15019990 TYEE LAKE OUTLET NEAR WRANGELL

LOCATION.--Lat 56°12'00", long 131°30'24", in SE¼ SW¼ 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.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	488	10	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	328	115	363
2	376	11	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	310	106	354
3	289	12	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	9.7	277	91	301
4	225	13	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	95	247	75	242
5	172	10	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	190	241	61	189
6	132	7.3	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	224	230	50	146
7	112	5.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	234	210	45	117
8	133	3.6	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	236	200	85	123
9	130	2.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	271	205	199	179
10	128	1.7	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	326	208	208	344
11	113	2.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	330	217	185	347
12	142	2.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	319	203	166	297
13	144	2.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	318	198	231	239
14	117	7.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	348	227	236	189
15	107	9.9	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	392	212	206	209
16	134	9.2	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	399	206	171	330
17	116	7.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	368	239	138	484
18	127	5.4	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	353	249	110	497
19	145	4.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	324	239	86	466
20	129	5.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	288	225	66	382
21	109	9.8	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	256	211	52	395
22	90	15	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	243	210	68	543
23	68	14	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	262	207	257	469
24	49	11	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	311	213	300	371
25	33	7.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	401	219	381	295
26	23	4.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	450	208	542	235
27	17	2.1	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	408	188	553	196
28	13	0.65	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	351	188	549	179
29	15	e0.00	e0.00	e0.00	---	e0.00	e0.00	e0.00	326	177	446	152
30	13	e0.00	e0.00	e0.00	---	e0.00	e0.00	e0.00	330	157	353	123
31	10	---	e0.00	e0.00	---	e0.00	---	e0.00	---	134	356	---
TOTAL	3899	196.45	0.00	0.00	0.00	0.00	0.00	0.00	8362.70	6783	6487	8756
MEAN	126	6.55	0.000	0.000	0.000	0.000	0.000	0.000	279	219	209	292
MAX	488	15	0.00	0.00	0.00	0.00	0.00	0.00	450	328	553	543
MIN	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	134	45	117
AC-FT	7730	390	0.00	0.00	0.00	0.00	0.00	0.00	16590	13450	12870	17370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)#

MEAN	161	46.1	8.92	1.07	0.027	0.000	3.18	68.4	266	190	121	182
MAX	264	108	38.4	6.37	0.28	0.000	24.8	247	367	305	216	298
(WY)	2000	1993	1998	2001	1994	1993	1993	1993	1999	1999	2000	2001
MIN	102	5.10	0.000	0.000	0.000	0.000	0.000	0.000	176	55.2	28.3	41.5
(WY)	1995	1997	1995	1993	1993	1993	1994	2002	1994	1998	1994	1993

\# Record for 1980 & 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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002#	
ANNUAL TOTAL	38732.00		34484.15			
ANNUAL MEAN	106		94.5		87.1	
HIGHEST ANNUAL MEAN					113	2001
LOWEST ANNUAL MEAN					56.5	1995
HIGHEST DAILY MEAN	628	Sep 23	553	Aug 27	710	Oct 27 1993
LOWEST DAILY MEAN	a0.00	Jan 1	b0.00	Nov 29	c0.00	Dec 30 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 22	0.00	Nov 29	0.00	Dec 30 1992
MAXIMUM PEAK FLOW			595	Aug 27	d975	Oct 26 1993
MAXIMUM PEAK STAGE			25.60	Aug 27	28.62	Oct 26 1993
INSTANTANEOUS LOW FLOW			0.00	Nov 29	0.00	Dec 30 1992
ANNUAL RUNOFF (AC-FT)	76820		68400		63080	
10 PERCENT EXCEEDS	339		325		275	
50 PERCENT EXCEEDS	9.8		0.00		17	
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 MINIMUM	2.0	Mar.31 1980
INSTANTANEOUS PEAK FLOW	1910	Oct. 7 1980
INSTANTANEOUS PEAK STAGE	12.72	Oct. 7 1980
ANNUAL RUNOFF (AC-FT)	130000	
10 PERCENT EXCEEDS	457	
50 PERCENT EXCEEDS	86	
90 PERCENT EXCEEDS	11	

\# Record for 1980 & 1981 water years, prior to diversion of 1984, not included. See Period of Record
a Jan. 01 to Jan. 3 and Jan. 22 to May 10
b Nov. 29 to Jun. 1
c No flow many days during winter months most years
d From rating curve extended above 400 ft^3/s
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. GOES Satellite telemetry at station.

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)
Aug 09	0300	6340	10.46	Aug 31	1215	4090	8.88
Aug 13	0430	5450	9.85	Sep 10	0045	4490	9.17
Aug 23	1015	*9150	*12.28	Sep 16	2045	5900	10.16
Aug 25	2045	5870	10.14	Sep 21	2130	8030	11.57

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	e2700	e700	e105	245	e100	e78	80	976	1620	1850	802	2380
2	e2000	e800	e100	226	e100	e78	73	774	1400	2030	887	1720
3	e1200	e1000	e95	319	e115	e95	69	556	1530	1400	753	995
4	e750	e780	e88	351	e130	e140	66	409	2450	1280	696	716
5	e500	e570	e120	263	e120	e120	63	337	2390	1820	675	549
6	e320	e460	e115	583	e115	e110	60	286	1580	1590	669	449
7	e440	e540	e175	1030	e105	e100	59	268	1200	1190	802	445
8	e550	e560	e210	818	e100	e90	58	266	1100	1300	2450	1310
9	e510	e550	e170	533	e120	e85	57	265	1700	1560	4400	1760
10	e660	e390	e150	560	e140	e80	66	364	2090	1470	1880	3380
11	e560	e420	e140	414	e160	e75	76	582	1510	1550	1050	1560
12	e800	e380	e140	386	e190	e73	81	1040	1340	1160	1190	858
13	e680	e340	e130	303	209	e69	114	1200	1520	1300	4180	591
14	e550	e800	e130	239	156	e65	189	1300	2260	2160	1870	464
15	e700	e540	e120	210	164	e64	268	807	2440	1260	1060	1770
16	e800	e800	e120	216	177	e60	205	765	2070	1280	772	3510
17	e650	e520	e110	183	150	e60	177	1110	1570	1900	649	4660
18	e720	e360	e105	171	122	e60	174	936	1650	1550	604	4000
19	e650	e300	e105	183	110	e59	212	960	1390	1280	545	2420
20	e550	e440	e100	172	103	e59	290	1590	1250	1120	489	1630
21	e500	e370	e98	141	91	e59	371	1920	1100	1100	690	3670
22	e460	e600	e110	134	e84	e58	381	1620	1190	1400	2070	4060
23	e420	e460	e270	e122	e75	e58	271	1500	1620	1420	6190	1920
24	e410	e350	e550	e120	e66	e57	232	1210	1790	1610	2000	1050
25	e400	e280	e660	e110	e70	e86	211	1290	2220	1770	3460	718
26	e520	e210	e580	e100	e95	e120	208	1600	2310	1190	4250	586
27	e460	e170	e540	e90	e88	e140	210	1770	1690	1050	3940	940
28	e800	e140	e520	e85	e80	128	273	2440	1220	1710	3080	1050
29	e1100	e125	513	e83	---	106	445	2930	1500	1300	1670	734
30	e800	e115	379	e80	---	95	675	2500	1530	957	1030	507
31	e600	---	297	e84	---	87	---	1690	---	824	3200	---
TOTAL	22760	14070	7045	8554	3335	2614.0	5714	35261	50230	44381	58003	50402
MEAN	734.2	469.0	227.3	275.9	119.1	84.32	190.5	1137	1674	1432	1871	1680
MAX	2700	1000	660	1030	209	140	675	2930	2450	2160	6190	4660
MIN	320	115	88	80	66	57	57	265	1100	824	489	445
MED	600	450	130	210	113	78	183	1040	1580	1400	1060	1180
AC-FT	45140	27910	13970	16970	6610	5180	11330	69940	99630	88030	115000	99970
CFSM	10.9	6.96	3.37	4.09	1.77	1.25	2.83	16.9	24.8	21.2	27.8	24.9
IN.	12.56	7.77	3.89	4.72	1.84	1.44	3.15	19.46	27.72	24.50	32.01	27.82

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

MEAN	1079	496.3	337.9	252.5	236.3	201.6	359.2	918.3	1389	1344	1145	1146
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

e Estimated

15022000 HARDING RIVER NEAR WRANGELL—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1951 - 2002#	
ANNUAL TOTAL	295251		302369.0			
ANNUAL MEAN	808.9		828.4		746.2	
HIGHEST ANNUAL MEAN					921	1992
LOWEST ANNUAL MEAN					558	1995
HIGHEST DAILY MEAN	3900	Sep 23	6190	Aug 23	11400	Oct 14 1961
LOWEST DAILY MEAN	80	Feb 23	a57	Mar 24	b35	Jan 23 1969
ANNUAL SEVEN-DAY MINIMUM	89	Feb 20	59	Mar 18	35	Jan 23 1969
MAXIMUM PEAK FLOW			9150	Aug 23	c15300	Oct 26 1993
MAXIMUM PEAK STAGE			12.28	Aug 23	d16.22	Oct 14 1961
INSTANTANEOUS LOW FLOW			f		35	Jan 23 1969
ANNUAL RUNOFF (AC-FT)	585600		599700		540600	
ANNUAL RUNOFF (CFSM)	12.0		12.3		11.1	
ANNUAL RUNOFF (INCHES)	162.96		166.89		150.43	
10 PERCENT EXCEEDS	1770		1910		1610	
50 PERCENT EXCEEDS	550		533		543	
90 PERCENT EXCEEDS	120		84		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 good, except for estimated daily discharges that are tidally affected, Oct.15 to 19, Oct. 30 to Nov.5, Nov. 11 to 19, and Apr. 23 to 30 which are fair, and 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80000	e20400	e9100	e8400	e6400	e7000	e5900	21300	103000	115000	87800	145000
2	62200	e21800	e8800	e8300	e6400	e7500	e5700	27700	97500	114000	87700	128000
3	54400	e19700	e8500	e8100	e6400	e8500	e5600	27700	95600	118000	83300	114000
4	47900	e22700	e9300	e8000	e6400	e8400	e5500	23000	105000	113000	77000	103000
5	42900	e20100	e9800	e8000	e6300	e8100	e5400	19800	120000	109000	75800	87400
6	40900	18200	e10700	e8000	e6200	e7500	e5300	17700	122000	111000	77500	77900
7	40100	16400	e11400	e8000	e6100	e6900	e5300	16400	113000	108000	82100	71900
8	40800	15500	e13200	e8100	e6000	e6500	e5300	15800	101000	109000	99400	71600
9	39700	15300	e14300	e8200	e5900	e6000	e5300	15800	106000	123000	132000	75500
10	39700	15500	e14200	e8500	e5900	e5800	e5300	16600	126000	133000	127000	94200
11	36600	e15900	e13700	e8400	e6000	e5700	e5300	18800	140000	141000	108000	86800
12	43300	e15500	e12900	e8200	e8200	e5700	e5600	24100	144000	134000	99500	70200
13	41700	e15100	e11800	e7900	e9400	e5700	e5900	29000	142000	120000	138000	61500
14	34000	e16600	e10700	e7900	e9800	e5700	e6500	33600	146000	116000	154000	54700
15	e30700	e17000	e9700	e8000	e9900	e5600	e6700	35000	164000	109000	130000	57300
16	e34400	e17300	e9000	e7700	e9900	e5500	e6800	36800	183000	113000	103000	70500
17	e32800	e16100	e8500	e7400	e9800	e5500	e6900	42400	187000	122000	85300	90600
18	e39400	e14300	e8200	e7600	e9700	e5400	e7200	45400	187000	132000	79200	94500
19	e43700	e13200	e8100	e7200	e9000	e5400	7780	46800	175000	134000	74200	93800
20	38500	13000	e8100	e7100	e8600	e5400	8240	55100	155000	131000	68000	77100
21	32800	13000	e8200	e7000	e8200	e5500	9220	70300	140000	121000	67500	74900
22	29700	13900	e8300	e7000	e7700	e5500	9940	81300	130000	127000	82500	95600
23	26700	14000	e8500	e6900	e7400	e5300	e9630	85900	128000	138000	144000	78600
24	24800	13500	e8600	e6900	e7000	e5300	e8940	82700	132000	151000	180000	73300
25	23500	12000	e8800	e6800	e7200	e5500	e8580	82200	136000	159000	161000	69700
26	22000	e11000	e8800	e6700	e7500	e5700	e8550	89800	143000	152000	189000	68400
27	21500	e10100	e8600	e6600	e7600	e5800	e8580	101000	139000	131000	209000	71100
28	20700	e9800	e8600	e6500	e7000	e5900	e8910	111000	128000	119000	226000	77300
29	22400	e9700	e8600	e6500	---	e6100	e10500	120000	122000	105000	203000	74100
30	e22100	e9500	e8500	e6500	---	e6000	e14400	119000	124000	92700	148000	64600
31	e20800	---	e8500	e6500	---	e6000	---	110000	---	89000	135000	---
TOTAL	1130700	456100	304000	232900	211900	190400	218770	1622000	4034100	3789700	3713800	2473100
MEAN	36470	15200	9806	7513	7568	6142	7292	52320	134500	122200	119800	82440
MAX	80000	22700	14300	8500	9900	8500	14400	120000	187000	159000	226000	145000
MIN	20700	9500	8100	6500	5900	5300	5300	15800	95600	89000	67500	54700
MED	36600	15400	8800	7700	7300	5700	6750	36800	131000	120000	103000	76300
AC-FT	2243000	904700	603000	462000	420300	377700	433900	3217000	8002000	7517000	7366000	4905000
CFSM	1.83	0.76	0.49	0.38	0.38	0.31	0.37	2.63	6.75	6.14	6.01	4.14
IN.	2.11	0.85	0.57	0.43	0.40	0.36	0.41	3.03	7.53	7.08	6.94	4.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY) #

MEAN	57390	24700	13910	11490	9303	10140	16490	66470	135100	134300	108000	80310
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1976 - 2002	
ANNUAL TOTAL	18705440		18377470			
ANNUAL MEAN	51250		50350		55810	
HIGHEST ANNUAL MEAN					72870	1981
LOWEST ANNUAL MEAN					42100	1978
HIGHEST DAILY MEAN	201000	Jul 22	226000	Aug 28	324000	Sep 23 1994
LOWEST DAILY MEAN	a7500	Feb 23	b5300	Mar 23	4000	Feb 12 1988
ANNUAL SEVEN-DAY MINIMUM	7670	Feb 19	5310	Apr 5	4090	Mar 8 1999
MAXIMUM PEAK FLOW			229000	Aug 28	351000	Sep 23 1994
MAXIMUM PEAK STAGE			25.70	Aug 28	30.60	Sep 23 1994
ANNUAL RUNOFF (AC-FT)	37100000		36450000		40430000	
ANNUAL RUNOFF (CFSM)	2.57		2.53		2.80	
ANNUAL RUNOFF (INCHES)	34.93		34.32		38.07	
10 PERCENT EXCEEDS	137000		132000		136000	
50 PERCENT EXCEEDS	21900		19700		31400	
90 PERCENT EXCEEDS	8500		6000		7200	

\# See Period of Record; partial years used in monthly statistics
a Feb. 23 to 24 and Mar. 24 to 25
b Mar. 23 to 24 and Apr. 6 to 11
e Estimated

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 current year.

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.

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)
Aug 09	1400	659	11.93	Aug 23	0915	615	11.80
Aug 13	0045	716	12.09	Aug 28	1500	*818	*12.36

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	33	e15	e23	e15	e16	e5.5	e8.4	222	268	219	500
2	212	33	e15	e23	e16	e18	e5.4	e10	213	343	201	405
3	174	37	e15	e20	e16	e20	e5.2	e11	224	339	181	317
4	144	38	e15	e19	e16	e18	e5.0	e11	249	312	165	250
5	125	34	e15	e20	e16	e16	e4.8	e10	279	295	154	201
6	131	30	e15	e22	e14	e14	e4.7	e9.8	268	262	149	167
7	123	26	e16	e23	e13	e13	e4.6	e9.4	238	235	214	173
8	122	26	e18	e24	e12	e12	e4.4	e9.2	223	222	457	181
9	118	28	17	e25	e13	e11	e4.5	e9.3	244	228	646	189
10	118	27	18	e26	e19	e10	e4.5	e12	318	229	567	187
11	108	26	17	e24	e20	e10	e4.4	e13	320	238	444	182
12	112	23	18	e23	e28	e10	e4.4	e15	278	237	550	170
13	106	20	18	e23	e28	e10	e4.4	e18	248	226	675	148
14	91	20	17	e21	e29	e10	e4.3	e22	248	252	560	127
15	78	21	17	e20	e34	e9.6	e4.5	e24	280	259	424	146
16	79	21	e16	e20	e42	e8.8	e4.3	e25	303	242	319	158
17	71	21	e15	e18	e36	e8.1	e4.3	29	312	237	246	164
18	76	20	e15	e19	e33	e7.5	e4.4	33	312	241	210	220
19	86	18	e14	e19	e30	e7.3	e4.3	41	297	228	190	256
20	80	18	e14	e18	e29	e7.0	e4.8	53	289	216	179	247
21	76	18	15	e16	e28	e6.5	e5.4	76	262	222	292	253
22	68	19	15	e15	e25	e5.8	e5.0	91	236	268	392	224
23	61	19	e16	e16	e22	e5.5	e5.6	104	232	296	582	197
24	54	17	e17	e17	e19	e5.4	e5.4	110	245	372	512	197
25	50	e17	e18	e16	e18	e5.3	e5.3	119	314	429	496	183
26	44	e16	e19	e15	e18	e6.3	e5.2	128	372	410	529	171
27	44	e16	e21	e14	e18	e7.3	e5.1	139	361	372	660	177
28	40	e16	e22	e15	e17	e8.0	e5.2	177	317	368	782	174
29	43	e16	e24	e15	---	e7.7	e5.4	239	285	339	745	156
30	40	e16	e24	e15	---	e7.0	e6.2	278	265	285	629	132
31	36	---	e24	e16	---	e6.0	---	250	---	246	568	---
TOTAL	2940	690	535	600	624	307.1	146.5	2084.1	8254	8716	12937	6252
MEAN	94.84	23.00	17.26	19.35	22.29	9.906	4.883	67.23	275.1	281.2	417.3	208.4
MAX	230	38	24	26	42	20	6.2	278	372	429	782	500
MIN	36	16	14	14	12	5.3	4.3	8.4	213	216	149	127
AC-FT	5830	1370	1060	1190	1240	609	291	4130	16370	17290	25660	12400
CFSM	8.62	2.09	1.57	1.76	2.03	0.90	0.44	6.11	25.0	25.6	37.9	18.9
IN.	9.94	2.33	1.81	2.03	2.11	1.04	0.50	7.05	27.91	29.48	43.75	21.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2002, BY WATER YEAR (WY)#

MEAN	158.9	48.02	35.00	21.51	20.67	17.30	18.82	86.17	217.5	271.1	263.7	260.7
MAX	243	88.7	80.8	38.1	40.8	59.2	36.9	140	275	364	417	387
(WY)	1988	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

e Estimated

15039900 DOROTHY LAKE OUTLET NEAR JUNEAU—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1987 - 2002	
ANNUAL TOTAL	36567.8		44085.7			
ANNUAL MEAN	100.2		120.8		118.8	
HIGHEST ANNUAL MEAN					141	1990
LOWEST ANNUAL MEAN					97.6	1996
HIGHEST DAILY MEAN	438	Jul 8	782	Aug 28	915	Sep 11 1995
LOWEST DAILY MEAN	9.8	Apr 17	a4.3	Apr 14	4.2	Mar 13 1989
ANNUAL SEVEN-DAY MINIMUM	10	Apr 15	4.4	Apr 13	4.2	Mar 10 1989
MAXIMUM PEAK FLOW			818	Aug 28	b990	Sep 10 1995
MAXIMUM PEAK STAGE			12.36	Aug 28	13.05	Sep 10 1995
INSTANTANEOUS LOW FLOW					4.2	Mar 10 1989
ANNUAL RUNOFF (AC-FT)	72530		87440		86080	
ANNUAL RUNOFF (CFSM)	9.11		11.0		10.8	
ANNUAL RUNOFF (INCHES)	123.67		149.09		146.77	
10 PERCENT EXCEEDS	268		313		286	
50 PERCENT EXCEEDS	29		28		54	
90 PERCENT EXCEEDS	12		6.4		12	

a Apr. 14,16,17, and 19
b From rating curve extended above 350 ft^3/s

15040000 DOROTHY CREEK NEAR JUNEAU

LOCATION.--Lat 58°13'40", long 134°02'25", in NW¼ SW¼ 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.--October 1929 to October 1941, September 1942 to December 1943, June 1944 to September 1945, October 1945 to September 1967, October 2001 to current year. Prior to October 1945 monthly discharge only.

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above sea level (from topographic map). Prior to September 1937 at site 100 ft upstream from mouth at different datum and published as Dorothy Creek at Taku Inlet.

REMARKS.--Records fair except estimated daily discharges, which are poor. Dorothy Lake (area 952 acres) lies at an elevation of 2,423 ft, less than 4 mi upstream from mouth; Lieuy Lake (area 80 acres) lies at an elevation of 1,711 ft; and Bart Lake (area 150 acres) lies at an elevation of 986 ft.

COOPERATION.--Records prior to October 1945 provided by U.S. Forest Service.

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	e300	e52	e22	34	24	e25	13	19	265	310	291	e620
2	e290	e55	e20	34	24	e27	13	18	268	354	256	e530
3	e260	e57	e19	31	23	e29	13	18	271	376	229	e400
4	e220	e58	e17	30	24	e25	13	18	282	371	206	e315
5	e190	e55	e17	33	23	e24	14	18	302	361	195	e250
6	e175	e48	e18	34	22	e24	14	18	308	338	183	e200
7	e170	e44	e21	34	21	e23	13	18	304	313	184	e210
8	e170	e42	e23	35	21	e22	12	19	295	290	256	e220
9	e165	e42	e22	36	23	e21	13	19	292	276	466	e225
10	e160	e43	e24	37	22	e20	14	23	334	267	e612	e230
11	e150	e42	e23	38	22	e19	13	25	355	267	e530	e220
12	e152	e38	e22	35	27	e19	12	28	343	263	e600	e200
13	e148	e33	e21	33	26	e18	14	32	324	258	e700	e180
14	e130	e32	e20	33	28	e18	14	34	312	269	e720	e160
15	e120	e32	e20	33	31	e18	12	36	308	274	e570	e170
16	e110	e33	e20	32	34	e17	12	40	317	273	e380	e185
17	e107	e32	e20	31	35	e17	12	46	327	269	e340	e210
18	e105	e31	e19	33	37	e17	12	53	336	266	e270	e250
19	e120	e28	e18	34	38	e16	12	68	339	262	e240	e300
20	e116	e29	e17	30	36	e15	15	89	338	253	e220	e290
21	e110	e29	e17	26	e32	e14	14	108	325	250	e300	e300
22	e100	e30	20	26	e31	e13	13	122	305	259	e370	e280
23	e93	e30	22	29	e29	14	13	135	288	270	e500	e240
24	e84	e29	26	26	e28	13	13	145	279	302	e650	e240
25	e75	e28	28	24	e27	15	13	155	298	350	e580	e225
26	e70	e27	29	24	e27	14	13	164	332	390	e630	e210
27	e66	e26	31	23	e27	13	14	174	352	398	e700	e210
28	e62	e25	33	24	e26	13	15	192	350	399	e900	e208
29	e64	e24	34	25	---	13	17	219	336	391	e850	e195
30	e60	e23	34	26	---	13	19	242	320	363	e780	e165
31	e57	---	34	24	---	13	---	257	---	327	e700	---
TOTAL	4199	1097	711	947	768	562	404	2552	9405	9609	14408	7638
MEAN	135.5	36.57	22.94	30.55	27.43	18.13	13.47	82.32	313.5	310.0	464.8	254.6
MAX	300	58	34	38	38	29	19	257	355	399	900	620
MIN	57	23	17	23	21	13	12	18	265	250	183	160
MED	120	32	21	32	27	17	13	40	315	290	466	222
AC-FT	8330	2180	1410	1880	1520	1110	801	5060	18650	19060	28580	15150
CFSM	8.91	2.41	1.51	2.01	1.80	1.19	0.89	5.42	20.6	20.4	30.6	16.8
IN.	10.28	2.68	1.74	2.32	1.88	1.38	0.99	6.25	23.02	23.52	35.26	18.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)#

MEAN	225.8	107.7	49.06	27.41	22.75	22.75	26.66	92.04	244.6	306.5	310.9	279.9
MAX	455	355	113	59.3	70.9	85.9	62.3	140	336	419	465	432
(WY)	1937	1950	1937	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

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002#	
ANNUAL TOTAL	52300			
ANNUAL MEAN	143.3		143.3	
HIGHEST ANNUAL MEAN			184	1937
LOWEST ANNUAL MEAN			108	1933
HIGHEST DAILY MEAN	900	Aug 28	1690	Nov 3 1949
LOWEST DAILY MEAN	a12	Apr 8	6.0	Mar 23 1933
ANNUAL SEVEN-DAY MINIMUM	13	Apr 12	6.6	Mar 23 1933
MAXIMUM PEAK FLOW	b		c1780	Nov 3 1949
MAXIMUM PEAK STAGE			5.85	Nov 3 1949
INSTANTANEOUS LOW FLOW	d		f6.0	Mar 23 1933
ANNUAL RUNOFF (AC-FT)	103700		103800	
ANNUAL RUNOFF (CFSM)	9.43		9.43	
ANNUAL RUNOFF (INCHES)	128.00		128.13	
10 PERCENT EXCEEDS	339		326	
50 PERCENT EXCEEDS	38		92	
90 PERCENT EXCEEDS	15		16	

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

15041200 TAKU RIVER NEAR JUNEAU
(International gaging station)

LOCATION.--Lat 58°32'19", long 133°42'00", in NE¼ NW¼ sec. 33, T. 38 S., R. 71 E. (Taku River C-6 quad), Hydrologic Unit 19010301, City and Borough of Juneau, in Tongass National Forest, on left bank, 1.5 mi upstream from Wright River, and 31 mi northeast of Juneau.

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

WATER-DISCHARGE RECORDS

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

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

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

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

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 17	0030	51,700	39.73	Aug 17	1400	*a74,600	*41.99
Aug 13	1700	55,500	40.19				

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11700	4370	e2250	e2080	e1600	e1720	e1420	6020	29200	24700	20900	31200
2	12100	4320	e2150	e2020	e1600	e1800	e1390	8340	26900	26200	20900	27200
3	11000	4480	e2100	e2000	e1590	e1890	e1360	7610	26700	26000	19600	24900
4	10200	4570	e2100	e1980	e1550	e1810	e1330	6270	28700	24600	18100	22800
5	10700	4210	e2300	e1960	e1550	e1780	e1310	5340	28900	23600	18200	19600
6	12000	3690	e2500	e1980	e1500	e1700	e1300	4680	27900	22000	19600	18100
7	14000	3440	e2600	e1990	e1490	e1610	e1300	4430	25000	21500	22400	17400
8	19100	3450	e2900	e2000	e1420	e1550	e1300	4340	24800	22800	30800	16300
9	26000	3700	e3300	e2050	e1390	e1500	e1300	4450	30200	25400	32700	15400
10	13000	3890	e3500	e2110	e1430	e1450	e1300	4680	32800	25400	30300	14500
11	9370	3710	e3400	e2080	e1480	e1420	e1300	5180	32300	23200	26500	14100
12	9160	3540	e3300	e2010	e1900	e1400	e1320	5650	29300	22100	31200	13300
13	8820	3490	e3100	e1980	e2220	e1390	e1400	6610	27800	22100	52600	12300
14	7830	3540	e2800	e1930	e2290	e1400	1580	8640	29700	24000	46800	11300
15	7210	3440	e2600	e1990	e2300	e1380	1640	10100	36700	25200	42600	11100
16	7200	3330	e2400	e1880	e2360	e1370	1680	10500	46100	24600	53500	11200
17	7230	3220	e2200	e1820	e2300	e1360	1660	11900	44200	24500	69200	11100
18	8370	3060	e2100	e1880	e2200	e1350	1700	14200	37100	27200	30700	12200
19	9660	3040	e2000	e1790	e2150	e1350	1810	17800	33600	26900	21100	13700
20	8490	3070	e2000	e1760	e2090	e1340	2130	22100	30100	26000	19500	12900
21	7550	3130	e2000	e1730	e2000	e1340	2530	26700	27200	25500	23000	12400
22	7030	3240	e2000	e1720	e1920	e1360	2590	28100	25100	26600	30900	11800
23	6510	3270	e2050	e1700	e1800	e1300	2470	27300	25100	29300	42700	11000
24	6040	3060	e2100	e1690	e1720	e1310	2340	27300	27300	33300	40500	11400
25	5540	2970	e2200	e1670	e1700	e1330	2330	29000	28000	36000	35100	12100
26	5140	e2700	e2200	e1640	e1700	e1400	2350	32400	27200	32900	34400	12900
27	5010	e2500	e2150	e1630	e1710	e1420	2340	35500	26500	29700	39000	14000
28	4730	e2400	e2150	e1620	e1720	e1450	2530	36700	24700	28000	46200	15000
29	4700	e2400	e2100	e1620	---	e1470	3050	39300	24000	24400	43900	13700
30	4640	e2300	e2100	e1620	---	e1480	4050	39200	25000	21000	36800	11800
31	4430	---	e2100	e1610	---	e1470	---	34100	---	20900	33500	---
TOTAL	284460	101530	74750	57540	50680	45900	56110	524440	888100	795600	1033200	456700
MEAN	9176	3384	2411	1856	1810	1481	1870	16920	29600	25660	33330	15220
MAX	26000	4570	3500	2110	2360	1890	4050	39300	46100	36000	69200	31200
MIN	4430	2300	2000	1610	1390	1300	1300	4340	24000	20900	18100	11000
AC-FT	564200	201400	148300	114100	100500	91040	111300	1040000	1762000	1578000	2049000	905900
CFSM	1.39	0.51	0.37	0.28	0.27	0.22	0.28	2.56	4.49	3.89	5.05	2.31
IN.	1.60	0.57	0.42	0.32	0.29	0.26	0.32	2.96	5.01	4.48	5.82	2.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2002, BY WATER YEAR (WY) #

MEAN	11490	4612	3348	2191	1937	2573	4274	19940	34280	31730	26500	19290
MAX	17250	8633	6613	4223	3682	10500	6815	33800	49280	41080	33330	26550
(WY)	1992	1994	2000	2000	1992	1992	1992	1993	1992	1992	2002	1994
MIN	6265	2488	1256	1125	1041	1359	1870	9652	23170	25040	18610	11180
(WY)	1997	1997	1997	1988	1999	1991	2002	2001	1995	1996	1995	1992

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

15041200 TAKU RIVER NEAR JUNEAU—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1988 - 2002#	
ANNUAL TOTAL	4473960		4369010			
ANNUAL MEAN	12260		11970		13580	
HIGHEST ANNUAL MEAN					16820	1992
LOWEST ANNUAL MEAN					10800	1996
HIGHEST DAILY MEAN	67600	Aug 10	69200	Aug 17	93100	Jul 26 2000
LOWEST DAILY MEAN	1450	Mar 25	a1300	Mar 23	710	Feb 12 1988
ANNUAL SEVEN-DAY MINIMUM	1510	Feb 18	1300	Apr 5	721	Feb 8 1988
MAXIMUM PEAK FLOW			b74600	Aug 17	b110000	Aug 17 1989
MAXIMUM PEAK STAGE			41.99	Aug 17	44.13	Aug 17 1989
INSTANTANEOUS LOW FLOW			c		710	Feb 12 1989
ANNUAL RUNOFF (AC-FT)	8874000		8666000		9836000	
ANNUAL RUNOFF (CFSM)	1.86		1.81		2.06	
ANNUAL RUNOFF (INCHES)	25.22		24.63		27.95	
10 PERCENT EXCEEDS	33100		30500		33300	
50 PERCENT EXCEEDS	4860		4450		7170	
90 PERCENT EXCEEDS	1800		1470		1610	

\# See Period of Record; partial years used in monthly statistics
a Mar. 23 & April 6 to 11
b Result of Tulsequah River glacier dam breakout
c 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 cross sections were performed on March 29, and August 16-18. The outburst peak of the lake dammed by Tulsequah Glacier occurred on August 16-18. As a result, the temperature cross sections showed variations of 0.5°C during sampling on August 16, 2.0° C on August 17 and no variation on August 18. Variation of 1.5° C were found on March 29.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 12.5°C, July 14, 1999 and July 20 and 21, 2001; minimum, 0.0°C, many days during most winters.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 12.0°C, July 7 and 8, ; minimum, 0.0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
MAR								
29...	1537	757	11.4	82	8.0	237	1.5	105
29...	1539	757	11.4	81	8.0	241	1.0	150
29...	1541	757	11.5	80	8.0	248	.5	185
29...	1543	757	11.6	80	8.0	252	.0	205
29...	1547	757	11.5	79	8.0	255	.0	230
AUG								
18...	1115	761	12.5	103	7.6	106	7.0	106
18...	1120	761	12.4	103	7.7	108	7.0	249
18...	1122	761	12.4	103	7.7	108	7.0	256
18...	1124	761	12.3	101	7.7	108	7.0	498
18...	1126	761	12.3	101	7.7	108	7.0	604

DATE	TIME	MEDIUM CODE	SAMPLE TYPE	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SAMPLING METHOD, CODES (82398)	SAMPLER TYPE (CODE) (84164)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)
NOV													
14...	1240	9	9	308	29.62	3390	20	3053	210	8.1	3.0	.5	740
MAR													
29...	1608	9	9	290	--	1480	20	8010	247	7.8	5.5	.5	757
MAY													
09...	1025	9	9	480	29.98	4380	10	3053	124	7.9	11.0	6.5	766
JUN													
12...	1240	9	9	719	36.19	29200	20	3053	128	7.1	17.5	9.0	767
JUL													
18...	1600	9	9	702	35.86	29100	20	3053	110	7.8	--	10.5	762
AUG													
16...	1957	9	9	793	40.73	58200	20	3055	111	7.9	14.0	4.5	--
17...	1651	9	9	837	41.90	68900	20	3055	129	8.0	--	3.5	--
18...	1432	9	9	711	35.53	25700	20	3055	108	7.7	--	7.0	761
SEP													
11...	1600	9	9	663	32.95	14300	20	3053	130	7.8	--	7.5	762

15041200 TAKU RIVER NEAR JUNEAU--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ANC WATER UNFLTRD FET FIELD MG/L AS CACO3 (00410)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT DIS FIX END FIELD CAC03 (MG/L) (39036)	SULFATE (MG/L AS SO4) (00946)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
NOV													
14...	13.4	96	113	32.3	7.78	3.5	92	1.00	122	92	92	18	.072
MAR													
29...	11.5	80	128	37.5	8.32	5.84	92	1.00	109	89	--	21	.185
MAY													
09...	11.9	96	110	32.1	6.88	3.45	86	1.00	103	84	86	18	.406
JUN													
12...	11.8	101	58	17.5	3.51	1.43	50	<.70	59	48	50	18	.020
JUL													
18...	11.8	106	52	15.5	3.20	1.30	--	<.70	--	--	--	--	.020
AUG													
16...	--	--	35	11.6	1.55	.64	28	1.00	34	28	28	8.1	.040
17...	--	--	42	13.2	2.11	.62	30	1.00	36	30	30	10	.040
18...	12.4	102	53	16.6	2.78	1.09	43	1.00	51	42	43	10	.047
SEP													
11...	12.5	104	66	19.6	4.21	1.56	55	<.70	65	53	55	12.2	.020

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
NOV													
14...	.05	.013	144	27	.6	.5	41	38	<.10	<.10	<1	--	1.1
MAR													
29...	.050	.010	73	<20	.7	.4	47	45	<.10	<.10	<1	<1	<1.0
MAY													
09...	.040	.017	139	<20	1	.6	45	40	<.10	<.10	<1	<1	1.7
JUN													
12...	.06	.073	1730	47	2	1.2	56	29	<.10	<.10	<1	<1	4.4
JUL													
18...	.07	.194	2890	63	3	1.2	74	28	<.12	<.10	5	1	7.9
AUG													
16...	.04	.910	18400	51	11	.5	370	20	.55	<.10	30	<1	48
17...	.04	.690	12800	43	9	.4	280	26	.39	<.10	22	<1	35
18...	.04	.360	5950	45	5	.5	139	29	.18	<.10	12	<1	18
SEP													
11...	<.02	.051	1280	43	1.3	.6	51	30	.17	.12	2	<1	3.7

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)
NOV													
14...	<1	310	30	.20	<.10	24	20	2	1.64	<1.0	<1	<.10	<.10
MAR													
29...	<1.0	480	<10	.20	<.10	49	42	1	.56	--	--	<.10	<.10
MAY													
09...	1.3	420	70	.20	<.10	29	20	E2	E2	--	--	<.10	<.10
JUN													
12...	<1.0	2190	<10	1.0	<.10	63	5.5	5	.56	--	--	<.10	<.10
JUL													
18...	<1.0	3960	<10	2.6	<.10	122	5.4	8	.50	--	--	<.10	<.10
AUG													
16...	<1.0	24300	<10	16	<.10	676	7.2	37	<.30	--	--	.20	<.10
17...	<1.0	18000	<10	12	<.10	495	9.0	28	.46	--	--	.15	<.10
18...	<1.0	8880	<10	6.0	<.10	259	7.3	17	.42	--	--	<.10	<.10
SEP													
11...	<1.0	1720	<10	1.5	<.10	54	8.0	4	.55	--	--	<.10	<.10

15041200 TAKU RIVER NEAR JUNEAU--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
NOV				
14...	<4	<4	.9	.9
MAR				
29...	<4	<4	<.7	.5
MAY				
09...	<4	--	1.9	2.1
JUN				
12...	9	<4	1.2	1.2
JUL				
18...	17	<4	1.2	1.0
AUG				
16...	122	<4	<.5	.5
17...	80	<4	<.5	<.5
18...	35	<4	.5	.5
SEP				
11...	8	<4	1.3	1.1

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	7.5	8.0	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
2	9.0	7.0	8.0	2.5	1.5	2.0	0.5	0.0	0.0	0.5	0.0	0.0
3	8.0	6.5	7.0	2.0	1.5	2.0	0.5	0.0	0.0	0.5	0.0	0.0
4	7.0	6.0	6.5	2.0	1.5	1.5	0.5	0.5	0.5	0.5	0.0	0.0
5	7.0	5.5	6.0	2.0	1.5	2.0	0.5	0.0	0.5	0.5	0.0	0.0
6	6.0	5.5	6.0	1.5	1.0	1.0	0.5	0.0	0.5	0.5	0.0	0.0
7	6.0	4.0	5.0	1.0	1.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0
8	4.5	3.5	4.0	1.0	0.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
9	3.5	2.5	3.0	1.0	0.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0
10	6.0	3.5	5.0	0.5	0.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0
11	6.5	5.5	5.5	1.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
12	6.0	4.5	5.5	1.0	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.0
13	6.0	5.0	5.0	1.0	0.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
14	6.0	4.5	5.0	1.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
15	4.5	3.5	4.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
16	4.0	3.5	3.5	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
17	4.5	4.0	4.0	1.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
18	5.0	4.5	5.0	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
19	5.0	4.5	5.0	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
20	4.5	4.0	4.5	1.5	1.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0
21	4.5	4.0	4.0	1.5	1.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
22	4.5	3.5	4.0	1.5	1.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0
23	4.5	4.0	4.0	1.5	1.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0
24	4.0	3.5	3.5	1.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
25	3.5	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
26	2.5	2.0	2.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	2.0	1.5	1.5	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
28	2.0	1.0	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	1.5	0.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	2.0	1.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	2.0	2.0	2.0	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	9.0	0.5	4.3	2.5	0.0	1.0	0.5	0.0	0.0	0.5	0.0	0.0

15041200 TAKU RIVER NEAR JUNEAU--Continued

WATER TEMPERATURE, (DEGREES CELSIUS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	1.0	0.0	0.5	1.5	0.0	0.5	5.0	3.5	4.0
2	0.0	0.0	0.0	0.5	0.0	0.0	2.0	0.0	1.0	3.5	2.0	3.0
3	0.0	0.0	0.0	0.5	0.0	0.0	2.5	0.0	1.0	4.0	1.5	2.5
4	0.0	0.0	0.0	0.5	0.0	0.0	2.0	0.0	0.5	4.5	2.5	3.5
5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	4.0	2.0	3.0
6	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.5	5.5	2.5	4.0
7	0.0	0.0	0.0	0.5	0.0	0.0	3.0	0.5	1.5	6.0	4.5	5.0
8	0.0	0.0	0.0	0.5	0.0	0.0	4.0	0.5	1.5	7.0	4.5	5.5
9	0.0	0.0	0.0	0.5	0.0	0.0	4.0	1.0	2.0	6.5	5.0	5.5
10	0.0	0.0	0.0	0.5	0.0	0.0	3.5	1.5	2.0	6.0	5.0	5.5
11	0.0	0.0	0.0	0.5	0.0	0.0	4.5	1.5	2.5	6.5	5.5	6.0
12	0.0	0.0	0.0	0.5	0.0	0.0	4.0	2.0	2.5	6.5	5.5	6.0
13	0.0	0.0	0.0	0.5	0.0	0.0	4.5	1.5	2.5	6.5	6.0	6.5
14	0.0	0.0	0.0	0.5	0.0	0.0	4.0	2.5	3.0	6.0	5.0	5.5
15	0.0	0.0	0.0	1.0	0.0	0.5	6.0	2.5	3.5	7.5	5.0	6.0
16	0.5	0.0	0.0	1.0	0.0	0.5	5.0	2.5	3.5	8.0	5.5	7.0
17	0.5	0.0	0.0	1.0	0.0	0.5	5.5	2.5	4.0	8.0	6.0	7.0
18	0.0	0.0	0.0	0.5	0.0	0.0	4.5	3.0	3.5	7.0	6.0	6.5
19	0.5	0.0	0.0	1.0	0.0	0.0	4.5	3.0	3.5	8.5	5.5	6.5
20	0.0	0.0	0.0	1.0	0.0	0.5	3.5	3.0	3.5	8.5	5.5	7.0
21	0.0	0.0	0.0	1.0	0.0	0.5	3.5	3.0	3.0	8.0	6.5	7.0
22	0.5	0.0	0.0	1.5	0.0	0.5	4.5	2.5	3.5	6.5	5.5	6.0
23	0.0	0.0	0.0	1.0	0.0	0.5	5.0	3.0	4.0	8.0	5.5	6.5
24	0.0	0.0	0.0	1.5	0.0	0.5	5.5	3.5	4.0	9.0	6.5	7.5
25	0.0	0.0	0.0	1.0	0.0	0.5	5.5	3.5	4.5	9.5	6.5	8.0
26	0.0	0.0	0.0	1.5	0.0	0.5	5.0	3.5	4.0	9.0	7.0	8.0
27	0.5	0.0	0.0	1.5	0.0	0.5	5.5	3.5	4.5	8.5	7.0	7.5
28	0.5	0.0	0.0	1.0	0.0	0.5	6.0	4.0	5.0	8.0	7.0	7.5
29	---	---	---	2.0	0.0	1.0	6.5	4.0	5.5	8.0	6.5	7.5
30	---	---	---	2.0	0.0	0.5	6.0	4.0	5.0	8.5	6.0	7.5
31	---	---	---	1.5	0.0	0.5	---	---	---	8.0	6.0	7.0
MONTH	0.5	0.0	0.0	2.0	0.0	0.3	6.5	0.0	2.9	9.5	1.5	6.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	6.5	7.5	8.5	7.5	8.0	10.0	8.0	9.0	9.0	8.0	8.5
2	9.0	7.0	8.0	8.0	7.0	7.5	10.0	8.0	9.0	9.0	8.0	8.5
3	9.5	7.5	8.5	8.5	7.0	7.5	9.5	8.0	9.0	9.0	8.0	8.5
4	9.0	7.5	8.0	9.5	7.5	8.5	10.5	7.0	8.5	9.0	7.5	8.5
5	9.5	7.0	8.0	9.5	8.0	8.5	11.0	7.5	9.0	9.0	7.5	8.5
6	9.5	7.5	8.0	11.0	8.5	9.5	10.5	8.5	9.5	9.5	8.0	8.5
7	8.0	6.5	7.0	12.0	8.5	10.0	9.5	9.0	9.0	9.0	8.0	8.5
8	10.5	6.5	8.5	12.0	9.0	10.5	9.0	8.0	8.0	9.0	8.0	8.5
9	10.0	8.0	8.5	11.5	10.0	10.5	9.0	7.5	8.0	8.5	8.0	8.0
10	9.0	7.5	8.0	10.5	8.5	9.0	9.0	8.0	8.5	8.5	7.5	8.0
11	9.0	7.5	8.0	10.0	8.5	9.0	9.0	8.0	8.5	8.5	7.5	8.0
12	10.0	7.5	8.5	11.0	8.5	10.0	9.0	8.0	8.5	9.0	7.5	8.0
13	11.0	7.5	9.0	10.5	8.5	9.0	8.0	6.0	7.5	8.5	7.5	8.0
14	11.5	8.5	10.0	9.5	8.0	8.5	9.0	7.0	7.5	8.5	7.0	7.5
15	11.0	8.5	9.5	10.0	8.5	9.0	8.0	6.0	7.0	8.0	7.5	8.0
16	9.5	7.0	8.5	10.0	8.5	9.5	7.5	5.0	6.0	8.0	7.5	8.0
17	10.5	7.0	8.5	9.5	8.5	9.0	6.0	4.0	5.0	8.0	7.5	8.0
18	10.0	8.5	9.0	10.5	8.0	9.5	8.5	6.0	7.5	8.0	7.0	7.5
19	8.5	8.0	8.0	11.0	8.5	9.5	9.0	8.0	8.5	8.0	7.0	7.0
20	9.5	7.5	8.5	11.0	9.0	9.5	9.0	8.5	9.0	8.0	7.0	7.5
21	10.0	7.5	8.5	10.0	9.0	9.5	9.5	8.5	9.0	8.0	7.0	7.5
22	11.0	8.0	9.5	10.5	9.0	9.5	9.0	8.0	8.5	7.5	6.5	7.0
23	10.5	8.5	9.5	10.5	9.5	10.0	8.0	7.5	7.5	7.5	7.0	7.0
24	10.5	9.0	9.5	10.0	9.5	9.5	7.5	7.0	7.0	8.5	7.5	8.0
25	10.0	8.5	9.0	10.0	8.5	9.0	8.0	7.0	7.5	8.5	8.0	8.5
26	10.0	8.5	9.0	9.5	8.5	9.0	8.0	7.5	8.0	8.5	7.5	8.0
27	10.0	8.5	9.0	9.5	8.5	9.0	8.0	7.5	7.5	9.0	8.0	8.5
28	11.0	8.0	9.5	9.5	8.0	8.5	7.5	6.5	7.0	8.5	7.5	8.0
29	10.5	8.5	9.5	9.0	8.0	8.5	8.0	6.5	7.5	7.5	6.5	7.0
30	9.0	8.5	8.5	9.5	7.0	8.5	9.0	8.0	8.0	7.0	5.5	6.0
31	---	---	---	10.0	7.5	9.0	9.0	8.0	8.5	---	---	---
MONTH	11.5	6.5	8.6	12.0	7.0	9.1	11.0	4.0	8.0	9.5	5.5	7.9

15050000 GOLD CREEK AT JUNEAU

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

DRAINAGE AREA.--9.76 mi^2.

