15199500 SINONA CREEK NEAR CHISTOCHINA

LOCATION.--Lat 62°35'28", long 144°38'48", in SW¼ of NW¼ sec. 3, T. 9 N., R. 4 E., (Gulkana C-2 quad), Hydrologic Unit 19020101, on downstream left bank, at Glenn Highway/Tok Cutoff (Alaska Route 1) bridge, 1.8 miles NE of Chistochina.

DRAINAGE AREA.--167 mi^2

PERIOD OF RECORD.--September 2002 to current year.

REVISED RECORD.--WRD AK-2004-1; 2003 (P)

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,900 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	e14	e12	e10	e5.0	e4.5	e12	e430	49	22	143	36
2	20	e13	e12	e11	e4.5	e4.5	e12	e400	44	21	121	44
3	19	e13	e12	e11	e4.5	e4.5	e12	355	45	24	101	42
4	19	e13	e11	e12	e4.5	e4.5	e13	308	42	28	86	40
5	19	e12	e11	e11	e4.5	e5.0	e13	e280	39	26	75	41
6	21	e12	e10	e11	e4.5	e5.0	e13	249	36	24	66	41
7	24	e12	e10	e11	e4.5	e5.5	e14	215	36	e22	58	41
8	26	e12	e10	e10	e4.5	e5.5	e14	164	35	e21	54	41
9	25	e12	e10	e10	e4.5	e6.0	e15	129	33	e21	49	40
10	23	e12	e10	e9.0	e4.5	e6.5	e15	128	31	e20	44	49
11	22	e12	e10	e8.5	e4.5	e7.0	e16	139	29	e20	40	56
12	20	e12	e10	e8.0	e4.5	e7.5	e16	131	28	e20	37	55
13	22	e12	e10	e8.0	e4.5	e8.0	e16	118	30	e19	35	62
14	23	e12	e10	e7.5	e4.5	e8.5	e17	114	29	e20	34	65
15	26	e11	e10	e7.0	e4.5	e8.5	e17	144	28	e20	32	66
16	26	e11	e10	e6.5	e4.5	e8.5	e17	180	28	e23	31	72
17	24	e11	e10	e6.5	e4.5	e9.0	e18	229	27	e22	30	67
18	e22	e11	e10	e6.0	e4.5	e9.0	e18	e280	25	e26	30	60
19	21	e11	e10	e6.0	e4.5	e9.0	e19	e220	26	27	30	55
20	20	e11	e10	e6.0	e4.5	e9.0	e20	131	39	29	29	54
21	18	e11	e10	e5.5	e4.5	e9.0	e23	106	40	27	29	52
22	e17	e11	e11	e5.5	e4.5	e9.0	e26	107	42	25	30	48
23	e17	e11	e11	e5.5	e4.5	e9.5	e30	121	47	25	31	49
24	e16	e11	e11	e5.5	e4.5	e9.5	e48	142	39	27	33	56
25	e16	e11	e10	e5.5	e4.5	e10	e70	126	30	28	32	62
26	e15	e12	e10	e5.5	e4.5	e10	e100	123	28	27	31	65
27	15	e12	e11	e5.5	e4.5	e11	e180	109	27	26	30	71
28	15	e12	e11	e5.0	e4.5	e11	e300	93	26	32	29	66
29	15	e12	e11	e5.0	---	e11	e450	80	25	36	29	61
30	15	e12	e10	e5.0	---	e11	e440	63	23	42	30	56
31	e14	---	e10	e5.0	---	e12	---	55	---	89	29	---
TOTAL	615	354	324	234.5	126.5	248.5	1974	5469	1006	839	1458	1613
MEAN	19.8	11.8	10.5	7.56	4.52	8.02	65.8	176	33.5	27.1	47.0	53.8
MAX	26	14	12	12	5.0	12	450	430	49	89	143	72
MIN	14	11	10	5.0	4.5	4.5	12	55	23	19	29	36
AC-FT	1220	702	643	465	251	493	3920	10850	2000	1660	2890	3200
CFSM	0.12	0.07	0.06	0.05	0.03	0.05	0.39	1.06	0.20	0.16	0.28	0.32
IN.	0.14	0.08	0.07	0.05	0.03	0.06	0.44	1.22	0.22	0.19	0.32	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)#

MEAN	42.3	16.2	7.54	5.22	5.66	6.82	27.6	128	38.7	19.0	23.5	38.5
MAX	91.9	28.9	10.5	7.56	10.3	8.02	65.8	176	43.1	27.1	47.0	70.8
(WY)	2003	2003	2005	2005	2003	2003	2005	2005	2004	2005	2005	2002
MIN	14.9	7.97	4.65	2.52	2.25	4.42	6.72	97.4	33.5	14.2	10.7	14.5
(WY)	2004	2004	2004	2004	2004	2004	2004	2004	2005	2004	2004	2004

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

15199500 SINONA CREEK NEAR CHISTOCHINA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005#	
ANNUAL TOTAL	7290.2		14261.5			
ANNUAL MEAN	19.9		39.1		29.2	
HIGHEST ANNUAL MEAN					39.1	2005
LOWEST ANNUAL MEAN					18.7	2004
HIGHEST DAILY MEAN	350	May 13	450	Apr 29	450	Apr 29 2005
LOWEST DAILY MEAN	a1.4	Jan 29	b4.5	Feb 2	a1.4	Jan 29 2004
ANNUAL SEVEN-DAY MINIMUM	1.4	Jan 29	4.5	Feb 2	1.4	Jan 29 2004
MAXIMUM PEAK FLOW			c412	May 3	c412	May 3 2005
MAXIMUM PEAK STAGE			c7.85	May 3	c7.85	May 3 2005
MAXIMUM PEAK STAGE			d10.37	Apr 26	d11.55	May 1 2004
ANNUAL RUNOFF (AC-FT)	14460		28290		21150	
ANNUAL RUNOFF (CFSM)	0.119		0.234		0.175	
ANNUAL RUNOFF (INCHES)	1.62		3.18		2.38	
10 PERCENT EXCEEDS	29		91		70	
50 PERCENT EXCEEDS	11		19		13	
90 PERCENT EXCEEDS	2.5		5.0		4.5	

\# See period of record, partial years used in monthly statistics
a Jan. 29 to Feb. 8
b Feb. 2 to Mar. 4
c Maximum recorded, but may have been higher during period of no gage-height record, Apr. 29 to May 3
d Backwater from ice

15215990 NICOLET CREEK NEAR CORDOVA

LOCATION.--Lat 60°31'09", long 145°47'23", in SW¼ SW¼ SE¼ sec. 32, T. 15 S., R. 3 W. (Cordova C-5 quad), Hydrologic Unit 19020201, on right bank 275 ft upstream from culvert for Whitshed Road, 475 ft upstream from mouth and 2.1 mi southwest of Cordova.

DRAINAGE AREA.--0.75 mi^2.

PERIOD OF RECORD.--Annual maximum, water years 1991-99. September 1999 to current year.

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

REMARKS.--Record is poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	3.2	107	e0.10	e0.40	21	2.0	1.4	2.8	0.24	13	0.25
2	e10	2.3	59	e0.50	e0.40	7.3	1.5	2.4	1.6	0.43	23	0.30
3	e100	31	9.0	e20	e0.30	40	1.1	2.8	1.00	0.68	29	0.34
4	e60	5.0	3.4	e60	e0.20	14	0.84	5.9	0.78	0.38	50	6.8
5	e10	3.1	2.3	e3.0	e0.20	44	3.1	4.1	0.64	0.29	11	50
6	e4.0	2.1	1.8	e0.60	e0.20	25	37	2.7	0.55	0.23	1.9	56
7	e3.0	2.1	1.5	e0.60	e1.0	48	13	2.1	0.51	0.28	0.93	9.9
8	e2.5	2.3	1.1	e0.50	e7.0	72	5.3	1.8	0.52	0.81	0.57	1.9
9	e2.0	6.4	e1.0	e0.50	e1.0	20	4.6	1.5	0.89	0.37	0.73	2.9
10	e4.0	159	e1.0	e0.50	e1.0	75	7.0	1.2	0.66	0.27	0.87	32
11	e4.0	61	e2.0	e0.30	e0.50	96	5.2	0.97	5.6	0.23	1.0	1.6
12	e60	52	e2.0	e0.50	e0.50	96	4.0	39	2.6	0.47	0.84	3.3
13	e30	37	e2.0	e0.50	e0.50	47	4.3	29	0.91	1.7	0.70	1.9
14	e6.0	4.8	e1.5	e0.50	e25	7.1	4.9	48	0.64	0.56	0.91	1.1
15	e3.0	3.1	e1.5	e0.50	50	3.7	4.0	10	0.53	0.34	0.83	12
16	e2.5	7.8	e1.5	e0.50	6.3	2.1	3.4	4.4	0.49	16	0.93	30
17	e2.0	4.1	e2.0	e0.50	12	1.8	3.5	7.7	0.41	10	1.3	26
18	e2.0	30	e8.0	e1.0	4.0	1.3	34	4.6	0.45	3.3	4.8	2.3
19	e6.0	56	e3.0	e1.5	15	1.2	53	1.5	0.67	4.3	5.1	1.2
20	e5.0	9.8	e1.5	e5.0	21	0.89	93	1.00	3.9	1.8	2.0	0.98
21	e7.0	2.1	e1.5	e2.0	14	0.66	21	1.5	1.0	10	62	1.2
22	e5.0	17	e8.0	e3.0	38	0.93	128	1.8	0.67	1.7	5.3	1.8
23	3.7	12	e5.0	e1.0	14	1.0	14	1.0	0.92	0.90	118	15
24	5.4	27	e2.0	e0.40	4.9	0.72	3.8	0.92	0.58	0.96	7.6	54
25	1.9	39	e0.60	e0.40	25	0.66	2.9	0.91	0.44	56	1.4	6.0
26	32	5.4	e0.40	e0.40	27	0.57	2.3	12	0.36	42	1.1	3.7
27	14	72	e0.30	e0.40	7.2	18	2.2	41	0.32	16	0.97	5.7
28	32	127	e0.20	e0.40	60	6.2	2.6	16	0.31	4.3	0.61	35
29	27	30	e0.10	e0.40	---	2.1	2.4	29	0.28	1.7	0.84	2.6
30	14	30	e0.10	e0.40	---	1.5	1.7	17	0.23	1.1	0.61	4.0
31	5.6	---	e0.10	e0.40	---	2.4	---	6.0	---	33	0.49	---
TOTAL	483.6	843.6	230.40	106.30	336.60	658.13	465.64	299.20	31.26	210.34	348.33	369.77
MEAN	15.6	28.1	7.43	3.43	12.0	21.2	15.5	9.65	1.04	6.79	11.2	12.3
MAX	100	159	107	60	60	96	128	48	5.6	56	118	56
MIN	1.9	2.1	0.10	0.10	0.20	0.57	0.84	0.91	0.23	0.23	0.49	0.25
AC-FT	959	1670	457	211	668	1310	924	593	62	417	691	733
CFSM	20.8	37.5	9.91	4.57	16.0	28.3	20.7	12.9	1.39	9.05	15.0	16.4
IN.	23.99	41.84	11.43	5.27	16.70	32.64	23.10	14.84	1.55	10.43	17.28	18.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)#

MEAN	15.9	13.8	11.8	11.9	10.8	7.84	12.2	9.97	4.73	5.69	8.67	11.3
MAX	20.2	28.1	20.4	26.6	20.7	21.2	22.4	16.1	9.35	6.79	15.2	19.9
(WY)	2001	2005	2000	2001	2003	2005	2004	2000	2002	2001	2003	2004
MIN	10.4	4.15	5.33	3.43	2.00	2.16	3.56	6.27	1.04	3.88	2.15	6.69
(WY)	2002	2004	2003	2005	2002	2004	2003	2003	2005	2003	2004	2003

\# See Period of Record
e Estimated

15215990 NICOLET CREEK NEAR CORDOVA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005#	
ANNUAL TOTAL	4050.96		4383.17			
ANNUAL MEAN	11.1		12.0		10.4	
HIGHEST ANNUAL MEAN					12.0	2005
LOWEST ANNUAL MEAN					8.90	2004
HIGHEST DAILY MEAN	200	Sep 26	159	Nov 10	200	Sep 26 2004
LOWEST DAILY MEAN	a0.10	Dec 29	a0.10	Dec 29	b0.10	Mar 12 2003
ANNUAL SEVEN-DAY MINIMUM	0.20	Jul 11	0.19	Dec 26	0.19	Dec 26 2004
MAXIMUM PEAK FLOW			c488	Aug 23	df988	Nov 3 1994
MAXIMUM PEAK STAGE			25.75	Aug 23	f19.60	Nov 3 1994
MAXIMUM PEAK STAGE					26.53	Sep 26 2004
INSTANTANEOUS LOW FLOW					g0.10	Jul 17 2004
ANNUAL RUNOFF (AC-FT)	8040		8690		7520	
ANNUAL RUNOFF (CFSM)	14.8		16.0		13.8	
ANNUAL RUNOFF (INCHES)	200.93		217.41		188.08	
10 PERCENT EXCEEDS	31		39		31	
50 PERCENT EXCEEDS	2.1		2.4		3.3	
90 PERCENT EXCEEDS	0.30		0.40		0.62	

\# See Period of Record
a Dec. 29 to Jan. 1 estimated
b Mar. 12 and Mar. 13
c From rating extended above 33 ft^3/s on basis of step-backwater analysis
d From rating curve extended above 66 ft^3/s on basis of slope-area measurement of peak flow
f Site and datum then in use
g Minimum observed, but may have been lower during periods of ice effect

15225990 SOLOMON LAKE NEAR VALDEZ

LOCATION.--Lat 61°04′25″, long 146°18′08″, in NE$^1/_4$ SW$^1/_4$ sec. 21, T. 9 S.,R. 6 W.(Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, at outlet of Solomon Lake, 0.7 mi upstream from mouth of Solomon Gulch, and 4.6 mi southeast of Valdez.

DRAINAGE AREA.--19.2 mi^2.

PERIOD OF RECORD.--October 1991 to current year. Additional unpublished records prior to period of record available from Copper Valley Electric Association and in station files of Geological Survey.

REMARKS.--Reservoir is formed by a rockfill dam at outlet of Solomon Lake. Reservoir is used for power; power-plant operation began January 6, 1982. Usable capacity is 31,500 acre-feet below spillway crest at 685 ft. Discharge released to the penstocks is accounted for at Solomon Gulch Tailrace (station 15225996). Releases through the dam to maintain minimum flows, spillway releases, and incremental flow are accounted for at the Solomon Gulch at top of falls gage (station 15225997).

COOPERATION.--Reservoir contents furnished by Copper Valley Electric Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 32,500 acre-ft, September 21, 1993, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 2,167 acre-ft, May 1, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 32,100 acre-ft August 24, elevation, 686.28 ft, from crest-stage gage and rating extended above 31,500 acre-ft; minimum contents, 3,750 acre-ft, April 24, elevation, 624.0 ft.

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
SEP 30	684.4	31,000	----
OCT 31	680.2	27,800	-3,200
NOV 30	675.0	24,800	-3,000
DEC 31	668.1	21,100	-3,700
JAN 31	657.6	15,800	-5,300
FEB 28	648.0	11,800	-4,000
MAR 31	632.5	6,170	-5,630
APR 30	629.1	5,080	-1,090
MAY 31	675.2	24,900	+19,820
JUN 30	685.0	31,500e	+6,600e
JUL 31	685.2	31,600e	+100e
AUG 31	684.2	30,900	-700
SEP 30	684.9	31,400	+500
		CAL YR 2004	+700
		WTR YR 2005	+400

e Estimated

15225996 SOLOMON GULCH TAILRACE NEAR VALDEZ

LOCATION.--Lat 61°05'01", long 146°18'10", in NE¼ SE¼ SW¼ sec. 16, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, on left wingwall of tailrace pool of Copper Valley Electric Association powerhouse facility, 350 ft upstream from mouth at Solomon Gulch, and 3.8 mi southeast of Valdez.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1986 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control until June 15, 2005 when gage was moved 70 feet downstream. Elevation of gage is 40 ft above sea level, from topographic map. Prior to May 20, 2005 at datum 5.00 ft. lower.

REMARKS.--Records fair except for estimated daily discharge, which is poor. Discharge shown herein is flow through the Solomon Gulch Power Plant turbines. Solomon Lake, 0.8 mi upstream, supplies water to the power-plant through two 48-in. diameter penstocks. Water for the fish hatchery, diverted upstream from the gage, is not included in these published daily values. Annual mean discharge for these diversions for 2005 water year was 10.6 ft3/s.

COOPERATION.--Records of daily discharge diverted to the fish hatchery are furnished by Valdez Fisheries Development Association. Copper Valley Electric Association provides tables of hourly power output through the turbines.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 293 ft^3/s, January 2 and 3, 1992, gage height, *3.04 ft, site and datumn in use; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 260 ft^3/s, October 19, gage height, *3.00 ft, but may have been higher during period of missing record; no flow May 20 to June 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	78	83	82	97	71	99	93	e180	227	213	168
2	201	77	84	84	94	85	94	80	e200	220	213	193
3	201	90	76	72	103	83	80	100	e190	216	206	198
4	205	87	80	73	91	87	60	106	e210	218	210	198
5	193	91	83	85	80	95	55	109	e200	225	205	194
6	207	92	67	81	88	89	54	107	e200	222	196	204
7	207	81	60	80	81	100	50	99	e210	222	201	192
8	211	66	81	69	74	100	47	95	e200	222	201	202
9	207	74	87	75	68	97	45	109	e200	214	211	204
10	206	72	83	98	72	87	47	105	e210	220	211	187
11	212	65	81	96	67	79	50	76	e210	223	212	189
12	209	63	71	90	68	71	49	78	e200	215	213	203
13	213	59	76	110	70	70	48	101	e220	174	188	196
14	214	60	86	131	73	88	47	94	e210	210	204	193
15	176	66	80	80	69	94	45	83	e210	227	206	193
16	205	72	85	78	87	88	47	106	204	219	211	188
17	202	81	93	72	92	106	48	103	170	216	216	182
18	215	71	91	90	79	114	47	102	215	224	218	175
19	164	61	83	103	67	107	49	100	194	217	216	190
20	223	66	83	80	73	109	54	22	192	218	210	190
21	209	64	75	75	81	93	47	0.00	212	185	216	191
22	218	54	75	74	68	94	47	0.00	208	218	219	192
23	200	64	75	71	65	89	46	0.00	218	195	208	185
24	183	56	73	78	76	91	44	0.00	218	193	175	181
25	133	57	73	72	77	89	50	0.00	212	222	224	180
26	67	60	104	92	73	87	50	0.00	210	219	216	188
27	67	59	91	72	82	86	50	0.00	209	213	201	196
28	70	61	91	76	83	86	70	0.00	218	211	194	192
29	67	77	94	68	---	96	84	0.00	222	211	203	189
30	61	83	96	68	---	108	96	0.00	224	208	222	190
31	68	---	91	81	---	102	---	0.00	---	210	219	---
TOTAL	5413	2107	2551	2556	2198	2841	1699	1868.00	6176	6634	6458	5723
MEAN	175	70.2	82.3	82.5	78.5	91.6	56.6	60.3	206	214	208	191
MAX	223	92	104	131	103	114	99	109	224	227	224	204
MIN	61	54	60	68	65	70	44	0.00	170	174	175	168
AC-FT	10740	4180	5060	5070	4360	5640	3370	3710	12250	13160	12810	11350

CAL YR 2004 TOTAL 46081 MEAN 126 MAX 228 MIN 42 AC-FT 91400
WTR YR 2005 TOTAL 46224 MEAN 127 MAX 227 MIN 0.00 AC-FT 91690

* At prior datum 5 ft lower (WY 86-05) at site and datum then in use.
e Estimated

15225997 SOLOMON GULCH AT TOP OF FALLS NEAR VALDEZ

LOCATION.--Lat 61°04'45", long 146°18'11", in SE¼ NE¼ NW¼ sec. 21, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, within Valdez Corporate boundary, on right bank, 72 ft above Alyeska Pipeline Service Company Bridge, 150 ft upstream from top of falls, 0.3 mi upstream from mouth, and 4.2 mi southeast of Valdez.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--September 1986 to current year.

REVISED RECORDS.--WDR AK-00-1: 1999.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map. Prior to October 1, 1991, discharge computed for site 150 ft downstream at datum 72.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge shown herein represents controlled releases from bypass valve and flow over the spillway of dam at Solomon Lake, 0.5 mi upstream, plus inflow between the spillway and the gage. Spillway crest elevation is 685 ft above sea level, from construction plans. Water for power generation is diverted from Solomon Lake (see records for station 15225996). Water is diverted for fish hatchery use 1,150 ft downstream from gage. Reservoir spilled October 1-5, June 12 to August 15, August 21-26, September 5-14, 16-18, and 23-29.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,280 ft^3/s, October 11, 1986, by computation of peak flow by several indirect measurement methods; gage height, 82.20 ft from water surface profiles for 1986 flood at top of falls and at datum 72.00 ft lower (12.90 ft from profile at present site and datum); minimum daily discharge, about 0.20 ft^3/s, January 23 to April 6, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,570 ft^3/s, September 24, maximum gage height, 9.15 ft, September 24; minimum daily discharge, 2.4 ft^3/s, February 1, 27, 28, and March 1 - 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e280	3.9	5.0	3.4	2.4	2.4	2.7	16	4.2	e190	e280	4.0
2	e400	3.8	6.1	3.4	2.5	2.4	e2.7	13	5.9	e190	e400	4.4
3	e480	6.7	5.0	3.6	2.5	2.4	2.6	11	5.7	e400	e240	4.1
4	e420	4.6	4.1	3.9	2.7	2.4	2.7	11	5.9	e190	e150	7.8
5	100	3.9	3.8	3.5	2.7	2.4	2.7	12	5.4	e140	97	65
6	17	3.8	3.8	3.4	2.7	2.4	2.7	11	4.7	e160	54	e650
7	5.9	3.7	3.4	3.4	2.6	2.5	2.8	12	4.5	e220	31	e600
8	4.8	3.7	3.2	3.7	2.7	2.8	2.8	13	4.1	e160	31	e150
9	4.5	3.6	3.2	3.7	2.8	3.4	2.7	13	3.9	e170	39	43
10	4.6	4.0	3.1	3.5	2.7	3.8	2.7	14	3.8	e190	38	e750
11	4.6	4.4	3.1	e3.0	2.6	8.8	2.8	14	4.3	e130	52	e220
12	7.8	4.1	3.1	e2.5	2.6	5.2	3.2	16	e160	117	68	e170
13	9.4	4.3	3.1	e3.0	2.6	4.1	3.3	15	e180	132	62	e220
14	13	3.9	3.1	2.9	2.6	3.5	3.3	16	e220	84	37	33
15	10	3.8	3.3	2.8	2.7	3.2	3.2	14	e300	90	15	5.4
16	6.4	3.7	3.3	2.8	2.6	3.0	3.4	12	e320	93	3.9	88
17	4.7	3.5	3.4	2.8	2.5	2.8	3.4	14	e460	65	3.2	133
18	4.2	3.6	4.5	2.8	2.5	2.7	3.2	14	e500	36	3.2	56
19	4.0	3.7	4.9	2.7	2.5	2.7	3.3	15	e400	64	3.2	7.0
20	3.9	3.6	3.8	2.7	2.5	2.7	4.1	12	e340	58	3.3	4.7
21	3.8	3.6	3.7	2.7	2.5	2.7	4.2	14	e220	70	29	4.5
22	3.7	3.6	3.8	2.6	2.5	2.6	10	12	e300	25	e120	4.8
23	3.6	3.6	5.9	2.6	2.5	2.7	9.2	11	e160	13	e420	7.2
24	3.6	3.6	5.1	2.6	2.5	2.6	12	10	e160	36	e380	e900
25	3.6	3.6	4.0	2.6	2.5	2.5	15	8.2	e190	33	e90	e300
26	3.8	3.5	3.8	2.6	2.5	2.6	14	7.4	e190	114	13	42
27	5.4	3.5	3.7	2.6	2.4	2.7	17	6.3	e280	83	4.1	11
28	5.8	11	3.7	2.5	2.4	2.7	36	5.8	e320	37	3.9	e220
29	5.2	5.4	3.5	2.5	---	2.6	18	5.7	e320	28	3.8	58
30	4.7	4.2	3.5	2.5	---	2.7	15	5.0	e300	16	3.7	5.2
31	4.2	---	3.4	2.5	---	2.7	---	4.3	---	e170	3.8	---
TOTAL	1832.2	125.9	120.4	91.8	71.8	94.7	210.7	357.7	5372.4	3504	2682.1	4768.1
MEAN	59.1	4.20	3.88	2.96	2.56	3.05	7.02	11.5	179	113	86.5	159
MAX	480	11	6.1	3.9	2.8	8.8	36	16	500	400	420	900
MIN	3.6	3.5	3.1	2.5	2.4	2.4	2.6	4.3	3.8	13	3.2	4.0
AC-FT	3630	250	239	182	142	188	418	709	10660	6950	5320	9460

CAL YR 2004 TOTAL 3599.6 MEAN 9.83 MAX 480 MIN 3.0 AC-FT 7140
WTR YR 2005 TOTAL 19231.8 MEAN 52.7 MAX 900 MIN 2.4 AC-FT 38150

e Estimated

15226000 SOLOMON GULCH NEAR VALDEZ

LOCATION.--Lat 61°05'02", long 146°18'13", in NE¼ SE¼ SW¼ sec. 16, T. 9 S., R. 6 W. (Valdez A-7 SE quad), Hydrologic Unit 19020201, at bridge crossing at mouth and 3.8 mi southeast across Port Valdez from Valdez.

DRAINAGE AREA.--19.7 mi^2.

PERIOD OF RECORD.--July to December 1948, October 1949 to September 1956, and September 1986 to current year.

GAGE.--Nonrecording gage. Elevation of gage is at sea level. July 9, 1948 to May 21, 1950, nonrecording gage, and May 22, 1950 to September 30, 1956, water-stage recorder at about present site and datum.

REMARKS.-- Records fair. Discharge data represent the flow at mouth which includes Solomon Gulch at top of falls (station 15225997), power plant tailrace (station 15225996), and all fish hatchery diversions. Water for power generation is diverted by a dam at Solomon Lake, 0.8 mi upstream. Water is diverted for the fish hatchery by a 24-in. penstock aeration system, and a 24-in. penstock line from the tailrace weir pool. An unaerated penstock and an 8-in. pipe for warm water supply are upstream. Additional water is diverted to the fish hatchery from Solomon Gulch bypass channel about 750 ft above gage, by means of a 12-in. diameter pipe. The fish hatchery discharges water directly into Port Valdez. Average daily diversion to fish hatchery for 2005 water year was 10.6 ft^3/s. Power generation began January 6, 1982.

COOPERATION.--Records of daily discharge diverted to the fish hatchery are furnished by Valdez Fisheries Development Association. Copper Valley Electric Association provides tables of hourly power output through the turbines and monthly storage values for Solomon Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e509	90	96	95	109	83	107	112	e187	e419	e520	199
2	e631	88	98	97	106	97	e102	95	e209	e412	e640	225
3	e711	104	88	85	115	95	88	115	e198	e618	e473	230
4	e655	99	92	86	103	99	68	121	e219	e410	e387	233
5	323	103	95	101	92	105	65	125	e208	e367	329	283
6	254	104	79	96	100	99	62	122	e207	e384	277	e878
7	222	92	71	93	93	112	58	115	e217	e444	259	e820
8	223	77	92	83	86	112	55	112	e205	e384	259	e380
9	219	85	98	89	80	111	53	125	e205	e386	276	275
10	219	84	94	111	84	99	55	121	e216	e412	275	e965
11	225	77	92	e108	79	95	58	91	e216	e355	290	e437
12	225	75	82	e102	80	84	57	95	e361	334	307	e401
13	230	71	87	e123	82	82	56	117	e401	308	276	e444
14	235	72	97	144	85	99	56	111	e431	296	267	254
15	194	77	91	93	81	105	54	98	e511	319	247	226
16	219	83	96	91	99	98	56	119	e525	314	241	304
17	215	92	104	85	104	116	58	118	e631	283	246	343
18	227	83	104	103	91	124	56	117	e716	262	248	259
19	176	73	96	115	79	116	59	116	e595	283	246	225
20	235	78	95	92	85	118	64	35	e534	278	240	223
21	221	76	87	87	93	103	59	15	e433	257	272	223
22	230	66	86	87	80	103	63	13	e510	245	e366	224
23	212	76	89	84	77	98	61	13	e379	230	e655	220
24	195	68	86	90	88	99	62	13	e379	251	e582	e1110
25	145	69	85	84	89	98	71	11	e403	278	e341	e508
26	79	72	115	105	85	96	69	11	e402	357	256	258
27	81	71	103	84	94	95	72	10	e491	325	233	235
28	84	80	102	88	95	95	109	9.6	e540	279	225	e440
29	80	91	106	80	---	104	105	9.4	e544	270	234	275
30	74	95	107	80	---	116	114	8.7	e526	255	254	223
31	80	---	102	89	---	110	---	6.0	---	e408	250	---
TOTAL	7628	2471	2915	2950	2534	3166	2072	2299.7	11599	10423	9971	11320
MEAN	246	82.4	94.0	95.2	90.5	102	69.1	74.2	387	336	322	377
MAX	711	104	115	144	115	124	114	125	716	618	655	1110
MIN	74	66	71	80	77	82	53	6.0	187	230	225	199
AC-FT	15130	4900	5780	5850	5030	6280	4110	4560	23010	20670	19780	22450

AJUSTED FOR CHANGE IN STORAGE IN SOLOMON LAKE

MEAN	194	31.9	33.8	8.9	18.5	10.6	50.8	396	498	338	310	386
AC-FT	11930	1900	2080	550	1030	650	3020	24380	29610	20770	19080	22950
CFSM	9.85	1.62	1.72	0.45	0.94	0.54	2.58	20.13	25.26	17.15	15.75	19.58
IN	11.37	1.81	1.98	0.52	0.98	0.62	2.88	23.23	28.21	19.79	18.18	21.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2005, BY WATER YEAR (WY)#

MEAN	203	107	98.0	92.7	89.2	84.5	75.5	149	196	270	298	326
MAX	435	228	180	138	130	138	132	213	387	410	462	501
(WY)	2003	2003	2003	1995	1987	2003	2003	1993	2005	2001	1993	1989
MIN	97.2	77.1	69.0	63.0	58.9	5.08	26.2	74.2	145	177	152	152
(WY)	1997	1993	2002	2003	2002	1991	1991	2005	1988	1991	1996	1996

\# See Period of Record; partial years were used in monthly statistics and breaks in record, and Remarks
e Estimated

15226000 SOLOMON GULCH NEAR VALDEZ—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1986 - 2005#	
ANNUAL TOTAL	53721		69348.7			
ANNUAL MEAN	147		190		167	
ANNUAL MEAN	*147		*190		*167	
HIGHEST ANNUAL MEAN					197	1990
LOWEST ANNUAL MEAN					125	1996
HIGHEST DAILY MEAN	711	Oct 3	e1110	Sep 24	2270	Sep 24 1989
LOWEST DAILY MEAN	a54	Jan 9	6.0	May 31	1.0	Apr 12 1989
ANNUAL SEVEN-DAY MINIMUM	62	Jan 7	9.4	May 25	2.3	Mar 24 1991
ANNUAL RUNOFF (AC-FT)	106600		137400		120800	
ANNUAL RUNOFF (AC-FT)	*107200		*138000		*121000	
ANNUAL RUNOFF (CFSM)	*7.48		*9.63		*8.48	
ANNUAL RUNOFF (IN)	*102.15		*131.45		*115.12	
10 PERCENT EXCEEDS	242		409		287	
50 PERCENT EXCEEDS	98		107		122	
90 PERCENT EXCEEDS	68		69		68	

PRIOR TO CONSTRUCTION OF SOLOMON GULCH HYDROELECTRIC PROJECT

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1956, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	124	58.9	18.3	13.3	10.4	8.82	10.9	102	370	385	322	260
MAX	304	131	35.6	20.9	12.2	11.1	18.3	224	544	514	442	574
(WY)	1953	1953	1950	1956	1954	1953	1953	1953	1953	1955	1956	1951
MIN	48.0	21.7	4.00	1.40	3.57	7.19	6.57	36.5	261	277	254	126
(WY)	1951	1951	1949	1951	1951	1951	1950	1955	1951	1950	1950	1955

SUMMARY STATISTICS		WATER YEARS 1948 - 1956#
ANNUAL MEAN	143	
HIGHEST ANNUAL MEAN	194	1953
LOWEST ANNUAL MEAN	126	1950
HIGHEST DAILY MEAN	1530	Sep 4 1951
LOWEST DAILY MEAN	.50	Dec 31 1950
ANNUAL SEVEN-DAY MINIMUM	1.0	Jan 10 1951
MAXIMUM PEAK FLOW	b2420	Sep 4 1951
MAXIMUM PEAK STAGE	c6.50	Sep 4 1951
INSTANTANEOUS LOW FLOW	d.00	Feb 20 1954
ANNUAL RUNOFF (AC-FT)	103900	
ANNUAL RUNOFF (CFSM)	7.28	
ANNUAL RUNOFF (INCHES)	98.89	
10 PERCENT EXCEEDS	396	
50 PERCENT EXCEEDS	49	
90 PERCENT EXCEEDS	8.0	

\# See Period of Record; partial years were used in monthly statistics and breaks in record, and Remarks
Values shown on this page are unadjusted for change in storage in Solomon Lake, unless otherwise noted
* Adjusted for change in storage in Solomon Lake
a Jan. 9 and Feb. 8
b From rating curve extended above 620 ft^3/s
c Site and datum then in use
d No flow sometime during period Feb. 20 to Mar. 3, 1954, caused by temporary storage upstream
e Estimated

15236900 WOLVERINE CREEK NEAR LAWING

LOCATION.--Lat 60°22'14", long 148°53'48", in NE¼ NE¼ sec. 10, T.3 N., R.3 E. (Seward B-6 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on the left bank, approximately 0.1 mi downstream from terminus of Wolverine Glacier, 2.0 mi upstream from mouth, 16 mi east of Lawing, Alaska.

DRAINAGE AREA.--9.51 mi^2.

PERIOD OF RECORD.--October 1966 to September 1978, October 1980 to September 1981, May 1997 to September 1997, October 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,200 ft above sea level, from topographic map.

REMARKS.--Records are poor due to large fluctuations from ice melt and alternate damming and storage releases during the melt season. Stream flow is modified by runoff from the melting of Wolverine Glacier, which covers 6.8 mi2, more than 70% of the drainage basin. Precipitation gage and air temperature recorded at station is available from computer files at the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station transmits every 4 hours. At 3,250 feet of elevation, there is a weather station recording air temperature, wind speed, and precipitation. In addition to the weather station, there are also three snow and ice balance measurement sites located in the basin. Combined snow, ice, and water balance data of the basin are published in other reports of the Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	e5.0	1.8	e1.0	e1.0	e1.0	e1.0	41	121	326	266	233
2	608	e4.0	1.6	e1.0	e1.0	e1.0	e1.0	36	108	321	305	194
3	461	e4.0	e1.5	e1.0	e1.0	e1.0	e1.0	35	113	307	749	201
4	333	e3.5	e1.0	e1.0	e1.0	e1.0	e1.0	32	177	292	755	343
5	225	e3.0	e1.0	e1.0	e1.0	e1.0	e1.5	30	186	350	573	325
6	140	e2.5	e1.0	e1.0	e1.0	e1.0	e1.5	30	178	396	466	374
7	108	e2.5	e1.0	e1.0	e1.0	e1.0	e1.5	32	192	340	491	305
8	93	e2.0	e1.0	e1.0	e1.0	e1.0	e1.5	42	241	356	464	292
9	76	e2.0	e1.0	e1.0	e1.0	e1.0	e1.5	70	367	365	445	312
10	62	e2.0	e1.0	e1.0	e1.0	e1.0	e1.5	70	363	299	538	357
11	53	e2.0	e1.0	e1.0	e1.0	e1.0	e1.5	70	309	288	578	247
12	116	e2.0	e1.0	e1.0	e1.0	e1.0	e1.5	190	296	289	552	286
13	77	e2.0	e1.0	e1.0	e1.0	e1.0	e1.5	341	294	446	469	257
14	85	e2.0	e1.0	e1.0	e1.0	e1.0	e2.0	413	300	544	460	231
15	47	e2.0	e1.0	e1.0	e1.0	e1.0	e2.0	247	318	540	354	179
16	33	e2.0	e1.0	e1.0	e1.0	e1.0	e2.0	151	351	413	336	511
17	22	e2.0	e2.0	e1.0	e1.0	e1.0	e2.0	131	420	438	407	529
18	15	e2.0	e5.0	e1.0	e1.0	e1.0	e2.0	129	366	399	462	422
19	13	e2.0	e2.0	e1.0	e1.0	e1.0	e2.0	124	348	441	511	354
20	11	e2.0	e1.0	e1.0	e1.0	e1.0	e2.0	116	302	422	366	295
21	9.4	e2.0	e1.0	e1.0	e1.0	e1.0	e2.0	121	289	392	293	209
22	8.4	2.0	e1.0	e1.0	e1.0	e1.0	e2.0	154	243	346	276	243
23	7.6	1.9	e1.0	e1.0	e1.0	e1.0	e4.0	160	246	325	430	306
24	7.2	1.9	e1.0	e1.0	e1.0	e1.0	e8.0	137	280	342	324	356
25	6.7	1.9	e1.0	e1.0	e1.0	e1.0	e12	129	280	589	272	211
26	6.5	1.7	e1.0	e1.0	e1.0	e1.0	23	220	311	439	268	167
27	6.3	1.7	e1.0	e1.0	e1.0	e1.0	153	336	319	575	317	397
28	6.7	7.4	e1.0	e1.0	e1.0	e1.0	87	361	373	372	242	258
29	6.0	2.4	e1.0	e1.0	---	e1.0	80	295	379	278	225	230
30	5.2	1.8	e1.0	e1.0	---	e1.0	48	193	358	240	219	168
31	e5.0	---	e1.0	e1.0	---	e1.0	---	147	---	317	246	---
TOTAL	2789.0	75.2	38.9	31.0	28.0	31.0	450.5	4583	8428	11787	12659	8792
MEAN	90.0	2.51	1.25	1.00	1.00	1.00	15.0	148	281	380	408	293
MAX	608	7.4	5.0	1.0	1.0	1.0	153	413	420	589	755	529
MIN	5.0	1.7	1.0	1.0	1.0	1.0	1.0	30	108	240	219	167
AC-FT	5530	149	77	61	56	61	894	9090	16720	23380	25110	17440
CFSM	9.46	0.26	0.13	0.11	0.11	0.11	1.58	15.5	29.5	40.0	42.9	30.8
IN.	10.91	0.29	0.15	0.12	0.11	0.12	1.76	17.93	32.97	46.11	49.52	34.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)#

MEAN	61.1	12.0	3.43	1.52	1.19	1.04	2.34	33.9	156	309	355	198
MAX	330	100	20.2	2.71	2.00	2.45	15.0	148	281	438	494	351
(WY)	2004	2003	2003	1970	1970	2003	2005	2005	2005	2004	1981	1974
MIN	13.1	2.01	0.51	0.39	0.00	0.00	0.00	0.61	31.1	146	176	80.0
(WY)	1975	2002	2001	2001	2001	2001	2001	1971	1971	1997	1997	1970

\# See Period of Record; partial year was used in monthly statistics and breaks in record
e Estimated

15236900 WOLVERINE CREEK NEAR LAWING—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1967 - 2005#	
ANNUAL TOTAL	45938.1		49692.6			
ANNUAL MEAN	126		136		96.8	
HIGHEST ANNUAL MEAN					146	2004
LOWEST ANNUAL MEAN					66.6	1970
HIGHEST DAILY MEAN	986	Jul 22	755	Aug 4	1930	Aug 28 2001
LOWEST DAILY MEAN	a1.0	Dec 4	b1.0	Dec 4	c0.00	Dec 2 2000
ANNUAL SEVEN-DAY MINIMUM	1.0	Dec 4	1.0	Dec 4	0.00	Dec 2 2000
MAXIMUM PEAK FLOW			1630	Oct 2	d4160	Aug 28 2001
MAXIMUM PEAK STAGE			3.90	Oct 2	f6.28	Aug 21 1981
MAXIMUM PEAK STAGE			g5.61	Apr 24		
ANNUAL RUNOFF (AC-FT)	91120		98570		70120	
ANNUAL RUNOFF (CFSM)	13.2		14.3		10.2	
ANNUAL RUNOFF (INCHES)	179.69		194.38		138.28	
10 PERCENT EXCEEDS	407		394		326	
50 PERCENT EXCEEDS	5.1		7.6		6.0	
90 PERCENT EXCEEDS	1.8		1.0		1.0	

\# See Period of Record; partial year was used in monthly statistics and breaks in record
a Dec. 4 to Dec. 16 and Dec. 20 to Dec. 31
b Dec. 4 to Dec. 16 and Dec. 20 to Apr. 4
c No flow most days during winter
d From rating curve extended above 1,290 ft^3/s
f From floodmarks, date approximate; flow over dense snow
g Caused by ice-jam, no corresponding discharge

15237730 GROUSE CREEK AT GROUSE LAKE OUTLET NEAR SEWARD

LOCATION.--Lat 60°11'54", long 149°22'24", in NE¼ NE¼ NW¼ sec. 12, T. 1 N., R. 1 W. (Seward A-7 NE quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on right bank, 200 ft downstream from Grouse Lake outlet, 0.2 mi upstream from Seward Highway, 7 mi north of Seward.

DRAINAGE AREA.--6.22 mi^2.

