	2001	2001	2001	2001	2002	2003
MIN	39.2	37.3	46.8	36.2	16.1	13.3	13.5	21.9	16.3	11.0	13.5	55.3
(WY)	2003	2002	2002	2002	2003	2002	2003	2003	2003	2003	2003	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003#	
ANNUAL TOTAL	13265.5		11957.7			
ANNUAL MEAN	36.3		32.8		34.9	
HIGHEST ANNUAL MEAN					37.1	2002
LOWEST ANNUAL MEAN					32.8	2003
HIGHEST DAILY MEAN	272	Dec 23	274	Jan 5	288	Mar 11 2001
LOWEST DAILY MEAN	2.5	Nov 3	2.0	Mar 12	2.0	Mar 12 2003
ANNUAL SEVEN-DAY MINIMUM	3.5	Oct 29	2.5	May 5	2.5	May 5 2003
MAXIMUM PEAK FLOW			666	Oct 5	666	Oct 5 2002
MAXIMUM PEAK STAGE			10.23	Oct 5	10.23	Oct 5 2002
INSTANTANEOUS LOW FLOW			a		a	
ANNUAL RUNOFF (AC-FT)	26310		23720		25300	
ANNUAL RUNOFF (CFSM)	7.68		6.93		7.38	
ANNUAL RUNOFF (INCHES)	104.33		94.04		100.31	
10 PERCENT EXCEEDS	89		97		89	
50 PERCENT EXCEEDS	19		14		18	
90 PERCENT EXCEEDS	6.0		3.3		4.6	

\# See Period of Record, partial years used in monthly statistics
a Undetermined, see lowest daily mean
e Estimated

15081995 REYNOLDS CREEK BELOW LAKE MELLEN NEAR HYDABURG

LOCATION.--Lat 55°13'05", long 132°34'50", in SW¼ SE¼ sec. 3, T. 77 S., R. 84 E.(Craig A-2 quad), Hydrologic Unit 19010103, on Prince of Wales Island, in Tongass National Forest, 0.1 mi below Lake Mellen, approximately 1 mi upstream from mouth at Copper Harbor in Hetta Inlet, and 10 mi east of Hydaburg.

DRAINAGE AREA.--5.20 mi^2.

PERIOD OF RECORD.--July 1982 to September 1985, October 1997 to July 14, 2003 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 860 ft above sea level, from topographic map. Prior to January 1, 1984, at datum 2.00 ft higher.

REMARKS.--Records good, except for estimated daily discharges which are poor. GOES satellite telemetry at station. Streamflow affected by storage in lakes, which cover 30 percent of the basin.

EXTREMES FOR CURRENT YEAR.--Maximum discharge for period October 2002 through July 14, 2003, 615 ft^3/s, January 6, gage height 8.21, minimum not determined, minimum daily mean discharge 21 ft^3/s, July 14.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	35	74	131	e120	43	73	47	60	33	---	---
2	111	33	67	140	e110	46	62	44	58	30	---	---
3	87	31	59	133	e100	40	54	40	52	36	---	---
4	75	30	53	282	e88	39	49	38	45	46	---	---
5	83	31	48	297	e79	42	45	36	40	43	---	---
6	192	45	46	453	e70	35	50	34	36	34	---	---
7	125	43	54	293	e64	31	68	32	32	31	---	---
8	109	37	91	186	e57	29	59	31	30	28	---	---
9	104	33	121	144	e50	27	53	30	27	26	---	---
10	91	31	113	125	43	28	51	30	25	25	---	---
11	77	31	117	112	41	27	52	29	24	23	---	---
12	71	50	153	100	38	27	51	34	25	22	---	---
13	92	125	130	89	35	39	47	43	30	22	---	---
14	84	113	124	80	33	51	45	44	48	21	---	---
15	83	98	208	80	34	46	46	42	71	---	---	---
16	73	86	147	88	35	50	49	41	55	---	---	---
17	65	91	124	102	64	50	54	38	88	---	---	---
18	58	84	111	87	69	73	58	34	88	---	---	---
19	75	81	99	92	94	54	68	32	69	---	---	---
20	115	103	89	92	76	51	59	31	60	---	---	---
21	83	140	80	76	60	56	56	34	53	---	---	---
22	70	106	84	66	51	59	55	47	46	---	---	---
23	62	92	182	62	46	48	80	104	39	---	---	---
24	55	82	192	65	42	41	68	111	35	---	---	---
25	50	83	158	e110	41	38	63	103	41	---	---	---
26	48	148	135	e190	38	39	60	95	50	---	---	---
27	59	123	116	e170	38	39	56	83	42	---	---	---
28	51	107	104	e150	43	47	53	77	50	---	---	---
29	44	92	93	e170	---	83	51	74	42	---	---	---
30	40	82	88	e150	---	113	49	66	35	---	---	---
31	37	---	109	e135	---	94	---	62	---	---	---	---
TOTAL	2460	2266	3369	4450	1659	1485	1684	1586	1396	---	---	---
MEAN	79.4	75.5	109	144	59.2	47.9	56.1	51.2	46.5	---	---	---
MAX	192	148	208	453	120	113	80	111	88	---	---	---
MIN	37	30	46	62	33	27	45	29	24	---	---	---
AC-FT	4880	4490	6680	8830	3290	2950	3340	3150	2770	---	---	---
CFSM	15.3	14.5	20.9	27.6	11.4	9.21	10.8	9.84	8.95	---	---	---
IN.	7.60	16.21	24.10	31.83	11.87	10.62	12.05	11.35	9.99	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2003, BY WATER YEAR (WY)#

MEAN	94.8	76.6	73.9	94.5	70.7	56.0	60.5	76.9	64.6	46.1	52.3	70.8
MAX	172	142	131	144	107	97.9	90.9	128	103	63.5	78.7	124
(WY)	2000	2000	1998	2003	1984	1984	2000	1999	1999	2001	1983	2002
MIN	71.6	44.1	20.7	61.4	47.7	24.9	23.9	40.4	22.9	20.2	19.3	32.2
(WY)	1986	1986	1984	1998	1999	2002	2002	1998	1998	1998	1982	1982

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

15081995 REYNOLDS CREEK BELOW LAKE MELLEN NEAR HYDABURG—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		WATER YEARS 1982 - 2003#	
ANNUAL TOTAL	25324			
ANNUAL MEAN	69.4		71.1	
HIGHEST ANNUAL MEAN			88.9	2000
LOWEST ANNUAL MEAN			59.5	1983
HIGHEST DAILY MEAN	217	Sep 22	610	Oct 23 1999
LOWEST DAILY MEAN	14	Mar 24	9.0	Jul 9 1998
ANNUAL SEVEN-DAY MINIMUM	17	Mar 18	9.8	Jul 4 1998
MAXIMUM PEAK FLOW	262	Dec 15	806	Oct 23 1999
MAXIMUM PEAK STAGE	6.91	Dec 15	8.71	Oct 23 1999
INSTANTANEOUS LOW FLOW	a		b8.7	Jul 9 1998
ANNUAL RUNOFF (AC-FT)	50230		51520	
ANNUAL RUNOFF (CFSM)	13.3		13.7	
ANNUAL RUNOFF (INCHES)	181.16		185.83	
10 PERCENT EXCEEDS	127		121	
50 PERCENT EXCEEDS	62		63	
90 PERCENT EXCEEDS	25		30	

\# See Period of Record; partial years used in monthly summary statistics and break in record
a Not determined,see lowest daily mean
b Jul. 9 and 10, 1998

15085100 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)
Nov 13	1330	685	4.88	Jan 4	0745	734	5.02
Nov 20	2100	481	4.24	Jan 6	0130	912	5.50
Dec 12	1230	579	4.56	May 23	1715	535	4.42
Dec 15	0830	*1040	*5.83	Aug 23	0830	652	4.78
Dec 24	0300	951	5.60	Sept 24	0645	538	4.43

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	19	8.3	19	251	30	11	34	18	21	9.7	3.5	89
2	24	7.7	17	173	53	12	23	15	18	8.9	3.1	178
3	15	6.9	15	275	45	10	18	12	16	10	2.9	52
4	12	6.5	14	538	28	10	14	10	13	11	2.7	29
5	20	14	13	463	21	9.1	12	9.1	12	8.6	2.4	34
6	104	74	13	370	18	6.5	74	8.1	11	8.0	2.2	97
7	35	27	19	188	16	5.6	97	7.4	9.8	11	2.2	60
8	23	17	52	59	14	e4.8	100	6.9	9.2	13	2.0	36
9	23	13	147	35	12	e4.4	47	6.5	8.6	11	1.9	25
10	17	12	131	25	11	e4.0	56	6.4	8.0	8.5	1.8	146
11	14	15	261	20	10	e3.7	60	6.4	7.3	7.0	1.7	99
12	21	212	384	18	9.0	e3.4	39	15	19	5.9	1.5	50
13	36	310	155	16	8.0	e3.3	28	17	51	6.2	1.4	93
14	31	111	230	14	7.7	e25	26	14	109	5.6	1.5	68
15	28	66	617	46	21	125	30	13	97	5.3	3.1	40
16	19	63	140	59	48	76	25	15	43	6.3	3.5	28
17	15	64	64	72	73	113	21	12	180	8.3	5.2	26
18	13	51	49	37	38	158	50	9.7	88	6.9	19	129
19	31	59	35	35	55	47	62	8.5	43	5.7	8.4	59
20	46	193	26	31	30	87	39	7.1	30	12	6.2	48
21	23	140	20	22	20	101	36	9.6	24	11	6.1	62
22	17	45	97	18	16	60	47	19	18	8.7	18	39
23	15	31	537	16	13	31	124	246	15	7.8	355	29
24	12	24	439	26	11	22	51	110	13	6.3	75	207
25	11	29	248	78	10	21	38	98	13	5.3	32	109
26	13	105	111	340	9.2	34	33	66	15	4.5	21	48
27	29	49	56	116	10	33	28	40	12	4.2	16	32
28	16	39	36	73	11	57	24	47	11	3.9	14	23
29	13	28	26	221	---	122	21	39	9.7	3.6	13	19
30	10	22	29	84	---	161	19	26	9.1	3.3	42	15
31	9.1	---	238	46	---	62	---	24	---	3.1	49	---
TOTAL	714.1	1842.4	4238	3765	647.9	1422.8	1276	941.7	933.7	230.6	717.3	1969
MEAN	23.0	61.4	137	121	23.1	45.9	42.5	30.4	31.1	7.44	23.1	65.6
MAX	104	310	617	538	73	161	124	246	180	13	355	207
MIN	9.1	6.5	13	14	7.7	3.3	12	6.4	7.3	3.1	1.4	15
AC-FT	1420	3650	8410	7470	1290	2820	2530	1870	1850	457	1420	3910
CFSM	3.90	10.4	23.2	20.6	3.92	7.78	7.21	5.15	5.28	1.26	3.92	11.1
IN.	4.50	11.62	26.72	23.74	4.09	8.97	8.05	5.94	5.89	1.45	4.52	12.41

e Estimated

15085l00 OLD TOM CREEK NEAR KASAAN—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)#

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	70.1	66.3	59.0	49.9	45.0	38.7	48.1	43.0	26.1	13.2	15.5	32.7
MAX	163	166	137	128	117	86.3	122	99.1	56.1	31.0	50.9	93.6
(WY)	1978	2000	2003	1992	1998	1984	1980	1999	1950	1991	2001	2001
MIN	23.0	17.1	8.29	3.00	5.00	10.1	19.1	15.0	5.45	2.66	1.81	2.69
(WY)	2003	1966	1984	1950	1950	1956	1967	1996	1958	1958	1993	1965

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1949 - 2003#	
ANNUAL TOTAL	15635.9		18698.5			
ANNUAL MEAN	42.8		51.2		42.2	
HIGHEST ANNUAL MEAN					63.1	2000
LOWEST ANNUAL MEAN					25.2	1951
HIGHEST DAILY MEAN	617	Dec 15	617	Dec 15	858	Oct 23 1990
LOWEST DAILY MEAN	3.8	Mar 22	1.4	Aug 13	0.28	Nov 14 1965
ANNUAL SEVEN-DAY MINIMUM	4.1	Mar 18	1.7	Aug 8	0.55	Nov 13 1965
MAXIMUM PEAK FLOW			1040	Dec 15	a1490	Apr 16 1952
MAXIMUM PEAK STAGE			5.83	Dec 15	6.96	Apr 16 1952
INSTANTANEOUS LOW FLOW	b		1.0	Aug 15	0.16	Nov 15 1965
ANNUAL RUNOFF (AC-FT)	31010		37090		30600	
ANNUAL RUNOFF (CFSM)	7.26		8.68		7.16	
ANNUAL RUNOFF (INCHES)	98.59		117.90		97.29	
10 PERCENT EXCEEDS	98		123		94	
50 PERCENT EXCEEDS	21		21		24	
90 PERCENT EXCEEDS	8.3		6.2		6.5	

\# See Period of Record; partial years used in monthly summary statistics
a From rating curve extended above 330 ft^3/s
b Undetermined, see lowest daily mean

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 November 14. 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; minimum, 0.0°C, on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 16.0°C, July 28 and August 10; minimum, 0.0°C, on several days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BK) (72103)	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)
NOV							
14...	0945	44.7	40.0	2.67	90.5	7.0	7.7
14...	0946	44.7	35.0	2.67	90.5	7.0	7.7
14...	0947	44.7	30.0	2.67	90.5	7.0	7.7
14...	0948	44.7	25.0	2.67	90.5	7.0	7.7
14...	0949	44.7	20.0	2.67	90.5	7.0	7.7
14...	0950	44.7	10.0	2.67	90.5	7.0	7.7
14...	0951	44.7	5.0	2.67	90.5	7.0	7.7

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

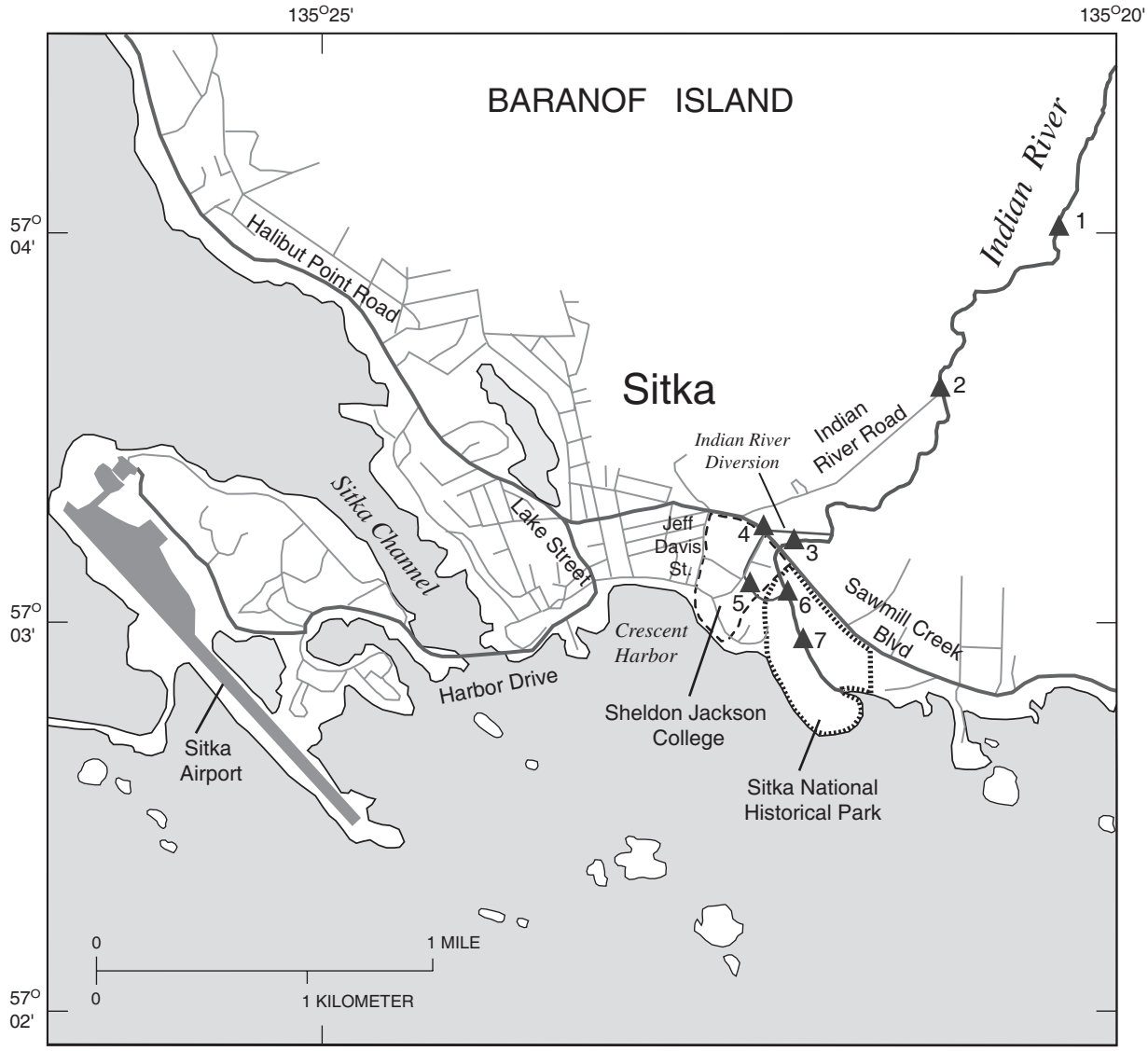
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.5	8.5	9.0	5.0	4.5	5.0	6.0	5.5	5.5	3.0	3.0	3.0
2	9.5	9.0	9.0	5.5	4.5	5.0	5.5	5.5	5.5	3.5	3.0	3.0
3	9.0	7.5	8.5	5.5	5.0	5.0	5.5	3.5	4.0	3.5	3.0	3.5
4	9.0	8.0	8.5	6.0	5.0	5.5	3.5	2.0	2.5	4.0	3.5	4.0
5	9.5	9.0	9.0	7.0	5.5	6.5	3.0	2.0	2.5	4.5	4.0	4.0
6	10.5	9.5	10.0	7.5	7.0	7.0	3.0	2.5	3.0	5.0	4.0	4.5
7	10.5	9.5	10.0	7.0	6.5	7.0	4.5	3.0	4.0	4.5	3.0	4.0
8	10.0	9.5	9.5	7.0	6.0	6.5	6.0	4.5	5.5	3.0	2.5	3.0
9	9.5	8.0	8.5	7.0	6.0	6.5	6.5	6.0	6.0	2.5	2.0	2.0
10	8.0	6.0	7.0	7.0	6.5	7.0	6.0	5.5	6.0	2.5	2.0	2.0
11	7.0	5.5	6.5	7.5	6.5	7.0	5.5	5.0	5.0	2.0	2.0	2.0
12	8.0	7.0	7.5	7.5	7.0	7.0	6.0	5.0	5.5	2.5	2.0	2.5
13	8.5	7.5	8.0	7.5	7.0	7.5	5.0	4.5	4.5	2.5	2.0	2.5
14	9.0	8.5	8.5	7.0	6.5	7.0	5.0	4.5	5.0	2.5	2.0	2.0
15	9.5	8.5	9.0	7.0	6.5	7.0	5.0	5.0	5.0	3.0	2.0	2.5
16	9.5	9.0	9.5	7.0	6.0	6.5	5.0	4.5	5.0	4.0	3.0	3.5
17	9.5	8.0	9.0	6.0	6.0	6.0	4.5	4.0	4.0	4.5	4.0	4.0
18	9.0	8.0	8.5	6.5	6.0	6.0	4.0	3.5	4.0	4.0	3.5	4.0
19	10.0	9.0	9.5	6.5	6.0	6.5	4.0	3.5	3.5	4.5	4.0	4.0
20	9.5	9.0	9.0	7.0	6.0	6.0	3.5	3.0	3.5	4.0	3.5	4.0
21	10.0	9.0	9.5	7.0	6.0	6.5	3.0	2.5	2.5	3.5	2.0	3.0
22	10.0	9.5	9.5	6.0	5.5	5.5	4.0	2.5	3.0	2.0	1.5	2.0
23	9.5	9.0	9.0	5.5	4.0	4.5	5.0	4.0	4.5	2.0	1.5	2.0
24	9.0	8.5	9.0	5.0	4.0	4.5	5.0	4.0	4.5	2.5	2.0	2.5
25	9.0	8.5	8.5	6.0	5.0	5.5	4.5	4.0	4.0	3.5	2.5	3.0
26	8.5	8.0	8.5	6.5	6.0	6.5	4.0	3.5	4.0	4.0	3.0	3.5
27	8.5	7.5	8.0	6.0	6.0	6.0	3.5	2.5	3.0	4.0	3.5	3.5
28	7.5	6.0	6.5	6.0	6.0	6.0	2.5	2.0	2.5	4.0	3.5	4.0
29	6.0	5.0	5.5	6.5	5.5	6.0	2.0	1.5	1.5	4.5	4.0	4.0
30	5.0	4.5	4.5	6.0	5.5	6.0	2.0	1.0	1.5	4.0	3.5	4.0
31	5.0	4.0	4.5	---	---	---	3.0	1.5	2.5	4.0	3.5	3.5
MONTH	10.5	4.0	8.3	7.5	4.0	6.2	6.5	1.0	4.0	5.0	1.5	3.2