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

REVISED RECORDS.--WSP 1372: Drainage area.

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

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

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug 07	1545	1270	5.07	Aug 23	0015	1230	5.00
Aug 12	1645	*1570	*5.58				

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	383	43	16	22	13	10	5.5	33	319	313	192	276
2	283	68	16	20	13	19	e5.0	31	325	389	187	201
3	171	71	15	19	13	20	e4.7	26	321	298	166	146
4	128	56	15	18	12	14	e4.4	23	427	316	167	106
5	102	42	15	17	12	e12	e4.1	20	522	336	160	76
6	135	34	15	35	12	e11	e3.9	19	379	330	148	64
7	104	30	17	52	11	e10	e3.4	18	286	298	748	209
8	111	32	20	76	11	e9.2	e3.3	18	298	259	834	173
9	197	52	17	102	11	e8.6	e3.2	19	366	333	486	144
10	281	45	16	123	15	e8.1	e3.5	23	422	322	332	191
11	236	36	16	79	13	e7.6	e3.9	35	341	317	344	195
12	269	30	15	60	23	7.1	e4.3	50	260	280	811	132
13	176	26	15	47	17	5.9	e4.7	87	248	218	426	88
14	136	27	14	37	18	5.3	e5.0	114	330	284	266	76
15	108	26	14	37	32	6.0	e5.4	96	407	276	184	133
16	138	28	13	34	41	e5.4	6.0	121	388	236	133	131
17	178	28	12	30	21	e5.6	6.3	150	362	289	103	156
18	364	26	13	29	17	e5.8	6.9	145	329	258	114	384
19	336	24	12	28	15	5.6	7.5	206	252	219	124	248
20	199	24	12	24	14	5.5	11	322	240	219	176	209
21	165	25	12	21	13	5.5	12	398	217	313	901	308
22	138	32	12	19	12	5.7	11	309	211	342	547	167
23	107	38	19	19	11	5.1	11	286	258	344	598	124
24	89	30	110	17	13	5.5	11	246	290	585	288	122
25	73	24	92	16	10	5.8	12	247	427	395	226	132
26	58	21	57	e15	11	6.9	12	268	415	347	322	122
27	53	20	42	e14	9.6	6.9	12	281	325	382	597	171
28	46	19	49	e14	9.7	6.9	14	379	277	301	551	118
29	59	18	47	14	---	6.5	17	458	275	269	505	74
30	44	17	31	15	---	6.1	23	444	266	224	382	47
31	37	---	25	14	---	5.9	---	317	---	208	365	---
TOTAL	4904	992	794	1067	423.3	248.5	237.0	5189	9783	9500	11383	4723
MEAN	158.2	33.07	25.61	34.42	15.12	8.016	7.900	167.4	326.1	306.5	367.2	157.4
MAX	383	71	110	123	41	20	23	458	522	585	901	384
MIN	37	17	12	14	9.6	5.1	3.2	18	211	208	103	47
MED	136	29	16	22	13	6.5	5.7	121	323	301	322	139
AC-FT	9730	1970	1570	2120	840	493	470	10290	19400	18840	22580	9370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2002, BY WATER YEAR (WY)#

MEAN	157.7	82.17	36.51	22.06	14.49	12.50	24.28	126.1	226.8	228.6	192.3	183.2
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	134	130	85.4	73.7
(WY)	1952	1976	1956	1974	1972	1974	1954	1920	1981	1982	1968	1978

e Estimated

15050000 GOLD CREEK AT JUNEAU—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1916 - 2002#	
ANNUAL TOTAL	37387.9		49243.8			
ANNUAL MEAN	102.4		134.9		109.4	
HIGHEST ANNUAL MEAN					155	2000
LOWEST ANNUAL MEAN					77.5	1951
HIGHEST DAILY MEAN	600	Sep 13	901	Aug 21	1830	Aug 12 1961
LOWEST DAILY MEAN	4.7	Apr 2	a3.2	Apr 9	b0.00	Mar 4 1951
ANNUAL SEVEN-DAY MINIMUM	5.2	Apr 10	3.6	Apr 5	0.00	Mar 4 1951
MAXIMUM PEAK FLOW			1570	Aug 12	2950	Sep 25 1996
MAXIMUM PEAK STAGE			5.58	Aug 12	8.14	Sep 25 1996
INSTANTANEOUS LOW FLOW			c		0.00	Mar 4 1951
ANNUAL RUNOFF (AC-FT)	74160		97680		79260	
10 PERCENT EXCEEDS	243		344		265	
50 PERCENT EXCEEDS	49		49		67	
90 PERCENT EXCEEDS	11		6.9		5.0	

\# See Period of Record; partial years used in monthly statistics
a No flow at times during some winters
b Not determined, see lowest daily discharge

15051010 SALMON CREEK NEAR JUNEAU

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

DRAINAGE AREA.--9.69 mi^2.

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

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

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	e41	e8.2	17	e8.4	11	8.5	22	60	49	29	65
2	61	e57	e7.8	16	e8.6	34	8.5	18	63	67	29	55
3	44	e50	e7.8	15	e8.5	25	8.4	13	63	53	26	43
4	36	e40	e8.3	14	e8.6	14	8.5	10	101	49	25	38
5	32	e33	8.7	13	e8.6	13	8.1	9.3	114	46	24	34
6	37	e25	11	25	e8.7	e14	8.8	8.9	78	46	22	31
7	31	e22	14	27	e8.7	e13	8.1	8.8	60	42	122	54
8	34	e66	16	31	e9.0	e12	8.0	9.5	62	41	167	49
9	56	e53	11	36	e9.2	e11	8.0	11	77	47	99	42
10	69	e45	10	39	e10	e11	8.0	13	81	41	66	45
11	59	e36	9.4	26	12	e10	8.1	23	60	43	63	54
12	77	e27	9.9	22	37	e9.5	8.1	28	48	38	162	43
13	49	e23	9.2	19	16	e9.0	8.3	36	49	37	93	37
14	37	e27	8.5	18	23	e8.8	8.4	34	61	47	64	34
15	32	e33	e8.5	19	44	e8.6	7.7	26	73	48	53	42
16	48	e32	e8.3	19	44	e8.4	7.8	27	70	41	42	41
17	62	e29	e8.1	17	20	e8.2	8.5	36	64	43	37	41
18	93	e25	e8.0	18	15	e8.0	8.6	37	56	39	37	79
19	94	e22	e7.9	18	13	e8.0	9.2	53	43	32	36	67
20	55	e18	e8.1	16	12	e8.5	12	72	43	32	38	59
21	54	e17	e8.0	e12	11	e8.2	12	81	39	43	176	79
22	46	e25	10	e11	e10	e8.2	10	64	38	48	109	55
23	e35	e29	23	e10	e9.5	e8.4	11	60	46	57	127	44
24	e30	e21	60	e9.6	e9.0	e8.7	10	49	52	98	65	38
25	e29	e17	45	e9.1	e9.0	e9.0	10	50	74	61	57	39
26	e28	e15	33	e8.8	e9.2	11	10	56	71	54	74	38
27	e28	e13	30	e8.7	e9.5	10	10	59	52	54	136	46
28	e60	e11	29	e8.5	e9.8	9.7	11	86	43	46	117	36
29	e55	e9.3	27	e8.4	---	9.5	13	92	45	39	105	31
30	e40	e8.5	22	e8.2	---	9.0	19	79	44	35	81	28
31	e32	---	19	e8.6	---	8.7	---	55	---	32	79	---
TOTAL	1519	869.8	494.7	527.9	401.3	345.4	285.6	1226.5	1830	1448	2360	1387
MEAN	49.00	28.99	15.96	17.03	14.33	11.14	9.520	39.56	61.00	46.71	76.13	46.23
MAX	94	66	60	39	44	34	19	92	114	98	176	79
MIN	28	8.5	7.8	8.2	8.4	8.0	7.7	8.8	38	32	22	28
AC-FT	3010	1730	981	1050	796	685	566	2430	3630	2870	4680	2750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)#

MEAN	62.88	29.91	26.32	18.16	21.77	16.81	23.76	49.26	56.51	46.19	39.68	61.91
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	9.38	9.52	29.7	35.9	22.7	18.2	41.0
(WY)	1997	1991	1997	1997	1999	1997	2002	1996	1995	1993	1994	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1991 - 2002#	
ANNUAL TOTAL	11866.4		12695.2			
ANNUAL MEAN	32.51		34.78		37.82	
HIGHEST ANNUAL MEAN					48.6	1992
LOWEST ANNUAL MEAN					29.7	1995
HIGHEST DAILY MEAN	173	Sep 13	176	Aug 21	954	Oct 20 1998
LOWEST DAILY MEAN	5.7	Mar 24	7.7	Apr 15	5.7	Mar 24 2001
ANNUAL SEVEN-DAY MINIMUM	7.2	Mar 20	8.1	Apr 10	6.8	Mar 4 1998
MAXIMUM PEAK FLOW			330	Aug 12	1930	Sep 25 1996
MAXIMUM PEAK STAGE			3.03	Aug 12	a4.65	Sep 25 1996
INSTANTANEOUS LOW FLOW			b5.0	Apr 15		
ANNUAL RUNOFF (AC-FT)	23540		25180		27400	
10 PERCENT EXCEEDS	61		68		73	
50 PERCENT EXCEEDS	27		29		28	
90 PERCENT EXCEEDS	9.4		8.5		9.9	

\# See Period of Record
a From flood marks
b Apr. 15 and 16
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. GOES telemetry at station.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	9.7	e1.8	2.4	e1.4	e2.9	e1.6	3.6	5.9	2.0	2.4	25
2	17	14	e1.7	2.2	e1.5	10	e1.2	2.7	5.8	4.3	2.0	27
3	9.9	14	e1.6	2.0	e2.3	11	e0.93	1.4	5.3	5.6	1.8	16
4	7.9	11	e1.9	1.9	3.9	5.4	e0.63	1.1	13	4.1	1.5	13
5	7.0	8.6	e2.1	1.8	2.4	e5.0	e0.45	0.99	19	3.6	1.3	11
6	10	7.5	e1.8	3.9	1.3	e4.2	e0.30	0.95	9.2	3.3	1.2	9.4
7	7.9	6.8	e3.3	4.6	e1.2	e3.8	e0.18	0.90	6.8	2.7	8.0	16
8	9.4	7.0	14	6.6	e1.1	e3.3	e0.00	0.89	6.1	2.4	23	13
9	13	20	11	6.1	e1.0	e2.9	e0.00	1.2	6.9	2.5	19	11
10	10	12	e8.4	6.7	6.2	e2.5	e0.00	6.9	10	2.6	9.2	10
11	10	9.1	e5.8	4.8	6.0	e2.1	e0.00	7.1	7.9	2.7	7.7	16
12	14	7.7	e3.9	4.2	15	e1.9	e0.00	7.5	5.8	2.3	43	11
13	10	7.1	2.7	4.3	5.0	e1.7	e0.00	9.6	5.1	2.4	41	9.1
14	9.5	7.6	1.5	4.3	6.6	e1.7	e0.00	9.2	4.7	3.2	17	8.2
15	8.5	7.3	1.5	5.2	12	e1.6	e0.00	6.0	4.4	3.0	13	9.1
16	19	7.3	e1.2	6.0	19	e1.6	e0.00	6.3	4.0	2.3	10	8.2
17	19	7.2	e1.1	4.4	6.9	e1.5	e0.00	8.7	3.5	2.4	8.6	9.6
18	23	6.3	e0.98	5.8	5.2	e1.5	e0.00	8.3	3.2	2.1	7.9	23
19	41	5.8	e0.95	6.1	4.5	e1.4	0.48	9.3	3.0	1.8	7.2	21
20	32	5.3	e0.92	5.0	4.1	e1.4	2.1	11	2.9	1.5	7.3	17
21	34	5.0	e0.91	e4.7	3.7	e1.3	2.6	12	2.6	2.0	18	23
22	27	6.1	e0.90	e3.2	e3.7	e1.4	1.4	11	2.3	3.3	14	17
23	20	7.8	e4.0	e2.5	e3.5	e1.5	0.97	12	2.1	2.7	19	12
24	18	5.4	15	e2.1	e3.2	e1.7	0.86	8.8	2.0	7.6	12	10
25	15	4.9	10	e1.9	e3.0	e1.9	0.78	8.1	2.8	6.8	10	9.9
26	13	e4.2	5.4	e1.8	e2.9	e2.1	0.72	8.8	3.2	4.5	14	9.9
27	12	e3.3	4.0	e1.7	e2.8	e2.5	0.73	7.8	2.7	4.1	24	12
28	12	e2.8	4.4	e1.6	e2.8	e2.9	0.86	8.4	2.3	3.9	36	8.8
29	18	e2.5	4.2	e1.5	---	e4.0	1.8	8.6	1.9	3.6	29	6.7
30	12	e2.1	3.3	e1.5	---	e3.5	3.0	7.0	2.0	3.0	27	4.6
31	9.6	---	2.7	e1.4	---	e2.4	---	5.8	---	2.6	30	---
TOTAL	484.7	225.4	122.96	112.2	132.2	92.6	21.59	201.93	156.4	100.9	465.1	397.5
MEAN	15.64	7.513	3.966	3.619	4.721	2.987	0.720	6.514	5.213	3.255	15.00	13.25
MAX	41	20	15	6.7	19	11	3.0	12	19	7.6	43	27
MIN	7.0	2.1	0.90	1.4	1.0	1.3	0.00	0.89	1.9	1.5	1.2	4.6
AC-FT	961	447	244	223	262	184	43	401	310	200	923	788
CFSM	6.01	2.89	1.53	1.39	1.82	1.15	0.28	2.51	2.01	1.25	5.77	5.10
IN.	6.93	3.22	1.76	1.61	1.89	1.32	0.31	2.89	2.24	1.44	6.65	5.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)#

MEAN	16.61	7.999	10.49	6.134	2.647	3.052	4.937	7.790	5.126	5.404	7.697	13.54
MAX	22.2	11.2	20.8	11.3	5.25	4.74	12.1	13.7	10.2	8.49	15.0	18.7
(WY)	1999	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	3.71	1.63	3.25	1.79	7.68
(WY)	1998	1999	1999	1998	1999	1998	2002	1998	1998	2002	2001	1997

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

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002#	
ANNUAL TOTAL	2155.83		2513.48			
ANNUAL MEAN	5.906		6.886		7.757	
HIGHEST ANNUAL MEAN					9.87	2000
LOWEST ANNUAL MEAN					5.95	2001
HIGHEST DAILY MEAN	41	Oct 19	43	Aug 12	129	Dec 28 1999
LOWEST DAILY MEAN	0.57	Aug 17	a0.00	Apr 8	b0.00	Mar 3 1999
ANNUAL SEVEN-DAY MINIMUM	0.78	Aug 12	0.00	Apr 8	0.00	Mar 3 1999
MAXIMUM PEAK FLOW			73	Aug 12	149	Dec 28 1999
MAXIMUM PEAK STAGE			6.09	Aug 12	7.59	Dec 28 1999
INSTANTANEOUS LOW FLOW			a		b0.00	Mar 3 1999
ANNUAL RUNOFF (AC-FT)	4280		4990		5620	
ANNUAL RUNOFF (CFSM)	2.27		2.65		2.98	
ANNUAL RUNOFF (INCHES)	30.84		35.96		40.54	
10 PERCENT EXCEEDS	11		16		17	
50 PERCENT EXCEEDS	4.7		4.5		5.2	
90 PERCENT EXCEEDS	1.5		1.2		1.2	

\# See Period of Record; partial year used in monthly statistics
a Not determined, see lowest daily mean
b Mar. 3 to Mar. 9, 1999 and Apr. 8 to Apr. 18, 2002

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.-- No record October 1 to January 4, April 6 to 19, and May 18 to June 30 due to recorder malfunction, faulty probe, or water level below probe. Partial record on May 17 and July 1. Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum recorded, 13.0°C, July 1, 2001, but may have been higher during period of missing record; minimum, 0°C, many days during winters.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum recorded, 12.0°C, July 19-20; minimum, 0°C, many days during winter.

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

15052475 JORDAN CREEK BELOW EGAN DRIVE NEAR AUKE BAY—Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	1.5	1.0	1.5	0.0	0.0	0.0	4.5	2.5	3.5
2	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	4.5	2.0	3.0
3	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0	4.0	1.0	2.5
4	0.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	0.0	4.5	1.5	2.5
5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.0	2.5
6	1.0	0.0	0.5	0.0	0.0	0.0	---	---	---	5.0	1.0	3.0
7	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.5	3.0	3.5
8	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	6.5	2.0	4.0
9	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	5.5	4.0	4.5
10	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.0	2.5	3.0
11	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.0	2.0	3.0
12	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---	4.5	2.5	3.5
13	1.0	0.0	0.5	0.0	0.0	0.0	---	---	---	4.5	3.0	4.0
14	1.0	0.5	0.5	0.0	0.0	0.0	---	---	---	5.0	3.0	4.0
15	1.0	0.5	0.5	0.0	0.0	0.0	---	---	---	6.5	3.5	5.0
16	1.0	0.0	0.5	0.0	0.0	0.0	---	---	---	8.5	4.0	6.0
17	1.5	1.0	1.0	0.0	0.0	0.0	---	---	---	---	4.0	---
18	2.0	1.0	1.5	0.0	0.0	0.0	---	---	---	---	---	---
19	2.0	1.5	1.5	0.0	0.0	0.0	---	---	---	---	---	---
20	1.5	1.0	1.5	0.0	0.0	0.0	3.0	1.0	2.0	---	---	---
21	1.5	0.5	1.0	0.0	0.0	0.0	2.0	0.5	1.0	---	---	---
22	0.5	0.0	0.0	0.0	0.0	0.0	4.0	0.5	2.0	---	---	---
23	0.0	0.0	0.0	0.0	0.0	0.0	5.0	1.5	3.0	---	---	---
24	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.0	3.0	---	---	---
25	0.0	0.0	0.0	0.0	0.0	0.0	5.0	1.0	2.5	---	---	---
26	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.5	2.5	---	---	---
27	0.0	0.0	0.0	0.0	0.0	0.0	6.0	1.0	3.0	---	---	---
28	1.0	0.0	0.5	0.0	0.0	0.0	6.0	2.0	3.5	---	---	---
29	---	---	---	0.0	0.0	0.0	5.5	2.0	3.5	---	---	---
30	---	---	---	0.0	0.0	0.0	5.5	1.5	3.5	---	---	---
31	---	---	---	0.5	0.0	0.0	---	---	---	---	---	---
MONTH	2.0	0.0	0.3	1.5	0.0	0.1	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	9.0	---	---	11.0	8.5	10.0	9.5	8.5	8.5
2	---	---	---	9.0	8.0	8.5	11.5	9.5	10.5	9.0	8.0	8.5
3	---	---	---	8.5	7.5	8.0	11.5	9.0	10.0	9.0	8.0	8.5
4	---	---	---	8.5	7.5	8.0	11.5	8.5	10.0	8.5	7.0	8.0
5	---	---	---	8.5	7.5	8.0	11.5	9.0	10.5	9.0	7.5	8.0
6	---	---	---	10.0	8.0	8.5	11.5	10.5	11.0	9.0	8.0	8.5
7	---	---	---	10.5	7.5	9.0	11.0	10.0	10.5	8.5	8.5	8.5
8	---	---	---	10.5	8.5	9.5	10.5	10.0	10.0	8.5	8.0	8.5
9	---	---	---	10.5	9.5	10.0	10.0	9.5	9.5	9.0	8.0	8.5
10	---	---	---	9.5	8.0	8.5	9.5	9.0	9.0	8.5	8.0	8.5
11	---	---	---	9.0	8.5	9.0	9.0	8.5	9.0	8.5	8.0	8.5
12	---	---	---	10.5	8.5	9.5	10.5	9.0	10.0	9.0	8.0	8.5
13	---	---	---	10.0	8.5	9.0	10.5	9.0	10.0	8.5	7.5	8.0
14	---	---	---	9.0	8.5	8.5	9.5	8.5	9.0	8.0	6.5	7.0
15	---	---	---	10.5	8.5	9.5	9.5	8.0	8.5	8.5	7.5	8.0
16	---	---	---	10.5	9.0	9.5	9.0	7.5	8.0	8.0	7.5	8.0
17	---	---	---	9.5	8.5	9.0	8.5	7.5	7.5	8.0	7.5	7.5
18	---	---	---	11.0	9.0	10.0	8.0	7.5	8.0	8.0	7.5	8.0
19	---	---	---	12.0	9.0	10.5	8.5	7.5	8.0	8.0	7.5	7.5
20	---	---	---	12.0	10.0	11.0	8.5	8.0	8.5	8.0	7.5	8.0
21	---	---	---	11.0	10.0	10.5	9.5	8.5	9.0	8.0	7.5	7.5
22	---	---	---	10.5	9.5	10.0	9.5	9.0	9.0	7.5	6.5	7.0
23	---	---	---	10.5	9.5	10.0	10.0	9.5	9.5	7.5	7.0	7.5
24	---	---	---	11.0	10.0	10.5	9.5	8.0	8.5	8.0	7.5	8.0
25	---	---	---	10.5	9.5	10.0	8.5	8.0	8.5	8.0	7.5	7.5
26	---	---	---	9.5	9.0	9.5	9.0	8.0	8.5	8.0	7.5	8.0
27	---	---	---	9.5	9.0	9.5	10.0	8.5	9.0	8.5	8.0	8.0
28	---	---	---	9.5	8.5	9.0	10.0	9.5	10.0	8.0	7.5	8.0
29	---	---	---	9.5	8.0	9.0	9.5	9.0	9.5	8.0	7.0	7.5
30	---	---	---	10.5	8.5	9.5	9.5	8.5	9.0	7.0	5.5	6.0
31	---	---	---	10.5	8.5	9.5	9.0	8.5	9.0	---	---	---
MONTH	---	---	---	12.0	---	---	11.5	7.5	9.3	9.5	5.5	7.9

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	49	e19	33	e9.0	13	e9.2	53	275	353	243	485
2	307	53	e18	29	e8.9	21	e8.8	49	297	569	226	349
3	164	52	e18	28	e8.8	22	e8.3	42	299	406	200	259
4	152	47	e17	26	e8.7	15	e8.0	36	505	426	198	205
5	136	42	e17	25	e8.6	15	e7.7	31	488	461	202	168
6	181	39	19	57	e8.5	15	e7.2	29	354	375	190	156
7	124	35	22	68	e8.4	14	e7.1	28	282	315	1170	453
8	145	37	26	60	e8.2	e13	e7.1	28	318	308	1300	283
9	172	46	21	57	e8.0	e12	e7.1	31	434	314	939	243
10	178	43	20	60	e8.6	e10	e7.4	42	605	291	642	286
11	164	37	20	45	e9.4	e9.6	e7.6	46	481	283	474	269
12	207	34	20	38	e11	e8.8	e7.7	60	307	244	1610	219
13	137	32	20	34	e13	e8.4	e8.0	79	292	247	1000	165
14	115	33	19	31	14	e8.0	e8.5	89	410	378	598	149
15	93	32	19	30	22	e7.8	e9.2	83	513	351	323	205
16	116	33	18	29	25	e7.5	e9.3	98	485	287	225	182
17	137	33	e17	27	17	e7.3	e9.5	143	448	320	179	238
18	369	32	e16	26	15	e7.0	e9.8	161	381	285	217	419
19	273	30	e15	25	14	e6.8	13	254	313	235	236	312
20	147	33	e14	23	13	e6.6	17	469	318	220	315	310
21	147	37	e13	18	13	e6.5	19	520	245	291	1060	284
22	115	47	e12	e16	12	e6.4	16	352	236	332	714	179
23	91	45	25	e14	e11	e6.6	15	298	278	339	863	184
24	79	35	65	e13	e10	e6.8	15	255	312	667	375	182
25	68	25	58	e12	e9.5	e7.0	15	276	471	677	277	188
26	59	e24	50	e11	e9.5	e8.4	15	288	484	701	460	192
27	60	e23	43	e10	e9.2	e10	16	278	368	600	835	269
28	56	e22	50	e9.8	e10	12	20	430	295	524	838	200
29	63	e21	54	e9.6	---	11	28	473	288	388	837	146
30	52	e20	43	e9.4	---	11	41	379	298	285	589	114
31	48	---	37	e9.2	---	9.9	---	273	---	259	493	---
TOTAL	4446	1071	825	883.0	323.3	323.4	377.5	5673	11080	11731	17828	7293
MEAN	143.4	35.70	26.61	28.48	11.55	10.43	12.58	183.0	369.3	378.4	575.1	243.1
MAX	369	53	65	68	25	22	41	520	605	701	1610	485
MIN	48	20	12	9.2	8.0	6.4	7.1	28	236	220	179	114
MED	137	35	20	26	9.8	9.6	9.2	98	318	332	474	212
AC-FT	8820	2120	1640	1750	641	641	749	11250	21980	23270	35360	14470
CFSM	9.08	2.26	1.68	1.80	0.73	0.66	0.80	11.6	23.4	24.0	36.4	15.4
IN.	10.47	2.52	1.94	2.08	0.76	0.76	0.89	13.36	26.09	27.62	41.97	17.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)#

MEAN	189.5	69.43	43.69	41.71	24.42	16.38	20.43	141.2	407.6	480.7	442.8	336.0
MAX	236	103	60.8	54.9	37.3	22.3	26.9	183	476	586	575	438
(WY)	2001	2001	2001	2001	2001	2001	2000	2002	2000	2000	2002	2000
MIN	143	35.7	26.6	28.5	11.5	10.4	12.6	95.2	369	378	317	243
(WY)	2002	2002	2002	2002	2002	2002	2002	2001	2002	2002	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002#	
ANNUAL TOTAL	59150		61854.2			
ANNUAL MEAN	162.1		169.5		173.9	
HIGHEST ANNUAL MEAN					178	2001
LOWEST ANNUAL MEAN					169	2002
HIGHEST DAILY MEAN	925	Sep 13	1610	Aug 12	1610	Aug 12 2002
LOWEST DAILY MEAN	11	Apr 1	6.4	Mar 22	6.4	Mar 22 2002
ANNUAL SEVEN-DAY MINIMUM	12	Mar 28	6.7	Mar 18	6.7	Mar 18 2002
MAXIMUM PEAK FLOW			2940	Aug 12	2940	Aug 12 2002
MAXIMUM PEAK STAGE			25.57	Aug 12	25.57	Aug 12 2002
ANNUAL RUNOFF (AC-FT)	117300		122700		126000	
ANNUAL RUNOFF (CFSM)	10.3		10.7		11.0	
ANNUAL RUNOFF (INCHES)	139.26		145.63		149.54	
10 PERCENT EXCEEDS	417		456		446	
50 PERCENT EXCEEDS	59		52		68	
90 PERCENT EXCEEDS	17		8.9		12	

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

15052500 MENDENHALL RIVER NEAR AUKE BAY

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

DRAINAGE AREA.--85.1 mi^2.

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

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

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

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

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

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

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Jul 26	0200	5310	6.79	Aug 23	1315	7760	7.96
Aug 10	0030	8330	8.20	Aug 29	0100	7440	7.82
Aug 13	1515	*10300	*8.97				

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	1730	221	97	124	63	60	38	e110	1720	2490	2800	3640
2	2230	229	89	117	64	75	e36	e100	1660	3280	2860	3210
3	1810	239	86	112	65	107	35	e92	1640	3210	2630	3010
4	1360	236	81	107	62	105	33	e90	1870	2640	2560	2680
5	1240	214	78	104	59	93	32	e90	2240	2920	2620	2110
6	1380	194	75	126	56	80	31	e97	1930	2750	2460	1940
7	1320	178	77	171	53	70	30	92	e1800	2540	3480	2450
8	1110	168	89	211	52	62	30	87	e1900	2620	6370	2610
9	1100	203	88	238	52	56	30	89	e2200	2720	8220	2400
10	1090	205	86	281	58	51	31	107	e2500	2570	7000	1940
11	1060	190	81	280	61	48	32	126	2320	2710	4690	2170
12	1020	169	82	258	77	46	32	153	1960	2870	6300	2070
13	955	153	79	223	80	42	33	187	1870	2450	10100	1590
14	817	144	73	194	91	41	35	228	2070	2560	7510	1260
15	639	141	67	178	108	38	38	239	2610	2680	4200	1460
16	575	145	60	174	140	36	37	261	2790	2550	3200	1730
17	601	151	56	154	128	34	37	333	2790	2520	2490	1800
18	955	147	54	146	114	33	38	411	2680	2700	2380	2370
19	1190	140	52	144	101	30	40	524	2280	2660	2400	2600
20	945	136	50	133	93	30	50	813	2190	2520	2630	2390
21	889	138	49	115	87	30	67	1200	2030	2590	4300	2020
22	829	153	47	103	77	28	76	1280	1900	3000	5710	1560
23	626	182	52	99	69	28	74	1280	2080	3260	7400	1190
24	498	144	92	95	65	29	71	1350	2110	4070	4900	1240
25	424	e140	136	86	64	30	66	1470	2570	4850	3270	1390
26	379	e130	148	79	65	34	64	1430	3040	4850	3230	1560
27	357	130	148	74	64	41	62	1430	3000	4090	4980	1850
28	318	124	155	73	61	44	64	1510	2690	4300	7100	1950
29	303	115	156	72	---	44	73	1620	2610	3500	7120	1600
30	268	106	147	70	---	43	92	1620	2560	2850	5250	1120
31	238	---	136	66	---	41	---	1680	---	2810	4580	---
TOTAL	28256	4965	2766	4407	2129	1529	1407	20099	67610	94130	144740	60910
MEAN	911.5	165.5	89.23	142.2	76.04	49.32	46.90	648.4	2254	3036	4669	2030
MAX	2230	239	156	281	140	107	92	1680	3040	4850	10100	3640
MIN	238	106	47	66	52	28	30	87	1640	2450	2380	1120
AC-FT	56050	9850	5490	8740	4220	3030	2790	39870	134100	186700	287100	120800
CFSM	10.7	1.94	1.05	1.67	0.89	0.58	0.55	7.62	26.5	35.7	54.9	23.9
IN.	12.35	2.17	1.21	1.93	0.93	0.67	0.62	8.79	29.55	41.15	63.27	26.63

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)#

MEAN	1338	345.6	155.2	113.5	90.52	91.81	137.8	648.0	1881	3006	3359	2665
MAX	2649	920	526	600	254	379	313	1227	2819	3835	4701	4100
(WY)	1987	1977	2000	1981	1977	1992	1994	1993	1969	1979	1990	1991
MIN	532	110	40.0	30.8	21.5	22.3	46.9	268	732	1939	2025	1380
(WY)	1969	1986	1984	1969	1969	1974	2002	1985	1985	1985	1985	1984

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

15052500 MENDENHALL RIVER NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002#	
ANNUAL TOTAL	394955		432948			
ANNUAL MEAN	1082		1186		1164	
HIGHEST ANNUAL MEAN					1547	1990
LOWEST ANNUAL MEAN					758	1985
HIGHEST DAILY MEAN	6030	Sep 14	10100	Aug 13	13700	Sep 8 1981
LOWEST DAILY MEAN	39	Feb 25	a28	Mar 22	19	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	43	Apr 2	29	Mar 19	19	Mar 5 1974
MAXIMUM PEAK FLOW			10300	Aug 13	16000	Sep 11 1995
MAXIMUM PEAK STAGE			8.97	Aug 13	b11.18	Sep 11 1995
INSTANTANEOUS LOW FLOW			c28	Mar 22	d19	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	783400		858800		843500	
ANNUAL RUNOFF (CFSM)	12.7		13.9		13.7	
ANNUAL RUNOFF (INCHES)	172.65		189.26		185.90	
10 PERCENT EXCEEDS	3180		2950		3210	
50 PERCENT EXCEEDS	236		205		385	
90 PERCENT EXCEEDS	52		44		48	

\# See Period of Record; partial years used in monthly summary statistics and break in record
a Mar. 22 and 23
b From floodmarks
c Mar. 22-24
d Mar. 1-3, 1969, and Mar. 7-11, 1974

15052800 MONTANA CREEK NEAR AUKE BAY

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

DRAINAGE AREA.--14.1 mi^2.

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

WATER-DISCHARGE RECORDS

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)
Jun 4	2145	870	14.07	Aug 12	2115	*1170	*14.77
Aug 7	1815	870	14.07	Aug 23	0400	892	14.13

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	199	51	e29	e17	e19	e14	e12	101	208	129	58	209
2	255	93	e28	e16	e19	e14	e12	76	219	331	55	142
3	113	78	e26	e15	e18	e16	e11	50	204	232	50	97
4	87	58	e25	e15	e19	e19	e11	38	401	206	47	74
5	77	47	e24	22	e18	e16	e10	32	369	220	46	62
6	92	41	e23	41	e17	e14	e10	29	196	168	46	56
7	75	37	e22	62	e17	e13	e9.8	29	142	125	454	224
8	104	40	e23	105	e16	e13	e9.4	29	145	108	545	149
9	137	152	e24	66	e15	e13	e9.2	38	191	110	323	136
10	131	87	e25	78	e15	e12	e9.1	98	249	104	217	102
11	122	61	e24	51	e14	e12	e9.4	110	168	129	144	163
12	199	45	e23	40	114	e11	e9.7	142	125	109	619	105
13	123	39	e23	34	84	e11	e9.8	149	121	94	384	74
14	104	38	e22	33	94	e11	e10	138	152	154	157	62
15	87	39	e21	43	130	e11	e11	97	177	110	109	125
16	127	60	e19	59	157	e10	e11	102	163	84	75	105
17	250	72	e18	37	71	e10	e12	134	145	88	62	122
18	445	58	e17	44	43	e9.8	e13	132	129	81	74	349
19	422	44	e16	59	25	e9.7	19	165	107	67	76	222
20	163	40	e15	44	20	e9.5	62	205	103	74	90	217
21	298	41	e15	e40	18	e10	81	221	88	92	542	263
22	152	64	e14	e34	e18	e11	48	193	85	115	248	130
23	100	81	e13	e31	e18	e12	33	191	100	95	444	90
24	83	45	e14	e29	e17	e13	29	156	105	217	158	78
25	70	39	e45	e27	e16	e20	28	155	145	174	112	79
26	62	e39	e42	e26	e16	e25	28	167	192	136	151	81
27	58	e38	e40	e25	e15	e30	29	193	136	157	370	103
28	54	e37	e41	e29	e15	e23	41	269	103	142	357	76
29	82	e36	e27	e23	---	e19	68	237	97	108	360	66
30	62	e32	e21	e20	---	e16	95	168	99	77	255	54
31	53	---	e18	e19	---	e13	---	132	---	64	258	---
TOTAL	4386	1632	737	1184	1058	441.0	750.4	3976	4864	4100	6886	3815
MEAN	141.5	54.40	23.77	38.19	37.79	14.23	25.01	128.3	162.1	132.3	222.1	127.2
MAX	445	152	45	105	157	30	95	269	401	331	619	349
MIN	53	32	13	15	14	9.5	9.1	29	85	64	46	54
AC-FT	8700	3240	1460	2350	2100	875	1490	7890	9650	8130	13660	7570
CFSM	10.0	3.86	1.69	2.71	2.68	1.01	1.77	9.10	11.5	9.38	15.8	9.02
IN.	11.57	4.31	1.94	3.12	2.79	1.16	1.98	10.49	12.83	10.82	18.17	10.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)#

MEAN	157.0	73.01	44.78	42.88	38.98	47.93	52.51	131.6	164.0	147.8	163.6	164.4
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	72.6	71.1	52.5	69.2	70.9
(WY)	1969	1986	1972	1974	1972	1974	2002	1984	1971	1971	1968	1984

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

15052800 MONTANA CREEK NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002#	
ANNUAL TOTAL	33415		33829.4			
ANNUAL MEAN	91.55		92.68		103.7	
HIGHEST ANNUAL MEAN					131	1975
LOWEST ANNUAL MEAN					80.8	1971
HIGHEST DAILY MEAN	1300	Sep 13	619	Aug 12	1350	Sep 29 1970
LOWEST DAILY MEAN	12	Mar 25	9.1	Apr 10	3.4	Feb 8 1972
ANNUAL SEVEN-DAY MINIMUM	15	Dec 18	9.5	Apr 7	3.5	Jan 13 1974
MAXIMUM PEAK FLOW			1170	Aug 12	3800	Oct 20 1998
MAXIMUM PEAK STAGE			14.77	Aug 12	17.36	Oct 20 1998
INSTANTANEOUS LOW FLOW			a		3.2	Feb 8 1972
ANNUAL RUNOFF (AC-FT)	66280		67100		75150	
ANNUAL RUNOFF (CFSM)	6.49		6.57		7.36	
ANNUAL RUNOFF (INCHES)	88.16		89.25		99.96	
10 PERCENT EXCEEDS	175		208		224	
50 PERCENT EXCEEDS	63		62		77	
90 PERCENT EXCEEDS	20		13		14	

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

15052800 MONTANA CREEK NEAR AUKE BAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1965-68, 1970-71, 1974-75, 2002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	STREAM WIDTH (FT) (00004)	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
APR										
18...	1508	46.6	9.73	17	52	7.3	2.5	770	--	--
MAY										
07...	1343	51.5	9.96	29	60	7.3	3.0	769	12.9	95
JUN										
15...	1027	55.5	11.07	158	41	7.3	6.0	755	11.9	96

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.--No estimated daily discharges. Records fair.

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	7.7	5.7	0.84	2.5	0.73	2.4	1.5	0.76	1.4	2.1	2.8	10
2	8.3	8.7	0.75	2.4	0.93	7.9	1.5	0.71	1.5	2.8	2.6	8.8
3	6.2	9.4	0.79	2.1	0.76	8.5	1.5	0.45	1.6	3.5	2.6	7.6
4	5.4	7.5	1.1	2.1	0.82	4.3	1.4	0.33	3.0	3.2	2.5	6.8
5	5.2	5.4	0.86	2.1	0.80	3.5	1.4	0.35	4.4	3.0	2.6	6.0
6	5.8	4.3	1.0	2.9	0.82	2.7	1.6	0.28	3.2	2.8	2.6	5.6
7	6.3	3.7	2.6	3.0	0.78	2.2	1.3	0.25	2.8	2.6	6.7	11
8	6.6	3.8	6.1	3.9	0.73	2.0	1.5	0.27	2.5	2.3	12	8.9
9	8.2	11	3.2	3.8	0.90	1.8	1.3	0.29	2.5	2.5	10	7.5
10	7.9	7.8	2.5	4.3	2.2	1.8	1.3	0.74	3.4	2.6	7.4	7.2
11	7.3	5.9	2.3	3.6	3.1	1.8	1.1	0.75	2.9	2.6	6.8	8.6
12	9.0	4.7	2.8	3.1	14	1.6	1.2	0.96	2.8	2.4	15	7.2
13	7.4	3.8	2.7	3.0	7.0	1.8	1.1	1.3	2.6	2.4	13	6.2
14	6.9	3.8	2.4	2.9	9.9	1.5	1.0	1.3	2.4	2.9	9.6	6.1
15	6.0	4.2	2.2	3.0	13	1.3	1.0	1.5	2.3	2.8	8.2	7.5
16	11	5.2	2.0	3.5	17	1.4	1.00	1.5	2.2	2.6	6.8	7.1
17	12	5.1	2.0	3.1	8.0	1.3	0.94	1.0	2.1	2.6	5.6	9.3
18	14	4.1	1.9	3.7	5.5	1.4	0.91	0.75	2.0	2.5	5.5	14
19	20	3.4	1.8	4.1	4.0	1.4	0.84	0.76	1.9	2.3	4.2	13
20	14	3.1	1.8	3.8	3.4	1.1	1.3	0.75	2.0	2.2	4.4	12
21	14	2.8	1.8	2.9	3.2	1.1	1.6	0.74	1.9	2.9	8.4	14
22	11	3.3	1.9	1.1	2.5	1.1	1.5	0.81	1.9	3.5	7.9	11
23	8.2	4.5	3.6	1.4	1.9	1.3	1.5	0.97	1.9	3.3	9.5	8.5
24	7.3	3.1	10	1.3	1.8	1.4	1.6	1.0	1.8	4.2	7.3	7.1
25	6.2	3.0	6.9	1.0	1.8	1.5	1.3	1.0	2.6	4.0	6.8	7.6
26	5.6	2.3	4.4	0.89	1.8	3.3	1.0	1.00	3.0	3.9	7.8	6.9
27	5.4	1.5	3.8	0.86	1.8	3.8	1.1	1.0	2.9	3.9	11	7.4
28	5.3	1.3	3.4	0.77	1.9	3.1	0.88	1.2	2.5	3.9	13	5.0
29	9.1	1.1	3.0	0.73	---	2.8	0.91	1.3	2.2	3.8	12	4.1
30	7.1	0.91	2.8	0.73	---	2.1	0.64	1.2	2.1	3.4	11	3.4
31	5.4	---	2.6	0.78	---	1.6	---	1.3	---	2.9	12	---
TOTAL	259.8	134.41	85.84	75.36	111.07	74.8	36.72	26.52	72.3	92.4	237.6	245.4
MEAN	8.381	4.480	2.769	2.431	3.967	2.413	1.224	0.855	2.410	2.981	7.665	8.180
MAX	20	11	10	4.3	17	8.5	1.6	1.5	4.4	4.2	15	14
MIN	5.2	0.91	0.75	0.73	0.73	1.1	0.64	0.25	1.4	2.1	2.5	3.4
AC-FT	515	267	170	149	220	148	73	53	143	183	471	487
CFSM	6.45	3.45	2.13	1.87	3.05	1.86	0.94	0.66	1.85	2.29	5.90	6.29
IN.	7.43	3.85	2.46	2.16	3.18	2.14	1.05	0.76	2.07	2.64	6.80	7.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)#

MEAN	9.344	4.859	5.203	2.636	2.374	2.419	2.885	2.796	2.260	2.858	4.161	7.979
MAX	18.1	10.3	12.2	4.85	3.97	5.08	6.16	4.97	3.47	4.23	7.66	14.5
(WY)	2000	2000	2000	2000	2002	1994	1999	1999	1999	1997	2002	2000
MIN	5.29	2.36	1.95	0.85	0.79	0.94	1.22	0.86	1.20	1.75	1.31	3.81
(WY)	1998	1996	1996	1997	1999	1995	2002	2002	1998	1995	1994	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1994 - 2002#	
ANNUAL TOTAL	1349.16		1452.22			
ANNUAL MEAN	3.696		3.979		4.153	
HIGHEST ANNUAL MEAN					6.90	2000
LOWEST ANNUAL MEAN					3.26	1995
HIGHEST DAILY MEAN	20	Oct 19	20	Oct 19	68	Dec 28 1999
LOWEST DAILY MEAN	0.75	Dec 2	0.25	May 7	0.19	Mar 15 2000
ANNUAL SEVEN-DAY MINIMUM	0.89	Nov 30	0.32	May 3	0.26	Mar 10 2000
MAXIMUM PEAK FLOW			27	Feb 16	80	Dec 28 1999
MAXIMUM PEAK STAGE			5.72	Feb 16	6.80	Dec 28 1999
MAXIMUM PEAK STAGE			5.73	Oct 19	a7.59	Sep 25 1996
INSTANTANEOUS LOW FLOW			b0.22	May 6	c0.18	Mar 8 1999
ANNUAL RUNOFF (AC-FT)	2680		2880		3010	
ANNUAL RUNOFF (CFSM)	2.84		3.06		3.19	
ANNUAL RUNOFF (INCHES)	38.61		41.56		43.41	
10 PERCENT EXCEEDS	6.7		8.8		8.5	
50 PERCENT EXCEEDS	3.1		2.8		2.7	
90 PERCENT EXCEEDS	1.3		0.90		1.0	

\# See Period of Record; partial years used in monthly summary statistics
a Backwater caused by culvert, which was removed Apr. 1998
b May 6-9, 2002
c 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.--No estimated daily discharges. Records fair.