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

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Rain gage recorder at station. GOES satellite telemetry and phone modem at station.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 100 ft^3/s and water year maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height(ft)	Date	Time	Discharge (ft^3/s)	Gage Height(ft)
Nov. 28	0945	103	6.16	Apr. 22	1030	*174	*6.68

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.9	44	13	7.3	e5.8	11	59	17	6.4	5.9	3.6
2	21	8.4	41	12	7.2	e5.7	10	53	16	6.4	6.9	3.4
3	62	9.6	35	18	7.2	e5.5	10	48	15	6.3	6.3	3.3
4	67	8.9	30	37	6.9	e5.4	10	46	15	6.2	6.0	3.6
5	46	7.8	23	31	6.5	e5.5	10	44	15	6.0	5.6	4.1
6	35	7.3	22	23	e6.4	e6.5	14	44	16	5.7	5.3	4.8
7	25	8.4	20	19	e6.3	7.4	15	43	14	5.8	5.3	4.7
8	18	8.4	18	18	e6.2	8.8	14	41	14	5.8	5.1	4.7
9	16	8.4	16	16	e6.2	12	14	42	14	5.5	4.6	4.5
10	15	49	15	14	e6.2	21	14	42	14	5.6	4.5	6.1
11	13	61	15	12	e6.0	39	14	41	12	5.8	4.3	5.3
12	18	40	14	11	e5.9	38	14	45	12	5.4	4.2	5.2
13	21	32	15	13	e5.9	49	14	46	11	5.4	4.0	5.0
14	27	25	14	13	e7.5	46	14	48	11	5.2	4.0	4.7
15	20	20	13	13	9.4	37	14	41	9.8	5.0	3.9	4.5
16	18	17	15	12	8.3	32	14	37	9.2	5.3	3.6	5.5
17	16	16	15	11	e7.5	26	14	34	8.8	5.4	3.6	10
18	15	15	19	9.6	e7.0	20	15	33	9.3	5.2	3.6	8.6
19	14	18	19	9.9	e6.5	18	16	32	9.5	5.6	3.5	7.3
20	13	19	18	11	e6.5	17	38	32	8.6	5.4	3.5	6.7
21	12	17	16	11	e6.5	16	46	32	8.3	5.7	3.8	6.0
22	11	16	21	12	e6.5	15	138	30	8.0	5.5	3.8	6.0
23	11	16	25	13	e6.5	14	117	27	8.5	5.2	4.4	7.1
24	11	17	20	11	e6.5	13	69	28	7.7	5.1	4.6	13
25	11	17	17	11	e6.5	13	57	27	6.7	6.2	4.4	11
26	11	16	17	10	e6.4	13	54	22	7.5	6.6	4.1	9.3
27	11	20	18	9.1	e6.2	12	56	28	6.5	6.3	3.9	12
28	11	82	16	8.4	e6.0	12	62	26	6.7	6.1	3.8	15
29	11	53	13	9.3	---	11	68	23	6.5	5.4	3.6	12
30	10	41	12	9.8	---	11	66	20	6.4	5.2	3.5	11
31	9.4	---	14	8.8	---	11	---	18	---	5.6	3.3	---
TOTAL	613.4	683.1	610	429.9	188.0	546.6	1022	1132	324.0	176.3	136.9	208.0
MEAN	19.8	22.8	19.7	13.9	6.71	17.6	34.1	36.5	10.8	5.69	4.42	6.93
MAX	67	82	44	37	9.4	49	138	59	17	6.6	6.9	15
MIN	9.4	7.3	12	8.4	5.9	5.4	10	18	6.4	5.0	3.3	3.3
AC-FT	1220	1350	1210	853	373	1080	2030	2250	643	350	272	413
CFSM	3.18	3.66	3.16	2.23	1.08	2.83	5.48	5.87	1.74	0.91	0.71	1.11
IN.	3.67	4.09	3.65	2.57	1.12	3.27	6.11	6.77	1.94	1.05	0.82	1.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2005, BY WATER YEAR (WY)#

MEAN	26.7	27.8	18.8	16.7	12.8	9.92	20.4	51.5	34.7	10.4	7.63	15.4
MAX	60.8	83.3	39.7	58.0	45.0	17.6	38.6	81.3	70.7	19.2	14.3	35.3
(WY)	2003	2003	2003	2001	2003	2005	1998	2004	1998	1998	2001	1997
MIN	11.8	7.41	8.83	5.23	3.34	2.69	5.81	29.9	9.55	5.69	4.42	6.66
(WY)	1998	2002	2004	1998	1999	1999	2002	2003	2003	2005	2005	2000

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

15237730 GROUSE CREEK AT GROUSE LAKE OUTLET NEAR SEWARD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1997 - 2005#	
ANNUAL TOTAL	7664.9		6070.2			
ANNUAL MEAN	20.9		16.6		21.1	
HIGHEST ANNUAL MEAN					27.3	2001
LOWEST ANNUAL MEAN					15.4	2002
HIGHEST DAILY MEAN	114	May 6	138	Apr 22	326	Nov 23 2002
LOWEST DAILY MEAN	5.4	Jan 30	a3.3	Aug 31	b2.1	Mar 9 1999
ANNUAL SEVEN-DAY MINIMUM	5.6	Feb 1	3.5	Aug 29	2.2	Mar 4 1999
MAXIMUM PEAK FLOW			174	Apr 22	478	Feb 5 2003
MAXIMUM PEAK STAGE			6.68	Apr 22	c8.14	Feb 5 2003
INSTANTANEOUS LOW FLOW					d1.5	Apr 7 1999
ANNUAL RUNOFF (AC-FT)	15200		12040		15320	
ANNUAL RUNOFF (CFSM)	3.37		2.67		3.40	
ANNUAL RUNOFF (INCHES)	45.84		36.30		46.20	
10 PERCENT EXCEEDS	52		41		52	
50 PERCENT EXCEEDS	11		11		11	
90 PERCENT EXCEEDS	6.4		5.1		5.5	

\# See Period of Record, partial year used in monthly statistics
a Aug. 31 and Sep. 3
b Mar. 9 and 10, 1999
c From crest-stage gage
d From temporary blockage of channel upstream from gage

15238600 SPRUCE CREEK NEAR SEWARD

LOCATION.--Lat 60°04'10", long 149°27'08", in SW¼ SE¼ sec. 21, T. 1 S., R. 1 W. (Seward A-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on left bank 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.

DRAINAGE AREA.--9.26 mi^2.

PERIOD OF RECORD.--September 1967 to September 1979, annual maximum, water years 1980-90. October 1990 to current year.

REVISED RECORDS.--WDR AK-76-1: 1966-67(M), 1970(M), 1972(M). WDR AK-77-1: 1969(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 75 ft above sea level, from topographic map.

REMARKS.--Records good, except estimated daily discharges and discharges below 7.0 ft^3/s, which are poor. Precipitation gage at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 21, 1966, reached a stage of 10.1 ft, from floodmarks; discharge, 3,090 ft^3/s, by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Oct. 3	2200	*1200	*6.37

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	23	71	15	9.6	5.2	3.4	95	164	176	119	48
2	208	20	52	15	e9.0	4.8	3.3	85	149	158	237	41
3	762	26	39	46	e8.5	4.5	2.8	74	156	166	180	54
4	665	22	32	102	e8.0	4.1	2.6	71	257	155	146	120
5	269	18	28	47	e8.0	4.6	2.6	74	304	170	116	147
6	154	17	27	31	7.8	4.8	4.1	113	237	200	101	285
7	96	17	26	25	6.5	4.7	5.0	90	205	174	95	137
8	73	18	24	21	6.4	9.1	4.9	87	224	166	96	94
9	89	39	21	19	6.7	15	5.1	105	226	175	93	138
10	84	377	19	17	6.4	21	5.4	122	228	152	91	196
11	83	171	18	15	6.0	36	5.5	128	212	143	91	104
12	114	94	18	13	5.6	33	5.7	165	184	159	87	105
13	189	72	21	13	5.4	42	5.8	196	178	170	80	83
14	185	55	22	13	13	27	6.1	212	187	157	73	71
15	105	44	19	13	14	19	6.7	166	218	143	63	102
16	84	37	29	12	9.4	15	7.1	138	252	224	58	210
17	66	33	47	12	8.6	14	7.5	125	314	180	71	166
18	54	33	60	11	7.9	12	8.3	140	311	136	71	113
19	54	43	46	11	7.4	11	9.8	160	267	149	69	88
20	47	45	31	10	6.9	10	52	165	236	120	62	75
21	41	39	27	11	7.6	9.2	62	164	218	126	64	62
22	36	39	36	15	7.2	8.5	193	169	188	95	54	75
23	36	38	43	21	7.4	7.8	159	182	151	80	153	107
24	35	41	29	18	7.3	7.2	74	175	172	80	102	171
25	32	37	24	15	7.2	6.6	65	157	180	229	74	94
26	38	29	22	14	6.9	6.1	70	171	189	180	68	74
27	39	73	21	13	6.3	5.5	75	291	201	136	64	131
28	44	219	19	12	5.7	5.1	108	285	215	101	55	199
29	36	77	17	11	---	4.6	130	263	224	76	50	119
30	31	55	16	10	---	4.3	113	196	192	64	47	86
31	28	---	16	10	---	3.9	---	159	---	66	49	---
TOTAL	3860	1851	920	611	216.7	365.6	1202.7	4723	6439	4506	2779	3495
MEAN	125	61.7	29.7	19.7	7.74	11.8	40.1	152	215	145	89.6	116
MAX	762	377	71	102	14	42	193	291	314	229	237	285
MIN	28	17	16	10	5.4	3.9	2.6	71	149	64	47	41
AC-FT	7660	3670	1820	1210	430	725	2390	9370	12770	8940	5510	6930
CFSM	13.4	6.66	3.20	2.13	0.84	1.27	4.33	16.5	23.2	15.7	9.68	12.6
IN.	15.51	7.44	3.70	2.45	0.87	1.47	4.83	18.97	25.87	18.10	11.16	14.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)#

MEAN	96.3	44.9	19.2	11.4	11.1	4.35	13.7	79.6	203	186	143	161
MAX	333	249	89.0	46.1	53.1	15.3	40.1	163	318	371	323	372
(WY)	1970	2003	2003	2001	2003	1970	2005	2004	2001	1977	1977	1995
MIN	17.0	9.40	3.52	0.65	0.00	0.00	0.12	30.6	116	104	56.9	48.8
(WY)	1997	1974	1997	1974	1972	1971	1972	1971	1972	1997	1969	2000

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

15238600 SPRUCE CREEK NEAR SEWARD—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1967 - 2005#	
ANNUAL TOTAL	29790.47		30969.0			
ANNUAL MEAN	81.4		84.8		80.9	
HIGHEST ANNUAL MEAN					123	1977
LOWEST ANNUAL MEAN					50.6	1996
HIGHEST DAILY MEAN	814	Jun 17	762	Oct 3	1650	Oct 11 1969
LOWEST DAILY MEAN	0.02	Apr 1	a2.6	Apr 4	b0.00	Mar 1 1969
ANNUAL SEVEN-DAY MINIMUM	0.06	Mar 26	3.2	Mar 31	0.00	Mar 1 1969
MAXIMUM PEAK FLOW			1200	Oct 3	c13600	Oct 11 1986
MAXIMUM PEAK STAGE			6.37	Oct 3	d13.96	Oct 11 1986
INSTANTANEOUS LOW FLOW			f2.4	Apr 4	0.00	Mar 1 1969
ANNUAL RUNOFF (AC-FT)	59090		61430		58630	
ANNUAL RUNOFF (CFSM)	8.79		9.16		8.74	
ANNUAL RUNOFF (INCHES)	119.68		124.41		118.75	
10 PERCENT EXCEEDS	209		196		207	
50 PERCENT EXCEEDS	38		55		35	
90 PERCENT EXCEEDS	3.3		6.7		2.0	

\# See Period of Record; partial year used in monthly statistics
a Apr. 4-5
b No flow many days in water years 1969, 1971-76, 1992, 1996, 1999, and 2002
c Slope-area measurement of the release of water temporarily stored behind a debris-avalanche dam. Inflow into the ponded area was 5,420 ft^3/s, from a slope-area measurement made about 0.3 mi upstream at a site with a drainage area of 8.98 mi^2
d From floodmarks
f Apr. 4-5

15238648 UPPER NUKA RIVER NEAR PARK BOUNDARY NEAR HOMER

LOCATION.--Lat 59°41'04", long 150°42'12" (Seldovia C-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020202, on left bank, 0.4 mi downstream from terminus of Nuka Glacier, 4.9 mi southeast of Bradley Lake, and 29 mi east of Homer, Alaska.

DRAINAGE AREA.--Indeterminate. Prior to July 29, 1990, drainage area was about 3 mi^2 and varied according to position of glacier terminus.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1980-81, prior to shift in glacier terminus; September 1984 to current year. Records prior to July 29, 1990, are not equivalent. Published as "Upper Nuka River near Homer" prior to October 1989. Low-flow records not equivalent prior to November 1987 because most low-flow measurements were made at site 0.5 mi downstream.

REVISED RECORDS.--WDR AK-89-1: 1985 (M), 1986-88.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,300 ft above sea level, from topographic map.

REMARKS.--Records fair except estimated daily discharges, which are poor. Water is diverted, 300 ft upstream from gage, into Bradley River drainage since July 29, 1990. Precipitation gage at station. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	e0.80	e0.00	e0.00	0.00	0.00	e0.00	5.2	7.4	3.4	2.3
2	5.3	1.1	e0.50	e0.00	e0.00	0.00	0.00	e0.00	4.4	9.4	3.0	1.6
3	22	1.1	e0.30	e0.40	e0.00	0.00	0.00	e0.00	7.0	11	2.9	5.6
4	27	0.97	e0.20	e4.0	0.00	0.00	0.00	e0.00	13	7.0	3.0	9.9
5	12	0.87	e0.20	e2.0	0.00	0.00	0.00	e0.00	16	9.8	6.0	4.9
6	2.0	0.75	e0.10	1.1	0.00	0.00	0.00	e0.00	8.3	11	7.5	9.6
7	1.6	0.82	e0.10	0.83	0.00	0.00	0.00	e0.00	9.6	11	6.7	2.3
8	1.4	0.70	e0.10	0.75	0.00	0.00	0.00	e0.00	21	12	7.6	2.5
9	2.4	1.2	e0.10	0.68	0.00	0.00	0.00	e0.00	22	11	8.8	11
10	1.7	e10	e0.00	e0.50	0.00	0.00	0.00	e0.00	12	13	7.0	5.3
11	6.9	e8.0	e0.00	e0.40	0.00	0.00	0.00	e0.00	10	8.2	8.9	3.6
12	13	4.4	0.00	e0.30	0.00	0.00	0.00	e0.00	9.1	8.7	9.3	4.3
13	12	1.9	0.00	e0.20	0.00	0.00	0.00	e0.00	7.4	6.8	8.0	2.8
14	8.3	1.4	0.00	e0.20	0.00	0.00	0.00	e0.00	10	7.5	6.1	1.9
15	1.9	1.2	0.00	e0.10	0.00	0.00	0.00	e0.00	12	9.7	4.7	12
16	1.6	1.1	0.00	e0.10	0.00	0.00	0.00	e0.00	13	17	3.2	19
17	1.5	0.96	e0.10	e0.10	0.00	0.00	0.00	e0.00	15	8.6	9.9	3.3
18	1.3	e0.90	e4.0	e0.00	0.00	0.00	0.00	e0.00	19	9.4	5.2	2.4
19	1.4	e0.90	e2.0	e0.00	0.00	e0.00	0.00	e0.10	5.8	4.5	5.7	1.9
20	1.3	0.84	e1.0	e0.00	0.00	e0.00	0.00	e0.20	9.0	9.3	3.3	1.7
21	1.3	0.81	e0.50	e0.10	0.00	e0.00	0.00	e0.30	9.9	7.7	3.7	1.6
22	4.1	0.79	e0.20	e0.20	0.00	e0.00	e0.00	e0.50	5.1	8.3	3.6	6.3
23	1.2	e0.70	e0.50	e0.10	0.00	e0.00	e0.00	e0.70	6.0	8.9	14	7.9
24	1.2	e0.70	e0.30	e0.10	0.00	0.00	e0.00	0.71	7.4	10	6.4	7.8
25	1.6	0.71	e0.20	e0.00	0.00	0.00	e0.00	4.4	6.2	18	2.8	1.9
26	1.2	0.60	e0.10	e0.00	0.00	0.00	e0.00	9.3	9.5	6.9	4.5	2.0
27	1.3	0.73	e0.10	e0.00	0.00	0.00	e0.00	22	11	4.7	6.4	24
28	1.3	16	e0.10	e0.00	0.00	0.00	e0.00	23	10	5.0	2.4	9.0
29	1.5	7.4	e0.10	e0.00	---	0.00	e0.00	21	9.9	3.3	2.1	1.8
30	1.2	1.3	e0.00	e0.00	---	0.00	e0.00	11	9.6	3.1	2.2	1.2
31	1.2	---	e0.00	e0.00	---	0.00	---	6.7	---	4.6	2.6	---
TOTAL	142.8	70.15	11.60	12.16	0.00	0.00	0.00	99.91	313.4	272.8	170.9	171.4
MEAN	4.61	2.34	0.37	0.39	0.00	0.00	0.00	3.22	10.4	8.80	5.51	5.71
MAX	27	16	4.0	4.0	0.00	0.00	0.00	23	22	18	14	24
MIN	1.1	0.60	0.00	0.00	0.00	0.00	0.00	0.00	4.4	3.1	2.1	1.2
AC-FT	283	139	23	24	0.00	0.00	0.00	198	622	541	339	340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)#

MEAN	7.60	3.89	0.27	0.06	0.17	0.01	0.01	1.41	26.2	34.3	17.6	12.0
MAX	62.1	36.7	2.15	0.39	1.56	0.10	0.12	9.96	209	272	53.1	41.1
(WY)	2003	2003	2003	2005	1994	2003	2003	2003	1999	1999	1998	2002
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	2.96	0.97	1.72
(WY)	1992	1992	1991	1991	1991	1991	1992	1998	1992	1991	1991	1991

\# See Period of Record; partial year was used in monthly statistics, and Remarks.
Not adjusted to account for changes in drainage area
e Estimated

15238648 UPPER NUKA RIVER NEAR PARK BOUNDARY NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1991 - 2005#	
ANNUAL TOTAL	858.21		1265.12			
ANNUAL MEAN	2.34		3.47		8.68	
HIGHEST ANNUAL MEAN					a45.6	1999
LOWEST ANNUAL MEAN					1.09	1991
HIGHEST DAILY MEAN	30	Jun 17	27	Oct 4	389	Oct 23 2002
LOWEST DAILY MEAN	b0.00	Jan 1	c0.00	Dec 10	d0.00	Nov 3 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Dec 10	0.00	Nov 3 1990
MAXIMUM PEAK FLOW			f33	Oct 4	565	Oct 23 2002
MAXIMUM PEAK STAGE			2.19	Oct 4	4.48	Oct 23 2002
ANNUAL RUNOFF (AC-FT)	1700		2510		6290	
10 PERCENT EXCEEDS	8.1		10		15	
50 PERCENT EXCEEDS	0.52		0.90		0.30	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

PRIOR TO REGULATION AND DIVERSION OF NUKA RIVER

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1989, BY WATER YEAR (WY)#

		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	47.6	7.01	2.83	1.48	.49	.21	.22	23.8	34.7	141	180	131	
MAX	72.0	24.9	9.00	5.79	2.24	.87	.72	117	81.2	307	432	321	
(WY)	1987	1987	1987	1985	1985	1985	1985	1986	1989	1989	1989	1989	
MIN	3.84	.024	.000	.000	.000	.000	.000	.016	.76	6.41	12.1	7.08	
(WY)	1989	1989	1989	1989	1988	1988	1988	1987	1987	1988	1986	1988	

SUMMARY STATISTICSWATER YEARS 1985 - 1989#

ANNUAL MEAN	47.9	
HIGHEST ANNUAL MEAN	96.2	1989
LOWEST ANNUAL MEAN	8.60	1988
HIGHEST DAILY MEAN	1240	Aug 25 1989
LOWEST DAILY MEAN	g.00	May 6 1987
ANNUAL SEVEN-DAY MINIMUM	.00	May 6 1987
INSTANTANEOUS PEAK FLOW	h1630	Aug 25 1989
INSTANTANEOUS PEAK STAGE	5.47	Aug 25 1989
ANNUAL RUNOFF (AC-FT)	34700	
10 PERCENT EXCEEDS	183	
50 PERCENT EXCEEDS	1.1	
90 PERCENT EXCEEDS	.00	

\# See Period of Record; partial year was used in monthly statistics, and Remarks. Not adjusted to account for changes in drainage area.
a Diversion dam failed June 17, 1999; repaired Sept. 25, 1999
b From Jan. 1 to May 28, Dec. 10 - 16, and Dec. 30, 31
c From Dec. 10 - 16, Dec. 30 to Jan. 2, and Jan. 18 to May 18
d No flow most days during winter
f Oct. 4 and Sept. 27
g No flow many days each year since 1987 during winter through June. See Period of Record for remark on low-flow records
h From rating curve extended above 380 ft^3/s

15238978 BATTLE CREEK DIVERSION ABOVE BRADLEY LAKE NEAR HOMER

LOCATION.--Lat 59°44'45", long 150°50'22", in SW¼ NE¼ sec. 17, T. 5 S., R. 9 W. (Seldovia C-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 0.6 mi upstream from Bradley Lake and 25 mi east of Homer.

DRAINAGE AREA.--0.95 mi^2.

PERIOD OF RECORD.--August 1992 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. The entire flow of Battle Creek at the station has been diverted into Bradley Lake since October 1991.

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

Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Oct. 3	1930	*91	*6.76

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	0.18	e0.30	0.00	e0.00	e0.00	e0.00	2.0	9.7	9.0	2.7	0.72
2	5.6	0.05	e0.10	0.00	e0.00	e0.00	e0.00	1.4	6.8	7.2	2.8	0.45
3	41	e0.04	e0.05	0.25	e0.00	e0.00	e0.00	1.3	5.6	8.3	3.1	0.55
4	54	e0.03	e0.02	1.1	e0.00	e0.00	e0.00	1.2	7.4	7.8	2.8	3.2
5	20	e0.02	0.01	0.38	e0.00	e0.00	e0.00	1.2	10	8.1	2.4	2.3
6	8.0	e0.02	0.00	0.11	e0.00	e0.00	e0.00	2.3	13	7.9	2.2	4.9
7	4.6	e0.01	e0.00	0.01	e0.00	e0.00	e0.00	1.5	16	7.5	2.2	3.0
8	3.1	e0.01	0.00	0.00	e0.00	e0.00	e0.00	1.2	19	8.3	2.2	2.1
9	4.3	e0.05	0.00	0.00	e0.00	e0.02	e0.00	1.6	17	8.1	2.1	2.8
10	3.0	19	0.00	0.00	e0.00	e0.20	e0.00	2.0	17	8.3	2.0	4.3
11	3.3	4.3	0.00	0.00	e0.00	e0.40	e0.00	2.3	14	11	2.0	2.5
12	18	1.5	0.00	0.00	e0.00	e0.60	e0.00	6.4	13	15	1.9	2.3
13	10	1.2	0.00	0.00	e0.00	e0.80	e0.00	9.9	9.9	11	1.8	2.0
14	6.7	0.86	0.00	0.00	e0.00	e0.40	e0.00	13	7.7	7.3	1.6	1.6
15	4.2	0.59	0.00	0.00	e0.00	e0.20	e0.00	13	8.6	5.8	1.5	1.8
16	3.2	0.40	0.00	e0.00	e0.00	e0.10	e0.00	9.1	13	9.3	1.7	8.4
17	2.3	0.23	e0.02	e0.00	e0.00	e0.08	e0.00	6.7	14	6.6	2.1	9.2
18	1.7	0.21	0.61	e0.00	e0.00	e0.06	e0.00	5.2	34	6.2	2.4	4.6
19	1.8	0.33	0.19	e0.00	e0.00	e0.04	e0.01	4.8	15	6.5	1.7	3.6
20	1.4	0.36	0.02	e0.00	e0.00	e0.02	e0.02	5.8	11	5.3	1.3	2.6
21	1.1	0.21	0.00	e0.00	e0.00	e0.00	e0.02	7.2	9.8	6.6	1.9	2.1
22	0.79	0.18	e0.02	e0.02	e0.00	e0.00	e0.04	7.5	10	5.9	1.5	2.0
23	1.0	0.50	1.4	e0.00	e0.00	e0.00	e0.06	7.6	8.1	4.5	2.0	2.6
24	0.93	0.69	0.47	e0.00	e0.00	e0.00	e0.10	8.1	7.6	5.8	1.4	4.1
25	0.62	0.28	0.14	e0.00	e0.00	e0.00	e0.40	8.4	8.1	9.7	0.96	2.5
26	0.66	0.09	0.02	e0.00	e0.00	e0.00	e0.80	8.4	7.8	6.8	0.79	2.1
27	1.2	0.74	0.00	e0.00	e0.00	e0.00	e1.2	21	9.2	5.1	0.78	23
28	0.94	3.3	0.00	e0.00	e0.00	e0.00	1.9	28	8.9	4.5	0.73	14
29	0.68	1.1	0.00	e0.00	---	e0.00	4.0	24	9.4	3.6	1.0	6.1
30	0.53	0.60	0.00	e0.00	---	e0.00	3.1	14	9.2	2.9	1.1	4.0
31	0.34	---	0.00	e0.00	---	e0.00	---	11	---	2.6	0.79	---
TOTAL	210.99	37.08	3.37	1.87	0.00	2.92	11.65	237.1	349.8	222.5	55.45	125.42
MEAN	6.81	1.24	0.11	0.06	0.00	0.09	0.39	7.65	11.7	7.18	1.79	4.18
MAX	54	19	1.4	1.1	0.00	0.80	4.0	28	34	15	3.1	23
MIN	0.34	0.01	0.00	0.00	0.00	0.00	0.00	1.2	5.6	2.6	0.73	0.45
AC-FT	418	74	6.7	3.7	0.00	5.8	23	470	694	441	110	249
CFSM	7.16	1.30	0.11	0.06	0.00	0.10	0.41	8.05	12.3	7.56	1.88	4.40
IN.	8.26	1.45	0.13	0.07	0.00	0.11	0.46	9.28	13.70	8.71	2.17	4.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)#

MEAN	4.52	2.07	0.50	0.05	0.21	0.01	0.14	3.47	14.0	10.8	5.12	6.25
MAX	16.6	15.1	4.76	0.22	1.58	0.09	0.67	7.67	23.5	20.1	14.5	16.9
(WY)	2003	2003	2003	2003	2003	2005	1997	1993	1998	2001	2001	1995
MIN	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.21	5.55	1.83	0.09	0.91
(WY)	1997	2000	1996	1996	1996	1994	1999	1999	1996	1996	1996	1992

See Period of Record; partial year was used in monthly statistics, and Remarks.
e Estimated

15238978 BATTLE CREEK DIVERSION ABOVE BRADLEY LAKE NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005#	
ANNUAL TOTAL	1362.01		1258.15			
ANNUAL MEAN	3.72		3.45		3.97	
HIGHEST ANNUAL MEAN					5.98	2003
LOWEST ANNUAL MEAN					1.23	1996
HIGHEST DAILY MEAN	54	Oct 4	54	Oct 4	121	Oct 23 2002
LOWEST DAILY MEAN	a0.00	Jan 1	b0.00	Dec 6	c0.00	Jun 3 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Dec 6	0.00	Jan 11 1993
MAXIMUM PEAK FLOW			d91	Oct 3	151	Oct 23 2002
MAXIMUM PEAK STAGE			6.76	Oct 3	7.50	Oct 23 2002
ANNUAL RUNOFF (AC-FT)	2700		2500		2880	
ANNUAL RUNOFF (CFSM)	3.92		3.63		4.18	
ANNUAL RUNOFF (INCHES)	53.33		49.27		56.80	
10 PERCENT EXCEEDS	11		9.7		13	
50 PERCENT EXCEEDS	0.36		0.93		0.47	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

\# See Period of Record; partial year was used in monthly statistics, and Remarks.
a No flow Jan. 1 to Apr. 26, Sep. 12-19, Dec. 6-16, Dec. 21, and Dec. 27-31
b No Flow Dec. 6-16, Dec. 21, Dec. 27-Jan. 2, Jan. 8-21, Jan. 23-Mar. 8, and Mar. 21-Apr. 18
c No flow many days most winters, and Jun. 3, 1992 (observation), Aug. 4, Aug. 5, Aug. 9, Aug. 14 - Sept. 11, 1996, Sept. 19, 2003, and Sept. 12-19, 2004.
d From crest-stage gage.

15238990 UPPER BRADLEY RIVER NEAR NUKA GLACIER NEAR HOMER

LOCATION.--Lat 59°42'02", long 150°42'09", (Seldovia C-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 1.0 mi downstream from Nuka Glacier terminus, 2.7 mi upstream from confluence with Kachemak Creek, 3.7 mi southeast of Bradley Lake, and 29 mi east of Homer. Prior to July 22, 1991 at site 0.2 mi downstream.

DRAINAGE AREA.--Indeterminate. Prior to July 29, 1990, drainage area was about 10 mi^2 and varied according to position of glacier terminus.

PERIOD OF RECORD.--October 1979 to current year. Prior to October 1989, published as Upper Bradley River near Homer.

REVISED RECORDS.--WDR AK-86-1: 1980-85, WRD AK-96-1: 1991-95.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,250 ft above sea level, from topographic map. Prior to July 22, 1991 at site 0.2 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow diverted from Upper Nuka River into Upper Bradley River drainage since July 29, 1990. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	e12	e12	e0.40	e0.00	e0.00	e0.00	e100	175	381	353	293
2	297	e10	e8.0	e0.40	e0.00	e0.00	e0.00	e100	157	368	413	209
3	803	e8.0	e6.0	e5.0	e0.00	e0.00	e0.00	e90	160	398	453	308
4	977	e9.0	e4.5	e25	e0.00	e0.00	e0.00	e60	214	376	397	568
5	526	e11	e3.5	e13	e0.00	e0.00	e0.00	e40	254	409	404	516
6	278	e12	e2.5	e7.0	e0.00	e0.00	e0.00	e30	230	488	423	677
7	162	13	e2.0	e4.0	e0.00	e0.00	e0.00	e30	243	478	425	451
8	111	12	e1.5	e3.0	e0.00	e0.00	e0.00	e35	411	474	436	329
9	119	e11	e1.5	e2.5	e0.00	e0.00	e0.00	e40	372	490	446	520
10	77	e200	e1.0	e2.0	e0.00	e1.0	e0.00	e45	309	478	424	535
11	118	e80	e1.0	e1.5	e0.00	e2.0	e0.00	e50	282	460	434	365
12	219	e20	e1.0	e1.0	e0.00	e3.0	e0.00	e50	275	538	477	475
13	247	e14	e0.50	e0.70	e0.00	e1.0	e0.00	e60	247	679	475	365
14	163	e9.0	e0.50	e0.50	e0.00	e0.90	e0.00	e90	224	604	447	246
15	66	e7.0	e0.40	e0.40	e0.00	e0.80	e0.00	e150	253	557	413	500
16	43	e5.5	e0.40	e0.30	e0.00	e0.60	e0.00	e160	344	713	429	817
17	31	e4.5	e0.40	e0.30	e0.00	e0.40	e0.00	173	423	655	599	545
18	27	e4.0	e20	e0.20	e0.00	e0.20	e0.00	137	545	592	671	376
19	30	e3.5	e10	e0.20	e0.00	e0.10	e0.30	142	428	582	606	263
20	25	e3.0	e5.0	e0.10	e0.00	e0.10	e1.0	133	363	520	491	205
21	23	e2.5	e2.5	e0.10	e0.00	e0.00	e10	130	368	487	501	163
22	21	e2.5	e1.5	e1.0	e0.00	e0.00	e60	137	328	441	379	260
23	23	e2.0	e10	e0.50	e0.00	e0.00	e50	149	288	385	656	406
24	21	e2.0	e5.0	e0.20	e0.00	e0.00	e30	153	287	492	585	431
25	19	e2.0	e2.5	e0.10	e0.00	e0.00	e25	148	285	832	414	227
26	20	e1.5	e1.5	e0.00	e0.00	e0.00	e30	163	295	797	373	181
27	20	e1.5	e1.0	e0.00	e0.00	e0.00	e40	336	351	564	420	545
28	18	e80	e0.90	e0.00	e0.00	e0.00	e50	453	363	451	337	392
29	17	27	e0.70	e0.00	---	e0.00	e70	437	382	389	335	198
30	15	19	e0.60	e0.00	---	e0.00	e90	256	380	340	360	143
31	e13	---	e0.50	e0.00	---	e0.00	---	194	---	343	345	---
TOTAL	4690	588.5	108.40	69.40	0.00	10.10	456.30	4271	9236	15761	13921	11509
MEAN	151	19.6	3.50	2.24	0.00	0.33	15.2	138	308	508	449	384
MAX	977	200	20	25	0.00	3.0	90	453	545	832	671	817
MIN	13	1.5	0.40	0.00	0.00	0.00	0.00	30	157	340	335	143
AC-FT	9300	1170	215	138	0.00	20	905	8470	18320	31260	27610	22830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2005, BY WATER YEAR (WY)#

MEAN	107	27.8	6.92	0.64	0.60	0.04	1.14	28.8	240	434	446	338
MAX	338	195	68.5	4.75	4.39	0.33	15.2	138	458	763	597	851
(WY)	2004	2003	2003	2001	2003	2005	2005	2005	2004	2001	1993	1995
MIN	12.9	2.40	0.00	0.00	0.00	0.00	0.00	0.01	94.4	106	293	117
(WY)	1997	2000	1995	1991	1991	1991	1992	1998	1999	1999	1998	1992

\# See Period of Record and Remarks. Not adjusted to account for changes in drainage area
e Estimated

15238990 UPPER BRADLEY RIVER NEAR NUKA GLACIER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1991 - 2005#	
ANNUAL TOTAL	58943.05		60620.70			
ANNUAL MEAN	161		166		137	
HIGHEST ANNUAL MEAN					181	2001
LOWEST ANNUAL MEAN					91.1	1998
HIGHEST DAILY MEAN	1380	Jul 27	977	Oct 4	a3600	Sep 21 1995
LOWEST DAILY MEAN	b0.00	Jan 1	c0.00	Jan 26	d0.00	Dec 5 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Jan 26	0.00	Dec 5 1990
MAXIMUM PEAK FLOW			fg1390	Oct 4	g4100	Sep 20 1995
MAXIMUM PEAK STAGE			13.26	Oct 4	h15.10	Sep 20 1995
ANNUAL RUNOFF (AC-FT)	116900		120200		99080	
10 PERCENT EXCEEDS	571		482		440	
50 PERCENT EXCEEDS	4.8		27		7.0	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

PRIOR TO DIVERSION FROM UPPER NUKA RIVER

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	106	22.8	10.2	4.67	1.74	1.35	1.29	38.3	161	290	349	292
MAX	279	75.7	54.6	15.1	4.82	6.50	4.67	92.0	270	458	595	673
(WY)	1980	1980	1987	1981	1981	1984	1981	1986	1988	1981	1986	1982
MIN	26.3	2.60	.50	.000	.000	.000	.000	.33	102	149	133	63.1
(WY)	1986	1988	1989	1989	1989	1989	1986	1987	1985	1985	1985	1983

SUMMARY STATISTICS	WATER YEARS 1980 - 1989 #	
ANNUAL MEAN	107	
HIGHEST ANNUAL MEAN	154	1986
LOWEST ANNUAL MEAN	49.6	1985
HIGHEST DAILY MEAN	1890	Aug 27 1986
LOWEST DAILY MEAN	d.00	Dec 25 1979
ANNUAL SEVEN-DAY MINIMUM	.00	Dec 25 1979
INSTANTANEOUS PEAK FLOW	i2530	Oct 10 1986
INSTANTANEOUS PEAK STAGE	j9.86	Oct 10 1986
ANNUAL RUNOFF (AC-FT)	77650	
10 PERCENT EXCEEDS	338	
50 PERCENT EXCEEDS	15	
90 PERCENT EXCEEDS	.50	

\# See Period of Record and Remarks. Not adjusted to account for changes in drainage area
a Estimated discharge, but may have been higher during period of no gage-height record, Sep. 21 to Sep. 22, 1995
b From Jan. 1 to Jan. 18, and Jan. 25 to May 15
c From Jan. 26 to Mar. 9, and Mar. 21 to Apr. 18
d No flow in winter most years
f From crest-stage gage
g From rating curve extended above 400 ft^3/s on basis of slope-area measurement of peak flow
h From floodmarks
i From rating curve extended above 440 ft^3/s on basis of slope-area measurement of peak flow
j Site and datum then in use

15239001 BRADLEY RIVER BELOW DAM NEAR HOMER

LOCATION.--Lat 59°45'30", long 150°51'02", in SW¼ SE¼ NW¼ sec. 8, T. 5 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank about 1,300 ft downstream from Bradley Lake Dam, 3.3 mi upstream from Middle Fork Bradley River, and 26 mi northeast of Homer.

DRAINAGE AREA.--About 66 mi2 since October 1991, when additional water was diverted into the basin. Prior drainage area was about 54 mi2.

PERIOD OF RECORD.--October 1989 to current year. Prior to 1990 water year, records are equivalent to "Bradley River near Homer" (station no. 15239000).

GAGE.--Water-stage recorder. Datum of gage is 1,054.16 ft above sea level (levels of dam-site survey for Alaska Power Authority).

REMARKS.--Records fair except for estimated for estimated daily discharges which are poor. Nuka River and Middle Fork Bradley River were diverted into Bradley Lake, upstream from dam, beginning July 29 and August 7, 1990, respectively. Reservoir began filling April 26, 1991. Water has been diverted out of the basin through the turbines since hydro-power generation began on June 28, 1991. Battle Creek was diverted into reservoir in October 1991. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,480 ft^3/s November 6, 2002 gage height, 7.15 ft; minimum, 0.00 ft^3/s, from rating curve extended below 0.18 ft^3/s, most likely ponded water, but no measurable flow, June 9 and June 10, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 159 ft^3/s, June 19, gage height, 3.33 ft; minimum, 0.21 ft^3/s, June 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	49	1.3	46	e43	e33	35	4.5	8.9	44	82	92
2	0.86	57	0.98	47	e42	e33	34	4.3	18	44	87	92
3	2.8	44	0.78	48	e42	e33	35	4.2	28	47	96	93
4	4.4	53	4.5	47	e41	e33	39	4.1	36	64	117	92
5	1.7	34	15	47	e41	e33	40	4.1	31	67	98	92
6	1.0	35	34	46	e40	e33	40	4.2	28	67	87	92
7	0.85	47	41	46	e40	e34	40	3.8	27	67	90	92
8	0.80	46	41	46	e39	e35	40	3.9	15	56	97	93
9	0.85	49	41	46	e39	e36	40	3.8	11	54	79	94
10	8.9	53	41	46	e39	e37	40	3.7	11	54	75	93
11	11	48	41	e38	e39	e38	39	3.7	10	54	75	88
12	4.7	47	41	e37	e38	40	39	3.7	12	54	75	85
13	1.3	47	41	e37	e38	35	39	3.9	21	55	84	85
14	1.1	16	41	e37	e37	33	39	3.9	29	61	87	85
15	0.95	0.89	41	e38	e37	33	39	3.7	27	77	88	86
16	0.90	0.84	41	e39	e36	32	39	3.7	24	73	111	83
17	0.83	0.81	41	e40	e36	32	37	3.6	17	71	101	61
18	0.83	0.93	41	e43	e35	32	36	8.1	7.8	71	91	50
19	0.87	1.4	41	e45	e35	32	36	9.5	19	72	91	45
20	4.8	1.1	43	e46	e35	33	34	8.5	40	72	91	37
21	8.5	0.93	45	e46	e34	38	27	8.5	39	73	89	35
22	13	1.0	46	46	e33	35	16	8.5	40	73	92	35
23	14	1.3	45	45	e33	35	7.3	8.5	40	73	93	30
24	19	1.2	44	44	e33	35	5.2	8.5	43	73	92	25
25	28	0.87	44	44	e33	35	4.9	8.5	46	74	92	24
26	28	4.5	44	44	e33	35	4.8	8.5	46	72	92	26
27	28	7.5	44	e44	e33	35	4.9	8.7	46	74	92	20
28	28	2.0	43	e44	e33	35	5.0	7.5	47	76	92	14
29	28	0.99	43	e44	---	35	5.0	4.9	42	77	92	14
30	27	0.81	43	44	---	37	4.6	5.8	44	81	92	14
31	29	---	43	e43	---	35	---	8.4	---	82	92	---
TOTAL	306.44	652.07	1116.56	1353	1037	1070	844.7	179.2	853.7	2052	2812	1867
MEAN	9.89	21.7	36.0	43.6	37.0	34.5	28.2	5.78	28.5	66.2	90.7	62.2
MAX	29	57	46	48	43	40	40	9.5	47	82	117	94
MIN	0.80	0.81	0.78	37	33	32	4.6	3.6	7.8	44	75	14
AC-FT	608	1290	2210	2680	2060	2120	1680	355	1690	4070	5580	3700

CAL YR 2004 TOTAL 13800.50 MEAN 37.7 MAX 107 MIN 0.09 AC-FT 27370
WTR YR 2005 TOTAL 14143.67 MEAN 38.7 MAX 117 MIN 0.78 AC-FT 28050

15239050 MIDDLE FORK BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°46'42", long 150°45'15", in NW¼ NE¼ sec.2, T.5 S., R.9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 6.0 mi upstream from mouth and 27 mi east of Homer.

DRAINAGE AREA.--9.25 mi^2.

PERIOD OF RECORD.--October 1979 to current year. Published as Bradley River tributary near Homer prior to October 1989.

REVISED RECORDS.-- WDR AK-86-1: 1980(P), 1981-82(M), 1984(M). WRD AK-2000-1: 1995-1997.

