

SOUTH-CENTRAL ALASKA

15239001 BRADLEY RIVER BELOW DAM NEAR HOMER

LOCATION.--Lat 59°45'30", long 150°51'02", in SW¹/₄ SE¹/₄ NW¹/₄ 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 ft³/s November 6, 2002 gage height, 7.15 ft; minimum, 0.00 ft³/s, from rating curve extended below 0.18 ft³/s, most likely ponded water, but no measurable flow, June 9 and June 10, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 159 ft³/s, June 19, gage height, 3.33 ft; minimum, 0.21 ft³/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