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	128	50	19	46	20	20	14	33	267	245	194	331
2	162	56	18	42	19	21	14	40	256	268	189	296
3	154	62	18	38	19	22	14	40	264	335	181	251
4	136	64	17	35	19	21	14	39	275	327	177	215
5	127	60	17	33	18	21	13	36	285	289	175	184
6	123	54	17	43	18	20	13	34	271	255	172	164
7	115	50	19	58	17	19	13	33	239	235	210	162
8	108	48	21	63	16	18	13	33	240	242	381	158
9	111	47	20	64	16	18	13	33	279	256	392	153
10	121	46	21	79	17	17	13	37	317	244	363	143
11	121	44	20	73	18	16	13	39	300	236	302	154
12	131	41	20	66	23	16	13	42	262	220	595	155
13	132	39	20	58	25	15	13	50	251	218	869	148
14	118	37	20	52	29	15	13	69	293	236	569	133
15	104	36	19	47	34	15	13	78	391	243	383	139
16	99	36	18	43	46	15	13	85	447	238	281	138
17	99	36	18	39	44	14	13	104	442	232	217	129
18	115	35	17	36	40	14	13	133	403	236	179	144
19	142	34	17	34	37	14	14	168	336	230	162	170
20	134	33	16	32	34	13	14	209	282	216	155	172
21	119	33	17	30	32	13	15	248	247	210	223	168
22	107	32	17	28	29	13	15	258	228	221	301	155
23	94	32	19	27	27	13	16	264	238	235	406	137
24	83	31	53	26	25	13	16	256	258	265	394	127
25	73	29	82	25	23	14	16	265	313	291	297	120
26	65	26	79	23	22	14	16	290	358	258	241	118
27	59	25	71	22	21	15	16	292	332	241	242	119
28	55	24	67	21	21	15	17	304	284	258	364	117
29	56	21	63	21	---	15	19	363	269	237	441	109
30	54	20	57	21	---	15	24	372	264	209	415	99
31	51	---	51	21	---	15	---	314	---	199	360	---
TOTAL	3296	1181	948	1246	709	499	436	4561	8891	7625	9830	4808
MEAN	106.3	39.37	30.58	40.19	25.32	16.10	14.53	147.1	296.4	246.0	317.1	160.3
MAX	162	64	82	79	46	22	24	372	447	335	869	331
MIN	51	20	16	21	16	13	13	33	228	199	155	99
AC-FT	6540	2340	1880	2470	1410	990	865	9050	17640	15120	19500	9540
CFSM	4.09	1.51	1.18	1.55	0.97	0.62	0.56	5.66	11.4	9.46	12.2	6.16
IN.	4.72	1.69	1.36	1.78	1.01	0.71	0.62	6.53	12.72	10.91	14.06	6.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)#

MEAN	165.1	60.57	66.98	37.82	24.29	20.51	37.29	138.2	314.1	275.2	232.6	224.0
MAX	240	80.2	134	52.1	35.0	29.1	55.8	204	330	327	317	271
(WY)	1999	2001	2000	2001	2001	2001	1999	1998	1999	2000	2002	1999
MIN	104	39.4	30.6	21.2	11.5	14.6	14.5	90.1	290	215	189	160
(WY)	1998	2002	2002	1999	1999	1999	2002	2001	1998	1998	1998	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	46329		44030			
ANNUAL MEAN	126.9		120.6		133.6	
HIGHEST ANNUAL MEAN					147	2000
LOWEST ANNUAL MEAN					121	2002
HIGHEST DAILY MEAN	704	Sep 14	869	Aug 13	993	Oct 20 1998
LOWEST DAILY MEAN	16	Feb 25	a13	Mar 20	7.8	Mar 9 1999
ANNUAL SEVEN-DAY MINIMUM	16	Apr 11	13	Apr 5	8.0	Mar 5 1999
MAXIMUM PEAK FLOW			983	Aug 13	b1300	Oct 20 1998
MAXIMUM PEAK STAGE			33.45	Aug 13	34.07	Oct 20 1998
INSTANTANEOUS LOW FLOW			c12	Apr 4	7.8	Mar 9 1999
ANNUAL RUNOFF (AC-FT)	91890		87330		96810	
ANNUAL RUNOFF (CFSM)	4.88		4.64		5.14	
ANNUAL RUNOFF (INCHES)	66.29		63.00		69.83	
10 PERCENT EXCEEDS	322		291		314	
50 PERCENT EXCEEDS	65		57		82	
90 PERCENT EXCEEDS	18		15		18	

\# See Period of Record; partial years used in monthly summary statistics
a Mar. 20-24 and Apr. 5-18
b From rating curve extended above 600 cfs on basis of slope-area measurement at gage height 34.07 ft
c Apr. 4 and 5

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 200 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 25 ft above sea level, from topographic map.

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)
Jun 16	unk	unk	unk	*Aug 23	unk	unk	unk
Aug 13	unk	unk	unk	Aug 28	unk	unk	unk

EXTREMES FOR WATER YEARS 1998-2001.-- Peak discharges above base 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)
Jul 22, 1998	0130	56	8.19				
Aug 08, 1998	0730	100	8.40	Dec 27, 1999	0045	*73	*8.28
Aug 31, 1998	1430	*242	*8.77	Sep 17, 2000	0345	65	8.24
Oct 20, 1998	0730	*202	*8.69	Oct 06, 2000	0400	55	8.18
Oct 24, 1998	1130	77	8.30	Oct 12, 2000	1600	*185	*8.65
Aug 17, 1999	1745	50	8.15	Jul 22, 2001	0600	75	8.29
Aug 28, 1999	1515	73	8.28	Aug 27, 2001	0515	71	8.27
Sep 18, 1999	2145	153	8.57	Sep 13, 2001	0600	123	8.48
Sep 22, 1999	1030	193	8.67				

REVISIONS.-- The maximum discharge for the water years 1998-2001 have been revised as shown in the following table. They supersede figures published in the reports for 1998-2001.

Water year	Date	Discharge (ft^3/s)	Gage height (ft)
#1997	Sep 23, 1997	222	8.73
1998	Aug 31, 1998	242	8.77
1999	Oct 20, 1998	202	8.69
2000	Dec 27, 1999	73	8.28
2001	Oct 12, 2000	185	8.65

See Period of Record; 1997 is a partial year.

15056030 KAKUHAN CREEK NR HAINES—Coutinued

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	e9.0	2.5	e0.80	0.98	0.62	0.58	0.51	4.5	e20	e22	e18	25
2	e11	2.7	e0.70	0.90	0.61	0.62	0.47	3.1	e19	e35	e17	20
3	e10	2.9	e0.70	0.89	0.59	0.61	0.46	1.7	e20	e26	e16	18
4	e9.0	2.4	e0.70	0.88	0.61	e0.60	0.50	1.4	e21	e27	e16	15
5	8.8	2.1	e0.65	0.87	0.60	e0.58	0.52	1.2	e19	e28	e17	14
6	7.5	2.0	e0.65	1.6	0.59	e0.54	0.54	1.3	e17	e23	e25	13
7	6.5	2.0	e0.65	2.0	0.57	e0.54	0.52	1.4	e19	e20	e55	14
8	6.5	2.0	e0.60	1.4	e0.49	e0.52	0.47	1.6	e19	e19	e54	14
9	6.1	2.0	e0.60	1.2	e0.50	e0.51	0.47	1.8	e22	e20	e36	13
10	6.0	2.3	e0.60	1.3	e0.54	e0.50	0.48	1.6	e25	e19	e28	11
11	6.8	2.2	e0.60	1.1	0.59	e0.50	0.49	1.7	e23	e17	e25	10
12	8.6	2.0	e0.60	0.97	0.68	e0.49	0.47	2.3	e19	e15	e94	9.4
13	7.4	e1.6	e0.60	0.88	0.62	e0.48	0.48	2.7	e21	e17	e155	8.5
14	6.7	e1.6	e0.60	0.85	0.65	e0.47	0.50	3.4	e25	e24	e60	8.8
15	6.6	e1.7	e0.57	0.86	0.68	e0.46	0.51	2.6	e33	e21	e47	12
16	6.6	e1.8	e0.57	0.86	0.74	e0.46	0.50	e4.6	e62	e18	e27	10
17	6.9	e1.7	e0.57	0.80	0.62	e0.45	0.52	e6.3	35	e20	e16	9.0
18	7.4	e1.6	e0.55	0.83	0.61	e0.44	0.53	e9.0	26	e17	e13	16
19	e9.8	e1.5	e0.55	0.81	0.59	e0.43	0.53	e12	20	e15	e11	10
20	e8.4	e1.4	e0.55	0.71	0.59	e0.42	0.56	e15	17	e14	e20	11
21	e7.5	e1.4	e0.55	e0.70	0.57	e0.41	0.58	e20	15	e16	e46	12
22	6.2	e1.4	e0.65	e0.67	e0.56	e0.40	0.58	e20	14	e17	e55	9.0
23	5.4	e1.4	0.96	e0.64	e0.53	e0.42	0.60	e19	17	e23	e78	8.5
24	5.0	e1.3	3.1	e0.60	e0.51	e0.43	0.61	e19	20	e42	e50	8.1
25	3.7	e1.2	1.8	e0.56	e0.50	0.50	0.63	e21	28	e39	e37	8.8
26	3.2	e1.2	1.5	e0.54	e0.49	0.52	0.66	e22	26	e35	e39	9.1
27	2.7	e1.1	1.4	e0.53	e0.50	0.51	0.73	e23	19	e30	e82	13
28	2.6	e1.0	1.6	e0.52	e0.44	0.50	1.0	e26	18	e28	e110	8.5
29	2.9	e0.90	1.4	e0.52	---	0.51	1.9	e31	17	e24	e46	7.2
30	2.6	e0.80	1.2	e0.54	---	0.50	3.6	e29	17	e20	e36	6.5
31	2.4	---	1.1	0.62	---	0.45	---	e25	---	e19	e31	---
TOTAL	199.8	51.70	27.67	27.13	16.19	15.35	20.92	334.2	673	710	1360	352.4
MEAN	6.445	1.723	0.893	0.875	0.578	0.495	0.697	10.78	22.43	22.90	43.87	11.75
MAX	11	2.9	3.1	2.0	0.74	0.62	3.6	31	62	42	155	25
MIN	2.4	0.80	0.55	0.52	0.44	0.40	0.46	1.2	14	14	11	6.5
AC-FT	396	103	55	54	32	30	41	663	1330	1410	2700	699
CFSM	4.21	1.13	0.58	0.57	0.38	0.32	0.46	7.05	14.7	15.0	28.7	7.68
IN.	4.86	1.26	0.67	0.66	0.39	0.37	0.51	8.13	16.36	17.26	33.07	8.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)#

MEAN	9.393	3.004	2.835	1.262	0.965	1.068	2.021	7.498	22.27	30.47	29.40	17.46
MAX	14.9	4.16	5.70	1.63	1.28	1.76	3.85	10.8	25.2	37.5	43.9	23.8
(WY)	1999	1999	2000	2001	1998	1999	1999	2002	1999	1999	2002	1999
MIN	4.70	1.72	0.89	0.88	0.58	0.50	0.70	4.87	20.9	22.9	22.2	11.7
(WY)	1998	2002	2002	2002	2002	2002	2002	2001	2000	2002	2000	2002

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

15056030 KAKUHAN CREEK NEAR HAINES—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002#	
ANNUAL TOTAL	3639.03		3788.36			
ANNUAL MEAN	9.970		10.38		10.76	
HIGHEST ANNUAL MEAN					13.3	1999
LOWEST ANNUAL MEAN					9.66	1998
HIGHEST DAILY MEAN	67	Sep 13	155	Aug 13	155	Aug 13 2002
LOWEST DAILY MEAN	0.36	Feb 24	0.40	Mar 22	0.36	Feb 24 2001
ANNUAL SEVEN-DAY MINIMUM	0.41	Feb 19	0.42	Mar 18	0.41	Feb 19 2001
MAXIMUM PEAK FLOW					a415	Aug 31 1998
MAXIMUM PEAK STAGE			b		8.77	Aug 31 1998
ANNUAL RUNOFF (AC-FT)	7220		7510		7790	
ANNUAL RUNOFF (CFSM)	6.52		6.78		7.03	
ANNUAL RUNOFF (INCHES)	88.48		92.11		95.54	
10 PERCENT EXCEEDS	30		26		30	
50 PERCENT EXCEEDS	2.8		2.2		3.8	
90 PERCENT EXCEEDS	0.60		0.51		0.71	

\# See Period of Record; partial years used in monthly statistics
a From a rating curve extended above 77 ft^3/s
b See highest daily mean

15056030 KAKUHAN CREEK NEAR HAINES—Continued

WATER-QUALITY RECORDS

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

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

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

REMARKS.-- Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on July 12. Temperature cross section found no variation. No variation was found between mean stream temperature and sensor temperature.

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, 13.5°C, July 8 and August 5; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
JULY							
12...	1028	15.6	1.0	7.74	15	8.0	12.5
12...	1029	15.6	5.0	7.74	15	8.0	12.5
12...	1030	15.6	10.0	7.74	15	8.0	12.5
12...	1031	15.6	15.0	7.74	15	8.0	12.5

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.0	6.0	6.5	2.5	1.0	2.0	0.0	0.0	0.0	1.5	1.5	1.5
2	7.0	5.5	6.5	2.5	2.5	2.5	0.0	0.0	0.0	1.5	1.0	1.0
3	7.5	5.0	6.0	2.5	2.0	2.5	0.0	0.0	0.0	2.0	1.5	1.5
4	9.0	6.5	7.5	2.0	1.5	2.0	0.0	0.0	0.0	1.5	1.0	1.5
5	8.5	7.0	7.5	1.5	0.5	1.5	0.0	0.0	0.0	1.5	0.5	1.0
6	7.5	5.5	6.5	0.5	0.0	0.5	0.0	0.0	0.0	2.5	1.5	2.0
7	6.0	5.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.0	2.5
8	6.5	5.0	5.5	1.0	0.0	0.0	0.5	0.0	0.0	2.5	2.0	2.0
9	6.5	5.0	5.5	1.5	0.5	1.0	0.5	0.0	0.5	2.5	2.0	2.5
10	6.5	5.5	6.0	2.0	1.5	2.0	0.5	0.5	0.5	2.5	2.0	2.5
11	5.5	3.0	4.5	2.5	1.0	2.0	0.5	0.5	0.5	2.5	2.0	2.0
12	5.0	3.0	4.0	1.0	0.5	0.5	0.5	0.5	0.5	2.0	1.5	2.0
13	5.5	4.0	4.5	1.0	0.5	0.5	0.5	0.5	0.5	2.0	1.5	1.5
14	5.0	3.5	4.0	1.5	0.5	1.0	0.5	0.0	0.5	2.0	1.5	2.0
15	3.5	2.5	3.0	2.5	1.5	2.0	0.0	0.0	0.0	2.0	2.0	2.0
16	3.0	2.0	2.5	2.5	2.0	2.5	0.0	0.0	0.0	2.0	1.0	2.0
17	5.0	2.5	4.0	2.5	2.0	2.0	0.0	0.0	0.0	1.0	0.5	1.0
18	6.0	5.0	5.5	3.0	2.5	3.0	0.5	0.0	0.5	1.5	0.5	1.0
19	5.0	3.5	4.5	3.0	2.5	2.5	0.5	0.5	0.5	2.0	1.5	1.5
20	4.0	3.5	3.5	3.0	2.5	3.0	1.0	0.5	0.5	1.5	0.0	0.5
21	3.5	3.0	3.5	3.5	3.0	3.5	1.0	0.5	1.0	0.0	0.0	0.0
22	4.5	3.0	4.0	3.5	3.0	3.0	1.0	0.5	1.0	0.0	0.0	0.0
23	3.5	2.5	3.0	3.5	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0
24	2.5	2.0	2.5	2.5	1.5	2.0	0.5	0.0	0.5	0.0	0.0	0.0
25	2.5	1.0	1.5	1.5	0.0	0.5	1.5	0.5	1.0	0.0	0.0	0.0
26	1.0	0.5	1.0	0.0	0.0	0.0	1.5	1.0	1.0	0.0	0.0	0.0
27	0.5	0.5	0.5	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0
28	0.5	0.0	0.5	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0
29	2.0	0.5	1.5	0.0	0.0	0.0	1.5	1.5	1.5	0.5	0.0	0.0
30	1.5	1.0	1.5	0.0	0.0	0.0	1.5	1.5	1.5	0.5	0.0	0.5
31	1.5	0.5	1.0	---	---	---	1.5	1.5	1.5	0.5	0.5	0.5
MONTH	9.0	0.0	4.0	3.5	0.0	1.5	1.5	0.0	0.5	2.5	0.0	1.1

15056030 KAKUHAN CREEK NEAR HAINES—Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.5	0.5	0.5	1.0	0.5	1.0	0.0	0.0	0.0	5.5	3.0	3.5
2	0.5	0.5	0.5	1.0	1.0	1.0	0.0	0.0	0.0	3.0	1.0	2.0
3	0.5	0.5	0.5	1.0	0.5	1.0	0.0	0.0	0.0	1.5	0.5	1.0
4	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5
6	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.5	1.0
7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.5	2.5
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.0	3.0
9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.0	3.5
10	0.5	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0	4.0	3.0	3.5
11	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	4.0	3.0	3.5
12	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	4.5	3.0	3.5
13	1.0	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.5	5.0	3.5	4.5
14	1.0	1.0	1.0	0.0	0.0	0.0	1.0	0.5	0.5	4.5	3.5	4.0
15	1.0	0.5	0.5	0.0	0.0	0.0	1.0	0.5	0.5	5.0	3.5	4.0
16	1.0	0.5	0.5	0.0	0.0	0.0	1.0	0.5	0.5	7.0	3.5	5.0
17	0.5	0.5	0.5	0.0	0.0	0.0	1.0	0.5	0.5	7.0	4.5	5.5
18	0.5	0.5	0.5	0.0	0.0	0.0	1.0	0.5	1.0	7.5	4.0	5.0
19	0.5	0.0	0.5	0.0	0.0	0.0	1.5	1.0	1.0	7.5	4.5	5.5
20	0.5	0.0	0.5	0.0	0.0	0.0	1.5	1.5	1.5	8.0	4.5	6.0
21	0.5	0.0	0.5	0.0	0.0	0.0	2.0	1.0	1.5	6.0	4.5	5.5
22	0.0	0.0	0.0	0.5	0.0	0.0	2.0	1.0	1.0	6.5	5.0	5.5
23	0.0	0.0	0.0	0.5	0.0	0.0	2.0	0.5	1.0	6.5	4.5	5.5
24	0.0	0.0	0.0	0.5	0.0	0.0	2.5	1.0	1.5	7.5	4.5	5.5
25	0.0	0.0	0.0	0.5	0.0	0.5	2.0	1.0	1.5	8.5	4.5	6.0
26	0.5	0.0	0.0	0.5	0.5	0.5	2.0	0.5	1.0	7.5	5.0	6.0
27	0.5	0.0	0.5	0.5	0.5	0.5	2.5	1.0	1.5	7.0	5.0	6.0
28	0.5	0.5	0.5	0.5	0.5	0.5	3.5	1.5	2.0	6.0	5.0	5.5
29	---	---	---	0.5	0.5	0.5	4.5	2.0	2.5	6.5	5.0	5.5
30	---	---	---	0.5	0.5	0.5	4.5	2.0	3.0	6.5	4.5	5.5
31	---	---	---	0.5	0.0	0.0	---	---	---	7.0	4.0	5.5
MONTH	1.0	0.0	0.4	1.0	0.0	0.2	4.5	0.0	0.8	8.5	0.0	4.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.0	5.0	5.5	9.0	7.5	8.0	12.0	7.5	9.5	9.0	7.0	8.0
2	6.5	5.0	6.0	8.0	6.5	7.5	11.5	7.5	9.0	10.5	6.5	8.5
3	8.5	5.5	6.5	8.5	6.0	7.0	12.5	8.0	10.0	10.0	7.5	8.5
4	7.0	5.0	6.0	9.0	7.0	8.0	13.0	8.0	10.0	10.5	6.5	8.0
5	8.5	5.0	6.0	8.5	7.0	7.5	13.5	8.5	10.5	10.0	7.5	8.5
6	7.0	5.0	6.0	10.5	7.5	9.0	11.0	9.5	10.0	8.5	7.5	8.0
7	9.0	5.0	6.5	13.0	6.5	9.5	9.5	8.5	9.0	8.5	7.0	7.5
8	10.0	6.0	7.5	13.5	8.0	10.5	10.0	8.5	9.0	8.0	7.0	7.5
9	7.0	6.0	7.0	10.5	7.5	9.0	9.5	8.0	8.5	9.5	6.5	8.0
10	7.0	5.5	6.0	9.5	6.5	8.0	9.5	7.5	8.5	8.0	7.0	7.5
11	6.0	5.0	6.0	9.0	7.5	8.5	9.0	8.0	8.5	8.5	7.0	7.5
12	9.0	5.0	6.5	12.0	7.5	9.0	11.0	9.0	10.0	9.0	7.0	7.5
13	11.0	5.5	8.0	9.5	8.0	8.5	11.0	8.5	9.0	8.5	6.5	7.5
14	12.0	7.0	9.0	10.0	8.0	9.0	11.5	8.0	9.0	7.5	6.0	7.0
15	12.0	7.5	9.0	10.5	7.5	9.0	10.5	6.5	8.5	8.0	6.5	7.0
16	12.0	7.0	9.0	11.0	7.5	9.5	10.5	6.5	8.0	8.0	7.0	7.5
17	11.0	7.0	8.5	10.5	8.0	9.5	8.5	7.0	8.0	8.0	7.0	7.5
18	8.0	6.5	7.0	12.0	8.0	9.5	9.0	8.0	8.5	7.0	6.0	6.5
19	8.0	6.5	7.0	12.0	8.0	10.0	10.0	8.0	9.0	7.5	6.0	6.5
20	8.0	6.0	7.0	11.5	8.0	10.0	9.0	8.5	8.5	7.5	6.5	7.0
21	8.0	6.0	7.0	10.5	9.0	10.0	10.0	8.5	9.0	8.5	6.0	7.0
22	11.0	6.0	8.5	11.5	9.0	10.0	9.5	8.5	9.0	7.5	5.5	6.5
23	11.0	7.5	9.0	11.5	9.5	10.5	10.0	7.0	8.5	8.0	6.5	7.0
24	9.5	7.5	8.5	11.0	8.5	10.5	8.5	6.5	7.5	8.5	7.5	7.5
25	9.0	6.5	7.5	10.0	8.0	9.0	9.0	7.0	8.0	8.0	7.5	8.0
26	8.0	6.5	7.5	9.0	8.0	8.5	9.5	7.5	8.5	8.5	7.5	8.0
27	8.5	6.5	7.5	10.0	7.5	8.5	10.5	9.0	9.5	9.5	6.5	8.0
28	11.5	6.5	8.5	9.0	7.0	8.0	9.5	8.0	8.5	7.5	5.5	6.5
29	12.0	8.0	9.0	9.5	7.0	8.5	9.5	8.0	8.5	8.0	5.5	6.5
30	9.0	7.5	8.0	12.5	8.5	10.0	8.5	7.5	8.0	6.5	5.0	5.5
31	---	---	---	13.0	9.0	10.5	9.0	7.5	8.0	---	---	---
MONTH	12.0	5.0	7.4	13.5	6.0	9.0	13.5	6.5	8.8	10.5	5.0	7.4

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 Gustavis, and 44 mi west of Juneau.

DRAINAGE AREA.--10.1 mi^2

WATER-DISCHARGE RECORDS

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 2001 TO SEPTEMBER 2002

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	25	e12	20	e7.8	e8.5	e8.5	87	109	36	31	158
2	92	69	e11	19	e7.7	e24	e8.4	49	122	90	26	113
3	55	46	e10	21	e7.5	e17	e8.3	33	128	170	22	74
4	44	29	e11	25	e7.4	e14	e7.8	25	190	175	20	55
5	36	22	e12	26	e7.3	e11	e7.5	22	209	118	18	44
6	46	19	e13	68	e7.2	e10	e7.4	22	168	73	17	39
7	35	17	e20	57	e7.1	e9.5	e7.3	23	123	53	263	86
8	47	18	e36	57	e9.0	e9.0	e7.3	25	99	42	206	61
9	39	23	e25	47	e13	e8.5	e7.3	31	113	37	171	50
10	38	33	e14	49	e16	e8.0	e7.4	56	147	36	110	44
11	59	24	e15	33	e14	e7.6	e7.8	73	107	33	76	52
12	144	18	e13	26	e70	e7.4	e8.6	88	78	29	718	41
13	84	16	e11	22	e33	e7.2	e9.5	136	71	28	342	35
14	61	16	e8.5	20	e56	e6.9	e10	112	78	53	241	33
15	49	19	e7.5	32	e58	e6.7	e11	88	85	40	116	49
16	73	22	e6.4	39	e86	e6.5	e11	110	76	34	73	83
17	126	22	e6.0	22	25	e6.3	e12	142	64	34	54	53
18	272	17	e5.6	23	16	e6.0	e13	145	62	34	51	257
19	213	16	e5.3	25	13	e6.0	e18	188	62	30	43	143
20	114	18	e5.6	19	e11	e5.8	e25	238	68	24	50	116
21	78	18	e6.0	e16	e10	e5.8	e26	232	56	30	206	247
22	60	25	e7.4	e15	e9.0	e5.7	e22	174	46	33	157	114
23	46	38	e9.0	e12	e8.3	e5.6	e20	155	43	35	260	76
24	41	24	e100	e12	e7.6	e5.5	e20	127	50	174	134	58
25	34	e19	e60	e11	e7.0	e6.3	e19	127	73	250	86	50
26	29	e16	e50	e10	e8.6	e7.8	e20	128	75	333	65	46
27	25	e15	e42	e10	e8.2	e10	23	112	68	166	82	43
28	24	e14	e36	e9.5	e7.8	e9.6	29	167	55	97	108	38
29	33	e13	31	e8.8	---	e9.0	34	182	44	67	103	36
30	24	e12	26	e8.4	---	e9.0	39	136	42	49	104	32
31	20	---	23	e8.0	---	e8.7	---	93	---	38	122	---
TOTAL	2099	683	638.3	770.7	538.5	268.9	455.1	3326	2711	2441	4075	2326
MEAN	67.71	22.77	20.59	24.86	19.23	8.674	15.17	107.3	90.37	78.74	131.5	77.53
MAX	272	69	100	68	86	24	39	238	209	333	718	257
MIN	20	12	5.3	8.0	7.0	5.5	7.3	22	42	24	17	32
MED	47	19	12	21	9.0	7.8	11	112	75	40	103	52
AC-FT	4160	1350	1270	1530	1070	533	903	6600	5380	4840	8080	4610
CFSM	6.70	2.25	2.04	2.46	1.90	0.86	1.50	10.6	8.95	7.80	13.0	7.68
IN.	7.73	2.52	2.35	2.84	1.98	0.99	1.68	12.25	9.99	8.99	15.01	8.57
MEAN	98.9	52.3	82.2	29.5	17.1	21.4	31.0	74.2	108	70.3	44.1	105
MAX	121	54.9	128	40.4	23.4	22.7	37.8	90.6	114	79.1	61.6	128
(WY)	2000	2000	2000	2001	2001	2000	2000	2000	2000	2000	2000	1999
MIN	77.1	49.7	36.7	18.7	11.0	20.0	24.2	57.9	103	61.5	26.7	84.5
(WY)	2001	2001	2001	2000	2000	2001	2001	2001	2001	2001	2001	2001

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)#

MEAN	88.51	42.47	61.68	27.96	17.81	17.13	25.72	85.26	102.4	73.10	73.25	97.85
MAX	121	54.9	128	40.4	23.4	22.7	37.8	107	114	79.1	131	128
(WY)	2000	2000	2000	2001	2001	2000	2000	2002	2000	2000	2002	1999
MIN	67.7	22.8	20.6	18.7	11.0	8.67	15.2	57.9	90.4	61.5	26.7	77.5
(WY)	2002	2002	2002	2000	2000	2002	2002	2001	2002	2001	2001	2002

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

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002#	
ANNUAL TOTAL	16820.1		20332.5			
ANNUAL MEAN	46.08		55.71		58.83	
HIGHEST ANNUAL MEAN					70.3	2000
LOWEST ANNUAL MEAN					50.5	2001
HIGHEST DAILY MEAN	283	Sep 13	718	Aug 12	1110	Dec 27 1999
LOWEST DAILY MEAN	5.3	Dec 19	5.3	Dec 19	5.0	Mar 10 2000
ANNUAL SEVEN-DAY MINIMUM	6.0	Dec 16	5.8	Mar 18	5.8	Mar 18 2002
MAXIMUM PEAK FLOW			1610	Aug 12	a1650	Dec 27 1999
MAXIMUM PEAK STAGE			30.49	Aug 12	30.52	Dec 27 1999
INSTANTANEOUS LOW FLOW			b		5.0	Mar 10 2000
ANNUAL RUNOFF (AC-FT)	33360		40330		42620	
ANNUAL RUNOFF (CFSM)	4.56		5.52		5.82	
ANNUAL RUNOFF (INCHES)	61.95		74.89		79.14	
10 PERCENT EXCEEDS	95		136		127	
50 PERCENT EXCEEDS	33		33		37	
90 PERCENT EXCEEDS	11		7.7		10	

\# See Period of Record, partial years used in monthly statistics
a From rating curve extended above 130 ft^3/s
b Undetermined, see lowest daily value

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER-QUALITY RECORDS

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

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

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

REMARKS.--Records represent water temperature at the sensor within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 13.5°C, August 13-15, 2001; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 12.0°C, August 5; minimum, 0.0°C, on many days during the winter.

WATER TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.5	7.0	7.0	3.5	2.5	3.0	0.5	0.5	0.5	1.5	1.0	1.0
2	7.5	6.5	7.0	3.0	2.5	3.0	0.5	0.0	0.5	1.5	1.5	1.5
3	7.0	6.5	7.0	3.5	2.5	3.0	0.5	0.0	0.0	1.5	1.0	1.5
4	7.5	7.0	7.0	2.5	2.0	2.5	0.5	0.0	0.0	1.0	0.5	1.0
5	7.0	6.0	6.5	3.0	1.5	2.5	0.5	0.0	0.0	1.5	0.5	1.0
6	7.5	6.5	7.0	2.0	1.0	1.5	0.0	0.0	0.0	1.0	0.5	0.5
7	6.5	6.0	6.5	2.0	1.0	1.5	0.0	0.0	0.0	1.5	1.0	1.5
8	7.0	6.5	6.5	2.5	1.5	2.0	0.0	0.0	0.0	1.5	1.0	1.5
9	6.5	6.0	6.5	2.5	2.0	2.5	0.0	0.0	0.0	2.0	1.5	2.0
10	6.5	6.0	6.5	3.0	2.5	3.0	0.0	0.0	0.0	2.0	1.5	1.5
11	6.5	5.5	6.0	3.0	2.5	2.5	0.0	0.0	0.0	2.0	1.5	2.0
12	6.0	5.0	5.5	2.5	1.0	2.0	0.0	0.0	0.0	1.5	1.0	1.5
13	5.5	5.0	5.5	2.0	1.0	1.5	0.0	0.0	0.0	1.5	1.0	1.5
14	5.5	4.5	5.0	3.0	2.0	2.5	0.0	0.0	0.0	2.0	1.5	1.5
15	5.0	4.0	4.5	3.0	2.5	2.5	0.0	0.0	0.0	1.5	1.5	1.5
16	5.0	4.5	5.0	3.0	2.5	2.5	0.0	0.0	0.0	1.5	1.0	1.0
17	5.5	5.0	5.0	2.5	2.5	2.5	0.0	0.0	0.0	1.5	0.5	1.0
18	5.5	5.0	5.5	3.0	2.5	3.0	0.0	0.0	0.0	1.5	0.0	1.0
19	5.0	4.5	5.0	3.5	2.5	3.0	0.0	0.0	0.0	1.0	1.0	1.0
20	4.5	4.5	4.5	3.5	3.0	3.5	0.0	0.0	0.0	1.0	0.0	1.0
21	5.0	4.5	4.5	4.0	3.0	3.5	0.0	0.0	0.0	0.0	0.0	0.0
22	5.0	4.0	4.5	4.0	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
23	4.5	4.0	4.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
24	4.0	3.5	4.0	2.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
25	3.5	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
26	3.0	2.5	2.5	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
27	3.0	2.0	2.5	0.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0
28	3.0	1.5	2.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
29	3.0	2.5	3.0	0.5	0.5	0.5	1.0	0.5	1.0	0.0	0.0	0.0
30	3.0	2.5	2.5	0.5	0.5	0.5	1.5	1.0	1.0	0.0	0.0	0.0
31	2.5	1.5	2.0	---	---	---	1.5	0.5	1.0	0.0	0.0	0.0
MONTH	7.5	1.5	5.0	4.0	0.0	2.1	1.5	0.0	0.1	2.0	0.0	0.8

15057580 KAHTAHEENA RIVER ABOVE UPPER FALLS NEAR GUSTAVUS—Continued

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.5	1.5
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.5	1.5
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.5	1.5
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	1.5
6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	1.5
7	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.5	2.5
8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	1.0	2.5
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	2.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.5	2.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	2.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.5	2.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.0	2.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	2.0	2.5
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.0	2.5
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5	3.0
17	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.0	3.0
18	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.0	3.5
19	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.5	3.5
20	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.5	3.5
21	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5	3.5
22	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	3.5
23	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	3.5
24	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	5.5	3.0	4.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	6.5	2.5	4.5
26	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5	5.0	3.5	4.5
27	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	5.0	3.5	4.0
28	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	5.0	4.0	4.5
29	---	---	---	0.0	0.0	0.0	2.0	0.5	1.0	5.0	3.5	4.5
30	---	---	---	0.0	0.0	0.0	3.0	0.5	1.5	6.0	3.5	4.5
31	---	---	---	0.0	0.0	0.0	---	---	---	5.5	3.5	4.5
MONTH	0.5	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.1	6.5	0.0	2.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.0	4.0	4.5	8.0	7.0	7.5	10.5	7.0	9.0	9.0	8.0	8.5
2	5.5	4.0	4.5	8.0	6.5	7.5	11.0	8.0	9.0	9.0	7.0	8.0
3	6.5	4.0	5.0	8.0	7.0	7.5	10.5	8.0	9.0	9.0	7.5	8.5
4	6.0	4.5	5.0	7.0	6.5	7.0	11.5	7.5	9.5	8.5	6.5	7.5
5	6.0	4.0	5.0	7.5	6.0	6.5	12.0	7.5	9.5	9.0	7.0	8.0
6	5.0	4.5	4.5	7.5	6.0	7.0	11.0	9.0	10.0	8.5	7.5	8.0
7	6.5	4.0	5.0	9.5	5.5	7.5	10.0	9.0	10.0	9.5	8.0	9.0
8	6.0	4.5	5.5	10.0	6.5	8.5	9.5	9.0	9.0	9.0	8.0	8.5
9	5.5	5.0	5.5	9.0	8.0	8.5	9.0	8.0	8.5	9.0	8.0	8.5
10	5.5	5.0	5.0	8.0	7.0	7.5	8.5	7.5	8.0	8.5	7.5	8.0
11	5.5	4.5	5.0	8.5	7.5	8.0	8.5	7.5	8.0	8.5	7.5	8.0
12	7.0	4.5	5.5	9.5	7.0	8.0	10.0	8.5	9.5	9.0	7.5	8.0
13	8.5	4.0	6.5	8.5	7.5	8.0	8.5	7.5	8.0	8.5	7.0	8.0
14	9.5	5.0	7.0	8.5	8.0	8.0	9.0	8.0	8.0	7.5	6.0	7.0
15	9.5	5.5	7.5	9.5	7.5	8.5	9.0	7.0	8.0	8.5	7.0	7.5
16	9.5	6.0	7.5	9.0	7.5	8.0	8.5	7.5	8.0	8.5	8.0	8.0
17	9.5	6.0	7.5	9.0	7.5	8.0	7.5	7.0	7.5	8.0	7.5	8.0
18	7.5	6.0	6.5	9.5	8.0	8.5	8.5	7.5	8.0	8.0	7.0	7.5
19	6.5	6.0	6.0	11.0	8.0	9.0	8.5	7.5	8.0	7.5	6.5	7.0
20	7.0	5.5	6.0	11.0	7.0	9.0	8.5	7.5	8.0	7.5	7.0	7.0
21	7.5	5.5	6.5	10.0	8.5	9.0	10.0	8.0	9.5	8.0	6.5	7.5
22	9.0	5.5	7.5	10.0	9.0	9.5	9.0	8.0	8.5	7.0	6.0	6.5
23	9.0	7.0	8.0	10.0	9.0	9.5	9.5	8.0	9.0	7.5	7.0	7.0
24	8.0	7.0	7.5	10.5	9.0	10.0	8.0	7.0	7.5	7.5	7.0	7.0
25	9.0	7.0	8.0	9.0	8.0	8.5	8.0	7.5	7.5	8.0	7.0	7.5
26	8.0	7.0	7.5	8.0	7.0	7.5	8.0	7.5	8.0	8.0	7.5	8.0
27	8.5	6.5	7.5	8.0	7.0	7.5	9.5	8.0	8.5	8.5	7.5	8.0
28	9.5	6.5	8.0	8.0	7.0	7.0	9.5	9.0	9.5	7.5	7.0	7.5
29	9.0	6.5	8.0	8.0	6.5	7.5	9.5	8.5	9.0	7.0	5.5	6.0
30	8.5	7.0	8.0	9.5	7.0	8.0	9.0	8.0	8.5	6.5	4.5	6.0
31	---	---	---	9.5	7.0	8.5	9.0	8.5	8.5	---	---	---
MONTH	9.5	4.0	6.4	11.0	5.5	8.1	12.0	7.0	8.6	9.5	4.5	7.7

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, 1985-2002), 444 ft^3/s, 165.2 in/yr, 321,700 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, 132,200 acre-ft, November 29, 1987, elevation, 334.2 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, 130,222 acre-ft, September 23, 2002, elevation, 332.80 ft; minimum contents observed, 63,806 acre-ft, March 18-19, 2002, elevation, 286.9 ft. Maximum release from reservoir (mean daily, not adjusted for changes in storage),1,399 ft^3/s, September 22, 2002; minimum release, 97.0 ft^3/s.

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

WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Sep 30	333.9	131,880	
Oct 31	330.9	127,620	-4,260
Nov 30	327.1	121,970	-5,650
Dec 31	319.2	110,550	-11,420
Jan 31	311.4	99,260	-11,290
Feb 28	299.4	80,900	-18,360
Mar 31	288.7	66,420	-14,480
Apr 30	292.9	72,470	+6,050
May 31	312.2	100,420	+27,950
Jun 30	311.9	99,980	-440
Jul 31	326.9	121,680	+21,700
Aug 31	331.2	127,910	+6,230
Sep 30	330.2	126,460	-1,450
		CAL YR 2001	2,170
		WTR YR 2002	-5,420

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

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	386	165	551	482
NOV	407	175	582	487
DEC	512	0	512	326
JAN	467	0	467	283
FEB	476	0	476	145
MAR	300	0	300	64
APR	113	0	113	215
MAY	343	0	343	798
JUN	389	0	389	382
JUL	453	13	466	819
AUG	408	62	470	571
SEP	352	311	663	639
CAL YR 2001	441	51.6	492	495
WTR YR 2002	384	60.3	444	437

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'31", long 131°11'38", in SW¼SW¼ sec. 6, T. 75 S., R. 94 E. (Ketchikan B-4 quad.), Gateway Borough, Hydrologic Unit 19010102, on Revillagigedo Island, in Tongass National Forest, on right bank 250 ft upstream from outlet of Low Lake, 750 ft upstream from mouth at Thorne Arm, and 18 mi east of Ketchikan.

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

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

REVISED RECORDS.--WSP 1372: 1918.

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

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

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug 28	0200	*2450	*3.59	No other peak greater than base discharge			

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	1270	749	163	350	128	117	114	303	1690	635	200	931
2	879	837	146	313	232	115	103	364	1400	786	201	980
3	651	1010	140	367	258	146	95	364	1120	714	195	811
4	500	868	138	391	271	147	88	339	1060	604	181	622
5	401	723	135	350	220	127	86	300	1020	593	167	483
6	343	607	138	513	178	112	83	262	883	542	153	386
7	378	573	299	844	152	102	81	232	746	465	147	330
8	543	527	463	856	137	95	79	214	631	402	215	444
9	538	511	477	760	181	90	79	202	568	355	432	665
10	667	474	455	850	223	87	96	202	552	329	478	894
11	645	564	406	767	212	91	112	254	524	322	431	901
12	830	595	453	811	294	97	140	408	484	308	367	733
13	775	612	472	595	352	91	179	539	458	331	402	569
14	615	819	414	460	378	85	220	623	455	366	388	453
15	738	847	343	373	532	77	231	587	465	334	334	651
16	797	839	292	316	474	71	217	530	449	318	287	1140
17	697	707	256	274	384	66	199	541	427	394	249	1410
18	763	558	235	252	314	62	187	516	406	392	218	1520
19	705	496	215	237	298	58	185	483	380	355	195	1360
20	609	553	192	245	268	54	193	508	349	320	175	969
21	578	609	177	221	226	52	208	567	322	295	164	852
22	546	680	164	194	196	49	220	623	302	276	225	1430
23	474	605	245	182	172	48	214	650	303	257	523	1620
24	478	500	666	182	153	47	203	599	378	251	647	1140
25	452	413	857	164	143	97	188	550	732	281	960	782
26	542	340	798	147	135	179	178	533	903	262	1380	597
27	534	285	703	134	132	150	171	547	796	238	1920	509
28	675	243	625	122	124	137	172	768	643	228	2260	546
29	761	211	551	116	---	127	188	1190	541	228	1540	449
30	749	186	468	116	---	129	225	1720	505	226	1000	368
31	654	---	405	134	---	127	---	1630	---	213	925	---
TOTAL	19787	17541	11491	11636	6767	3032	4734	17148	19492	11620	16959	24545
MEAN	638.3	584.7	370.7	375.4	241.7	97.81	157.8	553.2	649.7	374.8	547.1	818.2
MAX	1270	1010	857	856	532	179	231	1720	1690	786	2260	1620
MIN	343	186	135	116	124	47	79	202	302	213	147	330
MED	645	584	343	313	221	95	178	530	532	329	334	758
AC-FT	39250	34790	22790	23080	13420	6010	9390	34010	38660	23050	33640	48690
CFSM	19.9	18.2	11.5	11.7	7.53	3.05	4.92	17.2	20.2	11.7	17.0	25.5
IN.	22.93	20.33	13.32	13.48	7.84	3.51	5.49	19.87	22.59	13.47	19.65	28.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2002, BY WATER YEAR (WY)#

MEAN	698.7	567.6	420.4	350.6	317.5	261.6	352.9	504.3	472.6	335.3	334.3	445.0
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1915 - 2002#	
ANNUAL TOTAL	178902		164752			
ANNUAL MEAN	490.1		451.4		422.7	
HIGHEST ANNUAL MEAN					556	1992
LOWEST ANNUAL MEAN					302	1978
HIGHEST DAILY MEAN	2910	Sep 23	2260	Aug 28	4410	Oct 15 1961
LOWEST DAILY MEAN	80	Feb 26	47	Mar 24	20	Sep 9 1928
ANNUAL SEVEN-DAY MINIMUM	92	Feb 20	53	Mar 18	23	Sep 5 1928
MAXIMUM PEAK FLOW			2450	Aug 28	a5400	Oct 15 1961
MAXIMUM PEAK STAGE			3.59	Aug 28	b5.85	Oct 15 1961
INSTANTANEOUS LOW FLOW			c46	Mar 24	20	Sep 9 1928
ANNUAL RUNOFF (AC-FT)	354900		326800		306300	
ANNUAL RUNOFF (CFSM)	15.3		14.1		13.2	
ANNUAL RUNOFF (INCHES)	207.33		190.93		178.93	
10 PERCENT EXCEEDS	868		851		864	
50 PERCENT EXCEEDS	427		373		320	
90 PERCENT EXCEEDS	151		123		98	

\# See Period of Record
a From rating curve extended above 3,600 ft^3/s
b At site then in use
c Mar. 24-25

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK

LOCATION.--Lat 55°43'58", long 132°58'02", in NE¼ NE¼ 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 current year.

