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. Air temperature recorder at station, daily values of air temperature available from the computer files of the Alaska Science Center, Water Resources Office. GOES satellite telemetry at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1790	54	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e15	482	416	317
2	1810	71	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	e33	474	671	501
3	1060	53	e0.50	e0.00	e0.00	e0.00	e0.00	e0.00	e60	467	569	457
4	711	51	e0.30	e0.00	e0.00	e0.00	e0.00	e0.00	e160	518	425	278
5	672	56	e0.20	e0.00	e0.00	e0.00	e0.00	e0.00	276	498	417	207
6	1020	94	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	294	586	383	189
7	792	93	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	350	805	399	166
8	494	61	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	303	e1300	400	138
9	313	40	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	244	e1000	466	134
10	207	31	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	256	e800	482	189
11	142	29	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	266	e700	468	158
12	101	28	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	233	e600	449	132
13	85	e20	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	218	e550	383	128
14	180	e15	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	257	e500	401	79
15	247	e10	e0.00	e0.00	e0.00	e0.00	e0.00	e0.00	331	e500	439	58
16	98	e7.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.20	634	e550	451	47
17	59	e4.0	e0.00	e0.00	e0.00	e0.00	e0.00	e0.25	973	635	544	35
18	46	e2.5	e0.00	e0.00	e0.00	e0.00	e0.00	e0.30	1060	814	493	28
19	40	e1.5	e0.00	e0.10	e0.00	e0.00	e0.00	e0.40	948	733	536	38
20	36	e1.0	e0.00	e0.50	e0.00	e0.00	e0.00	e0.50	788	597	467	86
21	32	e0.90	e0.00	e1.0	e0.00	e0.00	e0.00	e0.60	666	618	400	83
22	32	e0.70	e0.00	e0.80	e0.00	e0.00	e0.00	e0.70	593	774	430	119
23	31	e0.50	e0.00	e0.50	e0.00	e0.00	e0.00	e0.80	576	895	533	102
24	34	e0.40	e0.00	e0.20	e0.00	e0.00	e0.00	e0.90	586	610	548	50
25	66	e0.35	e0.00	e0.00	e0.00	e0.00	e0.00	e1.4	612	642	460	68
26	138	e0.30	e0.00	e0.00	e0.00	e0.00	e0.00	e2.0	660	1270	380	391
27	92	e0.25	e0.00	e0.00	e0.00	e0.00	e0.00	e3.0	641	1380	282	150
28	45	e0.20	e0.00	e0.00	e0.00	e0.00	e0.00	e4.0	631	1010	199	77
29	33	e0.10	e0.00	e0.00	e0.00	e0.00	e0.00	e5.0	548	645	214	105
30	32	e0.10	e0.00	e0.00	---	e0.00	e0.00	e7.0	513	500	243	264
31	36	---	e0.00	e0.00	---	e0.00	---	e10	---	391	225	---
TOTAL	10474	725.80	1.00	3.10	0.00	0.00	0.00	37.05	13725	21844	13173	4774
MEAN	338	24.2	0.03	0.10	0.00	0.00	0.00	1.20	458	705	425	159
MAX	1810	94	0.50	1.0	0.00	0.00	0.00	10	1060	1380	671	501
MIN	31	0.10	0.00	0.00	0.00	0.00	0.00	0.00	15	391	199	28
AC-FT	20780	1440	2.0	6.1	0.00	0.00	0.00	73	27220	43330	26130	9470

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

MEAN	103	28.4	7.16	0.53	0.64	0.02	0.14	21.0	236	429	446	335
MAX	338	195	68.5	4.75	4.39	0.27	1.02	93.6	458	763	597	851
(WY)	2004	2003	2003	2001	2003	2003	2003	1993	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 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1991 - 2004#	
ANNUAL TOTAL	54512.55		64756.95			
ANNUAL MEAN	149		177		135	
HIGHEST ANNUAL MEAN					181	2001
LOWEST ANNUAL MEAN					91.1	1998
HIGHEST DAILY MEAN	1810	Oct 2	1810	Oct 2	a3600	Sep 21 1995
LOWEST DAILY MEAN	b0.00	Mar 20	c0.00	Dec 1	d0.00	Dec 5 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Mar 20	0.00	Dec 6	0.00	Dec 5 1990
MAXIMUM PEAK FLOW			f2730	Oct 2	f4100	Sep 20 1995
MAXIMUM PEAK STAGE			14.33	Oct 2	g15.10	Sep 20 1995
ANNUAL RUNOFF (AC-FT)	108100		128400		97570	
10 PERCENT EXCEEDS	447		598		436	
50 PERCENT EXCEEDS	32		0.85		6.5	
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	h2530	Oct 10 1986
INSTANTANEOUS PEAK STAGE	i9.86	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 Mar. 20 to apr. 10 and Dec. 1, 2, and 6-31
c From Dec. 1, 2, Dec. 6 to Jan. 18, and Jan. 25 to May 15
d No flow in winter most years
f From rating curve extended above 400 ft^3/s on basis of slope-area measurement of peak flow
g From floodmarks
h From rating curve extended above 440 ft^3/s on basis of slope-area measurement of peak flow
i Site and datum then in use