15085100 OLD TOM CREEK NEAR KASAAN—Continued

TEMPERATURE, WATER, 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	3.5	3.0	3.5	3.5	2.5	3.0	4.0	2.5	3.0	6.5	6.0	6.5
2	3.5	3.5	3.5	3.5	3.0	3.5	3.5	1.5	2.0	6.5	5.5	6.0
3	4.0	3.5	4.0	4.5	3.5	4.0	3.0	1.5	2.0	6.0	5.0	5.5
4	4.0	3.5	4.0	4.5	4.0	4.0	3.0	1.5	2.0	5.5	4.5	5.0
5	4.0	3.5	3.5	4.0	2.5	3.5	3.5	1.5	2.5	5.5	4.0	5.0
6	3.5	3.0	3.0	2.5	0.0	1.0	3.0	2.0	2.5	6.0	4.5	5.0
7	3.0	3.0	3.0	0.0	0.0	0.0	3.5	2.5	3.0	6.5	5.0	5.5
8	3.0	2.5	2.5	0.0	0.0	0.0	4.0	2.5	3.0	7.0	5.0	6.0
9	3.0	2.5	2.5	0.0	0.0	0.0	4.0	3.0	3.5	7.5	5.5	6.5
10	3.0	2.0	2.5	0.0	0.0	0.0	4.0	3.5	3.5	8.0	6.0	7.0
11	3.0	2.0	2.5	0.0	0.0	0.0	4.5	3.5	4.0	8.0	6.5	7.0
12	3.5	3.0	3.0	0.0	0.0	0.0	4.5	3.5	4.0	7.5	7.0	7.5
13	3.0	2.0	2.5	0.0	0.0	0.0	5.0	3.5	4.0	7.5	6.5	7.0
14	3.0	1.5	2.0	0.5	0.0	0.0	5.0	4.0	4.5	7.0	6.0	6.5
15	3.5	3.0	3.0	2.0	0.5	1.0	4.5	4.5	4.5	6.0	5.5	6.0
16	4.0	3.0	3.5	2.0	1.5	1.5	5.0	4.0	4.5	6.0	5.5	5.5
17	4.0	3.5	3.5	2.0	1.0	1.5	5.0	4.0	4.5	7.0	5.0	6.0
18	4.0	3.5	3.5	3.0	1.0	2.0	4.5	4.0	4.0	7.0	6.0	6.5
19	4.0	3.5	4.0	2.5	2.0	2.5	5.0	4.0	4.5	8.0	6.0	7.0
20	4.0	3.5	3.5	3.0	2.0	2.5	5.5	4.5	5.0	7.5	6.0	6.5
21	3.5	2.0	3.0	2.5	2.0	2.5	5.5	4.5	5.0	8.0	7.0	7.5
22	2.0	1.5	2.0	3.5	2.0	3.0	5.0	4.5	5.0	8.0	7.0	7.5
23	1.5	1.0	1.0	3.5	2.0	2.5	5.5	4.5	5.0	8.0	7.5	7.5
24	2.0	0.5	1.5	3.5	2.0	2.5	6.0	4.5	5.5	9.0	8.0	8.5
25	2.5	1.5	2.0	4.0	2.5	3.0	6.5	5.5	6.0	8.0	7.5	8.0
26	3.0	2.0	2.5	4.0	2.5	3.0	6.5	5.5	6.0	9.0	8.0	8.5
27	3.0	2.0	2.5	4.5	2.5	3.5	6.5	5.5	6.0	9.0	8.0	8.5
28	3.5	2.5	3.0	3.5	2.5	3.0	6.5	5.0	6.0	9.0	8.5	8.5
29	---	---	---	4.0	2.5	3.0	7.0	5.5	6.0	9.0	8.0	8.5
30	---	---	---	4.0	3.0	3.5	7.0	6.0	6.5	10.5	8.0	9.0
31	---	---	---	3.5	3.0	3.0	---	---	---	10.0	9.0	9.5
MONTH	4.0	0.5	2.9	4.5	0.0	2.0	7.0	1.5	4.2	10.5	4.0	6.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.5	8.5	9.0	11.0	10.5	10.5	13.5	12.5	13.0	11.5	11.5	11.5
2	9.5	8.0	9.0	11.5	10.5	11.0	13.0	12.0	12.5	12.5	11.5	12.0
3	11.0	7.5	9.0	11.0	10.5	11.0	13.0	11.5	12.0	12.5	12.0	12.0
4	10.5	9.0	9.5	11.0	10.5	10.5	13.0	11.0	12.0	12.0	11.5	12.0
5	12.5	9.0	10.5	13.0	9.5	11.0	12.5	11.0	12.0	12.5	11.5	12.0
6	14.5	10.5	12.0	11.5	11.0	11.0	14.5	10.5	12.0	12.0	11.5	11.5
7	14.0	10.5	12.0	13.0	10.5	11.5	15.0	11.0	12.5	12.5	11.5	11.5
8	13.5	10.0	11.5	11.5	11.0	11.5	15.5	11.5	13.0	11.5	11.0	11.5
9	14.0	10.0	11.5	14.0	10.5	12.0	15.5	12.0	13.5	11.5	11.0	11.5
10	15.0	10.5	12.5	13.5	11.5	12.5	16.0	13.0	14.0	11.5	10.5	11.0
11	12.0	11.0	11.5	14.0	12.0	12.5	15.5	12.0	13.5	11.5	11.0	11.0
12	11.5	10.0	11.0	15.0	12.0	13.0	14.5	12.0	13.0	12.0	11.0	11.5
13	10.0	9.0	9.5	14.0	12.5	13.0	15.5	13.5	14.0	11.5	10.5	11.0
14	9.0	8.5	8.5	13.5	12.0	12.5	15.0	13.5	14.5	11.5	10.5	11.0
15	10.0	8.5	9.5	12.5	12.0	12.5	14.5	13.0	14.0	11.0	10.5	11.0
16	10.5	10.0	10.0	12.5	11.5	12.0	14.0	12.5	13.0	11.0	10.0	10.5
17	10.0	9.5	9.5	12.0	11.5	11.5	13.0	12.0	12.5	10.0	9.0	9.5
18	10.5	9.5	10.0	14.5	11.0	12.5	12.5	11.5	12.0	10.5	9.0	9.5
19	10.5	9.5	10.0	12.5	11.0	12.0	12.0	11.0	11.5	10.5	9.5	10.0
20	10.0	9.5	10.0	12.5	12.0	12.0	12.0	11.0	11.5	10.5	10.0	10.0
21	10.5	9.5	10.0	12.5	11.5	12.0	12.0	11.0	11.5	10.5	10.0	10.0
22	10.5	9.5	10.0	11.5	10.5	11.0	11.5	10.5	11.0	10.0	9.0	9.5
23	10.5	9.5	10.0	12.5	10.5	11.5	12.0	10.5	11.0	9.0	8.0	8.5
24	10.5	9.5	10.0	14.0	10.5	12.0	13.0	11.5	12.0	10.0	8.5	9.5
25	11.0	10.0	10.5	15.0	11.0	12.5	13.0	11.0	12.0	10.5	9.5	10.0
26	11.0	10.0	10.5	12.5	12.0	12.0	13.0	10.5	11.5	10.0	9.5	10.0
27	10.5	9.5	10.0	13.5	12.0	12.5	12.5	11.5	12.0	11.0	10.0	10.5
28	11.5	9.5	10.5	16.0	12.5	13.5	12.5	11.0	12.0	11.0	10.0	10.5
29	12.5	10.0	11.0	15.5	12.5	13.5	12.0	11.0	11.5	11.0	10.0	10.5
30	11.0	10.0	10.5	15.0	12.0	13.0	12.0	11.0	11.5	11.0	10.0	10.5
31	---	---	---	13.5	12.0	13.0	12.0	11.0	11.5	---	---	---
MONTH	15.0	7.5	10.3	16.0	9.5	12.0	16.0	10.5	12.4	12.5	8.0	10.7



EXPLANATION

▲1 Discharge site and map number

Map No.	Station No.	Station Name	Map No.	Station No.	Station Name
* 1	15087690	Indian River near Sitka	5	15087735	Indian River Diversion Return Flow from Sheldon Jackson College at Sitka
2	15087695	Indian River above CBS pumphouse near Sitka	6	15087740	Indian River Diversion Return Flow at Mouth at Sitka
* 3	15087700	Indian River at Sitka	7	15087750	Indian River at Mouth at Sitka
4	15087730	Indian River Diversion to Sheldon Jackson College at Sawmill Cr Rd at Sitka			

* Daily discharge site

Locations of gaging stations in the Sitka area.

15087690 INDIAN RIVER NEAR SITKA

LOCATION.--Lat 57°04'01", long 135°17'42", in SW¼ SE¼ 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.-- No estimated daily discharges. Records fair.

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)
Oct 16	1530	*3090	*13.03	Nov 26	0830	2260	12.31
Oct 20	2030	1390	11.34	Sep 1	2115	1400	11.35

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	104	44	124	76	67	85	35	36	33	47	25	343
2	96	41	95	57	90	70	31	34	36	45	42	283
3	75	38	81	51	83	59	30	31	33	54	46	166
4	63	36	71	128	68	94	29	29	32	125	33	105
5	83	34	64	123	61	69	29	28	33	69	28	82
6	240	35	58	156	56	51	29	27	32	54	25	71
7	503	32	54	130	52	44	29	27	31	48	22	83
8	328	30	120	80	49	41	34	27	29	45	20	340
9	231	29	106	68	46	40	34	27	28	42	19	121
10	129	28	71	63	48	38	31	28	27	40	18	129
11	98	27	64	61	47	36	31	28	27	38	17	237
12	94	28	69	57	43	34	31	60	26	36	17	128
13	89	39	71	52	40	35	31	53	27	34	17	236
14	73	46	60	47	37	33	32	57	25	33	17	288
15	64	47	64	44	36	36	34	43	24	31	68	131
16	919	37	62	42	34	34	32	39	24	30	133	97
17	416	57	65	121	34	31	31	37	26	30	130	82
18	120	51	63	74	41	35	30	35	33	29	68	77
19	93	126	52	114	60	31	30	34	57	27	69	83
20	358	81	47	128	38	30	29	34	91	28	167	181
21	700	88	44	72	33	30	30	35	59	31	101	160
22	276	64	67	59	31	35	30	37	55	29	75	106
23	136	51	85	53	30	31	32	40	52	29	64	88
24	104	48	78	50	44	28	37	43	42	26	58	376
25	88	76	57	50	49	28	58	50	46	25	53	691
26	82	658	49	65	39	27	61	50	111	24	48	188
27	85	327	46	125	41	27	54	39	72	27	45	317
28	70	154	44	67	41	28	46	37	76	26	42	240
29	60	111	42	59	---	42	40	36	60	72	40	122
30	53	204	40	126	---	82	38	35	51	39	113	93
31	48	---	68	76	---	45	---	34	---	28	93	---
TOTAL	5878	2667	2081	2474	1338	1329	1048	1150	1298	1241	1713	5644
MEAN	190	88.9	67.1	79.8	47.8	42.9	34.9	37.1	43.3	40.0	55.3	188
MAX	919	658	124	156	90	94	61	60	111	125	167	691
MIN	48	27	40	42	30	27	29	27	24	24	17	71
AC-FT	11660	5290	4130	4910	2650	2640	2080	2280	2570	2460	3400	11190
CFSM	18.8	8.80	6.65	7.90	4.73	4.24	3.46	3.67	4.28	3.96	5.47	18.6
IN.	21.65	9.82	7.66	9.11	4.93	4.89	3.86	4.24	4.78	4.57	6.31	20.79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2003, BY WATER YEAR (WY)#

MEAN	189	101	99.3	98.7	79.6	61.6	65.3	104	88.6	63.4	89.4	170
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	104	37.0	21.7	46.3	24.8	19.9	29.0	37.1	28.8	20.6	30.0	52.8
(WY)	1985	1999	1984	1988	1999	1989	2002	2003	1993	1993	1989	1986

See period of record; partial years used in monthly summary statistics and break in record

15087690 INDIAN RIVER NEAR SITKA—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003#	
ANNUAL TOTAL	34253		27861			
ANNUAL MEAN	93.8		76.3		101	
HIGHEST ANNUAL MEAN					123	1987
LOWEST ANNUAL MEAN					76.3	2003
HIGHEST DAILY MEAN	978	Aug 12	919	Oct 16	2000	Oct 12 1982
LOWEST DAILY MEAN	a15	Apr 6	b17	Aug 11	8.6	Jan 18 1989
ANNUAL SEVEN-DAY MINIMUM	16	Apr 2	18	Aug 8	10	Jan 13 1989
MAXIMUM PEAK FLOW			c3090	Oct 16	d5710	Sep 4 1990
MAXIMUM PEAK STAGE			13.03	Oct 16	e13.51	Sep 4 1990
INSTANTANEOUS LOW FLOW			f16		8.2	Jan 19 1989
ANNUAL RUNOFF (AC-FT)	67940		55260		73310	
ANNUAL RUNOFF (CFSM)	9.29		7.56		10.0	
ANNUAL RUNOFF (INCHES)	126.16		102.62		136.13	
10 PERCENT EXCEEDS	157		128		185	
50 PERCENT EXCEEDS	68		48		68	
90 PERCENT EXCEEDS	26		28		29	

\# See period of record; partial years used in monthly summary statistics and break in record
a Apr. 6 to Apr. 8
b Aug. 11-14
c From rating curve extended above 300 ft^3/s
d From rating curve extended above 3,100 ft^3/s, at site and datum then in use
e At site and datum then in use
f Aug. 12 and Aug. 14

15087700 INDIAN RIVER AT SITKA

LOCATION.--Lat 57°03'12", long 135°18'52", in NE¼ SW¼ SE¼ sec. 36, T. 55 S., R. 63 E. (Sitka A-4 quad), Hydrologic Unit 19010203, Greater Sitka Borough, in Tongass National Forest, on Baranof Island, on right bank 500 ft upstream from Sawmill Creek Road, 600 ft downstream from Sheldon Jackson College Diversion, and 0.6 mi above mouth.

DRAINAGE AREA.--12.0 mi^2

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

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

REMARKS. Records good. Flow is diverted 600 ft upstream to Sheldon Jackson College.