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 good except for those above 200 ft^3/s which are fair 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 12	0200	362	4.43	Sep 16	1445	397	4.55
Feb 14	2000	*660	*5.32	Sep 21	1045	357	4.41
Aug 23	0445	368	4.45				

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	23	53	1.3	9.3	4.9	5.2	e3.8	29	23	3.8	3.1	21
2	15	43	0.91	12	15	e4.7	e3.5	18	18	5.1	9.6	39
3	11	79	e1.0	14	22	e14	e3.2	12	18	3.0	10	11
4	8.3	15	e1.3	8.1	33	e6.6	e3.1	8.1	22	3.0	4.8	6.6
5	6.4	10	1.7	20	10	e4.3	2.7	6.1	15	4.9	3.0	4.7
6	8.9	6.8	1.9	58	4.5	e3.9	2.7	5.2	12	4.0	2.5	3.8
7	21	18	e47	42	3.0	e3.6	2.9	5.4	9.7	2.7	11	6.5
8	24	36	e35	24	4.1	e3.3	3.3	6.8	9.7	2.2	79	29
9	36	47	e27	13	23	e3.0	3.6	8.5	11	2.2	36	35
10	54	21	48	23	39	e2.8	7.7	16	10	2.1	11	31
11	49	12	30	8.3	46	e3.2	8.0	37	7.7	2.1	7.9	19
12	138	6.2	39	8.7	133	e3.4	11	77	7.5	1.8	8.4	9.1
13	15	17	19	6.5	26	e3.4	37	33	8.9	1.8	48	5.7
14	6.5	54	7.4	5.4	304	e3.2	26	20	9.4	1.8	11	6.9
15	55	20	5.2	6.0	123	e3.0	15	16	7.2	1.7	5.4	34
16	57	27	e4.3	9.7	23	e2.8	10	26	5.1	6.7	3.9	149
17	91	16	e3.9	5.6	11	e2.5	9.9	26	4.6	17	3.7	61
18	50	12	e3.6	14	7.9	e2.3	9.9	24	4.5	6.8	3.0	70
19	51	12	e3.4	15	6.8	e2.2	12	23	3.9	4.7	2.6	30
20	17	26	e3.4	8.2	6.3	e2.2	18	29	3.5	3.4	2.4	15
21	50	22	5.0	4.3	7.2	e2.0	22	28	3.3	5.9	9.3	137
22	15	25	8.2	e3.8	5.7	e1.8	15	25	3.4	11	54	57
23	10	8.7	e50	4.1	e5.5	e1.9	10	16	4.0	5.6	107	30
24	24	4.9	e130	6.2	e5.0	2.0	8.3	16	3.6	12	17	12
25	10	3.5	29	5.1	4.5	6.7	7.5	21	8.2	7.9	63	8.1
26	19	2.3	15	5.7	4.3	25	9.2	20	5.6	4.0	69	7.2
27	16	e1.8	24	e3.3	8.8	15	11	19	4.6	3.1	51	16
28	63	e1.6	23	e3.2	6.2	7.3	17	24	3.9	3.4	32	13
29	68	e1.5	18	e3.2	---	4.8	27	31	3.1	3.9	16	7.3
30	29	e1.3	13	e4.7	---	4.5	37	29	2.7	3.8	12	5.1
31	15	---	10	6.9	---	4.1	---	25	---	3.1	73	---
TOTAL	1056.1	603.6	609.51	361.3	892.7	154.7	357.3	680.1	253.1	144.5	769.6	880.0
MEAN	34.1	20.1	19.7	11.7	31.9	4.99	11.9	21.9	8.44	4.66	24.8	29.3
MAX	138	79	130	58	304	25	37	77	23	17	107	149
MIN	6.4	1.3	0.91	3.2	3.0	1.8	2.7	5.2	2.7	1.7	2.4	3.8
AC-FT	2090	1200	1210	717	1770	307	709	1350	502	287	1530	1750
CFSM	11.1	6.55	6.40	3.80	10.4	1.63	3.88	7.15	2.75	1.52	8.09	9.55
IN.	12.80	7.31	7.39	4.38	10.82	1.87	4.33	8.24	3.07	1.75	9.33	10.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)#

MEAN	34.3	23.8	27.0	25.4	21.3	15.8	17.3	15.0	8.98	5.84	11.0	25.5
MAX	61.1	40.2	49.1	48.9	51.7	35.1	29.7	33.8	21.0	11.8	24.8	45.1
(WY)	2000	1994	1991	1997	1993	1994	1997	1999	1999	1997	2002	1994
MIN	18.5	13.0	11.5	11.7	7.51	4.99	7.76	3.87	1.59	1.46	1.80	10.4
(WY)	1993	1997	1997	2002	2000	2002	1998	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002#	
ANNUAL TOTAL	7115.20		6762.51			
ANNUAL MEAN	19.5		18.5		19.4	
HIGHEST ANNUAL MEAN					24.7	1994
LOWEST ANNUAL MEAN					15.4	1996
HIGHEST DAILY MEAN	218	Sep 30	304	Feb 14	793	Oct 26 1993
LOWEST DAILY MEAN	0.91	Dec 2	0.91	Dec 2	0.38	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	0.98	Aug 11	1.3	Nov 28	0.49	Jul 15 1993
MAXIMUM PEAK FLOW			660	Feb 14	a1110	Jan 29 1993
MAXIMUM PEAK STAGE			5.32	Feb 14	6.34	Jan 29 1993
INSTANTANEOUS LOW FLOW			0.71	Dec 2	b0.37	Jul 20 1993
ANNUAL RUNOFF (AC-FT)	14110		13410		14040	
ANNUAL RUNOFF (CFSM)	6.35		6.03		6.31	
ANNUAL RUNOFF (INCHES)	86.22		81.94		85.77	
10 PERCENT EXCEEDS	48		47		44	
50 PERCENT EXCEEDS	11		9.3		9.4	
90 PERCENT EXCEEDS	2.1		2.9		2.2	

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

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1991 to current year.

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

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 October 29 and April 2. No variation was found within the cross section on October 29 and a variation of 0.5°C was found on April 2. No variation was found between mean stream temperature and sensor temperature.Variation in the cross section on April 2 was likely caused by shore ice.

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, 15.0°C July 9; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
Oct							
29...	1432	20.7	2.3	2.50	27.7	3.5	2.5
29...	1433	20.7	6.3	2.50	27.7	3.5	2.5
29...	1434	20.7	10.3	2.50	27.7	3.5	2.5
29...	1435	20.7	14.3	2.50	27.7	3.5	2.5
29...	1436	20.7	18.3	2.50	27.7	3.5	2.5
Apr							
2...	1250	21.0	10.0	1.96	3.5	1.0	0.0
2...	1251	21.0	15.0	1.96	3.5	1.5	0.0
2...	1252	21.0	20.0	1.96	3.5	1.5	0.0
2...	1253	21.0	25.0	1.96	3.5	1.5	0.0

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.5	7.5	4.0	3.5	3.5	0.0	0.0	0.0	2.0	1.5	1.5
2	8.5	7.5	8.0	3.5	3.0	3.0	0.0	0.0	0.0	2.0	1.5	1.5
3	9.0	7.5	8.0	3.5	2.5	3.5	0.0	0.0	0.0	2.0	1.5	1.5
4	8.0	6.5	7.5	3.0	2.5	2.5	0.0	0.0	0.0	1.5	1.0	1.0
5	8.0	6.5	7.5	2.5	2.0	2.0	0.0	0.0	0.0	2.5	1.5	2.0
6	8.0	7.5	7.5	2.0	2.0	2.0	0.0	0.0	0.0	2.0	1.5	2.0
7	7.5	7.0	7.0	2.5	1.5	2.5	0.0	0.0	0.0	2.0	2.0	2.0
8	7.5	7.0	7.5	3.0	2.5	3.0	0.0	0.0	0.0	2.0	1.5	2.0
9	7.5	7.0	7.0	3.5	2.5	3.0	0.0	0.0	0.0	2.5	2.0	2.5
10	7.5	6.5	7.0	4.0	3.0	3.5	0.0	0.0	0.0	2.5	1.5	1.5
11	7.0	6.0	6.5	3.0	2.5	3.0	0.0	0.0	0.0	2.0	0.0	1.0
12	7.0	6.0	6.5	3.0	2.5	3.0	0.0	0.0	0.0	0.5	0.0	0.0
13	6.0	5.5	6.0	4.0	3.0	3.5	0.0	0.0	0.0	1.0	0.5	0.5
14	6.0	5.0	5.5	3.5	3.5	3.5	0.0	0.0	0.0	1.0	0.5	1.0
15	6.5	5.5	6.0	3.5	3.0	3.5	0.0	0.0	0.0	1.5	1.0	1.0
16	6.0	5.5	6.0	3.0	2.0	2.5	0.0	0.0	0.0	1.0	1.0	1.0
17	6.0	5.0	5.5	3.0	2.0	2.5	0.0	0.0	0.0	1.5	1.0	1.0
18	6.5	6.0	6.5	3.0	2.5	3.0	0.0	0.0	0.0	1.5	1.0	1.5
19	6.0	5.5	6.0	4.0	3.0	3.5	0.0	0.0	0.0	1.0	0.5	1.0
20	5.5	5.0	5.5	4.0	4.0	4.0	0.0	0.0	0.0	1.0	1.0	1.0
21	5.5	5.0	5.5	4.0	4.0	4.0	0.0	0.0	0.0	1.0	0.0	0.5
22	5.5	5.0	5.0	4.0	3.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
23	5.0	4.5	5.0	3.5	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0
24	4.5	4.0	4.5	3.0	2.0	2.5	0.5	0.0	0.0	0.0	0.0	0.0
25	4.0	3.5	3.5	2.0	0.5	1.5	0.5	0.0	0.5	0.0	0.0	0.0
26	3.5	2.0	2.5	0.5	0.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0
27	2.5	2.0	2.5	0.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0
28	3.5	2.5	3.0	0.0	0.0	0.0	1.5	1.0	1.5	0.0	0.0	0.0
29	3.5	3.0	3.0	0.0	0.0	0.0	1.5	1.0	1.5	0.0	0.0	0.0
30	3.5	3.0	3.5	0.0	0.0	0.0	1.5	1.0	1.5	0.0	0.0	0.0
31	4.0	3.5	3.5	---	---	---	2.0	1.0	1.5	0.0	0.0	0.0
MONTH	9.0	2.0	5.7	4.0	0.0	2.5	2.0	0.0	0.3	2.5	0.0	0.9

15081495 NORTH FORK STANEY CREEK NEAR KLAWOCK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	4.5	1.5	2.5
2	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	4.5	1.5	3.0
3	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	2.5	1.0	2.0
4	0.0	0.0	0.0	0.5	0.0	0.0	1.0	0.0	0.5	4.0	1.5	2.5
5	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.5	5.0	1.5	3.0
6	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.0	5.5	1.5	3.5
7	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.0	5.0	2.5	4.0
8	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.0	4.5	3.0	3.5
9	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.5	1.5	5.0	2.0	3.5
10	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	4.0	3.0	3.5
11	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	3.5	2.0	2.5
12	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0	3.5	2.0	2.5
13	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.5	0.5	3.5	2.5	3.0
14	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.0	4.0	2.0	3.0
15	0.5	0.0	0.5	0.0	0.0	0.0	2.0	0.5	1.0	4.0	2.5	3.0
16	0.5	0.0	0.5	0.0	0.0	0.0	3.0	0.5	1.5	4.5	3.0	3.5
17	0.5	0.0	0.5	0.0	0.0	0.0	3.5	0.0	2.0	4.5	3.0	3.5
18	0.5	0.0	0.5	0.0	0.0	0.0	3.5	0.5	2.0	6.0	2.5	4.0
19	0.5	0.0	0.0	0.0	0.0	0.0	3.5	1.5	2.5	7.0	2.0	4.5
20	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	2.0	6.0	2.5	4.0
21	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.0	2.0	4.5	3.5	4.0
22	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.5	2.0	4.5	3.5	4.0
23	0.0	0.0	0.0	0.0	0.0	0.0	3.5	1.5	2.5	5.0	3.5	4.0
24	0.0	0.0	0.0	0.5	0.0	0.0	3.0	1.0	2.0	8.0	3.5	5.5
25	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.5	3.0	7.0	4.0	5.5
26	0.0	0.0	0.0	0.0	0.0	0.0	4.0	1.0	2.5	5.5	4.5	5.0
27	0.0	0.0	0.0	0.0	0.0	0.0	5.0	1.5	3.0	6.0	4.5	5.0
28	0.0	0.0	0.0	0.0	0.0	0.0	5.5	1.5	3.0	6.0	4.5	5.0
29	---	---	---	0.5	0.0	0.0	5.0	1.0	2.5	5.5	4.5	5.0
30	---	---	---	0.5	0.0	0.0	5.0	1.0	2.5	6.0	4.5	5.0
31	---	---	---	1.0	0.0	0.0	---	---	---	5.5	4.5	5.0
MONTH	0.5	0.0	0.0	1.0	0.0	0.0	5.5	0.0	1.6	8.0	1.0	3.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.5	5.0	5.5	11.0	9.5	10.0	12.5	10.5	11.5	11.5	10.0	10.5
2	6.5	5.0	6.0	10.5	8.5	9.5	12.5	9.5	11.5	11.0	10.0	10.5
3	6.5	5.5	6.0	10.5	9.0	9.5	11.5	9.0	10.0	11.5	9.5	10.5
4	6.0	5.0	5.5	10.0	9.0	9.5	12.5	9.5	11.0	11.5	9.0	10.0
5	7.5	5.0	6.5	10.5	9.0	10.0	13.5	10.0	12.0	11.0	9.0	10.0
6	7.0	5.0	6.0	11.0	9.5	10.0	12.5	11.0	12.0	11.0	9.5	10.0
7	6.5	5.0	6.0	14.0	8.5	11.5	12.0	10.5	11.5	10.5	10.0	10.0
8	10.0	5.5	7.5	14.0	11.0	12.5	10.5	10.0	10.0	10.5	9.5	10.0
9	8.0	6.5	7.0	15.0	12.0	13.0	10.5	9.5	10.0	10.0	9.5	9.5
10	8.0	6.0	7.0	14.5	12.5	13.0	11.0	9.5	10.5	10.0	9.0	9.5
11	9.0	5.5	7.5	14.0	12.0	13.0	11.0	10.0	10.5	10.0	9.0	9.5
12	11.0	7.0	9.0	14.0	11.5	12.5	12.0	10.5	11.0	10.5	9.0	10.0
13	11.5	7.0	9.5	12.5	11.5	12.0	11.0	10.5	10.5	9.5	8.0	9.0
14	12.5	8.0	10.5	12.0	11.0	11.5	12.0	10.0	11.0	10.0	8.0	9.0
15	11.0	9.0	10.0	12.5	11.0	11.5	12.5	10.0	11.5	10.0	9.0	9.0
16	10.0	8.5	9.0	12.0	10.5	11.5	12.0	10.0	11.0	9.0	9.0	9.0
17	11.0	8.0	9.5	10.5	9.5	10.0	13.0	10.5	11.5	9.5	9.0	9.0
18	10.5	9.0	9.5	11.5	9.5	10.5	12.0	11.0	11.5	9.0	8.5	9.0
19	9.5	9.0	9.5	11.0	10.0	11.0	12.0	11.0	11.5	9.0	8.0	8.5
20	11.5	8.5	10.0	12.0	10.0	11.0	12.0	10.0	11.0	9.5	8.5	9.0
21	12.5	9.0	10.5	12.0	10.5	11.5	11.5	10.5	11.0	9.5	8.5	9.0
22	12.0	10.0	11.0	11.5	10.5	11.0	11.0	10.5	10.5	9.5	9.0	9.5
23	12.0	10.0	11.0	12.5	11.0	11.5	11.5	10.5	11.0	10.0	9.5	9.5
24	10.5	10.0	10.5	12.0	11.0	11.5	11.0	10.5	11.0	10.5	9.5	10.0
25	10.0	9.0	9.5	11.0	10.5	11.0	11.0	10.5	10.5	9.5	9.0	9.5
26	10.5	8.5	9.5	12.0	10.5	11.0	11.5	10.5	11.0	10.5	9.0	10.0
27	11.0	9.5	10.0	12.0	11.0	11.5	11.5	11.0	11.0	10.0	9.5	10.0
28	12.0	9.5	10.5	12.0	10.5	11.0	11.5	10.5	11.0	9.5	8.5	9.0
29	11.0	10.5	11.0	11.5	10.0	11.0	11.0	10.5	11.0	8.5	7.5	8.0
30	11.0	10.0	10.5	11.5	9.5	10.5	11.0	10.5	10.5	7.5	6.0	7.0
31	---	---	---	11.5	10.0	11.0	11.0	10.5	10.5	---	---	---
MONTH	12.5	5.0	8.7	15.0	8.5	11.1	13.5	9.0	11.0	11.5	6.0	9.4

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. GOES satellite telemetry at station.

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)
Sep 21	1515	*7130	*13.63	No other peak greater than base discharge			

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	487	621	e58	204	217	e85	95	374	377	89	55	304
2	238	798	e52	253	527	e125	84	250	248	79	77	764
3	201	1230	e46	296	577	e360	85	173	211	105	221	220
4	141	427	e54	238	543	e200	78	126	328	73	91	127
5	107	377	e61	239	225	150	72	99	214	100	60	91
6	112	245	e95	1270	e105	e120	74	74	162	88	47	73
7	157	595	e500	766	e84	e100	75	70	134	60	74	77
8	284	712	e380	507	e80	e90	76	75	114	47	845	327
9	513	732	e300	293	e180	e80	80	79	119	41	1020	422
10	639	390	504	540	e340	e74	133	125	127	40	219	1020
11	638	297	334	236	e300	e73	161	310	98	39	127	357
12	1780	178	372	319	e1350	e76	164	1080	84	35	110	177
13	359	163	335	243	520	e78	432	481	89	32	1290	111
14	183	790	215	194	e1350	61	412	313	95	32	262	87
15	770	473	e156	177	e1300	53	289	236	88	30	124	488
16	879	757	e130	305	543	e43	193	262	71	45	84	2170
17	1170	389	e110	186	274	e38	166	298	60	194	77	1710
18	983	264	e96	395	175	e34	155	299	59	122	64	1520
19	937	200	e84	700	165	e33	173	254	54	91	56	799
20	407	299	e82	402	158	e32	237	301	48	67	49	379
21	652	246	e83	191	e130	e30	347	308	45	71	58	3010
22	401	540	e98	120	e100	e29	298	301	42	171	537	1710
23	250	254	e335	181	e80	e28	189	266	46	120	2060	762
24	676	150	e1880	402	e67	e27	146	172	51	176	289	308
25	372	114	702	242	e54	e27	120	217	140	175	993	204
26	509	93	363	167	e49	e300	134	221	99	93	2420	186
27	550	e84	499	e110	e115	e270	127	177	70	69	886	271
28	1080	e76	422	e85	e84	209	179	230	67	73	731	348
29	1330	e68	370	e92	---	133	281	359	55	77	327	198
30	528	e62	275	e120	---	132	384	466	48	66	196	142
31	337	---	221	e175	---	133	---	381	---	55	1100	---
TOTAL	17670	11624.0	9212	9648	9692	3223	5439	8377	3443	2555	14549	18362
MEAN	570.0	387.5	297.2	311.2	346.1	104.0	181.3	270.2	114.8	82.42	469.3	612.1
MAX	1780	1230	1880	1270	1350	360	432	1080	377	194	2420	3010
MIN	107	62	46	85	49	27	72	70	42	30	47	73
AC-FT	35050	23060	18270	19140	19220	6390	10790	16620	6830	5070	28860	36420
CFSM	11.3	7.66	5.87	6.15	6.84	2.05	3.58	5.34	2.27	1.63	9.28	12.1
IN.	12.99	8.55	6.77	7.09	7.13	2.37	4.00	6.16	2.53	1.88	10.70	13.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)#

MEAN	678.5	566.2	597.2	452.3	402.1	339.8	308.1	233.5	120.7	96.47	205.7	460.5
MAX	1123	996	1270	782	983	565	559	558	252	200	469	783
(WY)	2000	1992	1992	1992	1991	1994	1997	1999	1999	1997	2002	1994
MIN	443	201	267	240	152	104	173	79.0	26.5	22.1	26.6	166
(WY)	1997	1997	1997	1998	1994	2002	1993	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002#	
ANNUAL TOTAL	127853.0		113794.0			
ANNUAL MEAN	350.3		311.8		371.6	
HIGHEST ANNUAL MEAN					506	1992
LOWEST ANNUAL MEAN					283	1995
HIGHEST DAILY MEAN	5200	Sep 30	3010	Sep 21	14900	Oct 26 1993
LOWEST DAILY MEAN	a12	Aug 15	b27	Mar 24	4.4	Jul 21 1993
ANNUAL SEVEN-DAY MINIMUM	13	Aug 11	29	Mar 19	6.0	Jul 15 1993
MAXIMUM PEAK FLOW			7130	Sep 21	c19800	Oct 26 1993
MAXIMUM PEAK STAGE			13.63	Sep 21	17.20	Oct 26 1993
INSTANTANEOUS LOW FLOW			d		4.0	Jul 21 1993
ANNUAL RUNOFF (AC-FT)	253600		225700		269200	
ANNUAL RUNOFF (CFSM)	6.92		6.16		7.34	
ANNUAL RUNOFF (INCHES)	93.99		83.66		99.78	
10 PERCENT EXCEEDS	793		742		887	
50 PERCENT EXCEEDS	187		179		174	
90 PERCENT EXCEEDS	46		55		39	

\# See Period of Record; partial years used in monthly statistics
a Aug. 15-17
b Mar. 24-25
c From rating curve extended above 3300 ft^3/sec
d Not determined, see lowest daily mean

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.

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, 18.5°C, June 14 and July 10; minimum, 0.0°C on many days during the winter.

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.5	7.5	8.0	5.0	4.0	4.5	0.0	0.0	0.0	2.5	1.5	2.0
2	9.0	8.0	8.5	4.5	4.0	4.0	0.0	0.0	0.0	2.0	2.0	2.0
3	9.5	8.5	9.0	4.5	3.5	4.5	0.0	0.0	0.0	2.0	1.5	2.0
4	8.5	7.0	8.0	4.0	3.5	4.0	0.0	0.0	0.0	2.0	1.0	1.5
5	8.0	6.5	7.5	4.0	3.0	3.5	0.0	0.0	0.0	3.0	1.5	2.5
6	9.0	8.0	8.0	3.5	3.0	3.0	0.0	0.0	0.0	3.0	2.0	2.5
7	8.0	7.5	8.0	3.5	3.0	3.5	0.0	0.0	0.0	2.5	2.5	2.5
8	8.5	7.5	8.0	4.0	3.5	3.5	0.5	0.0	0.0	2.5	2.5	2.5
9	8.0	7.5	8.0	4.0	3.5	4.0	1.0	0.0	0.5	3.0	2.5	2.5
10	8.0	7.5	7.5	5.0	4.0	4.5	0.5	0.0	0.0	3.0	1.5	2.0
11	7.5	7.0	7.0	4.5	3.5	4.0	1.0	0.0	0.5	2.0	0.0	1.5
12	7.5	7.0	7.5	4.5	3.0	4.0	1.0	0.5	0.5	1.0	0.0	0.5
13	7.0	6.5	6.5	5.0	3.5	4.0	1.0	0.5	0.5	2.0	1.0	1.5
14	7.0	6.0	6.5	4.5	4.0	4.0	2.0	0.0	1.0	2.0	1.0	1.5
15	7.0	6.0	6.5	4.5	3.5	4.0	0.0	0.0	0.0	2.5	1.5	2.0
16	6.5	6.0	6.5	4.0	3.0	3.5	0.0	0.0	0.0	2.0	1.5	1.5
17	6.5	5.5	6.0	4.0	3.0	3.5	0.0	0.0	0.0	2.0	1.5	1.5
18	7.5	6.5	7.0	4.0	3.5	4.0	0.0	0.0	0.0	2.0	2.0	2.0
19	7.0	6.0	6.5	5.0	4.0	4.5	0.0	0.0	0.0	2.0	1.5	1.5
20	6.5	6.0	6.0	5.0	4.5	5.0	0.0	0.0	0.0	2.0	1.5	1.5
21	6.5	6.0	6.0	5.0	4.5	5.0	0.0	0.0	0.0	2.0	1.0	1.5
22	6.0	5.5	5.5	5.0	4.0	4.5	0.0	0.0	0.0	2.0	1.5	2.0
23	6.0	5.0	5.5	4.0	3.0	4.0	0.0	0.0	0.0	2.0	0.0	0.0
24	5.5	4.5	5.0	3.5	2.5	3.0	1.0	0.0	0.5	0.0	0.0	0.0
25	5.0	4.0	4.5	2.5	1.0	2.0	1.5	0.5	1.0	0.0	0.0	0.0
26	4.5	3.5	4.0	2.5	0.0	1.0	1.5	0.5	1.0	0.0	0.0	0.0
27	4.0	3.0	3.5	0.0	0.0	0.0	2.0	1.5	1.5	0.0	0.0	0.0
28	4.0	3.5	4.0	0.0	0.0	0.0	2.0	1.5	1.5	0.0	0.0	0.0
29	4.0	3.5	4.0	0.0	0.0	0.0	2.0	1.5	1.5	0.0	0.0	0.0
30	4.5	3.5	4.0	0.0	0.0	0.0	2.0	1.0	1.5	0.0	0.0	0.0
31	5.0	4.0	4.5	---	---	---	2.0	1.0	1.5	0.0	0.0	0.0
MONTH	9.5	3.0	6.4	5.0	0.0	3.3	2.0	0.0	0.4	3.0	0.0	1.3

15081497 STANEY CREEK NEAR KLAWOCK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.0	6.0	3.0	4.5
2	0.0	0.0	0.0	0.5	0.0	0.0	3.5	0.0	1.5	7.5	3.5	5.5
3	0.0	0.0	0.0	1.0	0.5	0.5	3.0	0.0	1.5	5.0	3.0	4.0
4	0.0	0.0	0.0	1.0	0.0	0.5	3.0	0.5	1.5	6.5	3.5	4.5
5	0.0	0.0	0.0	2.0	0.5	1.0	3.0	1.0	2.0	7.5	2.5	5.0
6	1.0	0.0	0.5	1.5	0.0	0.0	4.5	1.0	2.5	8.5	2.0	5.5
7	2.0	0.0	1.5	0.0	0.0	0.0	4.5	0.5	2.5	8.5	3.0	6.0
8	1.5	0.5	1.0	0.0	0.0	0.0	4.5	1.0	2.5	7.5	4.5	6.0
9	1.5	0.0	0.5	0.0	0.0	0.0	4.5	1.5	3.0	7.5	3.0	5.5
10	0.0	0.0	0.0	0.0	0.0	0.0	5.0	2.5	3.5	7.0	5.0	6.0
11	0.0	0.0	0.0	0.0	0.0	0.0	4.5	1.0	2.5	5.5	4.5	5.0
12	0.5	0.0	0.5	0.0	0.0	0.0	4.5	2.5	3.5	5.0	4.0	4.5
13	1.0	0.5	0.5	0.0	0.0	0.0	3.0	2.0	2.5	5.5	4.5	5.0
14	1.0	0.5	1.0	0.0	0.0	0.0	3.5	1.5	2.5	6.5	4.0	5.0
15	1.5	0.5	1.0	0.0	0.0	0.0	4.0	1.5	3.0	6.5	4.5	5.5
16	1.5	0.5	1.0	0.5	0.0	0.0	5.5	1.5	3.0	8.0	5.5	6.5
17	1.5	0.5	1.0	0.5	0.0	0.5	5.5	1.5	3.5	7.0	5.5	6.0
18	2.0	1.0	1.0	0.5	0.0	0.5	6.0	1.5	3.5	8.5	5.0	6.5
19	1.5	0.0	1.0	0.5	0.0	0.5	6.0	3.0	4.5	10.5	5.0	7.5
20	1.5	0.0	0.5	0.5	0.0	0.5	4.5	3.5	4.0	9.5	5.5	7.5
21	0.0	0.0	0.0	0.5	0.0	0.5	4.5	3.0	3.5	7.5	6.5	7.0
22	0.0	0.0	0.0	0.5	0.0	0.5	5.5	2.0	3.5	7.0	6.0	6.5
23	0.0	0.0	0.0	1.0	0.0	0.5	4.5	3.0	3.5	7.0	6.0	6.5
24	0.0	0.0	0.0	1.0	0.0	0.5	5.0	2.0	3.5	12.0	6.0	8.5
25	0.0	0.0	0.0	1.0	0.0	0.5	7.0	3.0	5.0	11.0	7.5	9.0
26	0.0	0.0	0.0	0.0	0.0	0.0	6.5	2.5	4.5	9.0	7.5	8.5
27	0.0	0.0	0.0	0.5	0.0	0.0	8.0	2.5	5.0	9.0	7.0	8.0
28	0.0	0.0	0.0	1.0	0.0	0.0	8.0	3.5	5.5	10.0	7.5	8.5
29	---	---	---	2.0	0.0	1.0	7.5	3.5	5.5	8.5	7.0	8.0
30	---	---	---	1.5	0.0	1.0	7.5	3.0	5.0	9.0	7.0	8.0
31	---	---	---	2.0	0.0	1.0	---	---	---	8.5	7.5	8.0
MONTH	2.0	0.0	0.4	2.0	0.0	0.3	8.0	0.0	3.3	12.0	2.0	6.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.0	7.0	8.0	12.0	11.0	11.5	17.0	12.0	14.5	11.5	10.0	10.5
2	9.5	7.5	8.5	12.0	10.5	11.0	15.5	11.5	13.5	11.5	10.5	11.0
3	9.5	8.0	8.5	12.0	10.0	11.5	14.0	10.5	12.0	11.5	9.5	10.5
4	9.0	8.0	8.5	11.5	10.5	11.0	15.5	11.0	13.0	11.5	9.0	10.0
5	10.5	8.0	9.0	12.0	10.5	11.0	17.0	11.5	14.0	11.0	9.0	10.0
6	10.0	7.5	9.0	12.5	10.5	11.5	15.0	12.5	13.5	12.0	9.5	10.5
7	9.5	7.5	8.5	17.0	10.5	13.5	14.0	11.5	13.0	11.0	10.0	10.5
8	13.5	8.0	10.5	16.5	13.0	14.5	12.5	11.5	12.0	11.5	10.0	10.5
9	11.0	9.0	10.0	17.5	13.5	15.5	12.0	11.0	11.5	10.5	9.5	10.0
10	11.5	8.5	9.5	18.5	13.5	15.5	13.5	11.0	12.0	11.0	10.0	10.5
11	12.0	7.5	10.0	17.5	14.0	15.5	12.5	11.0	12.0	10.5	9.5	10.0
12	16.0	9.0	12.0	16.5	13.5	15.0	14.0	11.0	12.5	10.5	9.5	10.0
13	17.0	9.5	13.0	15.0	13.0	14.0	13.5	11.5	12.0	10.0	8.5	9.0
14	18.5	10.5	14.5	13.5	12.5	13.0	13.0	10.0	11.5	10.0	8.5	9.5
15	15.0	11.5	13.0	13.5	12.0	13.0	13.5	9.5	11.5	10.5	9.5	10.0
16	13.0	11.5	12.0	13.5	12.5	13.0	13.0	9.5	11.5	10.0	9.5	9.5
17	17.0	10.5	13.5	13.5	11.5	12.5	14.5	10.5	12.5	10.0	9.5	10.0
18	14.0	11.5	12.5	13.0	11.0	12.0	14.0	11.5	12.5	10.0	9.5	9.5
19	12.5	10.5	11.5	14.5	11.5	12.5	14.0	11.0	12.5	9.5	9.0	9.5
20	17.5	10.5	13.5	13.5	11.5	12.5	13.5	11.0	12.0	9.5	8.5	9.0
21	16.0	11.0	13.5	13.5	12.0	12.5	13.5	11.5	12.5	10.0	9.0	9.5
22	14.5	12.0	13.0	14.0	11.5	12.5	13.0	11.5	12.0	10.5	10.0	10.0
23	15.0	12.0	13.5	14.5	11.5	13.0	12.5	11.0	12.0	10.5	10.0	10.0
24	13.5	12.0	12.5	14.5	11.5	13.0	12.0	9.5	10.5	10.5	9.5	10.0
25	12.5	11.0	11.5	13.5	11.5	12.5	12.0	9.5	11.0	10.0	9.0	9.5
26	12.5	10.5	11.5	15.0	11.0	12.5	12.0	11.5	12.0	10.5	9.5	10.0
27	13.0	11.0	12.0	14.0	12.0	13.0	12.5	11.5	12.0	11.0	9.5	10.0
28	15.0	11.0	12.5	13.5	11.5	12.5	12.5	11.5	12.0	10.5	9.0	9.5
29	14.0	12.5	13.0	15.5	11.0	13.0	12.0	10.5	11.0	9.0	8.0	8.5
30	12.5	11.5	12.0	14.0	11.0	12.5	11.5	9.5	10.5	8.5	7.0	8.0
31	---	---	---	14.5	11.5	13.0	12.5	11.5	12.0	---	---	---
MONTH	18.5	7.0	11.3	18.5	10.0	12.9	17.0	9.5	12.2	12.0	7.0	9.8

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 current year.

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	91	e15	44	15	23	11	69	96	51	33	155
2	45	90	e15	52	70	32	11	51	93	45	67	154
3	48	132	e16	70	45	53	11	43	89	44	53	95
4	26	65	e17	47	61	23	11	33	103	55	36	74
5	19	53	18	77	24	15	10	27	87	72	30	60
6	31	42	19	155	18	e14	11	25	70	56	26	52
7	46	71	112	125	15	e13	11	27	59	44	34	56
8	58	69	71	87	14	e12	11	26	54	40	114	80
9	60	67	56	80	67	e11	11	25	60	38	116	108
10	66	56	81	81	44	11	18	43	65	39	66	179
11	106	46	48	62	53	10	15	68	56	42	48	114
12	166	36	62	58	91	10	22	112	51	34	70	77
13	69	55	45	43	36	10	45	106	60	45	195	62
14	36	85	30	35	113	9.9	41	77	71	44	78	55
15	134	59	25	49	113	9.4	27	64	65	36	51	77
16	118	72	21	50	60	e9.0	22	93	54	56	42	211
17	138	53	20	35	36	e8.7	22	77	47	75	38	186
18	129	43	e19	64	28	e8.4	22	71	45	54	31	167
19	112	50	e18	52	23	e8.1	22	82	47	43	27	135
20	77	77	18	39	20	e7.9	36	107	43	36	27	126
21	82	77	19	27	18	8.0	64	108	40	52	43	239
22	64	94	27	21	16	8.1	39	98	39	64	158	256
23	52	59	170	22	15	8.4	29	76	50	49	217	183
24	60	45	183	23	e14	8.9	21	68	68	52	114	113
25	48	36	90	19	13	39	19	96	86	49	165	86
26	76	28	62	16	15	42	21	99	64	37	182	82
27	57	24	81	16	25	25	24	93	54	40	159	117
28	126	22	77	15	19	16	36	125	52	61	157	93
29	96	e19	66	15	---	15	51	141	51	50	110	77
30	72	e17	58	17	---	14	73	113	50	39	110	62
31	54	---	51	17	---	13	---	103	---	34	210	---
TOTAL	2342	1733	1610	1513	1081	495.8	767	2346	1869	1476	2807	3531
MEAN	75.55	57.77	51.94	48.81	38.61	15.99	25.57	75.68	62.30	47.61	90.55	117.7
MAX	166	132	183	155	113	53	73	141	103	75	217	256
MIN	19	17	15	15	13	7.9	10	25	39	34	26	52
AC-FT	4650	3440	3190	3000	2140	983	1520	4650	3710	2930	5570	7000
CFSM	11.4	8.71	7.83	7.36	5.82	2.41	3.86	11.4	9.40	7.18	13.7	17.8
IN.	13.14	9.72	9.03	8.49	6.07	2.78	4.30	13.16	10.49	8.28	15.75	19.81

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)#

MEAN	82.65	61.62	52.44	51.55	33.35	28.51	39.00	73.03	79.83	58.64	60.44	86.69
MAX	113	68.1	57.3	69.8	38.6	42.1	50.1	88.8	108	68.3	90.5	118
(WY)	2000	2000	2000	2001	2002	2001	1999	1999	1999	1999	2002	2002
MIN	59.6	57.8	48.1	36.0	26.8	16.0	25.6	56.1	62.3	47.6	37.8	57.5
(WY)	2001	2002	2001	2000	2000	2002	2002	2000	2002	2002	2001	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002#	
ANNUAL TOTAL	21545.8		21570.8			
ANNUAL MEAN	59.03		59.10		57.45	
HIGHEST ANNUAL MEAN					59.1	2002
LOWEST ANNUAL MEAN					55.8	2000
HIGHEST DAILY MEAN	240	Mar 11	256	Sep 22	482	Oct 21 1999
LOWEST DAILY MEAN	a9.9	Feb 24	7.9	Mar 20	7.3	Mar 9 2000
ANNUAL SEVEN-DAY MINIMUM	11	Aug 12	8.2	Mar 17	8.2	Mar 17 2002
MAXIMUM PEAK FLOW			373	Aug 23	b1390	Aug 21 2000
MAXIMUM PEAK STAGE			9.31	Aug 23	11.55	Aug 21 2000
INSTANTANEOUS LOW FLOW			c		6.4	Mar 10 2000
ANNUAL RUNOFF (AC-FT)	42740		42790		41620	
ANNUAL RUNOFF (CFSM)	8.90		8.91		8.66	
ANNUAL RUNOFF (INCHES)	120.89		121.03		117.72	
10 PERCENT EXCEEDS	115		114		106	
50 PERCENT EXCEEDS	51		51		51	
90 PERCENT EXCEEDS	17		15		16	

e Estimated
See Period of Record
a Feb. 24 and Aug. 17
b From rating curve extended above 130 ft^3/s
c Not determined, see lowest daily mean

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	92	e4.8	21	7.2	12	6.6	51	40	8.6	8.5	73
2	21	71	e5.3	32	69	25	6.1	36	27	8.7	75	73
3	26	137	e6.0	69	46	68	6.1	23	25	12	37	21
4	14	33	e6.7	31	55	21	5.8	14	47	26	13	12
5	9.7	21	e7.7	49	18	17	5.7	11	31	44	8.4	8.8
6	24	14	8.8	159	e8.0	e12	5.7	11	20	21	6.7	7.3
7	27	41	196	116	e6.8	e10	5.6	13	15	11	21	20
8	35	65	84	71	15	e9.4	5.7	15	13	8.1	150	61
9	71	80	49	59	58	e8.4	6.0	15	14	7.3	88	57
10	82	43	85	69	50	e7.3	15	44	17	6.9	24	103
11	88	26	35	36	75	e6.4	14	73	14	7.4	14	53
12	120	13	60	33	159	5.8	22	98	12	6.6	45	19
13	39	17	36	17	39	5.6	52	89	13	15	211	11
14	17	72	17	14	199	5.5	46	49	14	16	33	9.7
15	103	54	15	34	146	5.2	26	33	12	11	14	38
16	95	64	12	41	47	5.0	19	42	10	35	12	158
17	114	31	e11	21	19	5.0	20	35	9.2	53	14	91
18	96	20	e10	80	13	4.8	21	29	8.5	31	9.1	103
19	74	22	e9.9	48	11	4.6	23	30	9.3	24	7.9	71
20	41	32	e9.8	26	10	4.6	49	36	8.6	12	6.9	41
21	69	34	e9.7	13	8.8	4.5	89	35	7.8	20	13	203
22	33	62	11	11	7.8	4.5	38	40	7.3	31	143	177
23	20	23	131	12	e6.9	4.7	22	25	7.6	16	200	77
24	42	12	281	10	e6.7	4.9	14	19	12	23	33	25
25	23	8.7	81	7.9	7.9	34	16	23	47	20	125	15
26	57	8.2	40	e7.1	9.3	50	20	23	26	11	167	17
27	35	e7.3	64	e6.7	25	26	24	20	17	14	107	51
28	146	e6.5	59	e6.5	12	15	41	31	12	36	89	31
29	111	e5.6	45	e6.5	---	10	51	69	9.2	27	32	19
30	46	e5.2	34	e7.0	---	9.0	63	70	8.1	15	35	12
31	32	---	27	e10	---	7.5	---	48	---	10	155	---
TOTAL	1746.7	1120.5	1451.7	1123.7	1135.4	412.7	738.3	1150	513.6	587.6	1897.5	1657.8
MEAN	56.35	37.35	46.83	36.25	40.55	13.31	24.61	37.10	17.12	18.95	61.21	55.26
MAX	146	137	281	159	199	68	89	98	47	53	211	203
MIN	9.7	5.2	4.8	6.5	6.7	4.5	5.6	11	7.3	6.6	6.7	7.3
MED	41	28	27	26	16	7.5	20	33	13	15	33	39
AC-FT	3460	2220	2880	2230	2250	819	1460	2280	1020	1170	3760	3290
CFSM	11.9	7.90	9.90	7.66	8.57	2.81	5.20	7.84	3.62	4.01	12.9	11.7
IN.	13.74	8.81	11.42	8.84	8.93	3.25	5.81	9.04	4.04	4.62	14.92	13.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2002, BY WATER YEAR (WY)#

MEAN	56.35	37.35	46.83	47.82	33.98	26.53	30.55	48.52	43.21	25.67	45.75	58.72
MAX	56.3	37.3	46.8	59.4	40.6	39.7	36.5	59.9	69.3	32.4	61.2	62.2
(WY)	2002	2002	2002	2001	2002	2001	2001	2001	2001	2001	2002	2001
MIN	56.3	37.3	46.8	36.2	27.4	13.3	24.6	37.1	17.1	19.0	30.3	55.3
(WY)	2002	2002	2002	2002	2001	2002	2002	2002	2002	2002	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2001 - 2002#	
ANNUAL TOTAL	16999.6		13535.5			
ANNUAL MEAN	46.57		37.08		37.08	
HIGHEST ANNUAL MEAN					37.1	2002
LOWEST ANNUAL MEAN					37.1	2002
HIGHEST DAILY MEAN	288	Mar 11	281	Dec 24	288	Mar 11 2001
LOWEST DAILY MEAN	4.8	Dec 1	a4.5	Mar 21	4.5	Mar 21 2002
ANNUAL SEVEN-DAY MINIMUM	5.4	Feb 19	4.7	Mar 18	4.7	Mar 18 2002
MAXIMUM PEAK FLOW			529	Aug 23	597	Sep 29 2001
MAXIMUM PEAK STAGE			9.90	Aug 23	10.07	Sep 29 2001
INSTANTANEOUS LOW FLOW			b4.5	Mar 19	4.5	Mar 19 2002
ANNUAL RUNOFF (AC-FT)	33720		26850		26870	
ANNUAL RUNOFF (CFSM)	9.85		7.84		7.84	
ANNUAL RUNOFF (INCHES)	133.70		106.45		106.52	
10 PERCENT EXCEEDS	100		88		88	
50 PERCENT EXCEEDS	35		21		21	
90 PERCENT EXCEEDS	7.4		6.8		6.8	

\# See Period of Record, partial years used in monthly statistics
a Mar. 21-22
b Mar. 19-22
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 current year

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.

