

SOUTH-CENTRAL ALASKA

15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING

LOCATION.--Lat 60°28'50", long 149°52'50", in NW¹/₄ SW¹/₄ 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 mi².

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 mi² 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 2003 TO SEPTEMBER 2004 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	32	e16	e11	12	10	e9.0	80	115	76	32	17
2	42	32	e16	e11	11	10	e9.0	88	111	70	32	18
3	120	31	e16	e11	11	9.9	e10	83	114	66	32	18
4	102	30	e16	e11	11	9.9	e10	98	120	64	30	17
5	79	30	e16	e11	11	9.8	9.6	119	117	64	29	16
6	112	30	e16	e11	11	e9.5	11	139	121	61	27	16
7	112	30	e16	e11	11	e9.5	13	142	126	62	27	16
8	93	32	e15	e11	14	e9.5	14	135	123	63	26	15
9	79	31	e15	e11	11	e9.5	14	124	107	63	26	15
10	64	30	e15	e11	e12	e9.5	14	110	104	61	25	15
11	59	33	e15	e11	e12	e9.5	14	115	101	56	24	15
12	53	28	e15	e11	12	e9.5	14	122	99	54	24	15
13	49	e24	e15	e11	12	e9.5	14	124	96	53	23	19
14	47	e21	e15	e11	12	e9.5	15	122	92	46	22	16
15	45	e19	e15	e11	12	9.3	17	119	91	45	21	13
16	43	e18	e15	e11	e11	9.7	19	117	116	42	20	13
17	41	e17	e15	e11	e11	e9.5	19	115	145	41	20	13
18	40	e15	e15	e11	e11	e9.0	19	121	151	41	20	13
19	39	e14	e15	e11	e11	e9.0	19	120	143	40	19	14
20	38	e12	e15	e11	e11	e9.0	20	126	131	39	19	15
21	37	e12	e15	e12	e11	e9.0	22	110	124	37	19	12
22	36	e13	e14	e12	e11	e9.5	23	119	121	36	18	14
23	35	e13	e13	e12	11	e9.5	25	180	114	37	18	14
24	36	e14	e13	e12	11	e9.5	25	224	112	35	18	14
25	38	e14	e12	e12	11	e9.5	28	166	106	33	18	15
26	37	e14	e12	e12	10	9.4	32	143	106	37	17	45
27	35	e15	e12	e12	10	9.1	33	142	106	44	21	28
28	33	e15	e11	12	10	9.1	33	139	96	39	21	22
29	32	e15	e11	11	10	8.9	40	125	83	36	19	25
30	33	e15	e11	12	---	e9.0	50	116	79	36	18	31
31	32	---	e11	13	---	e9.0	---	111	---	35	17	---
TOTAL	1674	649	442	352	325	292.1	594.6	3894	3370	1512	702	529
MEAN	54.0	21.6	14.3	11.4	11.2	9.42	19.8	126	112	48.8	22.6	17.6
MAX	120	33	16	13	14	10	50	224	151	76	32	45
MIN	32	12	11	11	10	8.9	9.0	80	79	33	17	12
AC-FT	3320	1290	877	698	645	579	1180	7720	6680	3000	1390	1050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004, BY WATER YEAR (WY)#

	1958	1959	1960	1961	1962	1963	1964	1999	2000	2001	2002	2003	2004
MEAN	75.9	51.1	26.1	19.6	16.4	11.9	18.5	99.2	181	135	76.4	68.6	
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 years used in monthly statistics
e Estimated

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15261000 COOPER CREEK AT MOUTH NEAR COOPER LANDING—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1958 - 2004#	
ANNUAL TOTAL	15061.5		14335.7			
ANNUAL MEAN	41.3		39.2		65.9	
HIGHEST ANNUAL MEAN					a174	1958
LOWEST ANNUAL MEAN					29.9	1963
HIGHEST DAILY MEAN	187	Feb 5	224	May 24	ab810	Sep 22 1961
LOWEST DAILY MEAN	9.5	Apr 12	8.9	Mar 29	c4.0	Mar 19 1999
ANNUAL SEVEN-DAY MINIMUM	10	Apr 8	9.0	Mar 27	4.0	Mar 19 1999
MAXIMUM PEAK FLOW			260	May 24	d1230	Oct 23 2002
MAXIMUM PEAK STAGE			f10.94	May 24	12.45	Oct 23 2002
INSTANTANEOUS LOW FLOW	g		g		h3.1	Mar 1 1960
ANNUAL RUNOFF (AC-FT)	29870		28430		47730	
10 PERCENT EXCEEDS	87		115		162	
50 PERCENT EXCEEDS	32		18		33	
90 PERCENT EXCEEDS	13		10		10	

- # See Period of Record, partial years 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 Mar. 19 to Apr. 14, 1999
- d From high water mark
- f From crest-stage gage
- g Not determined. See Lowest Daily Mean
- h Caused by temporary storage behind ice jam upstream (observed)