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	96	16	104	73	62	73	e19	17	18	41	29	482
2	82	14	70	45	89	60	e16	16	21	39	47	435
3	58	14	56	38	81	40	e14	15	19	46	56	185
4	47	13	48	118	62	76	e14	14	18	122	41	101
5	69	13	42	121	53	52	e14	14	19	67	36	79
6	319	13	37	153	46	29	e14	14	18	49	31	61
7	753	13	36	134	42	22	e15	13	17	42	28	72
8	402	14	117	e75	38	19	e19	13	16	39	27	503
9	238	13	100	e52	35	18	e19	13	18	36	26	116
10	94	12	58	47	38	17	e17	13	20	34	24	109
11	66	12	49	45	38	15	e15	13	19	36	23	292
12	63	12	53	41	33	14	e15	32	19	35	23	117
13	59	21	61	35	29	15	e15	27	19	33	24	279
14	46	28	46	30	25	15	e16	33	18	32	23	365
15	38	29	50	27	22	17	e18	21	18	29	77	122
16	1270	20	48	26	21	15	e16	18	17	26	142	81
17	604	44	53	124	21	14	e15	17	18	26	141	65
18	93	35	52	65	26	16	14	16	23	25	65	62
19	63	121	36	101	49	14	14	16	45	24	56	66
20	515	65	30	125	25	14	14	15	91	24	165	175
21	1260	74	27	62	21	14	14	16	57	26	88	167
22	352	47	56	47	20	16	15	19	49	25	62	95
23	103	33	85	41	19	15	15	23	47	25	49	75
24	85	29	82	38	32	13	17	28	42	24	44	490
25	48	57	47	38	36	13	28	35	47	23	39	1010
26	43	999	34	57	26	13	34	38	120	22	34	208
27	47	436	29	127	27	e12	27	25	80	24	33	427
28	33	137	27	62	27	e14	21	22	86	23	31	303
29	24	83	25	51	---	e25	19	22	66	75	28	116
30	20	215	24	124	---	e52	18	20	49	41	111	81
31	17	---	55	72	---	e26	---	20	---	32	82	---
TOTAL	7007	2632	1637	2194	1043	768	521	618	1114	1145	1685	6739
MEAN	226	87.7	52.8	70.8	37.2	24.8	17.4	19.9	37.1	36.9	54.4	225
MAX	1270	999	117	153	89	76	34	38	120	122	165	1010
MIN	17	12	24	26	19	12	14	13	16	22	23	61
MED	69	29	49	57	32	16	16	17	19	32	39	119
AC-FT	13900	5220	3250	4350	2070	1520	1030	1230	2210	2270	3340	13370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	205	71.1	98.4	76.0	49.4	48.5	47.7	79.2	80.3	56.0	75.7	151
MAX	248	87.7	240	125	82.7	107	108	139	130	67.7	196	225
(WY)	1999	2003	2000	1999	2002	2001	1999	1999	1999	2000	2002	2003
MIN	141	38.0	51.0	55.7	23.6	24.8	15.2	19.9	37.1	36.9	22.0	78.9
(WY)	2001	1999	2002	2002	1999	2003	2002	2003	2003	2003	2001	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	31980.7		27103			
ANNUAL MEAN	87.6		74.3		86.8	
HIGHEST ANNUAL MEAN					103	2000
LOWEST ANNUAL MEAN					74.3	2003
HIGHEST DAILY MEAN	1270	Oct 16	1270	Oct 16	2390	Oct 19 1998
LOWEST DAILY MEAN	a9.2	Apr 6	b12	Nov 10	a9.2	Apr 6 2002
ANNUAL SEVEN-DAY MINIMUM	9.2	Apr 6	13	Nov 6	9.2	Apr 6 2002
MAXIMUM PEAK FLOW			c3890	Oct 16	c5740	Oct 19 1998
MAXIMUM PEAK STAGE			25.93	Oct 16	26.84	Oct 19 1998
INSTANTANEOUS LOW FLOW			d11	Nov 11	9.0	Apr 9 2002
ANNUAL RUNOFF (AC-FT)	63430		53760		62910	
10 PERCENT EXCEEDS	152		123		157	
50 PERCENT EXCEEDS	48		35		50	
90 PERCENT EXCEEDS	13		14		19	

a Apr. 6 to Apr. 9, 2002
b Nov. 10 to Nov. 12, and Mar. 27
c From rating curve extended above 1050 ft^3/s
d Nov. 11 and 12

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. 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	241	601	54	78	89	71	65	66	73	120	e241
2	313	248	279	51	82	88	68	64	66	73	124	e154
3	281	247	123	64	83	85	67	63	66	74	123	e138
4	270	188	72	100	77	96	66	63	66	87	118	e117
5	280	62	69	93	75	88	66	63	65	79	117	e111
6	572	63	68	103	74	80	66	63	65	76	116	e111
7	2440	62	68	93	74	77	66	63	65	75	115	e109
8	2630	62	80	78	73	74	67	62	65	74	114	e184
9	1670	62	87	73	73	74	67	62	55	73	114	e125
10	841	62	97	72	74	74	66	62	65	73	114	e114
11	408	62	119	71	75	73	66	63	65	72	114	e173
12	297	63	120	71	73	73	66	65	66	72	113	e120
13	297	64	128	70	73	73	66	67	66	72	113	e214
14	273	65	101	70	73	73	66	69	66	72	113	e247
15	270	67	98	69	73	74	66	67	66	72	118	e108
16	1850	67	116	69	73	73	65	66	66	72	124	e104
17	3710	72	94	80	73	73	64	66	67	72	126	e105
18	1410	72	79	75	77	74	64	65	69	73	118	e107
19	687	84	73	88	77	73	64	65	75	72	120	e110
20	791	77	71	93	76	74	64	64	85	72	127	e131
21	2950	80	70	79	75	72	64	64	80	72	108	e148
22	2330	75	78	74	74	75	64	64	81	99	117	e148
23	1170	71	86	72	74	74	64	64	80	116	114	e128
24	616	70	86	71	75	73	65	64	75	116	112	e188
25	373	71	77	70	78	73	67	66	74	116	111	e2540
26	285	203	73	83	78	72	68	67	81	116	e109	e2390
27	268	1380	66	100	78	72	67	66	79	115	e109	e1240
28	257	1530	70	81	80	70	66	66	81	115	e108	e2300
29	252	754	70	76	---	70	64	65	76	122	e108	e1150
30	251	702	60	86	---	78	64	66	74	114	e117	e993
31	249	---	53	79	---	74	---	66	---	117	e118	---
TOTAL	28587	6926	3332	2408	2118	2361	1974	2005	2116	2696	3592	14048
MEAN	922	231	107	77.7	75.6	76.2	65.8	64.7	70.5	87.0	116	468
MAX	3710	1530	601	103	83	96	71	69	85	122	127	2540
MIN	249	62	53	51	73	70	64	62	55	72	108	104
AC-FT	56700	13740	6610	4780	4200	4680	3920	3980	4200	5350	7120	27860
CFSM	23.6	5.92	2.76	1.99	1.94	1.95	1.69	1.66	1.81	2.23	2.97	12.0
IN.	27.27	6.61	3.18	2.30	2.02	2.25	1.88	1.91	2.02	2.57	3.43	13.40

e Estimated

15088000 SAWMILL CREEK NEAR SITKA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2003, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	744	473	259	174	166	128	202	534	704	657	663	744
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	116	359
(WY)	1923	2002	1951	1956	1951	1922	1948	2002	2002	2003	2003	1941

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1920 - 2003#	
ANNUAL TOTAL	108127		72163			
ANNUAL MEAN	296		198		460	
HIGHEST ANNUAL MEAN					715	1936
LOWEST ANNUAL MEAN					198	2003
HIGHEST DAILY MEAN	4760	Aug 13	3710	Oct 17	5500	Oct 22 1937
LOWEST DAILY MEAN	a47	Jun 18	51	Jan 2	11	Mar 30 1922
ANNUAL SEVEN-DAY MINIMUM	47	Jun 18	60	Dec 28	12	Mar 25 1922
MAXIMUM PEAK FLOW			5680	Oct 17	b10700	Nov 19 1993
MAXIMUM PEAK STAGE			17.52	Oct 17	c	
INSTANTANEOUS LOW FLOW			37	Jun 9	9.1	Mar 4 1951
ANNUAL RUNOFF (AC-FT)	214500		143100		333600	
ANNUAL RUNOFF (CFSM)	7.60		5.07		11.8	
ANNUAL RUNOFF (INCHES)	103.14		68.83		160.41	
10 PERCENT EXCEEDS	778		271		933	
50 PERCENT EXCEEDS	77		75		346	
90 PERCENT EXCEEDS	57		64		65	

\# See Period of Record; partial years used in monthly statistics
a Jun. 18-24
b 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
c 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	0.45	1.4	1.7	3.2	2.6	0.72	0.98	0.75	0.96	3.8	10
2	2.5	0.41	1.1	2.1	3.9	4.2	0.68	0.75	0.60	1.5	1.9	4.1
3	1.5	0.38	0.97	9.8	1.8	5.6	0.67	0.64	0.70	2.8	1.8	1.4
4	1.1	0.36	0.88	8.5	1.3	2.0	0.64	0.64	0.65	1.5	1.4	0.81
5	4.5	0.37	0.86	13	1.1	1.0	0.59	0.57	0.56	1.1	0.78	0.58
6	12	1.00	1.5	2.9	1.0	0.70	0.66	0.53	0.45	0.80	0.43	1.2
7	12	0.75	13	e2.0	1.0	0.46	1.0	0.72	0.40	0.59	0.30	7.2
8	5.0	0.46	4.7	e1.2	1.00	e0.32	0.97	0.83	0.38	0.50	0.18	1.6
9	3.8	0.43	1.9	1.3	2.2	e0.21	0.98	0.75	0.36	0.40	0.03	3.9
10	1.3	0.40	2.4	2.2	1.9	e0.11	1.2	0.77	0.34	0.32	0.00	10
11	0.93	1.9	5.0	1.5	1.3	e0.03	1.5	1.8	0.38	0.23	0.01	2.7
12	5.7	3.4	2.5	1.1	1.1	0.37	1.9	1.4	0.37	0.20	0.56	14
13	1.8	2.7	1.8	0.97	1.0	0.56	1.9	1.5	0.31	0.32	0.36	7.1
14	1.1	2.5	6.5	0.94	0.90	1.2	1.5	1.1	0.29	0.19	5.0	1.4
15	0.84	1.4	2.2	1.0	0.82	0.80	0.98	0.90	0.30	0.05	2.9	0.85
16	41	3.2	1.9	6.2	0.85	0.59	0.85	0.90	0.84	0.02	2.0	0.88
17	6.3	2.0	1.8	2.3	1.5	0.69	0.81	1.0	1.6	0.00	1.3	3.1
18	1.3	6.0	1.2	8.9	2.7	0.58	0.86	0.79	3.1	0.00	1.5	3.0
19	1.3	3.9	1.1	5.4	1.2	0.67	1.1	0.73	8.1	0.03	4.3	8.7
20	25	4.3	0.97	1.6	0.99	0.79	1.2	0.81	6.9	0.24	1.5	3.6
21	27	1.8	6.1	1.0	0.93	0.96	0.99	0.72	5.2	0.58	0.90	2.3
22	6.4	1.1	4.0	0.88	0.88	0.68	1.5	1.0	3.2	0.50	0.54	1.6
23	1.4	1.4	3.8	0.83	1.4	0.63	3.9	0.95	2.2	0.49	0.36	21
24	1.0	3.6	1.7	1.2	1.8	0.61	5.0	3.1	2.6	0.63	0.29	16
25	0.80	20	1.2	5.7	1.5	0.56	3.5	1.3	4.3	0.54	0.22	2.8
26	1.0	18	1.1	5.7	1.9	0.68	2.7	0.72	4.9	0.69	0.26	15
27	2.2	4.1	0.99	1.8	2.5	0.93	1.9	0.76	3.9	0.42	0.29	3.8
28	1.1	1.8	0.91	2.0	3.0	2.7	1.6	0.65	2.1	3.8	0.21	1.0
29	0.75	6.4	0.91	3.4	---	4.3	1.3	0.61	1.5	1.1	5.7	0.57
30	0.56	2.3	1.1	1.6	---	1.2	1.3	0.60	1.2	0.90	2.4	0.42
31	0.50	---	1.8	1.3	---	0.82	---	0.48	---	1.7	16	---
TOTAL	177.98	96.81	77.29	100.02	44.67	37.55	44.40	29.00	58.48	23.10	57.22	150.61
MEAN	5.74	3.23	2.49	3.23	1.60	1.21	1.48	0.94	1.95	0.75	1.85	5.02
MAX	41	20	13	13	3.9	5.6	5.0	3.1	8.1	3.8	16	21
MIN	0.50	0.36	0.86	0.83	0.82	0.03	0.59	0.48	0.29	0.00	0.00	0.42
MED	1.5	1.8	1.7	1.8	1.3	0.69	1.1	0.77	0.80	0.50	0.78	2.9
AC-FT	353	192	153	198	89	74	88	58	116	46	113	299
CFSM	15.1	8.49	6.56	8.49	4.20	3.19	3.89	2.46	5.13	1.96	4.86	13.2
IN.	17.42	9.48	7.57	9.79	4.37	3.68	4.35	2.84	5.72	2.26	5.60	14.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

MEAN	6.56	3.46	4.17	2.73	2.16	1.79	2.16	4.66	4.02	2.70	3.07	5.06
MAX	7.64	4.56	7.73	3.23	3.16	2.78	2.66	6.85	6.20	4.93	5.96	6.36
(WY)	2002	2000	2000	2003	2002	2001	2001	2002	2000	2000	2002	2000
MIN	5.34	2.85	2.49	1.68	1.12	0.82	1.48	0.94	1.95	0.75	0.46	3.04
(WY)	2001	2001	2003	2000	2000	2002	2003	2003	2003	2003	2001	2002

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	1317.56		897.13			
ANNUAL MEAN	3.61		2.46		3.55	
HIGHEST ANNUAL MEAN					4.54	2000
LOWEST ANNUAL MEAN					2.46	2003
HIGHEST DAILY MEAN	51	Aug 12	41	Oct 16	51	Aug 12 2002
LOWEST DAILY MEAN	0.21	Mar 19	a0.00	Jul 17	0.00	Jul 17 2003
ANNUAL SEVEN-DAY MINIMUM	0.23	Mar 15	0.08	Jul 14	0.08	Jul 14 2003
MAXIMUM PEAK FLOW			167	Oct 16	264	Aug 12 2002
MAXIMUM PEAK STAGE			19.67	Oct 16	19.68	Aug 12 2002
INSTANTANEOUS LOW FLOW			b0.00	Jul 16	bc0.00	Dec 2 2001
ANNUAL RUNOFF (AC-FT)	2610		1780		2570	
ANNUAL RUNOFF (CFSM)	9.50		6.47		9.35	
ANNUAL RUNOFF (INCHES)	128.98		87.82		127.06	
10 PERCENT EXCEEDS	8.2		5.6		8.1	
50 PERCENT EXCEEDS	1.9		1.2		2.1	
90 PERCENT EXCEEDS	0.42		0.38		0.40	

a Jul. 17-18, and Aug. 10
b Jul. 16-19, and Aug. 10-11
c Dec.2 and Dec. 3, 2001
e Estimated

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.--29 years (water years, 1916-25, 1985-2003), 313 ft^3/s, 147.6 in/yr, 226,800 acre-ft/yr. Mean discharge for water years 1985-03 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 and November 27-29, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed,90,840 acre-ft, October 21-23, elevation 397.7 ft; minimum contents observed, 58,920 acre-ft, April 24, elevation 362.4ft; Maximum daily discharge (not adjusted for storage) 313 ft^3/s, December 13; minimum daily discharge, 6.0 ft^3/s, December 14.