GAGE.--Water-stage recorder. Elevation of gage is 2,300 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Precipitation gage and air temperature recorder at station; daily values of air temperature and precipitation are available from the computer files of the Alaska Science Center, Water-Resources office. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximums (*):
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Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Oct. 03	2130	*475	*9.49

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	e16	e10	5.9	e4.0	3.3	e3.0	18	79	e180	e120	85
2	126	e15	e9.0	6.0	e3.8	3.3	e3.0	16	67	e180	e130	71
3	276	e15	e8.5	8.9	e3.6	3.3	e3.0	16	61	e180	e140	76
4	375	e15	e8.0	7.8	e3.6	3.2	e2.8	16	68	e180	e100	95
5	172	e15	e7.5	7.0	e3.6	e3.2	e2.4	16	90	e190	100	83
6	98	e15	e7.0	6.6	e3.8	e3.2	e2.4	15	110	e200	97	112
7	77	e15	e7.0	6.5	e3.8	e3.0	e3.0	15	120	e200	99	88
8	64	e16	e7.0	6.2	e4.0	e3.0	3.2	17	137	e200	102	76
9	58	e50	e7.5	6.1	e4.0	e3.4	3.2	19	129	e200	109	125
10	50	e110	e7.5	e5.5	e4.0	e3.2	3.1	22	125	e200	109	118
11	57	e45	e7.5	e5.5	e4.0	e3.2	3.1	25	122	e200	113	99
12	59	25	e7.5	5.7	e3.8	e3.0	3.1	39	114	e240	118	103
13	79	18	e7.5	5.7	e3.8	e3.0	3.2	49	104	e260	114	85
14	70	16	e7.0	5.6	e3.8	e3.6	3.2	56	e95	e240	110	72
15	56	15	e7.0	5.5	e3.8	3.5	3.2	45	e100	e240	108	93
16	46	13	e7.0	5.4	e3.6	3.4	3.2	37	e110	e280	107	111
17	40	e12	e7.0	5.4	e3.6	3.3	3.3	35	e120	e260	134	94
18	37	e12	e7.0	5.3	e3.6	3.3	3.3	33	e130	e240	136	77
19	34	e11	e7.0	5.2	e3.6	3.3	3.4	37	e150	e240	113	68
20	30	e11	e7.0	5.3	e3.4	3.3	3.4	41	e140	e240	106	62
21	29	e10	e6.5	5.3	e3.4	e3.0	3.5	42	e130	e260	116	55
22	29	e10	e6.5	5.2	e3.4	e2.6	e4.5	42	e130	e240	95	72
23	26	e10	e6.5	5.2	e3.4	e2.4	e5.5	43	e125	e220	122	93
24	24	e9.5	e6.5	5.2	3.4	e2.4	e7.5	47	113	e240	100	88
25	26	e9.5	e6.5	e5.0	3.4	e2.4	9.0	45	121	e330	86	62
26	22	9.2	e6.5	5.2	3.4	e2.4	9.8	49	124	e260	81	53
27	20	18	e6.5	5.1	3.4	e2.4	12	78	133	e200	84	97
28	20	15	e6.0	5.0	3.3	e2.6	16	116	154	e160	82	103
29	e18	12	e6.0	e4.8	---	e2.8	20	121	171	e130	94	83
30	e17	11	e6.0	e4.6	---	e3.0	21	134	e178	e110	113	71
31	e16	---	6.1	e4.4	---	e3.0	---	98	---	e120	94	---
TOTAL	2151	574.2	220.1	176.1	102.3	94.0	170.3	1382	3550	6620	3332	2570
MEAN	69.4	19.1	7.10	5.68	3.65	3.03	5.68	44.6	118	214	107	85.7
MAX	375	110	10	8.9	4.0	3.6	21	134	178	330	140	125
MIN	16	9.2	6.0	4.4	3.3	2.4	2.4	15	61	110	81	53
AC-FT	4270	1140	437	349	203	186	338	2740	7040	13130	6610	5100
CFSM	7.50	2.07	0.77	0.61	0.39	0.33	0.61	4.82	12.8	23.1	11.6	9.26
IN.	8.65	2.31	0.89	0.71	0.41	0.38	0.68	5.56	14.28	26.62	13.40	10.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2005, BY WATER YEAR (WY)

MEAN	52.1	20.3	9.48	5.88	5.33	3.72	3.46	18.6	102	166	143	100
MAX	147	106	37.5	17.0	23.0	7.17	5.68	44.6	208	221	204	220
(WY)	2004	2003	2003	1981	2003	1981	2005	2005	2004	2001	2001	1995
MIN	15.6	5.29	4.45	3.82	2.86	1.30	2.38	5.45	44.7	111	86.9	38.7
(WY)	1997	1985	1985	1991	1991	1986	1999	1987	1985	1996	1996	1992

e Estimated

15239050 MIDDLE FORK BRADLEY RIVER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1980 - 2005	
ANNUAL TOTAL	23234.4		20942.0			
ANNUAL MEAN	63.5		57.4		52.9	
HIGHEST ANNUAL MEAN					75.3	2003
LOWEST ANNUAL MEAN					34.6	1996
HIGHEST DAILY MEAN	539	Jun 18	375	Oct 4	966	Sep 20 1995
LOWEST DAILY MEAN	a4.0	Apr 21	b2.4	Mar 23	c1.1	Mar 28 1986
ANNUAL SEVEN-DAY MINIMUM	4.1	Apr 19	2.5	Mar 22	1.1	Mar 28 1986
MAXIMUM PEAK FLOW			475	Oct 3	1470	Sep 20 1995
MAXIMUM PEAK STAGE			9.49	Oct 3	10.09	Nov 5 2002
MAXIMUM PEAK STAGE					d16.16	May 12 1988
ANNUAL RUNOFF (AC-FT)	46090		41540		38290	
ANNUAL RUNOFF (CFSM)	6.86		6.20		5.71	
ANNUAL RUNOFF (INCHES)	93.44		84.22		77.64	
10 PERCENT EXCEEDS	185		140		156	
50 PERCENT EXCEEDS	15		18		12	
90 PERCENT EXCEEDS	4.7		3.3		3.4	

a Apr. 21-25
b Mar. 23-27 and Apr. 5, 6
c From Mar. 28 to Apr. 10, 1986
d Backwater from ice

15239060 MIDDLE FORK BRADLEY RIVER BELOW NORTH FORK BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°47'54", long 150°51'48", in SE¼ NE¼ SW¼ sec. 29, T. 4 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on left bank 100 ft upstream from confluence with the main stem Bradley River, 0.2 mi below the mouth of the North Fork Bradley River, 5.5 mi downstream from the Middle Fork Bradley River diversion dam, and 25 mi east of Homer.

DRAINAGE AREA.--24.8 mi2.

PERIOD OF RECORD.--August 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above sea level, from topographic map.

REMARKS.--Records fair except for January 6 to April 27 and estimated daily discharges, which are poor. Water from upper Middle Fork Bradley River (15239050) is diverted into Bradley Lake at Middle Fork Bradley River diversion dam, located 5.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	e26	80	e20	e14	e13	e9.0	206	120	72	22	15
2	98	e26	71	e28	e12	e12	e8.0	175	108	64	21	13
3	203	e25	59	48	e11	e11	e7.0	150	96	60	22	13
4	406	e25	e38	65	e11	12	e6.0	139	103	56	22	15
5	273	e24	e34	56	11	13	e7.0	134	123	55	22	16
6	158	e23	e30	51	12	13	e7.0	129	136	59	20	26
7	108	e22	e21	47	13	13	e7.0	121	131	56	19	24
8	87	e21	e20	43	13	19	e8.0	121	142	56	19	20
9	80	e20	e18	39	12	27	e8.0	132	128	57	19	25
10	70	e100	e18	33	12	30	e9.0	148	122	55	19	36
11	65	e100	e17	e29	12	36	e10	148	117	54	18	29
12	103	e64	e16	e28	11	35	e11	190	108	56	18	28
13	119	e36	e15	e27	11	43	e11	216	98	52	18	26
14	128	e36	e14	e27	24	41	e13	226	92	46	17	23
15	105	e36	e13	e27	18	35	e14	179	95	43	16	23
16	94	e36	e12	27	14	31	e14	142	108	45	15	32
17	80	e36	e11	e25	13	28	e15	129	114	41	16	46
18	73	e35	e10	e24	12	25	e16	123	177	38	20	41
19	75	e35	e8.0	e23	12	e21	e20	128	121	41	17	38
20	66	e36	e8.0	24	13	e18	52	139	87	38	15	34
21	61	e36	e9.0	25	15	e12	72	142	83	39	19	31
22	e53	50	e18	26	15	e15	357	136	83	35	16	31
23	e53	51	e20	25	16	e17	300	129	74	31	17	35
24	e49	52	e20	23	16	e16	197	135	69	32	16	46
25	e44	46	e17	23	15	e15	170	130	71	43	13	38
26	e45	43	e15	21	e14	e14	162	127	71	38	12	35
27	e46	74	e15	20	e13	e13	175	163	72	32	11	90
28	e46	156	e14	e18	e13	e13	226	201	72	29	11	100
29	e44	91	e14	e16	---	e11	292	199	75	26	14	80
30	e41	73	e13	e16	---	e9.0	253	153	76	22	17	71
31	e38	---	e13	e16	---	e9.0	---	128	---	21	16	---
TOTAL	3014	1434	681.0	920	378	620.0	2456.0	4718	3072	1392	537	1080
MEAN	97.2	47.8	22.0	29.7	13.5	20.0	81.9	152	102	44.9	17.3	36.0
MAX	406	156	80	65	24	43	357	226	177	72	22	100
MIN	38	20	8.0	16	11	9.0	6.0	121	69	21	11	13
AC-FT	5980	2840	1350	1820	750	1230	4870	9360	6090	2760	1070	2140
CFSM	3.92	1.93	0.89	1.20	0.54	0.81	3.30	6.14	4.13	1.81	0.70	1.45
IN.	4.52	2.15	1.02	1.38	0.57	0.93	3.68	7.08	4.61	2.09	0.81	1.62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2005, BY WATER YEAR (WY)#

MEAN	86.7	74.5	27.6	19.3	18.5	10.5	29.1	130	168	92.5	43.4	61.8
MAX	267	309	95.5	75.3	81.4	20.7	81.9	240	277	193	120	116
(WY)	2003	2003	2003	2001	2003	1998	2005	2004	2001	2001	2001	1997
MIN	23.2	16.2	6.32	2.68	2.00	2.74	9.59	74.0	82.3	44.9	12.5	25.0
(WY)	1997	2000	2004	1999	1999	1999	1999	2003	2003	2005	1996	2003

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

15239060 MIDDLE FORK BRADLEY RIVER BELOW NORTH FORK BRADLEY RIVER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1996 - 2005#	
ANNUAL TOTAL	22550.5		20302.0			
ANNUAL MEAN	61.6		55.6		64.2	
HIGHEST ANNUAL MEAN					90.8	2001
LOWEST ANNUAL MEAN					44.0	1997
HIGHEST DAILY MEAN	410	May 23	406	Oct 4	1950	Oct 23 2002
LOWEST DAILY MEAN	a3.0	Mar 27	6.0	Apr 4	b1.0	Feb 5 1999
ANNUAL SEVEN-DAY MINIMUM	3.0	Mar 27	7.1	Apr 2	1.0	Feb 5 1999
MAXIMUM PEAK FLOW			466	Oct 4	c3940	Oct 24 2002
MAXIMUM PEAK STAGE			11.60	Oct 4	16.27	Oct 24 2002
MAXIMUM PEAK STAGE			d11.85	Nov 10		
ANNUAL RUNOFF (AC-FT)	44730		40270		46500	
ANNUAL RUNOFF (CFSM)	2.48		2.24		2.59	
ANNUAL RUNOFF (INCHES)	33.83		30.45		35.16	
10 PERCENT EXCEEDS	162		134		157	
50 PERCENT EXCEEDS	31		31		32	
90 PERCENT EXCEEDS	4.0		12		5.7	

\# See Period of Record; partial years used in monthly statistics
a From Mar. 27 to Apr. 3
b Feb. 5-12, 1999
c From rating curve extended above 52 ft^3/s on basis of comparison of instantaneous discharge of Bradley River below Dam (15239001) and instantaneous discharge of Bradley River near Tidewater (15239070)
d Backwater from ice.

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER

LOCATION.--Lat 59°48'06", long 150°52'58", in SE$^1/_4$ NE$^1/_4$ sec. 30, T. 4 S., R. 9 W. (Seldovia D-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020301, on right bank 0.7 mi upstream from mouth, 0.8 mi downstream from Middle Fork Bradley River, 4.3 mi downstream from Bradley Lake outlet and dam site, and 25 mi east of Homer.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--May 1983 to current year.

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

REMARKS.--Records good, except for estimated daily discharges, which are poor. Flow occasionally affected by high tides. Intermittent regulation during construction at the Bradley River dam site began in November 1986. Flow has been regulated since the reservoir began filling April 26, 1991. (See station 15239001.) Upper Nuka River was diverted into Upper Bradley River on July 29, 1990; flow from about 10 mi^2 of Middle Fork Bradley River upstream drainage has been seasonally diverted into the Bradley Lake reservoir since August 7, 1990. Battle Creek was diverted into the reservoir in October 1990. Water has been diverted out of the basin through the turbines since hydropower generation began June 28, 1991. Rain gage at station. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	76	110	e70	e60	e54	45	210	128	125	125	122
2	112	87	94	79	e60	e54	e42	183	126	115	123	121
3	236	e73	71	104	e56	e52	e44	158	128	112	125	121
4	493	e82	e45	133	e56	52	e45	147	147	129	141	124
5	311	e64	e50	112	e56	53	47	143	165	132	132	124
6	188	e62	e64	102	e56	53	53	139	171	138	115	135
7	132	e80	e63	e95	e56	54	55	129	164	135	e115	132
8	104	e72	e62	e90	e54	68	51	129	166	124	e130	127
9	93	e70	e60	e86	e54	76	49	138	147	118	129	133
10	83	e170	e60	e80	e54	88	49	153	138	117	120	145
11	80	e155	e58	e70	e52	95	50	152	131	117	118	131
12	131	e115	e58	e68	e52	91	50	191	124	119	115	127
13	145	e86	e56	e68	e52	94	50	216	125	116	122	125
14	156	e58	e56	e66	e66	84	52	225	128	115	121	123
15	126	e46	e55	e66	e58	71	53	184	131	133	118	124
16	111	e41	e54	e66	e54	64	53	147	142	132	126	133
17	91	e40	e53	e66	e54	59	53	133	137	125	130	123
18	80	e40	e52	e68	e52	56	53	129	191	123	124	101
19	85	e40	e50	e70	e50	54	58	138	139	127	122	93
20	71	e41	e52	e70	e50	51	86	146	137	124	122	81
21	68	e41	e56	e72	e52	e50	110	149	131	127	125	74
22	66	e53	e68	e72	e54	e50	420	142	131	122	124	74
23	68	e54	e68	e72	59	52	338	135	120	118	125	76
24	69	e55	e66	71	58	51	222	141	117	121	124	81
25	73	e50	e62	68	57	50	193	136	124	134	123	71
26	74	52	e60	65	56	49	183	134	124	128	122	70
27	75	96	e60	e64	e56	48	191	172	125	123	120	129
28	75	209	e62	e64	e56	48	229	204	127	124	116	134
29	73	121	e62	e64	---	47	281	200	127	123	122	112
30	69	91	e63	e64	---	e46	251	157	130	122	123	101
31	68	---	e64	e62	---	e45	---	133	---	123	121	---
TOTAL	3734	2320	1914	2367	1550	1859	3456	4893	4121	3841	3818	3367
MEAN	120	77.3	61.7	76.4	55.4	60.0	115	158	137	124	123	112
MAX	493	209	110	133	66	95	420	225	191	138	141	145
MIN	66	40	45	62	50	45	42	129	117	112	115	70
AC-FT	7410	4600	3800	4690	3070	3690	6850	9710	8170	7620	7570	6680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)#

MEAN	117	122	68.8	63.7	64.8	52.3	72.4	167	181	140	132	132
MAX	317	594	137	137	117	70.5	115	261	263	185	178	224
(WY)	2003	2003	2003	2001	2003	1998	2005	2004	1998	2001	1995	1995
MIN	64.0	51.2	47.1	41.6	42.2	43.3	50.5	120	114	115	105	104
(WY)	1998	2000	1998	1999	1999	2004	1999	1996	1997	1997	2002	1993

\# See Period of Record; partial year was used in monthly statistics, and Remarks.
e Estimated

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005#	
ANNUAL TOTAL	38519		37240			
ANNUAL MEAN	105		102		109	
HIGHEST ANNUAL MEAN					164	2003
LOWEST ANNUAL MEAN					83.8	1996
HIGHEST DAILY MEAN	493	Oct 4	493	Oct 4	3490	Nov 6 2002
LOWEST DAILY MEAN	a35	Jan 18	b40	Nov 17	c35	Jan 18 2004
ANNUAL SEVEN-DAY MINIMUM	40	Feb 26	41	Nov 15	40	Jan 28 1999
MAXIMUM PEAK FLOW			591	Oct 4	6200	Nov 5 2002
MAXIMUM PEAK STAGE			6.51	Oct 4	d10.83	Nov 5 2002
INSTANTANEOUS LOW FLOW					17	Mar 28 1989
ANNUAL RUNOFF (AC-FT)	76400		73870		79320	
10 PERCENT EXCEEDS	194		148		177	
50 PERCENT EXCEEDS	80		94		91	
90 PERCENT EXCEEDS	44		52		47	

PRIOR TO REGULATION AND DIVERSION OF BRADLEY DAM

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1989, BY WATER YEAR (WY)#

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	808	224	198	145	82.1	74.0	72.8	462	1032	1390	1318	966
MAX	1908	480	503	223	114	163	101	676	1357	1577	1781	1746
(WY)	1987	1984	1987	1985	1985	1984	1989	1987	1988	1988	1988	1989
MIN	363	86.1	78.9	72.5	37.4	27.4	42.5	282	862	1153	907	470
(WY)	1984	1986	1988	1989	1989	1989	1985	1985	1986	1983	1983	1983

SUMMARY STATISTICS	WATER YEARS 1983 - 1989#	
ANNUAL MEAN	583	
HIGHEST ANNUAL MEAN	722	1987
LOWEST ANNUAL MEAN	475	1985
HIGHEST DAILY MEAN	10000	Oct 11 1986
LOWEST DAILY MEAN	19	Dec 7 1986
ANNUAL SEVEN-DAY MINIMUM	22	Mar 26 1989
MAXIMUM PEAK FLOW	f11000	Oct 11 1986
MAXIMUM PEAK STAGE	d13.73	Oct 11 1986
INSTANTANEOUS LOW FLOW	g17	Mar 28 1989
ANNUAL RUNOFF (AC-FT)	422700	
ANNUAL RUNOFF (CFSM)	7.11	
ANNUAL RUNOFF (IN)	96.67	
10 PERCENT EXCEEDS	1470	
50 PERCENT EXCEEDS	388	
90 PERCENT EXCEEDS	52	

\# See Period of Record; partial year was used in monthly statistics, and Remarks.
a Jan. 18, 19
b Nov. 17-19
c Jan. 18, 19, 2004
d From floodmarks
f From rating curve extended above 2,400 ft^3/s on basis of runoff comparisons with nearby stations.
g Minimum recorded, but may have been less during period of ice effect, Mar. 28 to Mar. 31, 1989.

15243900 SNOW RIVER NEAR SEWARD

LOCATION.--Lat 60°17'42", long 149°20'38", in NE¼ SW¼ sec. 6, T. 2 N., R. 1 E. (Seward B-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on left bank, 0.5 mi below the Alaska Railroad bridge, 3.0 mi upstream from the mouth at Kenai Lake, and 13.5 mi north of Seward.

DRAINAGE AREA.--128 mi^2 (revision pending).

PERIOD OF RECORD.--August to September of 1970, 1974, 1977 and April 1997 to current year.

GAGE.--Water stage recorder. Elevation of gage is 470 ft above sea level, from topographic map. Prior to April 9, 1998 at site 0.5 mi upstream at different datum.

REMARKS.--Record poor. Rain gage at station. GOES satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Glacier-dammed lake outburst flood about August 31, 1967, 55,000 ft^3/s from rating curve extended above 27,000 ft^3/s, gage-height 42.60 ft from floodmarks, site and datum then in use.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	208	401	e140	e95	e65	67	1050	1610	2490	2070	2840
2	2220	173	366	e140	e95	73	70	971	1450	2390	2180	1260
3	4510	230	314	e140	e95	62	65	880	1350	2280	3130	1260
4	3790	222	322	e160	e95	60	62	840	1390	2220	3290	1990
5	2610	233	293	e150	e95	61	64	838	1590	2260	2850	2400
6	1810	163	261	e150	e95	63	121	832	1610	2440	2560	2580
7	1340	228	235	e130	e95	69	127	891	1740	2380	2570	2210
8	1040	223	204	e110	e90	99	113	906	1950	2420	2640	1740
9	892	205	181	e110	e90	126	107	989	2450	2550	2650	1810
10	828	900	172	e120	e90	259	109	1080	3170	2520	2710	2360
11	701	820	173	e120	e90	402	112	1090	2860	2450	2880	1840
12	1090	536	151	e120	e90	295	116	1750	2500	2460	2940	1920
13	e1000	450	157	e120	e90	296	118	2180	2220	2730	2750	1580
14	e1150	376	144	e120	e120	243	124	2680	2050	3350	2550	1400
15	972	321	138	e120	e110	190	127	2080	2130	3070	2450	1330
16	766	292	151	e100	e100	166	131	1610	2310	2860	2350	1970
17	648	265	166	e95	e95	144	133	1340	2660	2840	2410	2710
18	570	248	288	e95	e90	136	145	1260	3060	2550	2850	2190
19	553	254	296	e95	e90	126	158	1210	2890	2550	2670	1680
20	548	259	233	e95	e80	114	235	1240	2470	2510	2650	1460
21	613	231	218	e95	e80	96	302	1270	2260	2590	2420	1210
22	918	219	232	e110	e80	95	873	1350	2140	2210	2070	1250
23	558	213	262	e120	e80	91	838	1330	1920	2140	2720	1520
24	363	232	e200	e100	e70	86	740	1380	1960	2270	2640	2200
25	304	220	e160	e100	e70	83	740	1290	1990	3210	2050	1480
26	285	178	e150	e100	e70	80	851	1380	2040	3580	1850	1150
27	281	209	e140	e100	e65	78	934	2130	2150	3540	1790	2280
28	277	771	e140	e100	e70	76	1050	2530	2250	3020	1700	2390
29	272	513	e140	e100	---	75	1220	2700	2410	2260	1620	1850
30	246	387	e140	e95	---	76	1180	2270	2480	1910	1590	1350
31	214	---	e140	e95	---	71	---	1850	---	2050	2290	---
TOTAL	32919	9779	6568	3545	2475	3956	11032	45197	65060	80100	75890	55210
MEAN	1062	326	212	114	88.4	128	368	1458	2169	2584	2448	1840
MAX	4510	900	401	160	120	402	1220	2700	3170	3580	3290	2840
MIN	214	163	138	95	65	60	62	832	1350	1910	1590	1150
AC-FT	65290	19400	13030	7030	4910	7850	21880	89650	129000	158900	150500	109500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2005, BY WATER YEAR (WY)#

MEAN	1354	829	322	193	150	105	195	940	2269	3103	2932	2742
MAX	2720	2481	713	524	444	220	368	1458	2714	3281	5598	6294
(WY)	2004	2004	2003	2001	2003	1998	2005	2005	2002	1998	1977	1974
MIN	279	163	87.3	57.0	42.0	39.2	81.8	491	1780	2584	1764	1157
(WY)	1998	2002	1999	1999	1999	1999	1999	2001	1999	2005	1998	2000

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1970 - 2005#	
ANNUAL TOTAL	402987		391731			
ANNUAL MEAN	1101		1073		1193	
HIGHEST ANNUAL MEAN					1412	2001
LOWEST ANNUAL MEAN					965	2000
HIGHEST DAILY MEAN	4650	Jun 17	4510	Oct 3	a23800	Sep 20 1974
LOWEST DAILY MEAN	70	Mar 31	60	Mar 4	b36	Mar 3 1999
ANNUAL SEVEN-DAY MINIMUM	77	Feb 3	65	Mar 1	37	Feb 26 1999
MAXIMUM PEAK FLOW			6780	Sep 1	a26400	Sep 20 1974
MAXIMUM PEAK STAGE			d11.00	Sep 1	c40.75	Sep 20 1974
INSTANTANEOUS LOW FLOW			f		36	Mar 3 1999
ANNUAL RUNOFF (AC-FT)	799300		777000		864500	
10 PERCENT EXCEEDS	3000		2580		3060	
50 PERCENT EXCEEDS	418		648		490	
90 PERCENT EXCEEDS	85		90		80	

\# See Period of Record; partial years used in monthly statistic
a Result of release of stored water from glacier-dammed lake
b Mar. 3 and Mar. 4, 1999
c Site and datum then in use
d From crest-stage gage
f Not determined, see lowest daily mean
e Estimated

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29′34″, long 149°48′28″, in SE$^1/_4$ sec. 28, T. 5 N., R. 3 W. (Seward B-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on right bank 10 ft downstream from bridge on Sterling Highway, 0.9 mi upstream from Bean Creek, 0.9 mi east of Cooper Landing, and at Kenai Lake outlet.

DRAINAGE AREA.--634 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1947 to current year.

REVISED RECORDS.--WSP 2136: 1964 (M).

GAGE.--Water-stage recorder. Datum of gage is 419.92 ft above sea level (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to August 28, 1965. August 28, 1965 to January 21, 1974, at site 10 ft upstream at present datum. January 22, 1974 to September 30, 1981, non-recording gage at site 40 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Record good. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake power plant began May 1961. Rain gage at station. GOES satellite telemetry and telephone modem at station.

COOPERATION.--Records of diversion provided by Chugach Electric Association.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2660	1620	1570	953	602	484	560	2020	5830	6230	5800	4360
2	2830	1580	1560	947	593	481	550	2220	5600	6280	5710	4230
3	3840	1540	1530	963	584	478	547	2370	5350	6250	5730	4020
4	5000	1480	1510	953	574	476	543	2490	5160	6170	5980	3900
5	5610	1420	1470	934	571	475	539	2570	5170	6040	6110	4000
6	5750	1370	1450	925	568	470	543	2610	5270	6020	6070	4260
7	5570	1340	1410	908	561	468	546	2640	5290	6060	6030	4510
8	5240	1310	1360	900	550	467	545	2670	5330	6080	5970	4560
9	4900	1320	1320	886	550	481	545	2730	5480	6100	5920	4620
10	4530	1400	1280	858	537	480	545	2820	5920	6200	5870	4740
11	4190	1530	1250	834	539	519	538	2940	6420	6190	5840	4840
12	3960	1570	1220	820	532	540	540	3140	6700	6190	5880	4810
13	3840	1580	1200	809	540	556	546	3480	6770	6150	5980	4760
14	3840	1570	1180	797	544	569	549	4110	6720	6300	5920	4630
15	3750	1550	1170	782	553	585	542	4670	6650	6470	5830	4520
16	3590	1530	1130	753	552	584	540	4960	6690	6530	5680	4430
17	3420	1520	1120	738	545	586	551	5000	6910	6480	5510	4680
18	3230	1500	1100	720	539	589	559	4910	7320	6400	5460	4880
19	3060	1480	1090	707	533	587	569	4820	7650	6320	5380	4910
20	2870	1440	1080	713	533	584	583	4740	7740	6260	5420	4780
21	2710	1410	1090	698	527	587	606	4660	7630	6230	5360	4570
22	2600	1390	1100	690	519	593	684	4650	7390	6120	5280	4350
23	2540	1360	1060	688	516	594	762	4680	7020	5910	5240	4270
24	2370	1330	1010	686	503	589	832	4720	6700	5740	5270	4370
25	2260	1310	1010	683	504	582	935	4720	6410	5770	5230	4430
26	2160	1280	1010	670	495	575	1040	4740	6200	6140	5030	4330
27	2060	1280	1000	665	493	570	1170	4890	6110	6460	4820	4260
28	1960	1400	954	657	486	569	1340	5220	6050	6660	4640	4510
29	1870	1510	981	648	---	566	1560	5660	6060	6550	4450	4590
30	1790	1540	978	628	---	562	1800	5920	6120	6210	4250	4490
31	1720	---	967	612	---	557	---	5960	---	5920	4150	---
TOTAL	105720	43460	37160	24225	15143	16803	21709	123730	189660	192430	169810	134610
MEAN	3410	1449	1199	781	541	542	724	3991	6322	6207	5478	4487
MAX	5750	1620	1570	963	602	594	1800	5960	7740	6660	6110	4910
MIN	1720	1280	954	612	486	467	538	2020	5160	5740	4150	3900
MED	3230	1460	1130	753	539	566	550	4660	6310	6200	5680	4510
AC-FT	209700	86200	73710	48050	30040	33330	43060	245400	376200	381700	336800	267000
CFSM	5.38	2.28	1.89	1.23	0.85	0.85	1.14	6.30	9.97	9.79	8.64	7.08
IN.	6.20	2.55	2.18	1.42	0.89	0.99	1.27	7.26	11.13	11.29	9.96	7.90
ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE												
MEAN	3320	1365	1088	697	439	462	648	3874	6197	6208	5423	4351
CFSM	5.24	2.15	1.72	1.10	0.69	0.73	1.02	6.11	9.77	9.79	8.55	6.86
IN	6.04	2.40	1.98	1.27	0.75	0.84	1.14	7.05	10.90	11.29	9.86	7.66
AC-FT	204130	81220	66870	42860	25280	28390	38580	238230	368740	381700	333450	258890
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)#												
MEAN	3359	1897	1171	834	681	528	559	2003	5470	6983	6322	5198
MAX	8955	6739	3755	2807	2066	1122	1071	4277	10010	10480	11430	11490
(WY)	1980	2003	2003	1981	1981	1977	1980	2004	1953	1980	1977	1967
MIN	1264	654	364	310	251	208	262	658	3268	4868	3651	2629
(WY)	1956	1951	1951	1951	1949	1951	1952	1952	1972	1996	1969	1969

See Period of Record; partial year was used in monthly statistics, and Remarks

15258000 KENAI RIVER AT COOPER LANDING—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1947 - 2005#	
ANNUAL TOTAL	1074947		1074460			
ANNUAL MEAN	2937		2944		2935	
ANNUAL MEAN	*2826		*2849		*2859	
HIGHEST ANNUAL MEAN					4499	1977
LOWEST ANNUAL MEAN					2102	1969
HIGHEST DAILY MEAN	8860	Jun 21	7740	Jun 20	22500	Sep 21 1974
LOWEST DAILY MEAN	643	Apr 2	467	Mar 8	100	Mar 28 1964
ANNUAL SEVEN-DAY MINIMUM	650	Mar 29	474	Mar 2	190	Mar 15 1951
MAXIMUM PEAK FLOW			7830	Jun 20	a23100	Sep 21 1974
MAXIMUM PEAK STAGE			11.71	Jun 20	17.18	Sep 21 1974
INSTANTANEOUS LOW FLOW			415	Mar 10	b0.00	Mar 27 1964
ANNUAL RUNOFF (AC-FT)	2132000		2131000		2126000	
ANNUAL RUNOFF (AC-FT)	*2046070		*2068340		*2071000	
ANNUAL RUNOFF (CFSM)	*4.46		*4.49		*4.51	
ANNUAL RUNOFF (INCHES)	*60.53		*61.18		*61.24	
10 PERCENT EXCEEDS	6390		6140		6950	
50 PERCENT EXCEEDS	1670		1800		1670	
90 PERCENT EXCEEDS	752		545		422	

\# See Period of Record; partial year was used in monthly statistics, and Remarks
Values shown on this page are unadjusted for inflow from diversion, unless otherwise noted
* Adjusted to account for inflow from diversion, see Remarks
a Result of release of stored water from glacier-dammed lake at head of unnamed glacier in the Snow River Basin
b No flow, Mar. 27 and Mar. 28, 1964, caused by earthquake

15258000 KENAI RIVER AT COOPER LANDING—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950-53, 1955-60, 1966-74, 1976, 1994 and December 2002 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Water year 1950, and December 2002 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 stream average by cross section on April 15, July 21, and September 13. No variation more than 2.7°C was found within the cross sections. No variation more than 1.2°C was found between mean stream temperature and sensor temperature. Occasional large variations across cross section similar to one detected on July 21 are due to recorder location at outlet of Kenai Lake. Variation across cross sections and difference between mean stream temperature and sensor temperature are both usually less than 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORDS.--
WATER TEMPERATURE: Maximum, 18.0°C, August 18, 19 2004; minimum, 0.0°C, on several days during most winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 16.0°C, August 16; minimum, 0.0°C, on several days in February and April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampler type, code (84164)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
APR										
15...	1045	129	--	10.0	5.40	555	8010	10	2.7	6.8
15...	1047	129	--	25.0	5.40	555	8010	10	2.6	6.8
15...	1049	129	--	50.0	5.40	555	8010	10	2.3	6.8
15...	1051	129	--	75.0	5.40	555	8010	10	2.3	6.8
15...	1053	129	--	100.0	5.40	555	8010	10	2.3	6.8
JUL										
21...	1430	330	55.0	--	10.90	6210	8010	10	13.0	22.0
21...	1432	330	110	--	10.90	6210	8010	10	11.6	22.0
21...	1434	330	165	--	10.90	6210	8010	10	10.3	22.0
21...	1436	330	220	--	10.90	6210	8010	10	10.8	22.0
21...	1438	330	275	--	10.90	6210	8010	10	12.2	22.0
SEP										
13...	1242	343	60.0	--	10.06	4690	8010	10	10.2	14.2
13...	1244	343	95.0	--	10.06	4690	8010	10	10.0	14.2
13...	1246	343	130	--	10.06	4690	8010	10	10.0	14.2
13...	1248	343	180	--	10.06	4690	8010	10	10.1	14.2
13...	1250	343	225	--	10.06	4690	8010	10	10.1	14.2

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.0	7.0	7.5	5.5	4.5	5.0	3.5	2.5	3.0	2.0	1.5	1.5
2	7.5	7.0	7.5	5.0	4.5	5.0	3.5	2.5	3.0	2.0	1.0	1.5
3	7.5	7.0	7.5	5.0	4.5	4.5	3.5	2.5	3.0	2.0	1.0	1.5
4	8.0	7.0	7.5	5.0	4.0	4.5	3.0	2.0	3.0	2.0	1.0	1.5
5	8.0	7.0	7.5	4.5	4.0	4.0	3.5	2.5	3.0	2.5	1.5	2.0
6	8.0	7.0	7.5	4.5	3.5	4.0	3.0	2.0	2.5	2.5	1.5	2.0
7	8.0	7.0	7.5	4.0	3.5	4.0	2.5	2.0	2.0	3.0	1.5	2.0
8	7.5	7.0	7.5	4.0	3.5	3.5	3.0	2.0	2.5	2.5	1.5	2.0
9	7.5	7.0	7.5	4.0	3.0	3.5	2.5	1.5	2.0	2.5	2.0	2.0
10	7.5	7.0	7.5	4.5	3.0	3.5	2.5	2.0	2.0	2.5	1.5	2.0
11	7.5	7.0	7.5	4.0	3.0	3.5	2.5	1.5	2.0	2.5	1.5	2.0
12	7.5	7.0	7.5	4.0	3.0	3.5	2.5	1.5	2.0	2.5	1.5	2.0
13	7.5	7.0	7.0	4.0	3.0	3.5	2.5	1.5	2.0	2.0	1.0	2.0
14	7.5	7.0	7.0	4.0	3.0	3.5	2.5	1.5	2.0	1.5	1.0	1.0
15	7.5	7.0	7.0	4.0	3.0	3.5	2.5	1.5	2.0	1.5	1.0	1.5
16	7.5	7.0	7.0	4.0	3.0	3.5	3.0	2.0	2.5	2.0	1.0	1.5
17	7.5	6.5	7.0	4.0	3.0	3.5	3.0	2.0	2.5	1.5	1.0	1.5
18	7.0	6.5	7.0	4.0	3.0	3.5	3.0	2.0	2.5	1.5	1.0	1.0
19	7.0	6.5	7.0	3.5	3.0	3.5	3.0	2.0	2.5	1.5	1.0	1.5
20	7.0	6.5	6.5	3.5	3.0	3.0	3.5	2.0	2.5	2.0	1.0	1.5
21	7.0	6.5	6.5	3.5	2.5	3.0	2.5	1.5	2.0	2.0	1.0	1.5
22	6.5	6.0	6.5	3.5	2.5	3.0	3.0	2.0	2.5	2.0	1.5	1.5
23	6.5	6.0	6.5	3.5	2.5	3.0	3.0	2.0	2.5	2.0	1.0	1.5
24	6.5	6.0	6.5	3.5	3.0	3.0	2.5	1.5	2.0	2.0	1.0	1.5
25	6.5	6.0	6.0	3.5	3.0	3.0	2.5	1.5	2.0	2.0	1.0	1.5
26	6.5	6.0	6.0	3.5	2.5	3.0	2.5	1.5	2.0	2.0	1.0	1.5
27	6.0	5.5	6.0	3.5	2.5	3.0	2.0	1.0	1.5	1.5	1.0	1.0
28	6.0	5.5	6.0	3.5	2.5	3.0	2.5	1.5	2.0	1.5	1.0	1.0
29	6.0	5.5	6.0	3.5	2.5	3.0	2.0	1.5	2.0	1.5	1.0	1.5
30	6.0	5.5	5.5	3.5	2.5	3.0	2.0	1.5	2.0	1.5	1.0	1.0
31	6.0	5.0	5.5	---	---	---	2.0	1.5	2.0	1.5	0.5	1.0
MONTH	8.0	5.0	6.9	5.5	2.5	3.5	3.5	1.0	2.3	3.0	0.5	1.5

15258000 KENAI RIVER AT COOPER LANDING—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	0.5	1.0	2.0	0.5	1.0	3.0	1.0	1.5	4.5	3.5	4.0
2	1.5	0.5	1.0	2.0	0.5	1.0	2.5	0.5	1.5	4.5	3.5	4.0
3	1.5	1.0	1.5	2.0	0.5	1.0	3.0	1.0	1.5	5.0	3.5	4.0
4	2.0	1.0	1.5	2.0	0.5	1.0	2.5	1.0	1.5	5.0	3.5	4.0
5	2.0	1.0	1.5	2.0	1.0	1.5	2.5	1.0	1.5	4.5	3.5	4.0
6	2.0	1.5	2.0	2.0	1.0	1.5	2.5	1.0	2.0	5.0	3.5	4.0
7	2.0	0.5	1.5	2.5	1.0	1.5	3.0	1.0	2.0	5.0	3.5	4.0
8	1.5	0.0	1.0	2.0	1.0	1.5	3.0	1.0	2.0	5.0	4.0	4.5
9	1.5	0.5	1.0	2.0	1.0	1.5	3.0	1.0	2.0	5.0	3.5	4.0
10	1.5	0.0	0.5	2.0	1.0	1.5	3.0	1.0	2.0	5.0	4.0	4.5
11	1.0	0.0	0.5	2.0	1.0	1.5	3.5	1.0	2.5	6.0	3.5	4.5
12	1.0	0.0	0.5	1.5	1.0	1.0	4.0	1.0	2.5	6.5	5.0	5.5
13	1.5	0.5	1.0	2.0	1.0	1.5	4.0	1.5	2.5	5.5	4.5	5.0
14	1.5	0.5	1.0	2.0	0.5	1.5	4.0	1.5	2.5	5.5	4.5	5.0
15	1.5	0.0	1.0	2.0	0.5	1.5	4.0	2.0	2.5	5.5	4.5	5.0
16	1.0	0.0	0.5	2.0	0.5	1.5	4.0	1.5	2.5	5.5	4.5	5.0
17	1.5	0.0	0.5	2.5	0.5	1.5	4.5	2.0	3.0	5.5	4.5	5.0
18	1.5	0.0	0.5	2.5	1.0	1.5	3.5	1.5	2.5	5.5	4.0	5.0
19	1.5	0.5	1.0	3.0	1.0	1.5	3.0	1.5	2.0	5.0	4.0	4.5
20	1.5	0.5	1.0	2.5	0.5	1.5	3.5	0.0	2.0	6.5	4.0	5.5
21	1.5	0.5	1.0	2.0	1.0	1.5	3.0	0.0	2.0	6.0	4.5	5.5
22	1.5	0.5	1.0	2.0	1.0	1.5	4.5	2.0	3.0	5.5	4.0	4.5
23	1.5	0.5	1.0	3.0	1.0	1.5	4.0	2.5	3.0	5.0	4.0	4.5
24	1.5	0.5	1.0	2.5	1.0	1.5	4.0	2.5	3.5	6.5	4.0	5.0
25	1.5	0.5	1.0	2.5	1.0	1.5	4.0	2.5	3.5	6.5	4.5	5.5
26	1.5	0.5	1.0	2.5	0.5	1.5	4.0	2.5	3.5	6.5	5.0	5.5
27	2.0	0.5	1.0	2.5	0.5	1.5	4.0	3.0	3.5	6.0	5.0	5.5
28	1.5	0.5	1.0	2.5	0.5	1.5	4.5	3.0	3.5	6.0	4.5	5.0
29	---	---	---	2.5	0.5	1.5	4.5	3.0	3.5	6.0	4.5	5.0
30	---	---	---	2.5	0.5	1.5	4.5	3.0	4.0	6.0	4.5	5.0
31	---	---	---	2.5	1.0	1.5	---	---	---	6.0	4.5	5.5
MONTH	2.0	0.0	1.0	3.0	0.5	1.4	4.5	0.0	2.5	6.5	3.5	4.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.5	5.0	5.5	13.0	11.0	12.0	13.5	12.0	12.5	11.0	9.5	10.0
2	6.0	5.0	5.5	12.0	9.5	10.5	13.0	12.0	12.5	11.0	9.5	10.5
3	5.5	4.5	5.0	11.0	9.0	10.0	13.0	11.5	12.5	11.5	10.5	11.0
4	5.5	4.5	5.0	12.5	9.0	10.5	12.5	11.5	12.0	11.0	10.5	11.0
5	5.5	4.5	5.0	12.0	8.5	10.0	12.5	10.5	11.5	11.0	10.5	10.5
6	6.5	5.0	5.5	10.5	8.5	9.5	12.5	10.5	11.5	11.0	10.5	10.5
7	6.5	5.5	6.0	12.0	8.5	10.5	11.0	9.0	10.0	10.5	10.0	10.5
8	6.5	5.5	6.0	13.5	9.0	12.0	10.0	8.0	9.0	10.5	10.0	10.0
9	6.5	5.5	6.0	11.0	9.0	10.0	11.0	8.5	9.5	11.0	10.0	10.5
10	6.5	5.5	6.0	13.0	8.5	11.5	12.0	9.0	10.5	10.5	10.0	10.0
11	7.0	5.5	6.0	13.5	11.5	12.5	9.5	8.5	9.0	10.5	9.5	10.0
12	7.0	5.5	6.0	13.5	12.5	13.0	14.0	8.5	10.0	10.5	10.0	10.0
13	6.5	5.5	6.0	13.0	12.5	13.0	15.5	12.5	13.5	10.0	9.5	10.0
14	6.5	5.0	5.5	13.0	10.0	12.0	15.5	10.0	12.0	10.0	9.0	9.5
15	6.5	5.0	5.5	12.5	10.0	10.5	14.5	10.5	13.0	10.5	9.5	10.0
16	6.5	5.0	5.5	13.5	12.5	13.0	16.0	14.0	15.0	10.0	9.5	10.0
17	7.0	5.0	5.5	13.0	11.0	12.0	15.5	14.5	15.0	10.0	9.5	9.5
18	10.5	6.0	9.0	11.5	7.5	9.5	15.0	14.0	15.0	10.0	8.5	9.5
19	10.5	6.0	7.5	8.5	7.5	8.0	15.0	10.5	12.5	9.0	8.5	9.0
20	7.0	5.0	6.0	12.0	6.5	8.5	15.0	11.5	13.5	9.5	8.5	9.0
21	8.5	5.0	6.0	12.0	10.5	11.5	15.0	14.0	14.5	9.5	8.5	9.0
22	9.0	7.5	8.5	13.0	11.5	12.0	14.5	12.0	13.5	9.5	8.5	9.0
23	8.5	7.0	7.5	14.0	11.5	12.5	14.5	13.0	14.0	9.5	9.0	9.5
24	8.0	6.5	7.0	14.0	13.0	13.5	13.5	12.0	13.0	9.5	8.5	9.0
25	8.0	6.5	7.0	13.5	13.0	13.0	13.0	11.5	12.0	9.5	8.5	9.0
26	7.5	6.0	7.0	13.5	12.5	13.0	12.0	9.0	10.5	9.5	8.5	9.0
27	10.0	6.5	8.0	13.5	11.5	12.5	10.0	8.0	9.0	9.0	8.5	9.0
28	10.0	7.0	9.0	13.0	11.0	12.0	10.5	9.0	9.5	9.0	8.5	9.0
29	11.5	7.5	9.0	13.0	11.5	12.5	10.5	10.0	10.5	9.0	8.5	9.0
30	12.5	10.5	11.5	13.0	11.0	12.0	10.5	9.5	10.0	9.0	8.0	8.5
31	---	---	---	13.0	12.5	12.5	11.0	9.5	10.0	---	---	---
MONTH	12.5	4.5	6.6	14.0	6.5	11.5	16.0	8.0	11.8	11.5	8.0	9.7

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING

LOCATION.--Lat 60°28'50", long 149°52'50", in NW¼ SW¼ sec. 31, T. 5 N., R. 3 W. (Seward B-8 quad), Hydrologic Unit 19020302 Kenai Peninsula Borough,on left bank, approximately 0.5 mi upstream from mouth, and 1.5 mi west of Cooper Landing.