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	117	107	39	76	e30	e33	e19	e39	e125	88	27	145
2	99	108	36	74	e64	e32	e18	e45	e110	79	28	145
3	90	135	38	75	e58	e38	e17	e49	e122	71	31	123
4	81	111	40	71	e61	e39	e16	e47	e115	66	29	107
5	73	100	37	73	e55	e36	e18	e43	e105	65	26	98
6	73	91	36	128	e50	e35	21	e41	e96	60	24	89
7	85	93	54	148	e43	e34	20	e40	e87	55	27	87
8	103	93	87	123	e37	e31	20	e39	e78	49	55	101
9	95	94	68	112	e31	e29	20	e38	e71	46	88	109
10	97	87	65	131	e49	e27	21	e37	e67	43	66	135
11	96	84	58	112	e90	e24	22	e38	e66	39	51	116
12	127	74	64	107	e120	e26	23	e58	e65	37	46	101
13	101	83	69	94	e88	e25	26	e78	e64	36	85	90
14	86	102	57	84	e100	e23	31	e87	e63	33	72	82
15	110	92	48	78	e130	e22	31	e83	e64	32	55	96
16	117	99	42	79	e86	e21	27	e80	e63	40	46	144
17	108	84	40	71	e70	e20	e26	e75	e60	45	41	167
18	123	76	38	72	e58	e19	e25	e72	e55	40	37	171
19	116	76	36	73	e54	e18	26	e70	54	36	34	143
20	105	89	33	70	e49	e17	27	e72	51	33	32	127
21	111	94	35	e57	e43	e17	30	e77	48	32	32	160
22	106	106	34	e51	e39	e16	e28	e81	46	39	56	217
23	95	89	63	e48	e35	e15	e26	e87	47	38	132	187
24	94	78	181	e45	e30	e14	e24	e84	60	34	102	142
25	87	70	123	e41	e26	e19	e23	e80	87	32	115	124
26	99	63	97	e38	e30	e34	e23	e75	80	30	192	113
27	91	57	98	e36	e36	e26	e24	e87	72	29	194	107
28	110	52	96	e32	e35	e22	e25	e110	68	28	187	103
29	127	47	92	e29	---	e20	e26	e130	64	29	146	94
30	115	43	84	e30	---	e21	e33	e150	72	30	128	82
31	103	---	79	e31	---	e20	---	e135	---	28	171	---
TOTAL	3140	2577	1967	2289	1597	773	716	2227	2225	1342	2355	3705
MEAN	101.3	85.90	63.45	73.84	57.04	24.94	23.87	71.84	74.17	43.29	75.97	123.5
MAX	127	135	181	148	130	39	33	150	125	88	194	217
MIN	73	43	33	29	26	14	16	37	46	28	24	82
AC-FT	6230	5110	3900	4540	3170	1530	1420	4420	4410	2660	4670	7350
CFSM	19.5	16.5	12.2	14.2	11.0	4.80	4.59	13.8	14.3	8.33	14.6	23.8
IN.	22.46	18.44	14.07	16.38	11.42	5.53	5.12	15.93	15.92	9.60	16.85	26.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2002, BY WATER YEAR (WY)#

MEAN	96.47	76.71	69.58	88.33	72.12	56.97	61.06	80.12	66.87	46.14	52.26	70.77
MAX	172	142	131	129	107	97.9	90.9	128	103	63.5	78.7	124
(WY)	2000	2000	1998	1985	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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1982 - 2002#	
ANNUAL TOTAL	27110		24913			
ANNUAL MEAN	74.27		68.25		71.12	
HIGHEST ANNUAL MEAN					88.9	2000
LOWEST ANNUAL MEAN					59.5	1983
HIGHEST DAILY MEAN	199	Sep 3	217	Sep 22	610	Oct 23 1999
LOWEST DAILY MEAN	22	Aug 18	14	Mar 24	9.0	Jul 9 1998
ANNUAL SEVEN-DAY MINIMUM	25	Aug 12	17	Mar 18	9.8	Jul 4 1998
MAXIMUM PEAK FLOW			237	Dec 24	806	Oct 23 1999
MAXIMUM PEAK STAGE			6.77	Dec 24	8.71	Oct 23 1999
INSTANTANEOUS LOW FLOW			a		b8.7	Jul 9 1998
ANNUAL RUNOFF (AC-FT)	53770		49410		51520	
ANNUAL RUNOFF (CFSM)	14.3		13.1		13.7	
ANNUAL RUNOFF (INCHES)	193.94		178.22		185.83	
10 PERCENT EXCEEDS	113		122		121	
50 PERCENT EXCEEDS	74		64		63	
90 PERCENT EXCEEDS	32		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
e Estimated

15085l00 OLD TOM CREEK NEAR KASAAN

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

DRAINAGE AREA.--5.90 mi^2.

WATER-DISCHARGE RECORDS

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

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

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

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

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

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Oct 15	1515	481	4.24	Dec 24	0415	784	5.16
Oct 28	1530	731	5.01	Jan 6	0015	557	4.49
Nov 3	0615	*928	*5.54	Sep 9	1515	463	4.18

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	63	114	e10	40	9.7	9.4	15	51	53	16	6.5	36
2	32	106	e16	45	76	11	12	33	39	13	17	58
3	22	396	e28	55	66	19	11	24	36	11	22	35
4	17	95	e20	36	161	18	9.8	20	40	9.6	13	26
5	13	69	18	145	43	13	10	17	31	8.7	9.1	20
6	12	54	15	351	24	e11	14	15	28	7.6	7.0	17
7	122	134	74	213	16	e10	13	14	25	6.7	7.2	21
8	193	92	78	67	13	e9.0	12	14	21	6.0	17	29
9	54	70	37	85	130	e8.3	11	16	19	5.5	29	164
10	39	64	41	106	102	e8.0	14	22	18	5.3	16	78
11	51	50	33	51	59	e8.5	16	30	16	5.8	12	44
12	113	37	32	54	99	e9.5	18	53	15	5.0	10	29
13	39	131	53	41	58	e7.0	46	43	13	8.4	21	23
14	23	157	30	32	69	e5.5	54	32	14	8.9	14	20
15	163	107	21	27	108	e5.1	38	33	14	12	11	40
16	91	112	17	29	56	e4.9	27	88	13	26	8.2	134
17	55	59	15	24	34	e4.7	23	58	13	27	7.2	84
18	55	43	13	28	25	e4.5	22	44	12	17	6.2	95
19	51	90	12	32	24	e4.3	26	41	11	14	5.3	51
20	33	142	e10	29	21	e4.1	31	44	10	13	4.9	33
21	28	129	11	22	16	e3.9	35	47	9.1	12	4.7	87
22	27	85	16	16	14	e3.8	30	49	8.5	17	22	149
23	20	46	288	19	e12	4.2	22	48	10	14	82	104
24	22	34	518	21	e11	4.2	19	37	31	17	39	43
25	20	26	126	16	e9.5	42	17	39	42	20	74	28
26	157	18	61	e15	9.0	55	19	41	29	13	116	22
27	73	14	78	e13	10	35	21	42	20	9.8	63	20
28	251	e10	72	e11	9.9	25	29	130	18	8.2	53	20
29	159	e8.0	56	e10	---	20	41	139	16	8.2	33	16
30	194	e6.8	41	9.1	---	20	54	97	16	8.5	29	13
31	90	---	36	10	---	18	---	68	---	7.4	59	---
TOTAL	2282	2498.8	1876	1652.1	1285.1	405.9	709.8	1429	640.6	361.6	818.3	1539
MEAN	73.61	83.29	60.52	53.29	45.90	13.09	23.66	46.10	21.35	11.66	26.40	51.30
MAX	251	396	518	351	161	55	54	139	53	27	116	164
MIN	12	6.8	10	9.1	9.0	3.8	9.8	14	8.5	5.0	4.7	13
AC-FT	4530	4960	3720	3280	2550	805	1410	2830	1270	717	1620	3050
CFSM	12.5	14.1	10.3	9.03	7.78	2.22	4.01	7.81	3.62	1.98	4.47	8.69
IN.	14.39	15.76	11.83	10.42	8.10	2.56	4.48	9.01	4.04	2.28	5.16	9.70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)#

MEAN	70.99	66.38	57.58	48.51	45.39	38.59	48.18	43.19	26.05	13.26	15.32	32.11
MAX	163	166	136	128	117	86.3	122	99.1	56.1	31.0	50.9	93.6
(WY)	1978	2000	1992	1992	1998	1984	1980	1999	1950	1991	2001	2001
MIN	28.4	17.1	8.29	3.00	5.00	10.1	19.1	15.0	5.45	2.66	1.81	2.69
(WY)	1952	1966	1984	1950	1950	1956	1967	1996	1958	1958	1993	1965

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

15085l00 OLD TOM CREEK NEAR KASAAN—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002#	
ANNUAL TOTAL	21761.7		15498.2			
ANNUAL MEAN	59.62		42.46		42.08	
HIGHEST ANNUAL MEAN					63.1	2000
LOWEST ANNUAL MEAN					25.2	1951
HIGHEST DAILY MEAN	518	Dec 24	518	Dec 24	858	Oct 23 1990
LOWEST DAILY MEAN	1.2	Aug 16	3.8	Mar 22	0.28	Nov 14 1965
ANNUAL SEVEN-DAY MINIMUM	1.5	Aug 11	4.1	Mar 18	0.55	Nov 13 1965
MAXIMUM PEAK FLOW			928	Nov 3	a1490	Apr 16 1952
MAXIMUM PEAK STAGE			5.54	Nov 3	6.96	Apr 16 1952
INSTANTANEOUS LOW FLOW			b		0.16	Nov 15 1965
ANNUAL RUNOFF (AC-FT)	43160		30740		30480	
ANNUAL RUNOFF (CFSM)	10.1		7.20		7.13	
ANNUAL RUNOFF (INCHES)	137.21		97.72		96.90	
10 PERCENT EXCEEDS	150		100		94	
50 PERCENT EXCEEDS	32		24		24	
90 PERCENT EXCEEDS	6.3		8.5		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 April 1. 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, 13.5°C, July 23-24, August 21, 24; minimum, 0.0°C, on several days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM R 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)
APR							
01...	1023	28.5	3.5	1.86	14	1.0	3.0
01...	1024	28.5	8.5	1.86	14	1.0	3.0
01...	1025	28.5	13.5	1.86	14	1.0	3.0
01...	1026	28.5	18.5	1.86	14	1.0	3.0
01...	1027	28.5	23.5	1.86	14	1.0	3.0

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

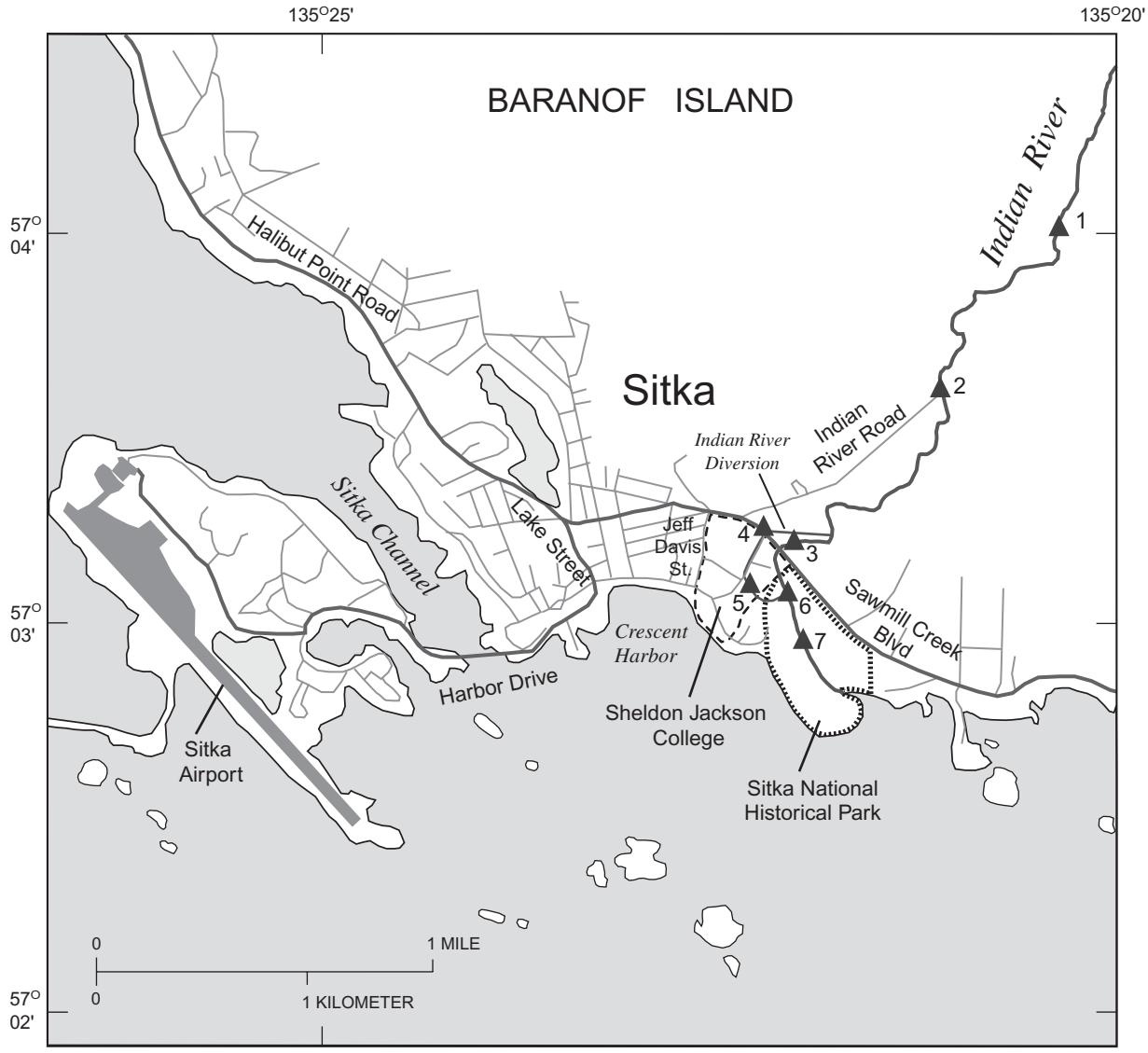
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.5	9.0	9.0	5.5	4.5	5.0	0.5	0.5	0.5	3.0	2.5	2.5
2	9.5	8.5	9.0	5.5	4.5	5.0	0.5	0.5	0.5	3.0	2.5	3.0
3	9.5	9.0	9.0	5.5	4.5	5.0	0.5	0.5	0.5	3.0	2.5	3.0
4	9.0	8.0	8.5	5.0	4.5	4.5	0.5	0.5	0.5	2.5	2.0	2.5
5	9.0	7.5	8.5	4.5	3.0	4.0	0.5	0.5	0.5	3.5	2.5	3.0
6	9.0	8.5	8.5	4.0	3.0	3.5	0.5	0.5	0.5	3.5	3.0	3.5
7	8.5	7.5	8.0	4.0	3.0	3.5	0.5	0.0	0.5	3.5	3.0	3.5
8	8.5	8.0	8.5	4.5	4.0	4.0	2.0	0.5	1.0	3.5	3.0	3.5
9	9.0	8.0	8.5	4.5	4.0	4.0	2.0	1.5	2.0	4.0	3.0	3.5
10	8.5	7.5	8.0	4.5	4.0	4.5	2.5	2.0	2.0	3.5	3.0	3.5
11	8.0	7.0	7.5	4.5	4.0	4.5	2.5	2.5	2.5	3.5	1.0	3.0
12	8.0	7.5	7.5	4.5	4.0	4.5	2.5	2.0	2.5	2.5	1.0	2.0
13	7.5	7.0	7.5	4.5	4.5	4.5	2.5	2.0	2.0	3.0	2.5	2.5
14	7.0	6.0	6.5	5.0	4.5	4.5	2.0	1.5	2.0	3.0	2.5	2.5
15	7.5	6.5	7.0	4.5	4.5	4.5	1.5	1.0	1.5	3.0	2.5	2.5
16	7.5	6.5	7.0	4.5	3.5	4.0	1.5	0.5	1.0	2.5	2.5	2.5
17	7.5	6.5	7.0	4.5	3.5	4.0	1.0	0.5	0.5	2.5	2.5	2.5
18	8.0	7.0	7.5	4.0	3.5	4.0	1.0	0.5	0.5	3.0	2.5	2.5
19	7.0	6.5	7.0	5.0	4.0	4.5	0.5	0.5	0.5	3.0	2.5	2.5
20	7.0	6.0	6.5	5.0	4.5	5.0	0.5	0.5	0.5	2.5	2.5	2.5
21	7.0	6.0	6.5	5.0	5.0	5.0	1.0	0.5	0.5	2.5	2.0	2.5
22	6.5	6.0	6.0	5.0	4.5	5.0	1.0	1.0	1.0	2.0	1.0	1.5
23	6.0	5.5	6.0	4.5	4.0	4.5	2.0	0.5	1.0	1.5	0.5	1.0
24	6.0	5.0	5.5	4.5	3.5	4.0	2.5	1.5	2.0	2.0	1.0	1.5
25	5.5	4.5	5.0	3.5	2.5	3.0	3.0	2.5	2.5	1.5	0.5	1.0
26	5.0	4.0	5.0	2.5	0.5	1.5	2.5	2.5	2.5	0.5	0.5	0.5
27	5.0	5.0	5.0	0.5	0.5	0.5	3.0	2.5	2.5	0.5	0.5	0.5
28	5.0	4.0	4.5	0.5	0.5	0.5	3.0	2.5	3.0	0.5	0.5	0.5
29	5.5	5.0	5.0	0.5	0.5	0.5	3.0	2.5	2.5	0.5	0.5	0.5
30	5.5	4.5	5.0	0.5	0.5	0.5	3.0	2.5	2.5	1.0	0.5	1.0
31	6.0	5.5	5.5	---	---	---	3.0	2.0	2.5	1.5	0.5	1.0
MONTH	9.5	4.0	7.0	5.5	0.5	3.7	3.0	0.0	1.4	4.0	0.5	2.2

15085100 OLD TOM CREEK NEAR KASAAN—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	1.0	1.0	1.5	1.5	1.5	2.5	1.0	1.5	5.5	3.0	4.0
2	1.0	0.5	0.5	2.0	1.5	2.0	3.0	1.0	1.5	5.0	3.0	4.0
3	2.0	1.0	1.5	2.0	1.5	2.0	3.0	0.5	1.5	4.0	3.0	3.5
4	2.5	1.0	2.0	1.5	1.5	1.5	2.5	1.0	1.5	4.5	3.5	4.0
5	2.0	2.0	2.0	1.5	1.0	1.0	2.0	1.0	1.5	5.5	2.5	3.5
6	2.0	1.5	1.5	1.0	0.5	1.0	3.0	1.0	2.0	5.5	2.0	3.5
7	1.5	1.0	1.0	0.5	0.5	0.5	3.0	1.5	2.0	5.0	2.5	3.5
8	1.5	0.5	1.0	0.5	0.5	0.5	3.0	1.5	2.0	4.5	3.5	4.0
9	2.0	1.0	1.5	0.5	0.0	0.5	3.5	1.5	2.5	5.5	3.0	4.0
10	2.0	2.0	2.0	0.5	0.5	0.5	3.5	2.0	3.0	5.0	4.0	4.5
11	2.0	2.0	2.0	0.5	0.5	0.5	3.0	1.5	2.5	5.0	4.0	4.5
12	2.0	2.0	2.0	0.5	0.5	0.5	3.5	2.0	2.5	4.5	4.0	4.5
13	2.0	2.0	2.0	0.5	0.0	0.5	2.5	2.0	2.0	5.0	4.0	4.5
14	2.0	2.0	2.0	0.5	0.5	0.5	3.0	2.0	2.5	5.0	3.5	4.0
15	2.5	2.0	2.0	0.5	0.5	0.5	3.5	2.0	2.5	5.0	4.0	4.5
16	2.5	2.0	2.0	0.5	0.5	0.5	4.0	2.0	3.0	5.5	4.5	5.0
17	2.0	2.0	2.0	0.5	0.5	0.5	4.5	1.5	2.5	5.5	4.5	5.0
18	2.0	2.0	2.0	0.5	0.5	0.5	4.0	2.0	3.0	6.5	4.5	5.5
19	2.0	2.0	2.0	0.5	0.5	0.5	4.5	2.5	3.5	7.0	4.5	5.5
20	2.0	1.5	1.5	0.5	0.5	0.5	4.5	2.5	3.0	6.5	5.0	5.5
21	1.5	1.0	1.5	0.5	0.5	0.5	4.5	3.0	3.5	5.5	5.0	5.5
22	1.5	1.0	1.0	0.5	0.5	0.5	4.5	2.0	3.0	5.5	5.0	5.5
23	1.0	0.5	1.0	1.0	0.5	0.5	5.0	2.5	3.5	5.5	5.0	5.5
24	1.0	0.5	0.5	1.0	0.5	1.0	4.0	2.5	3.5	7.0	5.0	5.5
25	1.0	0.5	0.5	1.0	0.0	0.5	6.0	3.0	4.0	7.0	5.5	6.5
26	1.0	0.5	1.0	0.5	0.0	0.5	5.0	2.5	3.5	6.5	6.0	6.5
27	1.0	1.0	1.0	1.5	0.5	1.0	6.0	2.5	4.0	6.5	5.5	6.0
28	1.5	1.0	1.5	2.0	1.0	1.5	6.0	2.5	4.0	7.0	6.0	6.5
29	---	---	---	2.0	1.5	1.5	6.0	3.0	4.0	7.0	6.5	6.5
30	---	---	---	1.5	1.5	1.5	6.0	3.0	4.0	7.0	6.5	7.0
31	---	---	---	1.5	1.5	1.5	---	---	---	7.0	7.0	7.0
MONTH	2.5	0.5	1.5	2.0	0.0	0.9	6.0	0.5	2.8	7.0	2.0	5.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.0	7.0	7.0	11.0	10.5	10.5	12.5	12.0	12.0	13.0	12.0	12.5
2	8.0	7.0	7.5	11.0	10.5	10.5	12.5	12.0	12.0	12.5	11.5	12.0
3	8.0	7.5	7.5	11.0	10.0	10.5	12.0	11.0	11.5	12.5	11.5	12.0
4	8.0	7.5	7.5	10.5	10.0	10.5	13.0	11.5	12.0	12.0	11.0	11.5
5	8.0	7.5	7.5	11.0	10.5	10.5	13.0	11.5	12.0	12.0	10.5	11.5
6	8.0	7.0	7.5	11.0	10.5	11.0	12.5	12.0	12.0	11.5	10.5	11.0
7	7.5	7.5	7.5	11.5	10.0	11.0	12.5	12.0	12.0	11.5	11.0	11.0
8	8.5	7.0	7.5	12.0	11.0	11.5	12.0	12.0	12.0	11.5	11.0	11.0
9	9.0	8.0	8.5	12.5	11.5	12.0	12.0	11.5	12.0	11.0	10.0	10.5
10	9.0	8.5	9.0	12.5	12.0	12.5	12.5	12.0	12.0	12.0	11.0	11.5
11	9.5	8.0	8.5	12.5	12.0	12.0	12.0	12.0	12.0	11.5	10.5	11.0
12	10.0	8.5	9.5	12.5	11.5	12.0	13.0	12.0	12.5	11.5	10.5	11.0
13	11.0	9.5	10.0	12.5	11.5	12.0	12.5	12.5	12.5	11.0	9.5	10.0
14	12.0	10.5	11.0	11.5	11.0	11.0	12.5	12.0	12.0	10.5	9.5	10.0
15	12.0	11.5	12.0	11.0	11.0	11.0	12.5	11.5	12.0	10.5	10.0	10.5
16	12.0	11.5	12.0	11.0	11.0	11.0	12.0	11.0	11.5	10.5	9.5	10.0
17	12.0	11.5	11.5	11.0	11.0	11.0	13.0	12.0	12.0	11.0	10.5	11.0
18	12.5	11.5	12.0	12.0	11.0	11.5	13.0	12.0	12.5	10.5	9.5	10.0
19	12.0	11.5	11.5	12.0	11.5	11.5	12.5	11.5	12.0	10.5	9.5	10.0
20	11.5	11.0	11.5	12.5	11.5	12.0	13.0	11.5	12.0	10.0	9.5	10.0
21	12.0	10.5	11.0	12.0	12.0	12.0	13.5	12.0	12.5	10.5	9.5	10.0
22	11.5	11.5	11.5	12.5	12.0	12.0	12.5	12.5	12.5	10.5	10.5	10.5
23	12.0	11.0	11.5	13.5	12.0	12.5	13.0	12.5	12.5	11.0	10.5	11.0
24	11.5	11.0	11.0	13.5	13.0	13.0	13.5	13.0	13.0	11.0	10.5	10.5
25	11.0	10.5	10.5	13.0	12.5	12.5	13.0	12.5	12.5	11.0	10.0	10.5
26	10.5	10.5	10.5	13.0	12.0	12.5	13.0	12.0	12.5	11.0	10.5	10.5
27	11.0	10.5	11.0	13.0	12.0	12.5	13.0	12.5	13.0	11.0	10.5	10.5
28	11.5	10.5	11.0	12.5	12.0	12.0	13.0	12.5	13.0	10.5	9.5	10.0
29	11.5	11.0	11.0	12.0	11.5	11.5	13.0	12.5	12.5	9.5	9.0	9.5
30	11.0	10.5	11.0	12.0	11.0	11.5	12.5	12.5	12.5	9.0	7.5	8.5
31	---	---	---	12.0	11.5	12.0	12.5	12.0	12.5	---	---	---
MONTH	12.5	7.0	9.9	13.5	10.0	11.6	13.5	11.0	12.2	13.0	7.5	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			
* 3	15087700	Indian River at Sitka	6	15087740	Indian River Diversion Return Flow at Mouth at Sitka
4	15087730	Indian River Diversion to Sheldon Jackson College at Sawmill Cr Rd at Sitka	7	15087750	Indian River at Mouth 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

WATER-DISCHARGE RECORDS

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 17	1630	2200	12.17	Aug 21	0715	1780	11.81
Aug 12	1800	*4840	*14.23				

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	120	102	39	84	36	48	16	92	124	58	83	152
2	222	128	38	80	35	196	16	77	123	55	75	131
3	154	126	38	88	33	131	16	65	116	51	67	94
4	144	90	37	75	36	68	16	57	149	57	61	75
5	121	77	37	68	33	53	16	53	144	72	56	64
6	132	67	36	125	28	47	15	51	113	57	52	56
7	134	64	59	132	25	44	15	51	122	52	164	80
8	89	93	58	140	24	41	15	49	111	51	246	62
9	116	134	56	101	28	39	16	51	127	49	184	57
10	230	98	63	95	65	38	16	78	160	55	228	63
11	182	79	52	78	170	36	16	99	120	55	138	91
12	350	66	72	71	241	33	17	99	101	47	978	88
13	179	60	55	67	81	31	19	117	105	51	407	60
14	134	70	47	64	264	28	20	100	123	95	159	49
15	154	81	43	89	290	26	20	87	118	60	117	47
16	168	93	40	104	163	24	20	111	98	56	97	51
17	545	81	39	73	98	24	20	118	93	62	83	75
18	624	65	37	147	81	22	22	105	91	58	73	105
19	406	61	35	153	72	21	26	129	82	51	65	140
20	186	72	33	92	64	20	78	172	77	46	61	117
21	159	74	31	75	59	19	67	175	72	54	559	156
22	134	139	31	65	53	19	44	151	72	65	196	108
23	121	94	52	61	47	19	38	139	83	60	261	93
24	133	70	193	55	44	19	33	122	83	85	111	83
25	103	60	123	49	42	19	33	136	80	101	94	78
26	86	53	115	44	43	21	35	150	68	83	89	76
27	78	48	102	40	50	22	37	136	62	141	103	161
28	99	44	98	40	42	20	42	171	64	238	185	125
29	120	41	110	42	---	19	53	153	63	199	121	111
30	87	40	95	43	---	19	74	140	60	119	111	79
31	73	---	97	41	---	18	---	122	---	95	155	---
TOTAL	5583	2370	1961	2481	2247	1184	871	3356	3004	2378	5379	2727
MEAN	180.1	79.00	63.26	80.03	80.25	38.19	29.03	108.3	100.1	76.71	173.5	90.90
MAX	624	139	193	153	290	196	78	175	160	238	978	161
MIN	73	40	31	40	24	18	15	49	60	46	52	47
AC-FT	11070	4700	3890	4920	4460	2350	1730	6660	5960	4720	10670	5410
CFSM	17.8	7.82	6.26	7.92	7.95	3.78	2.87	10.7	9.91	7.60	17.2	9.00
IN.	20.56	8.73	7.22	9.14	8.28	4.36	3.21	12.36	11.06	8.76	19.81	10.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY)#

MEAN	189.3	101.8	101.2	99.84	81.49	62.66	67.06	108.1	91.25	64.82	91.39	169.5
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	53.3	28.8	20.6	30.0	52.8
(WY)	1985	1999	1984	1988	1999	1989	2002	1981	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1980 - 2002#	
ANNUAL TOTAL	30850		33541			
ANNUAL MEAN	84.52		91.89		102.7	
HIGHEST ANNUAL MEAN					123	1987
LOWEST ANNUAL MEAN					82.7	2001
HIGHEST DAILY MEAN	624	Oct 18	978	Aug 12	2000	Oct 12 1982
LOWEST DAILY MEAN	12	Aug 23	a15	Apr 6	8.6	Jan 18 1989
ANNUAL SEVEN-DAY MINIMUM	17	Aug 20	16	Apr 2	10	Jan 13 1989
MAXIMUM PEAK FLOW			b4840	Aug 12	c5710	Sep 4 1990
MAXIMUM PEAK STAGE			14.23	Aug 12	d13.51	Sep 4 1990
INSTANTANEOUS LOW FLOW			f15	Apr 4	8.2	Jan 19 1989
ANNUAL RUNOFF (AC-FT)	61190		66530		74370	
ANNUAL RUNOFF (CFSM)	8.37		9.10		10.2	
ANNUAL RUNOFF (INCHES)	113.63		123.54		138.09	
10 PERCENT EXCEEDS	134		157		187	
50 PERCENT EXCEEDS	71		73		69	
90 PERCENT EXCEEDS	36		26		29	

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

15087700 INDIAN RIVER NEAR SITKA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1983, 2001 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 2001 to September 2002 (discontinued).
WATER TEMPERATURE: May 2001 to September 2002 (discontinued).

INSTRUMENTATION.--Electronic water temperature and specific conductance recorder since May 16, 2001, recorder set to 15 minute recording interval.

REMARKS.--
SPECIFIC CONDUCTANCE: No record May 16 to July 24, 2001 due to program error. Records represent specific conductance at sensor within 3 us/cm. No variation was found within the cross sections measured on five occasions during 2002 water year. No variation was found between the mean stream specific conductance and specific conductance at the sensor.
WATER TEMPERATURE: Probe installed on May 16 2001. Records represent water temperature at sensor within 0.5°C. No variation was found within the cross sections measured five times during 2002 water year. No variation was found between the mean stream temperature and temperature at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 54 us/cm, February 7, 2002; minimum recorded, 15 us/cm, August 12, 2002 .
WATER TEMPERATURE: Maximum recorded, 10.5°C, August 12, 2002; minimum recorded, 0.5°C February 11, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 54 us/cm, February 7; minimum recorded, 15 us/cm, August 12.
WATER TEMPERATURE: Maximum recorded, 10.5°C, August 12, minimum recorded, 0.5°C February 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB								
01...	0816	35.0	48	7.2	3.5	750	12.2	93
01...	0817	30.0	48	7.2	3.5	750	12.1	93
01...	0818	25.0	48	7.1	3.5	750	12.2	93
01...	0819	20.0	48	7.0	3.5	750	12.2	93
01...	0820	15.0	48	7.0	3.5	750	12.2	93
01...	0821	10.0	48	7.0	3.5	750	12.1	93
01...	0822	5.00	48	7.0	3.5	750	12.1	93

Date	Time	Medium code	Sample type	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SAMPLING METHOD, CODES (82398)	STREAM WIDTH (FT) (00004)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)
OCT													
02...	1000	9	9	9.26	270	10	49.6	762	11.9	99	7.7	36	7.5
NOV													
28...	1000	9	9	7.92	41	20	41.0	--	--	--	6.5	53	--
FEB													
01...	0845	9	9	7.85	38	10	37.6	750	12.2	93	7.1	48	3.0
APR													
06...	0900	9	9	7.61	16	10	25.6	747	12.1	88	7.1	51	2.0
MAY													
30...	0845	9	9	8.74	143	10	49.4	753	12.2	95	7.3	38	--
30...	1535	D	9	8.62	129	280	--	--	--	--	--	40	9.0
JUN													
15...	1305	D	9	8.52	114	280	--	--	--	--	--	--	--
SEP													
05...	0800	9	9	8.05	73	10	37.0	758	11.3	92	7.5	42	--
18...	0930	D	9	8.22	88	280	--	--	--	--	--	--	--
20...	1200	9	9	8.34	115	10	46.0	760	11.5	96	7.1	38	9.5

15087700 INDIAN RIVER NEAR SITKA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
OCT													
02...	7.5	13	4.57	.481	.11	1.75	12	15	2.42	<.1	2.93	1.4	26
NOV													
28...	--	--	--	--	--	--	16	20	--	--	--	--	--
FEB													
01...	3.5	17	5.64	.614	.13	2.14	17	20	4.04	<.1	3.62	1.8	28
APR													
06...	1.5	19	6.26	.721	.12	2.30	14	17	3.89	E.1	4.11	1.9	34
MAY													
30...	4.5	13	4.54	.470	.14	1.84	13	15	3.13	<.1	2.72	1.4	22
30...	4.5	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	6.5	16	5.31	.550	.12	1.93	--	--	2.28	<.1	3.67	1.8	29
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	7.5	14	4.73	.493	.18	1.88	13	16	2.12	<.1	3.18	1.5	22

Date	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN,PAR TICULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INOR-GANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT													
02...	21	<.015	E.07	.15	.025	<.002	--	E.003	E.006	E.003	--	--	--
NOV													
28...	--	<.015	<.10	<.10	.110	<.002	<.02	<.004	<.007	<.004	<.1	<.1	.6
FEB													
01...	28	<.015	<.10	<.10	.116	<.002	<.02	<.004	<.007	<.004	<.1	<.1	.9
APR													
06...	28	<.015	<.10	<.10	.147	<.002	<.02	<.004	<.007	E.003	<.1	<.1	.7
MAY													
30...	22	<.015	<.10	<.10	.103	<.002	<.02	<.004	<.007	<.004	<.1	<.1	1.3
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	26	--	--	E.06	--	--	<.02	--	--	.004	<.1	<.1	1.0
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	22	<.015	<.10	E.07	.073	<.002	<.02	E.003	<.007	E.002	<.1	<.1	2.0

Date	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PHEO-PHYTIN A, PERI-PHYTON (MG/M2) (62359)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2) (70957)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SAMPLER TYPE (CODE) (84164)
OCT										
02...	--	--	--	--	--	43	E1.3	3.0	2.2	3044
NOV										
28...	<.1	--	--	--	--	--	--	1.0	.11	3044
FEB										
01...	<.1	--	--	--	--	14	E1.2	1.0	.10	3044
APR										
06...	<.1	--	--	--	--	<10	E1.2	<1.0	--	--
MAY										
30...	<.1	--	--	--	--	13	<2.0	1.0	.39	3044
30...	--	41	42.20	.5	1.6	--	--	--	--	--
JUN										
15...	--	41	43.00	.7	3.2	--	--	--	--	--
SEP										
05...	<.1	--	--	--	--	E10	E1.0	--	--	3044
18...	--	43	43.90	1.9	6.3	--	--	--	--	--
20...	<.1	--	--	--	--	32	E2.1	3.0	.93	3044

15087700 INDIAN RIVER NEAR SITKA—Continued

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	40	36	39	48	39	44	52	52	52	48	47	47
2	41	32	38	44	37	42	52	52	52	48	47	48
3	45	41	43	47	42	44	52	52	52	47	46	46
4	46	45	46	48	47	47	52	52	52	49	47	48
5	47	45	47	49	48	48	52	51	52	49	48	48
6	45	41	43	49	49	49	52	51	52	48	38	42
7	47	45	46	49	48	49	52	35	43	43	40	42
8	47	44	45	49	45	47	47	37	43	45	38	41
9	44	40	43	47	42	45	48	43	46	46	40	45
10	40	36	38	48	44	47	45	43	44	47	41	45
11	43	36	41	49	47	48	48	40	47	49	47	48
12	44	33	40	50	49	49	47	39	43	49	49	49
13	45	44	45	50	50	50	50	47	48	49	48	49
14	46	45	46	50	45	49	50	50	50	49	49	49
15	47	45	46	48	45	47	51	50	51	49	39	46
16	46	42	45	46	43	45	51	51	51	47	40	44
17	46	34	42	48	43	46	51	51	51	48	45	47
18	39	35	37	49	48	49	52	51	52	45	37	41
19	42	36	39	50	49	50	52	51	52	45	37	42
20	45	42	44	50	49	49	52	52	52	48	45	47
21	45	42	44	50	49	50	52	51	52	50	48	49
22	46	44	45	49	35	44	52	51	52	50	50	50
23	46	45	46	48	43	47	51	40	48	51	50	50
24	45	43	44	49	48	49	43	37	41	50	50	50
25	47	44	46	50	49	50	45	43	45	51	50	51
26	48	47	47	51	50	51	45	44	45	51	51	51
27	48	47	48	51	51	51	46	44	45	52	51	51
28	48	39	44	52	51	51	47	45	46	51	51	51
29	44	40	42	52	52	52	46	44	45	51	50	50
30	47	44	46	52	52	52	47	46	47	50	48	49
31	48	47	47	---	---	---	47	46	46	49	48	49
MONTH	48	32	44	52	35	48	52	35	48	52	37	47

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	50	49	50	48	44	46	51	51	51	47	45	46
2	50	49	50	45	26	36	52	51	51	48	47	47
3	50	49	50	44	30	39	52	51	52	50	48	49
4	50	48	49	47	44	46	52	52	52	50	49	50
5	50	48	49	48	47	48	52	52	52	50	50	50
6	50	50	50	49	48	48	52	52	52	51	50	50
7	54	50	51	50	49	49	52	52	52	51	51	51
8	53	51	52	50	49	49	52	52	52	51	51	51
9	52	43	50	50	50	50	52	52	52	51	50	51
10	47	40	43	50	50	50	53	52	52	50	45	47
11	48	31	41	50	50	50	53	52	52	46	44	45
12	42	29	34	50	50	50	53	52	52	46	44	45
13	45	37	44	50	50	50	53	51	52	45	44	45
14	39	29	33	50	50	50	52	51	51	47	45	46
15	41	28	33	50	50	50	52	51	52	47	46	47
16	44	32	40	50	50	50	52	52	52	47	43	45
17	46	44	46	51	50	50	52	52	52	46	44	45
18	48	46	47	51	50	50	53	52	52	46	45	46
19	48	47	48	51	50	50	53	50	52	45	41	44
20	48	48	48	51	51	51	50	36	43	42	39	41
21	49	48	49	52	51	51	45	41	43	41	39	40
22	49	49	49	51	51	51	48	44	46	42	41	42
23	50	49	49	51	51	51	49	47	48	44	42	42
24	50	50	50	51	51	51	50	49	49	44	43	44
25	50	49	50	51	51	51	50	49	50	44	41	42
26	50	46	48	51	50	51	50	50	50	42	40	41
27	47	45	46	50	50	50	51	49	50	43	39	42
28	48	46	48	51	50	50	50	48	49	39	38	38
29	---	---	---	51	51	51	49	48	49	40	38	39
30	---	---	---	51	50	51	49	46	48	41	39	40
31	---	---	---	51	51	51	---	---	---	42	41	42
MONTH	54	28	46	52	26	49	53	36	50	51	38	45

15087700 INDIAN RIVER NEAR SITKA—Continued

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	41	41	41	43	42	42	45	44	44	37	34	35
2	41	41	41	45	42	43	45	45	45	39	34	37
3	42	40	41	46	43	45	46	45	46	41	39	40
4	40	37	39	44	41	43	46	46	46	42	41	41
5	40	37	39	42	41	41	47	46	46	43	42	42
6	43	40	42	43	42	42	47	46	47	43	42	43
7	43	39	41	44	43	43	47	33	38	42	39	40
8	42	41	42	43	43	43	36	31	34	42	41	41
9	42	38	40	44	43	44	39	33	36	42	41	42
10	39	37	38	44	42	43	40	31	36	42	40	41
11	42	39	41	43	42	43	42	35	40	41	35	38
12	43	42	43	44	43	44	39	15	31	40	36	38
13	43	40	42	45	38	44	34	23	30	42	40	41
14	41	38	39	41	36	39	38	34	36	42	42	42
15	40	38	39	42	41	42	40	38	39	43	42	42
16	42	40	41	43	42	42	41	40	41	43	41	42
17	42	41	42	43	40	42	42	41	42	42	37	40
18	42	41	41	44	41	43	42	42	42	39	34	38
19	43	42	42	44	43	44	43	42	42	38	33	36
20	43	43	43	45	44	45	43	42	43	39	35	38
21	44	43	43	45	42	44	42	19	28	39	32	36
22	44	42	43	43	42	43	36	24	33	40	38	39
23	42	40	41	43	43	43	36	23	32	41	40	40
24	41	39	40	44	38	41	38	36	38	42	41	41
25	41	39	40	40	39	40	40	38	39	42	41	42
26	42	41	42	43	40	41	40	39	40	42	41	42
27	43	42	42	43	34	38	40	34	38	41	31	36
28	42	41	42	36	33	35	35	30	33	40	36	38
29	42	41	42	40	35	37	39	35	37	41	36	39
30	42	42	42	43	40	42	39	36	38	42	41	42
31	---	---	---	44	43	44	37	32	35	---	---	---
MONTH	44	37	41	46	33	42	47	15	39	43	31	40

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

15087700 INDIAN RIVER NEAR SITKA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	3.5	3.5	3.5	2.5	3.0	3.5	2.5	3.0	3.5	3.0	3.5
2	3.5	3.0	3.5	2.5	1.0	1.5	4.0	2.0	2.5	4.5	3.0	3.5
3	3.5	3.5	3.5	3.0	1.5	2.5	4.0	2.0	2.5	4.0	2.5	3.5
4	3.5	2.5	3.0	3.0	2.5	2.5	3.5	2.0	2.5	4.5	3.0	3.5
5	3.5	3.0	3.5	3.0	2.5	2.5	4.0	2.5	3.0	4.5	3.0	3.5
6	3.5	3.0	3.0	3.0	2.5	2.5	4.0	2.5	3.0	4.5	3.0	3.5
7	3.0	2.5	3.0	3.0	2.5	2.5	4.0	2.0	2.5	4.0	3.5	3.5
8	3.0	2.5	3.0	3.0	2.5	2.5	4.0	2.0	2.5	5.0	3.5	4.0
9	3.5	2.0	3.0	3.0	2.5	2.5	4.0	2.0	3.0	4.0	3.5	4.0
10	2.0	1.5	2.0	3.5	3.0	3.0	4.0	2.5	3.0	4.0	3.5	3.5
11	2.5	0.5	1.5	3.5	3.0	3.0	4.0	2.0	3.0	4.0	3.5	3.5
12	2.5	1.0	1.5	3.5	3.0	3.5	3.5	2.5	3.0	4.0	3.5	3.5
13	3.0	2.0	2.5	3.5	2.5	3.0	4.0	2.5	3.0	4.0	3.5	3.5
14	2.5	1.5	2.0	4.0	2.5	3.0	4.0	2.5	3.0	4.0	3.0	3.5
15	3.0	1.5	2.0	3.5	2.5	2.5	3.5	2.5	3.0	4.5	3.5	4.0
16	3.0	1.5	2.5	3.5	2.5	2.5	4.0	2.0	3.0	5.0	3.5	4.5
17	3.5	3.0	3.5	3.0	2.0	2.5	4.0	2.0	2.5	4.0	3.5	4.0
18	4.0	3.5	3.5	3.5	2.5	2.5	4.0	2.0	3.0	5.0	4.0	4.5
19	4.0	3.0	4.0	3.5	2.0	2.5	3.5	2.5	3.0	5.5	3.5	4.5
20	4.0	3.0	3.5	3.5	2.0	2.5	2.5	1.5	2.0	5.5	4.0	4.5
21	4.0	3.5	3.5	3.5	2.0	2.5	2.5	1.5	2.0	4.5	4.0	4.5
22	3.5	3.0	3.5	4.0	2.5	3.0	3.5	1.5	2.5	4.5	4.0	4.0
23	3.5	3.0	3.0	4.5	3.0	3.5	3.5	2.5	3.0	4.5	4.0	4.0
24	3.5	3.0	3.0	4.0	2.5	3.0	4.0	2.5	3.0	5.5	4.0	4.5
25	3.5	3.5	3.5	3.5	2.5	3.0	4.5	2.5	3.0	5.5	4.0	4.5
26	3.5	2.5	3.5	3.5	2.5	3.0	4.0	2.5	3.0	5.0	4.5	4.5
27	3.5	2.5	3.0	3.5	2.0	2.5	4.0	3.0	3.5	5.0	4.5	4.5
28	3.5	3.0	3.5	3.0	2.0	2.5	5.0	3.0	3.5	5.0	4.5	5.0
29	---	---	---	3.5	2.5	3.0	4.5	3.0	3.5	5.0	4.5	4.5
30	---	---	---	3.5	2.5	3.0	4.5	3.0	3.5	5.0	4.5	4.5
31	---	---	---	3.5	2.5	3.0	---	---	---	5.0	4.5	4.5
MONTH	4.0	0.5	3.0	4.5	1.0	2.7	5.0	1.5	2.9	5.5	2.5	4.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.0	4.5	4.5	6.5	6.0	6.5	7.0	6.0	6.5	8.5	8.0	8.0
2	5.0	4.5	5.0	6.5	6.0	6.0	7.0	6.0	6.5	8.0	7.5	8.0
3	5.5	4.5	5.0	6.0	6.0	6.0	7.0	5.5	6.0	7.5	7.0	7.5
4	5.0	4.5	5.0	6.5	6.0	6.0	7.0	5.5	6.0	7.5	6.5	7.0
5	5.0	4.5	5.0	6.5	6.0	6.0	7.0	6.0	6.5	7.0	6.5	7.0
6	5.0	4.0	4.5	6.5	6.0	6.5	6.5	6.0	6.5	7.0	6.5	7.0
7	5.0	4.5	5.0	7.5	5.5	6.5	9.5	6.0	8.0	8.0	7.0	7.5
8	5.5	4.5	5.0	7.5	6.0	6.5	9.0	8.0	8.5	7.5	7.0	7.5
9	5.0	5.0	5.0	7.5	6.5	7.0	8.0	7.0	7.5	7.5	7.0	7.5
10	5.5	5.0	5.0	7.5	6.5	7.0	8.5	7.0	8.0	8.0	7.0	7.5
11	5.0	4.5	5.0	7.0	6.5	6.5	8.0	7.0	7.0	8.0	7.5	8.0
12	6.0	4.5	5.0	7.0	6.0	6.5	10.5	7.5	8.5	8.0	7.5	8.0
13	6.5	5.0	5.5	7.5	6.0	6.5	9.5	7.5	8.5	7.5	7.0	7.0
14	7.0	5.0	6.0	7.5	6.5	7.0	7.5	7.0	7.5	7.0	6.5	7.0
15	6.0	5.5	5.5	7.5	6.5	7.0	7.5	6.5	7.0	7.5	7.0	7.0
16	6.0	5.0	5.5	7.5	7.0	7.0	6.5	6.5	6.5	7.5	7.0	7.0
17	7.0	5.5	6.0	7.5	6.5	7.0	6.5	6.0	6.5	8.0	7.0	7.5
18	6.0	5.5	5.5	7.0	7.0	7.0	6.5	6.5	6.5	8.0	7.5	7.5
19	5.5	5.5	5.5	8.0	6.5	7.0	6.5	6.0	6.5	8.0	7.5	7.5
20	5.5	5.0	5.5	7.5	6.5	7.0	7.0	6.5	6.5	8.0	7.0	7.5
21	6.5	5.0	5.5	7.5	6.5	7.0	10.0	7.0	9.0	8.0	7.0	7.5
22	6.5	5.5	6.0	7.5	7.5	7.5	10.0	7.5	8.0	7.5	7.0	7.5
23	6.5	6.0	6.0	7.5	7.0	7.5	10.0	7.5	8.5	7.5	7.0	7.5
24	6.5	6.0	6.0	8.5	7.5	8.0	7.5	7.0	7.0	7.5	7.0	7.0
25	7.0	6.0	6.0	8.0	7.5	8.0	7.5	7.0	7.0	7.5	7.0	7.0
26	6.0	6.0	6.0	7.5	7.0	7.0	7.5	7.0	7.5	7.5	7.0	7.0
27	6.5	5.5	6.0	8.0	7.0	7.5	9.0	7.5	8.0	9.0	7.5	8.5
28	7.0	6.0	6.5	7.5	7.0	7.5	9.0	8.0	9.0	7.5	7.5	7.5
29	7.0	6.0	6.5	7.5	6.5	7.0	8.0	7.5	8.0	7.5	6.5	7.0
30	7.0	6.0	6.5	7.0	6.0	6.5	8.0	7.5	7.5	6.5	6.0	6.5
31	---	---	---	7.0	6.0	6.5	8.5	8.0	8.0	---	---	---
MONTH	7.0	4.0	5.5	8.5	5.5	6.9	10.5	5.5	7.4	9.0	6.0	7.4

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

WATER-DISCHARGE RECORDS

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. No estimated daily discharge.