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Sep 30	395.6	88,630	
Oct 31	394.8	87,810	-820
Nov 30	396.4	89,470	+1660
Dec 31	393.0	86,100	-3,370
Jan 31	391.6	84,770	-1,330
Feb 28	382.4	76,160	-8,610
Mar 31	370.5	65,680	-10,480
Apr 30	364.4	60,520	-5,160
May 31	370.4	65,590	+5,070
Jun 30	382.5	76,250	+10,660
Jul 31	386.5	79,930	+3,680
Aug 31	392.2	85,340	+5,410
Sep 30	395.4	88,420	+3,080
		CAL YR 2002	+9220
		WTR YR 2003	-210

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

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	225	0	225	212
NOV	200	587	787	789
DEC	139	0	139	144
JAN	198	0	198	176
FEB	215	0	215	60
MAR	243	0	243	73
APR	167	0	167	80
MAY	149	0	149	231
JUN	154	0	154	333
JUL	134	0	134	194
AUG	131	0	131	219
SEP	128	133	261	313
CAL YR 2002	231	57.4	289	304
WTR YR 2003	173	59.2	233	235

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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	25	78	17	15	9.1	8.9	69	76	31	25	e28
2	51	23	48	17	15	11	7.9	47	69	29	31	e105
3	43	22	34	16	16	15	9.8	35	54	34	25	e75
4	41	21	29	67	17	20	6.4	29	50	35	26	e57
5	47	20	26	65	15	14	5.3	26	72	28	23	e41
6	68	23	25	85	14	e12	5.0	24	82	27	20	e38
7	74	20	27	43	14	e10	5.2	24	67	25	19	e41
8	84	19	61	27	13	e7.0	6.4	26	53	23	e18	e75
9	82	18	89	23	13	e6.0	6.9	30	51	23	e18	e98
10	66	18	65	22	14	e5.4	6.9	32	51	22	e17	e70
11	52	18	42	20	15	e5.2	8.5	33	46	21	e20	e85
12	69	18	90	19	14	e5.0	11	52	43	19	e20	e78
13	67	25	56	18	13	e5.0	13	40	42	19	e16	e112
14	52	23	34	e17	12	e5.3	14	34	37	19	e16	e164
15	52	21	47	17	12	5.6	16	32	35	18	e26	e116
16	92	20	33	16	11	5.7	14	29	33	18	e31	e99
17	120	20	27	36	11	5.4	13	28	53	18	e32	e86
18	87	20	25	31	10	5.2	12	30	55	17	e26	e86
19	82	27	22	38	e9.6	5.2	13	31	60	16	e27	e83
20	93	29	20	34	e8.5	5.2	14	33	73	16	e32	e75
21	165	33	20	e23	e8.0	5.4	15	40	57	17	e32	e108
22	132	24	20	e20	e7.8	5.4	16	68	52	16	e29	e90
23	95	20	20	e18	e8.1	5.0	20	107	38	15	e27	e85
24	78	20	42	e17	9.6	4.8	35	122	36	14	e24	e116
25	55	36	23	e16	9.1	4.6	61	108	45	14	e23	e124
26	53	137	20	e15	8.7	4.7	83	86	44	14	e23	e101
27	49	120	18	e15	8.8	5.1	88	71	36	17	e20	e93
28	35	90	18	16	8.0	6.2	77	71	44	16	e21	e129
29	31	69	18	20	---	14	69	81	35	27	e20	e82
30	28	117	16	18	---	17	73	80	32	19	e18	e75
31	26	---	16	16	---	12	---	84	---	18	e27	---
TOTAL	2127	1096	1109	822	330.2	246.5	734.2	1602	1521	645	732	2615
MEAN	68.6	36.5	35.8	26.5	11.8	7.95	24.5	51.7	50.7	20.8	23.6	87.2
MAX	165	137	90	85	17	20	88	122	82	35	32	164
MIN	26	18	16	15	7.8	4.6	5.0	24	32	14	16	28
AC-FT	4220	2170	2200	1630	655	489	1460	3180	3020	1280	1450	5190
CFSM	7.96	4.24	4.15	3.08	1.37	0.92	2.84	6.00	5.88	2.41	2.74	10.1
IN.	9.18	4.73	4.79	3.55	1.42	1.06	3.17	6.91	6.56	2.78	3.16	11.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)#

MEAN	61.7	30.2	25.9	15.6	13.1	11.2	28.3	77.4	86.2	54.0	40.6	62.1
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	18.7	33.3
(WY)	1994	1991	1997	1997	1999	2002	2002	2003	2003	2003	1994	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003#	
ANNUAL TOTAL	15112.0		13579.9			
ANNUAL MEAN	41.4		37.2		42.4	
HIGHEST ANNUAL MEAN					60.1	1992
LOWEST ANNUAL MEAN					31.8	1998
HIGHEST DAILY MEAN	165	Oct 21	165	Oct 21	465	Oct 20 1998
LOWEST DAILY MEAN	1.2	Apr 3	4.6	Mar 25	a1.2	Apr 3 2002
ANNUAL SEVEN-DAY MINIMUM	1.2	Apr 8	5.0	Mar 21	1.2	Apr 8 2002
MAXIMUM PEAK FLOW			b193	Oct 21	c710	Oct 20 1998
MAXIMUM PEAK STAGE			2.85	Oct 21	d14.79	Oct 20 1998
INSTANTANEOUS LOW FLOW			2.0	Feb 26	f0.98	Mar 20 2002
ANNUAL RUNOFF (AC-FT)	29970		26940		30730	
ANNUAL RUNOFF (CFSM)	4.80		4.32		4.92	
ANNUAL RUNOFF (INCHES)	65.22		58.60		66.86	
10 PERCENT EXCEEDS	93		84		91	
50 PERCENT EXCEEDS	32		25		31	
90 PERCENT EXCEEDS	1.9		8.8		6.3	

\# 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

15102200 FAVORITE CREEK NEAR ANGOON

LOCATION.--Lat 57°26'52", long 134°27'35", in SE¼ NE¼ SW¼ sec. 14, T. 51 S., R. 68 E. (Sitka B-2 quad), Hydrologic Unit 19010204, in Tongass National Forest, on Admiralty Island, on right bank 1.2 mi upstream from confluence with North Fork Favorite Creek, 2.2 miles from the mouth of Favorite Creek and about 5.7 mi south east of Angoon.

DRAINAGE AREA.--2.52 mi^2

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 2000 to September 2003 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 370 ft above sea level, from topographic map.

REMARKS.-- Records good, except for discharges above 80 ft^3/s, and estimated daily discharges, which are poor.

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	e10	e7.5	18	17	8.0	5.1	5.2	14	19	9.3	3.3	9.0
2	e8.0	e6.6	15	12	14	4.7	4.2	13	17	8.7	3.1	19
3	e9.0	e8.0	13	16	13	5.3	e3.6	11	15	9.2	2.9	12
4	e10	e6.6	11	83	12	7.5	3.4	10	14	10	3.0	9.5
5	e15	6.3	9.9	86	9.7	6.1	3.3	8.8	17	8.5	3.2	8.3
6	e10	12	8.9	58	8.0	4.3	5.6	7.9	18	7.6	2.9	9.3
7	e14	10	9.0	25	6.8	e2.9	14	7.2	18	6.8	2.7	16
8	e25	8.3	15	18	6.1	e2.5	14	7.0	16	6.3	2.6	12
9	e45	7.4	21	15	5.7	e2.4	8.8	7.3	16	5.7	2.5	10
10	e35	7.0	20	13	5.6	e2.2	10	8.5	15	5.4	2.4	11
11	e20	6.8	34	12	5.4	e2.2	7.9	10	14	5.0	2.3	11
12	e25	8.3	66	11	5.1	e2.1	7.7	13	14	4.8	2.3	9.1
13	e20	19	25	9.3	4.9	e2.1	7.7	13	15	4.6	2.2	23
14	e15	21	19	8.3	4.6	e2.3	7.7	12	14	4.4	2.3	20
15	e10	14	90	8.6	4.4	2.6	9.3	11	13	4.2	6.3	15
16	e34	11	22	9.4	4.3	2.8	7.8	10	12	3.9	4.8	13
17	e55	14	16	20	4.1	3.2	7.0	9.1	17	3.8	4.2	11
18	e30	12	16	17	4.1	3.9	9.3	8.9	18	3.6	4.0	13
19	e24	17	11	18	4.1	3.2	12	9.3	15	3.4	3.7	12
20	e29	14	8.7	16	3.7	3.1	9.0	10	14	3.4	3.7	13
21	e70	16	7.3	13	e3.2	3.5	8.4	11	13	3.5	3.8	13
22	e35	12	12	11	3.4	3.7	9.2	14	12	3.8	3.7	12
23	e20	10	19	9.8	e2.9	3.4	9.6	32	12	3.6	3.5	12
24	e16	9.7	35	8.8	3.1	2.9	10	53	11	3.3	3.3	18
25	e14	14	11	8.2	3.1	2.7	15	54	11	3.1	3.1	15
26	e17	26	8.4	7.7	3.0	2.7	16	24	11	3.0	3.0	14
27	e20	28	7.1	7.0	3.1	2.8	15	19	11	2.9	2.9	14
28	e16	21	6.3	8.3	3.0	8.6	14	18	12	2.7	2.8	13
29	e13	16	5.6	17	---	15	14	19	11	3.2	2.7	12
30	e11	24	5.3	13	---	15	14	20	9.8	2.9	4.8	10
31	e8.5	---	21	9.8	---	7.9	---	20	---	2.7	4.3	---
TOTAL	683.5	393.5	586.5	586.2	158.4	138.7	282.7	485.0	424.8	153.3	102.3	389.2
MEAN	22.0	13.1	18.9	18.9	5.66	4.47	9.42	15.6	14.2	4.95	3.30	13.0
MAX	70	28	90	86	14	15	16	54	19	10	6.3	23
MIN	8.0	6.3	5.3	7.0	2.9	2.1	3.3	7.0	9.8	2.7	2.2	8.3
MED	17	12	15	13	4.5	3.2	9.1	11	14	3.9	3.1	12
AC-FT	1360	781	1160	1160	314	275	561	962	843	304	203	772
CFSM	8.75	5.21	7.51	7.50	2.24	1.78	3.74	6.21	5.62	1.96	1.31	5.15
IN.	10.09	5.81	8.66	8.65	2.34	2.05	4.17	7.16	6.27	2.26	1.51	5.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)#

MEAN	19.0	15.4	15.8	17.8	8.15	4.14	7.05	21.0	24.7	11.6	7.64	13.7
MAX	22.0	17.6	18.9	22.5	10.7	5.37	9.42	28.2	30.3	18.0	12.2	16.0
(WY)	2003	2002	2003	2001	2001	2001	2003	2002	2001	2001	2002	2001
MIN	15.9	13.1	12.4	12.0	5.66	2.57	3.25	15.6	14.2	4.95	3.30	12.2
(WY)	2002	2003	2002	2002	2003	2002	2002	2003	2003	2003	2003	2002

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

15102200 FAVORITE CREEK NEAR ANGOON—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003#	
ANNUAL TOTAL	5309.7		4384.1			
ANNUAL MEAN	14.5		12.0		12.9	
HIGHEST ANNUAL MEAN					13.8	2002
LOWEST ANNUAL MEAN					12.0	2003
HIGHEST DAILY MEAN	107	May 29	90	Dec 15	123	Dec 24 2001
LOWEST DAILY MEAN	1.5	Apr 7	a2.1	Mar 12	1.5	Apr 7 2002
ANNUAL SEVEN-DAY MINIMUM	1.5	Apr 5	2.3	Mar 8	1.5	Apr 5 2002
MAXIMUM PEAK FLOW			462	Dec 15	b462	Dec 15 2002
MAXIMUM PEAK STAGE			11.43	Dec 15	11.43	Dec 15 2002
INSTANTANEOUS LOW FLOW			2.1	Aug 13	1.4	Apr 4 2002
ANNUAL RUNOFF (AC-FT)	10530		8700		9360	
ANNUAL RUNOFF (CFSM)	5.77		4.77		5.13	
ANNUAL RUNOFF (INCHES)	78.38		64.72		69.69	
10 PERCENT EXCEEDS	33		20		26	
50 PERCENT EXCEEDS	10		9.8		9.8	
90 PERCENT EXCEEDS	2.4		3.0		2.7	

\# See Period of Record, partial year used in monthly statistics
a Mar. 12 and 13
b From rating curve extended above 80 ft^3/s.

15102200 FAVORITE CREEK NEAR ANGOON—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2002 to July 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)
NOV											
04...	1145	9	9	13.5	10.06	6.6	30	8010	6.0	6.5	<1.0
JAN											
09...	1315	9	9	14.5	10.23	15	30	8010	--	--	1.1
MAR											
07...	1000	9	9	13.9	10.04	2.9	30	8010	-7.5	.0	3.7
APR											
25...	0930	9	9	17.0	10.18	13	30	8010	6.5	3.0	<1.0
JUL											
07...	1200	9	9	16.0	10.01	6.9	30	8010	15.5	8.0	<1.0

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 good, 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. 16	1415	721	4.05	Sept. 01	2115	748	4.10
Oct. 20	2200	977	4.49	Sept. 13	1700	654	3.92
Nov. 26	0945	*1100	*4.68	Sept. 24	0500	634	3.88

WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	28	69	55	35	66	31	50	28	18	15	216
2	86	26	48	45	92	43	25	40	37	14	14	206
3	56	24	39	36	96	49	23	33	27	33	12	75
4	43	23	34	226	72	64	21	29	25	35	11	43
5	83	22	30	197	58	41	20	27	28	20	9.8	31
6	125	24	28	246	44	26	23	26	26	16	8.9	30
7	175	22	33	104	37	e15	53	26	22	14	8.3	102
8	195	20	123	65	33	e13	64	28	20	13	7.8	143
9	108	19	141	50	32	e13	52	32	18	12	7.3	53
10	62	20	80	42	38	e12	47	33	17	11	6.9	72
11	56	19	82	37	40	e12	41	34	16	10	6.7	80
12	88	20	125	35	32	e11	39	63	16	9.8	6.8	46
13	68	48	74	32	29	e11	37	49	16	9.4	7.1	237
14	54	42	49	29	27	e11	37	38	15	9.4	7.5	148
15	48	39	125	29	25	e13	38	35	14	9.0	18	70
16	345	29	74	35	24	e14	38	32	14	8.8	33	47
17	147	75	57	174	23	e15	43	27	31	9.9	22	38
18	58	63	60	100	24	e16	38	27	54	9.3	14	54
19	65	104	39	100	25	e18	53	28	36	8.6	12	60
20	337	93	32	79	21	24	43	28	33	9.8	34	156
21	544	69	28	48	e18	28	43	29	29	14	22	103
22	165	40	49	36	e17	28	41	38	22	12	15	56
23	75	32	59	31	e17	23	46	60	19	13	12	60
24	56	32	77	28	18	19	55	91	19	10	10	316
25	46	85	42	27	19	19	77	65	39	9.2	9.2	221
26	79	482	31	27	19	18	82	62	39	9.3	8.5	76
27	77	386	27	25	21	19	76	38	33	13	8.2	161
28	45	115	26	26	21	32	61	32	75	10	8.0	89
29	37	69	24	35	---	93	56	30	53	21	8.0	55
30	33	134	22	73	---	96	56	28	26	14	50	43
31	29	---	28	46	---	45	---	30	---	11	38	---
TOTAL	3506	2204	1755	2118	957	907	1359	1188	847	416.5	451.0	3087
MEAN	113	73.5	56.6	68.3	34.2	29.3	45.3	38.3	28.2	13.4	14.5	103
MAX	544	482	141	246	96	96	82	91	75	35	50	316
MIN	29	19	22	25	17	11	20	26	14	8.6	6.7	30
AC-FT	6950	4370	3480	4200	1900	1800	2700	2360	1680	826	895	6120
CFSM	11.1	7.20	5.55	6.70	3.35	2.87	4.44	3.76	2.77	1.32	1.43	10.1
IN.	12.79	8.04	6.40	7.72	3.49	3.31	4.96	4.33	3.09	1.52	1.64	11.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2003, BY WATER YEAR (WY)#

MEAN	117	76.9	63.5	50.2	48.1	43.7	65.9	99.7	65.3	30.2	33.1	75.8
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	9.44	17.5
(WY)	1970	1974	1978	1969	1969	1974	2002	2003	1998	1989	1977	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1968 - 2003#	
ANNUAL TOTAL	20027.8		18795.5			
ANNUAL MEAN	54.9		51.5		64.1	
HIGHEST ANNUAL MEAN					80.8	1992
LOWEST ANNUAL MEAN					44.1	1978
HIGHEST DAILY MEAN	544	Oct 21	544	Oct 21	1010	Oct 19 1998
LOWEST DAILY MEAN	7.7	Mar 20	6.7	Aug 11	a3.2	Jul 28 1989
ANNUAL SEVEN-DAY MINIMUM	8.1	Mar 15	7.2	Aug 8	4.2	Jan 13 1974
MAXIMUM PEAK FLOW			1100	Nov 26	b1970	Oct 8 1990
MAXIMUM PEAK STAGE			4.68	Nov 26	5.83	Oct 8 1990
INSTANTANEOUS LOW FLOW			c6.1	Aug 10	3.2	Jul 28 1989
ANNUAL RUNOFF (AC-FT)	39730		37280		46410	
ANNUAL RUNOFF (CFSM)	5.38		5.05		6.28	
ANNUAL RUNOFF (INCHES)	73.04		68.55		85.34	
10 PERCENT EXCEEDS	114		100		138	
50 PERCENT EXCEEDS	35		33		43	
90 PERCENT EXCEEDS	13		12		12	

\# See Period of Record; partial years used in monthly summary statistics
a Jul. 28 to Jul. 29, 1989
b 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
c Aug. 10 to Aug. 12, 2003

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 November 1, and March 7. No variation was found in the temperature cross sections. 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, 14.0°C, July 10-11; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Stream width, feet (00004)	Locatn in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instan-taneous dis-charge, cfs (00061)	Temper-ature, water, deg C (00010)	Temper-ature, air, deg C (00020)
NOV							
01...	1105	33.0	2.00	1.53	28	5.0	5.8
01...	1106	33.0	7.00	1.53	28	5.0	5.8
01...	1107	33.0	12.0	1.53	28	5.0	5.8
01...	1108	33.0	17.0	1.53	28	5.0	5.8
01...	1109	33.0	22.0	1.53	28	5.0	5.8
01...	1110	33.0	27.0	1.53	28	5.0	5.8
01...	1111	33.0	32.0	1.53	28	5.0	5.8
MAR							
07...	1135	35.0	4.00	1.66	14	.0	-6.5
07...	1136	35.0	11.0	1.66	14	.0	-6.5
07...	1137	35.0	18.0	1.66	14	.0	-6.5
07...	1138	35.0	25.0	1.66	14	.0	-6.5
07...	1139	35.0	32.0	1.66	14	.0	-6.5

