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 STATISTICS	WATER 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