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	156	77	20	56	20	28	9.9	59	103	37	61	147
2	282	123	19	52	19	270	9.8	47	101	35	53	123
3	100	108	19	59	19	143	9.6	34	93	33	46	71
4	67	71	18	48	21	43	9.6	27	133	37	41	53
5	54	55	18	42	19	29	9.4	25	132	50	37	44
6	94	44	17	96	16	24	9.2	23	92	38	33	36
7	61	41	74	104	15	22	9.2	24	106	34	176	59
8	61	71	70	122	15	20	9.2	23	89	33	308	44
9	85	129	65	73	16	19	9.2	25	109	32	192	38
10	241	83	85	71	52	18	9.3	51	152	36	244	43
11	156	61	49	51	240	18	9.3	75	102	36	127	76
12	452	46	86	45	418	16	9.3	74	79	31	1240	74
13	157	40	37	40	61	15	9.7	95	81	35	594	43
14	103	48	28	38	383	15	10	74	102	87	167	31
15	80	61	24	63	432	14	10	60	96	43	102	28
16	143	80	23	83	176	13	10	85	75	38	86	33
17	806	68	21	46	68	13	10	95	68	44	79	56
18	1060	46	20	123	51	12	10	79	66	42	73	88
19	606	39	20	140	42	12	11	105	58	34	67	147
20	163	47	18	65	35	12	57	153	54	31	52	105
21	133	49	18	46	30	12	41	157	50	37	828	177
22	104	130	19	37	26	12	20	133	50	49	190	94
23	89	76	38	34	23	11	15	122	59	44	384	76
24	113	48	211	30	21	11	14	100	57	71	94	65
25	75	38	105	26	21	11	14	114	55	87	75	62
26	58	32	92	23	23	12	14	130	46	66	69	59
27	53	29	79	21	30	12	15	113	41	126	84	209
28	79	26	70	21	23	12	17	151	43	250	215	120
29	111	23	83	23	---	11	23	135	42	206	109	103
30	67	21	67	24	---	11	41	120	39	105	89	62
31	50	---	69	26	---	11	---	99	---	74	163	---
TOTAL	5859	1810	1582	1728	2315	882	454.7	2607	2373	1901	6078	2366
MEAN	189	60.3	51.0	55.7	82.7	28.5	15.2	84.1	79.1	61.3	196	78.9
MAX	1060	130	211	140	432	270	57	157	152	250	1240	209
MIN	50	21	17	21	15	11	9.2	23	39	31	33	28
MED	103	49	37	46	24	13	10	85	77	38	94	64
AC-FT	11620	3590	3140	3430	4590	1750	902	5170	4710	3770	12060	4690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

MEAN	200	66.9	110	77.4	52.4	54.5	55.3	94.0	91.1	60.8	81.1	132
MAX	248	87.1	240	125	82.7	107	108	139	130	67.7	196	209
(WY)	1999	2001	2000	1999	2002	2001	1999	1999	1999	2000	2002	2000
MIN	141	38.0	51.0	55.7	23.6	28.2	15.2	72.3	74.7	51.6	22.0	78.9
(WY)	2001	1999	2002	2002	1999	1999	2002	2000	2001	2001	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	28626		29955.7			
ANNUAL MEAN	78.4		82.1		90.0	
HIGHEST ANNUAL MEAN					103	2000
LOWEST ANNUAL MEAN					79.1	2001
HIGHEST DAILY MEAN	1060	Oct 18	1240	Aug 12	2390	Oct 19 1998
LOWEST DAILY MEAN	15	Aug 24	a9.2	Apr 6	a9.2	Apr 6 2002
ANNUAL SEVEN-DAY MINIMUM	16	Aug 20	9.2	Apr 6	9.2	Apr 6 2002
MAXIMUM PEAK FLOW			b4930	Aug 12	b5740	Oct 19 1998
MAXIMUM PEAK STAGE			26.46	Aug 12	26.84	Oct 19 1998
INSTANTANEOUS LOW FLOW			9.0	Apr 9	9.0	Apr 9 2002
ANNUAL RUNOFF (AC-FT)	56780		59420		65180	
10 PERCENT EXCEEDS	119		151		163	
50 PERCENT EXCEEDS	56		52		55	
90 PERCENT EXCEEDS	23		14		21	

a Apr. 6 to Apr. 9, 2002
b From rating curve extended above 1050 ft^3/s

15087700 INDIAN RIVER NEAR SITKA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- Water years 1983, 2001 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 2001 to September 2002 (discontinued).
WATER TEMPERATURE: May 2001 to September 2002 (discontinued).

INSTRUMENTATION.--Electronic water temperature and specific conductance recorder since May 16, 2001, recorder set to 15 minute recording interval.

REMARKS.--
SPECIFIC CONDUCTANCE: No record May 16 to July 24, 2001 due to program error. Records represent specific conductance at sensor within 3 us/cm. No variation was found within the cross sections measured on five occasions during 2002 water year. No variation was found between the mean stream specific conductance and specific conductance at the sensor.
WATER TEMPERATURE: Probe installed on May 16 2001. Records represent water temperature at sensor within 0.5°C. No variation was found within the cross sections measured five times during 2002 water year. No variation was found between the mean stream temperature and temperature at the sensor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 54 us/cm, February 7, 2002; minimum recorded, 15 us/cm, August 12, 2002 .
WATER TEMPERATURE: Maximum recorded, 10.5°C, August 12, 2002; minimum recorded, 0.5°C February 11, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 54 us/cm, February 7; minimum recorded, 15 us/cm, August 12.
WATER TEMPERATURE: Maximum recorded, 10.5°C, August 12, minimum recorded, 0.5°C February 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB								
01...	0816	35.0	48	7.2	3.5	750	12.2	93
01...	0817	30.0	48	7.2	3.5	750	12.1	93
01...	0818	25.0	48	7.1	3.5	750	12.2	93
01...	0819	20.0	48	7.0	3.5	750	12.2	93
01...	0820	15.0	48	7.0	3.5	750	12.2	93
01...	0821	10.0	48	7.0	3.5	750	12.1	93
01...	0822	5.00	48	7.0	3.5	750	12.1	93

Date	Time	Medium code	Sample type	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SAMPLING METHOD, CODES (82398)	STREAM WIDTH (FT) (00004)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)
OCT													
02...	1000	9	9	9.26	270	10	49.6	762	11.9	99	7.7	36	7.5
NOV													
28...	1000	9	9	7.92	41	20	41.0	--	--	--	6.5	53	--
FEB													
01...	0845	9	9	7.85	38	10	37.6	750	12.2	93	7.1	48	3.0
APR													
06...	0900	9	9	7.61	16	10	25.6	747	12.1	88	7.1	51	2.0
MAY													
30...	0845	9	9	8.74	143	10	49.4	753	12.2	95	7.3	38	--
30...	1535	D	9	8.62	129	280	--	--	--	--	--	40	9.0
JUN													
15...	1305	D	9	8.52	114	280	--	--	--	--	--	--	--
SEP													
05...	0800	9	9	8.05	73	10	37.0	758	11.3	92	7.5	42	--
18...	0930	D	9	8.22	88	280	--	--	--	--	--	--	--
20...	1200	9	9	8.34	115	10	46.0	760	11.5	96	7.1	38	9.5

15087700 INDIAN RIVER NEAR SITKA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
OCT													
02...	7.5	13	4.57	.481	.11	1.75	12	15	2.42	<.1	2.93	1.4	26
NOV													
28...	--	--	--	--	--	--	16	20	--	--	--	--	--
FEB													
01...	3.5	17	5.64	.614	.13	2.14	17	20	4.04	<.1	3.62	1.8	28
APR													
06...	1.5	19	6.26	.721	.12	2.30	14	17	3.89	E.1	4.11	1.9	34
MAY													
30...	4.5	13	4.54	.470	.14	1.84	13	15	3.13	<.1	2.72	1.4	22
30...	4.5	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	6.5	16	5.31	.550	.12	1.93	--	--	2.28	<.1	3.67	1.8	29
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	7.5	14	4.73	.493	.18	1.88	13	16	2.12	<.1	3.18	1.5	22

Date	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN,PARTICULTE WAT FLT SUSP (MG/L AS N) (49570)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHO-PHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	CARBON, INORG + ORGANIC PARTIC. TOTAL (MG/L AS C) (00694)	CARBON, INORGANIC, PARTIC. TOTAL (MG/L AS C) (00688)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)
OCT													
02...	21	<.015	E.07	.15	.025	<.002	--	E.003	E.006	E.003	--	--	--
NOV													
28...	--	<.015	<.10	<.10	.110	<.002	<.02	<.004	<.007	<.004	<.1	<.1	.6
FEB													
01...	28	<.015	<.10	<.10	.116	<.002	<.02	<.004	<.007	<.004	<.1	<.1	.9
APR													
06...	28	<.015	<.10	<.10	.147	<.002	<.02	<.004	<.007	E.003	<.1	<.1	.7
MAY													
30...	22	<.015	<.10	<.10	.103	<.002	<.02	<.004	<.007	<.004	<.1	<.1	1.3
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
05...	26	--	--	E.06	--	--	<.02	--	--	.004	<.1	<.1	1.0
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	22	<.015	<.10	E.07	.073	<.002	<.02	E.003	<.007	E.002	<.1	<.1	2.0

Date	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PHEOPHYTIN A, PERIPHYTON (MG/M2) (62359)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2) (70957)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SAMPLER TYPE (CODE) (84164)
OCT										
02...	--	--	--	--	--	43	E1.3	3.0	2.2	3044
NOV										
28...	<.1	--	--	--	--	--	--	1.0	.11	3044
FEB										
01...	<.1	--	--	--	--	14	E1.2	1.0	.10	3044
APR										
06...	<.1	--	--	--	--	<10	E1.2	<1.0	--	--
MAY										
30...	<.1	--	--	--	--	13	<2.0	1.0	.39	3044
30...	--	41	42.20	.5	1.6	--	--	--	--	--
JUN										
15...	--	41	43.00	.7	3.2	--	--	--	--	--
SEP										
05...	<.1	--	--	--	--	E10	E1.0	--	--	3044
18...	--	43	43.90	1.9	6.3	--	--	--	--	--
20...	<.1	--	--	--	--	32	E2.1	3.0	.93	3044

15087700 INDIAN RIVER NEAR SITKA—Continued

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	40	36	39	48	39	44	52	52	52	48	47	47
2	41	32	38	44	37	42	52	52	52	48	47	48
3	45	41	43	47	42	44	52	52	52	47	46	46
4	46	45	46	48	47	47	52	52	52	49	47	48
5	47	45	47	49	48	48	52	51	52	49	48	48
6	45	41	43	49	49	49	52	51	52	48	38	42
7	47	45	46	49	48	49	52	35	43	43	40	42
8	47	44	45	49	45	47	47	37	43	45	38	41
9	44	40	43	47	42	45	48	43	46	46	40	45
10	40	36	38	48	44	47	45	43	44	47	41	45
11	43	36	41	49	47	48	48	40	47	49	47	48
12	44	33	40	50	49	49	47	39	43	49	49	49
13	45	44	45	50	50	50	50	47	48	49	48	49
14	46	45	46	50	45	49	50	50	50	49	49	49
15	47	45	46	48	45	47	51	50	51	49	39	46
16	46	42	45	46	43	45	51	51	51	47	40	44
17	46	34	42	48	43	46	51	51	51	48	45	47
18	39	35	37	49	48	49	52	51	52	45	37	41
19	42	36	39	50	49	50	52	51	52	45	37	42
20	45	42	44	50	49	49	52	52	52	48	45	47
21	45	42	44	50	49	50	52	51	52	50	48	49
22	46	44	45	49	35	44	52	51	52	50	50	50
23	46	45	46	48	43	47	51	40	48	51	50	50
24	45	43	44	49	48	49	43	37	41	50	50	50
25	47	44	46	50	49	50	45	43	45	51	50	51
26	48	47	47	51	50	51	45	44	45	51	51	51
27	48	47	48	51	51	51	46	44	45	52	51	51
28	48	39	44	52	51	51	47	45	46	51	51	51
29	44	40	42	52	52	52	46	44	45	51	50	50
30	47	44	46	52	52	52	47	46	47	50	48	49
31	48	47	47	---	---	---	47	46	46	49	48	49
MONTH	48	32	44	52	35	48	52	35	48	52	37	47

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	50	49	50	48	44	46	51	51	51	47	45	46
2	50	49	50	45	26	36	52	51	51	48	47	47
3	50	49	50	44	30	39	52	51	52	50	48	49
4	50	48	49	47	44	46	52	52	52	50	49	50
5	50	48	49	48	47	48	52	52	52	50	50	50
6	50	50	50	49	48	48	52	52	52	51	50	50
7	54	50	51	50	49	49	52	52	52	51	51	51
8	53	51	52	50	49	49	52	52	52	51	51	51
9	52	43	50	50	50	50	52	52	52	51	50	51
10	47	40	43	50	50	50	53	52	52	50	45	47
11	48	31	41	50	50	50	53	52	52	46	44	45
12	42	29	34	50	50	50	53	52	52	46	44	45
13	45	37	44	50	50	50	53	51	52	45	44	45
14	39	29	33	50	50	50	52	51	51	47	45	46
15	41	28	33	50	50	50	52	51	52	47	46	47
16	44	32	40	50	50	50	52	52	52	47	43	45
17	46	44	46	51	50	50	52	52	52	46	44	45
18	48	46	47	51	50	50	53	52	52	46	45	46
19	48	47	48	51	50	50	53	50	52	45	41	44
20	48	48	48	51	51	51	50	36	43	42	39	41
21	49	48	49	52	51	51	45	41	43	41	39	40
22	49	49	49	51	51	51	48	44	46	42	41	42
23	50	49	49	51	51	51	49	47	48	44	42	42
24	50	50	50	51	51	51	50	49	49	44	43	44
25	50	49	50	51	51	51	50	49	50	44	41	42
26	50	46	48	51	50	51	50	50	50	42	40	41
27	47	45	46	50	50	50	51	49	50	43	39	42
28	48	46	48	51	50	50	50	48	49	39	38	38
29	---	---	---	51	51	51	49	48	49	40	38	39
30	---	---	---	51	50	51	49	46	48	41	39	40
31	---	---	---	51	51	51	---	---	---	42	41	42
MONTH	54	28	46	52	26	49	53	36	50	51	38	45

15087700 INDIAN RIVER NEAR SITKA—Continued

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	41	41	41	43	42	42	45	44	44	37	34	35
2	41	41	41	45	42	43	45	45	45	39	34	37
3	42	40	41	46	43	45	46	45	46	41	39	40
4	40	37	39	44	41	43	46	46	46	42	41	41
5	40	37	39	42	41	41	47	46	46	43	42	42
6	43	40	42	43	42	42	47	46	47	43	42	43
7	43	39	41	44	43	43	47	33	38	42	39	40
8	42	41	42	43	43	43	36	31	34	42	41	41
9	42	38	40	44	43	44	39	33	36	42	41	42
10	39	37	38	44	42	43	40	31	36	42	40	41
11	42	39	41	43	42	43	42	35	40	41	35	38
12	43	42	43	44	43	44	39	15	31	40	36	38
13	43	40	42	45	38	44	34	23	30	42	40	41
14	41	38	39	41	36	39	38	34	36	42	42	42
15	40	38	39	42	41	42	40	38	39	43	42	42
16	42	40	41	43	42	42	41	40	41	43	41	42
17	42	41	42	43	40	42	42	41	42	42	37	40
18	42	41	41	44	41	43	42	42	42	39	34	38
19	43	42	42	44	43	44	43	42	42	38	33	36
20	43	43	43	45	44	45	43	42	43	39	35	38
21	44	43	43	45	42	44	42	19	28	39	32	36
22	44	42	43	43	42	43	36	24	33	40	38	39
23	42	40	41	43	43	43	36	23	32	41	40	40
24	41	39	40	44	38	41	38	36	38	42	41	41
25	41	39	40	40	39	40	40	38	39	42	41	42
26	42	41	42	43	40	41	40	39	40	42	41	42
27	43	42	42	43	34	38	40	34	38	41	31	36
28	42	41	42	36	33	35	35	30	33	40	36	38
29	42	41	42	40	35	37	39	35	37	41	36	39
30	42	42	42	43	40	42	39	36	38	42	41	42
31	---	---	---	44	43	44	37	32	35	---	---	---
MONTH	44	37	41	46	33	42	47	15	39	43	31	40

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

15087700 INDIAN RIVER NEAR SITKA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.5	3.5	3.5	3.5	2.5	3.0	3.5	2.5	3.0	3.5	3.0	3.5
2	3.5	3.0	3.5	2.5	1.0	1.5	4.0	2.0	2.5	4.5	3.0	3.5
3	3.5	3.5	3.5	3.0	1.5	2.5	4.0	2.0	2.5	4.0	2.5	3.5
4	3.5	2.5	3.0	3.0	2.5	2.5	3.5	2.0	2.5	4.5	3.0	3.5
5	3.5	3.0	3.5	3.0	2.5	2.5	4.0	2.5	3.0	4.5	3.0	3.5
6	3.5	3.0	3.0	3.0	2.5	2.5	4.0	2.5	3.0	4.5	3.0	3.5
7	3.0	2.5	3.0	3.0	2.5	2.5	4.0	2.0	2.5	4.0	3.5	3.5
8	3.0	2.5	3.0	3.0	2.5	2.5	4.0	2.0	2.5	5.0	3.5	4.0
9	3.5	2.0	3.0	3.0	2.5	2.5	4.0	2.0	3.0	4.0	3.5	4.0
10	2.0	1.5	2.0	3.5	3.0	3.0	4.0	2.5	3.0	4.0	3.5	3.5
11	2.5	0.5	1.5	3.5	3.0	3.0	4.0	2.0	3.0	4.0	3.5	3.5
12	2.5	1.0	1.5	3.5	3.0	3.5	3.5	2.5	3.0	4.0	3.5	3.5
13	3.0	2.0	2.5	3.5	2.5	3.0	4.0	2.5	3.0	4.0	3.5	3.5
14	2.5	1.5	2.0	4.0	2.5	3.0	4.0	2.5	3.0	4.0	3.0	3.5
15	3.0	1.5	2.0	3.5	2.5	2.5	3.5	2.5	3.0	4.5	3.5	4.0
16	3.0	1.5	2.5	3.5	2.5	2.5	4.0	2.0	3.0	5.0	3.5	4.5
17	3.5	3.0	3.5	3.0	2.0	2.5	4.0	2.0	2.5	4.0	3.5	4.0
18	4.0	3.5	3.5	3.5	2.5	2.5	4.0	2.0	3.0	5.0	4.0	4.5
19	4.0	3.0	4.0	3.5	2.0	2.5	3.5	2.5	3.0	5.5	3.5	4.5
20	4.0	3.0	3.5	3.5	2.0	2.5	2.5	1.5	2.0	5.5	4.0	4.5
21	4.0	3.5	3.5	3.5	2.0	2.5	2.5	1.5	2.0	4.5	4.0	4.5
22	3.5	3.0	3.5	4.0	2.5	3.0	3.5	1.5	2.5	4.5	4.0	4.0
23	3.5	3.0	3.0	4.5	3.0	3.5	3.5	2.5	3.0	4.5	4.0	4.0
24	3.5	3.0	3.0	4.0	2.5	3.0	4.0	2.5	3.0	5.5	4.0	4.5
25	3.5	3.5	3.5	3.5	2.5	3.0	4.5	2.5	3.0	5.5	4.0	4.5
26	3.5	2.5	3.5	3.5	2.5	3.0	4.0	2.5	3.0	5.0	4.5	4.5
27	3.5	2.5	3.0	3.5	2.0	2.5	4.0	3.0	3.5	5.0	4.5	4.5
28	3.5	3.0	3.5	3.0	2.0	2.5	5.0	3.0	3.5	5.0	4.5	5.0
29	---	---	---	3.5	2.5	3.0	4.5	3.0	3.5	5.0	4.5	4.5
30	---	---	---	3.5	2.5	3.0	4.5	3.0	3.5	5.0	4.5	4.5
31	---	---	---	3.5	2.5	3.0	---	---	---	5.0	4.5	4.5
MONTH	4.0	0.5	3.0	4.5	1.0	2.7	5.0	1.5	2.9	5.5	2.5	4.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.0	4.5	4.5	6.5	6.0	6.5	7.0	6.0	6.5	8.5	8.0	8.0
2	5.0	4.5	5.0	6.5	6.0	6.0	7.0	6.0	6.5	8.0	7.5	8.0
3	5.5	4.5	5.0	6.0	6.0	6.0	7.0	5.5	6.0	7.5	7.0	7.5
4	5.0	4.5	5.0	6.5	6.0	6.0	7.0	5.5	6.0	7.5	6.5	7.0
5	5.0	4.5	5.0	6.5	6.0	6.0	7.0	6.0	6.5	7.0	6.5	7.0
6	5.0	4.0	4.5	6.5	6.0	6.5	6.5	6.0	6.5	7.0	6.5	7.0
7	5.0	4.5	5.0	7.5	5.5	6.5	9.5	6.0	8.0	8.0	7.0	7.5
8	5.5	4.5	5.0	7.5	6.0	6.5	9.0	8.0	8.5	7.5	7.0	7.5
9	5.0	5.0	5.0	7.5	6.5	7.0	8.0	7.0	7.5	7.5	7.0	7.5
10	5.5	5.0	5.0	7.5	6.5	7.0	8.5	7.0	8.0	8.0	7.0	7.5
11	5.0	4.5	5.0	7.0	6.5	6.5	8.0	7.0	7.0	8.0	7.5	8.0
12	6.0	4.5	5.0	7.0	6.0	6.5	10.5	7.5	8.5	8.0	7.5	8.0
13	6.5	5.0	5.5	7.5	6.0	6.5	9.5	7.5	8.5	7.5	7.0	7.0
14	7.0	5.0	6.0	7.5	6.5	7.0	7.5	7.0	7.5	7.0	6.5	7.0
15	6.0	5.5	5.5	7.5	6.5	7.0	7.5	6.5	7.0	7.5	7.0	7.0
16	6.0	5.0	5.5	7.5	7.0	7.0	6.5	6.5	6.5	7.5	7.0	7.0
17	7.0	5.5	6.0	7.5	6.5	7.0	6.5	6.0	6.5	8.0	7.0	7.5
18	6.0	5.5	5.5	7.0	7.0	7.0	6.5	6.5	6.5	8.0	7.5	7.5
19	5.5	5.5	5.5	8.0	6.5	7.0	6.5	6.0	6.5	8.0	7.5	7.5
20	5.5	5.0	5.5	7.5	6.5	7.0	7.0	6.5	6.5	8.0	7.0	7.5
21	6.5	5.0	5.5	7.5	6.5	7.0	10.0	7.0	9.0	8.0	7.0	7.5
22	6.5	5.5	6.0	7.5	7.5	7.5	10.0	7.5	8.0	7.5	7.0	7.5
23	6.5	6.0	6.0	7.5	7.0	7.5	10.0	7.5	8.5	7.5	7.0	7.5
24	6.5	6.0	6.0	8.5	7.5	8.0	7.5	7.0	7.0	7.5	7.0	7.0
25	7.0	6.0	6.0	8.0	7.5	8.0	7.5	7.0	7.0	7.5	7.0	7.0
26	6.0	6.0	6.0	7.5	7.0	7.0	7.5	7.0	7.5	7.5	7.0	7.0
27	6.5	5.5	6.0	8.0	7.0	7.5	9.0	7.5	8.0	9.0	7.5	8.5
28	7.0	6.0	6.5	7.5	7.0	7.5	9.0	8.0	9.0	7.5	7.5	7.5
29	7.0	6.0	6.5	7.5	6.5	7.0	8.0	7.5	8.0	7.5	6.5	7.0
30	7.0	6.0	6.5	7.0	6.0	6.5	8.0	7.5	7.5	6.5	6.0	6.5
31	---	---	---	7.0	6.0	6.5	8.5	8.0	8.0	---	---	---
MONTH	7.0	4.0	5.5	8.5	5.5	6.9	10.5	5.5	7.4	9.0	6.0	7.4

15088000 SAWMILL CREEK NEAR SITKA

LOCATION.--Lat 57°03'05", long 135°13'40", in NE¼ SW¼ 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.-- No estimated daily discharges.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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	81	67	78	70	65	58	79	49	70	298	1210
2	1240	93	67	77	71	96	58	76	49	177	296	1180
3	811	101	67	79	71	96	52	69	49	289	293	843
4	397	86	67	78	72	74	58	65	54	290	292	526
5	211	79	68	76	71	67	58	63	55	293	291	362
6	262	75	68	94	70	64	58	63	51	290	291	286
7	308	74	73	93	68	63	58	62	53	288	309	279
8	296	82	80	99	68	62	58	62	50	288	575	285
9	328	94	77	85	71	61	58	54	53	287	1010	311
10	568	85	91	84	85	61	59	60	64	288	1270	344
11	642	79	81	78	94	61	59	63	55	288	950	427
12	1460	75	91	76	145	60	59	62	52	287	2280	466
13	1120	73	78	75	91	60	62	66	50	291	4760	382
14	606	74	75	75	125	60	62	60	50	304	2080	302
15	345	78	72	86	147	59	62	57	49	292	1210	276
16	458	81	71	92	113	59	62	61	48	283	697	270
17	800	80	70	82	85	59	62	60	48	291	467	316
18	2720	75	70	107	78	58	63	56	47	292	347	640
19	2070	72	69	118	73	58	64	61	47	291	296	1270
20	969	75	69	90	71	58	87	64	47	290	280	1270
21	498	75	68	80	68	58	89	62	47	291	1180	1310
22	305	93	69	76	65	58	75	58	47	293	1540	1110
23	184	83	81	74	63	58	69	57	47	294	1850	769
24	138	76	145	74	62	59	65	54	47	300	1260	587
25	96	73	106	73	62	59	64	56	59	302	894	437
26	84	70	100	71	62	60	64	56	69	301	764	341
27	76	69	92	71	64	61	63	52	70	313	744	466
28	83	68	89	71	63	61	64	56	70	344	1130	521
29	90	68	89	71	---	60	69	54	70	329	1170	524
30	82	68	83	72	---	59	74	52	70	308	844	337
31	76	---	82	72	---	59	---	49	---	301	996	---
TOTAL	18823	2355	2475	2527	2248	1953	1913	1869	1616	8845	30664	17647
MEAN	607.2	78.50	79.84	81.52	80.29	63.00	63.77	60.29	53.87	285.3	989.2	588.2
MAX	2720	101	145	118	147	96	89	79	70	344	4760	1310
MIN	76	68	67	71	62	58	52	49	47	70	280	270
AC-FT	37340	4670	4910	5010	4460	3870	3790	3710	3210	17540	60820	35000
CFSM	15.6	2.01	2.05	2.09	2.06	1.62	1.64	1.55	1.38	7.32	25.4	15.1
IN.	17.95	2.25	2.36	2.41	2.14	1.86	1.82	1.78	1.54	8.44	29.25	16.83

15088000 SAWMILL CREEK NEAR SITKA—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2002, BY WATER YEAR (WY)#

MEAN	737.8	481.3	264.3	177.0	169.1	129.3	206.8	549.9	725.4	675.6	681.3	752.8
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	165	291	359
(WY)	1923	2002	1951	1956	1951	1922	1948	2002	2002	2001	2001	1941

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 1920 - 2002#	
ANNUAL TOTAL	92935			
ANNUAL MEAN	254.6		469.8	
HIGHEST ANNUAL MEAN			715	1936
LOWEST ANNUAL MEAN			255	2002
HIGHEST DAILY MEAN	4760	Aug 13	5500	Oct 22 1937
LOWEST DAILY MEAN	a47	Jun 18	11	Mar 30 1922
ANNUAL SEVEN-DAY MINIMUM	47	Jun 18	12	Mar 25 1922
MAXIMUM PEAK FLOW	7280	Aug 12	b10700	Nov 19 1993
MAXIMUM PEAK STAGE	18.26	Aug 12	c	
INSTANTANEOUS LOW FLOW	44	Apr 3	c	
ANNUAL RUNOFF (AC-FT)	184300		340400	
ANNUAL RUNOFF (CFSM)	6.53		12.0	
ANNUAL RUNOFF (INCHES)	88.65		163.68	
10 PERCENT EXCEEDS	664		938	
50 PERCENT EXCEEDS	76		367	
90 PERCENT EXCEEDS	58		66	

\# 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 fair except for the period August 12 to September 30 and estimated discharges which are poor.

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	3.3	8.5	0.07	2.5	0.44	1.00	0.37	12	4.5	1.1	1.2	3.9
2	15	6.5	0.04	3.5	0.41	7.5	0.42	5.2	4.9	0.90	1.0	3.3
3	2.5	10	0.07	6.5	0.40	4.7	0.50	3.4	4.8	0.93	0.57	1.2
4	0.87	2.5	0.12	2.3	0.66	1.4	0.46	1.8	5.6	2.6	0.50	0.64
5	0.60	1.7	0.13	3.1	0.52	0.78	0.35	1.6	6.3	1.8	0.44	0.54
6	9.3	1.3	0.14	23	0.37	0.54	0.37	1.6	2.9	1.2	0.35	0.32
7	2.0	1.7	7.3	7.4	0.32	0.39	0.47	1.8	5.4	1.2	2.7	1.3
8	4.1	6.1	4.5	6.4	0.30	0.32	0.65	1.9	3.6	1.1	14	1.2
9	6.7	7.8	2.8	4.4	1.1	0.30	0.90	2.3	6.8	0.90	12	2.0
10	14	5.3	4.6	3.2	5.0	0.31	1.0	3.8	7.3	1.4	13	3.2
11	11	2.2	1.6	1.5	8.6	0.29	1.1	4.9	3.3	1.2	5.3	4.0
12	21	1.4	4.2	1.1	18	0.29	1.2	6.0	3.0	0.76	51	2.1
13	6.5	1.4	1.1	0.84	2.2	0.27	1.5	11	3.7	4.7	15	0.83
14	2.6	4.0	0.58	0.73	11	0.27	1.6	4.7	4.2	12	3.1	0.72
15	6.0	3.1	0.39	2.3	26	0.25	1.5	3.8	3.1	1.9	1.4	1.7
16	16	2.6	0.33	2.3	4.8	0.24	2.0	14	2.0	1.6	1.2	2.2
17	25	2.3	0.31	2.6	1.6	0.24	2.6	7.4	2.2	2.9	1.00	3.5
18	27	2.0	0.30	6.5	1.1	0.24	2.5	6.9	2.1	1.8	0.88	4.6
19	17	3.3	0.29	6.5	0.82	0.21	2.6	17	3.1	1.3	1.0	7.2
20	4.2	6.0	0.28	1.9	0.65	0.22	6.9	18	2.1	0.93	0.91	3.4
21	5.7	4.4	0.27	0.83	0.56	0.24	6.2	11	1.7	1.4	14	9.6
22	2.9	5.9	0.35	e0.71	0.44	0.28	2.7	7.3	2.0	2.2	5.7	2.3
23	2.9	2.3	8.6	0.54	0.39	0.47	2.6	5.3	2.5	2.2	5.8	3.8
24	4.6	1.3	36	0.46	0.36	0.52	1.8	6.2	2.8	4.0	3.0	2.9
25	2.4	0.68	10	e0.45	0.35	0.50	2.2	9.2	2.0	9.6	2.7	2.3
26	1.7	0.36	8.4	e0.43	0.41	0.93	2.7	8.0	1.3	4.6	3.3	1.8
27	1.6	0.32	5.8	e0.42	0.86	0.86	2.3	6.8	1.3	8.4	2.9	10
28	10	0.25	7.1	e0.42	0.76	0.51	4.3	11	1.9	17	9.8	7.9
29	6.5	0.17	6.2	0.46	---	0.47	7.5	8.7	1.4	4.1	2.5	2.0
30	2.4	0.13	4.5	0.54	---	0.50	9.7	5.6	1.4	1.8	2.4	0.84
31	1.6	---	5.1	0.52	---	0.42	---	4.2	---	1.2	6.0	---
TOTAL	236.97	95.51	121.47	94.35	88.42	25.46	70.99	212.4	99.2	98.72	184.65	91.29
MEAN	7.644	3.184	3.918	3.044	3.158	0.821	2.366	6.852	3.307	3.185	5.956	3.043
MAX	27	10	36	23	26	7.5	9.7	18	7.3	17	51	10
MIN	0.60	0.13	0.04	0.42	0.30	0.21	0.35	1.6	1.3	0.76	0.35	0.32
MED	4.6	2.3	1.1	1.9	0.65	0.39	1.7	6.0	3.0	1.8	2.7	2.2
AC-FT	470	189	241	187	175	50	141	421	197	196	366	181
CFSM	20.1	8.38	10.3	8.01	8.31	2.16	6.23	18.0	8.70	8.38	15.7	8.01
IN.	23.20	9.35	11.89	9.24	8.66	2.49	6.95	20.79	9.71	9.66	18.08	8.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)#

MEAN	6.835	3.531	4.727	2.566	2.353	1.985	2.384	5.905	4.708	3.347	3.472	5.077
MAX	7.64	4.56	7.73	3.04	3.16	2.78	2.66	6.85	6.20	4.93	5.96	6.36
(WY)	2002	2000	2000	2002	2002	2001	2001	2002	2000	2000	2002	2000
MIN	5.34	2.85	2.54	1.68	1.12	0.82	2.12	5.14	3.31	1.93	0.46	3.04
(WY)	2001	2001	2001	2000	2000	2002	2000	2001	2002	2001	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002	
ANNUAL TOTAL	1337.70		1419.43			
ANNUAL MEAN	3.665		3.889		3.919	
HIGHEST ANNUAL MEAN					4.54	2000
LOWEST ANNUAL MEAN					3.32	2001
HIGHEST DAILY MEAN	36	Dec 24	51	Aug 12	51	Aug 12 2002
LOWEST DAILY MEAN	0.04	Dec 2	0.04	Dec 2	0.04	Dec 2 2001
ANNUAL SEVEN-DAY MINIMUM	0.08	Aug 14	0.10	Nov 30	0.08	Aug 14 2001
MAXIMUM PEAK FLOW			264	Aug 12	264	Aug 12 2002
MAXIMUM PEAK STAGE			19.68	Aug 12	19.68	Aug 12 2002
INSTANTANEOUS LOW FLOW			a0.00	Dec 2	a0.00	Dec 2 2001
ANNUAL RUNOFF (AC-FT)	2650		2820		2840	
ANNUAL RUNOFF (CFSM)	9.64		10.2		10.3	
ANNUAL RUNOFF (INCHES)	130.95		138.95		140.11	
10 PERCENT EXCEEDS	7.8		9.4		8.5	
50 PERCENT EXCEEDS	2.4		2.2		2.4	
90 PERCENT EXCEEDS	0.29		0.35		0.42	

a Dec. 2 and Dec. 3, 2001
e Estimated

15090000 GREEN LAKE NEAR SITKA

LOCATION.--Lat 56°59'14", long 135°06'37", in SW¼ NE¼ 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.--28 years (water years, 1916-25, 1985-2002), 315 ft^3/s, 148.5 in/yr, 228,200 acre-ft/yr. Mean discharge for water years 1985-99 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,90,630 acre-ft, October 18, elevation 397.5 ft; minimum contents observed, 37,420 acre-ft, May 12-15, elevation 333.2 ft; Maximum daily discharge (not adjusted for storage) 1525 ft^3/s, October 18; minimum daily discharge, 5.3 ft^3/s, August 13.