TEMPERATURE WATER, (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	8.0	6.5	7.5	5.5	4.5	5.0	5.5	4.5	5.0	1.5	1.0	1.0
2	7.5	7.0	7.5	5.5	5.0	5.0	4.5	3.5	4.0	2.0	1.5	1.5
3	7.5	7.0	7.5	5.5	5.0	5.0	3.5	2.5	3.5	2.0	2.0	2.0
4	7.5	6.5	7.0	5.5	5.0	5.5	2.5	2.0	2.5	2.0	1.0	1.5
5	7.0	6.5	7.0	6.0	5.5	5.5	2.5	2.0	2.0	2.5	1.5	2.0
6	8.0	7.0	8.0	6.5	6.0	6.0	2.5	2.5	2.5	3.0	2.5	2.5
7	8.5	8.0	8.0	6.0	5.0	5.5	3.5	2.5	3.0	3.0	2.0	2.5
8	8.0	7.0	7.5	5.5	5.0	5.0	4.5	3.5	4.0	2.5	2.0	2.0
9	7.0	5.5	6.5	5.0	4.5	5.0	5.0	4.5	5.0	2.0	1.0	1.5
10	5.5	4.0	4.5	5.0	4.5	4.5	5.0	4.5	5.0	1.5	1.0	1.0
11	6.0	5.0	5.5	5.0	5.0	5.0	4.5	4.0	4.5	1.5	1.0	1.0
12	6.5	6.0	6.0	5.5	5.0	5.0	4.5	4.0	4.5	2.0	1.0	1.5
13	6.5	6.0	6.5	6.0	5.0	5.5	4.0	3.5	3.5	2.0	2.0	2.0
14	7.0	6.5	6.5	6.0	5.5	5.5	3.5	3.0	3.0	2.0	1.5	1.5
15	7.5	7.0	7.0	5.5	5.5	5.5	3.5	3.0	3.0	2.0	1.5	2.0
16	8.5	7.5	8.0	5.5	4.0	4.5	3.5	3.0	3.0	2.0	2.0	2.0
17	8.5	7.5	8.0	4.5	4.0	4.5	3.5	3.0	3.5	2.0	1.0	1.5
18	7.5	7.5	7.5	4.5	4.5	4.5	3.0	2.5	3.0	2.5	2.0	2.5
19	8.5	7.5	8.0	4.5	4.5	4.5	2.5	2.5	2.5	2.5	2.5	2.5
20	9.0	8.0	8.5	5.0	4.5	4.5	2.5	1.0	2.0	2.5	2.5	2.5
21	8.5	8.5	8.5	4.5	4.0	4.5	1.5	1.0	1.5	2.5	1.0	1.5
22	8.5	7.5	8.0	4.5	4.0	4.5	2.0	1.0	1.5	1.0	0.5	0.5
23	7.5	7.5	7.5	4.0	3.0	3.5	2.0	1.0	1.5	1.0	0.5	0.5
24	7.5	7.0	7.0	4.5	3.5	4.0	1.5	0.5	1.0	0.5	0.0	0.0
25	7.0	6.5	7.0	5.0	4.5	5.0	2.0	1.5	2.0	1.0	0.0	0.5
26	7.0	7.0	7.0	6.5	5.0	6.0	2.0	1.0	1.5	1.0	0.0	0.5
27	7.0	6.5	7.0	6.5	5.5	6.0	1.5	1.0	1.5	1.0	0.5	0.5
28	6.5	5.5	5.5	5.5	5.5	5.5	1.5	1.0	1.0	1.5	1.0	1.5
29	5.5	4.0	5.0	6.0	5.5	5.5	1.5	1.0	1.0	1.5	1.0	1.5
30	4.5	4.0	4.5	6.0	5.5	6.0	2.0	1.5	1.5	1.0	0.5	1.0
31	4.5	4.0	4.0	---	---	---	1.5	1.0	1.5	1.5	1.0	1.0
MONTH	9.0	4.0	6.9	6.5	3.0	5.0	5.5	0.5	2.7	3.0	0.0	1.5

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

TEMPERATURE WATER, 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	2.0	1.5	1.5	1.5	0.5	1.0	1.5	0.5	1.0	6.5	4.5	5.5
2	2.0	0.5	1.5	1.5	0.5	1.0	1.5	0.5	1.0	6.0	3.5	5.0
3	1.5	0.5	1.5	1.5	1.0	1.5	1.0	0.0	0.5	5.5	3.5	4.5
4	2.0	1.5	2.0	2.0	1.0	1.5	1.5	0.0	1.0	5.5	3.0	4.0
5	2.0	2.0	2.0	1.5	0.0	0.5	2.5	1.0	1.5	5.5	3.0	4.5
6	2.5	2.0	2.0	0.0	0.0	0.0	2.0	1.0	1.5	6.0	4.0	5.0
7	2.5	2.0	2.0	0.0	0.0	0.0	1.5	1.0	1.5	6.5	3.5	5.0
8	2.5	2.0	2.0	0.0	0.0	0.0	2.0	1.0	1.5	7.0	4.0	5.5
9	2.5	2.0	2.5	0.0	0.0	0.0	2.0	1.0	1.5	7.5	4.5	6.0
10	3.0	2.5	2.5	0.0	0.0	0.0	3.0	1.5	2.0	7.0	5.0	6.0
11	2.5	1.5	2.0	0.0	0.0	0.0	3.5	1.5	2.5	6.5	6.0	6.0
12	2.0	1.5	2.0	0.0	0.0	0.0	3.5	1.5	2.5	6.0	5.5	5.5
13	2.5	2.0	2.0	0.0	0.0	0.0	3.5	1.5	2.5	6.0	5.0	5.5
14	2.0	1.5	2.0	0.0	0.0	0.0	3.5	1.5	2.5	6.0	4.5	5.5
15	2.0	1.5	2.0	0.0	0.0	0.0	4.0	2.5	3.0	5.5	4.0	5.0
16	2.5	2.0	2.0	0.0	0.0	0.0	3.5	2.5	3.0	6.0	4.0	5.0
17	2.5	2.0	2.0	0.0	0.0	0.0	4.0	2.5	3.0	6.5	4.0	5.5
18	2.5	1.5	2.0	0.0	0.0	0.0	3.5	2.5	3.0	7.0	4.5	6.0
19	1.5	0.5	1.0	0.5	0.0	0.0	4.0	2.5	3.0	8.0	4.5	6.5
20	1.0	0.0	0.5	1.0	0.5	1.0	4.5	2.5	3.5	8.5	5.5	7.0
21	0.0	0.0	0.0	1.5	0.5	1.0	4.5	2.5	3.5	7.5	6.0	7.0
22	0.5	0.0	0.0	1.5	1.0	1.0	4.5	3.5	4.0	8.0	6.5	7.0
23	0.0	0.0	0.0	1.5	0.5	1.0	5.0	3.5	4.0	7.0	6.5	7.0
24	0.5	0.0	0.5	2.0	1.0	1.5	5.5	3.0	4.0	8.0	6.5	7.0
25	1.5	0.5	1.0	2.0	0.5	1.5	5.5	3.0	4.0	7.0	6.5	7.0
26	1.5	1.0	1.5	2.0	1.0	1.5	6.0	3.5	4.5	7.5	6.5	7.0
27	1.5	1.0	1.0	2.0	1.0	1.5	6.0	3.5	5.0	8.5	6.0	7.0
28	2.0	1.0	1.5	2.0	0.0	1.5	6.0	3.5	4.5	8.5	7.0	8.0
29	---	---	---	1.0	0.0	0.5	6.5	3.5	5.0	9.0	8.0	8.5
30	---	---	---	1.0	0.5	0.5	6.5	4.0	5.5	9.5	7.5	8.5
31	---	---	---	1.5	0.5	1.0	---	---	---	8.5	8.0	8.5
MONTH	3.0	0.0	1.5	2.0	0.0	0.6	6.5	0.0	2.9	9.5	3.0	6.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.5	7.0	8.0	12.5	10.0	11.0	12.0	11.5	11.5	11.0	10.5	11.0
2	9.0	7.5	8.0	11.5	10.5	11.0	12.0	11.0	11.5	11.0	10.5	10.5
3	9.0	7.5	8.5	11.0	10.0	10.5	11.5	10.5	11.0	10.5	10.0	10.5
4	9.0	7.5	8.5	11.5	10.0	10.5	11.5	11.0	11.0	10.5	9.5	10.0
5	10.0	8.0	9.0	11.0	10.0	10.5	11.5	10.0	11.0	10.0	9.0	9.5
6	11.0	9.0	10.0	11.5	10.0	11.0	12.5	9.5	11.0	10.0	9.5	10.0
7	10.0	9.0	9.5	12.5	10.5	11.5	13.0	10.0	11.5	11.0	10.0	10.5
8	11.5	8.5	10.0	13.0	11.0	12.0	13.0	10.5	12.0	10.5	10.0	10.5
9	11.5	8.5	10.0	12.5	11.5	12.0	13.5	11.0	12.0	10.5	10.0	10.0
10	12.0	9.0	10.5	14.0	11.0	12.5	13.0	10.0	11.5	10.5	10.0	10.0
11	11.5	9.5	10.5	14.0	12.0	13.0	13.0	10.5	11.5	10.5	10.0	10.0
12	11.5	10.0	10.5	13.5	12.0	13.0	12.0	11.5	12.0	10.0	9.5	10.0
13	11.5	10.0	10.5	13.0	12.0	12.5	13.5	11.5	12.5	10.5	10.0	10.0
14	12.0	9.5	10.5	12.5	12.0	12.5	12.5	12.0	12.0	10.0	9.5	9.5
15	12.0	10.0	11.0	13.0	11.0	12.0	12.5	12.0	12.5	9.5	8.0	8.5
16	11.0	10.0	10.5	12.0	11.5	11.5	12.5	12.0	12.0	8.0	7.0	7.5
17	10.5	10.0	10.5	11.5	11.0	11.5	12.5	11.5	12.0	7.5	6.5	7.0
18	10.5	9.5	10.0	12.5	11.0	11.5	12.0	11.0	11.5	8.0	7.5	7.5
19	10.0	9.0	9.5	12.5	10.5	11.5	11.5	11.0	11.0	8.0	7.5	7.5
20	10.0	9.0	9.5	12.0	11.5	12.0	11.5	10.5	11.0	9.0	8.0	8.5
21	10.5	9.5	10.0	12.0	11.0	11.5	11.0	10.0	10.5	9.0	8.0	8.5
22	10.5	9.5	10.0	11.5	11.0	11.5	11.0	10.0	10.5	8.0	7.5	7.5
23	10.5	9.5	10.0	12.0	11.0	11.5	10.5	9.0	10.0	7.5	7.0	7.5
24	10.0	9.0	9.5	12.0	11.5	11.5	11.0	10.0	10.5	8.5	7.5	8.0
25	10.0	9.5	9.5	12.0	11.5	11.5	11.0	9.0	10.0	9.0	8.5	8.5
26	10.0	9.5	9.5	11.5	11.5	11.5	10.5	9.0	10.0	8.5	8.0	8.0
27	9.5	9.0	9.5	11.5	11.0	11.5	10.5	10.0	10.5	9.5	8.0	9.0
28	10.5	9.0	9.5	11.5	10.5	11.0	11.5	9.5	10.5	9.5	9.0	9.0
29	11.0	9.5	10.0	12.5	11.5	11.5	11.0	10.0	10.5	9.0	8.5	8.5
30	11.0	9.5	10.5	12.5	11.0	11.5	11.5	10.5	11.0	9.0	8.5	8.5
31	---	---	---	12.5	11.0	11.5	11.0	10.5	11.0	---	---	---
MONTH	12.0	7.0	9.8	14.0	10.0	11.6	13.5	9.0	11.2	11.0	6.5	9.1

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, except for estimated daily discharges, which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.53	0.78	1.7	0.82	0.58	0.46	0.27	0.64	0.29	0.25	0.16	0.28
2	0.43	0.71	1.5	0.80	0.83	0.39	0.25	0.61	0.28	0.22	0.13	0.41
3	0.39	0.66	1.2	0.77	0.81	0.39	0.23	0.59	0.26	0.24	0.11	0.22
4	0.39	0.64	0.93	1.5	0.70	0.42	0.23	0.53	0.25	0.22	0.11	0.17
5	0.58	0.64	0.83	1.9	0.65	0.37	0.25	0.49	0.27	0.20	0.10	0.16
6	0.68	0.64	0.78	2.3	0.62	0.30	0.28	0.48	0.28	0.22	0.11	0.20
7	0.76	0.58	0.79	2.1	0.59	0.23	0.33	0.42	0.24	0.25	0.11	0.31
8	0.98	0.55	1.1	1.7	0.57	0.21	0.36	0.40	0.24	0.23	0.12	0.30
9	1.1	0.49	1.4	1.3	0.56	0.28	0.33	0.39	0.25	0.21	0.13	0.26
10	1.0	0.45	1.1	1.0	0.55	0.22	0.33	0.38	0.26	0.22	0.11	0.31
11	0.96	0.42	1.4	0.92	0.52	0.24	0.30	0.39	0.26	0.23	0.10	0.33
12	0.91	0.47	1.6	0.85	0.51	e0.24	0.27	0.43	0.28	0.22	0.11	0.27
13	0.80	0.48	1.2	0.79	0.51	e0.29	0.28	0.40	0.26	0.21	0.12	0.75
14	0.73	0.41	1.3	0.71	0.49	0.29	0.28	0.39	0.23	0.19	0.12	1.0
15	0.68	0.40	1.8	0.68	0.49	0.34	0.29	0.37	0.20	0.18	0.17	0.95
16	1.6	0.38	1.4	0.66	0.48	0.32	0.28	0.34	0.20	0.18	0.14	0.83
17	1.4	0.48	1.2	1.0	0.45	0.32	0.29	0.32	0.30	0.15	0.12	0.73
18	1.5	0.47	1.1	0.81	0.45	0.32	0.29	0.31	0.30	0.17	0.10	0.74
19	1.3	0.59	0.94	0.82	0.42	0.29	0.29	0.30	0.22	0.18	0.08	0.63
20	2.0	0.68	0.87	0.80	0.36	0.30	0.28	0.31	0.21	0.19	0.09	0.79
21	4.8	0.65	0.87	0.81	0.30	0.31	0.27	0.32	0.20	0.18	0.08	0.84
22	4.9	0.50	1.0	0.81	0.29	0.31	0.30	0.32	0.20	0.15	0.08	0.73
23	3.3	0.46	1.0	0.76	0.29	0.25	0.30	0.38	0.20	0.15	0.07	0.78
24	2.5	0.44	1.2	0.71	0.33	0.25	0.29	0.45	0.18	0.15	0.07	2.1
25	2.0	0.52	1.0	0.71	0.37	0.24	0.31	0.44	0.20	0.15	0.07	2.1
26	1.9	2.6	0.84	0.73	0.35	0.23	0.30	0.48	0.17	0.14	0.07	1.7
27	1.5	4.2	0.74	0.64	0.38	0.22	0.40	0.43	0.17	0.11	0.07	2.2
28	1.1	3.9	0.72	0.65	0.35	0.28	0.57	0.45	0.23	0.10	0.06	1.9
29	1.00	2.7	0.67	0.69	---	0.46	0.62	0.41	0.24	0.15	0.07	1.7
30	0.89	2.4	0.69	0.71	---	0.44	0.64	0.39	0.24	0.12	0.15	1.3
31	0.83	---	0.74	0.63	---	0.34	---	0.35	---	0.14	0.11	---
TOTAL	43.44	29.29	33.61	30.08	13.80	9.55	9.71	12.91	7.11	5.70	3.24	24.99
MEAN	1.40	0.98	1.08	0.97	0.49	0.31	0.32	0.42	0.24	0.18	0.10	0.83
MAX	4.9	4.2	1.8	2.3	0.83	0.46	0.64	0.64	0.30	0.25	0.17	2.2
MIN	0.39	0.38	0.67	0.63	0.29	0.21	0.23	0.30	0.17	0.10	0.06	0.16
MED	1.00	0.56	1.0	0.80	0.49	0.30	0.29	0.40	0.24	0.18	0.11	0.74
AC-FT	86	58	67	60	27	19	19	26	14	11	6.4	50
CFSM	11.7	8.14	9.03	8.09	4.11	2.57	2.70	3.47	1.98	1.53	0.87	6.94
IN.	13.47	9.08	10.42	9.32	4.28	2.96	3.01	4.00	2.20	1.77	1.00	7.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)#

MEAN	1.70	1.34	1.52	0.69	0.47	0.37	0.30	0.61	0.78	0.36	0.28	0.90
MAX	2.98	2.65	3.75	0.97	0.57	0.51	0.43	0.92	1.31	0.65	0.40	1.34
(WY)	2000	2000	2000	2003	2001	2001	2000	2002	2002	1999	2002	2000
MIN	1.16	0.83	0.45	0.47	0.30	0.26	0.17	0.42	0.24	0.18	0.10	0.59
(WY)	2001	2001	2002	2000	2000	2002	2002	2003	2003	2003	2003	2002

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

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003#	
ANNUAL TOTAL	254.37		223.43			
ANNUAL MEAN	0.70		0.61		0.77	
HIGHEST ANNUAL MEAN					1.20	2000
LOWEST ANNUAL MEAN					0.61	2003
HIGHEST DAILY MEAN	4.9	Oct 22	4.9	Oct 22	31	Dec 27 1999
LOWEST DAILY MEAN	0.14	Apr 1	0.06	Aug 28	0.06	Aug 28 2003
ANNUAL SEVEN-DAY MINIMUM	0.15	Apr 1	0.07	Aug 23	0.07	Aug 23 2003
MAXIMUM PEAK FLOW			7.2	Nov 26	a66	Dec 27 1999
MAXIMUM PEAK STAGE			4.43	Nov 26	5.16	Dec 27 1999
INSTANTANEOUS LOW FLOW			b0.05	Aug 23	b0.05	Aug 23 2003
ANNUAL RUNOFF (AC-FT)	505		443		557	
ANNUAL RUNOFF (CFSM)	5.81		5.10		6.40	
ANNUAL RUNOFF (INCHES)	78.85		69.26		86.99	
10 PERCENT EXCEEDS	1.5		1.3		1.3	
50 PERCENT EXCEEDS	0.47		0.39		0.48	
90 PERCENT EXCEEDS	0.18		0.15		0.21	

\# See Period of Record; partial years used in monthly statistics
a From rating curve extended above 3.0 ft^3/s
b Aug. 23, 25, 26, and 28-29

