

SOUTH-CENTRAL ALASKA

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 mi² 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)#

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
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

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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	
LOWEST ANNUAL MEAN					91.1	
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 ft³/s on basis of slope-area measurement of peak flow
h From floodmarks
i From rating curve extended above 440 ft³/s on basis of slope-area measurement of peak flow
j Site and datum then in use