DRAINAGE AREA.--48.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1957 to January 1965, August 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 450 ft above sea level, from topographic map. From October 1957 to January 1965, 0.4 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Since July 1959, entire flow from 31.8 mi^2 of drainage area has been regulated by dam at Cooper Lake outlet. No spilling since 1959 except for period May 1961 to October 1962. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	e30	37	e16	e13	13	12	111	78	70	50	27
2	60	e30	34	e20	e13	12	e12	104	71	64	50	26
3	189	e30	32	e22	e13	12	12	91	65	64	49	25
4	164	e28	e26	e24	e13	12	11	87	68	60	47	28
5	127	e28	e20	e22	e13	13	e11	84	79	58	45	29
6	97	e28	e16	e22	e13	13	e11	82	82	61	44	33
7	78	e28	e16	e22	e13	13	e11	84	81	62	42	33
8	57	e26	e16	e20	e13	14	e10	86	80	65	41	32
9	49	e26	e18	e19	e14	14	e10	95	79	60	39	33
10	46	e26	e24	e18	e13	15	e10	103	86	57	38	42
11	43	e30	e24	e17	e13	17	e10	109	88	57	37	37
12	49	e34	e24	e16	e13	15	e10	123	82	56	35	39
13	55	38	e26	e16	e13	17	e11	131	76	53	34	38
14	59	36	28	e15	e15	16	e12	134	77	50	33	36
15	52	34	28	e15	e14	15	e13	115	85	48	32	36
16	53	33	22	e15	14	14	e14	100	93	48	31	39
17	49	31	22	e14	14	14	e15	90	96	45	30	43
18	44	30	22	e13	13	13	e16	88	112	44	29	42
19	43	31	22	e13	13	13	18	89	113	44	28	40
20	40	30	22	e13	13	13	22	95	89	47	27	37
21	38	29	e24	e14	13	15	26	97	80	48	30	36
22	36	28	27	e15	13	13	66	96	78	44	28	37
23	35	28	24	e16	13	13	65	96	74	43	28	46
24	33	28	e24	e15	13	13	67	97	69	43	27	55
25	32	26	e24	e15	13	13	71	90	66	48	26	51
26	32	25	e22	e15	13	13	82	86	65	51	25	48
27	32	28	e20	e15	13	13	93	94	64	49	24	50
28	31	60	e19	e14	13	12	108	98	70	46	24	50
29	31	41	e18	e14	---	12	132	100	69	46	25	49
30	31	36	e17	e15	---	e12	114	93	69	45	24	48
31	e30	---	e16	e14	---	12	---	83	---	46	29	---
TOTAL	1754	936	714	514	370	419	1075	3031	2384	1622	1051	1165
MEAN	56.6	31.2	23.0	16.6	13.2	13.5	35.8	97.8	79.5	52.3	33.9	38.8
MAX	189	60	37	24	15	17	132	134	113	70	50	55
MIN	30	25	16	13	13	12	10	82	64	43	24	25
AC-FT	3480	1860	1420	1020	734	831	2130	6010	4730	3220	2080	2310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, BY WATER YEAR (WY) #

MEAN	74.6	49.7	25.9	19.4	16.1	12.0	19.7	99.1	174	129	73.3	66.6
MAX	264	285	82.9	58.9	50.5	28.0	50.3	219	412	326	226	309
(WY)	1958	1958	1958	1958	2003	1958	1958	1961	1958	1961	1961	1961
MIN	20.7	11.9	10.0	8.00	6.43	4.50	9.00	42.6	73.7	48.8	22.6	17.6
(WY)	1964	1964	1964	1964	1999	1999	1960	1964	1963	2004	2004	2004

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

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1958 - 2005#	
ANNUAL TOTAL	14974.7		15035			
ANNUAL MEAN	40.9		41.2		64.1	
HIGHEST ANNUAL MEAN					a174	1958
LOWEST ANNUAL MEAN					29.9	1963
HIGHEST DAILY MEAN	224	May 24	189	Oct 3	ab810	Sep 22 1961
LOWEST DAILY MEAN	8.9	Mar 29	c10	Apr 8	d4.0	Mar 19 1999
ANNUAL SEVEN-DAY MINIMUM	9.0	Mar 27	10	Apr 6	4.0	Mar 19 1999
MAXIMUM PEAK FLOW			246	Oct 3	f1230	Oct 23 2002
MAXIMUM PEAK STAGE			10.98	Oct 3	f12.45	Oct 23 2002
INSTANTANEOUS LOW FLOW	g		g		h3.1	Mar 1 1960
ANNUAL RUNOFF (AC-FT)	29700		29820		46450	
10 PERCENT EXCEEDS	116		88		152	
50 PERCENT EXCEEDS	24		31		33	
90 PERCENT EXCEEDS	10		13		10	

See Period of Record; partial year was used in monthly statistics.
a Includes natural flow or spill from area upstream from Cooper Lake dam.
b Caused by release of water behind log jam upstream. Site and datum then in use.
c From Apr. 8 to Apr. 12
d From Mar. 19 to Apr. 14, 1999
f From high water mark
g Not determined. See Lowest Daily Mean.
h Caused by temporary storage behind ice jam upstream (observed).

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 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 average for the stream by cross section on May 4. No variation was found within the cross section. The variation between mean stream temperature and sensor temperature is less than 0.2°C. Heavy shore ice occurs near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 12.5°C, July 7 and 12, 2004 and August 17, 2004; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 12.0°C, August 12; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
MAY								
04...	1532	32.0	3.00	10.27	86	10	5.5	12.6
04...	1534	32.0	9.00	10.27	86	10	5.5	12.6
04...	1536	32.0	15.0	10.27	86	10	5.5	12.6
04...	1538	32.0	21.0	10.27	86	10	5.5	12.6
04...	1540	32.0	27.0	10.27	86	10	5.5	12.6

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.0	3.0	6.0	0.0	0.0	0.0	2.0	1.5	2.0	0.0	0.0	0.0
2	5.5	2.5	5.5	0.0	0.0	0.0	1.5	0.5	1.5	0.0	0.0	0.0
3	5.5	4.5	5.5	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0.0
4	5.5	4.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5.0	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	5.5	3.5	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	5.5	4.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	5.5	4.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	5.5	4.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	5.0	3.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	4.5	3.0	4.5	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
12	5.0	4.0	5.0	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
13	5.0	3.0	5.0	2.0	1.0	2.0	0.5	0.0	0.5	0.0	0.0	0.0
14	5.0	4.0	5.0	1.0	0.5	1.0	0.5	0.0	0.5	0.0	0.0	0.0
15	4.0	2.5	4.0	1.0	0.5	1.0	1.0	0.0	1.0	0.0	0.0	0.0
16	4.0	3.0	4.0	1.0	0.5	1.0	1.0	1.0	1.0	0.0	0.0	0.0
17	3.0	1.5	3.0	1.0	0.5	1.0	1.5	1.0	1.5	0.0	0.0	0.0
18	2.5	0.5	2.5	1.5	1.0	1.5	1.5	1.5	1.5	0.0	0.0	0.0
19	3.5	2.5	3.5	2.0	0.5	2.0	1.5	0.5	1.5	0.0	0.0	0.0
20	2.5	1.0	2.5	1.5	0.5	1.5	0.5	0.0	0.5	0.0	0.0	0.0
21	2.0	1.5	2.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
22	1.5	0.0	1.5	1.5	1.0	1.5	1.0	0.0	1.0	0.0	0.0	0.0
23	2.5	1.5	2.5	2.0	1.5	2.0	1.5	0.0	1.5	0.0	0.0	0.0
24	2.5	1.5	2.5	2.0	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
25	2.0	0.5	2.0	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
26	3.5	2.0	3.5	1.5	0.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
27	2.5	1.5	2.5	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
28	2.5	2.0	2.5	2.0	0.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
29	2.0	1.5	2.0	2.0	0.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0
30	1.5	0.5	1.5	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
31	0.5	0.0	0.5	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0
MONTH	6.0	0.0	3.8	2.0	0.0	1.1	2.0	0.0	0.5	0.0	0.0	0.0

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.5	0.0	0.5	1.0	0.0	1.0	4.5	2.0	4.5
2	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.5	5.0	1.5	5.0
3	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.5	5.0	1.5	5.0
4	0.0	0.0	0.0	1.0	0.5	1.0	1.0	0.0	1.0	5.5	2.0	5.5
5	0.0	0.0	0.0	1.0	1.0	1.0	1.5	0.5	1.5	3.5	2.0	3.5
6	0.0	0.0	0.0	1.0	1.0	1.0	1.5	1.0	1.5	5.5	2.5	5.5
7	0.0	0.0	0.0	1.0	1.0	1.0	1.5	1.0	1.5	6.0	1.5	6.0
8	0.0	0.0	0.0	1.0	0.5	1.0	1.5	1.0	1.5	6.5	1.5	6.5
9	0.0	0.0	0.0	1.0	0.5	1.0	1.5	1.0	1.5	6.5	2.0	6.5
10	0.0	0.0	0.0	1.0	0.0	1.0	2.0	1.0	2.0	6.5	2.0	6.5
11	0.0	0.0	0.0	1.0	0.0	1.0	1.5	0.5	1.5	6.5	2.0	6.5
12	0.0	0.0	0.0	1.0	1.0	1.0	1.5	0.5	1.5	5.5	3.5	5.5
13	0.0	0.0	0.0	1.0	0.5	1.0	1.5	0.5	1.5	5.5	3.0	5.5
14	0.0	0.0	0.0	1.0	1.0	1.0	2.0	0.5	2.0	6.0	3.0	6.0
15	0.5	0.0	0.5	1.0	0.5	1.0	2.0	1.0	2.0	5.0	3.0	5.0
16	0.5	0.0	0.5	1.0	1.0	1.0	1.5	0.5	1.5	5.5	2.0	5.5
17	0.5	0.5	0.5	1.0	0.0	1.0	5.0	0.5	5.0	6.0	2.5	6.0
18	0.5	0.5	0.5	0.5	0.0	0.5	2.0	1.0	2.0	7.0	2.0	7.0
19	0.5	0.5	0.5	0.5	0.0	0.5	2.0	1.5	2.0	7.5	2.5	7.5
20	1.0	0.5	1.0	0.5	0.0	0.5	2.0	1.0	2.0	6.5	3.5	6.5
21	1.0	0.5	1.0	0.5	0.0	0.5	2.5	1.0	2.5	6.5	3.5	6.5
22	1.0	1.0	1.0	0.5	0.0	0.5	1.0	0.0	1.0	6.0	3.5	6.0
23	1.0	1.0	1.0	1.0	0.5	1.0	2.5	1.0	2.5	7.0	3.5	7.0
24	1.0	0.5	1.0	1.0	0.0	1.0	3.5	1.5	3.5	7.5	3.0	7.5
25	1.0	0.5	1.0	1.0	0.5	1.0	4.0	1.0	4.0	6.0	2.5	6.0
26	1.0	0.5	1.0	1.5	1.0	1.5	4.0	1.5	4.0	6.5	4.0	6.5
27	1.0	0.5	1.0	1.5	0.5	1.5	4.5	1.5	4.5	5.5	4.0	5.5
28	0.5	0.5	0.5	1.0	0.5	1.0	4.5	1.5	4.5	6.0	4.0	6.0
29	---	---	---	0.5	0.0	0.5	4.5	2.0	4.5	7.0	3.5	7.0
30	---	---	---	0.5	0.0	0.5	4.5	1.5	4.5	6.0	3.0	6.0
31	---	---	---	1.0	0.5	1.0	---	---	---	7.5	3.5	7.5
MONTH	1.0	0.0	0.4	1.5	0.0	0.9	5.0	0.0	2.3	7.5	1.5	6.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.5	3.0	7.5	8.5	6.0	7.0	8.0	6.5	7.5	8.0	6.0	7.0
2	6.0	2.5	6.0	9.5	5.5	7.0	8.0	6.5	7.5	7.0	4.0	5.5
3	7.5	3.0	7.5	8.5	6.0	7.5	8.5	6.5	7.5	7.5	6.5	7.0
4	8.0	3.5	8.0	8.0	6.0	7.0	9.0	6.5	7.5	7.5	6.5	7.0
5	6.5	4.0	6.5	10.5	6.0	8.0	9.5	6.0	8.0	8.5	6.5	7.5
6	7.5	4.0	7.5	9.5	6.0	7.5	10.5	6.5	8.5	8.5	7.0	7.5
7	5.5	4.0	5.5	9.5	5.5	7.5	11.0	6.5	8.5	8.0	6.5	7.0
8	6.0	4.0	6.0	11.0	5.5	8.0	11.0	7.5	9.5	7.5	5.0	6.0
9	7.0	4.0	7.0	10.5	6.0	8.0	11.5	7.5	9.5	8.0	6.5	7.5
10	7.5	4.5	7.5	11.5	6.0	8.5	11.5	7.5	9.5	8.0	6.5	7.5
11	7.0	4.5	7.0	11.0	6.0	8.5	11.5	7.5	9.5	8.0	5.5	6.5
12	8.0	4.0	8.0	9.5	7.0	8.0	12.0	8.0	10.0	8.0	6.5	7.5
13	8.5	3.5	8.5	9.0	6.5	7.5	11.5	8.0	10.0	7.0	4.5	6.0
14	9.5	4.0	9.5	9.5	6.0	7.5	11.0	8.0	9.5	7.5	5.5	6.5
15	10.0	4.5	10.0	10.0	6.0	8.0	11.0	8.0	9.5	7.0	5.5	6.0
16	9.5	5.0	9.5	9.0	7.0	8.0	10.5	8.5	9.5	8.0	6.5	7.0
17	10.0	5.0	10.0	10.0	6.5	8.0	10.0	8.5	9.0	7.0	6.5	6.5
18	7.0	5.5	7.0	8.5	6.0	7.5	10.0	7.5	9.0	7.0	5.5	6.0
19	7.0	4.0	7.0	9.5	7.0	8.0	11.5	8.5	9.5	7.0	5.0	6.0
20	8.0	4.0	8.0	10.5	7.5	8.5	10.5	7.5	9.0	6.5	5.0	6.0
21	9.5	4.0	6.5	10.0	7.0	8.5	10.0	8.0	9.0	6.5	4.0	5.5
22	7.5	4.5	6.0	10.5	6.0	8.0	9.5	6.0	8.0	7.0	5.5	6.0
23	8.5	5.0	6.5	11.0	6.0	8.5	10.0	8.0	9.0	7.5	6.0	7.0
24	8.5	4.5	6.5	10.5	7.5	8.5	9.5	7.5	8.5	7.0	5.5	6.0
25	9.0	4.5	7.0	9.0	7.5	8.5	9.0	7.0	8.0	6.0	4.5	5.5
26	10.0	5.0	7.0	9.0	6.0	7.5	9.5	7.0	8.0	5.5	3.0	4.5
27	10.0	5.5	7.5	9.0	6.0	7.5	8.0	5.5	7.0	5.5	5.0	5.0
28	10.0	5.0	7.5	8.0	6.0	7.0	8.5	6.5	7.5	6.5	4.5	5.5
29	10.0	6.0	7.5	8.5	6.5	7.5	8.0	7.0	7.5	6.0	4.0	5.0
30	9.0	6.0	7.5	8.5	6.5	7.5	8.5	7.0	7.5	6.0	4.5	5.0
31	---	---	---	8.5	7.0	7.5	9.0	7.0	8.0	---	---	---
MONTH	10.0	2.5	7.4	11.5	5.5	7.8	12.0	5.5	8.6	8.5	3.0	6.3

15266110 KENAI RIVER BELOW SKILAK LAKE OUTLET NEAR STERLING

LOCATION.--Lat 60°28'00", long 150°35'56", in SW¼ NW¼ sec. 1, T. 4 N., R. 8 W. (Kenai B-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on right bank, 3.5 mi downstream from Skilak Lake, 7 mi southeast of Sterling.

DRAINAGE AREA.--1,206 mi^2.

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

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

GAGE.--Water stage recorder. Elevation of gage is 240 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Rain gage recorder at station. GOES satellite telemetry and phone modem at station.

DISCAHRGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4090	7840	2420	1650	e1250	1030	989	1490	7470	11300	12300	9900
2	4180	6820	2370	1640	e1250	1020	980	1610	7750	11300	12000	9520
3	4500	6040	2400	e1640	e1250	1010	965	1740	7820	11400	11800	9200
4	5070	5420	2370	1650	e1240	1010	961	1890	7790	11300	e11800	8980
5	5850	4890	2350	1640	e1240	1020	968	2090	7760	11300	e11800	8810
6	6720	4430	2320	1630	e1230	998	997	2170	7750	11300	e11700	8930
7	7380	4080	2320	1620	e1230	996	995	2230	7900	11300	e11700	9160
8	7790	3850	2300	1590	1220	994	977	2340	7870	11500	e11700	9340
9	8000	3860	2250	1570	1200	994	948	2460	7900	11400	e11600	9650
10	7870	3590	2200	1550	1180	988	943	2620	8010	11600	e11600	9810
11	7820	3310	2170	e1550	e1140	1050	935	2750	8310	11800	e11600	10200
12	7610	3250	2140	e1550	e1140	1050	939	2890	8600	12100	e11500	10400
13	7440	3180	2120	e1530	e1140	1060	935	3040	8910	12300	11500	10600
14	7270	3100	2090	e1510	1180	1090	928	3280	9220	12400	11400	10500
15	7160	3050	2040	1480	1190	1090	924	3570	9450	12400	11500	10400
16	7020	2980	2040	1450	e1150	1100	918	3940	9700	12700	11400	10300
17	6810	2930	2040	e1450	1150	1090	905	4290	9910	12900	11700	10300
18	6570	2930	2000	e1450	1140	1080	900	4600	10300	13000	11600	10400
19	6410	2910	1960	e1430	1140	1080	897	4870	10800	13100	11700	10300
20	6310	2830	1920	e1410	1140	1070	914	5040	11100	13100	11600	10100
21	6170	2750	1900	1380	1120	1070	960	5200	11300	13200	11600	9920
22	6220	2760	e1920	1370	1120	1090	966	5360	11400	13000	11600	9750
23	6540	2600	1880	1350	1120	1050	873	5490	11300	12800	11700	9620
24	7090	2540	1870	1340	1090	1060	915	5600	11200	12800	11200	9400
25	8030	2470	1810	1340	1080	1060	939	5720	11100	12700	11200	9410
26	9510	2430	1790	1330	1070	1030	984	5850	11100	12800	11300	9340
27	11600	2500	1800	e1320	1060	1030	1040	6030	11000	12700	11200	9090
28	13100	2380	1770	e1300	1040	997	1110	6140	11000	12800	11100	8940
29	12300	2370	1730	e1280	---	996	1250	6450	11200	12800	10900	8790
30	10600	2350	1690	e1260	---	1010	1370	6770	11200	12700	10400	8700
31	9170	---	1670	1260	---	985	---	7110	---	12400	9860	---
TOTAL	232200	106440	63650	45520	32500	32198	29325	124630	286120	380200	355560	289760
MEAN	7490	3548	2053	1468	1161	1039	978	4020	9537	12260	11470	9659
MAX	13100	7840	2420	1650	1250	1100	1370	7110	11400	13200	12300	10600
MIN	4090	2350	1670	1260	1040	985	873	1490	7470	11300	9860	8700
AC-FT	460600	211100	126200	90290	64460	63860	58170	247200	567500	754100	705300	574700
CFSM	6.21	2.94	1.70	1.22	0.96	0.86	0.81	3.33	7.91	10.2	9.51	8.01
IN.	7.16	3.28	1.96	1.40	1.00	0.99	0.90	3.84	8.83	11.73	10.97	8.94

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2005, BY WATER YEAR (WY)#

MEAN	6980	4601	2559	1799	1544	1163	1095	3005	8543	13050	11910	9327
MAX	9623	14170	7548	2960	2773	1867	1321	5158	10300	15400	13600	13860
(WY)	2004	2003	2003	2001	2003	2003	2004	2004	2004	2001	2001	2001
MIN	3937	2106	1387	1164	891	870	888	2210	6156	11960	10310	5659
(WY)	2001	2002	2002	1999	1998	1998	2002	2001	1997	1999	1998	2000

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1997 - 2005#	
ANNUAL TOTAL	2011672		1978103			
ANNUAL MEAN	5496		5419		5485	
HIGHEST ANNUAL MEAN					6742	2003
LOWEST ANNUAL MEAN					4742	2000
HIGHEST DAILY MEAN	16100	Jul 30	13200	Jul 21	20300	Nov 27 2002
LOWEST DAILY MEAN	990	Mar 30	873	Apr 23	776	Mar 13 1998
ANNUAL SEVEN-DAY MINIMUM	999	Mar 29	912	Apr 14	792	Mar 9 1998
MAXIMUM PEAK FLOW			13500	Jul 21	21400	Nov 27 2002
MAXIMUM PEAK STAGE			11.79	Jul 21	13.95	Nov 27 2002
INSTANTANEOUS LOW FLOW			a843	Apr 21	b765	Mar 12 1998
ANNUAL RUNOFF (AC-FT)	3990000		3924000		3974000	
ANNUAL RUNOFF (CFSM)	4.56		4.49		4.55	
ANNUAL RUNOFF (INCHES)	62.05		61.02		61.80	
10 PERCENT EXCEEDS	13200		11600		12800	
50 PERCENT EXCEEDS	3770		3250		3200	
90 PERCENT EXCEEDS	1100		1010		1070	

\# See Period of Record; partial year was used in monthly statistics
a Also occurred Apr. 23
b Mar. 12 and 13, 1998 and Apr. 20, 2002
e Estimated

15266150 KENAI RIVER BELOW MOUTH OF KILLEY RIVER NEAR STERLING

LOCATION.--Lat 60°29'28", long 150°37'50", in NW¼ SW¼ SE¼ sec. 26, T. 5 N., R. 8 W. (Kenai B-2 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on right bank, 1.5 mi downstream from Killey River, 4.5 mi southeast of Sterling.

DRAINAGE AREA.--1,496 mi2.

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

GAGE.--Water stage recorder. Elevation of gage is 230 ft above sea level, from topographic map.

REMARKS.--Record is good except for estimated daily discharges, which are poor. GOES satellite telemetry and phone modem at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5100	8000	2650	1860	e1400	e970	1130	2150	8860	12500	13900	10200
2	5090	6950	2590	1850	e1380	e980	1120	2270	9060	12500	13700	9960
3	6100	6300	2580	e1890	e1360	e980	1110	2390	9040	12400	13400	9740
4	6870	5680	2470	1890	1320	e980	1110	2520	8970	12400	13200	9730
5	7370	5100	2440	1860	e1320	e980	1110	2720	9020	12400	13100	9670
6	7710	4580	2420	1840	e1320	e980	1140	2830	9100	12400	13000	9850
7	8090	4210	2430	1800	e1320	e980	1150	2920	9300	12700	13000	10000
8	8330	4000	2430	1770	e1300	e980	1150	3080	9360	12700	12900	10000
9	8490	4000	2380	1740	e1300	e980	1140	3260	9470	12700	13000	10300
10	8370	3820	2340	1710	e1280	1090	1140	3450	9620	12900	12900	10900
11	8280	3580	2300	e1710	e1280	1140	1140	3650	9900	13000	12900	11000
12	8200	3570	2280	e1690	e1280	1150	1140	3880	10100	13300	12900	11100
13	8060	3480	2290	e1670	e1260	1180	1140	4250	10300	13700	12800	11200
14	7870	3370	2260	e1650	e1260	1200	1140	4660	10500	13800	12800	11000
15	7680	3240	2220	1630	e1260	1210	1150	4990	10800	13800	12700	10800
16	7530	3170	2220	1580	e1240	1210	1150	5270	11200	14200	12500	10800
17	7340	3120	2240	e1580	e1240	1210	1140	5550	11500	14400	12600	10800
18	7080	3120	2210	e1580	e1150	1200	1130	5850	12000	14400	12600	10700
19	6950	3080	2190	e1560	e1150	1200	1140	6100	12700	14600	12500	10600
20	6850	3000	2140	e1540	e1150	1190	1190	6310	12800	14700	12300	10400
21	6730	2900	2100	1520	e1100	1180	1240	6490	12700	14600	12300	10200
22	6750	2920	2230	1480	e1100	1180	1300	6710	12800	14700	12300	9950
23	7050	2770	2100	1460	e1100	1170	1290	6850	12600	14400	12500	9870
24	7550	2720	2080	1450	e1100	1170	1370	6990	12400	14300	12300	9880
25	8360	2630	1990	1440	e1100	1170	1430	7110	12200	14300	12200	9740
26	9730	2590	1960	e1440	e1100	1150	1470	7200	12100	14600	12200	9570
27	11700	2650	1980	e1440	e1050	1160	1560	7510	12100	14400	11900	9350
28	13200	2570	1960	e1440	e1050	1140	1670	7840	12200	14600	11600	9520
29	12400	2610	1930	e1420	---	1140	1800	8250	12300	14500	11400	9260
30	10800	2590	1930	e1420	---	1130	2050	8430	12400	14200	11000	9050
31	9310	---	1860	e1400	---	1120	---	8600	---	13900	10500	---
TOTAL	250940	112320	69200	50310	34270	34500	37940	160080	327400	424000	388900	305140
MEAN	8095	3744	2232	1623	1224	1113	1265	5164	10910	13680	12550	10170
MAX	13200	8000	2650	1890	1400	1210	2050	8600	12800	14700	13900	11200
MIN	5090	2570	1860	1400	1050	970	1110	2150	8860	12400	10500	9050
AC-FT	497700	222800	137300	99790	67970	68430	75250	317500	649400	841000	771400	605200
CFSM	5.41	2.50	1.49	1.08	0.82	0.74	0.85	3.45	7.30	9.14	8.39	6.80
IN.	6.24	2.79	1.72	1.25	0.85	0.86	0.94	3.98	8.14	10.54	9.67	7.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2005, BY WATER YEAR (WY)#

MEAN	7678	5150	2844	1917	1626	1238	1281	3620	9849	14520	12940	9811
MAX	11390	17110	8687	3140	3034	1914	1544	6533	11930	18240	15930	14240
(WY)	2004	2003	2003	2001	2003	2003	2004	2004	2004	2001	2001	2001
MIN	4291	2139	1633	1126	989	926	1010	2456	7701	12580	11020	6196
(WY)	2001	2002	2002	1999	1998	1999	1999	1999	1997	1999	1998	2000

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1997 - 2005#	
ANNUAL TOTAL	2227840		2195000			
ANNUAL MEAN	6087		6014		6061	
HIGHEST ANNUAL MEAN					7798	2003
LOWEST ANNUAL MEAN					5010	2000
HIGHEST DAILY MEAN	17300	Jul 30	14700	Jul 20	a24600	Oct 30 2002
LOWEST DAILY MEAN	b1000	Mar 31	970	Mar 1	c800	Apr 19 1997
ANNUAL SEVEN-DAY MINIMUM	1020	Mar 28	979	Mar 1	836	Apr 1 1999
MAXIMUM PEAK FLOW			15000	Jul 26	27300	Nov 6 2002
MAXIMUM PEAK STAGE			11.11	Jul 26	13.52	Nov 6 2002
ANNUAL RUNOFF (AC-FT)	4419000		4354000		4391000	
ANNUAL RUNOFF (CFSM)	4.07		4.02		4.05	
ANNUAL RUNOFF (INCHES)	55.40		54.58		55.04	
10 PERCENT EXCEEDS	14300		12800		13900	
50 PERCENT EXCEEDS	4090		3820		3540	
90 PERCENT EXCEEDS	1200		1140		1150	

\# See Period of Record; partial year was used in monthly statistics.
a Oct. 30 and Nov. 7
b Mar. 31 to Apr. 3
c Apr. 19, 1997 and Apr. 6-7, 1999
e Estimated

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28′39″, long 151°04′46″, in W½ SW¼ sec. 32, T. 5 N., R. 10 W. (Kenai B-3 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, on left bank 80 feet downstream of bridge on Sterling Highway, 1.0 mi southwest of Soldotna.

DRAINAGE AREA.--1,951 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1965 to current year.

REVISED RECORDS.--WRD AK-00-1 drainage area.

GAGE.--Water-stage recorder. Datum of gage is 35.34 ft above sea level. Prior to May 5, 2005, water-stage recorder near center of span on downstream side of bridge on Sterling Highway, same datum. Prior to May 1, 1997, non-recording gage near center of span on downstream side of bridge on Sterling Highway, same site and datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6130	8680	3350	e2000	e1450	e1100	1350	2870	9040	12700	14000	10300
2	6190	7480	3310	e1950	e1450	e1100	1340	2950	9350	12800	13900	10000
3	6850	6950	3050	e1950	e1450	e1100	1310	2990	9430	12800	13800	9860
4	7980	6200	2850	e1900	e1400	e1100	1310	3030	9400	12800	13700	9960
5	8410	5580	2830	e1900	e1400	e1100	1380	3180	9370	12800	13500	9930
6	8700	5090	e2650	e1850	e1400	e1100	1470	3380	9450	12900	13300	10000
7	9080	4710	e2500	e1850	e1350	e1100	1530	3400	9560	13100	13200	10100
8	9360	4520	e2500	e1800	e1350	e1100	1560	3540	9720	13000	13200	10000
9	9550	4490	e2500	e1800	e1350	e1050	1630	3740	9930	13100	13200	10400
10	9410	4660	e2400	e1750	e1350	e1150	1620	3890	10100	13200	13100	11000
11	9260	4300	e2400	e1750	e1350	e1200	1610	4050	10200	13200	13200	11200
12	9190	4270	e2400	e1700	e1300	e1250	1630	4190	10400	13400	13200	11500
13	9000	4170	e2350	e1700	e1300	e1300	1660	4490	10600	13900	13100	11400
14	8770	4110	e2350	e1700	e1300	e1300	1650	4820	10900	14000	13100	11200
15	8580	3960	e2350	e1700	e1300	e1300	1660	5130	11100	13900	13000	11100
16	8400	3860	e2300	e1700	e1300	e1300	1650	5430	11400	14100	13000	11300
17	8200	3780	e2300	e1650	e1300	e1300	1640	5690	11600	14400	13100	11400
18	7940	3810	e2300	e1650	e1250	e1350	1580	5990	12100	14300	13100	11200
19	7780	3760	e2250	e1650	e1250	e1350	1600	6250	12900	14400	12700	11000
20	7680	3670	e2250	e1600	e1200	e1350	1670	6480	13000	14700	12400	10600
21	7520	3500	e2200	e1600	e1200	e1350	1700	6670	13000	14500	12500	10400
22	7440	3570	e2200	e1600	e1200	e1350	1850	6900	13000	14700	12300	10400
23	7760	3460	e2200	e1600	e1200	e1350	1860	7100	13000	14400	12600	10400
24	8170	3410	e2200	e1550	e1150	e1350	1960	7280	12900	14300	12400	10300
25	8800	3200	e2200	e1550	e1150	e1350	2080	7450	12700	14400	12200	10100
26	10000	3080	e2200	e1500	e1150	e1350	2080	7610	12600	14400	12000	9830
27	12000	3230	e2200	e1500	e1150	e1350	2160	7900	12600	14500	11900	9820
28	13800	3310	e2150	e1500	e1100	e1350	2280	8270	12700	14500	11800	9820
29	13500	3280	e2100	e1500	---	1370	2450	8500	12600	14400	11700	9480
30	11800	3080	e2050	e1500	---	1390	2730	8660	12600	14300	11200	9240
31	10100	---	e2000	e1500	---	1410	---	8760	---	14200	10800	---
TOTAL	277350	131170	74890	52450	36100	38970	52000	170590	337250	428100	396200	313240
MEAN	8947	4372	2416	1692	1289	1257	1733	5503	11240	13810	12780	10440
MAX	13800	8680	3350	2000	1450	1410	2730	8760	13000	14700	14000	11500
MIN	6130	3080	2000	1500	1100	1050	1310	2870	9040	12700	10800	9240
AC-FT	550100	260200	148500	104000	71600	77300	103100	338400	668900	849100	785900	621300
CFSM	4.59	2.24	1.24	0.87	0.66	0.64	0.89	2.82	5.76	7.08	6.55	5.35
IN.	5.29	2.50	1.43	1.00	0.69	0.74	0.99	3.25	6.43	8.16	7.55	5.97
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)#												
MEAN	7429	3835	2407	1900	1667	1360	1583	3328	8745	13580	14320	11510
MAX	14370	17350	9172	4290	4575	2696	2836	7216	12780	18740	24890	21280
(WY)	1970	2003	2003	1981	1981	1981	1980	2004	2004	1977	1977	1995
MIN	2852	1631	1132	823	822	800	812	1950	4940	9696	8706	5873
(WY)	1993	1974	1976	1976	1976	1976	1972	1973	1972	1973	1969	1969

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

15266300 KENAI RIVER AT SOLDOTNA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1965 - 2005#	
ANNUAL TOTAL	2437080		2308310			
ANNUAL MEAN	6659		6324		6017	
HIGHEST ANNUAL MEAN					8810	1977
LOWEST ANNUAL MEAN					4002	1973
HIGHEST DAILY MEAN	17600	Jul 30	a14700	Jul 20	41400	Sep 24 1995
LOWEST DAILY MEAN	1100	Mar 30	1050	Mar 9	b770	Apr 1 1966
ANNUAL SEVEN-DAY MINIMUM	1140	Mar 24	1090	Mar 3	774	Apr 1 1966
MAXIMUM PEAK FLOW			a15000	Jul 20	42200	Sep 24 1995
MAXIMUM PEAK STAGE			9.71	Jul 22	14.50	Sep 24 1995
MAXIMUM PEAK STAGE					c22.62	Jan 18 1969
INSTANTANEOUS LOW FLOW					770	Apr 1 1966
ANNUAL RUNOFF (AC-FT)	4834000		4579000		4359000	
ANNUAL RUNOFF (CFSM)	3.41		3.24		3.08	
ANNUAL RUNOFF (INCHES)	46.47		44.01		41.91	
10 PERCENT EXCEEDS	15200		13100		14200	
50 PERCENT EXCEEDS	4740		4300		3320	
90 PERCENT EXCEEDS	1350		1330		1200	

\# See Period of Record; partial year was used in monthly statistics.
a July 20 and 22
b Apr. 1 to Apr. 4, 1966
c Backwater from ice

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'15", long 149°25'31", in SW$^1/_4$ SE$^1/_4$ sec. 34, T. 8 N., R. 1 W. (Seward D-7 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on left bank, 6.0 mi upstream from mouth at Turnagain Arm, and 10.6 mi southeast of Hope.

DRAINAGE AREA.--234 mi^2

PERIOD OF RECORD.--June 1979 to September 1990, August 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map. Prior to November 26, 1979, recording gage at site 0.8 mi downstream at different datum.

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

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

Date	Time	Discharge (ft^3/s)	Gage Height (ft)
May 14	0830	*4590	*11.85

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1080	316	286	e180	e150	e130	152	e1450	2060	1960	931	547
2	1150	268	284	e180	e150	e130	151	1390	1910	1660	1030	505
3	2020	317	264	e190	e150	e130	150	1340	1820	1540	1190	504
4	1610	317	242	e200	e150	e130	149	1330	1850	1450	1080	583
5	1390	270	e230	e190	e150	e130	154	1280	2060	1420	973	631
6	1080	223	e220	e180	e150	e130	205	1180	2080	1460	919	830
7	900	364	e220	e180	e140	e130	202	1200	2230	1460	898	797
8	783	324	e230	e180	e140	e140	189	1290	2220	1400	891	694
9	704	298	e240	e180	e140	e150	187	1470	2570	1370	892	782
10	645	309	264	e170	e140	e200	188	1690	2960	1360	894	1130
11	583	314	259	e170	e140	233	192	1750	2650	1340	891	924
12	638	313	242	e170	e140	207	199	2300	2410	1300	884	974
13	635	311	240	e170	e140	213	205	3010	2260	1280	827	873
14	703	297	226	e170	e170	206	215	3940	2220	1220	787	802
15	639	285	231	e170	e160	196	225	2940	2350	1130	755	764
16	600	284	235	e170	e140	187	236	2350	2570	1130	718	839
17	561	278	234	e170	e140	181	242	2050	2720	1040	721	1090
18	519	276	299	e160	e140	177	249	2030	2940	974	736	988
19	520	282	311	e160	e130	175	250	2040	2620	1090	690	854
20	484	282	270	e160	e130	172	270	2150	2100	1030	664	786
21	464	273	257	e160	e130	168	317	2290	1920	962	694	722
22	432	269	264	e160	e130	168	406	2340	1880	888	664	735
23	427	271	270	e180	e130	163	478	2290	1660	856	968	935
24	412	275	232	e160	e130	161	614	2240	1540	869	819	1100
25	385	268	e200	e150	e130	159	751	2190	1490	929	681	908
26	386	261	e200	e150	e130	158	962	2330	1500	1020	631	829
27	387	261	e190	e150	e130	158	1150	2820	1600	1050	592	1160
28	383	318	e190	e150	e130	156	1350	2870	1660	981	569	1250
29	375	289	e190	e150	---	154	e1450	2670	1660	877	604	1070
30	351	279	e180	e150	---	154	e1550	2340	1700	822	556	914
31	313	---	e180	e150	---	156	---	2140	---	919	544	---
TOTAL	21559	8692	7380	5210	3930	5102	13038	64700	63210	36787	24693	25520
MEAN	695	290	238	168	140	165	435	2087	2107	1187	797	851
MAX	2020	364	311	200	170	233	1550	3940	2960	1960	1190	1250
MIN	313	223	180	150	130	130	149	1180	1490	822	544	504
AC-FT	42760	17240	14640	10330	7800	10120	25860	128300	125400	72970	48980	50620
CFSM	2.97	1.24	1.02	0.72	0.60	0.70	1.86	8.92	9.00	5.07	3.40	3.64
IN.	3.43	1.38	1.17	0.83	0.62	0.81	2.07	10.29	10.05	5.85	3.93	4.06
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2005, BY WATER YEAR (WY)#												
MEAN	921	475	296	236	189	158	267	1369	2667	2119	1226	959
MAX	1777	1735	687	528	433	240	435	2344	3957	3986	2699	1556
(WY)	1981	2003	2003	1981	2003	1984	2005	2004	2001	1980	1981	1999
MIN	500	221	198	133	113	106	119	748	1736	1131	596	362
(WY)	1998	1986	1999	1999	1999	1999	1985	1985	1989	2004	2004	2004

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

15271000 SIXMILE CREEK NEAR HOPE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1979 - 2005#	
ANNUAL TOTAL	275568		279821			
ANNUAL MEAN	753		767		914	
HIGHEST ANNUAL MEAN					1335	1980
LOWEST ANNUAL MEAN					675	1986
HIGHEST DAILY MEAN	3600	May 24	3940	May 14	7570	Jul 12 1980
LOWEST DAILY MEAN	a150	Mar 31	b130	Feb 19	c80	Apr 1 1986
ANNUAL SEVEN-DAY MINIMUM	153	Mar 27	130	Feb 19	80	Apr 1 1986
MAXIMUM PEAK FLOW			4590	May 14	10800	Oct 24 2002
MAXIMUM PEAK STAGE			11.85	May 14	13.56	Oct 24 2002
INSTANTANEOUS LOW FLOW					d29	Nov 26 1979
ANNUAL RUNOFF (AC-FT)	546600		555000		662500	
ANNUAL RUNOFF (CFSM)	3.22		3.28		3.91	
ANNUAL RUNOFF (INCHES)	43.81		44.48		53.10	
10 PERCENT EXCEEDS	2280		2030		2390	
50 PERCENT EXCEEDS	317		432		522	
90 PERCENT EXCEEDS	181		150		146	

\# See Period of Record; partial years used in monthly statistics
a Mar. 31 to Apr. 1
b Feb. 19 to Mar. 7
c Apr. 1 to Apr. 9, 1986
d Sometime between Nov. 26, 1979 and Jan. 9, 1980, during release from storage behind snow-avalanche dam upstream from former gage site, site and datum then in use

15272280 PORTAGE CREEK AT PORTAGE LAKE OUTLET NEAR WHITTIER

LOCATION.--Lat 60°47'07", long 148°50'20", in SW¼ NE¼ sec. 13, T. 8 N., R. 3 E. (Seward D-5 SW quad), Municipality of Anchorage, Hydrologic Unit 19020302, on left bank at lake outlet, 5.0 mi west of Whittier, 5.8 mi southeast of Portage, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--40.5 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 95 ft above sea level, from topographic map.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 12,500 ft^3/s, August 19, 1984 (elevation about 97.05 ft above sea level from USFS levels) by contracted-opening measurement of peak flow.