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 9, 2003. No variation was found in the temperature cross section. No variation was found between mean stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 9.5°C, August 12, 2002, August 8, 2003 ; minimum, 0.0°C, on many days during most winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 9.5°C, August 8; minimum, 0.0°C, on several days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	SAMPLE LOC-ATION, STREAM WIDTH (FT) (00004)	CROSS SECTION (FT FM L BANK) (00009)	DIS-CHARGE, INST. GAGE HEIGHT (FEET) (00065)	CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)
		JAN				
09...	1100	4.10	1.00	4.02	1.4	2.5
09...	1111	4.10	2.00	4.02	1.4	2.5
09...	1112	4.10	3.00	4.02	1.4	2.5

TEMPERATURE, WATER (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	7.0	6.5	6.5	5.0	5.0	5.0	5.0	4.5	5.0	3.0	2.5	3.0
2	6.5	6.5	6.5	5.0	5.0	5.0	4.5	4.0	4.0	3.0	3.0	3.0
3	7.0	6.5	6.5	5.0	5.0	5.0	4.0	3.5	4.0	3.0	3.0	3.0
4	6.5	6.5	6.5	5.0	5.0	5.0	3.5	3.0	3.0	3.5	3.0	3.5
5	6.5	6.5	6.5	5.5	5.0	5.5	3.0	3.0	3.0	3.5	3.0	3.5
6	7.0	6.5	7.0	6.0	5.5	5.5	3.5	3.0	3.0	4.0	3.5	4.0
7	7.0	7.0	7.0	5.5	5.0	5.5	4.0	3.5	3.5	3.5	3.0	3.5
8	7.0	6.0	6.5	5.5	5.0	5.0	5.0	4.0	4.5	3.0	3.0	3.0
9	6.0	5.0	6.0	5.5	5.0	5.0	5.0	4.5	5.0	3.0	2.0	2.5
10	5.5	4.5	5.0	5.0	5.0	5.0	5.0	4.5	5.0	2.5	2.0	2.0
11	5.5	5.0	5.5	5.5	5.0	5.0	4.5	4.5	4.5	2.0	2.0	2.0
12	6.0	5.5	5.5	5.5	5.0	5.0	5.0	4.5	4.5	3.0	2.0	2.5
13	6.0	5.5	6.0	5.5	5.0	5.5	4.5	4.0	4.0	3.0	2.5	2.5
14	6.0	5.5	6.0	5.5	5.5	5.5	4.0	3.5	4.0	2.5	2.0	2.5
15	6.5	6.0	6.0	5.5	5.5	5.5	4.0	4.0	4.0	3.0	2.0	2.5
16	7.0	6.0	7.0	5.5	4.5	5.0	4.0	4.0	4.0	3.0	2.5	3.0
17	7.0	6.5	6.5	5.0	4.5	5.0	4.0	4.0	4.0	3.5	3.0	3.0
18	6.5	6.0	6.5	5.0	5.0	5.0	4.0	3.5	3.5	3.5	3.5	3.5
19	6.5	6.5	6.5	5.0	5.0	5.0	3.5	3.0	3.5	3.5	3.5	3.5
20	7.5	6.5	7.0	5.0	5.0	5.0	3.0	2.5	3.0	3.5	3.5	3.5
21	7.5	6.5	7.0	5.0	5.0	5.0	2.5	2.5	2.5	3.5	2.0	2.5
22	6.5	6.0	6.5	5.0	4.5	4.5	3.0	2.5	2.5	2.0	2.0	2.0
23	6.0	6.0	6.0	4.5	4.0	4.5	3.0	3.0	3.0	2.0	1.5	1.5
24	6.0	6.0	6.0	5.0	4.5	4.5	3.0	2.5	3.0	1.5	1.0	1.5
25	6.0	5.5	6.0	5.0	5.0	5.0	3.0	3.0	3.0	2.0	1.0	2.0
26	6.0	6.0	6.0	6.0	5.0	6.0	3.0	2.5	2.5	2.0	1.5	2.0
27	6.0	5.5	6.0	6.0	5.5	5.5	2.5	2.5	2.5	2.0	1.0	2.0
28	5.5	5.0	5.5	5.5	5.0	5.0	2.5	2.0	2.5	2.5	2.0	2.0
29	5.5	5.0	5.0	5.5	5.0	5.5	2.5	2.0	2.5	2.5	2.0	2.5
30	5.0	4.5	4.5	5.5	5.0	5.5	2.5	2.5	2.5	2.5	2.5	2.5
31	5.0	4.5	4.5	---	---	---	2.5	2.5	2.5	2.5	2.5	2.5
MONTH	7.5	4.5	6.1	6.0	4.0	5.1	5.0	2.0	3.5	4.0	1.0	2.7

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

TEMPERATURE, WATER (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	2.5	2.5	2.5	2.5	2.0	2.0	1.5	1.0	1.5	5.0	4.5	4.5
2	2.5	2.5	2.5	2.5	2.0	2.5	1.5	1.0	1.5	5.0	4.0	4.5
3	3.0	2.5	3.0	3.0	2.5	2.5	1.5	0.5	1.0	4.5	4.0	4.0
4	3.0	3.0	3.0	3.0	2.5	3.0	2.0	0.5	1.5	4.5	3.5	4.0
5	3.0	3.0	3.0	2.5	1.5	2.0	2.0	1.5	1.5	4.5	3.0	4.0
6	3.0	2.5	3.0	1.5	1.0	1.5	2.0	1.5	1.5	4.5	3.5	4.0
7	3.0	3.0	3.0	1.0	0.0	0.5	2.0	2.0	2.0	4.5	3.5	4.0
8	3.0	2.5	3.0	0.5	0.0	0.0	2.5	2.0	2.0	5.0	3.5	4.5
9	3.5	3.0	3.0	1.0	0.5	0.5	2.5	2.0	2.0	5.5	4.0	4.5
10	3.5	3.0	3.5	0.5	0.0	0.5	3.0	2.0	2.5	5.0	4.0	4.5
11	3.5	3.0	3.0	1.0	0.0	0.5	3.0	2.0	2.5	5.0	4.5	5.0
12	3.0	2.5	3.0	0.5	0.0	0.0	3.0	2.0	2.5	5.0	4.5	5.0
13	3.0	3.0	3.0	0.5	0.0	0.5	3.0	2.0	2.5	5.0	4.5	4.5
14	3.0	2.5	3.0	1.0	0.5	1.0	3.0	2.0	2.5	5.0	4.5	4.5
15	3.0	2.5	3.0	1.5	1.0	1.0	3.0	2.5	3.0	4.5	4.0	4.5
16	3.0	2.5	3.0	1.5	1.5	1.5	3.0	2.0	2.5	5.0	4.0	4.5
17	3.0	2.5	2.5	1.5	1.5	1.5	3.0	2.5	3.0	5.0	3.5	4.5
18	3.0	2.5	2.5	1.5	1.5	1.5	3.0	2.5	2.5	5.0	3.5	4.5
19	2.5	2.0	2.0	2.0	1.5	1.5	3.5	2.5	3.0	5.5	4.0	4.5
20	2.0	1.5	1.5	2.0	1.5	1.5	3.5	3.0	3.0	5.5	4.0	5.0
21	1.5	1.0	1.5	2.0	1.5	2.0	3.5	2.5	3.0	5.5	4.5	5.0
22	1.5	1.0	1.5	2.0	1.5	2.0	3.5	3.0	3.5	5.5	5.0	5.0
23	1.5	1.0	1.0	2.0	1.5	1.5	4.0	3.0	3.5	5.5	5.0	5.5
24	2.0	1.5	1.5	2.0	1.5	2.0	4.5	3.0	3.5	5.5	5.5	5.5
25	2.0	2.0	2.0	2.0	1.5	1.5	5.0	3.0	4.0	5.5	5.5	5.5
26	2.0	2.0	2.0	2.0	1.5	2.0	5.0	3.5	4.0	5.5	5.0	5.5
27	2.0	1.5	2.0	2.5	1.5	2.0	4.5	3.5	4.0	6.0	5.0	5.5
28	2.5	2.0	2.0	2.5	1.5	2.0	4.5	3.5	4.0	6.0	5.5	5.5
29	---	---	---	2.5	1.5	2.0	5.0	3.5	4.5	6.0	5.5	6.0
30	---	---	---	2.5	2.0	2.0	5.0	4.0	4.5	6.5	5.5	6.0
31	---	---	---	2.0	1.5	2.0	---	---	---	6.0	5.5	6.0
MONTH	3.5	1.0	2.5	3.0	0.0	1.5	5.0	0.5	2.8	6.5	3.0	4.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.0	5.5	6.0	8.0	7.0	7.5	8.5	8.0	8.5	9.0	8.5	8.5
2	6.0	5.5	6.0	7.5	7.0	7.0	8.5	8.0	8.0	9.0	8.5	9.0
3	6.5	5.5	6.0	7.5	7.0	7.0	8.5	8.0	8.0	9.0	8.5	8.5
4	6.0	5.5	6.0	7.5	7.0	7.5	8.5	8.0	8.0	8.5	8.0	8.5
5	6.5	6.0	6.0	7.5	7.0	7.5	8.5	7.5	8.0	8.5	7.5	8.0
6	6.5	6.0	6.5	7.5	7.0	7.5	9.0	7.5	8.5	8.5	8.5	8.5
7	6.5	6.0	6.5	8.0	7.5	7.5	9.0	8.0	8.5	8.5	8.5	8.5
8	7.0	6.0	6.5	8.0	7.5	8.0	9.5	8.0	8.5	8.5	8.5	8.5
9	7.0	6.0	6.5	8.0	7.5	8.0	9.0	8.5	9.0	8.5	8.5	8.5
10	7.5	6.0	6.5	8.5	7.5	8.0	9.0	7.5	8.5	8.5	8.5	8.5
11	7.0	6.5	6.5	8.5	8.0	8.5	9.0	8.0	8.5	8.5	8.5	8.5
12	7.0	6.5	7.0	8.5	8.0	8.0	9.0	8.5	8.5	8.5	8.5	8.5
13	7.0	6.5	7.0	8.5	8.0	8.0	9.0	8.5	9.0	9.0	8.5	8.5
14	7.0	6.5	6.5	8.5	8.0	8.0	9.0	8.5	9.0	8.5	8.0	8.5
15	7.0	6.5	7.0	8.5	7.5	8.0	9.0	9.0	9.0	8.0	7.0	7.5
16	7.0	6.5	7.0	8.0	8.0	8.0	9.0	8.5	8.5	7.0	6.5	7.0
17	7.5	6.5	7.0	8.0	8.0	8.0	9.0	8.5	8.5	6.5	6.0	6.5
18	7.0	6.5	7.0	8.5	8.0	8.0	9.0	8.5	8.5	6.5	6.5	6.5
19	7.0	6.5	6.5	8.5	7.5	8.0	8.5	8.5	8.5	6.5	6.5	6.5
20	7.0	6.5	6.5	8.5	8.0	8.5	8.5	8.0	8.5	7.0	6.5	7.0
21	7.0	6.5	7.0	8.5	8.0	8.0	8.5	8.0	8.0	7.0	6.5	7.0
22	7.0	6.5	7.0	8.0	8.0	8.0	8.5	8.0	8.0	7.0	6.5	6.5
23	7.0	6.5	7.0	8.5	8.0	8.0	8.5	7.0	8.0	6.5	6.0	6.5
24	7.0	6.5	6.5	8.5	8.0	8.5	8.5	8.0	8.5	7.0	6.5	7.0
25	7.0	6.5	7.0	8.5	8.0	8.5	8.5	7.5	8.0	7.0	6.5	7.0
26	7.0	6.5	7.0	8.0	8.0	8.0	8.5	7.5	8.0	6.5	6.5	6.5
27	7.0	6.5	6.5	8.5	8.0	8.0	8.5	8.5	8.5	7.0	6.5	7.0
28	7.0	6.5	7.0	8.5	8.0	8.0	9.0	8.0	8.5	7.0	7.0	7.0
29	7.5	6.5	7.0	8.5	8.0	8.5	8.5	8.0	8.5	7.0	6.5	7.0
30	7.5	6.5	7.0	8.5	8.0	8.5	9.0	8.5	8.5	7.0	6.5	7.0
31	---	---	---	8.5	8.0	8.5	8.5	8.5	8.5	---	---	---
MONTH	7.5	5.5	6.7	8.5	7.0	8.0	9.5	7.0	8.4	9.0	6.0	7.6

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 current year.

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 good except for estimated daily discharges, which are poor.

DISCHARGE, in CFS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e9.8	33	15	8.9	7.5	8.1	11	4.8	2.8	6.6	5.2
2	12	e9.0	19	16	12	8.5	6.2	8.5	5.5	2.6	14	8.0
3	10	8.3	13	13	18	9.5	e5.3	6.6	4.8	2.7	12	7.9
4	9.3	e7.0	e10	40	19	19	e4.5	4.9	4.1	2.8	9.7	8.1
5	11	e6.5	9.6	53	15	16	3.9	3.9	3.9	2.9	8.1	6.5
6	25	5.7	8.7	50	12	8.9	3.8	3.3	4.3	2.6	6.9	6.2
7	19	5.5	e8.5	30	9.5	e5.0	4.2	3.0	4.1	2.4	6.0	6.2
8	25	4.9	9.2	21	8.4	e3.9	4.8	2.8	3.6	2.3	5.2	17
9	25	4.5	23	15	7.6	e3.4	5.5	3.1	3.0	2.2	4.7	20
10	17	4.2	21	e12	7.9	e3.1	5.5	3.4	2.9	2.1	4.3	15
11	13	4.3	15	e10	8.9	e2.8	5.5	3.9	2.8	2.0	4.2	22
12	11	4.0	42	e9.0	8.7	e2.6	5.5	5.6	2.6	2.0	4.1	15
13	11	4.4	30	e8.0	7.6	e2.5	5.8	6.8	2.8	1.9	4.1	40
14	9.9	4.6	17	e6.5	6.7	e2.4	6.3	10	2.6	1.9	3.9	34
15	9.3	4.5	16	5.4	5.9	e2.6	7.9	9.8	2.5	1.9	3.8	23
16	48	3.9	16	5.1	5.5	e3.5	8.9	6.7	2.3	1.9	4.0	16
17	84	4.6	12	22	4.9	7.3	7.4	5.4	2.5	1.9	4.0	11
18	27	e9.0	10	25	e4.3	8.1	6.5	5.0	6.3	1.9	4.1	10
19	18	20	e8.5	27	e4.0	7.7	5.8	4.8	7.3	1.8	4.0	11
20	26	21	7.3	27	e3.7	7.1	5.6	4.6	8.2	1.8	4.8	11
21	225	37	6.1	17	e3.5	8.4	5.8	4.7	6.5	2.0	4.8	11
22	104	e19	6.2	11	e3.3	9.4	6.4	5.4	5.0	2.0	5.5	10
23	34	e13	15	e7.0	e3.2	6.4	6.9	6.6	3.9	2.0	5.2	9.0
24	23	e10	34	e5.5	e3.1	5.4	8.8	10	3.3	1.9	4.6	23
25	16	e9.5	20	e4.6	e3.2	4.9	17	8.3	3.2	1.9	4.1	23
26	15	81	14	e3.9	4.5	4.3	23	6.9	3.3	1.9	3.9	21
27	22	54	10	e3.8	4.5	4.2	22	5.9	3.3	2.1	3.5	189
28	20	33	8.3	5.3	4.7	4.7	17	5.0	4.1	2.1	3.6	61
29	15	20	7.2	6.1	---	10	14	4.6	3.7	8.1	3.3	26
30	12	94	6.5	13	---	17	12	4.4	3.2	5.8	3.9	18
31	e11	---	6.2	12	---	12	---	4.7	---	6.0	4.5	---
TOTAL	917.5	516.2	462.3	499.2	208.5	218.1	249.9	179.6	120.4	80.2	165.4	684.1
MEAN	29.6	17.2	14.9	16.1	7.45	7.04	8.33	5.79	4.01	2.59	5.34	22.8
MAX	225	94	42	53	19	19	23	11	8.2	8.1	14	189
MIN	9.3	3.9	6.1	3.8	3.1	2.4	3.8	2.8	2.3	1.8	3.3	5.2
AC-FT	1820	1020	917	990	414	433	496	356	239	159	328	1360
CFSM	6.84	3.97	3.44	3.72	1.72	1.62	1.92	1.34	0.93	0.60	1.23	5.27
IN.	7.88	4.43	3.97	4.29	1.79	1.87	2.15	1.54	1.03	0.69	1.42	5.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)#

MEAN	20.7	12.4	17.0	10.3	6.35	6.46	8.74	12.7	11.8	8.52	9.51	17.7
MAX	29.6	19.7	43.2	16.1	12.2	7.96	19.2	18.1	14.9	15.9	16.6	22.8
(WY)	2003	2000	2000	2003	2002	2001	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	2.59	3.95	13.2
(WY)	2001	1999	2002	2000	1999	2002	2002	2003	2003	2003	2001	1999
TOTAL	517.4	260.5	257.3	261.0	342.3	128.47	90.5	486.9	393.2	251.1	514.6	454.9
MEAN	16.69	8.683	8.300	8.419	12.22	4.144	3.017	15.71	13.11	8.100	16.60	15.16
MAX	45	30	37	16	48	29	7.1	29	34	17	60	76
MIN	6.7	2.1	1.7	5.0	3.0	0.90	2.2	3.5	5.0	4.5	3.2	5.4
AC-FT	1030	517	510	518	679	255	180	966	780	498	1020	902
CFSM	3.85	2.01	1.92	1.94	2.82	0.96	0.70	3.63	3.03	1.87	3.83	3.50
IN.	4.45	2.24	2.21	2.24	2.94	1.10	0.78	4.18	3.38	2.16	4.42	3.91

\# See Period of Record
e Estimated

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003#	
ANNUAL TOTAL	4818.97		4301.4			
ANNUAL MEAN	13.2		11.8		12.0	
HIGHEST ANNUAL MEAN					15.5	2000
LOWEST ANNUAL MEAN					9.84	2001
HIGHEST DAILY MEAN	225	Oct 21	225	Oct 21	364	Dec 27 1999
LOWEST DAILY MEAN	0.90	Mar 17	a1.8	Jul 19	0.90	Mar 17 2002
ANNUAL SEVEN-DAY MINIMUM	0.97	Mar 16	1.9	Jul 14	0.97	Mar 16 2002
MAXIMUM PEAK FLOW			452	Sep 27	616	Dec 28 1999
MAXIMUM PEAK STAGE			10.34	Sep 27	10.80	Dec 28 1999
INSTANTANEOUS LOW FLOW			b1.8	Jul 13	c	
ANNUAL RUNOFF (AC-FT)	9560		8530		8690	
ANNUAL RUNOFF (CFSM)	3.05		2.72		2.77	
ANNUAL RUNOFF (INCHES)	41.40		36.95		37.63	
10 PERCENT EXCEEDS	26		23		22	
50 PERCENT EXCEEDS	8.8		6.6		7.7	
90 PERCENT EXCEEDS	2.5		2.8		2.9	

\# See Period of Record
a Jul. 19 and 20
b Jul. 13-20, Jul. 25 and 26
c Not determined; see lowest daily mean

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 mi².