MONTH END RESERVOIR ELEVATION, IN FEET ABOVE SEA LEVEL, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
Sep 30	397.7	90,840	
Oct 31	394.9	87,910	-2,930
Nov 30	390.5	83,730	-4,210
Dec 31	383.2	76,880	-6,850
Jan 31	376.4	70,760	-6,120
Feb 28	368.4	63,890	-6,870
Mar 31	352.4	50,920	-12,970
Apr 30	337.3	40,000	-10,920
May 31	343.8	44,220	+4,220
Jun 30	362.2	58,760	+14,540
Jul 31	370.7	65,850	+7,090
Aug 31	389.4	82,680	+16,830
Sep 30	395.6	88,630	+5,950
		CAL YR 2001	-4,690
		WTR YR 2002	-2,240

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

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT	145	465	610	563
NOV	198	9	207	136
DEC	223	0	223	112
JAN	219	0	219	119
FEB	247	0	247	123
MAR	272	0	272	61
APR	280	0	280	96
MAY	266	0	266	335
JUN	262	0	262	506
JUL	244	0	244	359
AUG	223	0	223	497
SEP	202	111	313	413
CAL YR 2001	168	180.1	349	342
WTR YR 2002	232	49.4	281	278

15101490 GREENS CREEK AT GREENS CREEK MINE NEAR JUNEAU

LOCATION.--Lat 58°05'00", long 134°37'54", in NW¼ SE¼ 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	24	e12	14	5.2	2.0	1.5	29	98	63	32	85
2	92	25	e13	13	5.3	8.7	1.4	23	102	88	30	73
3	70	46	e13	12	4.8	13	1.2	17	99	81	28	55
4	48	26	e12	11	4.7	6.6	1.2	15	109	86	26	44
5	39	22	12	11	4.5	5.4	1.3	14	107	78	25	37
6	44	21	11	24	4.5	e4.8	1.3	13	96	72	25	35
7	52	20	11	21	e4.3	e4.1	1.3	13	91	66	59	42
8	57	19	13	19	e3.9	e3.5	1.2	14	95	67	80	46
9	62	22	10	17	4.0	e2.8	1.3	17	104	64	88	40
10	53	24	9.4	19	4.3	2.5	1.4	25	102	60	71	45
11	66	21	9.0	15	3.4	2.3	1.2	27	90	59	59	46
12	107	19	8.7	13	5.7	2.0	1.2	31	83	47	94	37
13	81	18	8.4	12	5.9	e1.9	1.2	73	85	50	88	34
14	58	22	8.4	11	15	1.9	1.2	67	95	74	75	34
15	63	22	8.5	11	11	1.7	1.3	48	104	56	56	37
16	93	19	8.4	11	11	1.6	1.4	68	97	50	42	37
17	78	18	7.6	10	6.3	1.6	1.6	84	93	54	37	46
18	99	18	7.5	9.5	4.7	1.5	1.7	86	89	48	37	91
19	95	18	6.8	9.1	3.9	1.5	1.8	100	83	42	33	86
20	73	22	5.8	8.5	3.4	1.5	4.2	111	81	38	32	76
21	66	23	5.3	e7.8	3.1	1.5	4.4	115	74	51	59	104
22	49	23	5.1	7.2	3.0	1.4	3.1	109	71	51	63	82
23	37	22	8.5	e7.0	e2.9	1.5	2.9	114	81	51	82	71
24	33	19	30	e6.7	e2.7	1.5	2.5	102	87	57	69	62
25	30	e18	23	e6.5	2.4	1.5	3.0	102	98	54	73	58
26	28	e16	20	e6.2	2.2	1.5	3.9	106	91	48	80	53
27	27	e14	22	e5.7	2.2	1.5	5.2	105	80	46	82	73
28	28	e14	21	e6.3	2.1	1.5	11	136	75	46	90	56
29	32	e13	20	6.7	---	1.5	17	134	71	41	90	46
30	25	e13	17	5.8	---	1.6	24	111	62	36	83	40
31	23	---	16	5.3	---	1.5	---	98	---	34	90	---
TOTAL	1819	621	383.4	342.3	136.4	87.4	106.9	2107	2693	1758	1878	1671
MEAN	58.68	20.70	12.37	11.04	4.871	2.819	3.563	67.97	89.77	56.71	60.58	55.70
MAX	111	46	30	24	15	13	24	136	109	88	94	104
MIN	23	13	5.1	5.3	2.1	1.4	1.2	13	62	34	25	34
AC-FT	3610	1230	760	679	271	173	212	4180	5340	3490	3730	3310
CFSM	6.81	2.40	1.43	1.28	0.57	0.33	0.41	7.88	10.4	6.58	7.03	6.46
IN.	7.85	2.68	1.65	1.48	0.59	0.38	0.46	9.09	11.62	7.59	8.10	7.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)#

MEAN	61.12	29.72	25.14	14.76	13.17	11.50	28.60	79.36	88.93	56.59	41.95	60.36
MAX	97.9	49.5	65.7	22.3	36.9	27.2	49.6	107	147	90.5	69.7	95.0
(WY)	1999	1994	1990	1991	1992	1992	1994	1992	1992	2000	1991	1991
MIN	34.7	14.6	8.27	5.50	3.43	2.82	3.56	56.4	59.5	31.5	18.7	33.3
(WY)	1994	1991	1997	1997	1999	2002	2002	2001	1998	1998	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002#	
ANNUAL TOTAL	14820.4		13603.4			
ANNUAL MEAN	40.60		37.27		42.82	
HIGHEST ANNUAL MEAN					60.1	1992
LOWEST ANNUAL MEAN					31.8	1998
HIGHEST DAILY MEAN	132	Jun 20	136	May 28	465	Oct 20 1998
LOWEST DAILY MEAN	a3.8	Apr 2	1.2	Apr 3	b1.2	Apr 3 2002
ANNUAL SEVEN-DAY MINIMUM	4.0	Mar 31	1.2	Apr 8	1.2	Apr 8 2002
MAXIMUM PEAK FLOW			152	Sep 21	c710	Oct 20 1998
MAXIMUM PEAK STAGE			2.56	Sep 21	d14.79	Oct 20 1998
INSTANTANEOUS LOW FLOW			f0.98	Mar 20	f0.98	Mar 20 2002
ANNUAL RUNOFF (AC-FT)	29400		26980		31020	
ANNUAL RUNOFF (CFSM)	4.71		4.32		4.97	
ANNUAL RUNOFF (INCHES)	63.96		58.71		67.49	
10 PERCENT EXCEEDS	96		91		91	
50 PERCENT EXCEEDS	26		24		32	
90 PERCENT EXCEEDS	6.5		1.9		6.3	

\# See Period of Record, partial years used in monthly statistics
a Apr. 2-3
b Apr. 3-4, 8, and 11-14, 2002
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, 2002

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

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

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	30	e4.4	8.9	3.0	2.5	1.8	12	41	19	6.2	18
2	18	22	e4.0	8.6	2.9	4.5	1.7	9.4	41	19	5.8	17
3	15	71	3.8	8.8	2.8	8.1	1.7	6.8	43	17	5.4	13
4	12	19	3.7	7.3	7.4	4.1	1.7	5.1	46	14	5.0	11
5	11	14	3.6	13	3.9	e3.3	1.6	4.3	40	13	4.6	9.5
6	12	11	3.4	72	3.2	e3.0	1.6	3.9	31	12	4.4	8.6
7	18	9.1	4.2	28	e2.9	e2.7	1.5	4.0	28	11	6.6	9.2
8	17	26	5.1	17	e5.0	e2.4	1.5	5.0	29	11	14	9.1
9	15	22	3.9	45	e10	e2.3	1.5	5.8	36	13	13	9.6
10	13	20	3.5	30	27	e2.3	1.5	8.7	37	14	9.8	9.9
11	19	13	3.3	16	7.1	e2.3	1.5	13	30	14	8.4	9.7
12	23	9.5	3.4	12	26	2.3	1.6	20	25	12	14	8.9
13	14	16	3.1	9.9	8.0	2.2	1.9	35	24	11	15	8.2
14	11	57	2.9	8.5	7.8	2.1	2.4	22	27	10	12	7.5
15	22	26	2.7	8.0	38	e1.9	2.5	17	32	9.7	10	8.3
16	18	16	e2.6	7.6	23	e1.8	2.2	27	31	10	8.7	14
17	14	12	e2.4	6.8	8.1	e1.8	2.4	26	28	11	7.7	11
18	13	11	e2.3	8.2	5.8	1.8	2.6	22	27	10	6.8	16
19	13	12	2.2	7.1	4.7	1.8	3.2	24	22	9.6	6.0	13
20	12	14	2.1	6.2	4.1	1.8	5.3	32	20	9.2	5.4	11
21	13	16	2.1	5.0	3.7	1.8	5.5	38	18	11	6.0	39
22	13	17	2.2	e4.6	e3.5	1.7	4.4	40	17	12	7.2	18
23	11	14	46	4.3	e3.4	1.7	4.1	42	21	12	8.7	15
24	13	11	123	4.2	e3.1	1.7	4.1	36	31	15	12	12
25	10	9.2	35	e4.0	e2.9	2.6	3.9	34	45	13	18	11
26	8.9	7.7	18	e3.8	2.7	3.9	4.2	37	33	11	33	11
27	9.3	6.6	31	e3.6	2.7	3.0	4.1	39	26	9.5	33	e14
28	49	5.8	21	e3.4	2.5	2.4	6.0	87	23	8.9	29	e10
29	31	5.1	17	3.2	---	2.1	8.5	107	20	8.1	21	e7.0
30	13	4.7	12	3.2	---	2.0	11	66	19	7.4	16	e5.0
31	11	---	9.8	3.2	---	1.9	---	45	---	6.7	26	---
TOTAL	494.2	527.7	383.7	371.4	225.2	79.8	97.5	874.0	891	364.1	378.7	364.5
MEAN	15.94	17.59	12.38	11.98	8.043	2.574	3.250	28.19	29.70	11.75	12.22	12.15
MAX	49	71	123	72	38	8.1	11	107	46	19	33	39
MIN	8.9	4.7	2.1	3.2	2.5	1.7	1.5	3.9	17	6.7	4.4	5.0
MED	13	14	3.7	7.6	4.0	2.3	2.4	24	28	11	8.7	11
AC-FT	980	1050	761	737	447	158	193	1730	1770	722	751	723
CFSM	6.33	6.98	4.91	4.75	3.19	1.02	1.29	11.2	11.8	4.66	4.85	4.82
IN.	7.30	7.79	5.66	5.48	3.32	1.18	1.44	12.90	13.15	5.37	5.59	5.38

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2002, BY WATER YEAR (WY)#

MEAN	15.94	17.59	14.22	17.23	9.395	3.974	5.860	23.66	30.02	14.89	9.815	14.05
MAX	15.9	17.6	16.1	22.5	10.7	5.37	8.47	28.2	30.3	18.0	12.2	16.0
(WY)	2002	2002	2001	2001	2001	2001	2001	2002	2001	2001	2002	2001
MIN	15.9	17.6	12.4	12.0	8.04	2.57	3.25	19.1	29.7	11.7	7.41	12.2
(WY)	2002	2002	2002	2002	2002	2002	2002	2001	2002	2002	2001	2002

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 2000 - 2002#	
ANNUAL TOTAL	5594.3		5051.8			
ANNUAL MEAN	15.33		13.84		13.84	
HIGHEST ANNUAL MEAN					13.8	2002
LOWEST ANNUAL MEAN					13.8	2002
HIGHEST DAILY MEAN	123	Dec 24	123	Dec 24	123	Dec 24 2001
LOWEST DAILY MEAN	2.1	Dec 20	a1.5	Apr 7	a1.5	Apr 7 2002
ANNUAL SEVEN-DAY MINIMUM	2.3	Dec 16	1.5	Apr 5	1.5	Apr 5 2002
MAXIMUM PEAK FLOW			232	Dec 24	244	Dec 1 2000
MAXIMUM PEAK STAGE			11.14	Dec 24	11.16	Dec 1 2000
INSTANTANEOUS LOW FLOW			b1.4	Apr 4	b1.4	Apr 4 2002
ANNUAL RUNOFF (AC-FT)	11100		10020		10030	
ANNUAL RUNOFF (CFSM)	6.08		5.49		5.49	
ANNUAL RUNOFF (INCHES)	82.58		74.57		74.62	
10 PERCENT EXCEEDS	30		31		31	
50 PERCENT EXCEEDS	12		9.8		9.8	
90 PERCENT EXCEEDS	3.3		2.3		2.3	

\# See Period of Record, partial year used in monthly statistics
a Apr. 7-11
b Apr. 4 and 9, 2002 but may have been lower during period of ice affected record
e Estimated

15102200 FAVORITE CREEK NEAR ANGOON—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 2002 to June 2002.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	Medium code	Sample type	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	STREAM WIDTH (FT) (00004)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	SAMPLER TYPE (CODE) (84164)
FEB											
19...	1110	9	9	10.02	4.6	8010	11.7	3.0	-2.0	.0	8010
MAR											
20...	1430	9	9	9.80	1.8	8010	12.0	3.8	2.0	.0	8010
JUN											
03...	1300	9	9	10.56	41	8010	20.7	1.0	--	4.5	8010

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE

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

DRAINAGE AREA.--10.2 mi^2.

WATER-DISCHARGE RECORDS

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

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

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

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

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Oct 12	0430	634	3.82	Aug 12	1645	*879	*4.33
Oct 17	1600	517	3.63				

DISCHARGE, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	106	e20	29	15	21	12	83	125	19	13	68
2	125	134	e19	26	14	111	12	61	110	29	12	75
3	64	246	e23	25	13	82	12	41	85	25	11	55
4	48	97	e23	23	19	33	11	31	114	23	10	40
5	41	83	e32	28	17	e20	11	27	78	24	9.6	36
6	58	61	45	161	14	e17	11	25	62	22	10	32
7	58	49	52	85	13	e15	11	26	68	18	90	84
8	59	81	121	67	32	e13	11	32	61	17	102	75
9	72	142	39	68	67	e12	11	38	87	16	56	66
10	96	94	40	67	163	e11	10	60	75	18	35	66
11	117	70	36	43	58	e10	11	102	53	18	26	60
12	395	48	36	34	173	e9.7	11	95	45	15	239	42
13	114	44	27	31	45	e9.5	12	120	48	17	91	35
14	78	91	22	30	115	e9.0	14	84	54	20	54	32
15	113	83	22	46	149	e8.6	16	76	53	15	38	42
16	185	71	e18	50	115	e8.4	16	107	45	15	32	44
17	228	59	e14	32	52	e8.2	16	95	41	16	30	66
18	212	48	e15	45	40	e8.0	16	90	37	15	26	145
19	175	45	e15	46	34	e7.8	21	113	32	18	24	80
20	103	52	e15	33	28	e7.7	49	133	29	16	26	58
21	108	52	15	23	23	e8.3	52	123	25	22	216	186
22	82	71	18	e19	19	e9.0	34	122	24	27	77	64
23	63	60	60	e30	e17	e10	28	112	27	25	109	51
24	90	41	292	e23	e16	11	28	97	33	43	56	43
25	70	32	116	17	e16	12	29	92	40	30	50	43
26	50	26	63	e14	23	19	30	104	27	22	75	40
27	46	e25	51	e13	20	20	29	91	26	39	112	53
28	84	e22	53	e17	18	17	39	176	22	29	192	44
29	127	e21	55	e16	---	15	54	135	20	21	116	38
30	60	e20	41	e15	---	14	65	100	19	17	61	32
31	46	---	33	e15	---	13	---	84	---	14	113	---
TOTAL	3267	2074	1431	1171	1328	570.2	682	2675	1565	665	2111.6	1795
MEAN	105.4	69.13	46.16	37.77	47.43	18.39	22.73	86.29	52.17	21.45	68.12	59.83
MAX	395	246	292	161	173	111	65	176	125	43	239	186
MIN	41	20	14	13	13	7.7	10	25	19	14	9.6	32
AC-FT	6480	4110	2840	2320	2630	1130	1350	5310	3100	1320	4190	3560
CFSM	10.3	6.78	4.53	3.70	4.65	1.80	2.23	8.46	5.11	2.10	6.68	5.87
IN.	11.91	7.56	5.22	4.27	4.84	2.08	2.49	9.76	5.71	2.43	7.70	6.55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)#

MEAN	117.4	77.05	63.74	49.67	48.57	44.14	66.52	101.6	66.41	30.68	33.65	74.96
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	42.0	19.8	6.41	9.44	17.5
(WY)	1970	1974	1978	1969	1969	1974	2002	1981	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1968 - 2002#	
ANNUAL TOTAL	21838.6		19334.8			
ANNUAL MEAN	59.83		52.97		64.46	
HIGHEST ANNUAL MEAN					80.8	1992
LOWEST ANNUAL MEAN					44.1	1978
HIGHEST DAILY MEAN	723	Sep 13	395	Oct 12	1010	Oct 19 1998
LOWEST DAILY MEAN	8.5	Aug 17	7.7	Mar 20	a3.2	Jul 28 1989
ANNUAL SEVEN-DAY MINIMUM	8.9	Aug 12	8.1	Mar 15	4.2	Jan 13 1974
MAXIMUM PEAK FLOW			879	Aug 12	b1970	Oct 8 1990
MAXIMUM PEAK STAGE			4.33	Aug 12	5.83	Oct 8 1990
INSTANTANEOUS LOW FLOW			c		3.2	Jul 28 1989
ANNUAL RUNOFF (AC-FT)	43320		38350		46700	
ANNUAL RUNOFF (CFSM)	5.87		5.19		6.32	
ANNUAL RUNOFF (INCHES)	79.65		70.52		85.86	
10 PERCENT EXCEEDS	112		113		139	
50 PERCENT EXCEEDS	46		38		43	
90 PERCENT EXCEEDS	15		13		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 See lowest daily mean

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 February 21, and July 15. 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, 12.0°C, July 24, August 1-2, and 4-5; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
FEB							
21...	1045	23.0	3.00	1.50	22	1.0	-2.0
21...	1046	23.0	6.00	1.50	22	1.0	-2.0
21...	1047	23.0	9.00	1.50	22	1.0	-2.0
21...	1048	23.0	12.0	1.50	22	1.0	-2.0
21...	1049	23.0	15.0	1.50	22	1.0	-2.0
21...	1050	23.0	18.0	1.50	22	1.0	-2.0
21...	1051	23.0	21.0	1.50	22	1.0	-2.0
JUL							
15...	1025	26.0	7.00	1.38	16	9.0	17.5
15...	1026	26.0	11.0	1.38	16	9.0	17.5
15...	1027	26.0	15.0	1.38	16	9.0	17.5
15...	1028	26.0	19.0	1.38	16	9.0	17.5
15...	1029	26.0	23.0	1.38	16	9.0	17.5
15...	1030	26.0	27.0	1.38	16	9.0	17.5

TEMPERATURE WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.0	7.5	7.5	4.0	3.5	3.5	0.0	0.0	0.0	2.0	1.5	1.5
2	8.0	7.5	7.5	4.0	3.5	3.5	0.0	0.0	0.0	2.0	2.0	2.0
3	8.0	7.5	7.5	4.0	3.0	3.5	0.0	0.0	0.0	2.0	2.0	2.0
4	7.5	7.0	7.5	3.5	3.0	3.0	0.0	0.0	0.0	2.0	1.5	2.0
5	7.0	6.5	7.0	3.5	3.0	3.0	0.0	0.0	0.0	2.0	2.0	2.0
6	7.5	7.0	7.0	3.5	3.0	3.0	0.0	0.0	0.0	2.0	0.5	1.0
7	7.0	6.5	7.0	3.0	3.0	3.0	0.0	0.0	0.0	2.0	1.0	1.5
8	7.0	6.5	7.0	3.0	3.0	3.0	0.0	0.0	0.0	2.0	1.5	1.5
9	7.0	6.5	7.0	3.5	2.5	3.0	0.5	0.0	0.0	2.0	1.5	2.0
10	7.0	6.5	7.0	3.5	3.0	3.5	1.0	0.5	0.5	2.0	1.5	1.5
11	6.5	5.5	6.0	3.5	3.0	3.0	1.0	0.5	1.0	2.0	2.0	2.0
12	6.0	5.5	5.5	3.0	3.0	3.0	1.0	1.0	1.0	2.0	2.0	2.0
13	6.0	5.5	5.5	3.0	3.0	3.0	1.0	0.5	1.0	2.0	1.5	2.0
14	6.0	5.0	5.5	3.0	3.0	3.0	0.5	0.0	0.5	2.0	2.0	2.0
15	5.5	5.0	5.0	3.5	3.0	3.0	0.0	0.0	0.0	2.5	1.5	2.0
16	5.5	5.0	5.0	3.5	3.0	3.5	0.0	0.0	0.0	2.0	1.5	1.5
17	5.5	5.0	5.5	3.5	3.0	3.5	0.0	0.0	0.0	2.0	1.5	2.0
18	6.0	5.5	6.0	3.5	3.5	3.5	0.0	0.0	0.0	2.0	1.5	2.0
19	5.5	5.0	5.5	4.0	3.0	3.5	0.0	0.0	0.0	2.0	1.5	1.5
20	5.0	4.5	5.0	4.0	3.5	3.5	0.0	0.0	0.0	1.5	1.0	1.5
21	5.5	5.0	5.0	4.0	4.0	4.0	1.0	0.0	0.5	1.0	0.0	0.5
22	5.5	4.5	5.0	4.0	3.5	4.0	1.0	0.5	1.0	0.0	0.0	0.0
23	4.5	4.5	4.5	3.5	3.0	3.5	1.0	0.0	0.5	0.0	0.0	0.0
24	4.5	4.0	4.0	3.5	2.5	3.0	0.0	0.0	0.0	0.5	0.0	0.0
25	4.0	3.5	4.0	2.5	0.5	1.5	1.0	0.0	0.5	0.0	0.0	0.0
26	3.5	3.0	3.5	0.5	0.0	0.5	1.5	1.0	1.0	0.0	0.0	0.0
27	4.0	3.0	3.5	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0
28	3.5	3.0	3.5	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0
29	3.5	3.0	3.5	0.0	0.0	0.0	1.5	1.5	1.5	0.0	0.0	0.0
30	4.0	3.5	3.5	0.0	0.0	0.0	2.0	1.5	1.5	0.0	0.0	0.0
31	3.5	3.0	3.5	---	---	---	1.5	1.0	1.5	1.0	0.0	0.5
MONTH	8.0	3.0	5.5	4.0	0.0	2.7	2.0	0.0	0.5	2.5	0.0	1.2

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE—Continued

TEMPERATURE WATER, DEGREES CELSIUS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	1.0	1.0	1.5	1.0	1.0	1.0	0.0	0.5	2.5	1.5	2.0
2	1.0	0.5	1.0	1.0	0.0	0.5	1.0	0.0	0.5	3.0	1.0	2.0
3	1.0	1.0	1.0	1.0	0.0	0.5	0.5	0.0	0.0	2.5	1.0	2.0
4	1.0	0.5	1.0	0.5	0.0	0.5	0.5	0.0	0.0	3.0	1.0	2.0
5	1.0	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.5	3.0	1.0	2.0
6	1.0	0.5	1.0	0.0	0.0	0.0	1.0	0.0	0.5	3.5	1.0	2.0
7	0.5	0.0	0.5	0.0	0.0	0.0	1.0	0.0	0.5	3.0	2.0	2.5
8	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	4.0	1.5	3.0
9	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.5	3.0	2.0	2.5
10	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.0	3.0	2.0	2.5
11	0.5	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.0	2.5	2.0	2.0
12	0.5	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.5	3.0	1.5	2.0
13	1.0	0.5	0.5	0.0	0.0	0.0	2.0	1.0	1.5	3.0	2.0	2.5
14	1.0	0.5	0.5	0.0	0.0	0.0	2.5	1.0	1.5	3.5	2.0	2.5
15	1.0	0.5	0.5	0.0	0.0	0.0	2.5	1.0	1.5	3.5	2.0	3.0
16	1.5	0.5	1.0	0.0	0.0	0.0	2.5	0.5	1.5	4.0	2.5	3.0
17	1.5	0.5	1.0	0.0	0.0	0.0	2.5	0.5	1.0	4.0	2.0	3.0
18	1.5	1.0	1.5	0.0	0.0	0.0	2.5	1.0	1.5	4.5	2.5	3.5
19	1.5	1.5	1.5	0.0	0.0	0.0	2.0	1.5	1.5	5.0	2.5	3.5
20	1.5	0.5	1.0	0.0	0.0	0.0	1.5	0.5	1.0	5.0	2.5	3.5
21	1.0	0.5	1.0	0.0	0.0	0.0	1.0	0.5	1.0	3.5	3.0	3.5
22	1.0	0.0	0.5	0.0	0.0	0.0	2.0	0.5	1.0	3.5	3.0	3.5
23	0.0	0.0	0.0	0.5	0.0	0.5	2.5	0.5	1.5	4.5	3.0	3.5
24	0.0	0.0	0.0	1.0	0.0	0.5	2.5	1.0	1.5	5.0	3.5	4.0
25	0.0	0.0	0.0	1.0	0.5	0.5	3.0	1.0	2.0	6.0	3.0	4.5
26	1.0	0.0	0.5	1.0	0.5	1.0	2.5	0.5	1.5	5.0	3.5	4.0
27	1.0	0.5	1.0	1.5	0.5	1.0	2.5	1.0	1.5	4.5	3.5	4.0
28	1.5	1.0	1.0	1.0	0.5	1.0	3.0	1.5	2.0	4.5	3.5	4.0
29	---	---	---	1.5	1.0	1.0	3.0	1.0	2.0	5.0	4.0	4.5
30	---	---	---	1.5	0.5	1.0	3.0	1.0	2.0	5.5	4.0	4.5
31	---	---	---	1.5	0.5	1.0	---	---	---	5.0	4.0	4.5
MONTH	1.5	0.0	0.6	1.5	0.0	0.3	3.0	0.0	1.1	6.0	1.0	3.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.0	4.0	4.5	8.5	8.0	8.5	12.0	10.0	11.0	10.0	9.5	9.5
2	5.5	4.5	5.0	8.5	7.5	8.0	12.0	9.5	10.5	10.0	9.5	9.5
3	5.5	4.0	5.0	8.0	7.5	8.0	11.0	8.5	10.0	9.5	9.0	9.0
4	5.5	4.5	5.0	8.5	7.5	8.0	12.0	9.0	10.5	9.0	7.5	8.5
5	6.0	4.5	5.0	8.5	7.5	8.0	12.0	9.0	10.5	9.0	8.0	8.5
6	6.0	4.5	5.0	9.0	8.0	8.5	11.5	10.5	11.0	9.0	8.0	8.5
7	6.0	4.5	5.5	10.5	7.5	9.0	11.0	10.0	10.5	9.5	8.5	9.0
8	7.0	5.0	6.0	11.0	8.0	9.5	11.0	10.5	10.5	9.5	9.0	9.0
9	6.0	5.5	5.5	10.5	9.5	10.0	10.5	10.0	10.5	9.0	9.0	9.0
10	6.5	5.5	6.0	10.0	9.0	9.0	10.5	10.0	10.0	9.0	8.5	9.0
11	6.0	5.5	5.5	9.5	9.0	9.0	10.0	9.5	10.0	9.0	8.5	9.0
12	7.5	5.5	6.5	10.0	8.5	9.0	11.5	10.0	10.5	9.0	8.0	8.5
13	8.5	5.5	7.0	9.5	9.0	9.0	11.0	10.0	10.5	8.5	7.0	7.5
14	9.5	6.0	7.5	10.0	9.0	9.5	10.5	9.5	10.0	8.0	7.0	7.5
15	9.5	6.5	8.0	10.5	8.5	9.5	10.0	8.5	9.5	8.5	8.0	8.0
16	9.0	7.0	8.0	10.0	9.5	9.5	9.5	9.0	9.0	8.5	8.0	8.5
17	9.5	7.0	8.5	10.0	9.0	9.5	9.0	8.0	8.5	9.0	8.0	8.5
18	8.5	7.0	7.5	10.0	9.0	9.5	9.5	9.0	9.0	9.0	8.0	8.5
19	8.0	6.5	7.5	10.0	9.0	9.5	10.0	8.5	9.0	8.5	7.5	8.0
20	7.5	6.5	7.0	10.5	9.0	10.0	9.5	9.0	9.5	8.5	8.0	8.0
21	8.0	6.5	7.5	10.5	10.0	10.0	11.0	9.5	10.0	8.5	7.5	8.0
22	9.0	7.0	8.0	11.0	10.0	10.5	10.5	9.5	10.0	8.0	7.0	7.5
23	9.5	8.0	8.5	11.5	10.5	11.0	10.5	9.5	10.5	8.5	7.5	8.0
24	8.5	7.5	8.0	12.0	11.0	11.5	9.5	9.0	9.0	8.5	8.0	8.0
25	9.0	7.0	8.0	11.0	10.5	11.0	9.5	9.0	9.5	8.5	8.0	8.0
26	8.5	7.5	8.0	10.5	10.0	10.0	10.0	9.5	10.0	8.5	8.0	8.0
27	8.5	7.5	8.0	10.5	9.5	10.0	11.0	10.0	10.5	9.0	8.5	8.5
28	9.0	7.5	8.0	10.0	9.5	10.0	11.0	10.5	10.5	8.5	7.5	8.0
29	9.0	7.5	8.0	10.5	9.0	9.5	10.5	9.5	10.0	8.0	6.5	7.0
30	9.0	8.0	8.5	10.5	9.0	10.0	9.5	9.0	9.5	6.5	5.5	6.0
31	---	---	---	11.0	9.0	10.0	10.5	9.5	10.0	---	---	---
MONTH	9.5	4.0	6.9	12.0	7.5	9.5	12.0	8.0	10.0	10.0	5.5	8.3

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.66	1.1	0.39	0.53	0.32	0.30	0.14	0.30	2.3	0.46	0.20	0.94
2	0.77	1.3	0.37	0.54	0.32	0.61	0.14	0.29	2.2	0.46	0.19	0.95
3	0.71	3.2	0.38	0.51	0.32	0.64	0.14	0.24	2.2	0.40	0.18	0.81
4	0.67	1.8	0.38	0.46	0.37	0.42	0.14	0.22	2.2	0.39	0.18	0.72
5	0.65	1.4	0.38	0.52	0.32	0.34	0.16	0.19	2.2	0.32	0.18	0.66
6	0.65	1.2	0.36	0.71	0.30	0.30	0.16	0.18	2.0	0.31	0.18	0.63
7	0.64	0.97	0.47	0.64	0.27	0.29	0.14	0.18	1.8	0.31	0.27	0.64
8	0.60	0.98	0.43	0.56	0.24	0.26	0.14	0.18	1.7	0.31	0.31	0.59
9	0.59	1.2	0.39	0.58	0.42	e0.27	0.15	0.18	1.7	0.28	0.24	0.55
10	0.63	1.0	0.42	0.56	0.89	0.28	0.17	0.20	1.7	0.29	0.19	0.50
11	0.67	0.87	0.39	0.56	0.54	0.29	0.16	0.24	1.6	0.27	0.19	0.46
12	1.4	0.84	0.42	0.52	1.2	0.25	0.17	0.30	1.4	0.25	0.47	0.42
13	1.2	0.84	0.39	0.49	0.61	0.22	0.19	0.37	1.3	0.28	0.39	0.38
14	1.2	0.89	0.35	0.46	0.93	0.20	0.19	0.35	1.3	0.25	0.30	0.39
15	1.5	0.88	0.34	0.51	1.3	0.19	0.18	0.35	1.3	0.24	0.32	0.41
16	1.7	0.79	0.31	0.47	1.1	0.18	0.16	0.47	1.3	0.24	0.31	0.38
17	1.9	0.71	0.31	0.46	0.71	0.18	0.14	0.50	1.2	0.24	0.29	0.40
18	2.3	0.71	0.30	0.51	0.63	0.17	0.14	0.54	1.1	0.21	0.29	0.60
19	2.8	0.69	0.29	0.54	0.58	0.17	0.16	0.63	0.96	0.21	0.28	0.48
20	2.6	0.73	0.30	0.52	0.47	0.15	0.25	0.75	0.88	0.20	0.28	0.44
21	2.3	0.68	0.30	0.43	0.40	0.17	0.27	0.97	0.85	0.23	0.53	0.85
22	2.0	0.67	0.32	0.37	0.33	0.19	0.21	1.4	0.84	0.22	0.41	0.67
23	1.7	0.59	0.48	0.44	0.29	0.20	0.18	1.8	0.84	0.24	0.48	0.70
24	1.5	0.56	1.2	0.42	0.27	0.19	0.17	1.8	0.71	0.28	0.42	0.67
25	1.2	0.53	0.71	0.34	0.27	0.22	0.17	1.7	0.68	0.20	0.46	0.64
26	1.1	0.49	0.61	0.30	0.28	0.27	0.17	1.8	0.62	0.19	0.55	0.61
27	1.0	0.46	0.61	0.28	0.33	0.23	0.18	2.0	0.60	0.20	0.65	0.61
28	1.1	0.45	0.60	0.31	0.29	0.21	0.20	2.4	0.60	0.18	0.90	0.56
29	1.2	0.41	0.59	0.32	---	0.20	0.22	2.9	0.57	0.19	0.89	0.51
30	1.0	0.38	0.55	0.35	---	0.18	0.25	2.7	0.52	0.19	0.91	0.46
31	0.90	---	0.53	0.34	---	0.17	---	2.4	---	0.19	1.0	---
TOTAL	38.84	27.32	13.87	14.55	14.30	7.94	5.24	28.53	39.17	8.23	12.44	17.63
MEAN	1.253	0.911	0.447	0.469	0.511	0.256	0.175	0.920	1.306	0.265	0.401	0.588
MAX	2.8	3.2	1.2	0.71	1.3	0.64	0.27	2.9	2.3	0.46	1.0	0.95
MIN	0.59	0.38	0.29	0.28	0.24	0.15	0.14	0.18	0.52	0.18	0.18	0.38
MED	1.1	0.81	0.39	0.49	0.35	0.22	0.17	0.47	1.3	0.24	0.31	0.60
AC-FT	77	54	28	29	28	16	10	57	78	16	25	35
CFSM	10.4	7.59	3.73	3.91	4.26	2.13	1.46	7.67	10.9	2.21	3.34	4.90
IN.	12.04	8.47	4.30	4.51	4.43	2.46	1.62	8.84	12.14	2.55	3.86	5.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)#

MEAN	1.799	1.463	1.666	0.594	0.459	0.387	0.294	0.680	0.962	0.405	0.325	0.920
MAX	2.98	2.65	3.75	0.84	0.57	0.51	0.43	0.92	1.31	0.65	0.40	1.34
(WY)	2000	2000	2000	2001	2001	2001	2000	2002	2002	1999	2002	2000
MIN	1.16	0.83	0.45	0.47	0.30	0.26	0.17	0.51	0.74	0.27	0.21	0.59
(WY)	2001	2001	2002	2000	2000	2002	2002	2001	2000	2002	2001	2002

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

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002#	
ANNUAL TOTAL	226.49		228.06			
ANNUAL MEAN	0.621		0.625		0.820	
HIGHEST ANNUAL MEAN					1.20	2000
LOWEST ANNUAL MEAN					0.62	2002
HIGHEST DAILY MEAN	3.2	Nov 3	3.2	Nov 3	31	Dec 27 1999
LOWEST DAILY MEAN	0.17	Aug 18	a0.14	Apr 1	0.14	Apr 1 2002
ANNUAL SEVEN-DAY MINIMUM	0.18	Aug 13	0.15	Apr 1	0.15	Apr 1 2002
MAXIMUM PEAK FLOW			5.9	Nov 3	b66	Dec 27 1999
MAXIMUM PEAK STAGE			4.38	Nov 3	5.16	Dec 27 1999
INSTANTANEOUS LOW FLOW			0.11	Mar 20	c0.11	Mar 20 2002
ANNUAL RUNOFF (AC-FT)	449		452		594	
ANNUAL RUNOFF (CFSM)	5.17		5.21		6.84	
ANNUAL RUNOFF (INCHES)	70.21		70.70		92.88	
10 PERCENT EXCEEDS	1.1		1.3		1.3	
50 PERCENT EXCEEDS	0.49		0.45		0.50	
90 PERCENT EXCEEDS	0.25		0.18		0.24	

\# See Period of Record; partial years used in monthly statistics
a Apr. 1-4, 7-8, 17, and 18
b From rating curve extended above 3.0 ft^3/s
c Mar. 20, Apr. 2, 3, 7-9, 17, and 18, 2002

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 the average of the river by cross section on July 15. 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, 9.5°C, August 12, 2002; minimum, 0.0°C, March 15-17, 20, and April 9, 2002.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 9.5°C, August 12; minimum, 0.0°C, March 15-17, 20, and April 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
JUL							
15...	1140	4.70	1.00	3.68	.25	7.5	12.0
15...	1142	4.70	2.00	3.68	.25	7.5	12.0
15...	1143	4.70	3.00	3.68	.25	7.5	12.0
15...	1144	4.70	4.00	3.68	.25	7.5	12.0

TEMPERATURE, WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.0	6.5	6.5	4.5	4.0	4.0	1.0	0.5	1.0	2.5	2.5	2.5
2	7.0	6.5	6.5	4.5	4.0	4.5	1.0	0.5	1.0	2.5	2.5	2.5
3	6.5	6.5	6.5	4.5	4.0	4.5	2.0	1.0	1.5	3.0	2.5	2.5
4	6.5	6.5	6.5	4.0	4.0	4.0	2.0	2.0	2.0	2.5	2.5	2.5
5	6.5	6.5	6.5	4.0	4.0	4.0	2.0	1.0	1.5	3.0	2.5	3.0
6	6.5	6.5	6.5	4.0	3.5	4.0	2.0	1.0	2.0	3.0	3.0	3.0
7	6.5	6.0	6.0	4.0	3.5	3.5	2.0	1.5	2.0	3.5	3.0	3.0
8	6.5	6.0	6.0	4.0	3.5	4.0	2.0	2.0	2.0	3.0	3.0	3.0
9	6.5	6.0	6.0	4.0	3.5	4.0	2.0	2.0	2.0	3.5	3.0	3.5
10	6.5	6.0	6.0	4.5	4.0	4.0	2.5	2.0	2.0	3.5	3.0	3.0
11	6.0	5.5	6.0	4.0	4.0	4.0	2.5	2.0	2.5	3.5	3.0	3.5
12	6.0	5.5	6.0	4.0	3.5	3.5	2.5	2.0	2.5	3.5	3.0	3.0
13	6.0	5.5	5.5	4.0	3.5	3.5	2.5	2.0	2.5	3.0	3.0	3.0
14	5.5	5.0	5.5	4.0	3.5	4.0	2.0	1.5	2.0	3.0	3.0	3.0
15	5.5	5.0	5.0	4.0	4.0	4.0	1.5	1.5	1.5	3.5	3.0	3.0
16	5.5	5.5	5.5	4.0	4.0	4.0	1.5	1.0	1.0	3.5	3.0	3.0
17	5.5	5.0	5.5	4.0	4.0	4.0	1.5	1.0	1.5	3.0	3.0	3.0
18	5.5	5.5	5.5	4.0	4.0	4.0	1.5	1.5	1.5	3.0	3.0	3.0
19	5.5	5.0	5.0	4.5	4.0	4.0	2.0	0.5	1.5	3.0	3.0	3.0
20	5.0	5.0	5.0	4.5	4.5	4.5	2.0	1.0	2.0	3.0	2.5	3.0
21	5.0	5.0	5.0	4.5	4.5	4.5	2.0	2.0	2.0	2.5	1.5	2.0
22	5.0	5.0	5.0	4.5	4.5	4.5	2.0	2.0	2.0	1.5	1.5	1.5
23	5.0	4.5	4.5	4.5	4.0	4.0	2.0	1.5	2.0	2.0	1.5	2.0
24	4.5	4.0	4.5	4.0	3.5	4.0	2.0	1.5	2.0	2.0	1.5	2.0
25	4.5	4.0	4.0	3.5	2.0	3.0	2.5	2.0	2.5	2.0	1.0	1.5
26	4.0	4.0	4.0	2.0	1.5	2.0	2.5	2.5	2.5	1.5	0.5	1.0
27	4.0	4.0	4.0	1.5	1.0	1.5	2.5	2.5	2.5	1.0	0.5	0.5
28	4.0	4.0	4.0	1.5	1.0	1.5	2.5	2.5	2.5	1.5	1.0	1.5
29	4.5	4.0	4.0	1.0	1.0	1.0	2.5	2.5	2.5	2.0	1.5	2.0
30	4.5	4.0	4.0	1.0	1.0	1.0	2.5	2.5	2.5	2.0	2.0	2.0
31	4.0	3.5	4.0	---	---	---	2.5	2.5	2.5	2.0	2.0	2.0
MONTH	7.0	3.5	5.3	4.5	1.0	3.6	2.5	0.5	2.0	3.5	0.5	2.5

15106970 MIDDLE BASIN CREEK NEAR TENAKEE—Continued

TEMPERATURE, WATER, (DEGREES CELSIUS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	2.0	2.0	2.0	2.0	2.0	1.5	0.5	1.0	3.0	2.5	2.5
2	2.0	1.5	2.0	2.0	2.0	2.0	1.5	0.5	1.0	2.5	2.0	2.0
3	2.5	2.0	2.0	2.0	2.0	2.0	1.5	0.5	1.0	2.5	1.5	2.0
4	2.5	2.0	2.0	2.0	1.5	1.5	1.0	0.5	1.0	2.5	1.5	2.0
5	2.5	2.0	2.0	1.5	1.0	1.0	1.0	0.5	1.0	2.0	1.5	1.5
6	2.5	2.0	2.0	1.0	1.0	1.0	1.5	0.5	1.0	2.5	1.0	2.0
7	2.0	1.0	1.5	1.0	0.5	1.0	1.5	0.5	1.0	2.5	2.0	2.5
8	1.5	0.5	1.0	1.0	0.5	0.5	1.5	0.5	1.0	3.0	1.5	2.5
9	2.0	1.0	1.5	0.5	0.5	0.5	1.5	0.0	1.0	2.5	2.0	2.5
10	2.0	1.5	2.0	1.0	0.5	1.0	1.5	1.0	1.5	3.0	2.5	2.5
11	2.0	2.0	2.0	1.0	1.0	1.0	1.5	0.5	1.0	3.0	2.5	3.0
12	2.0	2.0	2.0	1.0	1.0	1.0	2.0	1.0	1.5	3.0	2.5	3.0
13	2.5	2.0	2.0	1.0	1.0	1.0	2.0	1.5	1.5	3.0	3.0	3.0
14	2.5	2.0	2.0	1.0	0.5	1.0	2.0	1.0	1.5	3.5	2.5	3.0
15	2.5	2.0	2.0	1.0	0.0	0.5	2.0	1.5	1.5	3.5	3.0	3.0
16	2.5	2.0	2.0	1.0	0.0	0.5	2.0	1.0	1.5	4.0	3.0	3.5
17	2.5	1.5	2.0	1.0	0.0	0.5	2.0	1.0	1.5	3.5	3.0	3.5
18	2.5	2.0	2.0	1.0	0.5	0.5	2.0	1.0	1.5	4.0	3.0	3.5
19	2.5	2.0	2.0	1.0	0.5	1.0	2.0	1.5	2.0	4.5	3.5	4.0
20	2.5	2.0	2.0	1.0	0.0	1.0	2.0	1.5	2.0	5.0	3.5	4.0
21	2.0	1.5	2.0	1.5	0.5	1.0	2.0	1.5	2.0	4.5	4.0	4.5
22	2.0	1.0	1.5	1.5	1.0	1.5	2.0	1.5	1.5	5.0	4.5	4.5
23	1.5	0.5	1.0	1.5	1.0	1.5	2.0	1.5	1.5	5.0	4.5	4.5
24	1.5	0.5	1.0	1.5	1.0	1.5	2.0	1.5	1.5	5.0	4.5	5.0
25	2.0	1.5	1.5	1.5	1.0	1.5	2.5	1.5	1.5	5.5	4.5	5.0
26	2.0	1.0	1.5	2.0	1.5	1.5	2.0	1.0	1.5	5.5	5.0	5.5
27	2.0	1.5	2.0	2.0	1.5	1.5	2.0	1.5	2.0	5.5	5.0	5.0
28	2.0	2.0	2.0	2.0	1.0	1.5	2.5	1.5	2.0	5.5	5.0	5.5
29	---	---	---	2.0	1.5	1.5	3.0	1.5	2.0	5.5	5.0	5.0
30	---	---	---	2.0	1.0	1.5	3.0	2.0	2.5	5.5	5.0	5.0
31	---	---	---	1.5	1.0	1.0	---	---	---	5.0	5.0	5.0
MONTH	2.5	0.5	1.8	2.0	0.0	1.2	3.0	0.0	1.5	5.5	1.0	3.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5.0	5.0	5.0	7.0	6.5	6.5	8.5	7.5	8.0	8.0	7.5	7.5
2	5.5	5.0	5.0	6.5	6.5	6.5	8.0	7.5	8.0	7.5	7.5	7.5
3	5.5	5.0	5.0	6.5	6.5	6.5	8.0	7.0	7.5	8.0	7.5	7.5
4	5.5	5.0	5.5	6.5	6.5	6.5	8.5	7.0	8.0	7.5	7.0	7.5
5	5.5	5.0	5.0	6.5	6.5	6.5	8.5	7.0	8.0	7.5	7.0	7.5
6	5.5	5.0	5.0	6.5	6.5	6.5	8.5	8.0	8.0	7.5	7.0	7.5
7	5.5	5.0	5.5	7.0	6.0	6.5	8.5	8.0	8.0	7.5	7.5	7.5
8	6.0	5.0	5.5	7.5	6.5	7.0	8.5	8.0	8.0	7.5	7.0	7.5
9	6.0	5.5	5.5	7.0	7.0	7.0	8.0	8.0	8.0	7.5	7.0	7.5
10	6.0	5.5	5.5	7.0	7.0	7.0	8.0	8.0	8.0	7.5	7.0	7.0
11	5.5	5.0	5.5	7.0	7.0	7.0	8.0	8.0	8.0	7.5	7.0	7.0
12	6.0	5.0	5.5	7.5	6.5	7.0	9.5	8.0	8.5	7.5	7.0	7.0
13	6.5	5.0	6.0	7.0	7.0	7.0	8.5	8.0	8.5	7.0	6.5	7.0
14	7.5	5.5	6.5	7.0	7.0	7.0	8.5	8.0	8.0	7.0	6.5	7.0
15	7.5	6.0	6.5	7.5	7.0	7.0	8.5	7.5	8.0	7.5	7.0	7.0
16	7.0	6.0	6.5	7.5	7.0	7.0	8.0	8.0	8.0	7.0	7.0	7.0
17	7.0	6.0	6.5	7.5	7.0	7.0	8.0	7.5	7.5	7.5	7.0	7.0
18	6.5	6.0	6.0	7.5	7.0	7.0	8.0	7.5	8.0	7.5	7.0	7.0
19	6.5	6.0	6.0	7.5	7.0	7.5	8.0	7.5	8.0	7.5	7.0	7.0
20	6.0	6.0	6.0	7.5	7.0	7.5	8.0	7.5	8.0	7.0	7.0	7.0
21	6.5	6.0	6.0	7.5	7.5	7.5	8.5	8.0	8.0	7.0	7.0	7.0
22	6.5	6.0	6.5	8.0	7.5	7.5	8.5	8.0	8.0	7.0	6.5	7.0
23	7.0	6.5	6.5	8.0	7.5	8.0	8.5	8.0	8.0	7.0	6.5	7.0
24	6.5	6.5	6.5	8.0	7.5	8.0	8.0	7.5	8.0	7.0	7.0	7.0
25	7.0	6.5	6.5	8.0	7.5	7.5	8.0	8.0	8.0	7.0	7.0	7.0
26	6.5	6.5	6.5	7.5	7.5	7.5	8.0	8.0	8.0	7.0	7.0	7.0
27	6.5	6.5	6.5	8.0	7.5	7.5	8.5	8.0	8.0	7.0	7.0	7.0
28	7.0	6.0	6.5	7.5	7.5	7.5	8.5	8.0	8.5	7.0	6.5	7.0
29	7.0	6.5	6.5	8.0	7.0	7.5	8.5	8.0	8.0	6.5	6.0	6.5
30	7.0	6.5	6.5	8.0	7.5	7.5	8.0	7.5	7.5	6.5	5.5	6.0
31	---	---	---	8.0	7.5	7.5	8.0	7.5	7.5	---	---	---
MONTH	7.5	5.0	5.9	8.0	6.0	7.1	9.5	7.0	8.0	8.0	5.5	7.1

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY

LOCATION.(REVISED)--Lat 58°17'00", long 134°39'54", in SE¼ NW¼ SW¼ 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, revised.