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

Date	Time	Discharge (ft^3/s)	Gage Height	Date	Time	Discharge (ft^3/s)	Gage Height
July 26	0100	*5970	*8.03	Sept. 17	1315	4860	7.49

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	755	171	301	87	103	72	62	492	1460	1690	1160	833
2	1230	158	312	83	e95	63	57	462	1160	1570	1510	743
3	4020	177	255	116	e90	63	54	411	1010	1510	2660	755
4	3980	166	208	214	e85	66	57	395	993	1450	2900	2180
5	2890	144	174	194	78	85	76	406	1090	1430	2160	3240
6	1840	128	156	162	74	111	190	438	1140	1590	1730	3050
7	1150	133	156	137	75	141	273	428	1230	1660	1590	2240
8	815	144	140	118	94	241	233	415	1450	1750	1560	1450
9	755	148	124	104	110	391	213	422	2410	1780	1550	1340
10	866	270	122	91	145	663	184	455	3220	1810	1560	1850
11	716	475	123	96	137	963	160	480	2470	1790	1660	1410
12	1370	500	117	107	110	646	140	788	2000	1900	1770	1370
13	1090	459	141	108	93	468	126	1940	1620	2950	1660	1200
14	891	387	147	98	100	326	114	3260	1450	2910	1480	1010
15	665	306	137	87	116	247	105	2390	1460	2170	1370	994
16	492	262	163	78	99	191	100	1700	1560	2390	1350	2240
17	390	263	235	70	84	157	96	1200	1760	3360	1510	4220
18	320	303	690	63	72	135	119	960	2060	2380	2130	2830
19	287	361	856	58	65	116	141	866	2030	2090	1880	1550
20	250	390	537	66	62	103	148	836	1670	1870	1610	1040
21	218	309	367	95	83	94	171	840	1460	1810	1440	794
22	196	283	358	235	97	97	429	855	1420	1560	1190	784
23	184	341	310	553	104	91	469	864	1330	1440	2280	1220
24	177	385	249	459	97	82	414	944	1310	1500	2800	1650
25	163	360	203	347	106	75	378	1000	1360	3460	1780	1090
26	175	287	174	252	102	68	352	1280	1410	4720	1320	824
27	189	253	156	193	88	67	367	2970	1450	2860	1130	2060
28	259	368	136	156	79	70	387	4010	1480	2330	1010	2830
29	262	331	117	134	---	68	436	3690	1550	1670	912	1980
30	226	264	105	119	---	63	483	2600	1670	1330	875	1030
31	195	---	95	104	---	64	---	2020	---	1230	867	---
TOTAL	27016	8526	7364	4784	2643	6087	6534	39817	47683	63960	50404	49807
MEAN	871	284	238	154	94.4	196	218	1284	1589	2063	1626	1660
MAX	4020	500	856	553	145	963	483	4010	3220	4720	2900	4220
MIN	163	128	95	58	62	63	54	395	993	1230	867	743
AC-FT	53590	16910	14610	9490	5240	12070	12960	78980	94580	126900	99980	98790
CFSM	21.5	7.02	5.87	3.81	2.33	4.85	5.38	31.7	39.2	50.9	40.1	41.0
IN.	24.81	7.83	6.76	4.39	2.43	5.59	6.00	36.57	43.80	58.75	46.30	45.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)#

MEAN	745	302	168	147	134	89.5	228	644	1479	2100	2001	1716
MAX	2145	1456	482	460	407	196	393	1284	1728	2518	3164	3583
(WY)	2004	2003	2003	2001	2003	2005	1995	2005	1990	1990	1989	1995
MIN	136	90.5	26.3	26.0	26.0	26.0	36.7	286	1178	1714	1409	649
(WY)	1997	1991	1991	1991	1991	1991	2002	2001	2001	1999	1998	1992

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

15272280 PORTAGE CREEK AT PORTAGE LAKE OUTLET NEAR WHITTIER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005#	
ANNUAL TOTAL	279880		314625			
ANNUAL MEAN	765		862		806	
HIGHEST ANNUAL MEAN					1010	2003
LOWEST ANNUAL MEAN					656	2000
HIGHEST DAILY MEAN	5740	Jul 27	4720	Jul 26	10700	Sep 20 1995
LOWEST DAILY MEAN	32	Jan 19	54	Apr 3	a26	Dec 5 1990
ANNUAL SEVEN-DAY MINIMUM	38	Mar 24	61	Mar 29	26	Dec 5 1990
MAXIMUM PEAK FLOW			5970	Jul 26	13000	Sep 20 1995
MAXIMUM PEAK STAGE			8.03	Jul 26	10.66	Sep 20 1995
INSTANTANEOUS LOW FLOW			51	Apr 4	26	Dec 5 1990
ANNUAL RUNOFF (AC-FT)	555100		624100		584100	
ANNUAL RUNOFF (CFSM)	18.9		21.3		19.9	
ANNUAL RUNOFF (INCHES)	257.07		288.99		270.51	
10 PERCENT EXCEEDS	1850		2110		2000	
50 PERCENT EXCEEDS	376		414		328	
90 PERCENT EXCEEDS	71		88		55	

See Period of Record; partial year was used in monthly statistics.
a From Dec. 5, 1990 to Mar. 31, 1991

15272380 TWENTYMILE RIVER BELOW GLACIER RIVER NEAR PORTAGE

LOCATION.--Lat 60°53'53", long 148°55'19", in NE¼ NW¼ SE¼ sec. 4, T. 9 N., R. 3 E. (Seward D-6 quad), Hydrologic Unit 19020401, on right bank, 0.1 miles downstream from Glacier River, 4.0 miles upstream from mouth at Seward Highway, and 6.0 miles northeast of Portage.

DRAINAGE AREA.--141 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2001 to current year.

REVISED RECORDS.--WDR AK-02-1: 2001.

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

REMARKS.--Records good except for October 1 to April 20, which are poor. Rain gage at station. GOES satellite telemetry at station.

WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2080	364	784	e250	e250	184	162	1810	3130	3720	2320	1300
2	2380	342	796	e360	e230	179	170	1590	2690	3450	2570	1100
3	7230	413	688	417	e230	180	162	1440	2410	3080	3860	1190
4	7060	371	588	640	e210	195	146	1370	2420	2910	4170	2500
5	5030	340	583	511	e210	241	165	1320	2650	2970	3430	4330
6	3150	e310	540	431	e350	309	419	1250	2620	3200	3020	5940
7	2460	e290	402	432	465	360	546	1260	2740	3200	2920	4840
8	1720	330	384	354	498	656	442	1350	2930	3220	2900	2990
9	1380	311	323	e310	508	797	453	1460	4700	3330	2950	2860
10	1320	693	313	e290	527	1270	437	1620	6990	3460	2950	4080
11	1170	903	296	e270	466	1330	370	1660	5180	3430	3030	2900
12	1650	780	297	e300	426	1010	311	2530	4090	3630	3280	2900
13	1660	805	356	e330	402	918	280	4840	3500	4050	3160	2390
14	1640	730	422	e300	450	766	271	7200	3400	3960	2840	1930
15	1310	674	342	e280	626	660	273	5310	3560	3470	2530	1750
16	985	674	478	e260	494	532	273	3900	3830	3870	2520	3120
17	793	678	579	e230	437	446	273	3010	4210	4660	2460	5760
18	728	727	1200	e200	393	386	332	2570	4830	3790	2950	4230
19	678	830	1690	e190	352	357	356	2430	4840	3590	2830	2610
20	607	866	1230	e250	262	331	367	2440	3700	3330	2550	1890
21	600	740	881	616	288	300	425	2410	3200	3210	2520	1470
22	594	719	1020	1120	279	299	849	2420	3120	2820	1960	1460
23	482	787	938	1830	274	262	904	2470	2720	2640	3680	2130
24	495	761	723	735	252	216	997	2540	2720	2680	4630	3320
25	412	746	706	585	277	202	1060	2580	2830	4240	3010	2260
26	386	611	689	486	273	205	1200	2820	2900	6630	2160	1590
27	445	562	473	e410	232	204	1380	4650	2990	4610	1790	2340
28	461	860	463	e360	199	190	1500	6110	3110	3500	1530	3730
29	584	728	e380	e310	---	181	1720	5810	3260	2660	1460	3000
30	436	674	e320	286	---	175	1860	4530	3400	2230	1390	1870
31	400	---	e270	252	---	163	---	3800	---	2730	1350	---
TOTAL	50326	18619	19154	13595	9860	13504	18103	90500	104670	108270	84720	83780
MEAN	1623	621	618	439	352	436	603	2919	3489	3493	2733	2793
MAX	7230	903	1690	1830	626	1330	1860	7200	6990	6630	4630	5940
MIN	386	290	270	190	199	163	146	1250	2410	2230	1350	1100
MED	985	685	540	330	319	300	395	2470	3160	3430	2840	2560
AC-FT	99820	36930	37990	26970	19560	26790	35910	179500	207600	214800	168000	166200
CFSM	11.5	4.40	4.38	3.11	2.50	3.09	4.28	20.7	24.7	24.8	19.4	19.8
IN.	13.28	4.91	5.05	3.59	2.60	3.56	4.78	23.88	27.62	28.56	22.35	22.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)#

MEAN	2151	925	620	440	418	212	397	1634	3079	3526	3411	2095
MAX	2883	2496	906	735	932	436	603	2919	3509	4349	4603	2793
(WY)	2003	2003	2003	2002	2003	2005	2005	2005	2004	2004	2003	2005
MIN	1235	140	195	153	127	77.1	121	796	2513	2796	2700	1288
(WY)	2002	2004	2004	2004	2002	2002	2002	2001	2002	2002	2002	2004

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2001 - 2005#	
ANNUAL TOTAL	557746		615101			
ANNUAL MEAN	1524		1685		1595	
HIGHEST ANNUAL MEAN					1880	2003
LOWEST ANNUAL MEAN					1263	2002
HIGHEST DAILY MEAN	9490	Jul 27	7230	Oct 3	12900	Oct 3 2003
LOWEST DAILY MEAN	a36	Mar 27	146	Apr 4	a36	Mar 27 2004
ANNUAL SEVEN-DAY MINIMUM	37	Mar 25	163	Mar 30	37	Mar 25 2004
MAXIMUM PEAK FLOW			8680	Oct 4	14400	Oct 3 2003
MAXIMUM PEAK STAGE			22.79	Oct 4	25.88	Oct 3 2003
ANNUAL RUNOFF (AC-FT)	1106000		1220000		1156000	
ANNUAL RUNOFF (CFSM)	10.8		12.0		11.3	
ANNUAL RUNOFF (INCHES)	147.15		162.28		153.73	
10 PERCENT EXCEEDS	3750		3790		3710	
50 PERCENT EXCEEDS	786		1010		891	
90 PERCENT EXCEEDS	110		270		136	

\# See Period of Record; partial year was used in monthly statistics.
a Mar. 27-30, 2004
e Estimated

15272380 TWENTYMILE RIVER BELOW GLACIER RIVER NEAR PORTAGE—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2002 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April 2002 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 April 20. No variation more than 0.1°C was found within the cross section. The variation found between mean stream temperature and sensor temperature was less than 0.2°C. Heavy shore ice occurs near the gage.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 11.5°C, July 15, 2005; Minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 11.5°C, July 15; Minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from lt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
APR									
20...	1413	130	13.0	15.49	367	10	8010	3.7	8.0
20...	1415	130	29.0	15.49	367	10	8010	3.7	8.0
20...	1417	130	65.0	15.49	367	10	8010	3.7	8.0
20...	1419	130	91.0	15.49	367	10	8010	3.6	8.0
20...	1421	130	117	15.49	367	10	8010	3.6	8.0

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5.5	4.0	4.5	2.0	0.0	1.0	2.0	1.5	2.0	0.0	0.0	0.0
2	5.0	3.5	4.5	0.5	0.0	0.5	1.5	1.5	1.5	0.5	0.0	0.0
3	5.0	4.5	5.0	1.5	0.0	1.0	1.5	0.0	1.0	1.0	0.5	0.5
4	5.0	4.5	4.5	1.5	0.5	0.5	0.0	0.0	0.0	0.5	0.5	0.5
5	5.0	4.0	4.5	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
6	5.5	4.0	4.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
7	5.5	4.0	4.5	0.5	0.0	0.0	1.0	0.5	0.5	0.0	0.0	0.0
8	5.0	4.0	4.5	1.0	0.0	0.5	0.5	0.0	0.5	0.0	0.0	0.0
9	5.0	4.0	4.5	1.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0
10	5.0	4.0	4.5	1.0	0.5	1.0	0.5	0.0	0.0	0.0	0.0	0.0
11	5.0	4.0	4.5	1.5	1.0	1.0	0.5	0.5	0.5	0.0	0.0	0.0
12	5.0	4.5	4.5	1.5	1.5	1.5	0.5	0.5	0.5	0.0	0.0	0.0
13	5.0	4.0	4.5	2.0	1.5	1.5	1.0	0.5	1.0	0.0	0.0	0.0
14	5.5	4.0	4.5	1.5	0.5	1.0	0.5	0.5	0.5	0.0	0.0	0.0
15	4.5	3.5	4.0	2.0	0.5	1.0	1.5	0.5	1.0	0.0	0.0	0.0
16	4.5	3.5	4.0	2.0	1.5	1.5	1.5	1.0	1.0	0.0	0.0	0.0
17	4.0	2.5	3.0	1.5	0.5	1.0	1.5	1.0	1.5	0.0	0.0	0.0
18	3.5	2.0	3.0	1.5	1.5	1.5	1.0	1.0	1.0	0.0	0.0	0.0
19	4.0	3.5	3.5	2.0	1.0	1.5	1.0	1.0	1.0	0.0	0.0	0.0
20	4.0	3.0	3.5	1.5	1.0	1.5	1.0	0.5	1.0	0.0	0.0	0.0
21	4.0	3.0	3.5	1.5	1.5	1.5	1.0	0.5	1.0	0.0	0.0	0.0
22	3.0	2.0	2.5	2.0	1.5	1.5	1.5	1.0	1.5	0.0	0.0	0.0
23	3.0	2.5	3.0	2.0	2.0	2.0	1.5	0.5	1.0	0.5	0.0	0.0
24	3.5	3.0	3.0	2.0	1.5	2.0	0.5	0.0	0.0	0.5	0.0	0.0
25	3.0	1.5	2.5	1.5	0.5	1.5	0.0	0.0	0.0	0.5	0.0	0.5
26	4.0	2.5	3.0	1.5	1.0	1.0	0.0	0.0	0.0	0.5	0.0	0.5
27	3.5	2.5	3.0	2.5	1.5	2.0	0.5	0.0	0.0	0.0	0.0	0.0
28	3.5	3.0	3.5	2.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
29	3.5	3.0	3.0	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
30	3.0	2.0	2.5	1.5	1.0	1.5	0.0	0.0	0.0	0.5	0.0	0.5
31	2.5	1.5	2.0	---	---	---	0.0	0.0	0.0	0.5	0.0	0.0
MONTH	5.5	1.5	3.7	2.5	0.0	1.1	2.0	0.0	0.6	1.0	0.0	0.1

15272380 TWENTYMILE RIVER BELOW GLACIER RIVER NEAR PORTAGE—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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	5.0	0.5	2.5	5.0	2.5	3.5
2	0.0	0.0	0.0	1.0	0.5	0.5	3.5	0.0	1.5	7.0	2.0	4.0
3	0.0	0.0	0.0	0.5	0.0	0.5	3.5	0.5	1.5	7.5	2.0	4.5
4	0.0	0.0	0.0	1.5	0.5	1.0	2.5	1.0	1.5	6.5	3.0	4.5
5	0.0	0.0	0.0	1.0	0.5	1.0	3.0	1.5	2.0	5.5	3.0	4.0
6	0.0	0.0	0.0	1.0	0.5	0.5	2.5	1.0	1.5	6.0	3.5	4.5
7	0.0	0.0	0.0	1.0	0.5	1.0	3.0	0.5	1.5	8.0	3.0	5.5
8	0.0	0.0	0.0	0.5	0.5	0.5	3.0	1.0	2.0	8.5	3.0	5.5
9	0.0	0.0	0.0	1.0	0.5	0.5	5.0	1.0	3.0	8.5	3.0	5.5
10	0.0	0.0	0.0	0.5	0.5	0.5	4.5	1.0	2.5	8.5	3.0	5.5
11	0.0	0.0	0.0	1.0	0.5	0.5	6.0	1.0	3.0	8.0	3.0	5.5
12	0.0	0.0	0.0	1.5	0.5	1.0	6.0	0.5	3.0	5.5	4.5	5.0
13	0.0	0.0	0.0	1.5	1.0	1.0	6.5	0.5	3.0	5.0	4.0	4.5
14	0.0	0.0	0.0	3.0	0.5	1.5	5.0	1.0	3.0	6.5	3.5	4.5
15	0.0	0.0	0.0	2.5	0.5	1.5	6.5	1.0	3.5	5.5	4.0	4.5
16	0.0	0.0	0.0	3.5	0.5	1.5	6.5	1.0	3.5	7.5	3.5	5.0
17	0.0	0.0	0.0	3.0	0.0	1.5	7.0	1.0	3.5	6.5	4.0	5.0
18	0.0	0.0	0.0	3.5	0.0	1.5	4.0	2.0	2.5	8.5	3.0	5.5
19	0.0	0.0	0.0	3.0	0.5	1.5	4.0	2.0	2.5	8.5	3.5	5.5
20	0.5	0.0	0.0	2.0	0.5	1.0	4.5	2.5	3.5	7.5	4.0	5.5
21	0.5	0.0	0.5	2.5	0.5	1.5	5.0	2.0	3.5	7.5	4.5	5.5
22	0.5	0.5	0.5	1.0	0.0	0.5	3.0	2.0	2.5	7.0	4.0	5.5
23	1.0	0.5	0.5	4.0	0.5	2.0	5.0	2.0	3.0	8.5	3.5	6.0
24	1.0	0.0	0.5	3.0	0.0	1.5	5.5	2.0	3.5	7.0	4.5	5.5
25	1.0	0.5	0.5	2.0	0.0	1.0	6.5	1.0	3.5	8.0	4.0	6.0
26	1.0	0.0	0.5	4.0	1.0	2.5	6.5	1.5	3.5	6.0	4.5	5.5
27	1.0	0.0	0.5	2.5	0.5	1.5	6.5	1.5	3.5	6.0	4.5	5.0
28	0.5	0.0	0.0	2.0	0.0	1.0	7.0	1.5	4.0	6.5	4.5	5.0
29	---	---	---	3.0	0.0	1.5	7.0	2.0	4.0	6.5	4.0	5.0
30	---	---	---	3.0	0.0	1.5	7.5	2.0	4.0	6.0	4.0	5.5
31	---	---	---	4.5	1.0	2.5	---	---	---	8.0	4.5	6.0
MONTH	1.0	0.0	0.1	4.5	0.0	1.2	7.5	0.0	2.9	8.5	2.0	5.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.5	4.5	6.0	7.5	6.0	7.0	6.5	5.5	6.0	8.5	5.5	6.5
2	9.0	4.0	6.5	9.0	6.0	7.0	7.0	5.5	6.0	7.5	4.5	6.0
3	9.5	4.0	6.5	8.5	6.0	7.0	6.5	5.0	6.0	6.5	5.5	6.0
4	10.0	4.0	6.5	10.0	6.0	7.5	7.0	5.0	6.0	6.0	5.0	5.5
5	9.0	4.0	6.5	10.5	6.0	7.5	9.0	5.5	6.5	6.0	4.5	5.5
6	9.0	4.5	6.5	11.0	5.5	8.0	9.5	5.5	7.0	6.5	5.0	5.5
7	6.5	5.0	5.5	10.5	6.0	8.0	9.5	5.5	7.0	7.5	5.0	6.0
8	6.5	5.0	5.5	11.0	6.0	8.0	9.5	5.5	7.0	7.5	5.0	6.0
9	5.5	4.5	5.0	10.5	6.0	8.0	10.0	5.5	7.5	6.5	5.5	6.0
10	8.0	4.5	6.0	11.0	6.5	8.5	10.0	5.5	7.5	8.0	5.5	6.5
11	6.5	5.0	6.0	11.0	6.5	8.5	9.5	6.0	7.5	8.0	5.0	6.0
12	8.5	4.5	6.5	8.5	6.5	7.5	9.5	5.5	7.5	6.5	5.5	6.0
13	9.5	4.5	7.0	7.5	6.0	6.5	9.5	5.5	7.0	8.0	5.0	6.0
14	10.0	4.5	7.0	9.5	5.5	7.5	9.0	5.5	7.0	7.5	5.0	6.0
15	10.0	5.0	7.5	11.5	6.0	8.0	9.0	6.0	7.0	6.0	5.5	5.5
16	10.5	5.5	7.5	8.5	6.0	7.0	8.5	6.0	7.0	5.5	5.0	5.5
17	11.0	5.0	7.5	9.0	5.5	7.0	7.0	6.0	6.5	6.0	4.5	5.5
18	8.5	6.0	6.5	8.5	6.0	7.5	7.0	5.5	6.0	6.5	5.0	5.5
19	8.0	5.0	6.5	9.0	6.0	7.5	7.5	5.5	6.5	7.0	4.5	5.5
20	9.0	5.0	6.5	10.0	6.0	7.5	8.5	6.0	7.0	7.0	4.5	5.5
21	10.0	4.5	7.0	10.5	6.0	8.0	6.5	5.5	6.0	6.5	4.0	5.5
22	7.5	5.5	6.5	10.0	5.5	7.5	8.0	5.5	6.5	6.0	5.0	5.5
23	9.5	5.0	6.5	10.5	6.0	8.0	7.0	6.0	6.5	6.0	5.0	5.5
24	10.0	4.5	7.0	8.0	6.5	7.5	8.0	5.5	6.5	6.0	5.0	5.5
25	10.0	5.5	7.5	7.0	6.0	6.5	7.5	5.5	6.5	6.0	5.0	5.5
26	10.0	5.5	7.5	7.5	5.5	6.5	8.5	5.0	6.5	6.0	4.5	5.0
27	10.0	5.5	7.5	7.5	6.0	7.0	8.5	5.0	6.5	5.5	5.0	5.0
28	10.5	5.5	7.5	7.0	5.5	6.5	7.0	5.0	6.0	6.0	4.5	5.0
29	10.5	6.0	8.0	6.0	5.5	6.0	7.5	5.5	6.0	6.5	4.5	5.0
30	9.5	6.0	7.5	6.5	5.5	6.0	7.5	5.0	6.0	6.0	4.5	5.0
31	---	---	---	7.0	5.5	6.0	7.0	5.0	6.0	---	---	---
MONTH	11.0	4.0	6.7	11.5	5.5	7.3	10.0	5.0	6.6	8.5	4.0	5.6

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'32", long 149°38'06", in SW¼ SE¼ sec. 9, T. 13 N., R. 2 W. (Anchorage A-8 quad), Municipality of Anchorage, Hydrologic Unit 19020401, in Fort Richardson Military Reservation, on left bank, 800 ft downstream from diversion dam, 3.3 mi upstream from North Fork Ship Creek, and 7.8 mi east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--89.5 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1936: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 490 ft above sea level, from topographic map. Prior to August 22, 1985, water-stage recorder at dam 800 ft upstream. See WSP 1936 for history of changes prior to October 1, 1954.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 2005 was 5.50 ft^3/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	131	85	e42	e42	32	29	312	519	387	322	190
2	532	e90	85	e43	e39	e30	29	300	502	379	294	181
3	520	e78	75	e47	e35	33	29	316	477	376	266	175
4	503	e72	e37	e51	e36	32	29	351	469	347	245	181
5	449	e68	e25	e57	e37	32	29	324	494	323	225	180
6	394	e74	e42	e65	e38	32	29	316	513	313	209	247
7	348	e84	e55	e72	e36	32	29	335	520	306	195	301
8	313	e91	e65	e68	e31	33	29	372	505	299	183	276
9	288	e105	e46	e72	e34	32	30	430	496	298	174	333
10	264	e113	e42	e57	e38	33	30	489	507	275	165	616
11	233	e111	e45	e58	e37	33	31	521	514	282	158	545
12	212	108	e61	e48	e36	33	31	528	511	268	154	541
13	213	104	e72	e36	e37	35	31	564	493	269	150	492
14	220	101	e64	e47	e36	34	30	621	491	250	145	435
15	208	99	e62	e64	e37	32	32	621	503	238	141	400
16	193	97	e69	e71	e37	32	33	582	533	239	137	383
17	181	95	e72	e62	e36	31	33	544	550	232	135	348
18	171	93	e75	e67	e36	31	33	534	591	217	134	313
19	177	92	e71	e58	36	31	34	550	598	246	154	286
20	169	90	e61	e50	36	31	42	572	543	226	135	270
21	173	88	e59	e56	34	31	49	617	484	214	161	252
22	163	87	e78	e53	34	31	66	621	447	207	167	260
23	166	86	e93	e52	34	31	83	604	413	197	261	327
24	162	85	e60	e57	33	30	90	593	385	188	292	529
25	154	83	e25	e55	33	30	91	587	366	185	263	479
26	159	82	e29	e50	33	30	104	585	358	190	235	429
27	163	84	e63	e40	33	31	120	593	342	181	215	393
28	157	92	e63	e35	32	30	142	584	349	181	198	364
29	154	83	e41	e39	---	29	199	571	345	176	204	333
30	146	81	e36	e45	---	31	275	552	353	179	183	314
31	137	---	e41	e47	---	30	---	531	---	381	189	---
TOTAL	7972	2747	1797	1664	996	978	1841	15620	14171	8049	6089	10373
MEAN	257	91.6	58.0	53.7	35.6	31.5	61.4	504	472	260	196	346
MAX	650	131	93	72	42	35	275	621	598	387	322	616
MIN	137	68	25	35	31	29	29	300	342	176	134	175
AC-FT	15810	5450	3560	3300	1980	1940	3650	30980	28110	15970	12080	20570

ADJUSTED TO INCLUDE DIVERSION

MEAN	265	96.5	63.2	58.8	40.9	36.5	66.2	509	479	267	201	350
CFSM	2.96	1.08	0.70	0.66	0.46	0.41	0.74	5.68	5.35	2.99	2.25	3.91
IN	3.41	1.20	0.81	0.76	0.48	0.47	0.82	6.55	5.97	3.44	2.59	4.36
AC-FT	16300	5740	3880	3610	2270	2250	3940	31300	28500	16400	12400	20800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2005, BY WATER YEAR (WY)#

MEAN	154	79.8	49.7	32.8	23.5	17.9	26.7	177	450	300	204	209
MAX	356	199	154	79.4	61.6	50.2	69.7	504	798	645	510	471
(WY)	2003	2003	2003	2003	2003	2003	1990	2005	1977	1980	1981	1967
MIN	48.7	24.3	13.9	7.13	5.36	3.61	4.77	39.9	132	72.0	72.9	55.8
(WY)	1969	1969	1969	1956	1983	1956	1954	1971	1996	1996	2004	1969

\# See Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted.
e Estimated

15276000 SHIP CREEK NEAR ANCHORAGE—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1947 - 2005#	
ANNUAL TOTAL	51228		72297			
ANNUAL MEAN	140		198		144	
ANNUAL MEAN	*146		*203		*162	
HIGHEST ANNUAL MEAN					223	1980
LOWEST ANNUAL MEAN					67.3	1969
HIGHEST DAILY MEAN	650	Oct 1	650	Oct 1	1420	Aug 9 1971
LOWEST DAILY MEAN	25	Dec 5	25	Dec 5	a0.00	Jan 2 1956
ANNUAL SEVEN-DAY MINIMUM	29	Mar 26	29	Apr 1	0.43	Jan 9 1956
MAXIMUM PEAK FLOW			1160	Oct 1	1860	Jun 21 1949
MAXIMUM PEAK STAGE			f6.30	Oct 1	b3.44	Jun 21 1949
MAXIMUM PEAK STAGE					c6.52	Jun 21 1949
MAXIMUM PEAK STAGE					d8.54	Dec 29 2002
ANNUAL RUNOFF (AC-FT)	101600		143400		104500	
ANNUAL RUNOFF (AC-FT)	*106000		*147400		*117400	
ANNUAL RUNOFF (CFSM)	*1.63		*2.27		*1.81	
ANNUAL RUNOFF (IN)	*22.2		*30.9		*24.6	
10 PERCENT EXCEEDS	390		513		370	
50 PERCENT EXCEEDS	75		137		78	
90 PERCENT EXCEEDS	36		32		15	

\# See Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted.
* Adjusted to account for diversion, see Remarks.
a No flow during one or more days in water years 1956, 1960, 1969 and 1971.
b Site and datum then in use.
c Current site and datum.
d From crest-stage gage mark from ice-affected winter breakout event, at current site and datum.
f From crest-stage gage.

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE

LOCATION.--Lat 61°14'36", long 149°43'19", in SW¼ NE¼ SE¼ sec. 1, T. 13 N., R. 3 W. (Anchorage A-8NE quad), Municipality of Anchorage, Hydrologic Unit 19020401, in Fort Richardson Military Reservation, on left bank, 0.5 mi downstream from fish hatchery, 0.8 mi upstream of the Fort Richardson Elmendorf border, 3.3 mi downstream from diversion dam, and 6.0 mi east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--104.6 mi^2.

PERIOD OF RECORD.--October 2002 to September 30, 2005 (discontinued).

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. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 2005 was 5.52 ft^3/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

REVISIONS.--Revised figures of discharge for water year 2004 are given given below. These figures supercede those published in reports for 2004.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	e100	76	50	41	33	26	128	411	233	90	113
2	111	104	71	47	40	33	30	153	392	218	86	113
3	288	100	65	52	39	33	30	157	377	206	84	110
4	400	94	78	53	38	33	30	172	386	190	79	106
5	305	96	80	53	38	31	30	204	409	183	83	99
6	302	98	70	52	38	22	32	253	418	172	82	94
7	278	102	71	50	37	27	37	310	463	164	80	91
8	256	111	76	49	38	33	39	357	517	156	78	88
9	252	111	76	52	37	25	36	347	474	144	78	86
10	223	e106	74	52	38	33	37	336	426	139	78	84
11	e200	e105	74	51	40	34	37	346	391	133	75	81
12	e190	e105	71	49	35	33	37	356	360	124	75	79
13	e180	e100	68	47	39	31	38	392	348	119	75	90
14	e165	e85	68	47	38	31	40	418	343	117	73	80
15	e160	e60	67	45	34	31	44	423	360	120	74	76
16	e150	e48	65	44	25	30	49	414	351	117	73	73
17	e140	e42	63	44	28	27	49	396	393	114	63	70
18	e140	e32	63	44	32	29	50	411	422	113	64	69
19	e130	31	58	44	37	21	52	431	418	106	71	69
20	e130	49	63	46	40	26	55	456	411	101	77	76
21	e120	81	63	47	39	29	58	489	393	105	74	97
22	e120	83	63	47	38	33	65	514	357	104	72	91
23	e110	73	60	45	36	33	71	629	345	102	70	103
24	111	78	55	41	35	32	73	620	330	99	68	91
25	123	75	46	39	34	30	75	529	314	96	66	94
26	121	56	43	43	33	28	82	499	305	95	86	220
27	e113	49	43	43	34	28	89	449	299	96	182	223
28	e110	63	51	41	33	27	92	450	284	104	198	191
29	e110	74	60	40	33	28	108	413	268	100	159	212
30	e100	77	64	36	---	26	117	405	244	97	135	558
31	e100	---	63	39	---	21	---	421	---	93	120	---
TOTAL	5347	2388	2008	1432	1047	911	1608	11878	11209	4060	2768	3627
MEAN	172	79.6	64.8	46.2	36.1	29.4	53.6	383	374	131	89.3	121
MAX	400	111	80	53	41	34	117	629	517	233	198	558
MIN	100	31	43	36	25	21	26	128	244	93	63	69
AC-FT	10610	4740	3980	2840	2080	1810	3190	23560	22230	8050	5490	7190
CFSM	1.65	0.76	0.62	0.44	0.35	0.28	0.51	3.66	3.57	1.25	0.85	1.16
IN.	1.90	0.85	0.71	0.51	0.37	0.32	0.57	4.22	3.99	1.44	0.98	1.29

ADJUSTED TO INCLUDE DIVERSION

MEAN	178	84.8	69.8	51.5	41.7	35.4	58.8	389	379	141	96.2	126
CFSM	1.70	0.81	0.67	0.49	0.40	0.34	0.56	3.72	3.63	1.34	0.92	1.20
IN	1.89	0.90	0.77	0.57	0.43	0.39	0.63	4.28	4.04	1.55	1.06	1.38
AC-FT	10920	5040	4290	3170	2400	2170	3500	23900	22600	8650	5920	7480

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

MEAN	255	134	106	60.3	46.2	39.0	50.5	274	356	164	121	117
MAX	337	188	148	74.4	56.6	48.7	53.6	383	374	196	153	121
(WY)	2003	2003	2003	2003	2003	2003	2004	2004	2004	2003	2003	2004
MIN	172	79.6	64.8	46.2	36.1	29.4	47.5	165	339	131	89.3	113
(WY)	2004	2004	2004	2004	2004	2004	2003	2003	2003	2004	2004	2003

\# See Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted.
e Estimated

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2003 - 2004#	
ANNUAL TOTAL	46051		48283			
ANNUAL MEAN	126		132		144	
ANNUAL MEAN	*132		*138		*150	
HIGHEST ANNUAL MEAN					156	2003
LOWEST ANNUAL MEAN					132	2004
HIGHEST DAILY MEAN	517	Jun 14	629	May 23	680	Dec 28 2002
LOWEST DAILY MEAN	31	Nov 19	a21	Mar 19	a21	Mar 19 2004
ANNUAL SEVEN-DAY MINIMUM	35	Apr 9	26	Mar 26	26	Mar 26 2004
MAXIMUM PEAK FLOW			878	Sep 30	878	Sep 30 2004
MAXIMUM PEAK STAGE			5.34	Sep 30	5.34	Sep 30 2004
ANNUAL RUNOFF (AC-FT)	91340		95770		104300	
ANNUAL RUNOFF (AC-FT)	*95760		*100000		*108700	
ANNUAL RUNOFF (CFSM)	*1.26		*1.31		*1.43	
ANNUAL RUNOFF (INCHES)	*17.08		*17.89		*19.47	
10 PERCENT EXCEEDS	269		380		345	
50 PERCENT EXCEEDS	100		78		100	
90 PERCENT EXCEEDS	46		33		38	

\# See Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted.
* Adjusted to account for diversion, see Remarks.
a Mar. 21 and 31

15276320 SHIP CREEK BELOW FISH HATCHERY NEAR ANCHORAGE—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	116	96	e34	e34	26	31	322	483	363	308	205
2	493	81	98	e35	e31	23	30	308	453	354	286	195
3	481	e76	84	e39	e27	30	31	302	438	352	266	189
4	490	e72	29	e43	e28	29	28	300	419	330	251	193
5	407	69	e18	e49	e29	29	28	284	446	318	231	195
6	345	e75	e34	e57	e30	30	29	278	476	315	222	254
7	327	e85	e50	64	28	31	28	293	482	307	208	309
8	293	e92	61	60	23	34	27	316	476	303	202	291
9	277	112	43	64	26	33	28	352	476	307	193	316
10	259	131	40	49	e30	37	28	377	480	286	186	591
11	229	129	44	50	e29	40	30	405	486	287	182	549
12	207	125	61	e40	e28	41	31	482	519	270	175	520
13	205	121	73	28	e29	50	33	572	497	266	169	483
14	211	114	66	39	28	47	30	650	505	245	165	417
15	199	111	65	56	29	42	36	621	528	234	160	373
16	181	111	73	63	29	41	38	568	565	233	153	356
17	171	107	77	54	28	38	37	501	600	226	151	341
18	159	105	81	59	28	37	35	483	661	206	149	324
19	166	103	78	e50	28	37	37	523	652	233	178	307
20	157	100	69	42	28	38	58	559	551	219	152	300
21	160	98	51	48	28	35	74	641	471	205	180	281
22	152	97	70	55	27	37	99	648	428	196	193	288
23	154	95	85	54	26	41	119	590	392	188	268	340
24	151	94	51	49	26	36	129	599	358	177	311	588
25	142	92	17	47	25	38	127	566	346	173	290	525
26	147	90	21	42	25	39	141	544	342	178	259	483
27	152	94	55	32	25	40	159	573	332	173	238	435
28	145	106	55	27	24	37	186	563	332	171	215	400
29	143	94	33	31	---	33	247	556	332	167	221	366
30	134	91	28	37	---	31	299	536	334	164	201	354
31	122	---	e33	39	---	33	---	503	---	353	203	---
TOTAL	7503	2986	1739	1436	776	1113	2233	14815	13860	7799	6566	10768
MEAN	242	99.5	56.1	46.3	27.7	35.9	74.4	478	462	252	212	359
MAX	644	131	98	64	34	50	299	650	661	363	311	591
MIN	122	69	17	27	23	23	27	278	332	164	149	189
AC-FT	14880	5920	3450	2850	1540	2210	4430	29390	27490	15470	13020	21360
CFSM	2.31	0.95	0.54	0.44	0.26	0.34	0.71	4.57	4.42	2.41	2.02	3.43
IN.	2.67	1.06	0.62	0.51	0.28	0.40	0.79	5.27	4.93	2.77	2.34	3.83
ADJUSTED TO INCLUDE DIVERSION												
MEAN	250	104	61.3	51.4	33.0	40.9	79.3	483	469	259	217	363
CFSM	2.39	1.00	0.59	0.49	0.32	0.39	0.76	4.61	4.48	2.48	2.07	3.47
IN	2.66	1.11	0.67	0.57	0.34	0.45	0.84	5.31	4.99	2.85	2.39	4.00
AC-FT	15400	6220	3769	3160	1830	2510	4720	29700	27900	16000	13300	21600
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2003 - 2005, BY WATER YEAR (WY)#												
MEAN	251	122	89.5	55.6	40.1	38.0	58.5	342	392	193	151	197
MAX	337	188	148	74.4	56.6	48.7	74.4	478	462	252	212	359
(WY)	2003	2003	2003	2003	2003	2003	2005	2005	2005	2005	2005	2005
MIN	172	79.6	56.1	46.2	27.7	29.4	47.5	165	339	131	89.3	113
(WY)	2004	2004	2005	2004	2005	2004	2003	2003	2003	2004	2004	2003

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2003 - 2005#	
ANNUAL TOTAL	50768		71594			
ANNUAL MEAN	139		196		161	
ANNUAL MEAN	*144		*201		*167	
HIGHEST ANNUAL MEAN					196	2005
LOWEST ANNUAL MEAN					132	2004
HIGHEST DAILY MEAN	644	Oct 1	661	Jun 18	680	Dec 28 2002
LOWEST DAILY MEAN	17	Dec 25	17	Dec 25	17	Dec 25 2004
ANNUAL SEVEN-DAY MINIMUM	26	Mar 26	25	Feb 24	25	Feb 24 2005
MAXIMUM PEAK FLOW			a784	Jun 18	878	Sep 30 2004
MAXIMUM PEAK STAGE			a5.21	Jun 18	5.34	Sep 30 2004
ANNUAL RUNOFF (AC-FT)	100700		142000		116900	
ANNUAL RUNOFF (AC-FT)	*105100		*146000		*121000	
ANNUAL RUNOFF (CFSM)	*1.38		*1.92		*1.60	
ANNUAL RUNOFF (INCHES)	*18.72		*26.19		*21.68	
10 PERCENT EXCEEDS	392		484		391	
50 PERCENT EXCEEDS	84		147		104	
90 PERCENT EXCEEDS	33		29		34	

\# See Remarks. Values shown on this page are unadjusted for diversion, unless otherwise noted.
* Adjusted to account for diversion, see Remarks.
a Maximum discharge, 805 ft^3/s, Oct. 1, peak discharge of 878 ft^3/s occurred Sep. 30, 2004;
maximum peak discharge for water year, 784 ft^3/s, Jun. 18, 19 and Sep. 24, gage height, 5.21 ft.

15278000 EKLUTNA LAKE NEAR PALMER

LOCATION.--Lat 61°24'39", long 149°07'20", in NE$^1/_4$ NE$^1/_4$ sec. 18, T. 15 N., R. 2 E. (Anchorage B-6 quad), Municipality of Anchorage, Hydrologic Unit 19020402, on north shore, 0.7 mi upstream from lake outlet, 12 mi upstream from mouth of Eklutna River, and 14 mi south of Palmer.

DRAINAGE AREA.--119 mi^2.

PERIOD OF RECORD.--November 1946 to September 1962 (fragmentary after January 1955), June 1983 to current year. Fragmentary records for the period October 1962 to June 1983 available from Eklutna Hydroelectric Project.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Alaska Power Administration). Prior to June 1983, non-recording gage at lake outlet at datum of 859.8 ft above sea level.

REMARKS.--Lake outlet consists of earth and rockfill dam with uncontrolled spillway crest at an elevation of 871 ft. Prior to 1965, control structure 1400 ft upstream with spillway crest at elevation of 867.5 ft which could be flash-boarded to elevation of 871 ft. Outflow was controlled by the flash boards and sluice gates. Dead storage below elevation of 859 ft. Reservoir is used for power generation and water supply. Rain gage at station. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 877.68 ft, September 25, 1995; minimum observed, 814.2 ft, June 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 865.93 ft, October 6; minimum, 827.80 ft, May 9.