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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26500	17000	31700	e6150	e5080	e3740	3920	20400	33800	75600	69600	52900
2	27900	16200	24600	e6240	e4970	e3670	3860	19600	32900	86100	71000	56000
3	26000	15500	21400	6530	e4800	e3490	3810	18400	33100	87000	70700	64200
4	24200	15000	18500	7470	e4830	e3190	3830	17000	34300	88200	68600	61100
5	22500	14800	16300	9350	e4960	e3000	3850	15800	36100	90800	61800	54900
6	23600	14800	15000	12700	e4710	e2920	3910	14900	41300	87400	60700	49900
7	28500	15100	14900	10200	e4530	e2760	3970	14700	51400	87200	63700	51800
8	35700	14500	15000	8470	e4410	e2640	4360	15100	55600	92700	69900	51300
9	31200	14000	14700	7030	e4300	e2640	4690	16000	57200	96500	75400	49100
10	27200	13700	14300	6830	e4220	e2620	4910	17100	60200	98600	73500	45500
11	24900	13100	13700	e6120	e4160	e2640	5140	18600	65000	99800	72600	43000
12	27300	12700	13700	e5590	e4030	e2610	5270	20600	68600	103000	78800	44100
13	28200	12500	13800	e5400	e3910	e2580	5360	19900	70800	105000	85600	45300
14	25200	12500	12900	e5310	e3740	e2640	5600	18700	68000	106000	89300	43200
15	23400	12300	12300	e4770	e3630	e2800	5890	17800	66800	103000	103000	35300
16	31200	12000	12000	e4290	e3460	e3010	6180	17400	65100	94800	118000	29600
17	34100	11700	11600	e5630	e3310	e3180	6230	17100	67000	90900	113000	26300
18	30500	11700	11200	e6540	e3070	e3350	6420	17600	67400	92400	99900	24300
19	29400	11700	10700	e7700	e3040	e3380	6440	18200	65000	93900	84500	22300
20	38000	12200	10200	e7500	e3000	e3350	6980	18600	62000	97400	72300	21400
21	42900	11600	9700	e6700	e2940	e3230	7570	19000	63000	101000	60200	22500
22	35500	11000	8810	e6500	e2880	e3180	8080	19900	65100	94600	50600	e23400
23	30700	10300	8300	e6000	e2830	e3290	8900	21100	66100	82500	48100	e26500
24	27600	10500	8370	e5900	e2730	e3350	10500	22500	66800	82400	49700	e33000
25	25500	11200	7950	e5850	e2760	e3400	12000	24000	64500	82800	49500	e40600
26	24500	26500	7230	e5810	e3060	e3600	14100	25100	60900	78100	49000	e52000
27	24100	74500	6960	e5810	e3250	e4000	15900	26100	58200	73200	51300	e49700
28	22300	64400	e6750	e5650	e3490	4110	17000	28100	56600	76100	52100	e54800
29	20400	44500	e6520	e5530	---	4360	18000	28900	57900	79700	54400	e59300
30	18900	37200	e6420	e5420	---	4850	18700	30700	62600	81700	55500	e57400
31	17700	---	e6420	e5200	---	4520	---	33600	---	78100	56400	---
TOTAL	855600	574700	391930	204190	106100	102100	231370	632500	1723300	2786500	2178700	1290700
MEAN	27600	19160	12640	6587	3789	3294	7712	20400	57440	89890	70280	43020
MAX	42900	74500	31700	12700	5080	4850	18700	33600	70800	106000	118000	64200
MIN	17700	10300	6420	4290	2730	2580	3810	14700	32900	73200	48100	21400
AC-FT	1697000	1140000	777400	405000	210400	202500	458900	1255000	3418000	5527000	4321000	2560000
CFSM	2.55	1.77	1.17	0.61	0.35	0.30	0.71	1.89	5.31	8.31	6.50	3.98
IN.	2.94	1.98	1.35	0.70	0.36	0.35	0.80	2.17	5.92	9.58	7.49	4.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2003, BY WATER YEAR (WY)#

MEAN	24140	9897	7123	5221	4263	4070	6520	25580	67060	86130	76210	49020
MAX	40300	19160	12640	9118	6625	6619	10870	40100	83970	98590	99370	76330
(WY)	1995	2003	2003	2001	1993	1992	1992	1993	1993	1993	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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1991 - 2003#	
ANNUAL TOTAL	11346160		11077690			
ANNUAL MEAN	31090		30350		30480	
HIGHEST ANNUAL MEAN					35850	1993
LOWEST ANNUAL MEAN					23920	1996
HIGHEST DAILY MEAN	175000	Aug 13	118000	Aug 16	175000	Aug 13 2002
LOWEST DAILY MEAN	a2900	Mar 23	2580	Mar 13	2280	Mar 13 1999
ANNUAL SEVEN-DAY MINIMUM	2950	Apr 4	2620	Mar 8	2310	Mar 8 1999
MAXIMUM PEAK FLOW			121000	Aug 17	b178000	Aug 13 2002
MAXIMUM PEAK STAGE			85.10	Aug 17	89.52	Aug 13 2002
ANNUAL RUNOFF (AC-FT)	22510000		21970000		22080000	
ANNUAL RUNOFF (CFSM)	2.87		2.80		2.82	
ANNUAL RUNOFF (INCHES)	39.01		38.09		38.27	
10 PERCENT EXCEEDS	78400		76900		82400	
50 PERCENT EXCEEDS	16000		18000		12800	
90 PERCENT EXCEEDS	3300		3560		3500	

\# See Period of Record; partial years used in monthly summary statistics
a Mar. 23-24 and Apr. 8
b 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)
Oct 12	1415	1000	68.22	Jan 18	0700	1170	68.62
Oct 20	1900	1080	68.41	Aug 15	2145	1440	69.21
Nov 27	0145	3070*	71.95*				

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	394	284	903	167	241	e280	180	77	168	155	141	326
2	406	268	682	160	324	e270	158	76	174	148	133	506
3	369	253	541	155	304	e260	141	74	187	187	126	599
4	341	262	446	246	371	e250	126	72	178	204	129	512
5	315	307	382	386	330	e240	114	71	195	191	116	420
6	441	292	336	716	330	e236	105	70	249	176	106	351
7	679	285	355	552	295	e230	98	70	262	161	98	312
8	899	265	365	457	265	e220	99	68	230	149	92	287
9	848	249	391	380	242	e212	105	67	206	138	87	264
10	662	236	401	323	240	e204	105	78	187	128	82	240
11	537	223	346	284	255	e198	97	209	170	120	78	217
12	833	213	327	259	256	e185	92	329	158	113	81	201
13	822	214	331	238	248	e165	89	297	151	106	84	190
14	676	268	300	218	231	e152	86	289	152	102	154	176
15	572	268	274	203	215	e141	84	290	147	99	1010	162
16	799	246	257	201	201	e130	83	278	138	96	1350	149
17	690	236	244	246	189	120	83	251	132	94	1360	140
18	599	253	238	785	178	124	81	222	145	90	1050	131
19	695	280	228	506	169	125	80	199	168	86	704	e118
20	1000	284	214	524	162	120	79	181	169	85	538	e151
21	872	267	202	433	156	115	82	165	160	97	434	e230
22	679	252	218	367	148	112	85	155	153	120	347	e212
23	553	238	279	317	141	112	81	151	145	123	287	e186
24	464	252	265	280	148	117	79	203	140	118	245	e248
25	401	346	244	252	155	114	77	212	143	112	217	e293
26	403	1680	224	229	158	109	76	257	173	104	202	e286
27	409	2710	210	214	198	106	76	237	216	111	297	e264
28	373	1850	199	207	188	104	77	213	203	136	297	e237
29	341	1440	190	209	---	130	78	194	187	169	270	e219
30	314	1180	181	255	---	297	78	181	169	168	303	e197
31	293	---	173	244	---	212	---	172	---	155	380	---
TOTAL	17679	15401	9946	10013	6338	5390	2874	5408	5255	4041	10798	7824
MEAN	570	513	321	323	226	174	95.8	174	175	130	348	261
MAX	1000	2710	903	785	371	297	180	329	262	204	1360	599
MIN	293	213	173	155	141	104	76	67	132	85	78	118
AC-FT	35070	30550	19730	19860	12570	10690	5700	10730	10420	8020	21420	15520
CFSM	15.8	14.3	8.91	8.97	6.29	4.83	2.66	4.85	4.87	3.62	9.68	7.24
IN.	18.27	15.91	10.28	10.35	6.55	5.57	2.97	5.59	5.43	4.18	11.16	8.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)#

MEAN	544	357	382	290	240	233	228	270	229	188	285	492
MAX	878	598	739	620	471	516	370	418	345	292	612	838
(WY)	2000	1993	2000	2001	1997	1992	1998	1991	1991	1991	2002	1991
MIN	283	173	142	131	81.2	54.2	73.6	160	127	77.7	105	261
(WY)	1998	1999	1991	1996	1999	1989	2002	1996	1993	1993	1994	2003

\# See Period of Record
e Estimated

15129500 SITUK RIVER NEAR YAKUTAT—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1989 - 2003#	
ANNUAL TOTAL	115429		100967			
ANNUAL MEAN	316		277		312	
HIGHEST ANNUAL MEAN					382	1992
LOWEST ANNUAL MEAN					230	1996
HIGHEST DAILY MEAN	2710	Nov 27	2710	Nov 27	2850	Dec 27 1999
LOWEST DAILY MEAN	a48	Apr 14	67	May 9	b47	Mar 5 1989
ANNUAL SEVEN-DAY MINIMUM	48	Apr 11	70	May 3	48	Mar 3 1989
MAXIMUM PEAK FLOW			3070	Nov 27	3840	Oct 18 1999
MAXIMUM PEAK STAGE			71.95	Nov 27	72.99	Oct 18 1999
INSTANTANEOUS LOW FLOW			66	May 10	47	cMar 5 1989
ANNUAL RUNOFF (AC-FT)	229000		200300		225900	
ANNUAL RUNOFF (CFSM)	8.78		7.68		8.66	
ANNUAL RUNOFF (INCHES)	119.28		104.33		117.66	
10 PERCENT EXCEEDS	607		517		594	
50 PERCENT EXCEEDS	245		212		236	
90 PERCENT EXCEEDS	88		91		112	

\# See Period of Record
a Apr. 14-17
b Mar. 5-7, 1989
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. water year. Missing record September 19-30 due to recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 20.0°C, July 4, 1997; minimum, 0.0°C, on many days during winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 18.5°C, July 1, 10, and 12; minimum, 0.0°C on several days during winter.

TEMPERATURE, WATER (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	9.0	8.0	8.5	7.5	7.0	7.0	5.5	5.0	5.5	2.0	1.5	2.0
2	9.5	8.0	8.5	7.0	6.5	6.5	5.0	4.5	5.0	2.0	1.5	2.0
3	9.0	7.5	8.5	6.5	6.0	6.5	5.0	4.5	4.5	2.5	1.5	2.0
4	9.0	8.0	8.5	7.0	6.5	6.5	4.5	4.0	4.5	3.0	2.0	2.5
5	8.5	8.0	8.0	7.0	6.5	6.5	4.5	4.0	4.5	2.5	2.0	2.0
6	8.5	8.0	8.5	7.0	6.5	6.5	4.0	3.5	3.5	2.0	2.0	2.0
7	9.0	8.5	8.5	7.0	5.0	6.0	5.0	4.0	4.5	2.0	1.5	2.0
8	8.5	8.0	8.5	5.0	4.5	5.0	5.0	4.5	5.0	2.5	2.0	2.5
9	8.0	7.0	7.5	5.0	4.0	4.5	5.0	4.5	4.5	2.0	1.5	1.5
10	8.0	7.0	7.5	5.5	4.5	5.0	5.0	4.0	4.5	2.0	1.0	1.5
11	8.0	7.0	7.5	4.5	4.0	4.0	4.5	4.5	4.5	2.0	1.5	1.5
12	8.0	7.5	7.5	5.0	4.0	4.5	4.5	4.0	4.5	2.5	1.5	2.0
13	8.5	7.5	8.0	5.5	5.0	5.5	4.5	3.5	4.0	2.5	1.0	2.0
14	8.0	7.5	8.0	5.5	5.0	5.5	3.5	2.5	3.0	1.0	0.5	1.0
15	8.0	7.5	8.0	5.5	4.5	5.0	3.5	2.5	3.5	2.5	1.0	2.0
16	8.0	8.0	8.0	4.5	3.5	4.0	3.5	3.0	3.5	3.0	2.5	2.5
17	8.0	8.0	8.0	4.5	3.5	4.0	4.0	3.5	3.5	3.0	2.5	2.5
18	8.0	7.5	7.5	4.5	4.0	4.5	3.5	2.5	3.0	2.5	1.0	1.5
19	8.5	8.0	8.0	5.0	4.0	4.5	3.0	2.0	2.5	2.5	2.0	2.5
20	8.5	8.0	8.5	5.0	4.0	4.5	2.0	1.5	1.5	2.5	2.0	2.5
21	8.0	7.0	7.5	4.5	4.0	4.5	2.0	1.5	2.0	2.0	1.5	2.0
22	8.0	7.0	7.5	5.5	4.5	5.0	3.0	2.0	2.5	2.0	1.5	1.5
23	8.0	7.0	7.0	4.5	4.0	4.0	3.0	2.0	2.5	1.5	1.0	1.5
24	8.0	7.0	7.5	5.0	4.5	5.0	3.0	2.5	2.5	2.0	1.5	2.0
25	7.5	7.5	7.5	5.0	5.0	5.0	2.5	1.5	2.5	2.5	2.0	2.5
26	7.5	7.0	7.0	7.0	5.0	6.5	1.5	1.0	1.5	2.5	1.5	2.0
27	7.5	7.0	7.0	7.0	6.0	6.5	2.0	1.5	2.0	3.0	2.0	2.5
28	7.5	6.0	6.5	6.0	5.5	6.0	2.0	2.0	2.0	3.0	2.5	2.5
29	7.0	7.0	7.0	6.5	5.5	6.0	2.5	1.5	2.0	3.0	2.5	3.0
30	7.5	6.5	7.0	6.5	5.5	6.0	2.5	1.5	2.0	3.0	2.0	2.5
31	7.5	7.0	7.0	---	---	---	2.5	1.5	1.5	2.5	1.5	2.0
MONTH	9.5	6.0	7.7	7.5	3.5	5.3	5.5	1.0	3.3	3.0	0.5	2.1