WATER-DISCHARGE RECORDS

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	8.5	e1.7	8.0	6.9	3.8	e2.2	11	19	5.5	4.3	25
2	18	11	e1.7	6.9	6.0	23	e2.3	11	20	12	4.0	20
3	13	21	e1.7	6.3	5.6	29	e2.4	8.8	19	17	3.8	15
4	12	16	e1.8	5.9	5.5	13	e2.4	6.7	28	14	3.6	12
5	11	11	e1.8	5.7	4.7	7.7	e2.4	5.0	34	11	3.5	9.7
6	12	8.6	e1.8	9.6	4.5	e6.0	e2.4	4.1	24	9.6	3.2	8.3
7	12	7.2	e2.3	12	5.1	e4.8	e2.4	3.7	17	7.9	3.7	7.0
8	20	7.2	18	16	e5.5	e4.0	e2.4	3.5	15	6.6	13	7.1
9	15	30	e12	13	6.5	e3.2	e2.4	3.5	18	6.1	21	7.6
10	12	16	e10	13	33	e2.5	2.4	6.1	25	5.9	12	7.8
11	13	12	8.0	10	14	e2.1	2.4	8.8	18	6.6	9.4	11
12	24	9.1	5.3	10	39	e1.7	2.4	9.7	13	6.7	50	9.6
13	16	7.5	4.5	8.8	18	e1.5	2.4	16	11	7.1	34	8.3
14	13	8.1	4.1	7.4	31	e1.3	2.5	21	12	14	17	6.8
15	13	9.0	e3.4	7.5	32	e1.2	2.6	14	12	10	10	6.2
16	45	7.8	e3.0	11	48	e1.0	2.5	13	11	8.2	7.2	5.4
17	33	8.1	e2.7	8.8	20	e0.90	2.5	16	10	7.4	5.1	5.9
18	33	6.8	e2.5	10	12	e0.92	2.6	18	9.6	6.4	4.3	21
19	36	6.2	e2.5	11	8.1	e0.95	2.9	24	8.2	5.5	4.2	21
20	24	5.7	e2.5	9.7	6.2	e0.95	3.8	28	7.0	4.8	5.3	17
21	16	5.5	e2.7	7.3	5.0	e0.95	4.2	29	6.4	5.0	20	76
22	13	5.7	e3.3	e6.5	e4.1	e1.1	3.8	25	5.7	5.9	14	30
23	10	6.2	e4.2	e6.0	e3.6	e1.2	3.5	26	5.8	6.4	19	18
24	8.8	5.7	37	e7.0	e3.3	e1.4	3.5	21	6.2	12	16	15
25	7.6	5.1	29	e5.5	e3.0	e1.7	3.4	20	7.4	12	15	16
26	6.7	4.5	22	e5.0	4.2	e1.9	3.3	22	7.8	8.8	25	17
27	6.7	e3.5	16	e5.0	3.8	e2.2	3.3	23	7.0	7.3	45	17
28	9.6	e2.9	15	e5.5	3.7	e2.2	3.5	26	5.9	6.3	60	14
29	24	e2.5	15	6.9	---	e2.1	4.6	26	5.2	5.6	30	11
30	14	e2.1	12	7.3	---	e2.1	7.1	21	5.0	5.0	26	9.2
31	10	---	9.8	8.4	---	e2.1	---	16	---	4.5	26	---
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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)#

MEAN	17.76	11.24	17.56	8.790	6.073	6.314	8.846	14.45	13.80	10.01	10.55	16.39
MAX	20.6	19.7	43.2	12.4	12.2	7.96	19.2	18.1	14.9	15.9	16.6	22.5
(WY)	2000	2000	2000	1999	2002	2001	1999	1999	1999	2000	2002	2000
MIN	15.9	4.99	8.30	5.57	2.00	4.14	3.02	11.2	13.1	7.29	3.95	13.2
(WY)	2001	1999	2002	2000	1999	2002	2002	2001	2002	1999	2001	1999

\# See Period of Record
e Estimated

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY—Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002#	
ANNUAL TOTAL	3458.8		3958.17			
ANNUAL MEAN	9.476		10.84		12.06	
HIGHEST ANNUAL MEAN					15.5	2000
LOWEST ANNUAL MEAN					9.84	2001
HIGHEST DAILY MEAN	52	Feb 27	76	Sep 21	364	Dec 27 1999
LOWEST DAILY MEAN	1.7	Dec 1	a0.90	Mar 17	0.90	Mar 17 2002
ANNUAL SEVEN-DAY MINIMUM	1.8	Nov 30	0.97	Mar 16	0.97	Mar 16 2002
MAXIMUM PEAK FLOW			178	Sep 21	616	Dec 28 1999
MAXIMUM PEAK STAGE			9.14	Sep 21	10.80	Dec 28 1999
ANNUAL RUNOFF (AC-FT)	6860		7850		8740	
ANNUAL RUNOFF (CFSM)	2.19		2.50		2.79	
ANNUAL RUNOFF (INCHES)	29.72		34.01		37.85	
10 PERCENT EXCEEDS	19		24		22	
50 PERCENT EXCEEDS	7.7		7.6		7.9	
90 PERCENT EXCEEDS	3.0		2.4		3.0	

See Period of Record

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	STREAM WIDTH (FT) (00004)	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR									
21...	1150	7.50	3.00	59	6.2	.0	764	14.3	97
21...	1153	7.50	4.00	59	6.1	.0	764	14.3	97
21...	1156	7.50	5.00	59	6.1	.0	764	14.3	97
21...	1158	7.50	6.00	59	6.1	.0	764	14.2	97

Date	Time	Medium code	Sample type	GAGE HEIGHT (FEET) (00065)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	SAM-PLING METHOD, CODES (82398)	STREAM WIDTH (FT) (00004)	TURBID-ITY LAB HACH 2100AN (NTU) (99872)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)
NOV													
06...	1130	9	9	6.61	8.6	--	10	18.7	--	--	--	--	--
19...	1200	9	9	6.51	6.2	70	20	20.0	.6	760	10.4	84	6.9
DEC													
27...	1156	H	9	--	E5.0	--	--	--	--	--	--	--	--
JAN													
03...	0940	F	9	6.43	6.3	--	--	--	--	760	5.7	--	--
07...	1010	9	9	6.74	12	--	--	19.5	--	738	13.1	99	7.4
17...	1030	9	9	6.63	8.6	100	20	19.2	2.6	768	13.0	93	7.0
FEB													
12...	1503	9	9	7.56	43	--	10	32.0	--	--	--	--	--
MAR													
12...	1545	9	9	6.46	1.8	--	10	7.80	--	747	11.9	83	6.5
21...	1204	9	9	--	E.95	25	70	7.50	3.7	764	14.3	97	6.1
MAY													
14...	1135	9	9	7.07	22	45	10	23.2	1.6	761	12.3	93	7.4
17...	1505	H	9	6.90	15	--	--	--	--	--	--	--	--
JUL													
02...	1005	9	9	6.76	12	--	--	--	--	763	11.4	95	7.9
02...	1010	F	9	--	--	--	--	--	--	763	8.9	--	--

Date	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV													
06...	--	--	3.5	--	--	--	--	--	--	--	--	--	--
19...	56	--	6.0	24	7.29	1.30	1.80	18	22	<.01	2.21	.06	5.73
DEC													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	36	3.5	2.5	--	--	--	--	--	--	--	--	--	--
17...	43	--	2.0	20	6.08	1.11	1.66	16	20	<.01	1.95	.05	5.31
FEB													
12...	--	3.0	.0	--	--	--	--	--	--	--	--	--	--
MAR													
12...	56	-2.5	.0	--	--	--	--	--	--	--	--	--	--
21...	59	1.0	.0	26	7.78	1.46	2.33	22	27	<.01	2.40	.08	6.51
MAY													
14...	47	3.0	3.5	22	6.83	1.09	1.47	17	20	<.01	1.84	.07	4.64
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
02...	42	--	7.5	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

15109048 PETERSON CREEK BELOW NORTH FORK NEAR AUKE BAY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
NOV													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	2.01	54	<.015	--	.019	E.002	.008	<.007	6.5	<.5	<8	<10	<13
DEC													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	1.96	48	<.015	--	.023	E.002	.006	<.007	6.2	<.5	<8	<10	<13
FEB													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	2.34	55	<.015	--	.057	<.002	.004	<.007	6.9	<.5	<8	<10	<13
MAY													
14...	2.34	27	<.04	.11	.08	<.008	<.06	<.02	5.3	<.5	<8	<10	<13
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV													
06...	--	--	--	--	--	--	--	--	--	--	--	8.0	.19
19...	<6	324	E.06	<4	22.0	<50	<30	<9	43.4	<8	<24	1.0	.02
DEC													
27...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	E5	304	.10	<4	13.8	<50	<30	<9	37.5	<8	<24	1.0	.02
FEB													
12...	--	--	--	--	--	--	--	--	--	--	--	4.0	.47
MAR													
12...	--	--	--	--	--	--	--	--	--	--	--	1.0	.0
21...	<6	186	E.06	<4	18.1	<50	<30	<9	48.8	<8	<24	1.0	--
MAY													
14...	<6	149	<.08	<4	6.3	<50	<30	<9	39.1	<8	<24	5.0	.29
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date'	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	SAMPLER TYPE (CODE) (84164)
NOV											
06...	--	--	--	--	--	--	--	--	--	--	3044
19...	--	--	--	--	--	--	--	--	--	--	3045
DEC											
27...	0	1	2	8	22	40	58	78	92	100	8010
JAN											
03...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	3045
FEB											
12...	--	--	--	--	--	--	--	--	--	--	3044
MAR											
12...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	3045
MAY											
14...	--	--	--	--	--	--	--	--	--	--	3045
17...	0	1	8	27	41	55	66	81	94	100	8010
JUL											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27800	11000	5980	e4600	e3550	e4000	e3250	10200	53700	68800	74400	67500
2	30900	11400	5510	e4500	e3550	e4100	e3200	11000	50800	68200	76200	59600
3	27500	11800	e5400	e4400	e3500	e4300	e3100	10500	49500	69100	79900	78600
4	25300	11500	e5350	e4400	e3500	e4100	e3000	10200	50700	73300	82100	78200
5	25300	10700	e5400	e4400	e3350	e4000	e2950	9960	50500	69300	83700	53500
6	26000	9930	e5500	e4900	e3300	e3800	e2950	9910	51200	67400	85100	49100
7	25300	9610	e5600	e5300	e3200	e3500	e2950	10100	50300	67700	81700	50000
8	24100	9760	e5600	e4900	e3100	e3400	e2900	10700	51600	72900	82700	48200
9	23600	9290	e5600	e4900	e3050	e3300	e2950	11300	57700	77800	86500	44300
10	25100	9590	e5600	e4900	e3200	e3200	e2950	11500	62100	76900	84000	40000
11	25000	9430	e5500	e5000	e3300	e3100	e3000	12500	62100	72500	78000	36400
12	23100	8640	e5450	e4800	e5500	e3100	e3100	13500	58000	70500	114000	34700
13	21800	8480	e5400	e4600	e6000	e3100	e3350	14800	57300	71300	175000	33400
14	19900	8490	e5400	e4300	e5800	e3100	e3600	16000	60600	72600	161000	31900
15	18500	8560	e5350	e4400	e5600	e3100	e3700	17000	74300	73600	132000	30500
16	17400	8440	e5300	e4200	e5300	e3050	e3800	18000	85800	75900	101000	29500
17	16900	8400	e5300	e4100	e5100	e3000	e4000	19500	92000	79800	81100	28400
18	19800	8930	e5200	e4200	e5050	e3000	e4300	23400	93500	83800	68900	28300
19	20500	8760	e5100	e4000	e4800	e3000	4690	27800	84100	86200	62100	27900
20	18700	8490	e5200	e3900	e4600	e2980	5420	32200	78900	83500	60600	26700
21	17600	8320	e5200	e3800	e4450	e3000	5820	37800	75500	82400	73800	25400
22	16800	8310	e5400	e3800	e4200	e3000	5700	40400	71400	80200	86900	24800
23	16000	8230	e6000	e3750	e4000	e2900	5700	39900	68900	83700	93500	23800
24	15300	7660	e6700	e3700	e3800	e2900	5640	42200	68700	93000	89000	23600
25	14800	7470	e6600	e3700	e3600	e3050	5640	45800	70600	98500	74400	24500
26	14100	7010	e6300	e3650	e3700	e3150	5790	50900	69100	101000	61400	26400
27	13400	6250	e5900	e3650	e4050	e3200	5960	54700	63500	97500	54500	28700
28	12600	6380	e5600	e3650	e4000	e3300	6430	56800	62900	91000	65100	30000
29	12500	6120	e5200	e3600	---	e3300	7230	57600	66300	79700	71700	28900
30	12000	6060	e4900	e3550	---	e3300	8310	58600	70400	71300	74400	27400
31	11400	---	e4700	e3550	---	e3300	---	56100	---	73300	72200	---
TOTAL	619000	263010	171240	131100	116150	102630	131380	840870	1962000	2432700	2666900	1140200
MEAN	19970	8767	5524	4229	4148	3311	4379	27120	65400	78470	86030	38010
MAX	30900	11800	6700	5300	6000	4300	8310	58600	93500	101000	175000	78600
MIN	11400	6060	4700	3550	3050	2900	2900	9910	49500	67400	54500	23600
AC-FT	1228000	521700	339700	260000	230400	203600	260600	1668000	3892000	4825000	5290000	2262000
CFSM	1.85	0.81	0.51	0.39	0.38	0.31	0.40	2.51	6.04	7.25	7.95	3.51
IN.	2.13	0.90	0.59	0.45	0.40	0.35	0.45	2.89	6.75	8.36	9.17	3.92

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2002, BY WATER YEAR (WY)#

MEAN	23830	9055	6622	5097	4306	4141	6412	26050	67930	85820	76710	49520
MAX	40300	14130	12470	9118	6625	6619	10870	40100	83970	98590	99370	76330
(WY)	1995	2001	2000	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1991 - 2002#	
ANNUAL TOTAL	10970510		10577180			
ANNUAL MEAN	30060		28980		30490	
HIGHEST ANNUAL MEAN					35850	1993
LOWEST ANNUAL MEAN					23920	1996
HIGHEST DAILY MEAN	116000	Jul 23	175000	Aug 13	175000	Aug 13 2002
LOWEST DAILY MEAN	3940	Apr 2	a2900	Mar 23	2280	Mar 13 1999
ANNUAL SEVEN-DAY MINIMUM	4020	Apr 1	2950	Apr 4	2310	Mar 8 1999
MAXIMUM PEAK FLOW			b178000	Aug 13	b178000	Aug 13 2002
MAXIMUM PEAK STAGE			89.52	Aug 13	89.52	Aug 13 2002
ANNUAL RUNOFF (AC-FT)	21760000		20980000		22090000	
ANNUAL RUNOFF (CFSM)	2.78		2.68		2.82	
ANNUAL RUNOFF (INCHES)	37.72		36.37		38.29	
10 PERCENT EXCEEDS	84600		78400		82600	
50 PERCENT EXCEEDS	11500		10700		12000	
90 PERCENT EXCEEDS	4680		3300		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 ft³s
e Estimated

15129500 SITUK RIVER NEAR YAKUTAT

LOCATION.--Lat 59°35'00", long 139°29'31", in SE¼ SW¼ 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. GOES satellite telemetry at station.

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)
Jan 09	2215	1130	68.57	Aug 12	1645	*2340	*70.86
Jan 11	0815	1130	68.57	Aug 21	1645	1310	68.94

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	335	314	e180	286	173	147	e67	144	217	173	239	450
2	407	381	e160	261	165	e255	e64	161	226	175	211	399
3	381	426	e150	249	156	261	e62	160	233	170	189	356
4	361	466	e140	241	162	e210	e60	151	232	167	171	320
5	329	387	e130	277	164	e180	e57	146	268	164	157	293
6	333	332	e120	450	157	e160	e55	142	273	158	149	282
7	313	291	e110	709	e149	e150	e53	147	258	151	212	427
8	287	285	e100	727	142	e140	e51	149	242	144	235	437
9	338	276	e95	862	139	e130	e50	149	261	139	309	414
10	482	483	e90	921	156	e120	e49	183	315	135	417	375
11	515	488	e87	1000	191	e110	49	193	371	132	446	345
12	517	435	e83	753	304	e100	49	197	335	128	1720	317
13	470	360	e80	579	e295	e97	e49	192	297	121	2100	314
14	406	320	e77	474	311	e90	48	219	269	117	1600	322
15	356	365	e75	478	298	e85	48	274	248	112	1030	413
16	313	350	e74	471	e250	e81	e48	283	237	108	705	362
17	343	343	e73	404	e220	e78	48	258	228	109	534	352
18	597	503	e75	419	e200	e77	49	251	221	114	437	403
19	625	416	e90	384	e180	e76	59	251	216	109	375	385
20	589	358	118	340	e160	e75	95	253	216	105	383	399
21	577	322	130	297	e150	e75	110	255	213	100	1060	429
22	530	297	148	264	e130	e75	111	259	201	96	969	368
23	454	290	172	250	e120	e75	111	257	190	103	874	332
24	399	264	375	248	e110	75	109	245	183	188	764	303
25	348	244	575	218	e130	74	107	231	194	275	619	314
26	312	227	557	e200	150	74	105	220	207	309	503	311
27	277	213	538	e190	154	78	105	216	216	377	433	361
28	258	200	488	185	149	76	107	217	203	498	521	333
29	293	188	415	176	---	74	113	222	189	410	572	307
30	282	186	365	192	---	e73	121	223	178	335	532	286
31	258	---	319	186	---	e70	---	222	---	278	515	---
TOTAL	12285	10010	6189	12691	5065	3441	2209	6470	7137	5700	18981	10709
MEAN	396.3	333.7	199.6	409.4	180.9	111.0	73.63	208.7	237.9	183.9	612.3	357.0
MAX	625	503	575	1000	311	261	121	283	371	498	2100	450
MIN	258	186	73	176	110	70	48	142	178	96	149	282
AC-FT	24370	19850	12280	25170	10050	6830	4380	12830	14160	11310	37650	21240
CFSM	11.0	9.27	5.55	11.4	5.02	3.08	2.05	5.80	6.61	5.11	17.0	9.92
IN.	12.69	10.34	6.40	13.11	5.23	3.56	2.28	6.69	7.37	5.89	19.61	11.07

e Estimated

15129500 SITUK RIVER NEAR YAKUTAT—Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)#

MEAN	541.6	345.6	386.7	287.4	240.7	237.0	237.5	277.0	232.5	191.7	280.4	508.5
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	339
(WY)	1998	1999	1991	1996	1999	1989	2002	1996	1993	1993	1994	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1989 - 2002#	
ANNUAL TOTAL	111863		100887			
ANNUAL MEAN	306.5		276.4		314.3	
HIGHEST ANNUAL MEAN					382	1992
LOWEST ANNUAL MEAN					230	1996
HIGHEST DAILY MEAN	1170	Feb 27	2100	Aug 13	2850	Dec 27 1999
LOWEST DAILY MEAN	73	Dec 17	a48	Apr 14	b47	Mar 5 1989
ANNUAL SEVEN-DAY MINIMUM	77	Dec 12	48	Apr 11	48	Mar 3 1989
MAXIMUM PEAK FLOW			2340	Aug 12	3840	Oct 18 1999
MAXIMUM PEAK STAGE			70.86	Aug 12	72.99	Oct 18 1999
INSTANTANEOUS LOW FLOW			c47	Apr 15	d47	Mar 5 1989
ANNUAL RUNOFF (AC-FT)	221900		200100		227700	
ANNUAL RUNOFF (CFSM)	8.51		7.68		8.73	
ANNUAL RUNOFF (INCHES)	115.59		104.25		118.61	
10 PERCENT EXCEEDS	583		488		597	
50 PERCENT EXCEEDS	248		228		237	
90 PERCENT EXCEEDS	128		77		114	

\# See Period of Record
a Apr. 14-17
b Mar. 5-7 1989
c Apr. 15 and 17, lowest observed, but may have been lower during periods of gage malfunction.
d Mar. 5, 1989 and Apr. 15 and 17, 2002

15129500 SITUK RIVER NEAR YAKUTAT—Continued

WATER-QUALITY RECORDS

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

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

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

REMARKS.--Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on March 12. No variation was found within the cross section, or between mean stream temperature and sensor temperature. October 1 to December 7 record considered fair, due to 4 hour recording interval.

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, 18.0°C, July 8; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)	SAM-PLING METHOD, CODES (82398)	TEMPER-ATURE WATER (DEG C) (00010)	TEMPER-ATURE AIR (DEG C) (00020)
MAR								
12...	1631	63.0	6.0	65.39	103	10	1.0	3.0
12...	1633	61.0	18.0	65.39	103	10	1.0	3.0
12...	1635	61.0	30.0	65.39	103	10	1.0	3.0
12...	1637	61.0	42.0	65.39	103	10	1.0	3.0
12...	1639	61.0	54.0	65.39	103	10	1.0	3.0

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	8.0	---	4.0	3.5	---	0.0	0.0	---	2.0	1.5	2.0
2	9.0	8.0	---	4.0	4.0	---	0.5	0.0	---	2.5	2.0	2.0
3	9.0	7.0	---	4.0	3.0	---	2.0	0.5	---	2.0	2.0	2.0
4	9.5	8.5	---	3.0	2.5	---	2.0	1.0	---	2.0	1.0	1.5
5	9.0	8.5	---	3.0	2.5	---	1.0	0.5	---	2.5	1.5	2.0
6	9.0	8.0	---	3.0	2.5	---	1.0	0.5	---	2.0	2.0	2.0
7	8.5	7.5	---	3.0	2.0	---	2.0	0.5	---	2.0	1.5	1.5
8	8.5	7.5	---	3.0	2.0	---	2.0	0.5	1.0	1.5	1.5	1.5
9	8.0	7.5	---	3.0	2.5	---	2.0	1.0	1.5	2.0	1.0	1.5
10	7.5	7.0	---	3.0	2.5	---	2.0	1.5	2.0	1.5	1.0	1.5
11	7.5	7.0	---	3.0	2.5	---	2.0	1.5	2.0	1.5	1.0	1.5
12	7.5	7.0	---	2.5	2.0	---	2.0	1.5	2.0	1.5	1.0	1.5
13	7.5	6.5	---	3.0	2.0	---	2.0	1.0	1.5	2.0	1.5	1.5
14	7.0	6.5	---	3.5	2.5	---	1.0	0.5	0.5	2.0	2.0	2.0
15	6.5	6.0	---	3.0	3.0	---	0.5	0.0	0.0	2.0	1.5	2.0
16	7.0	6.0	---	3.0	3.0	---	0.0	0.0	0.0	1.5	1.0	1.5
17	6.5	5.5	---	3.5	3.0	---	0.0	0.0	0.0	2.0	1.5	2.0
18	6.5	6.0	---	3.5	3.0	---	0.0	0.0	0.0	2.0	2.0	2.0
19	6.5	6.0	---	3.5	2.5	---	0.0	0.0	0.0	2.0	1.5	2.0
20	6.5	6.0	---	3.5	3.0	---	0.0	0.0	0.0	1.5	1.0	1.5
21	6.0	6.0	---	3.5	3.0	---	0.5	0.0	0.5	1.0	0.5	1.0
22	6.0	5.5	---	3.5	3.0	---	2.0	0.5	1.0	1.0	0.0	0.5
23	6.0	5.5	---	3.5	2.5	---	2.0	1.0	1.0	1.0	0.0	0.5
24	6.0	5.0	---	2.5	2.0	---	2.0	1.5	1.5	0.5	0.0	0.0
25	5.0	4.0	---	1.5	1.5	---	1.5	1.0	1.5	0.5	0.0	0.0
26	4.5	4.0	---	2.0	1.5	---	2.0	1.5	1.5	0.0	0.0	0.0
27	4.5	4.0	---	2.5	2.0	---	2.0	1.5	2.0	0.5	0.0	0.0
28	4.5	4.0	---	1.5	0.5	---	2.0	1.0	1.5	1.5	0.5	1.0
29	4.0	3.0	---	0.5	0.0	---	2.0	1.5	2.0	2.0	1.5	1.5
30	4.0	3.5	---	0.5	0.0	---	2.0	1.5	1.5	2.0	1.0	1.5
31	4.0	3.0	---	---	---	---	2.0	1.5	1.5	2.0	1.0	1.5
MONTH	9.5	3.0	---	4.0	0.0	---	2.0	0.0	---	2.5	0.0	1.4

15129500 SITUK RIVER NEAR YAKUTAT—Continued

TEMPERATURE, WATER (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.0	1.0	1.5	2.0	1.0	2.0	2.5	0.0	1.0	5.5	3.5	4.5
2	1.5	1.0	1.5	1.0	0.0	0.0	2.5	0.0	1.0	7.5	2.0	4.5
3	1.5	1.0	1.0	2.0	1.0	1.5	2.5	0.0	1.0	6.0	2.5	4.0
4	1.5	0.5	0.5	1.0	0.0	0.5	3.0	0.0	1.0	7.0	2.5	4.5
5	1.5	0.5	1.0	1.0	0.0	0.0	3.5	0.0	1.5	7.5	2.0	4.5
6	2.0	1.0	1.5	0.5	0.0	0.0	4.0	0.0	2.0	6.5	2.5	4.5
7	1.0	0.0	0.5	0.5	0.0	0.0	4.0	0.5	2.0	7.5	3.0	5.5
8	1.0	0.5	0.5	0.0	0.0	0.0	4.0	0.0	2.0	7.0	3.0	5.5
9	1.5	0.5	1.0	0.0	0.0	0.0	4.0	0.0	2.0	5.5	4.0	4.5
10	1.5	1.0	1.5	0.0	0.0	0.0	4.5	1.0	2.5	5.5	3.5	4.5
11	1.0	0.0	0.5	1.0	0.0	0.5	4.5	2.0	3.0	5.5	3.5	4.5
12	1.5	0.5	1.0	1.0	0.0	0.5	6.0	2.5	4.0	7.5	3.5	5.5
13	1.0	0.0	0.5	1.5	0.5	1.0	6.0	1.5	3.5	6.5	4.0	5.0
14	1.5	0.0	1.0	1.5	0.0	0.5	5.0	2.0	3.5	5.5	4.0	4.5
15	1.5	0.5	1.0	1.0	0.0	0.5	6.0	2.5	4.0	6.0	3.5	4.5
16	1.0	0.5	1.0	0.5	0.0	0.0	6.0	1.5	4.0	7.0	3.5	5.0
17	1.5	0.0	1.0	0.5	0.0	0.0	6.0	2.0	4.0	9.5	3.5	6.0
18	1.5	0.0	0.5	0.0	0.0	0.0	5.0	3.5	4.0	10.0	4.0	6.5
19	1.5	0.5	1.0	0.5	0.0	0.0	4.0	3.5	4.0	10.5	4.0	7.0
20	1.0	0.5	1.0	1.0	0.0	0.5	3.5	1.5	3.0	11.0	5.5	8.0
21	1.0	0.0	0.5	1.5	0.0	0.5	4.5	2.0	3.0	11.0	6.0	8.5
22	0.0	0.0	0.0	2.0	0.0	1.0	6.0	1.5	3.5	8.5	6.0	7.0
23	0.0	0.0	0.0	2.5	0.0	1.0	7.0	2.5	4.5	8.0	6.5	7.0
24	0.0	0.0	0.0	2.5	0.0	1.0	6.0	2.0	4.0	9.0	7.0	8.0
25	0.5	0.0	0.0	3.0	1.5	2.5	6.5	1.5	4.0	12.5	6.5	9.5
26	1.0	0.0	0.5	4.5	2.0	3.5	6.5	2.5	4.5	10.5	7.5	8.5
27	2.0	0.0	1.0	3.5	2.0	3.0	7.0	3.0	4.5	10.5	7.5	9.0
28	2.0	1.5	2.0	4.0	1.5	2.5	7.5	2.5	5.0	10.0	9.0	9.5
29	---	---	---	3.5	2.0	2.5	7.5	3.0	5.5	10.0	7.5	9.0
30	---	---	---	2.5	1.5	2.0	7.0	3.0	5.0	10.5	7.0	8.5
31	---	---	---	3.0	0.5	1.5	---	---	---	13.0	7.0	10.0
MONTH	2.0	0.0	0.8	4.5	0.0	0.9	7.5	0.0	3.2	13.0	2.0	6.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.0	9.0	9.5	12.5	12.0	12.0	17.0	13.0	15.0	12.5	11.0	12.0
2	9.0	7.5	8.5	13.0	11.5	12.5	17.0	13.0	15.0	12.5	10.5	11.5
3	11.0	7.5	9.5	14.0	11.5	13.0	17.5	13.5	15.5	13.5	10.5	11.5
4	10.5	9.0	9.5	13.0	12.0	12.0	17.5	13.0	15.0	12.5	10.0	11.0
5	10.5	8.5	9.5	13.5	11.0	12.5	15.5	13.5	14.5	12.5	9.5	11.0
6	11.0	9.5	10.0	13.5	11.5	12.5	14.0	13.0	13.5	11.5	10.5	11.0
7	14.5	9.5	11.5	17.0	11.5	14.0	13.0	12.0	12.5	10.5	10.0	10.0
8	12.0	9.5	11.0	18.0	11.5	14.5	13.5	12.5	13.0	11.0	10.0	10.5
9	10.5	9.5	10.0	16.0	13.5	14.0	13.0	12.5	13.0	11.5	10.0	10.5
10	10.0	8.5	9.5	13.5	11.5	12.5	14.0	12.5	13.0	11.0	10.0	10.5
11	10.5	9.5	9.5	14.0	11.5	13.0	13.0	12.5	13.0	11.0	10.0	10.5
12	11.5	9.5	10.5	15.5	12.0	13.5	13.0	12.5	12.5	11.0	9.5	10.5
13	14.5	10.0	12.0	16.5	11.0	14.0	13.5	12.5	13.0	10.5	9.5	10.0
14	15.5	10.0	12.5	15.0	13.0	13.5	14.5	12.5	13.5	10.0	9.0	9.5
15	16.5	11.0	13.5	14.5	12.5	13.5	15.0	13.0	14.0	10.0	9.0	9.5
16	15.0	12.0	13.0	15.0	11.5	13.5	14.5	13.0	14.0	11.0	8.5	9.5
17	13.5	12.0	12.5	14.0	12.0	13.0	14.0	12.5	13.0	9.5	8.5	9.0
18	13.0	11.5	12.5	15.0	12.0	13.5	13.0	12.0	12.5	9.0	8.5	9.0
19	12.5	11.5	12.0	16.5	12.0	14.0	13.5	12.5	13.0	10.0	8.5	9.5
20	12.5	11.0	12.0	15.0	11.5	13.5	13.0	12.0	12.5	9.5	8.5	9.0
21	12.5	10.5	11.5	14.0	12.5	13.5	12.0	11.5	12.0	10.0	8.0	9.0
22	15.0	10.5	12.5	14.0	13.0	13.5	12.5	11.5	12.0	10.0	8.0	9.0
23	14.0	12.0	13.0	13.5	12.5	13.0	12.5	12.0	12.0	10.0	9.0	9.5
24	15.0	12.0	13.0	13.0	12.0	12.5	13.5	11.5	12.5	10.0	9.0	9.5
25	13.5	12.0	12.5	13.5	12.5	13.0	12.5	11.5	12.0	10.0	9.0	9.5
26	12.5	11.5	11.5	13.5	13.0	13.5	13.0	11.0	12.0	10.0	9.0	9.5
27	13.0	11.0	12.0	13.5	12.5	13.0	12.5	11.5	12.0	10.0	9.0	9.5
28	16.0	10.5	13.0	13.5	12.0	12.5	11.5	11.0	11.5	10.0	8.5	9.0
29	17.0	11.0	14.0	14.0	12.0	13.0	12.0	11.0	11.5	9.0	7.5	8.0
30	14.5	11.5	12.5	16.0	12.5	14.0	11.5	11.0	11.5	9.0	7.5	8.0
31	---	---	---	17.0	13.0	14.5	12.5	11.0	11.5	---	---	---
MONTH	17.0	7.5	11.5	18.0	11.0	13.2	17.5	11.0	13.0	13.5	7.5	9.9

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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	25	e12	11	10	6.4	2.5	4.8	6.5	3.9	4.0	23
2	19	28	e11	10	9.6	12	2.5	5.4	7.0	3.7	3.8	20
3	17	29	11	9.3	8.8	13	2.4	5.3	8.0	3.5	3.5	18
4	16	30	10	8.7	8.8	11	2.3	5.2	7.8	3.5	3.2	17
5	14	26	11	11	8.2	9.5	2.3	5.0	7.3	3.2	3.1	16
6	14	24	9.6	20	7.6	8.4	2.2	5.0	6.8	3.0	3.1	15
7	15	22	9.1	27	7.0	7.6	2.1	5.2	6.4	2.9	5.5	25
8	13	22	8.5	26	6.5	7.0	2.1	5.5	6.0	2.7	5.5	28
9	18	20	8.0	30	6.1	6.5	2.0	5.8	6.6	2.6	5.1	26
10	23	31	7.3	36	8.1	6.1	1.9	6.5	7.2	2.6	4.7	23
11	25	31	6.9	40	11	5.8	1.9	7.0	7.4	2.5	6.9	20
12	27	29	6.6	35	19	5.5	1.9	7.4	7.1	2.5	30	18
13	25	26	6.4	30	17	5.2	1.9	7.4	6.6	2.4	25	18
14	21	23	6.0	26	16	4.9	1.8	7.8	6.2	2.2	21	18
15	19	24	5.9	29	14	4.6	1.8	9.1	5.8	2.2	18	23
16	18	24	5.5	29	13	e4.4	1.8	9.4	5.4	2.1	16	21
17	20	23	5.1	25	12	4.3	1.8	9.1	5.2	2.1	14	19
18	28	32	5.0	27	12	e4.1	1.8	9.1	5.0	2.1	12	19
19	30	30	5.1	25	11	e3.9	2.0	9.1	4.7	1.9	11	19
20	30	26	6.5	22	9.7	3.8	3.5	9.2	4.6	1.9	13	18
21	33	23	6.0	20	8.9	3.5	3.9	9.2	4.3	1.8	43	20
22	33	22	6.1	18	8.1	3.5	3.9	9.3	4.1	1.8	33	18
23	28	21	6.7	17	7.4	3.3	3.8	9.3	4.0	2.1	30	17
24	26	19	13	16	7.1	3.2	3.8	9.1	3.9	6.5	29	15
25	25	18	17	14	6.6	3.2	3.6	8.8	4.1	7.2	26	16
26	23	16	16	14	7.6	3.2	3.5	8.5	4.4	6.1	23	16
27	21	16	17	12	6.6	3.1	3.5	8.1	4.9	6.2	21	19
28	19	15	17	12	6.5	3.0	3.7	8.2	4.7	5.7	25	17
29	22	14	15	12	---	2.7	3.9	8.2	4.4	5.2	25	15
30	22	e13	13	12	---	2.7	4.2	7.3	4.0	4.8	25	15
31	21	---	12	12	---	2.6	---	6.7	---	4.3	26	---
TOTAL	685	702	295.3	636.0	274.2	168.0	80.3	231.0	170.4	105.2	514.4	572
MEAN	22.10	23.40	9.526	20.52	9.793	5.419	2.677	7.452	5.680	3.394	16.59	19.07
MAX	33	32	17	40	19	13	4.2	9.4	8.0	7.2	43	28
MIN	13	13	5.0	8.7	6.1	2.6	1.8	4.8	3.9	1.8	3.1	15
AC-FT	1360	1390	586	1260	544	333	159	458	338	209	1020	1130
CFSM	8.84	9.36	3.81	8.21	3.92	2.17	1.07	2.98	2.27	1.36	6.64	7.63
IN.	10.19	10.45	4.39	9.46	4.08	2.50	1.19	3.44	2.54	1.57	7.65	8.51

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

MEAN	31.91	25.61	22.95	19.12	15.59	15.99	15.27	13.87	6.982	4.446	9.100	19.13
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	6.17	2.01	0.66	1.32	5.90
(WY)	1998	1996	1996	1993	1999	1999	2002	1996	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1992 - 2002	
ANNUAL TOTAL	6484.2		4433.8			
ANNUAL MEAN	17.76		12.15		16.67	
HIGHEST ANNUAL MEAN					23.3	2001
LOWEST ANNUAL MEAN					10.9	1993
HIGHEST DAILY MEAN	60	Feb 27	43	Aug 21	e118	Dec 27 1999
LOWEST DAILY MEAN	a1.2	Aug 22	b1.8	Apr 14	0.27	Jul 31 1993
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 21	1.8	Apr 12	0.39	Jul 28 1993
MAXIMUM PEAK FLOW			51	Aug 21	c159	Oct 18 1999
MAXIMUM PEAK STAGE			11.59	Aug 21	c12.55	Oct 18 1999
INSTANTANEOUS LOW FLOW			d1.6	Apr 16	f0.21	Jul 28 1993
ANNUAL RUNOFF (AC-FT)	12860		8790		12080	
ANNUAL RUNOFF (CFSM)	7.11		4.86		6.67	
ANNUAL RUNOFF (INCHES)	96.48		65.97		90.60	
10 PERCENT EXCEEDS	38		26		36	
50 PERCENT EXCEEDS	16		8.9		13	
90 PERCENT EXCEEDS	2.3		2.7		3.4	

a Aug. 22-25
b Apr. 14-18, and July 21-22
c May have been exceeded during period of gage malfunction from Dec. 25 to 28, 1999
d Apr. 16-18
e Estimated
f 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

15130000 RUSSELL LAKE NEAR YAKUTAT

LOCATION.--Lat 59°55'04", long 139°22'56", in SW¼ SW¼ sec. 14, T. 23 S., R. 35 E. (Yakutat D-4 quad.), Yakutat Borough, Hydrologic Unit 19010401, in Tongass National Forest, in Russell Fiord Wilderness Area, on the left shore of Russell Lake, 6 mi southeast of Hubbard Glacier terminal area near Osier Island, and 33 miles northeast of Yakutat.

DRAINAGE AREA.--700 mi^2, approximately.

PERIOD OF RECORD.-- June 1986 to October 1986 (intermittent prior to August 11) and June 2002 to August 2002.

GAGE.-- Water-stage recorder. Datum of gage is sea level (levels by U.S. Forest Service GPS Survey of Aug. 2002). Prior to October 7, 1986, non-recording gage at site near south end of lake (USGS station 15129990) at same datum (revised).

REMARKS.--During May, 1986 and again in July, 2002, Russell Fiord was dammed by the advancing Hubbard Glacier. In each case the ice dam changed Russell Fiord from a tidal estuary to a closed lake, unofficially named "Russell Lake." Water inflow to the lake, predominantly runoff of melting snow and ice from surrounding glaciated mountains, raised the level of the lake to a high of 84.48 ft in October 1986 and 49.56 ft in August of 2002, when the ice dams failed. GOES satellite telemetry at station.

COOPERATION.-- Gage-height record was provided by personnel of U.S.D.A. Forest Service prior to August 11, 1986.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation 84.48 ft (revised), October 7, 1996, result of an ice dam formed by the advance of Hubbard Glacier.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 49.56 ft, August 14, result of an ice dam formed by the advance of Hubbard Glacier; minimum is tidally affected and not determined.

REVISIONS.--The daily elevations and maximum for calendar year 1986 have been revised to reflect sea level datum of 2002 as shown in the following table. They supersede figures published in Open File Report 86-545.

GAGE HEIGHT, FEET, CALENDAR YEAR JANUARY TO DECEMBER 1986
DAILY MEAN VALUES

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	---	---	---	---	---	---	---	70.0	81.1	---	---
2	---	---	---	---	---	---	---	---	70.5	81.5	---	---
3	---	---	---	---	---	3.0	---	46.6	70.9	82.0	---	---
4	---	---	---	---	---	3.3	---	---	71.4	82.5	---	---
5	---	---	---	---	---	3.6	22.7	---	71.8	83.3	---	---
6	---	---	---	---	---	---	---	49.9	72.1	84.0	---	---
7	---	---	---	---	---	---	---	---	72.5	84.30	---	---
8	---	---	---	---	---	---	---	---	72.9	34.98	---	---
9	---	---	---	---	---	---	---	---	73.3	---	---	---
10	---	---	---	---	---	---	---	---	73.6	---	---	---
11	---	---	---	---	---	---	---	56.5	74.0	---	---	---
12	---	---	---	---	---	8.6	27.3	57.6	74.3	---	---	---
13	---	---	---	---	---	---	---	59.2	74.7	---	---	---
14	---	---	---	---	---	---	---	60.3	74.9	---	---	---
15	---	---	---	---	---	---	---	60.9	75.3	---	---	---
16	---	---	---	---	---	---	---	61.4	75.7	---	---	---
17	---	---	---	---	---	---	31.9	62.0	76.0	---	---	---
18	---	---	---	---	---	---	---	62.4	76.4	---	---	---
19	---	---	---	---	---	---	---	62.9	76.7	---	---	---
20	---	---	---	---	---	---	---	63.2	77.1	---	---	---
21	---	---	---	---	---	---	---	63.8	77.9	---	---	---
22	---	---	---	---	---	---	---	64.1	78.4	---	---	---
23	---	---	---	---	---	---	38.6	64.4	79.3	---	---	---
24	---	---	---	---	---	15.3	---	65.1	79.7	---	---	---
25	---	---	---	---	---	---	---	65.5	80.1	---	---	---
26	---	---	---	---	---	16.8	---	66.0	80.3	---	---	---
27	---	---	---	---	---	---	---	66.7	80.5	---	---	---
28	---	---	---	---	---	---	---	67.6	80.6	---	---	---
29	---	---	---	---	---	---	---	68.0	80.8	---	---	---
30	---	---	---	---	---	---	---	68.9	81.0	---	---	---
31	---	---	---	---	---	---	---	69.4	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	75.76	---	---	---
MAX	---	---	---	---	---	---	---	---	81.00	---	---	---
MIN	---	---	---	---	---	---	---	---	70.00	---	---	---
MED	---	---	---	---	---	---	---	---	75.50	---	---	---

15130000 RUSSELL LAKE NEAR YAKUTAT—Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	10.91	34.41	---
2	---	---	---	---	---	---	---	---	---	11.55	35.22	---
3	---	---	---	---	---	---	---	---	---	12.13	35.98	---
4	---	---	---	---	---	---	---	---	---	12.74	36.79	---
5	---	---	---	---	---	---	---	---	---	13.30	37.61	---
6	---	---	---	---	---	---	---	---	---	13.87	38.37	---
7	---	---	---	---	---	---	---	---	---	14.47	39.27	---
8	---	---	---	---	---	---	---	---	---	15.16	40.33	---
9	---	---	---	---	---	---	---	---	---	15.91	41.40	---
10	---	---	---	---	---	---	---	---	---	16.58	42.53	---
11	---	---	---	---	---	---	---	---	---	17.24	43.52	---
12	---	---	---	---	---	---	---	---	---	17.87	45.86	---
13	---	---	---	---	---	---	---	---	---	18.54	48.84	---
14	---	---	---	---	---	---	---	---	---	19.23	44.27	---
15	---	---	---	---	---	---	---	---	---	19.89	8.27	---
16	---	---	---	---	---	---	---	---	---	20.57	---	---
17	---	---	---	---	---	---	---	---	---	21.36	---	---
18	---	---	---	---	---	---	---	---	---	22.23	---	---
19	---	---	---	---	---	---	---	---	---	23.06	---	---
20	---	---	---	---	---	---	---	---	---	23.81	---	---
21	---	---	---	---	---	---	---	---	---	24.52	---	---
22	---	---	---	---	---	---	---	---	---	25.21	---	---
23	---	---	---	---	---	---	---	---	---	25.94	---	---
24	---	---	---	---	---	---	---	---	6.57	27.00	---	---
25	---	---	---	---	---	---	---	---	7.20	28.27	---	---
26	---	---	---	---	---	---	---	---	7.81	29.35	---	---
27	---	---	---	---	---	---	---	---	8.39	30.42	---	---
28	---	---	---	---	---	---	---	---	8.90	31.50	---	---
29	---	---	---	---	---	---	---	---	9.51	32.28	---	---
30	---	---	---	---	---	---	---	---	10.22	32.92	---	---
31	---	---	---	---	---	---	---	---	---	33.62	---	---
MEAN	---	---	---	---	---	---	---	---	---	21.34	---	---
MAX	---	---	---	---	---	---	---	---	---	33.62	---	---
MIN	---	---	---	---	---	---	---	---	---	10.91	---	---
MED	---	---	---	---	---	---	---	---	---	20.57		