GAGE-HEIGHT, FEET, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	865.41	863.30	858.22	852.85	847.01	841.32	835.06	828.55	830.15	838.79	852.93	862.47
2	865.38	863.09	858.08	852.69	846.76	841.11	834.85	828.45	830.14	839.38	853.32	862.48
3	865.56	862.91	857.93	852.49	846.54	840.92	834.64	828.35	830.10	840.00	853.67	862.45
4	865.81	862.74	857.75	852.37	846.36	840.75	834.41	828.27	830.08	840.54	853.00	862.43
5	865.89	862.55	857.54	852.27	846.15	840.63	834.15	828.19	830.09	841.09	---	862.43
6	865.88	862.36	857.36	852.10	---	840.48	833.94	828.10	830.18	841.65	---	862.50
7	865.82	862.18	857.19	851.92	---	840.30	833.70	828.01	830.26	842.16	---	862.65
8	865.74	862.01	857.02	851.76	845.56	840.08	833.46	827.92	830.33	842.66	---	862.70
9	865.65	861.80	856.79	851.64	845.38	839.88	833.24	827.89	830.43	843.20	855.78	862.77
10	865.53	861.56	856.59	851.45	845.17	839.72	833.01	828.06	830.58	843.72	856.20	863.11
11	865.46	861.39	856.40	851.23	844.97	839.60	832.75	828.25	830.71	844.32	856.66	863.43
12	865.37	861.25	856.26	851.03	844.80	839.45	832.47	828.44	830.87	844.92	857.16	863.69
13	865.31	861.12	856.08	850.88	844.64	839.29	832.19	828.68	831.08	845.45	857.68	863.84
14	865.24	860.97	855.92	850.74	---	839.11	831.93	828.88	831.33	845.95	858.13	863.88
15	865.19	860.76	855.73	850.53	---	838.92	831.68	829.06	831.66	846.35	858.57	863.91
16	865.11	860.60	855.59	850.34	844.00	838.74	831.41	829.20	832.10	846.81	858.88	863.92
17	865.02	860.45	855.41	850.16	843.75	838.58	831.17	829.26	832.60	847.24	859.16	863.98
18	864.93	860.29	855.23	850.00	843.53	838.44	830.92	829.31	833.21	847.60	859.47	863.98
19	864.81	860.12	855.07	---	843.37	838.21	830.65	829.28	833.92	847.95	859.78	863.91
20	864.71	859.96	854.94	---	843.22	837.92	830.45	829.27	834.54	848.40	860.06	863.86
21	864.62	859.80	854.79	849.24	843.07	837.63	830.23	829.33	834.95	848.87	860.35	863.77
22	864.49	859.58	854.69	849.05	842.90	837.40	830.03	829.49	835.34	849.27	860.57	863.69
23	864.36	859.38	854.54	848.86	842.64	837.27	829.88	829.59	835.67	849.66	860.94	863.67
24	864.24	859.21	854.32	848.66	842.40	837.12	829.73	829.61	835.92	850.09	861.44	863.85
25	864.08	859.03	854.11	848.48	842.15	836.90	829.47	829.62	836.23	850.45	861.71	863.92
26	863.94	858.89	853.90	848.29	841.90	836.65	829.23	829.68	836.59	850.89	861.88	863.87
27	863.82	858.73	853.70	848.10	841.69	836.44	829.04	829.77	836.99	851.29	862.00	863.74
28	863.73	858.61	853.52	847.89	841.51	836.22	828.88	829.88	837.36	851.59	862.14	863.66
29	863.68	858.47	853.37	847.67	---	835.92	828.76	830.00	837.78	851.87	862.28	863.61
30	863.59	858.36	853.20	847.44	---	835.61	828.65	830.10	838.25	852.09	862.34	863.55
31	863.48	---	853.03	847.22	---	835.31	---	830.14	---	852.53	862.38	---
MEAN	864.90	860.72	855.62	---	---	838.58	831.67	828.99	832.98	846.35	---	863.39
MAX	865.89	863.30	858.22	---	---	841.32	835.06	830.14	838.25	852.53	---	863.98
MIN	863.48	858.36	853.03	---	---	835.31	828.65	827.89	830.08	838.79	---	862.43

15280200 EKLUTNA RIVER AT OLD GLENN HIGHWAY AT EKLUTNA

LOCATION.--Lat 61°27′01″, long 149°22′02″, in NE¼ SW¼ NE¼ sec. 25, T. 16 N., R. 1 W. (Anchorage B-7 quad), Municipality of Anchorage, Hydrologic Unit 19020402, on right bank, 1.3 mi upstream from mouth, 0.7 mi south of Eklutna.

DRAINAGE AREA.--172 mi^2.

PERIOD OF RECORD.--May 1 2002 to current year

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records are fair except for Apr. 15 to May 9, May 20 to Aug. 24, and estimated daily discharges, which are poor. Flow regulated by Eklutna Reservoir, 11 mi upstream, for power generation and water supply. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	43	32	e23	e12	10	14	110	126	119	117	60
2	110	e30	32	e23	e12	12	13	126	121	135	137	60
3	115	e24	e26	e22	e12	13	13	110	116	128	163	61
4	108	e21	e17	e22	e12	12	12	102	116	124	142	61
5	114	e18	e13	e23	e11	12	13	90	118	126	104	61
6	108	e15	e19	e23	e11	10	13	85	121	130	92	64
7	104	e10	e31	e21	e11	11	15	84	124	127	88	63
8	95	e18	e34	e19	e11	12	16	87	130	135	84	61
9	89	e30	e32	e19	e12	12	17	76	136	132	93	63
10	87	e42	e31	e18	e13	14	16	61	157	124	85	75
11	80	e44	e30	e18	e13	14	16	64	161	92	67	74
12	73	e39	e30	e17	e14	13	16	68	165	92	59	82
13	70	e35	e29	e17	e15	17	18	73	170	76	68	85
14	62	e33	e29	e17	e15	20	16	78	176	75	52	84
15	61	e31	e28	e16	e16	17	22	79	168	86	53	84
16	66	e29	e28	e16	15	19	30	79	188	69	59	85
17	67	e30	e27	e16	14	17	28	78	203	82	47	85
18	60	e31	e27	e16	12	12	25	81	199	78	61	84
19	55	32	e27	e15	15	12	25	83	199	72	58	81
20	56	31	15	e15	14	12	31	75	199	63	54	78
21	57	31	e17	e15	14	e10	34	83	163	66	44	72
22	53	31	e25	e15	14	e11	52	95	154	80	42	72
23	57	32	21	e14	12	12	79	110	142	74	48	76
24	54	32	e18	e14	13	12	66	115	133	71	e51	85
25	51	29	e22	e14	13	13	52	111	139	72	59	80
26	59	28	e26	13	13	14	77	116	134	72	62	85
27	57	33	e26	13	13	14	68	126	124	76	64	91
28	56	34	e25	e13	9.7	13	73	138	109	72	64	92
29	54	31	e25	e13	---	12	92	139	102	68	66	89
30	49	30	e24	e13	---	18	99	135	98	71	64	86
31	46	---	e24	e12	---	15	---	132	---	123	62	---
TOTAL	2288	897	790	525	361.7	415	1061	2989	4391	2910	2309	2279
MEAN	73.8	29.9	25.5	16.9	12.9	13.4	35.4	96.4	146	93.9	74.5	76.0
MAX	115	44	34	23	16	20	99	139	203	135	163	92
MIN	46	10	13	12	9.7	10	12	61	98	63	42	60
AC-FT	4540	1780	1570	1040	717	823	2100	5930	8710	5770	4580	4520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)#

MEAN	59.7	32.2	22.0	18.0	16.0	13.5	25.0	55.0	94.1	64.0	51.7	53.4
MAX	73.8	43.3	25.5	21.3	22.1	15.7	35.4	96.4	146	93.9	74.5	76.0
(WY)	2005	2003	2005	2003	2003	2003	2005	2005	2005	2005	2005	2005
MIN	39.2	23.4	17.2	15.7	12.9	11.5	17.9	21.0	71.9	41.9	29.4	30.3
(WY)	2004	2004	2004	2004	2005	2004	2004	2003	2003	2004	2004	2003

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2002 - 2005#	
ANNUAL TOTAL	13202		21215.7			
ANNUAL MEAN	36.1		58.1		42.3	
HIGHEST ANNUAL MEAN					58.1	2005
LOWEST ANNUAL MEAN					31.9	2004
HIGHEST DAILY MEAN	115	Oct 1	203	Jun 17	203	Jun 17 2005
LOWEST DAILY MEAN	10	Nov 7	9.7	Feb 28	6.0	Nov 16 2003
ANNUAL SEVEN-DAY MINIMUM	11	Mar 17	11	Feb 28	11	Mar 17 2004
MAXIMUM PEAK FLOW			231	Jun 17	231	Jun 17 2005
MAXIMUM PEAK STAGE			86.23	Jun 17	86.23	Jun 17 2005
MAXIMUM PEAK STAGE			a87.50	Jan 4	a87.50	Jan 4 2005
ANNUAL RUNOFF (AC-FT)	26190		42080		30670	
10 PERCENT EXCEEDS	78		125		86	
50 PERCENT EXCEEDS	29		52		29	
90 PERCENT EXCEEDS	12		13		13	

\# See Period of Record; partial year was used in monthly statistics.
a Backwater from ice
e Estimated

15281000 KNIK RIVER NEAR PALMER

LOCATION.--Lat 61°30′18″, long 149°01′50″, in NE¼ SE¼ sec. 2, T.16 N., R.2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, near the right bank on downstream side of bridge on Old Glenn Highway, 7 mi south of Palmer, 7 mi upstream from Alaska Railroad bridge, 9 mi downstream from Friday Creek, and about 17 mi downstream from Knik Glacier.

DRAINAGE AREA.--1,180 mi^2, approximately.

PERIOD OF RECORD.--October 1959 to January 1988, annual maximum, water year 1989, October 1991 to September 1992, April 2001 to current year (no winter record).

REVISED RECORDS.--WRD-AK-77-1: 1974-75(M).

GAGE.--Water-stage recorder. Datum of gage is 33.68 ft above North American Vertical Datum of 1988. Prior to June 27, 1960, nonrecording gage, and June 27, 1960 to April 25,1974, water-stage recorder at old bridge 100 ft upstream at original 1929 datum. April 26, 1974 to April 18, 1976, recording gage at site 0.4 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flood peaks due to outbreak of glacier-dammed Lake George, 1948-62, 1964, 1965, published in WSP 1936. Streamflow augmented by glaciers, which cover 54 percent of the basin.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1948, 359,000 ft^3/s, July 18, 1958, gage height, 25.30 ft, at site in use beginning 1959, from outbreak of glacier-dammed Lake George.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8750	---	---	---	---	---	e750	5320	14000	25700	e19000	14500
2	7730	---	---	---	---	---	e750	5730	13400	24900	18900	13400
3	10000	---	---	---	---	---	e750	5380	12700	24000	18700	12700
4	13800	---	---	---	---	---	e750	5060	12500	22900	e19000	13100
5	14000	---	---	---	---	---	e750	4940	12800	23000	e20000	13600
6	11500	---	---	---	---	---	e800	4760	13600	24000	21000	15600
7	9170	---	---	---	---	---	e800	4700	14400	25300	21700	18300
8	7520	---	---	---	---	---	e800	4940	14100	25600	22100	17300
9	6390	---	---	---	---	---	e800	5260	14200	26100	22900	e16000
10	5780	---	---	---	---	---	e800	5700	15600	27300	24400	e20000
11	5310	---	---	---	---	---	e850	6060	17100	29900	25400	e19000
12	5040	---	---	---	---	---	e850	6530	18200	30800	27500	e18000
13	5140	---	---	---	---	---	e850	7560	18100	30800	29400	17800
14	5180	---	---	---	---	---	e850	8840	18600	29400	28700	14700
15	5110	---	---	---	---	---	e900	9480	19600	28200	28000	13200
16	4680	---	---	---	---	---	e900	9110	21000	e30000	26100	13200
17	4140	---	---	---	---	---	e900	e9500	23300	e28000	25100	13900
18	3590	---	---	---	---	---	e950	e10000	25900	e26000	24300	14300
19	3160	---	---	---	---	---	e1000	10100	26100	25600	23800	12600
20	2890	---	---	---	---	---	1100	10300	23600	26600	e22500	11200
21	2680	---	---	---	---	---	1280	11200	21300	26900	23500	10000
22	2480	---	---	---	---	---	1520	10900	21800	25700	21300	9470
23	2310	---	---	---	---	---	2130	10300	20900	24800	e20400	10400
24	2200	---	---	---	---	---	2670	11000	20900	25000	24000	13000
25	e2100	---	---	---	---	---	2760	11900	22300	24500	24300	13000
26	2070	---	---	---	---	---	2850	12200	24200	25200	22400	11300
27	2110	---	---	---	---	---	3190	12600	25800	e26000	19600	10000
28	2130	---	---	---	---	---	3570	12900	25200	e24000	17800	9960
29	2160	---	---	---	---	---	4040	13600	25200	e22000	16800	9510
30	2110	---	---	---	---	---	4740	13800	25800	20300	15900	8510
31	e2000	---	---	---	---	---	---	14100	---	e20000	15000	---
TOTAL	163230	---	---	---	---	---	45650	273770	582200	798500	689500	407550
MEAN	5265	---	---	---	---	---	1522	8831	19410	25760	22240	13580
MAX	14000	---	---	---	---	---	4740	14100	26100	30800	29400	20000
MIN	2000	---	---	---	---	---	750	4700	12500	20000	15000	8510
AC-FT	323800	---	---	---	---	---	90550	543000	1155000	1584000	1368000	808400
CFSM	4.46	---	---	---	---	---	1.29	7.48	16.4	21.8	18.8	11.5
IN.	5.15	---	---	---	---	---	1.44	8.63	18.35	25.17	21.74	12.85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)#

MEAN	4847	1906	1022	909	790	658	964	4076	13340	23910	21600	11190
MAX	15730	5950	2677	3781	2566	1314	1756	8831	21500	37450	28300	16960
(WY)	2004	2003	2003	1981	2003	1977	2004	2005	2004	1960	1979	1974
MIN	1782	637	500	460	338	260	348	1039	2598	17440	15260	6594
(WY)	1982	1969	1974	1976	1962	1962	1972	1965	1965	1970	1969	1992

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

15281000 KINIK RIVER NEAR PALMER—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 1960 - 2005#	
ANNUAL MEAN			7004	
HIGHEST ANNUAL MEAN			8889	2003
LOWEST ANNUAL MEAN			5590	1973
HIGHEST DAILY MEAN	a30800	Jul 12	341000	Jul 26 1961
LOWEST DAILY MEAN			b260	Mar 1 1962
ANNUAL SEVEN-DAY MINIMUM			260	Mar 1 1962
MAXIMUM PEAK FLOW	32500	Jul 13	cd355000	Jul 26 1961
MAXIMUM PEAK STAGE	11.95	Jul 13	c24.35	Jul 17 1960
ANNUAL RUNOFF (AC-FT)			5074000	
ANNUAL RUNOFF (CFSM)			5.94	
ANNUAL RUNOFF (INCHES)			80.65	
10 PERCENT EXCEEDS			21100	
50 PERCENT EXCEEDS			2100	
90 PERCENT EXCEEDS			500	

\# See Period of Record; partial years were used in monthly statistics and break in record
a July 12 & 13
b Mar. 1-31, 1962
c Site then in use, caused by release of stored water (Lake George) behind Knik Glacier
d Gage height, 24.3 ft

15284000 MATANUSKA RIVER AT PALMER

LOCATION.--Lat 61°36′33″, long 149°04′15″, in SE¼ NW¼ sec. 34, T. 18 N., R. 2 E. (Anchorage C-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020402, on downstream left bank of Old Glenn Highway bike path bridge, and 1 mi east of Palmer.

DRAINAGE AREA.--2,070 mi^2, approximately.

PERIOD OF RECORD.--April 1949 to September 1973, May 1985 to September 1986, October 1991 to September 1992, and May 2000 to current year. Annual maximum, water year 1974 and 1995.

GAGE.--Water-stage recorder. Datum of gage is 170.92 ft above National Geodetic Vertical Datum of 1929 (Alaska Railroad Commission benchmark, prior to March 27, 1964 earthquake). Prior to November 2, 1950, non-recording gage at bridge 20 ft upstream at same datum. November 2, 1950 to April 30,1952, non-recording gage at current site and same datum. May 1, 1952 to September 30, 1973, July 19 to October 20, 1987, and October 1, 1991 to September 30, 1992, water-stage recorder at site 100 ft downstream at same datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 21,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
June 17	1815	*a27,000	*10.54	Aug. 14	0600	24,000	10.14

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3640	e1000	e850	e700	e500	e600	624	5510	11600	17900	9820	9050
2	2510	e1000	e850	e700	e500	e600	628	e4850	9940	17700	8580	8800
3	e2200	e1000	e800	e700	e500	e620	592	e4470	8240	17600	8980	7270
4	e2000	e1000	e750	e750	e500	e620	603	e4300	7290	17600	9960	6310
5	e1900	e950	e750	e800	e500	e620	597	e3960	8400	17400	11600	5930
6	e1900	e900	e750	e850	e500	e620	634	3900	10500	17200	13400	6070
7	e1900	e900	e750	e800	e500	e620	633	4170	10900	16300	13500	7980
8	e1800	e900	e800	e700	e500	e620	632	e5180	11600	15700	13600	7600
9	e1800	e1000	e800	e600	e550	657	653	e6290	11200	15800	13800	7520
10	e1800	e1000	e800	e550	e550	e650	669	e7220	11900	16100	15500	17800
11	e1800	e1000	e800	e500	e500	e650	693	e7840	15800	15300	17000	15900
12	e1800	e1000	e800	e500	e500	664	708	8400	17700	15100	18200	14800
13	e1800	e1000	e800	e500	e500	740	728	8440	19200	13400	18200	13900
14	e1800	e900	e800	e500	e500	743	736	8990	20800	12200	18900	11400
15	e1700	e900	e800	e500	e550	672	757	9690	21600	11200	18900	9810
16	e1700	e900	e800	e500	e550	638	761	e8810	21800	13200	16500	8600
17	e1700	e900	e850	e500	e550	641	765	e7870	24900	11600	14000	7670
18	e1600	e900	e850	e500	e550	618	758	e7470	22400	12700	14000	7210
19	e1600	e900	e850	e500	e550	639	751	7760	19700	15500	14100	6700
20	e1600	e900	e800	e500	e550	629	790	8560	18500	17100	12600	6380
21	e1600	e900	e800	e500	e550	560	847	10300	15800	15200	11400	6020
22	e1500	e900	e850	e550	e580	564	940	12000	16500	12800	9740	5770
23	e1500	e900	e850	e550	e580	647	1050	12000	17100	12300	9980	6430
24	e1500	e900	e800	e550	e580	660	1320	12200	17400	13000	11600	9140
25	e1400	e850	e700	e550	e600	656	e1690	14700	18000	12600	10700	9010
26	e1400	e850	e700	e500	e600	652	1940	14700	17900	11800	10100	7450
27	e1400	e850	e700	e500	e600	658	2280	15200	17700	12900	9610	6300
28	e1300	e850	e700	e500	e600	631	3110	16000	17100	14300	8290	5630
29	e1300	e850	e700	e500	---	617	4530	16600	17600	14700	7810	5010
30	e1200	e850	e700	e500	---	e625	e5200	14800	18100	12600	7880	4960
31	e1100	---	e700	e500	---	597	---	13000	---	11300	8100	---
TOTAL	53750	27650	24250	17850	15090	19728	36619	285180	477170	450100	386350	252420
MEAN	1734	922	782	576	539	636	1221	9199	15910	14520	12460	8414
MAX	3640	1000	850	850	600	743	5200	16600	24900	17900	18900	17800
MIN	1100	850	700	500	500	560	592	3900	7290	11200	7810	4960
AC-FT	106600	54840	48100	35410	29930	39130	72630	565700	946500	892800	766300	500700
CFSM	0.84	0.45	0.38	0.28	0.26	0.31	0.59	4.44	7.68	7.01	6.02	4.06
IN.	0.97	0.50	0.44	0.32	0.27	0.35	0.66	5.12	8.58	8.09	6.94	4.54

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2005, BY WATER YEAR (WY)#

MEAN	1996	1002	739	621	528	481	667	2946	10410	13180	9920	4899
MAX	3540	1793	1024	821	708	636	1221	9199	17250	18750	15730	8966
(WY)	2004	1972	1972	1961	2003	2005	2005	2005	1964	2000	1971	1951
MIN	1166	568	440	349	381	360	465	1007	5415	9206	4992	2123
(WY)	1992	1959	1969	1959	1971	1971	1972	1966	1965	1973	1969	1969

\# See Period of Record; partial years were used in monthly statistics.
a Peak discharge adjusted to exclude surge; peak stage not adjusted to exclude surge.
e Estimated

15284000 MATANUSKA RIVER AT PALMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1949 - 2005#	
ANNUAL TOTAL	1551020		2046157			
ANNUAL MEAN	4238		5606		3898	
HIGHEST ANNUAL MEAN					5606	2005
LOWEST ANNUAL MEAN					2562	1969
HIGHEST DAILY MEAN	31300	Jun 21	24900	Jun 17	40700	Aug 10 1971
LOWEST DAILY MEAN	433	Mar 29	b500	Jan 11	234	Apr 25 1956
ANNUAL SEVEN-DAY MINIMUM	443	Mar 28	500	Jan 11	304	Apr 20 1956
MAXIMUM PEAK FLOW	a45000	Jun 21	a27000	Jun 17	c82100	Aug 10 1971
MAXIMUM PEAK STAGE	a13.56	Jun 20	a10.54	Jun 17	d13.60	Aug 10 1971
ANNUAL RUNOFF (AC-FT)	3076000		4059000		2824000	
ANNUAL RUNOFF (CFSM)	2.05		2.71		1.88	
ANNUAL RUNOFF (INCHES)	27.87		36.77		25.59	
10 PERCENT EXCEEDS	12000		15900		11800	
50 PERCENT EXCEEDS	1110		1500		1200	
90 PERCENT EXCEEDS	482		550		480	

\# See Period of Record; partial years were used in monthly statistics.
a Peak discharge adjusted to exclude surge; peak stage not adjusted to exclude surge.
b Jan. 11-21, Jan. 26 - Feb. 8, and Feb. 11-14
c From rating curve extended above 34,000 ft^3/s on basis of velocity-area study, from break-out of natural reservoir on Granite Creek tributary.
d Site then in use

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'37", long 149°13'47", in SE$^1/_4$ NW$^1/_4$ sec. 26, T. 19 N., R. 1 E. (Anchorage C-6 NW quad), Matanuska-Susitna Borough, Hydrologic Unit 19020505, on right bank 100 ft downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi north of road junction, 1.8 mi downstream from unnamed tributary, and 8 mi northwest of Palmer. Prior to October 1, 1991 at site 60 ft upstream.

DRAINAGE AREA.--61.9 mi^2.

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962 because most measurements below 300 ft^3/s were made at site 3.4 miles downstream.

GAGE.--Water-stage recorder. Datum of gage is 916.6 ft above sea level (river-profile survey). Prior to August 16, 1948, non-recording gage and August 17, 1948 to May 15, 1972, water-stage recorder on left bank; water-stage recorder on right bank, May 16, 1972 to September 30, 1991, at site 60 ft upstream. Prior to October 1, 1974, at datum 4.00 ft higher; October 1, 1974 to September 30, 1991, at datum 2.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, and for discharges above 700 ft^3/s, which are poor. GOES satellite telemetry at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 21	1845	1270	5.30	Sept. 07	0130	1300	5.30
June 18	2215	2170	6.01	Sept. 10	0315	*2760	*6.36
Aug. 21	1515	1280	5.35	Sept. 24	0615	2130	5.98

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUE

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	95	59	e47	33	27	24	345	904	1110	402	575
2	492	88	58	46	e33	26	23	331	881	934	444	510
3	393	e84	54	e46	e33	26	23	319	847	898	393	451
4	350	e81	e50	e46	e33	26	23	305	872	848	373	447
5	309	e78	e47	e46	e33	26	23	296	998	834	380	458
6	275	e75	e46	e46	e33	26	24	302	1110	836	374	673
7	256	e70	e45	e45	e32	26	24	372	1120	831	337	1110
8	234	e74	e43	e45	e32	26	24	459	1060	764	315	909
9	213	e78	e42	e45	e32	26	25	566	937	789	308	1090
10	194	e81	e44	e45	e32	26	26	671	1070	846	315	2120
11	177	e84	e46	e44	32	26	27	766	1620	736	318	1460
12	165	e85	e48	e44	31	26	29	862	1460	686	322	1250
13	169	76	e50	e44	31	30	31	850	1370	593	324	1160
14	224	70	e51	e44	31	30	32	869	1570	516	313	941
15	183	69	e52	e43	30	28	34	915	1680	500	305	781
16	160	66	55	e43	30	27	35	814	1800	493	263	690
17	146	64	58	44	29	26	35	719	1800	449	236	614
18	136	63	54	42	29	26	34	696	1850	469	227	535
19	137	62	48	40	29	26	34	754	1700	447	252	476
20	129	61	47	41	29	25	42	917	1190	424	218	441
21	126	61	56	41	28	e24	46	1120	1010	399	739	428
22	114	59	54	40	28	e25	65	1110	974	373	575	493
23	122	59	54	42	28	25	93	1110	829	361	744	847
24	113	58	e51	43	28	24	109	1080	843	361	687	1720
25	107	57	e50	36	27	24	114	1090	877	332	616	1370
26	110	56	e49	36	27	24	136	1160	952	301	549	1150
27	111	60	e49	e34	27	24	172	1110	1010	282	489	931
28	105	64	e48	e34	27	24	243	992	965	281	428	745
29	101	60	e48	e35	---	24	312	893	1020	328	546	627
30	96	58	e48	36	---	23	337	873	1090	347	500	547
31	87	---	e47	35	---	24	---	878	---	473	563	---
TOTAL	6564	2096	1551	1298	847	796	2199	23544	35409	17841	12855	25549
MEAN	212	69.9	50.0	41.9	30.2	25.7	73.3	759	1180	576	415	852
MAX	1030	95	59	47	33	30	337	1160	1850	1110	744	2120
MIN	87	56	42	34	27	23	23	296	829	281	218	428
MED	160	67	49	43	30	26	34	850	1040	493	374	717
AC-FT	13020	4160	3080	2570	1680	1580	4360	46700	70230	35390	25500	50680
CFSM	3.42	1.13	0.81	0.68	0.49	0.41	1.18	12.3	19.1	9.30	6.70	13.8
IN.	3.94	1.26	0.93	0.78	0.51	0.48	1.32	14.15	21.28	10.72	7.73	15.35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2005, BY WATER YEAR (WY)#

MEAN	143	63.6	40.7	31.1	25.0	20.6	26.4	233	669	492	404	309
MAX	391	134	61.7	54.1	41.2	29.7	73.3	759	1215	1047	909	852
(WY)	1984	1980	1980	1961	1982	1991	2005	2005	1977	1963	1971	2005
MIN	51.3	24.5	17.4	17.5	14.0	10.0	10.0	52.9	276	193	165	82.2
(WY)	1969	1969	1955	1959	1952	1956	1955	1971	1996	1996	2004	1969

\# See Period of Record for remark on low-flow records; partial year was used in monthly statistics
e Estimated

15290000 LITTLE SUSITNA RIVER NEAR PALMER—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1948 - 2005#	
ANNUAL TOTAL	55882		130549			
ANNUAL MEAN	153		358		205	
HIGHEST ANNUAL MEAN					358	2005
LOWEST ANNUAL MEAN					95.8	1969
HIGHEST DAILY MEAN	1030	Oct 1	2120	Sep 10	5040	Aug 10 1971
LOWEST DAILY MEAN	a21	Mar 1	b23	Mar 30	c8.0	Apr 1 1956
ANNUAL SEVEN-DAY MINIMUM	21	Feb 27	23	Mar 30	8.0	Apr 1 1956
MAXIMUM PEAK FLOW			2760	Sep 10	d7840	Aug 10 1971
MAXIMUM PEAK STAGE			6.36	Sep 10	f13.00	Aug 10 1971
INSTANTANEOUS LOW FLOW					8.0	Apr 1 1956
ANNUAL RUNOFF (AC-FT)	110800		258900		148500	
ANNUAL RUNOFF (CFSM)	2.47		5.78		3.31	
ANNUAL RUNOFF (INCHES)	33.58		78.46		44.99	
10 PERCENT EXCEEDS	387		1000		566	
50 PERCENT EXCEEDS	95		113		70	
90 PERCENT EXCEEDS	23		27		21	

\# See Period of Record for remark on low-flow records; partial year was used in monthly statistics
a Mar. 1 to 4
b Mar. 30 and Apr. 2 to 5
c Apr. 1 to Apr. 20, 1956; and Mar. 11 and 12, 1957
d From rating curve extended above 4,600 ft^3/s on basis of slope-area measurement of peak flow
f Gage height about 13.0 ft, from floodmarks; 9.84 ft in gage well; 12.30 ft at top of needle peak in gage well; at prior datum (WY 1974-91) at sites then in use

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¼ sec. 20, T. 31 N., R. 2 W. (Talkeetna Mts. D-6 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020501, near left bank under Alaska Railroad bridge, 0.1 mi downstream from Gold Creek, 0.9 mi north of Gold Creek railroad station, and 2.0 mi. downstream from Indian River.

DRAINAGE AREA.--6,160 mi^2, approximately.

PERIOD OF RECORD.--August 1949 to September 1996 and May 2001 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 676.50 ft above sea level. Prior to June 6, 1957, non-recording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi upstream at same datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4790	e1800	e1700	e1500	e1300	e1100	e1100	19700	33600	31400	e21000	19400
2	e4700	e1800	e1700	e1500	e1300	e1100	e1100	22100	34000	32100	e20000	19300
3	e4600	e1700	e1700	e1500	e1300	e1100	e1100	20900	33100	31900	e21000	16700
4	e4500	e1600	e1600	e1500	e1300	e1100	e1200	19900	31100	32200	e20000	15600
5	e4400	e1500	e1600	e1500	e1300	e1100	e1200	18900	30400	33200	e21000	18200
6	e4300	e1400	e1600	e1500	e1300	e1100	e1200	17400	32300	31600	e23000	21800
7	e4200	e1300	e1600	e1500	e1300	e1100	e1300	16500	32700	30300	e22000	26300
8	e4100	e1400	e1600	e1500	e1300	e1100	e1300	18200	32600	29600	e21000	28200
9	e4000	e1500	e1600	e1500	e1300	e1100	e1300	21300	32200	29700	e20000	26000
10	e3900	e1600	e1600	e1500	e1300	e1100	e1300	23300	32800	27800	e22000	30500
11	e3800	e1700	e1600	e1500	e1300	e1100	e1400	24500	33900	27700	e24000	31400
12	e3600	e1900	e1600	e1500	e1200	e1100	e1400	26000	34100	27900	e26000	29600
13	e3500	e2000	e1600	e1500	e1200	e1100	e1500	27100	34300	28300	e27000	28400
14	e3500	e2000	e1600	e1500	e1200	e1100	e1500	29600	37200	26400	e28000	26600
15	e3400	e2000	e1600	e1500	e1200	e1000	e1600	32300	38700	25100	e27000	24100
16	e3300	e1900	e1600	e1400	e1200	e1000	e1600	34600	39400	25300	e26000	22300
17	e3200	e1900	e1600	e1400	e1200	e1000	e1700	33200	39200	27700	e25000	21400
18	e3000	e1900	e1600	e1400	e1200	e1000	e1700	29300	40700	27200	e24000	22000
19	e2900	e1900	e1600	e1400	e1200	e1000	e1800	27100	45200	26100	e23000	20500
20	e2800	e1800	e1600	e1400	e1200	e1000	e2000	26700	40700	26800	18000	18400
21	e2700	e1800	e1600	e1400	e1200	e1000	e2100	29100	39300	27300	17600	17200
22	e2600	e1800	e1600	e1400	e1200	e1000	e2300	30900	35600	24800	20200	17000
23	e2600	e1800	e1600	e1400	e1200	e1000	e2400	31400	32700	21600	21800	19500
24	e2500	e1800	e1600	e1400	e1200	e1000	e2600	31900	30800	22600	20700	25500
25	e2500	e1700	e1600	e1400	e1200	e1000	e2700	31400	30600	23400	25100	27900
26	e2400	e1700	e1600	e1400	e1200	e1000	e3000	31800	31500	22300	24200	28800
27	e2300	e1700	e1600	e1400	e1200	e1000	3220	33000	30600	21200	21600	23600
28	e2200	e1700	e1600	e1400	e1200	e1000	4210	32700	30000	21100	18000	21100
29	e2100	e1700	e1600	e1300	---	e1000	e9500	31200	30200	22100	17600	19600
30	e2000	e1700	e1600	e1300	---	e1000	e18000	30900	30200	22100	17300	18800
31	e1900	---	e1600	e1300	---	e1000	---	32300	---	22800	18100	---
TOTAL	102290	52000	49900	44600	34700	32400	78330	835200	1029700	829600	681200	685700
MEAN	3300	1733	1610	1439	1239	1045	2611	26940	34320	26760	21970	22860
MAX	4790	2000	1700	1500	1300	1100	18000	34600	45200	33200	28000	31400
MIN	1900	1300	1600	1300	1200	1000	1100	16500	30000	21100	17300	15600
AC-FT	202900	103100	98980	88460	68830	64270	155400	1657000	2042000	1646000	1351000	1360000
CFSM	0.54	0.28	0.26	0.23	0.20	0.17	0.42	4.37	5.57	4.34	3.57	3.71
IN.	0.62	0.31	0.30	0.27	0.21	0.20	0.47	5.04	6.22	5.01	4.11	4.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2005, BY WATER YEAR (WY)#

MEAN	6255	2690	1885	1586	1410	1285	1692	13810	26900	23980	21340	13740
MAX	12680	5394	3264	2452	2243	1900	4250	26940	50580	34400	37870	26510
(WY)	1987	2003	1958	1961	2003	1968	1990	2005	1964	1963	1981	1990
MIN	3124	1215	866	724	723	713	745	3745	15500	16010	8879	5093
(WY)	1970	1970	1970	1969	1969	1964	1964	1971	1969	1996	1969	1969

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1949 - 2005#	
ANNUAL TOTAL	3260740		4455620			
ANNUAL MEAN	8909		12210		9753	
HIGHEST ANNUAL MEAN					13020	1990
LOWEST ANNUAL MEAN					5597	1969
HIGHEST DAILY MEAN	40600	May 9	45200	Jun 19	85900	Jun 7 1964
LOWEST DAILY MEAN	a1000	Mar 22	b1000	Mar 15	c600	Feb 16 1950
ANNUAL SEVEN-DAY MINIMUM	1000	Mar 22	1000	Mar 15	614	Feb 16 1950
MAXIMUM PEAK FLOW			50200	Jun 19	90700	Jun 7 1964
MAXIMUM PEAK STAGE			12.95	Jun 19	16.58	Jun 7 1964
MAXIMUM PEAK STAGE					d24.48	May 10 1954
ANNUAL RUNOFF (AC-FT)	6468000		8838000		7066000	
ANNUAL RUNOFF (CFSM)	1.45		1.98		1.58	
ANNUAL RUNOFF (INCHES)	19.69		26.91		21.51	
10 PERCENT EXCEEDS	24300		31400		25600	
50 PERCENT EXCEEDS	2800		2600		3400	
90 PERCENT EXCEEDS	1200		1200		1100	

\# See Period of Record; partial years used in monthly statistics and break in record
a Mar. 22-31
b Mar. 15-31
c Feb. 16-20, 1950
d Maximum observed, ice jam
e Estimated

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic Bench-Mark Station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE$^1/_4$ sec. 16, T. 26 N., R. 4 W. (Talkeetna B-1 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020503, on left bank 1.7 mi downstream from Chunilna Creek, 3.5 mi northeast of Talkeetna, and about 5 mi upstream from mouth.

DRAINAGE AREA.--1,996 mi^2.

REVISED RECORDS.-- WRD AK 2000-1: Drainage Area.

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above sea level, from topographic map. From October 1, 1992 to September 30, 1994 at site 0.5 mi upstream at different datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4770	1310	1530	e700	e600	e550	e700	9960	17100	13100	8380	8380
2	3400	1110	1130	e700	e600	e550	e800	10200	16300	13100	8090	7530
3	3020	e1000	912	e700	e600	e600	e800	10000	14600	12900	8320	6990
4	3030	e900	e800	e700	e600	e600	e800	9510	14400	12300	8100	7550
5	3010	e800	e700	e700	e600	e600	e800	9400	15400	12000	8460	8190
6	2980	e700	e600	e700	e600	e600	e800	8610	17700	11700	8630	9070
7	3030	e600	e600	e700	e600	e600	e800	8320	17800	11800	8280	13500
8	3120	e500	e650	e700	e600	e650	e800	9840	17300	11500	8000	11700
9	3000	e600	e650	e700	e600	e650	e850	11100	15200	11100	7910	10600
10	2910	e800	e650	e700	e600	e650	e850	11900	16000	11200	8450	22000
11	2850	e1000	e650	e700	e600	e650	e900	12800	19100	11400	9090	18300
12	2690	e1600	e700	e700	e600	e650	e900	13800	19200	11300	9710	15300
13	2640	e1500	e700	e700	e600	e700	e900	14600	18400	10500	10000	14800
14	3960	1420	e800	e700	e600	e700	e900	15900	21000	9840	9990	12300
15	4560	1160	e800	e700	e600	e700	e900	15900	22500	9410	9830	11000
16	3760	e1100	e800	e700	e600	e700	e950	15900	22300	10800	9300	10400
17	3180	e1150	e800	e700	e550	e700	e950	15300	21500	11900	8580	9940
18	2720	e1200	e800	e700	e550	e700	e1000	13700	21300	12000	8390	9760
19	2770	e1300	e800	e700	e550	e700	e1000	14600	21500	13100	8320	8600
20	2680	e1400	e750	e700	e550	e700	e1100	15500	17600	12700	7750	7980
21	2600	e1500	e750	e650	e550	e700	1300	17600	14700	11500	8150	7680
22	2320	e1550	e750	e650	e550	e700	1390	18400	13700	10200	7950	8200
23	2140	e1550	e750	e650	e550	e700	2130	18300	12700	9770	7710	10300
24	2140	e1500	e750	e650	e550	e700	3100	18500	11800	9680	10000	14900
25	1860	e1500	e750	e650	e550	e700	3410	18700	12000	9210	10400	13900
26	1980	e1400	e750	e650	e550	e700	3570	18300	12500	8700	10000	12500
27	2090	e1400	e750	e650	e550	e700	4210	18200	12400	8390	8660	10800
28	1970	e1350	e750	e650	e550	e700	5260	17800	12400	9070	7490	9710
29	1860	1600	e750	e650	---	e700	7870	15800	12500	9990	8890	8760
30	1720	2250	e750	e650	---	e700	9260	15700	13300	9500	8810	8130
31	1380	---	e750	e650	---	e700	---	17400	---	9570	7970	---
TOTAL	86140	36750	24072	21150	16200	20650	59000	441540	494200	339230	269610	328770
MEAN	2779	1225	777	682	579	666	1967	14240	16470	10940	8697	10960
MAX	4770	2250	1530	700	600	700	9260	18700	22500	13100	10400	22000
MIN	1380	500	600	650	550	550	700	8320	11800	8390	7490	6990
AC-FT	170900	72890	47750	41950	32130	40960	117000	875800	980200	672900	534800	652100
CFSM	1.39	0.61	0.39	0.34	0.29	0.33	0.99	7.14	8.25	5.48	4.36	5.49
IN.	1.61	0.68	0.45	0.39	0.30	0.38	1.10	8.23	9.21	6.32	5.02	6.13
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)#												
MEAN	2854	1202	833	675	572	515	705	5080	11010	10310	9081	5893
MAX	10000	2400	1122	996	990	1058	1967	14240	19040	15410	16770	12090
(WY)	1987	2003	1987	1990	1990	1990	2005	2005	1971	1981	1971	1993
MIN	1424	672	538	457	401	285	396	2145	5207	7080	3787	2070
(WY)	1997	1992	1996	1996	1969	1982	1986	1971	1969	1969	1969	1969

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

15292700 TALKEETNA RIVER NEAR TALKEETNA—Continued
(Hydrologic Bench-Mark Station)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005#	
ANNUAL TOTAL	1309322		2137312			
ANNUAL MEAN	3577		5856		4074	
HIGHEST ANNUAL MEAN					5856	2005
LOWEST ANNUAL MEAN					2249	1969
HIGHEST DAILY MEAN	10900	Jun 8	22500	Jun 15	63200	Oct 11 1986
LOWEST DAILY MEAN	a460	Mar 24	500	Nov 8	b260	Feb 27 1982
ANNUAL SEVEN-DAY MINIMUM	460	Mar 24	550	Feb 17	260	Feb 27 1982
MAXIMUM PEAK FLOW			24300	Sep 10	75700	Oct 11 1986
MAXIMUM PEAK STAGE			10.51	Sep 10	17.38	Oct 11 1986
ANNUAL RUNOFF (AC-FT)	2597000		4239000		2952000	
ANNUAL RUNOFF (CFSM)	1.79		2.93		2.04	
ANNUAL RUNOFF (INCHES)	24.40		39.83		27.73	
10 PERCENT EXCEEDS	8840		15200		10600	
50 PERCENT EXCEEDS	1860		2250		1400	
90 PERCENT EXCEEDS	500		600		500	

\# See Period of Record; partial years used in monthly statistics
a Mar. 24-31
b From Feb. 27 to Mar. 20, 1982

15292800 MONTANA CREEK NEAR MONTANA

LOCATION (REVISED).--Lat 62°06'19", long 150°03'27", in NW¼ NW¼ sec. 8, T. 23 N., R. 4 W. (Talkeetna A-1 quad), Hydrologic Unit 19020505, on left bank, east side of Parks Highway, between Parks Highway bridge and pedestrian bridge, 2.1 miles north of Montana, Alaska.

DRAINAGE AREA.--164 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1963 to September 1972 and 1987, annual maximum; May to September 2005.