15129500 SITUK RIVER NEAR YAKUTAT—Continued

TEMPERATURE, WATER (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	2.5	2.0	2.0	3.5	2.5	3.0	3.5	0.5	1.5	11.5	8.0	10.0
2	2.5	2.0	2.5	3.5	2.5	3.0	3.5	0.0	1.5	11.5	7.0	9.0
3	3.0	2.0	2.5	4.0	3.0	3.5	4.0	0.0	2.0	9.5	6.5	8.5
4	3.0	2.5	2.5	4.0	2.5	3.5	3.0	0.5	2.0	8.5	5.0	7.0
5	3.0	2.5	3.0	3.0	1.5	2.0	4.5	0.5	2.5	9.0	5.5	7.5
6	3.0	3.0	3.0	2.0	0.5	1.0	3.5	1.5	2.5	9.5	6.5	8.0
7	3.0	2.5	3.0	1.5	0.0	0.5	5.0	2.5	3.5	11.5	5.5	8.0
8	3.0	2.5	2.5	0.5	0.0	0.0	5.0	3.0	4.0	12.0	6.0	9.0
9	3.5	2.5	3.0	1.0	0.0	0.0	4.5	2.5	3.5	12.0	6.5	9.5
10	3.5	3.0	3.5	0.5	0.0	0.0	6.0	2.5	4.5	10.0	7.0	8.0
11	4.0	3.0	3.5	0.5	0.0	0.0	6.5	2.5	4.5	7.0	5.5	6.5
12	3.5	3.0	3.0	0.0	0.0	0.0	6.5	2.5	4.5	8.0	5.5	6.5
13	3.0	2.5	3.0	0.0	0.0	0.0	7.0	4.0	5.5	9.0	6.5	7.5
14	2.5	1.5	2.0	0.0	0.0	0.0	7.0	4.5	6.0	7.5	6.5	7.5
15	2.5	1.5	2.0	2.5	0.0	1.0	7.0	4.0	5.5	8.0	6.5	7.0
16	2.5	1.5	2.0	2.5	0.5	1.5	6.0	4.0	5.0	8.5	6.5	7.5
17	2.5	1.5	2.0	3.0	0.5	1.5	5.5	3.5	4.5	10.5	7.0	8.5
18	3.0	2.5	2.5	2.0	1.5	2.0	6.5	3.5	5.0	11.5	7.5	9.5
19	2.5	1.5	2.0	3.5	1.0	2.5	6.5	4.5	5.5	13.0	7.0	9.5
20	2.0	1.5	2.0	3.5	1.0	2.0	7.0	4.5	5.5	13.5	7.0	10.0
21	2.5	1.5	2.0	4.5	1.5	3.0	6.0	4.0	5.0	14.0	7.5	10.5
22	2.5	1.5	2.0	3.5	2.0	2.5	8.0	4.5	6.0	11.5	9.0	10.0
23	2.5	1.0	2.0	2.0	0.5	1.5	9.5	4.5	7.0	10.5	9.0	10.0
24	3.0	1.5	2.5	3.0	0.0	1.5	10.0	4.5	7.5	10.0	8.5	9.0
25	4.0	2.5	3.0	3.5	0.5	2.0	10.5	5.5	8.0	9.5	8.0	9.0
26	4.0	3.0	3.5	4.0	0.5	2.5	11.5	6.0	8.5	10.0	8.0	9.0
27	4.0	2.5	3.0	4.0	1.0	2.5	11.5	6.5	9.0	12.0	7.5	9.5
28	3.5	2.5	3.0	4.5	1.5	3.0	11.0	7.0	9.0	13.5	8.0	10.5
29	---	---	---	3.5	2.0	3.0	11.0	7.5	9.0	12.0	10.0	11.0
30	---	---	---	3.0	1.5	2.0	11.5	7.5	9.5	13.0	9.0	10.5
31	---	---	---	3.5	1.0	2.0	---	---	---	11.0	9.0	10.0
MONTH	4.0	1.0	2.6	4.5	0.0	1.7	11.5	0.0	5.2	14.0	5.0	8.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.0	8.5	10.0	18.5	12.5	15.5	16.5	12.5	14.5	13.0	12.0	12.5
2	11.0	9.0	10.0	16.0	12.5	13.5	16.5	13.5	15.0	12.0	11.5	12.0
3	12.5	9.0	10.5	13.0	12.0	12.5	15.5	12.5	14.0	13.0	12.0	12.5
4	12.5	9.0	10.5	15.0	12.0	13.5	14.5	13.0	13.5	13.5	11.5	12.5
5	11.0	10.0	10.5	14.5	13.0	13.5	17.0	11.5	14.0	13.5	11.0	12.0
6	11.5	9.5	10.5	16.5	12.0	14.0	17.0	11.5	14.5	13.5	11.0	12.5
7	12.5	10.0	11.0	17.0	12.5	14.5	17.0	12.0	14.5	14.0	12.0	13.0
8	14.0	9.5	11.5	16.0	13.0	14.5	17.5	13.5	15.5	13.5	12.0	12.5
9	13.0	10.5	11.5	17.5	13.0	15.0	17.5	12.5	15.0	12.0	11.5	12.0
10	14.5	11.0	12.5	18.5	14.0	16.0	17.0	12.5	15.0	12.5	10.0	11.5
11	13.0	11.0	12.0	18.0	14.0	15.5	15.5	13.5	14.0	12.5	10.5	11.5
12	16.5	11.0	13.5	18.5	14.0	16.0	13.5	12.5	13.0	12.5	11.0	11.5
13	14.5	12.0	12.5	18.0	13.0	15.5	14.5	12.5	13.5	11.5	10.5	11.0
14	13.0	11.0	12.0	16.5	14.5	15.0	14.0	13.0	13.0	10.5	9.0	10.0
15	14.0	10.5	12.5	15.0	13.5	14.5	14.5	13.5	14.0	9.5	7.5	8.5
16	15.5	11.5	13.5	14.0	13.0	13.5	15.0	14.5	15.0	9.0	6.5	7.5
17	14.0	11.5	12.5	14.5	12.5	13.5	15.0	14.5	14.5	9.0	6.5	8.0
18	12.5	11.5	12.0	17.5	12.5	14.5	15.5	14.0	14.5	9.5	8.0	8.5
19	13.0	11.0	12.0	17.5	12.0	15.0	15.0	14.0	14.5	---	---	---
20	15.0	11.5	13.0	16.5	14.0	15.0	14.5	13.5	14.0	---	---	---
21	14.0	12.0	13.0	14.5	13.0	13.5	15.0	12.5	13.5	---	---	---
22	15.0	12.0	13.0	14.0	12.5	13.0	15.0	12.0	13.5	---	---	---
23	14.0	12.0	13.0	16.5	13.0	14.5	15.0	12.0	13.5	---	---	---
24	13.0	11.5	12.0	15.5	13.5	14.5	15.0	13.0	14.0	---	---	---
25	12.5	11.0	11.5	14.5	13.5	14.0	15.0	12.0	13.5	---	---	---
26	11.5	11.0	11.0	14.5	13.0	13.5	13.5	12.5	13.0	---	---	---
27	12.5	10.5	11.5	14.0	12.5	13.5	13.0	12.0	12.5	---	---	---
28	14.0	11.0	12.5	13.5	13.0	13.5	15.0	12.5	13.5	---	---	---
29	16.5	11.5	14.0	14.5	13.0	13.5	13.5	12.5	13.0	---	---	---
30	18.0	12.0	14.5	15.0	13.0	14.0	13.0	12.0	12.5	---	---	---
31	---	---	---	16.0	13.0	14.5	13.5	12.0	12.5	---	---	---
MONTH	18.0	8.5	12.0	18.5	12.0	14.3	17.5	11.5	13.9	---	---	---

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.--3.0 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 2003.

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

REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR - Maximum discharge during period June to September, 74 ft^3/s, August 15, gage height 14.82 ft; minimum discharge, 12 ft^3/s, August 9-11, gage height 14.35 ft.

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	---	---	---	---	---	---	---	---	---	19	16	30
2	---	---	---	---	---	---	---	---	---	20	16	42
3	---	---	---	---	---	---	---	---	---	23	15	41
4	---	---	---	---	---	---	---	---	---	22	15	37
5	---	---	---	---	---	---	---	---	---	21	14	35
6	---	---	---	---	---	---	---	---	---	20	14	33
7	---	---	---	---	---	---	---	---	---	20	14	32
8	---	---	---	---	---	---	---	---	---	19	13	33
9	---	---	---	---	---	---	---	---	---	19	13	31
10	---	---	---	---	---	---	---	---	---	18	13	30
11	---	---	---	---	---	---	---	---	---	18	13	28
12	---	---	---	---	---	---	---	---	---	17	14	28
13	---	---	---	---	---	---	---	---	---	17	14	27
14	---	---	---	---	---	---	---	---	---	17	20	26
15	---	---	---	---	---	---	---	---	---	17	53	25
16	---	---	---	---	---	---	---	---	---	16	55	24
17	---	---	---	---	---	---	---	---	---	16	46	24
18	---	---	---	---	---	---	---	---	---	16	40	23
19	---	---	---	---	---	---	---	---	---	15	36	23
20	---	---	---	---	---	---	---	---	---	15	35	29
21	---	---	---	---	---	---	---	---	---	16	32	29
22	---	---	---	---	---	---	---	---	---	17	29	27
23	---	---	---	---	---	---	---	---	---	16	28	26
24	---	---	---	---	---	---	---	---	---	15	26	27
25	---	---	---	---	---	---	---	---	---	14	26	30
26	---	---	---	---	---	---	---	---	---	14	26	31
27	---	---	---	---	---	---	---	---	---	16	31	29
28	---	---	---	---	---	---	---	---	20	16	28	28
29	---	---	---	---	---	---	---	---	20	18	27	28
30	---	---	---	---	---	---	---	---	19	19	31	27
31	---	---	---	---	---	---	---	---	---	18	32	---
TOTAL	---	---	---	---	---	---	---	---	---	544	785	883
MEAN	---	---	---	---	---	---	---	---	---	17.5	25.3	29.4
MAX	---	---	---	---	---	---	---	---	---	23	55	42
MIN	---	---	---	---	---	---	---	---	---	14	13	23
AC-FT	---	---	---	---	---	---	---	---	---	1080	1560	1750
CFSM	---	---	---	---	---	---	---	---	---	3.67	5.30	6.16
IN.	---	---	---	---	---	---	---	---	---	4.23	6.11	6.87

15129510 OLD SITUK RIVER NEAR YAKUTAT—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- June to September 2003.

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

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 2003 water year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 14.0°C July 1 and 10; minimum recorded, 3.5°C on September 16, 2003.

TEMPERATURE, WATER, DEGREES CELSIUS, JUNE TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	14.0	8.5	11.0	10.5	7.0	8.5	7.5	6.5	7.0
2	---	---	---	11.0	8.0	9.0	9.5	6.0	6.5	8.5	7.0	7.5
3	---	---	---	8.5	7.5	8.0	6.5	6.0	6.5	8.5	7.0	7.5
4	---	---	---	10.5	7.0	8.5	6.5	6.0	6.5	9.5	6.5	7.5
5	---	---	---	9.5	7.5	8.5	7.5	6.0	6.5	9.0	5.5	7.0
6	---	---	---	11.5	7.0	9.0	7.5	6.0	7.0	9.0	5.5	7.0
7	---	---	---	12.0	7.5	9.5	8.0	6.0	7.0	8.5	6.5	7.5
8	---	---	---	10.5	8.0	9.0	8.0	6.5	7.0	8.5	6.5	7.5
9	---	---	---	12.5	7.5	9.5	8.0	6.5	7.0	7.5	6.5	7.0
10	---	---	---	14.0	8.5	11.0	7.5	6.5	7.0	7.5	5.5	6.5
11	---	---	---	13.5	8.5	11.0	7.0	6.5	6.5	8.5	6.0	7.0
12	---	---	---	13.5	8.5	10.5	8.5	6.0	6.5	8.5	6.5	7.0
13	---	---	---	13.0	8.0	10.5	8.5	7.5	8.0	7.5	6.0	7.0
14	---	---	---	11.0	9.0	9.5	9.5	7.5	8.5	6.5	5.5	6.0
15	---	---	---	10.0	8.0	9.0	10.0	9.0	9.5	7.5	4.5	5.5
16	---	---	---	9.0	8.0	8.5	9.5	8.0	9.0	7.0	3.5	5.0
17	---	---	---	9.5	7.5	8.5	9.0	7.5	8.0	6.5	4.0	5.5
18	---	---	---	12.5	8.0	9.5	9.0	6.5	7.5	7.0	5.5	6.0
19	---	---	---	13.0	8.0	10.0	8.5	6.0	7.5	6.5	4.0	5.0
20	---	---	---	11.0	9.0	10.0	8.5	6.5	7.5	6.5	5.5	6.0
21	---	---	---	9.5	8.5	8.5	9.5	6.0	7.5	7.0	5.5	6.0
22	---	---	---	8.5	7.5	8.0	10.0	5.5	7.5	7.0	4.0	5.5
23	---	---	---	10.5	7.0	9.0	9.5	6.0	7.5	6.5	5.0	6.0
24	---	---	---	9.5	8.0	8.5	9.0	6.5	7.5	7.0	5.5	6.0
25	---	---	---	8.5	7.5	8.0	9.5	6.0	7.5	7.0	6.0	6.5
26	---	---	---	9.0	7.5	8.0	7.5	6.5	7.0	7.5	6.0	6.5
27	9.0	---	---	9.0	8.0	8.5	8.0	7.0	7.5	7.0	6.0	6.5
28	10.0	6.5	8.5	8.5	7.5	8.0	10.5	7.0	8.0	8.0	6.5	7.0
29	13.0	7.0	9.5	9.0	7.5	8.0	8.0	7.0	7.5	8.0	6.0	7.0
30	13.5	7.5	10.5	8.5	7.5	8.0	8.0	7.0	7.5	6.5	6.0	6.5
31	---	---	---	10.0	7.0	8.5	9.0	6.5	7.5	---	---	---
MONTH	---	---	---	14.0	7.0	9.1	10.5	5.5	7.4	9.5	3.5	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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	16	56	13	13	15	6.7	2.8	5.6	4.3	2.7	17
2	24	15	49	13	18	15	6.0	2.7	5.9	4.3	3.0	22
3	20	14	43	12	20	13	5.6	2.7	5.6	6.4	2.8	21
4	17	15	39	16	26	13	5.2	2.5	5.4	6.3	3.7	19
5	16	17	35	21	24	11	4.9	2.5	6.1	5.6	3.3	17
6	18	16	31	30	25	10	4.8	2.5	7.1	5.1	3.0	16
7	25	15	31	26	23	9.7	4.7	2.4	6.6	4.8	2.8	14
8	27	14	31	23	20	e9.1	4.8	2.4	6.1	4.5	2.5	13
9	22	12	32	21	19	e8.3	4.8	2.3	5.7	4.2	2.3	12
10	19	11	32	20	18	7.8	5.2	2.7	5.4	3.8	2.2	14
11	17	10	29	18	18	7.4	4.9	6.5	5.2	3.6	2.1	12
12	36	9.9	28	17	18	e6.8	4.6	9.9	4.8	3.4	2.2	10
13	31	9.9	27	16	17	e6.7	4.6	9.3	4.5	3.2	2.1	9.8
14	25	13	25	15	16	6.6	4.4	8.1	4.3	3.2	4.3	8.8
15	23	15	24	14	15	6.3	4.3	7.3	4.0	3.0	19	8.1
16	42	14	23	14	14	6.0	4.2	6.6	3.9	2.9	18	7.5
17	35	13	22	16	13	5.8	4.1	6.1	3.8	2.8	22	7.1
18	31	12	21	45	12	5.8	4.0	5.7	4.2	2.7	19	6.7
19	37	13	20	34	11	5.6	4.0	5.4	4.1	2.5	17	6.0
20	47	13	19	31	10	5.1	3.8	5.1	3.9	2.5	16	7.4
21	42	13	18	26	9.6	4.8	3.8	4.8	3.7	2.8	14	11
22	35	12	19	23	8.9	4.6	3.7	4.6	3.5	2.9	13	10
23	30	11	22	21	8.4	4.6	3.7	4.6	3.4	2.5	12	8.9
24	27	12	21	18	8.9	4.6	3.5	5.5	3.4	2.3	10	11
25	23	19	20	17	8.4	4.4	3.5	6.0	3.5	2.2	9.4	13
26	24	72	19	16	8.4	4.3	3.3	9.1	3.9	2.3	9.3	13
27	25	98	18	14	12	4.1	3.2	8.1	5.5	2.4	13	12
28	23	71	17	13	12	4.0	3.0	7.0	5.5	2.6	12	11
29	20	69	16	13	---	5.2	3.0	6.4	5.0	3.5	11	10
30	19	64	15	15	---	9.9	3.0	5.9	4.6	3.4	13	9.4
31	17	---	14	14	---	7.9	---	5.7	---	3.0	20	---
TOTAL	822	708.8	816	605	426.6	232.4	129.3	163.2	144.2	109.0	286.7	357.7
MEAN	26.5	23.6	26.3	19.5	15.2	7.50	4.31	5.26	4.81	3.52	9.25	11.9
MAX	47	98	56	45	26	15	6.7	9.9	7.1	6.4	22	22
MIN	16	9.9	14	12	8.4	4.0	3.0	2.3	3.4	2.2	2.1	6.0
AC-FT	1630	1410	1620	1200	846	461	256	324	286	216	569	709
CFSM	10.6	9.45	10.5	7.81	6.09	3.00	1.72	2.11	1.92	1.41	3.70	4.77
IN.	12.23	10.55	12.14	9.00	6.35	3.46	1.92	2.43	2.15	1.62	4.27	5.32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

MEAN	31.5	25.4	23.2	19.2	15.6	15.3	14.4	13.2	6.80	4.37	9.11	18.5
MAX	60.7	43.8	49.1	42.7	35.9	38.3	28.3	34.4	19.7	9.67	19.4	30.8
(WY)	2000	2000	2000	2001	1997	1992	1998	1999	1999	1998	1998	1998
MIN	20.5	12.6	8.96	5.13	3.31	4.13	2.68	5.26	2.01	0.66	1.32	5.90
(WY)	1998	1996	1996	1993	1999	1999	2002	2003	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	5098.3		4800.9			
ANNUAL MEAN	14.0		13.2		16.4	
HIGHEST ANNUAL MEAN					23.3	2001
LOWEST ANNUAL MEAN					10.9	1993
HIGHEST DAILY MEAN	98	Nov 27	98	Nov 27	e118	Dec 27 1999
LOWEST DAILY MEAN	a1.8	Apr 14	b2.1	Aug 11	0.27	Jul 31 1993
ANNUAL SEVEN-DAY MINIMUM	1.8	Apr 12	2.3	Aug 7	0.39	Jul 28 1993
MAXIMUM PEAK FLOW			116	Nov 27	c159	Oct 18 1999
MAXIMUM PEAK STAGE			12.22	Nov 27	c12.55	Oct 18 1999
INSTANTANEOUS LOW FLOW			1.9	Aug 14	d0.21	Jul 28 1993
ANNUAL RUNOFF (AC-FT)	10110		9520		11870	
ANNUAL RUNOFF (CFSM)	5.59		5.26		6.55	
ANNUAL RUNOFF (INCHES)	75.86		71.44		89.01	
10 PERCENT EXCEEDS	29		26		35	
50 PERCENT EXCEEDS	9.9		10		12	
90 PERCENT EXCEEDS	2.7		3.0		3.3	

a Apr. 14-18, and Jul. 21-22
b Aug. 11 and Aug. 13
c May have been exceeded during period of gage malfunction from Dec. 25 to 28, 1999
d Minimum recorded, Jul. 28, Aug. 2, Aug. 7 to Aug. 10, 1993, but may have been less during period water was below intake Jul. 28, Aug. 2, and Aug. 8 to Aug. 10, 1993
e Estimated