GAGE.--Water stage recorder and crest-stage gage. Elevation of gage is 230 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.--Maximum discharge observed during the period, May to September 2005, 2,990 ft^3/s, September 24, gage height 7.76 ft, but may have been higher during estimated period; minimum discharge during period, 123 ft^3/s, August 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e1080	1290	438	392	457
2	---	---	---	---	---	---	---	e1100	1240	424	337	384
3	---	---	---	---	---	---	---	e1050	1110	398	393	372
4	---	---	---	---	---	---	---	e980	1090	360	355	611
5	---	---	---	---	---	---	---	e938	1160	324	328	666
6	---	---	---	---	---	---	---	e867	1230	331	287	815
7	---	---	---	---	---	---	---	e1010	1140	342	255	1390
8	---	---	---	---	---	---	---	e1160	1020	300	237	967
9	---	---	---	---	---	---	---	e1310	885	273	216	895
10	---	---	---	---	---	---	---	e1400	889	263	196	1850
11	---	---	---	---	---	---	---	e1510	1010	237	183	1310
12	---	---	---	---	---	---	---	e1620	963	223	169	1140
13	---	---	---	---	---	---	---	e1600	865	296	154	1180
14	---	---	---	---	---	---	---	e1620	892	280	144	889
15	---	---	---	---	---	---	---	e1640	917	227	140	759
16	---	---	---	---	---	---	---	e1530	1130	213	135	743
17	---	---	---	---	---	---	---	e1430	893	218	132	717
18	---	---	---	---	---	---	---	e1460	841	233	165	711
19	---	---	---	---	---	---	‡86	e1510	931	237	160	604
20	---	---	---	---	---	---	---	e1630	740	257	135	555
21	---	---	---	---	---	---	---	e2080	613	205	329	504
22	---	---	---	---	---	---	---	e2000	543	176	466	718
23	---	---	---	---	---	---	---	e1970	508	164	418	1030
24	---	---	---	---	---	---	---	e2200	458	152	602	1820
25	---	---	---	---	---	---	---	2260	433	145	770	1450
26	---	---	---	---	---	---	---	2020	443	154	687	1080
27	---	---	---	---	---	---	---	1790	446	178	541	882
28	---	---	---	---	---	---	---	1600	415	219	431	776
29	---	---	---	---	---	---	---	1370	381	193	568	682
30	---	---	---	---	---	---	---	1330	379	200	538	602
31	---	---	---	---	---	---	---	1330	---	481	440	---
TOTAL	---	---	---	---	---	---	---	46395	24855	8141	10303	26559
MEAN	---	---	---	---	---	---	---	1497	828	263	332	885
MAX	---	---	---	---	---	---	---	2260	1290	481	770	1850
MIN	---	---	---	---	---	---	---	867	379	145	132	372
AC-FT	---	---	---	---	---	---	---	92020	49300	16150	20440	52680
CFSM	---	---	---	---	---	---	---	9.13	5.05	1.60	2.03	5.40
IN.	---	---	---	---	---	---	---	10.52	5.64	1.85	2.34	6.02

‡ Result of discharge measurement
e Estimated

15292800 MONTANA CREEK NEAR MONTANA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-73, 1982-83, and June to September 2005.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Medium code	Sample type	Stream width, feet (00004)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Sampler type, code (84164)	Type of sample related QA data, code (99111)	Specif. conductance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
JUN													
03...	1540	9	9	78.0	6.02	1110	20	3054	--	24	7.1	12.5	9.5
JUL													
07...	1400	9	9	83.0	4.84	344	10	3044	--	50	7.2	21.0	16.0
SEP													
23...	1350	9	9	69.0	5.97	1110	20	3054	1	36	7.1	13.3	9.0

Date	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water unfltrd recoverable, mg/L (00916)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, unfltrd recoverable, mg/L (00927)	Magnesium, water, fltrd, mg/L (00925)	Sodium, water, fltrd, mg/L (00930)	Potassium, water, fltrd, mg/L (00935)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)
JUN													
03...	757	10.9	96	11	--	3.85	--	.385	1.11	.40	11	9	9.2
JUL													
07...	747	9.8	101	19	--	6.55	--	.608	1.84	.51	17	14	15
SEP													
23...	751	10.6	93	14	4.43	4.70	.57	.513	1.38	.66	14	11	12

Date	Sulfate water, fltrd, mg/L (00945)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue water, fltrd, sum of constituents mg/L (70301)	Nitrite water, fltrd, mg/L as N (00613)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ammonia water, fltrd, mg/L as N (00608)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Phosphorus, water, unfltrd mg/L (00665)	Phosphorus, water, fltrd, mg/L (00666)
JUN													
03...	2.6	.60	<.1	7.57	--	22	<.002	.091	<.010	.11	<.10	.019	<.004
JUL													
07...	4.4	1.36	<.1	8.51	35	32	E.001	.048	<.010	E.08	<.10	.007	.004
SEP													
23...	2.6	1.26	<.1	9.01	46	28	E.001	.148	E.005	.27	.28	.025	.008

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Aluminum, water, unfltrd recoverable, ug/L (01105)	Aluminum, water, fltrd, ug/L (01106)	Antimony, water, unfltrd ug/L (01097)	Antimony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, unfltrd recoverable, ug/L (01007)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, unfltrd recoverable, ug/L (01012)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, unfltrd recoverable, ug/L (01022)	Boron, water, fltrd, ug/L (01020)	Cadmium water, unfltrd ug/L (01027)
JUN													
03...	<.006	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	<.006	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
23...	<.006	287	71	<.2	<.20	E.2	10	7	<.06	<.06	E4	<8	<.04

Date	Cadmium water, fltrd, ug/L (01025)	Chromium, water, unfltrd recoverable, ug/L (01034)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, unfltrd recoverable, ug/L (01037)	Cobalt water, fltrd, ug/L (01035)	Copper, water, unfltrd recoverable, ug/L (01042)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recoverable, ug/L (01045)	Iron, water, fltrd, ug/L (01046)	Lead, water, unfltrd recoverable, ug/L (01051)	Lead, water, fltrd, ug/L (01049)	Lithium water unfltrd recoverable, ug/L (01132)	Lithium water, fltrd, ug/L (01130)
JUN													
03...	--	--	--	--	--	--	--	--	39	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	61	--	--	--	--
SEP													
23...	<.04	.26	.11	.214	.063	N	2.0	630	200	N	.37	.8	.8

15292800 MONTANA CREEK NEAR MONTANA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Manganese, water, unfltrd recoverable, ug/L (01055)	Manganese, water, fltrd, ug/L (01056)	Mercury water, unfltrd recoverable, ug/L (71900)	Mercury water, fltrd, ug/L (71890)	Molybdenum, water, unfltrd recoverable, ug/L (01062)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, unfltrd recoverable, ug/L (01067)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, unfltrd ug/L (01147)	Selenium, water, fltrd, ug/L (01145)	Silver, water, unfltrd recoverable, ug/L (01077)	Silver, water, fltrd, ug/L (01075)	Strontium, water, unfltrd recoverable, ug/L (01082)
JUN													
03...	--	2.5	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	4.4	--	--	--	--	--	--	--	--	--	--	--
SEP													
23...	18	5.9	E.01	<.01	.4	.4	.47	.41	E.05	<.4	<.16	<.2	20.6

Date	Strontium, water, fltrd, ug/L (01080)	Thallium, water, unfltrd ug/L (01059)	Thallium, water, fltrd, ug/L (01057)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, unfltrd recoverable, ug/L (01092)	Zinc, water, fltrd, ug/L (01090)	Uranium natural water unfltrd ug/L (28011)	Uranium natural water, fltrd, ug/L (22703)	Organic carbon, water, fltrd, mg/L (00681)	Total carbon, suspnd sedimnt total, mg/L (00694)	Particulate nitrogen, susp, water, mg/L (49570)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
JUN													
03...	--	--	--	--	--	--	--	--	2.2	--	--	25	75
JUL													
07...	--	--	--	--	--	--	--	--	1.7	--	--	2	1.9
SEP													
23...	20.6	<.2	<.04	.4	E2	3.4	.087	.06	5.3	.8	.07	31	93

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'51", long 149°53'04", in NW¼ SE¼ sec. 31, T.20 N., R.3 W. (Anchorage D-8 quad), Matanuska-Susitna Borough, Hydrologic Unit 19020505, on the right bank, 0.9 mi downstream from unnamed tributary, 5.5 mi northeast of Willow, and 6.7 mi upstream from Deception Creek.

DRAINAGE AREA.--166 mi^2.

PERIOD OF RECORD.--June 1978 to September 1993, and May 2001 to current year.

REVISED RECORDS.--WRD-AK-80-1: 1979 (M).

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above sea level from topographic map. Prior to April 2, 1981 at site 0.2 miles upstream at different datum.

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

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge 2,300 ft^3/s and maximums (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Oct. 1	0000	*3630	*5.65	Aug. 21	1700	2450	4.89
May 25	0045	2770	5.11	Sept. 10	0545	2920	5.21
June 11	1215	2420	4.87	Sept. 24	0845	3230	5.41
June 18	2245	2680	5.05				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2500	e170	201	e128	e99	e84	63	1120	1760	1210	621	1250
2	e1600	e155	195	e126	e99	e83	63	1140	1660	1070	663	1070
3	e1100	e148	163	e125	e98	e83	65	1100	1580	1070	573	943
4	1040	e143	118	e123	e98	e82	63	1030	1510	948	532	969
5	878	e140	e105	e122	e97	e82	62	988	1590	897	537	976
6	774	e140	e101	e120	e97	e81	64	917	1650	930	572	1280
7	730	e141	e96	e119	e96	e81	66	1070	1660	1020	494	1620
8	670	e143	e93	e117	e96	e80	64	1220	1580	937	457	1220
9	610	e145	e90	e116	e95	e79	66	1370	1380	863	431	1220
10	564	e150	e89	e114	e94	e79	66	1470	1540	888	411	2450
11	521	e152	e90	e113	e94	e78	68	1570	2260	826	395	1690
12	481	e163	e90	e111	e93	e78	70	1690	2020	778	376	1520
13	488	e178	e93	e110	e93	e77	71	1670	1810	719	364	1400
14	824	e183	e97	e110	e92	e77	73	1690	1940	646	351	1140
15	674	e180	e100	e109	e92	e76	76	1710	1980	597	375	1020
16	542	e176	e105	e109	e91	e76	76	1610	2100	580	339	975
17	479	172	e110	e108	e91	e75	78	1510	2030	554	319	916
18	e461	177	e115	e108	e90	e74	78	1550	2160	621	327	822
19	436	174	e125	e107	e89	e74	78	1610	2110	581	369	741
20	410	170	e135	e107	e89	e73	111	1730	1520	551	325	702
21	394	168	e140	e106	e88	e72	139	2190	1290	502	1170	669
22	329	163	e140	e105	e88	e72	263	2120	1230	468	1090	817
23	373	159	e139	e104	e87	e71	430	2090	1150	461	1070	1050
24	345	e157	e138	e104	e87	e71	531	2320	1090	598	1140	2660
25	282	e154	e137	e103	e86	e70	554	2390	1080	485	1190	2190
26	343	152	e136	e103	e86	e70	632	2220	1150	447	1040	1860
27	343	162	e135	e102	e85	e69	740	2120	1190	418	943	1430
28	315	231	e134	e102	e84	e68	861	1940	1130	398	804	1220
29	298	194	e132	e101	---	e67	1050	1740	1130	423	941	1060
30	282	178	e130	e101	---	65	1110	1710	1210	482	860	973
31	207	---	e129	e100	---	66	---	1700	---	753	1100	---
TOTAL	19293	4918	3801	3433	2574	2333	7731	50305	47490	21721	20179	37853
MEAN	622	164	123	111	91.9	75.3	258	1623	1583	701	651	1262
MAX	2500	231	201	128	99	84	1110	2390	2260	1210	1190	2660
MIN	207	140	89	100	84	65	62	917	1080	398	319	669
AC-FT	38270	9750	7540	6810	5110	4630	15330	99780	94200	43080	40030	75080
CFSM	3.75	0.99	0.74	0.67	0.55	0.45	1.55	9.78	9.54	4.22	3.92	7.60
IN.	4.32	1.10	0.85	0.77	0.58	0.52	1.73	11.27	10.64	4.87	4.52	8.48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2005, BY WATER YEAR (WY)#

MEAN	428	163	108	86.0	76.4	63.3	99.7	680	1044	667	597	660
MAX	1197	364	152	112	134	97.5	258	1623	1583	1287	1286	1262
(WY)	1987	1980	1980	1980	2003	1990	2005	2005	2005	1980	1981	2005
MIN	177	81.5	57.3	57.1	52.9	33.7	45.8	328	484	228	210	259
(WY)	1985	1985	1981	1981	1981	1982	2002	2003	1981	2004	2004	1978

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

15294005 WILLOW CREEK NEAR WILLOW—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1978 - 2005#	
ANNUAL TOTAL	104475		221631			
ANNUAL MEAN	285		607		397	
HIGHEST ANNUAL MEAN					607	2005
LOWEST ANNUAL MEAN					268	2004
HIGHEST DAILY MEAN	2500	Oct 1	2660	Sep 24	8670	Oct 11 1986
LOWEST DAILY MEAN	a46	Mar 30	62	Apr 5	30	Apr 6 2003
ANNUAL SEVEN-DAY MINIMUM	47	Mar 25	64	Mar 31	32	Apr 1 2003
MAXIMUM PEAK FLOW			3630	Oct 1	b12000	Oct 11 1986
MAXIMUM PEAK STAGE			5.65	Oct 1	9.01	Oct 11 1986
MAXIMUM PEAK STAGE					c9.40	Dec 18 1986
ANNUAL RUNOFF (AC-FT)	207200		439600		287800	
ANNUAL RUNOFF (CFSM)	1.72		3.66		2.39	
ANNUAL RUNOFF (INCHES)	23.41		49.67		32.51	
10 PERCENT EXCEEDS	769		1610		1000	
50 PERCENT EXCEEDS	158		339		198	
90 PERCENT EXCEEDS	55		78		62	

\# See Period of Record; partial years were used in monthly statistics and break in record
a Mar.30, 31
b From rating curve extended above 3,900 ft^3/s on basis of slope-area measurement of peak flow
c Backwater from ice

15294640 LAKE FORK CRESCENT RIVER NEAR TUXEDNI BAY

LOCATION.--Lat 60°21'29", long 152°49'07", in $SE^1/_4$ $SE^1/_4$ $SW^1/_4$ sec. 7, T.3 N., R.20 W. (Kenai B-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020602, on the right bank, 1.2 mi downstream from Crescent Lake outlet.

DRAINAGE AREA.--125 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to September 2005 (seasonal).

GAGE.--Water-stage recorder. Elevation of gage is 550 ft above sea level from topographic map.

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

EXTREMES FOR CURRENT PERIOD: June 2005 to September 2005, maximum discharge observed during period, 3,520 ft^3/s, June 19, gage-height, 14.85 ft, but may have been higher during estimated periods; minimum discharge not determined, occurs during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	e2400	2800	1700	997
2	---	---	---	---	---	---	---	---	e2200	2750	1590	944
3	---	---	---	---	---	---	---	---	e2000	2700	1540	908
4	---	---	---	---	---	---	---	---	e2200	2610	1480	934
5	---	---	---	---	---	---	---	---	e2200	2530	1420	938
6	---	---	---	---	---	---	---	---	e2400	2480	1390	996
7	---	---	---	---	---	---	---	---	e2400	2470	1400	1030
8	---	---	---	---	---	---	---	---	e2600	2440	1410	1010
9	---	---	---	---	---	---	---	---	e2600	2440	1430	1060
10	---	---	---	---	---	---	---	---	e2400	2480	1470	1180
11	---	---	---	---	---	---	---	---	e2400	2470	1490	1160
12	---	---	---	---	---	---	---	---	e2200	2400	1520	1180
13	---	---	---	---	---	---	---	---	e2200	2390	1550	1190
14	---	---	---	---	---	---	---	---	e2200	2270	1580	1120
15	---	---	---	---	---	---	---	---	e2200	2140	1590	1130
16	---	---	---	---	---	---	---	---	e2200	2090	1540	1430
17	---	---	---	---	---	---	---	---	e2600	2060	1490	1500
18	---	---	---	---	---	---	---	---	e3200	2000	1520	1380
19	---	---	---	---	---	---	---	---	e3500	1960	1480	1230
20	---	---	---	---	---	---	---	---	e3400	1890	1450	1100
21	---	---	---	---	---	---	---	---	e3200	1850	1410	979
22	---	---	---	---	---	---	---	---	e3000	1790	1350	909
23	---	---	---	---	---	---	---	---	e2800	1700	1370	905
24	---	---	---	---	---	---	---	---	e2800	1640	1390	939
25	---	---	---	---	---	---	---	---	e2600	1880	1340	896
26	---	---	---	---	---	---	---	---	e2600	2150	1260	831
27	---	---	---	---	---	---	---	---	e2500	2130	1180	809
28	---	---	---	---	---	---	---	---	2560	2020	1130	819
29	---	---	---	---	---	---	---	---	2650	1910	1110	780
30	---	---	---	---	---	---	---	---	2760	1820	1060	732
31	---	---	---	---	---	---	---	---	---	1770	1040	---
TOTAL	---	---	---	---	---	---	---	---	76970	68030	43680	31016
MEAN	---	---	---	---	---	---	---	---	2566	2195	1409	1034
MAX	---	---	---	---	---	---	---	---	3500	2800	1700	1500
MIN	---	---	---	---	---	---	---	---	2000	1640	1040	732
AC-FT	---	---	---	---	---	---	---	---	152700	134900	86640	61520
CFSM	---	---	---	---	---	---	---	---	20.6	17.6	11.3	8.30
IN.	---	---	---	---	---	---	---	---	22.99	20.32	13.05	9.26

e Estimated

15294640 LAKE FORK CRESCENT RIVER NEAR TUXEDNI BAY—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2004 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Medium code	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Specif. conduct- ance, wat unf uS/cm 25 degC (00095)	pH, water, unfltrd field, std units (00400)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)
JUN													
19...	1653	9	160	30.0	14.84	3520	10	30	6.6	8.6	15.0	741	12.3
19...	1655	9	160	80.0	14.84	3520	10	30	6.7	8.4	15.0	741	12.3
19...	1656	9	160	130.0	14.84	3520	10	30	6.7	8.4	15.0	741	12.3
27...	1639	9	157	30.0	13.55	2470	10	28	6.4	11.8	17.8	742	11.8
27...	1641	9	157	80.0	13.55	2470	10	28	6.6	12.1	17.8	742	11.8
27...	1642	9	157	130.0	13.55	2470	10	28	6.7	11.9	17.8	742	11.8
AUG													
02...	1426	9	157	30.0	12.74	1580	10	17	6.2	10.9	13.9	745	10.9
02...	1428	9	157	80.0	12.74	1580	10	17	6.3	10.9	13.9	745	10.8
02...	1430	9	157	130.0	12.74	1580	10	17	6.3	10.8	13.9	745	10.8
SEP													
07...	1333	9	144	24.0	11.79	1040	10	22	5.9	11.2	13.5	746	10.1
07...	1335	9	144	72.0	11.79	1040	10	22	6.0	10.9	13.5	746	10.1
07...	1336	9	144	120.0	11.79	1040	10	22	6.0	10.9	13.5	746	10.1

Date	Dissolved oxygen, percent of saturation (00301)	Turbidity, IR LED light, det ang 90 deg, FNU (63680)
JUN		
19...	108	7.2
19...	108	8.1
19...	108	8.0
27...	112	5.0
27...	112	5.1
27...	112	4.8
AUG		
02...	101	11
02...	100	11
02...	100	12
SEP		
07...	94	8.1
07...	94	8.0
07...	93	8.0

15295700 TERROR RIVER AT MOUTH NEAR KODIAK

LOCATION.--Lat 57°41'41", long 153°09'42", in SW¼ NE¼ sec. 5, T. 29 S., R. 24 W. (Kodiak C-4 quad), Kodiak Island Borough, Hydrologic Unit 19020701, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank, 0.9 mi upstream from mouth, 7.5 mi downstream from Terror Lake Dam, and 29 mi southwest of Kodiak.

DRAINAGE AREA.--30.7 mi^2, 45.7 mi^2 prior to partial diversion of Terror Lake to hydropower plant in February 1985.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1964 to October 1968, October 1981 to current year.

REVISED RECORDS.--WDR AK-84-1: 1982-83. WDR AK-96-1: 1995(M).

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above sea level, from topographic map. Prior to October 1, 1981 at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Flow from 15 mi^2 at headwaters regulated by Terror Lake Dam and some flow diverted from Terror Lake to Kizhuyak River. Regulation for construction began in November 1982. Began filling reservoir April 29, 1984. Diversion to hydropower plant began February 12, 1985. GOES satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	129	117	78	87	97	82	301	247	188	194	174
2	229	141	104	78	81	95	85	316	233	199	270	171
3	226	147	87	117	78	91	91	322	221	196	692	165
4	214	137	84	133	78	97	101	277	246	191	356	166
5	237	137	83	104	78	103	110	614	257	192	227	167
6	190	137	82	92	88	139	110	1630	227	211	203	168
7	178	137	77	83	86	201	109	798	302	214	199	162
8	166	130	72	77	81	333	109	444	269	209	200	160
9	165	273	75	70	78	211	113	346	296	205	186	163
10	157	238	71	67	68	273	115	329	382	209	185	162
11	284	184	79	66	70	190	116	333	606	205	180	161
12	318	312	70	79	66	166	118	784	988	237	176	160
13	268	326	65	86	84	165	119	659	456	253	176	158
14	233	216	64	85	122	152	119	698	303	230	176	156
15	212	179	155	91	93	137	117	476	256	214	173	159
16	201	147	202	84	94	123	120	341	256	211	173	159
17	189	123	134	78	94	115	121	279	271	196	176	162
18	180	140	162	75	122	111	126	288	467	200	182	166
19	178	208	121	74	107	107	142	282	255	212	180	159
20	171	166	97	78	119	106	172	326	204	203	178	157
21	166	137	113	213	116	101	273	409	188	198	189	155
22	163	149	284	248	124	97	340	346	200	197	181	156
23	170	186	212	172	120	95	246	308	191	204	179	157
24	166	166	136	142	130	93	250	313	177	232	176	159
25	165	136	116	207	123	92	243	291	203	283	172	156
26	171	124	117	163	116	91	277	267	198	270	167	166
27	165	175	106	134	106	88	309	282	203	251	160	209
28	162	161	81	119	100	85	303	291	308	233	174	210
29	157	133	73	113	---	83	395	297	241	204	179	193
30	147	118	75	115	---	81	396	396	216	199	177	174
31	149	---	80	104	---	81	---	323	---	199	173	---
TOTAL	5948	5092	3394	3425	2709	3999	5327	13366	8867	6645	6409	4990
MEAN	192	170	109	110	96.8	129	178	431	296	214	207	166
MAX	318	326	284	248	130	333	396	1630	988	283	692	210
MIN	147	118	64	66	66	81	82	267	177	188	160	155
AC-FT	11800	10100	6730	6790	5370	7930	10570	26510	17590	13180	12710	9900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2005, BY WATER YEAR (WY)#

MEAN	296	205	151	130	116	102	173	335	481	352	273	274
MAX	722	631	313	267	205	152	247	457	872	1070	662	707
(WY)	2004	2003	1986	2003	2003	1998	1993	2004	1987	1987	1988	1995
MIN	192	93.8	78.4	81.8	72.6	60.9	115	231	296	214	183	166
(WY)	1998	1995	1988	1989	1989	1986	1986	2003	2005	2005	1994	2005

See Period of Record; break in record, and Remarks

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1986 - 2005#	
ANNUAL TOTAL	78159		70171			
ANNUAL MEAN	214		192		241	
HIGHEST ANNUAL MEAN					369	1987
LOWEST ANNUAL MEAN					192	2005
HIGHEST DAILY MEAN	1310	May 24	1630	May 6	4610	Sep 20 1995
LOWEST DAILY MEAN	64	Dec 14	64	Dec 14	a26	Dec 11 1996
ANNUAL SEVEN-DAY MINIMUM	71	Dec 8	71	Dec 8	39	Nov 19 1985
MAXIMUM PEAK FLOW			1750	May 6	b10000	Sep 19 1995
MAXIMUM PEAK STAGE			3.79	May 6	7.67	Sep 19 1995
INSTANTANEOUS LOW FLOW			53	Jan 11	a9.8	Dec 11 1996
ANNUAL RUNOFF (AC-FT)	155000		139200		174700	
10 PERCENT EXCEEDS	408		308		458	
50 PERCENT EXCEEDS	172		166		184	
90 PERCENT EXCEEDS	86		83		86	

PRIOR TO CONSTRUCTION OF TERROR LAKE DAM

SUMMARY STATISTICS, WATER YEARS 1965 - 1983 #

ANNUAL MEAN	293		
HIGHEST ANNUAL MEAN	421		1983
LOWEST ANNUAL MEAN	230		1967
HIGHEST DAILY MEAN	2600	Oct 2	1965
LOWEST DAILY MEAN	c19	Feb 23	1967
ANNUAL SEVEN-DAY MINIMUM	20	Feb 23	1967
INSTANTANEOUS PEAK FLOW	3820	Sep 26	1966
INSTANTANEOUS PEAK STAGE	d6.48	Sep 26	1966
INSTANTANEOUS PEAK STAGE	f7.54	Mar 28	1964
ANNUAL RUNOFF (AC-FT)	212200		
ANNUAL RUNOFF (CFSM)	9.54		
ANNUAL RUNOFF (IN)	129.66		
10 PERCENT EXCEEDS	774		
50 PERCENT EXCEEDS	157		
90 PERCENT EXCEEDS	39		

\# See Period of Record; break in record, and Remarks
a Occurred while dam release valve was closed for repair
b From rating curve extended above 960 ft^3/s on basis of slope-area measurement of peak flow
c Feb. 23 and Mar. 1, 1967
d Site and datum then in use
f Site and datum then in use; from tidal wave

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968, 1982 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: December 1981 to current year.

INSTRUMENTATION.--Water-temperature recorder since December 10, 1981. Electronic water temperature recorder set for 1-hour recording interval.

REMARKS.--Records represent water temperature at sensor within 0.5°C. Probe was faulty from September 6 to 28. Temperature at the sensor was compared with the average for the river by cross section on June 8 with a variation of 1.6°C found in the cross secton at the sensor location. A gravel bar running parallel to the channel formed in the 2003 water year and has remained in place at the sensor location. The channel opposite the sensor is shallow with lower velocities, and has backwater which results in an increase in water temperature. Most of the discharge is in the right channel where the probe is located. No variation was found between median stream temperature and sensor temperature.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 15.0°C, July 15, 2003; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 13.0°C, July 8; minimum, 0.0°C on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUN							
08...	1042	89.0	87.0	1.86	261	5.3	13.4
08...	1043	89.0	72.0	1.86	261	5.3	13.4
08...	1044	89.0	57.0	1.86	261	5.3	13.4
08...	1045	89.0	42.0	1.86	261	5.2	13.4
08...	1046	89.0	27.0	1.86	261	6.3	13.4
08...	1047	89.0	12.0	1.86	261	6.7	13.4
08...	1048	89.0	2.00	1.86	261	6.8	13.4

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.0	6.0	7.0	4.0	2.5	2.5	3.0	2.0	2.5	1.0	0.0	0.5
2	7.5	6.0	7.0	4.0	2.0	3.0	2.0	1.0	2.0	1.5	1.0	1.5
3	7.5	6.5	7.0	3.5	1.5	3.0	1.0	0.5	1.0	1.5	1.0	1.5
4	7.0	6.5	6.5	1.5	1.5	1.5	1.0	0.5	0.5	1.5	1.0	1.5
5	7.5	6.5	7.0	3.0	1.5	2.0	1.0	0.5	1.0	1.0	0.0	0.5
6	7.0	5.5	6.5	3.0	2.0	2.5	2.0	0.5	1.5	0.5	0.0	0.0
7	7.0	6.0	6.5	3.5	2.5	3.0	1.5	1.0	1.0	0.5	0.0	0.0
8	7.0	5.0	6.0	3.0	2.0	2.5	1.5	1.0	1.5	0.5	0.0	0.0
9	7.0	6.0	6.5	3.0	2.5	3.0	1.5	0.5	1.0	0.5	0.0	0.0
10	7.0	5.5	6.0	3.0	2.5	2.5	1.5	1.0	1.0	0.5	0.0	0.5
11	7.0	6.0	6.5	3.5	2.0	3.0	1.5	1.0	1.0	0.5	0.0	0.0
12	6.5	5.5	6.0	4.0	3.5	3.5	1.5	1.0	1.0	0.5	0.0	0.0
13	7.0	5.5	6.5	4.0	3.5	3.5	1.5	0.5	1.0	0.5	0.0	0.5
14	6.5	5.5	6.0	3.5	3.0	3.5	1.0	0.5	0.5	0.5	0.0	0.5
15	6.0	4.5	5.5	3.5	2.0	2.5	1.5	1.0	1.0	1.0	0.0	0.5
16	7.0	5.5	6.0	2.0	1.0	1.5	1.5	1.0	1.5	1.5	1.0	1.5
17	6.5	5.0	5.5	1.5	0.5	1.0	2.0	1.0	1.5	1.5	0.5	1.0
18	6.5	4.5	5.0	2.0	1.5	2.0	2.0	1.5	2.0	1.0	0.5	0.5
19	7.0	5.5	6.5	2.5	2.0	2.5	1.5	0.0	1.0	1.0	0.5	1.0
20	6.0	4.5	5.0	3.0	2.0	2.5	0.5	0.0	0.0	1.5	1.0	1.0
21	6.0	5.0	5.5	3.0	1.5	2.0	1.0	0.5	0.5	1.5	1.0	1.0
22	6.0	5.0	5.5	3.5	2.5	3.0	2.0	1.0	1.5	1.5	1.0	1.5
23	6.5	5.0	6.0	3.5	2.5	3.0	1.5	0.0	0.5	2.0	1.5	1.5
24	5.5	4.5	5.0	3.0	2.0	2.5	0.0	0.0	0.0	2.0	1.0	1.5
25	5.0	4.0	4.5	2.5	1.5	2.0	0.0	0.0	0.0	2.5	1.5	2.0
26	6.0	5.0	5.5	3.5	2.0	2.5	0.5	0.0	0.0	2.0	1.0	1.5
27	6.0	5.0	5.5	4.5	3.0	4.0	0.5	0.0	0.5	1.0	0.0	0.5
28	5.5	4.5	5.0	3.0	2.0	2.0	0.0	0.0	0.0	1.5	0.0	1.0
29	4.5	3.5	4.5	3.5	2.0	3.0	0.5	0.0	0.0	2.0	1.0	1.5
30	4.0	3.0	3.5	2.5	2.0	2.0	0.5	0.0	0.5	2.0	0.5	1.5
31	4.0	3.5	4.0	---	---	---	0.5	0.5	0.5	1.0	0.0	0.5
MONTH	7.5	3.0	5.8	4.5	0.5	2.6	3.0	0.0	0.9	2.5	0.0	0.9

15295700 TERROR RIVER AT MOUTH NEAR KODIAK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	0.5	0.0	0.0	1.5	0.0	0.5	7.0	2.0	4.0
2	0.0	0.0	0.0	1.0	0.0	0.5	2.5	0.5	1.5	5.0	3.0	4.0
3	0.5	0.0	0.0	2.0	1.0	1.5	3.0	0.0	1.0	6.0	2.0	4.0
4	0.5	0.0	0.0	2.5	1.5	1.5	2.0	0.0	1.0	6.5	2.5	4.0
5	0.5	0.0	0.0	3.0	1.0	2.0	0.5	0.0	0.0	4.5	2.5	3.5
6	0.5	0.0	0.5	1.5	1.0	1.5	4.0	0.5	2.0	3.5	2.5	3.0
7	0.5	0.0	0.5	3.0	1.0	2.0	4.0	1.0	2.0	5.5	2.5	4.0
8	0.5	0.0	0.5	2.5	1.0	1.5	4.0	0.5	2.0	7.0	2.0	4.0
9	0.5	0.0	0.0	3.0	1.0	2.0	3.0	1.5	2.0	8.0	2.5	4.5
10	0.0	0.0	0.0	2.0	1.0	1.5	3.5	1.5	2.0	6.5	3.0	4.5
11	0.5	0.0	0.0	2.5	1.0	2.0	5.0	1.0	2.5	7.5	2.5	4.5
12	0.5	0.0	0.0	3.5	1.5	2.5	4.5	0.5	2.0	4.5	3.0	4.0
13	0.5	0.0	0.0	3.5	2.0	2.5	4.5	0.5	2.0	5.0	3.0	3.5
14	0.5	0.0	0.0	3.5	1.0	2.0	4.0	1.0	2.5	6.0	3.0	4.0
15	0.5	0.0	0.0	3.0	1.0	2.0	5.0	1.5	3.0	6.5	3.0	4.0
16	1.5	0.0	0.5	3.5	1.0	2.0	5.0	1.0	2.5	6.5	2.5	4.5
17	2.0	0.5	1.0	3.5	1.0	2.0	5.0	0.5	2.5	6.5	3.5	4.5
18	2.0	0.5	1.0	3.5	1.0	2.0	6.0	2.0	3.5	6.5	4.0	5.0
19	1.5	0.0	0.5	3.5	0.5	1.5	5.5	2.0	3.5	8.0	2.5	5.0
20	2.0	1.0	1.5	3.5	0.5	1.5	7.5	2.5	4.0	6.0	4.0	5.0
21	2.0	0.5	1.0	2.5	0.0	1.0	4.5	2.0	3.0	6.0	3.5	4.5
22	1.5	0.5	1.0	3.0	0.5	1.0	4.0	1.5	3.0	6.5	3.5	5.0
23	2.0	1.0	1.0	2.5	0.0	1.5	4.5	2.5	3.5	7.0	4.0	5.5
24	1.5	1.0	1.0	3.5	1.5	2.0	6.5	2.5	4.0	8.0	4.0	5.5
25	2.0	1.0	1.5	3.0	2.0	2.5	6.5	1.5	4.0	7.0	3.5	5.0
26	2.0	0.5	1.0	3.0	1.0	2.0	6.5	2.5	4.0	6.0	4.0	5.0
27	1.0	0.0	0.5	2.5	0.5	1.0	6.0	2.0	4.0	6.5	4.0	5.0
28	0.5	0.0	0.0	2.5	0.5	1.5	7.5	2.5	4.5	6.5	4.0	5.0
29	---	---	---	3.5	0.5	1.5	7.5	2.5	4.0	6.5	4.0	5.0
30	---	---	---	0.5	0.0	0.5	6.5	2.0	4.0	6.5	4.0	5.0
31	---	---	---	0.5	0.0	0.0	---	---	---	7.5	3.0	5.0
MONTH	2.0	0.0	0.5	3.5	0.0	1.6	7.5	0.0	2.7	8.0	2.0	4.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.5	3.5	5.5	9.0	7.0	8.0	10.0	8.5	9.5	9.0	6.5	7.5
2	8.0	4.5	6.0	10.0	7.0	8.5	10.5	8.5	9.5	9.0	6.0	7.0
3	9.0	3.5	6.0	10.5	7.5	9.0	10.5	9.5	10.0	9.5	7.0	8.0
4	9.5	4.0	6.5	11.0	7.0	9.0	12.0	9.0	10.0	9.0	7.5	8.0
5	9.5	4.0	6.5	11.5	7.0	9.5	12.0	9.0	10.5	8.5	7.0	7.5
6	6.5	4.0	5.5	12.0	7.5	9.5	12.5	9.0	10.5	---	---	---
7	6.5	5.0	5.5	12.5	7.5	9.5	12.5	9.0	10.5	---	---	---
8	6.5	4.0	5.0	13.0	7.5	10.0	12.5	8.5	10.5	---	---	---
9	6.0	4.5	5.5	12.5	7.5	10.0	11.5	9.5	10.5	---	---	---
10	6.5	4.5	5.5	12.5	8.0	10.0	12.0	9.0	10.5	---	---	---
11	5.5	4.5	5.0	12.5	7.5	9.5	12.0	8.5	10.0	---	---	---
12	6.0	5.0	5.5	9.5	8.0	9.0	12.5	8.0	10.0	---	---	---
13	8.5	4.5	6.0	9.5	7.5	8.5	11.5	9.0	10.0	---	---	---
14	9.0	4.5	6.5	11.0	8.0	9.0	10.0	8.5	9.5	---	---	---
15	10.0	5.0	7.0	10.5	7.5	9.0	10.0	9.0	9.5	---	---	---
16	10.5	5.0	7.5	9.5	8.0	9.0	9.5	9.0	9.0	---	---	---
17	7.5	5.0	6.5	12.0	8.0	9.5	11.0	9.0	9.5	---	---	---
18	8.5	5.5	6.5	12.0	8.0	9.5	10.0	9.0	9.5	---	---	---
19	8.5	5.0	6.0	11.0	7.5	9.0	11.5	8.0	9.5	---	---	---
20	10.0	5.0	7.0	12.0	8.0	9.5	10.5	8.0	9.0	---	---	---
21	8.0	5.0	6.5	10.0	8.0	9.0	11.0	8.5	9.5	---	---	---
22	7.5	6.0	6.5	10.5	8.0	9.0	10.5	7.5	8.5	---	---	---
23	8.0	6.0	7.0	10.0	8.5	9.0	11.0	8.5	9.5	---	---	---
24	9.5	6.5	7.5	10.0	8.0	9.0	9.0	8.0	8.5	---	---	---
25	8.5	7.0	7.5	10.5	8.0	9.0	8.5	7.5	8.0	---	---	---
26	12.0	7.0	9.0	9.5	8.0	8.5	9.5	7.5	8.5	---	---	---
27	8.5	6.5	7.5	9.0	8.0	8.5	10.0	7.0	8.0	---	---	---
28	8.5	7.0	7.5	10.5	8.0	9.0	10.0	8.0	8.5	---	---	---
29	12.0	6.5	9.0	11.0	8.5	9.5	9.0	8.0	8.5	8.0	7.0	7.5
30	12.0	7.0	9.0	12.0	8.5	10.0	9.5	7.5	8.5	8.5	6.0	7.0
31	---	---	---	11.0	8.5	9.5	9.5	7.0	8.0	---	---	---
MONTH	12.0	3.5	6.6	13.0	7.0	9.2	12.5	7.0	9.4	---	---	---

15297580 ALEC RIVER NEAR CHIGNIK

LOCATION.--Lat 56°27'14", long 158°54'58", in NW¼ SE¼ SE¼ sec. 17, T. 43 S., R. 61 W. (Chignik B-3 quad), Hydrologic Unit 19020702, on left bank, 0.7 mi upstream from mouth, and 15.4 mi northwest of the village of Chignik Lake.

DRAINAGE AREA.-- 122.71 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- May 2004 to September 2005 (discontinued.)

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 32 ft above sea level, from topographic map.

REMARKS.--Records are fair. Rain gage at station. GOES satellite telemetry at station.

COOPERATION.--Data collected in cooperation with the U.S. Army Corps of Engineers.

EXTREMES FOR WATER YEAR 2004.--Maximum discharge for period May 19 to September 30, 2004, 4,640 ft^3/s, June 4, gage height, 12.71 ft; minimum discharge not determined, occurs during the winter.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	881	2900	548	411
2	---	---	---	---	---	---	---	---	992	2290	535	441
3	---	---	---	---	---	---	---	---	2510	1970	541	428
4	---	---	---	---	---	---	---	---	3740	1590	535	448
5	---	---	---	---	---	---	---	---	2040	1330	554	400
6	---	---	---	---	---	---	---	---	1600	1170	541	372
7	---	---	---	---	---	---	---	---	1570	1050	489	367
8	---	---	---	---	---	---	---	---	1270	944	475	419
9	---	---	---	---	---	---	---	---	1070	913	465	372
10	---	---	---	---	---	---	---	---	987	905	456	385
11	---	---	---	---	---	---	---	---	958	832	455	367
12	---	---	---	---	---	---	---	---	934	766	440	369
13	---	---	---	---	---	---	---	---	1010	787	453	352
14	---	---	---	---	---	---	---	---	903	862	467	334
15	---	---	---	---	---	---	---	---	883	776	444	350
16	---	---	---	---	---	---	---	---	948	749	416	371
17	---	---	---	---	---	---	---	---	884	716	411	336
18	---	---	---	---	---	---	---	---	1350	647	413	450
19	---	---	---	---	---	---	---	‡974	1460	671	390	492
20	---	---	---	---	---	---	---	1030	1190	698	388	569
21	---	---	---	---	---	---	---	1210	1250	691	371	535
22	---	---	---	---	---	---	---	1650	1240	692	642	516
23	---	---	---	---	---	---	---	2190	1190	611	1490	500
24	---	---	---	---	---	---	---	1920	1110	584	866	454
25	---	---	---	---	---	---	---	1570	993	1040	639	481
26	---	---	---	---	---	---	---	1280	882	1080	575	701
27	---	---	---	---	---	---	---	1280	908	855	604	622
28	---	---	---	---	---	---	---	1170	897	740	528	653
29	---	---	---	---	---	---	---	1140	1290	662	487	652
30	---	---	---	---	---	---	---	1030	1740	622	446	627
31	---	---	---	---	---	---	---	936	---	576	426	---
TOTAL	---	---	---	---	---	---	---	---	38680	30719	16490	13774
MEAN	---	---	---	---	---	---	---	---	1289	991	532	459
MAX	---	---	---	---	---	---	---	---	3740	2900	1490	701
MIN	---	---	---	---	---	---	---	---	881	576	371	334
AC-FT	---	---	---	---	---	---	---	---	76720	60930	32710	27320
CFSM	---	---	---	---	---	---	---	---	10.5	8.08	4.33	3.74
IN.	---	---	---	---	---	---	---	---	11.73	9.31	5.00	4.18

‡ Result of discharge measurement

15297580 ALEC RIVER NEAR CHIGNIK—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	542	361	467	415	e670	478	e340	532	1150	749	541	1130
2	667	387	430	400	e660	491	e330	512	1120	698	518	963
3	616	418	387	393	e640	583	e320	557	1170	673	516	903
4	559	365	382	377	e620	635	e310	560	1070	655	501	1290
5	602	349	402	352	e670	855	e310	966	1040	607	464	1280
6	655	340	442	341	e640	708	e320	1860	1290	584	436	1310
7	731	347	381	e335	579	802	342	1270	1460	564	416	1230
8	649	326	363	e330	532	912	376	1010	1150	567	405	1080
9	611	418	360	e325	e480	925	375	924	1220	538	387	1070
10	593	418	410	e315	e460	813	343	911	1230	522	382	918
11	792	368	439	e320	e500	736	333	958	1260	508	398	842
12	892	362	372	e500	e560	695	322	1050	1410	571	375	785
13	798	365	365	e400	e650	639	331	1210	1150	571	356	705
14	729	363	355	328	693	602	329	1100	1020	506	351	658
15	668	381	559	1450	532	609	326	998	955	492	352	689
16	636	344	439	1710	671	575	321	928	909	506	404	640
17	608	345	403	1190	656	546	311	872	957	722	663	628
18	578	389	393	962	976	549	310	783	1140	639	709	796
19	565	479	373	847	735	528	308	714	941	549	600	985
20	511	420	364	767	774	513	300	677	817	518	623	992
21	495	413	434	744	688	483	372	634	807	497	600	828
22	491	429	834	695	691	462	416	588	1010	471	591	803
23	492	440	e660	625	636	448	364	564	884	451	617	757
24	470	413	e640	634	609	448	344	553	858	1050	743	699
25	451	414	e600	993	584	439	350	573	978	1030	637	644
26	454	406	e580	741	553	423	362	658	853	799	591	705
27	432	417	e560	677	522	420	428	1370	865	668	550	1700
28	417	401	e520	659	499	410	549	1180	851	748	600	1410
29	429	398	e600	905	---	399	557	1450	873	764	708	1570
30	401	388	e500	956	---	e380	538	1660	865	657	1470	1550
31	386	---	408	e750	---	e350	---	1310	---	588	1650	---
TOTAL	17920	11664	14422	20436	17480	17856	10837	28932	31303	19462	18154	29560
MEAN	578	389	465	659	624	576	361	933	1043	628	586	985
MAX	892	479	834	1710	976	925	557	1860	1460	1050	1650	1700
MIN	386	326	355	315	460	350	300	512	807	451	351	628
AC-FT	35540	23140	28610	40530	34670	35420	21500	57390	62090	38600	36010	58630
CFSM	4.71	3.17	3.79	5.37	5.09	4.69	2.94	7.61	8.50	5.12	4.77	8.03
IN.	5.43	3.54	4.37	6.20	5.30	5.41	3.29	8.77	9.49	5.90	5.50	8.96

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)#

MEAN	578	389	465	659	624	576	361	933	1166	809	559	722
MAX	578	389	465	659	624	576	361	933	1289	991	586	985
(WY)	2005	2005	2005	2005	2005	2005	2005	2005	2004	2004	2005	2005
MIN	578	389	465	659	624	576	361	933	1043	628	532	459
(WY)	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005	2004	2004

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005#	
ANNUAL TOTAL	238026			
ANNUAL MEAN	652		652	
HIGHEST ANNUAL MEAN			652	2005
LOWEST ANNUAL MEAN			652	2005
HIGHEST DAILY MEAN	1860	May 6	3740	Jun 4 2004
LOWEST DAILY MEAN	300	Apr 20	300	Apr 20 2005
ANNUAL SEVEN-DAY MINIMUM	315	Apr 14	315	Apr 14 2005
MAXIMUM PEAK FLOW	2260	May 6	4640	Jun 4 2004
MAXIMUM PEAK STAGE	11.34	May 6	12.71	Jun 4 2004
INSTANTANEOUS LOW FLOW	a293	Apr 20	a293	Apr 20 2005
ANNUAL RUNOFF (AC-FT)	472100		472400	
ANNUAL RUNOFF (CFSM)	5.31		5.31	
ANNUAL RUNOFF (INCHES)	72.16		72.21	
10 PERCENT EXCEEDS	1070		1070	
50 PERCENT EXCEEDS	580		580	
90 PERCENT EXCEEDS	352		352	

\# See Period of Record; partial year was used in monthly statistics.
a Apr. 20-21
e Estimated

15297580 ALEC RIVER NEAR CHIGNIK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2004 to September 2005 (discontinued).

PERIOD OF DAILY RECORD.--May 2004 to September 2005 (discontinued).

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

REMARKS.--Probe installed on May 20, 2004. 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 September 15, 2004 and May 4, 2005. Variations found in the cross-sections were at or less than 0.5°C. No variation more than 0.3°C was found between mean stream temperature and sensor temperature for both dates.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum, 15.5°C, August 12, 2004, August 10-11, 2005; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR WATER YEAR 2004.--
WATER TEMPERATURE: Maximum, 15.5°C, August 12; minimum recorded 4.5°C, May 20, 23-31, June 4-5.

EXTREMES FOR 2005 WATER YEAR.--
WATER TEMPERATURE: Maximum, 15.5°C, August 10-11; minimum 0.0°C on many days during the winter.

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

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
SEP							
15...	1650	160	15.0	9.17	365	8.5	8.8
15...	1652	160	45.0	9.17	365	8.5	8.8
15...	1654	160	80.0	9.17	365	8.5	8.8
15...	1656	160	115	9.17	365	8.6	8.8
15...	1658	160	145	9.17	365	9.0	8.8

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
MAY							
04...	1549	180	18.0	9.34	536	7.2	9.5
04...	1550	180	54.0	9.34	536	7.1	9.5
04...	1551	180	90.0	9.34	536	7.1	9.5
04...	1552	180	126	9.34	536	7.1	9.5
04...	1553	180	162	9.34	536	7.4	9.5

15297580 ALEC RIVER NEAR CHIGNIK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.5	5.0	7.0	9.5	7.0	8.0	12.5	9.0	10.5	11.0	9.0	10.5
2	8.0	5.5	6.0	8.5	6.5	7.5	14.0	9.0	11.5	11.5	9.5	10.5
3	6.0	5.0	5.5	8.5	6.0	7.5	14.0	9.5	11.0	11.0	9.5	10.0
4	7.5	4.5	5.5	10.5	7.0	8.0	12.5	9.0	10.5	10.5	9.0	10.0
5	9.0	4.5	6.5	10.0	7.5	8.5	12.0	9.0	10.0	10.5	8.5	10.0
6	9.0	5.5	7.5	11.5	7.0	9.0	12.5	8.5	10.0	10.5	9.0	10.0
7	9.5	5.0	7.0	12.5	7.5	10.0	13.5	9.0	11.5	11.0	9.5	10.0
8	9.0	5.0	6.5	13.5	7.5	10.5	14.5	10.5	13.0	10.0	7.5	9.0
9	8.5	5.0	6.5	14.5	8.0	11.5	14.0	10.0	12.0	10.5	8.5	9.5
10	8.5	5.0	7.0	15.0	8.0	12.0	14.5	10.5	12.5	10.5	8.5	9.5
11	8.0	5.0	6.5	15.0	8.5	12.0	14.0	11.5	13.0	10.0	9.0	9.5
12	8.0	5.0	6.5	15.0	9.5	11.0	15.5	11.5	13.5	10.5	8.0	9.5
13	8.5	5.5	7.0	10.5	8.5	9.5	14.0	11.5	12.5	9.5	6.5	8.5
14	8.5	5.5	7.0	10.5	8.0	9.0	15.0	10.5	12.5	9.0	7.5	8.5
15	8.0	6.0	7.0	12.5	8.0	10.0	14.5	10.5	12.5	9.0	7.5	8.0
16	10.0	5.5	7.5	13.0	9.0	11.0	13.5	10.0	12.0	8.5	6.5	7.5
17	9.5	6.0	7.5	12.0	8.5	9.5	14.5	11.5	13.0	8.0	7.0	7.5
18	9.0	6.5	7.5	10.5	7.5	9.0	14.0	11.5	12.5	9.5	8.0	8.5
19	10.0	5.5	7.5	13.5	9.0	11.0	12.5	10.0	11.0	11.0	8.5	9.5
20	11.5	6.5	8.5	12.0	9.0	10.5	12.5	9.5	11.0	11.0	8.0	9.0
21	10.5	6.5	7.5	10.5	8.5	9.5	12.0	11.0	11.5	8.5	6.5	7.5
22	10.5	6.5	8.5	13.5	8.5	10.5	12.0	11.0	11.5	8.5	7.5	8.0
23	10.5	6.0	8.0	13.5	9.0	11.5	11.5	10.0	10.5	8.0	6.0	7.0
24	8.5	6.5	7.0	13.0	9.5	11.0	11.5	9.0	10.0	7.5	6.0	6.5
25	8.0	6.0	7.0	11.5	9.5	10.5	11.0	9.5	10.0	7.5	6.5	7.0
26	9.5	6.0	7.5	11.0	8.5	9.5	11.5	9.0	10.5	6.5	5.0	6.0
27	9.5	7.0	8.5	10.5	8.0	9.0	11.5	9.0	10.5	7.5	5.5	6.5
28	9.5	6.5	8.0	10.5	8.0	9.0	11.0	8.5	9.5	8.0	6.5	7.0
29	9.5	7.0	8.0	10.5	8.5	9.5	11.0	8.5	9.5	8.5	8.0	8.0
30	8.0	6.0	7.0	11.0	8.5	10.0	10.5	8.5	9.5	8.5	6.0	7.0
31	---	---	---	11.0	9.0	10.0	11.0	9.5	10.5	---	---	---
MONTH	11.5	4.5	7.2	15.0	6.0	9.8	15.5	8.5	11.3	11.5	5.0	8.5

15297580 ALEC RIVER NEAR CHIGNIK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.5	5.0	5.5	2.0	1.0	1.5	4.0	2.0	3.0	4.0	3.5	3.5
2	6.5	5.5	6.0	4.5	2.0	3.0	2.0	1.5	2.0	3.5	2.5	3.0
3	6.5	6.0	6.5	4.0	0.5	1.5	2.0	2.0	2.0	3.5	2.5	3.5
4	7.5	6.0	6.5	2.0	0.5	1.0	2.5	2.0	2.0	2.5	1.5	2.0
5	7.5	6.0	7.0	2.5	1.5	2.0	3.0	1.5	2.0	2.0	0.5	1.0
6	6.5	5.5	6.0	2.5	1.5	2.0	3.0	2.0	2.5	2.5	0.5	1.5
7	7.0	6.0	6.5	2.5	1.0	1.5	2.5	1.5	2.0	0.5	0.0	0.5
8	8.0	6.0	7.0	2.0	0.5	1.0	2.0	1.0	1.5	0.0	0.0	0.0
9	8.0	5.5	6.5	4.5	1.0	3.5	1.0	0.0	0.5	0.0	0.0	0.0
10	7.0	5.0	6.0	4.0	3.0	3.0	2.0	0.0	1.0	0.0	0.0	0.0
11	7.0	6.0	6.5	3.5	2.5	3.0	2.0	0.5	1.0	0.0	0.0	0.0
12	7.0	5.5	6.5	4.0	3.5	3.5	2.0	1.0	1.5	1.5	0.0	0.5
13	7.0	6.0	6.5	4.0	3.5	3.5	1.5	0.5	1.0	3.0	1.5	2.5
14	7.0	5.0	6.0	5.5	3.5	4.5	2.5	0.5	1.0	3.0	2.0	2.5
15	7.0	5.5	6.0	4.5	1.5	2.5	2.5	2.0	2.0	3.0	2.5	3.0
16	6.5	5.5	6.0	2.0	1.5	1.5	3.0	2.5	2.5	3.0	2.5	2.5
17	7.5	6.0	7.0	3.0	1.5	2.0	3.0	2.5	2.5	3.0	2.5	2.5
18	9.0	7.0	8.0	3.5	3.0	3.0	3.0	2.0	2.5	2.5	1.5	2.0
19	9.0	6.0	7.0	4.0	3.0	3.5	2.0	0.5	1.5	3.0	2.0	2.5
20	6.0	3.5	5.0	3.5	2.5	3.0	0.5	0.0	0.5	3.0	2.5	3.0
21	5.5	4.0	5.0	4.5	2.5	3.5	4.0	0.5	2.0	3.5	3.0	3.0
22	5.5	5.0	5.5	5.0	4.0	4.5	4.0	2.0	3.5	3.0	2.5	3.0
23	6.0	4.5	5.5	5.0	3.0	3.5	2.0	0.0	0.5	2.5	1.5	2.0
24	4.5	3.0	4.0	3.5	2.0	2.5	0.0	0.0	0.0	3.5	2.0	2.5
25	5.5	3.5	4.5	3.0	2.5	3.0	0.0	0.0	0.0	3.5	2.5	3.0
26	6.0	5.0	5.5	5.0	3.0	4.0	0.5	0.0	0.0	3.5	3.0	3.0
27	5.5	4.5	5.0	5.0	3.0	4.5	1.5	0.5	1.0	3.5	3.0	3.0
28	4.5	3.0	3.5	3.5	2.0	2.5	0.5	0.0	0.5	3.5	3.0	3.0
29	4.0	2.5	3.5	4.0	3.0	4.0	0.5	0.0	0.0	3.5	3.0	3.5
30	2.5	1.5	2.0	4.0	2.5	3.0	3.0	0.5	2.0	3.5	3.0	3.5
31	2.5	1.0	2.0	---	---	---	3.5	3.0	3.5	3.5	0.0	1.0
MONTH	9.0	1.0	5.6	5.5	0.5	2.8	4.0	0.0	1.5	4.0	0.0	2.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	3.5	1.0	2.0	0.0	0.0	0.0	8.0	5.0	6.0
2	0.0	0.0	0.0	3.5	2.5	3.0	0.0	0.0	0.0	7.5	4.5	6.0
3	0.0	0.0	0.0	3.5	2.0	3.0	0.5	0.0	0.0	8.5	5.5	7.0
4	0.0	0.0	0.0	3.5	2.5	3.0	1.0	0.0	0.5	8.0	5.0	7.0
5	0.5	0.0	0.0	4.5	3.0	3.5	0.5	0.0	0.0	7.0	5.5	6.5
6	3.5	0.5	2.0	3.5	2.0	3.0	4.5	0.5	2.0	8.5	4.0	5.5
7	3.5	2.0	2.5	4.0	3.0	3.5	5.5	2.5	4.0	8.0	4.5	6.0
8	2.5	1.5	2.0	4.5	3.5	4.0	5.5	4.0	4.5	10.0	4.5	7.0
9	2.0	0.0	0.5	4.0	3.0	3.5	4.5	1.5	3.5	9.5	5.0	7.0
10	0.0	0.0	0.0	5.0	2.5	3.5	1.5	0.5	1.0	8.0	5.0	6.5
11	0.0	0.0	0.0	5.0	2.0	3.5	4.0	0.5	2.0	10.5	5.0	7.5
12	0.5	0.0	0.0	4.5	2.5	3.5	6.5	2.0	3.5	10.0	5.0	7.0
13	3.0	0.5	2.5	4.5	3.0	4.0	7.0	3.5	5.5	8.5	4.5	6.5
14	3.0	2.0	2.5	4.5	3.0	4.0	7.0	3.5	5.0	8.5	5.0	6.5
15	2.5	1.0	2.0	4.0	3.0	3.5	8.0	4.0	6.0	8.5	5.0	7.0
16	3.0	2.5	2.5	4.5	1.5	3.0	8.0	4.0	6.0	9.0	5.5	7.0
17	4.5	2.5	3.5	4.5	3.0	4.0	6.5	4.0	5.0	8.5	4.5	6.0
18	4.0	2.0	2.5	6.0	3.0	4.5	4.5	3.5	4.0	7.5	4.0	6.0
19	4.0	2.0	3.0	5.5	3.0	4.5	6.0	2.5	4.0	7.5	5.0	6.0
20	4.0	3.0	3.5	5.5	3.0	4.0	5.5	3.0	4.5	6.0	4.5	5.0
21	3.5	1.5	2.5	3.0	0.5	1.0	6.5	4.0	5.0	5.0	4.0	4.5
22	3.5	2.5	3.0	4.0	0.0	2.0	7.0	3.5	5.5	7.5	4.5	6.0
23	3.0	2.0	3.0	3.5	1.0	2.5	9.0	5.0	7.0	9.5	5.0	7.5
24	3.5	2.0	2.5	4.0	2.5	3.5	9.5	5.0	7.0	11.5	6.0	9.0
25	3.5	2.5	3.0	3.0	1.0	2.0	8.0	6.0	7.0	11.0	6.5	8.5
26	3.5	2.0	2.5	4.5	0.5	2.5	6.5	5.5	6.0	8.0	5.5	6.5
27	3.0	1.5	2.5	4.5	2.5	3.5	8.0	5.0	6.5	8.0	5.0	6.5
28	3.5	2.0	2.5	3.5	1.5	3.0	7.0	5.5	6.5	8.5	5.0	6.5
29	---	---	---	3.5	0.5	2.0	9.0	4.5	6.5	7.5	5.0	6.0
30	---	---	---	0.5	0.0	0.0	9.0	6.0	8.0	9.5	5.0	6.5
31	---	---	---	0.0	0.0	0.0	---	---	---	8.5	5.0	7.0
MONTH	4.5	0.0	1.8	6.0	0.0	3.0	9.5	0.0	4.2	11.5	4.0	6.6

15297580 ALEC RIVER NEAR CHIGNIK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9.5	5.0	7.0	11.0	7.5	9.0	11.5	9.0	10.5	10.0	8.0	9.0
2	9.0	5.5	7.0	13.5	8.0	10.5	12.5	8.5	10.5	10.0	8.0	9.0
3	10.5	5.0	7.5	13.5	9.0	10.5	13.0	9.5	11.0	9.5	8.5	9.0
4	12.5	5.0	8.5	10.5	8.0	9.0	11.5	9.0	10.0	9.5	8.5	9.0
5	11.5	5.0	8.5	11.0	8.5	9.5	14.0	9.5	11.5	9.5	8.0	9.0
6	10.5	6.5	8.0	10.5	8.0	9.5	13.5	10.0	12.0	9.5	8.0	8.5
7	8.5	5.5	6.5	13.5	8.5	10.5	15.0	11.0	13.5	10.0	8.0	9.0
8	9.0	5.5	7.5	14.0	9.0	12.0	14.5	11.0	13.0	10.0	8.0	8.5
9	9.0	5.5	7.0	13.5	9.0	11.0	15.0	11.0	13.0	10.0	9.0	9.5
10	9.5	6.0	7.5	13.5	9.0	11.0	15.5	11.0	13.0	10.0	8.0	9.5
11	9.5	6.5	8.0	13.5	8.5	10.5	15.5	10.5	13.0	11.0	9.0	10.0
12	9.0	6.0	7.0	11.5	7.5	9.5	15.0	11.5	13.5	11.0	8.0	9.0
13	11.0	5.5	8.0	12.5	8.5	10.0	14.0	11.5	12.5	9.5	7.0	8.0
14	10.5	6.0	8.5	13.0	9.5	11.5	14.0	11.0	12.5	10.0	8.0	9.0
15	12.5	6.5	9.5	12.5	10.0	11.5	14.0	11.5	12.5	10.0	9.5	10.0
16	12.5	6.5	9.5	11.5	9.0	10.0	14.0	11.5	12.5	9.5	8.0	8.5
17	11.5	7.0	8.5	10.5	9.0	9.5	13.0	10.5	11.5	9.0	8.0	8.5
18	10.5	6.0	8.0	11.5	8.0	9.5	12.5	9.5	11.0	8.5	8.0	8.0
19	10.0	6.0	8.0	13.5	9.0	11.0	12.5	11.0	11.5	8.5	7.5	8.0
20	11.0	5.5	8.5	13.0	9.0	11.0	11.5	10.0	11.0	8.5	7.0	7.5
21	11.0	7.0	9.0	12.5	9.0	10.5	11.5	10.5	11.0	8.5	7.5	8.0
22	10.0	7.0	8.0	11.5	10.0	10.5	13.5	11.0	12.0	9.5	8.0	8.5
23	12.0	7.0	9.0	13.0	9.5	11.0	13.5	11.0	12.0	9.0	7.5	8.5
24	11.5	7.5	9.5	12.5	9.5	10.5	11.0	9.5	10.5	8.5	7.0	8.0
25	10.5	7.5	9.0	12.0	8.0	9.5	10.5	9.5	10.0	8.0	6.5	7.5
26	12.5	7.5	9.5	12.0	8.5	10.0	10.5	9.0	10.0	7.5	7.0	7.5
27	14.5	8.0	11.0	11.5	8.5	10.0	10.5	9.5	10.0	8.0	7.5	7.5
28	14.0	7.5	11.0	11.0	9.0	10.0	11.0	10.0	10.5	8.0	7.5	7.5
29	14.5	8.5	12.0	10.5	9.0	9.5	11.0	9.5	10.0	7.5	6.5	7.0
30	14.0	7.5	10.0	11.0	8.5	9.5	10.0	9.0	9.5	7.0	6.0	6.5
31	---	---	---	11.5	8.5	10.0	9.0	8.5	8.5	---	---	---
MONTH	14.5	5.0	8.6	14.0	7.5	10.2	15.5	8.5	11.4	11.0	6.0	8.4

15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK

LOCATION.--Lat 56°23'41", long 158°56'06", in SW¼ SW¼ SW¼ sec. 05, T. 44 S., R. 61 W. (Chignik B-3 quad), Hydrologic Unit 19020702, on right bank, 1.5 mi below Black Lake, and 11.9 mi northwest from the village of Chignik Lake.

DRAINAGE AREA.-- 282.93 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- May 2004 to September 2005 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 32 ft above sea level, from topographic map.

REMARKS.--Records are fair. Rain gage at station. GOES satellite telemetry at station.

COOPERATION.--Data collected in cooperation with the U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge during period May 20 to September 30,2004, 2,440 ft^3/s, June 5, gage height, 8.82 ft; minimum discharge 405 ft^3/s, Sept. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	1480	1690	1020	702
2	---	---	---	---	---	---	---	---	1570	1840	957	783
3	---	---	---	---	---	---	---	---	1830	1980	975	794
4	---	---	---	---	---	---	---	---	2230	2000	935	717
5	---	---	---	---	---	---	---	---	2360	2070	901	685
6	---	---	---	---	---	---	---	---	2130	1890	895	640
7	---	---	---	---	---	---	---	---	2210	1760	869	599
8	---	---	---	---	---	---	---	---	2080	1650	792	663
9	---	---	---	---	---	---	---	---	2040	1560	808	656
10	---	---	---	---	---	---	---	---	1930	1480	775	650
11	---	---	---	---	---	---	---	---	1900	1390	781	646
12	---	---	---	---	---	---	---	---	1810	1170	624	695
13	---	---	---	---	---	---	---	---	1770	1130	545	657
14	---	---	---	---	---	---	---	---	1640	1220	564	631
15	---	---	---	---	---	---	---	---	1580	1190	759	661
16	---	---	---	---	---	---	---	---	1540	931	754	685
17	---	---	---	---	---	---	---	---	1480	1150	644	593
18	---	---	---	---	---	---	---	---	1320	1190	644	625
19	---	---	---	---	---	---	---	---	1540	1160	700	646
20	---	---	---	---	---	---	---	1360	1550	1180	672	818
21	---	---	---	---	---	---	---	1520	1540	1140	547	783
22	---	---	---	---	---	---	---	1540	1460	1120	555	798
23	---	---	---	---	---	---	---	1810	1610	1020	696	857
24	---	---	---	---	---	---	---	2010	1680	860	847	749
25	---	---	---	---	---	---	---	2130	1630	888	885	832
26	---	---	---	---	---	---	---	2110	1540	1060	953	1000
27	---	---	---	---	---	---	---	1860	1430	1100	881	853
28	---	---	---	---	---	---	---	1930	1370	1130	854	829
29	---	---	---	---	---	---	---	1950	1420	1120	833	608
30	---	---	---	---	---	---	---	1830	1530	1080	770	1050
31	---	---	---	---	---	---	---	1640	---	1040	682	---
TOTAL	---	---	---	---	---	---	---	---	51200	41189	24117	21905
MEAN	---	---	---	---	---	---	---	---	1707	1329	778	730
MAX	---	---	---	---	---	---	---	---	2360	2070	1020	1050
MIN	---	---	---	---	---	---	---	---	1320	860	545	593
MED	---	---	---	---	---	---	---	---	1600	1170	781	690
AC-FT	---	---	---	---	---	---	---	---	101600	81700	47840	43450
IN.	---	---	---	---	---	---	---	---	6.73	5.42	3.17	2.88

15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK—Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1010	681	1010	1090	913	963	326	e570	1330	1110	907	1010
2	1090	701	1050	1100	e900	872	332	e550	1370	1050	955	980
3	1140	e600	954	1140	e900	868	316	e515	1470	956	948	1060
4	1160	558	853	1110	e900	865	319	691	1460	995	899	1120
5	1260	679	807	1040	e850	959	276	784	1330	994	858	1140
6	1220	753	968	991	e850	1080	228	1120	1230	1020	820	1230
7	1260	789	938	924	e850	1120	212	1300	1370	960	785	1290
8	1170	804	928	862	e800	1300	235	1210	1390	875	748	1110
9	1240	750	905	806	e800	1400	311	1090	1500	888	634	1120
10	1170	714	769	746	e800	1550	309	1100	1570	875	553	1290
11	1140	877	842	722	e800	1310	326	1170	1580	772	729	1190
12	1280	968	881	642	715	1200	206	1230	1690	800	731	1320
13	1390	935	903	595	718	1400	127	1270	1630	801	654	1200
14	1380	810	832	573	805	1180	91	1340	1580	759	649	1050
15	1340	1040	943	836	892	1350	205	1310	1480	676	655	1120
16	1300	946	962	1240	876	1300	196	1280	1320	812	629	1190
17	1240	802	955	1400	766	1060	125	1350	1230	863	747	1150
18	1190	912	962	1420	985	1030	160	1300	1460	847	800	1160
19	1220	853	928	1400	1030	1210	176	1220	1540	828	841	1220
20	1160	1040	873	1370	1370	1270	e220	1230	1310	807	837	1180
21	1180	851	826	1330	1400	1180	e350	1130	1180	721	776	1110
22	1090	1030	977	1300	1440	1070	e400	1050	1300	743	591	1120
23	1090	1060	1060	1170	1380	999	e420	1010	1230	682	815	1200
24	1110	1060	887	1000	1330	983	e510	853	1110	702	856	1190
25	759	1050	878	1120	1280	1040	e440	647	1240	848	729	1150
26	858	855	e850	1200	1190	723	e350	687	1200	897	917	960
27	955	855	e850	1170	1130	720	e340	904	1210	999	765	1320
28	929	945	e900	1050	1060	703	e600	1070	1230	1030	852	1480
29	967	978	900	1070	---	696	e640	1160	1210	1000	830	1530
30	853	880	963	1250	---	334	e610	1280	1170	971	910	1620
31	931	---	1050	1290	---	302	---	1340	---	940	1020	---
TOTAL	35082	25776	28404	32957	27730	32037	9356	32761	40920	27221	24440	35810
MEAN	1132	859	916	1063	990	1033	312	1057	1364	878	788	1194
MAX	1390	1060	1060	1420	1440	1550	640	1350	1690	1110	1020	1620
MIN	759	558	769	573	715	302	91	515	1110	676	553	960
MED	1160	855	905	1100	900	1060	313	1130	1330	875	800	1170
AC-FT	69590	51130	56340	65370	55000	63550	18560	64980	81160	53990	48480	71030
IN.	4.61	3.39	3.73	4.33	3.65	4.21	1.23	4.31	5.38	3.58	3.21	4.71

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)#

MEAN	1132	859	916	1063	990	1033	312	1057	1535	1103	783	962
MAX	1132	859	916	1063	990	1033	312	1057	1707	1329	788	1194
(WY)	2005	2005	2005	2005	2005	2005	2005	2005	2004	2004	2005	2005
MIN	1132	859	916	1063	990	1033	312	1057	1364	878	778	730
(WY)	2005	2005	2005	2005	2005	2005	2005	2005	2005	2005	2004	2004

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005#	
ANNUAL TOTAL	352494			
ANNUAL MEAN	966		966	
HIGHEST ANNUAL MEAN			966	2005
LOWEST ANNUAL MEAN			966	2005
HIGHEST DAILY MEAN	1690	Jun 12	2360	Jun 5 2004
LOWEST DAILY MEAN	91	Apr 14	91	Apr 14 2005
ANNUAL SEVEN-DAY MINIMUM	154	Apr 13	154	Apr 13 2005
MAXIMUM PEAK FLOW	1730	Jun 12	2440	Jun 5 2004
MAXIMUM PEAK STAGE	8.06	Jun 12	8.82	Jun 5 2004
INSTANTANEOUS LOW FLOW	56	Apr 14	56	Apr 14 2005
ANNUAL RUNOFF (AC-FT)	699200		699600	
ANNUAL RUNOFF (INCHES)	46.35		46.38	
10 PERCENT EXCEEDS	1330		1330	
50 PERCENT EXCEEDS	967		967	
90 PERCENT EXCEEDS	593		593	

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

15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 2004 to September 2005 (discontinued).

PERIOD OF DAILY RECORD.--May 2004 to September 2005 (discontinued).

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

REMARKS.--Probe installed on May 20, 2004. Records represent water-temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the stream average by cross section on May 4, 2005 and July 7, 2005. Variations of 0.3°C or less were found within the cross sections on both dates. The variation found between mean stream temperature and sensor temperature was less than 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 23.5°C, July 11, 2004; minimum, 0.0°C on many days during winter periods.

EXTREMES FOR 2004 WATER YEAR.--
WATER TEMPERATURE: Maximum, 23.5°C, July 11; minimum recorded 5.0°C, September 27.

EXTREMES FOR 2005 WATER YEAR.--
WATER TEMPERATURE: Maximum, 21.0°C, August 8 and 12; minimum 0.0°C on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Location in X-sect. looking dwnstrm ft from l bank (00009)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampler type, code (84164)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
MAY									
04...	1328	180	162	6.41	678	8010	10	9.3	10.5
04...	1329	180	126	6.41	678	8010	10	9.2	10.5
04...	1330	180	90.0	6.41	678	8010	10	9.1	10.5
04...	1331	180	54.0	6.41	678	8010	10	9.1	10.5
04...	1332	180	18.0	6.41	678	8010	10	9.2	10.5
JUL									
07...	1625	176	18.0	6.79	943	8010	10	15.6	13.7
07...	1626	176	53.0	6.79	943	8010	10	15.5	13.7
07...	1627	176	88.0	6.79	943	8010	10	15.4	13.7
07...	1628	176	123	6.79	943	8010	10	15.3	13.7
07...	1629	176	158	6.79	943	8010	10	15.4	13.7

15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK—Continued

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

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.0	9.5	10.5	14.0	11.5	12.5	17.0	15.5	16.0	14.5	13.0	13.5
2	11.0	10.0	10.0	13.0	11.5	12.0	19.0	14.0	16.5	15.0	13.0	14.0
3	10.0	8.5	9.5	14.0	11.0	13.0	18.5	16.0	17.0	13.5	12.5	13.0
4	10.0	8.5	9.0	14.0	12.0	13.0	16.0	14.0	15.0	13.5	12.0	12.5
5	13.0	9.5	11.0	15.0	13.0	14.0	16.0	14.5	15.0	14.5	12.0	13.0
6	12.5	12.0	12.0	15.5	13.0	14.0	17.5	14.5	16.0	14.0	12.5	13.0
7	12.0	11.0	11.5	17.5	13.0	15.0	19.0	14.0	16.5	13.5	12.0	12.5
8	11.5	9.0	10.5	19.0	15.0	17.0	20.0	16.5	18.5	14.0	11.0	12.5
9	11.5	8.5	10.0	21.0	16.5	18.5	20.0	16.0	17.5	13.5	12.0	12.5
10	12.5	9.0	10.5	22.5	18.0	20.0	20.5	17.5	18.5	14.0	11.5	12.5
11	12.0	10.5	11.0	23.5	18.5	21.0	21.0	17.5	19.0	14.0	11.5	12.5
12	11.5	9.5	11.0	22.0	16.5	19.0	19.5	17.0	18.5	13.5	11.5	12.5
13	11.5	9.5	10.5	16.5	14.0	15.5	17.0	15.0	15.5	14.0	10.0	12.0
14	12.5	10.5	11.5	15.5	14.0	14.5	17.5	14.0	15.5	12.0	10.0	11.0
15	12.5	11.0	12.0	17.0	14.5	15.5	19.5	14.0	16.5	11.5	10.0	10.5
16	13.5	11.5	12.5	17.0	14.0	15.5	19.5	16.0	17.5	10.5	8.5	9.5
17	13.0	11.0	12.0	15.5	14.0	14.5	19.5	16.5	18.0	10.0	8.5	9.0
18	12.0	10.5	11.0	15.0	14.0	14.0	17.5	16.5	16.5	11.0	9.5	10.5
19	14.0	10.5	12.0	16.5	13.0	14.0	17.0	15.5	16.0	13.0	10.0	11.5
20	14.0	11.5	12.5	16.0	14.0	15.0	18.5	15.0	16.5	12.0	9.5	11.0
21	14.0	12.0	13.0	15.0	13.0	14.0	17.0	14.5	15.0	11.0	8.5	9.5
22	14.0	12.5	13.0	17.5	14.0	15.5	16.0	13.5	14.5	10.0	9.0	9.5
23	15.0	12.5	13.5	18.5	15.5	16.5	16.5	13.5	15.0	9.0	7.5	8.0
24	14.0	13.0	13.5	17.0	14.5	15.5	16.0	14.0	15.0	8.5	6.5	7.5
25	13.0	10.5	11.5	15.5	14.0	14.5	15.5	14.5	15.0	8.5	7.5	8.0
26	14.0	10.5	12.0	16.0	14.5	15.0	15.0	13.0	14.0	7.5	6.0	6.5
27	14.0	12.5	13.5	15.0	13.5	14.0	14.5	12.5	13.5	7.5	5.0	6.0
28	14.5	12.0	13.0	15.0	13.5	14.0	13.5	12.0	12.5	8.0	6.5	7.0
29	13.5	13.0	13.0	15.5	14.0	14.5	13.0	11.0	12.0	9.5	7.5	8.5
30	13.5	12.5	13.0	16.0	13.5	15.0	14.0	11.5	12.5	9.5	7.5	8.5
31	---	---	---	17.0	14.5	15.5	14.0	12.0	13.0	---	---	---
MONTH	15.0	8.5	11.7	23.5	11.0	15.2	21.0	11.0	15.7	15.0	5.0	10.6

15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.5	6.0	7.0	0.5	0.0	0.0	2.5	1.0	1.5	0.5	0.0	0.5
2	7.5	6.5	7.0	1.5	0.0	1.0	1.0	0.5	0.5	0.5	0.0	0.5
3	7.0	6.5	7.0	1.0	0.0	0.0	0.5	0.0	0.5	0.5	0.5	0.5
4	8.0	6.5	7.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.5
5	8.0	7.0	7.5	0.5	0.0	0.0	1.0	0.0	0.5	0.5	0.0	0.0
6	7.0	6.0	6.5	0.5	0.0	0.0	1.0	0.0	0.5	0.5	0.0	0.0
7	7.5	6.5	7.0	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
8	9.0	6.5	7.5	0.5	0.0	0.0	0.5	0.0	0.0	0.5	0.0	0.0
9	8.0	7.0	7.5	1.5	0.5	0.5	0.0	0.0	0.0	0.5	0.0	0.0
10	8.0	6.0	7.0	1.0	0.5	0.5	0.5	0.0	0.0	0.5	0.0	0.0
11	7.5	6.5	7.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
12	8.0	6.5	7.0	1.5	0.5	1.0	0.0	0.0	0.0	1.0	0.0	0.5
13	8.0	6.5	7.5	1.5	0.5	1.0	0.0	0.0	0.0	1.0	0.5	0.5
14	8.5	6.5	7.5	3.5	1.0	2.5	0.5	0.0	0.5	1.5	0.5	1.0
15	7.5	7.0	7.0	2.5	0.5	1.5	0.5	0.0	0.5	1.5	1.0	1.5
16	7.0	6.0	6.5	1.0	0.5	0.5	1.0	0.0	0.5	1.0	0.5	1.0
17	7.5	6.0	7.0	1.0	0.0	0.5	1.0	0.5	0.5	1.0	0.5	0.5
18	9.0	7.0	8.0	1.0	0.5	0.5	1.0	0.5	0.5	0.5	0.0	0.0
19	8.5	7.0	7.5	2.0	1.0	1.5	0.5	0.0	0.0	0.5	0.0	0.0
20	7.5	6.0	6.5	2.0	1.0	1.5	0.5	0.0	0.0	1.0	0.0	0.5
21	6.0	4.5	5.0	3.0	1.0	2.0	1.5	0.0	1.0	1.0	0.5	0.5
22	5.5	4.5	5.0	3.0	2.0	2.5	2.0	0.0	1.5	1.5	1.0	1.0
23	5.5	4.5	5.5	2.5	2.0	2.0	0.0	0.0	0.0	1.0	0.0	0.5
24	4.5	3.0	3.5	2.0	1.0	1.0	0.0	0.0	0.0	1.5	0.0	0.5
25	5.0	3.0	3.5	1.0	0.5	1.0	0.0	0.0	0.0	2.0	1.0	1.5
26	5.0	4.0	4.5	3.5	1.0	2.0	0.0	0.0	0.0	1.5	1.0	1.0
27	5.0	4.0	4.5	3.5	2.5	3.0	0.0	0.0	0.0	1.5	1.0	1.0
28	4.0	3.0	3.5	2.5	1.5	2.0	0.0	0.0	0.0	2.0	1.0	1.5
29	3.0	2.0	2.5	2.5	1.5	2.5	0.0	0.0	0.0	3.0	1.5	2.0
30	2.0	1.0	1.0	2.5	1.5	2.0	0.5	0.0	0.0	3.0	1.5	2.5
31	1.0	0.0	0.5	---	---	---	0.5	0.0	0.5	1.5	0.0	0.0
MONTH	9.0	0.0	5.9	3.5	0.0	1.1	2.5	0.0	0.3	3.0	0.0	0.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	0.0	0.0	0.0	2.5	0.5	1.5	0.5	0.0	0.5	---	---	---
2	0.0	0.0	0.0	3.0	1.0	2.0	1.0	0.0	0.5	---	---	---
3	0.0	0.0	0.0	3.0	2.0	2.5	3.0	0.0	1.0	---	---	---
4	0.0	0.0	0.0	4.0	2.0	3.0	1.5	0.0	0.5	10.0	---	---
5	0.0	0.0	0.0	4.5	2.5	3.5	2.0	0.0	0.5	10.2	7.0	8.6
6	0.5	0.0	0.5	3.5	2.5	3.0	5.0	0.0	2.0	10.5	7.5	9.0
7	0.5	0.0	0.0	3.5	2.5	3.0	4.0	0.5	2.0	10.0	7.5	9.0
8	0.5	0.0	0.0	5.5	3.0	4.0	5.0	2.0	3.0	11.5	8.0	9.5
9	0.0	0.0	0.0	5.0	3.5	4.0	3.5	0.5	2.0	10.0	7.5	9.0
10	0.5	0.0	0.0	5.0	3.0	3.5	1.0	0.0	0.0	9.5	7.5	8.5
11	0.5	0.0	0.0	4.0	2.5	3.0	4.0	0.0	1.5	11.5	8.0	9.5
12	0.5	0.0	0.5	3.5	2.5	3.0	6.0	0.0	2.5	11.0	9.0	10.0
13	1.0	0.5	0.5	4.5	2.5	3.5	6.5	1.0	3.5	12.5	8.5	10.0
14	1.0	0.5	0.5	5.0	3.0	4.0	7.0	1.5	4.0	13.0	10.0	11.5
15	1.5	0.0	0.5	4.0	3.0	3.5	8.5	2.0	5.0	12.5	10.0	11.0
16	1.5	0.5	1.0	4.5	2.0	3.5	9.0	3.5	6.0	13.0	10.5	11.5
17	3.0	0.5	2.0	4.5	3.0	3.5	7.0	3.5	5.5	11.5	9.5	10.5
18	2.5	1.0	2.0	5.5	3.5	4.0	5.5	3.5	4.5	9.5	6.5	8.5
19	3.0	1.0	2.0	6.0	3.0	4.5	---	2.0	---	8.5	7.5	8.0
20	3.0	1.5	2.5	5.5	3.5	4.5	---	---	---	7.5	6.0	6.5
21	2.5	1.0	1.5	3.5	0.5	1.5	---	---	---	6.5	5.5	6.0
22	2.0	1.5	2.0	3.0	0.0	1.0	---	---	---	9.0	5.0	6.5
23	2.5	1.5	1.5	2.5	0.0	1.0	---	---	---	11.0	6.5	8.5
24	2.5	1.0	1.5	3.0	1.0	2.0	---	---	---	13.5	8.0	10.5
25	3.0	1.5	2.0	1.5	0.0	1.0	---	---	---	11.5	9.0	10.0
26	3.0	1.5	2.0	3.5	0.0	1.0	---	---	---	9.5	7.5	8.5
27	2.5	1.0	1.5	3.5	0.5	2.0	---	---	---	11.0	8.0	9.0
28	3.0	1.0	1.5	4.0	0.5	2.0	---	---	---	11.0	7.5	9.0
29	---	---	---	2.0	0.0	1.0	---	---	---	11.5	8.0	9.5
30	---	---	---	0.0	0.0	0.0	---	---	---	11.0	8.5	9.5
31	---	---	---	0.5	0.0	0.0	---	---	---	11.5	9.0	10.0
MONTH	3.0	0.0	0.9	6.0	0.0	2.6	---	---	---	---	---	---

15297585 CHIGNIK RIVER AT BLACK LAKE OUTLET NEAR CHIGNIK—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.5	8.0	9.5	16.0	13.0	14.5	16.0	14.0	15.0	12.5	9.5	11.0
2	11.5	8.5	10.0	18.0	13.5	15.5	16.0	14.0	15.0	12.5	10.5	11.5
3	14.5	10.0	12.0	17.0	14.5	15.5	16.0	14.0	15.0	13.0	11.5	12.5
4	16.5	11.0	13.5	16.5	14.5	15.5	16.0	14.0	15.0	13.0	11.0	12.0
5	15.5	12.5	14.0	17.0	14.5	15.5	17.5	14.0	15.5	13.0	11.0	12.0
6	13.5	11.5	12.5	16.5	14.0	15.0	19.0	15.0	16.5	12.5	11.5	11.5
7	12.5	10.5	11.5	17.0	13.0	14.5	20.5	16.0	18.0	13.0	11.0	11.5
8	13.0	10.0	11.5	19.0	13.5	16.0	21.0	16.5	18.5	12.0	11.0	11.5
9	13.5	11.0	12.0	17.5	15.5	16.0	19.0	16.0	17.5	13.5	11.5	12.0
10	13.0	10.5	12.0	17.0	13.0	15.0	18.0	14.5	16.0	13.5	11.0	12.5
11	14.5	11.5	13.0	15.5	13.5	14.0	20.0	14.0	17.0	14.0	11.5	12.5
12	13.5	11.0	12.0	16.0	13.0	14.5	21.0	17.0	18.5	13.0	11.5	12.0
13	15.0	10.5	13.0	17.0	13.5	15.0	19.0	16.0	17.5	12.0	10.0	11.0
14	16.5	12.0	14.5	18.0	14.5	16.0	19.0	15.5	17.0	13.0	11.0	11.5
15	17.5	13.5	15.5	17.0	14.0	15.5	18.0	15.5	17.0	12.5	11.5	12.0
16	16.5	13.0	15.0	16.0	14.5	15.5	19.5	16.0	17.5	11.5	10.0	11.0
17	14.0	11.5	12.5	15.5	13.0	14.0	18.0	16.0	17.0	11.0	10.0	10.5
18	14.0	11.5	13.0	15.5	12.5	13.5	19.0	14.5	16.5	10.5	9.5	10.0
19	14.0	11.0	12.5	17.5	13.0	15.0	17.5	15.0	16.0	10.5	9.0	9.5
20	14.5	11.0	12.5	16.0	13.0	14.5	16.0	13.0	14.5	10.5	8.5	9.5
21	13.5	12.0	12.5	16.0	13.0	14.5	16.5	14.0	15.0	10.0	9.0	9.5
22	14.5	12.0	13.0	16.5	14.5	15.5	17.0	14.5	15.5	11.0	10.0	10.5
23	16.0	12.5	14.0	17.5	14.5	15.5	16.0	13.5	14.5	11.0	9.5	10.5
24	15.0	13.0	14.0	16.5	14.0	15.0	14.0	12.0	13.0	11.5	9.0	10.0
25	15.0	13.0	14.0	17.5	14.0	15.5	13.5	11.5	12.5	11.0	8.0	9.5
26	17.0	14.0	15.0	17.0	14.5	15.5	14.0	11.5	12.5	9.5	8.5	9.0
27	20.0	14.0	16.5	17.0	14.5	15.5	13.5	11.5	12.5	10.0	8.5	9.0
28	20.0	16.0	18.0	15.5	13.0	14.0	14.0	12.5	13.5	9.5	8.5	9.0
29	20.0	15.0	17.5	13.5	12.0	13.0	13.5	11.5	12.5	8.5	7.5	8.0
30	18.0	15.5	16.0	15.0	13.0	13.5	12.5	11.0	11.5	8.0	7.0	7.5
31	---	---	---	16.0	13.5	14.5	11.0	10.5	11.0	---	---	---
MONTH	20.0	8.0	13.4	19.0	12.0	14.9	21.0	10.5	15.3	14.0	7.0	10.7