

SOUTH-CENTRAL ALASKA

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¹/₄ sec. 28, T. 5 N., R. 3 W. (Seward B-8 quad), Kenai Peninsula Borough, Hydrologic Unit 19020302, Chugach National Forest, on right bank 10 ft. downstream from bridge on Sterling Highway, 0.9 mi upstream from Bean Creek, 0.9 mi east of Cooper Landing, and at Kenai Lake outlet.

DRAINAGE AREA.--634 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1947 to current year.

REVISED RECORDS.--WSP 2136: 1964 (M).

GAGE.--Water-stage recorder. Datum of gage is 419.92 ft. above sea level (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to August 28, 1965. August 28, 1965 to January 21, 1974, at site 10 ft. upstream at present datum. January 22, 1974 to September 30, 1981, non-recording gage at site 40 ft. upstream at present datum.

REMARKS.--Records good except for estimated daily discharge, which are poor. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake power plant began May 1961. Rain gage at station. GOES satellite telemetry and telephone modem at station.

COOPERATION.--Records of diversion provided by Chugach Electric Association.

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	3180	2380	1830	924	752	846	644	1590	5390	7810	5940	4360
2	4290	2320	1710	900	746	844	643	1780	5260	7580	5690	4230
3	6360	2290	1670	883	737	825	654	1990	5100	7330	5640	4220
4	8620	2240	1540	868	727	819	660	2170	5020	7070	5610	4130
5	9260	2200	1480	855	720	817	657	2390	5030	6870	5510	4020
6	10700	2170	1410	833	731	812	658	2670	5090	6560	5340	3840
7	12900	2160	1360	820	739	803	663	2980	5330	6450	5240	3630
8	13400	2160	1350	806	736	790	676	3300	5540	6520	5250	3400
9	12400	2170	1340	827	731	797	698	3550	5750	6680	5220	3210
10	11200	2220	1370	852	752	794	719	3750	5790	6770	5220	3040
11	9880	2350	1350	846	765	789	730	3870	5690	6780	5300	2860
12	8470	2570	1330	837	773	778	754	4000	5590	6760	5270	2710
13	7310	3110	1300	832	775	772	771	4190	5490	6720	5210	2570
14	6390	4240	1290	823	788	766	786	4350	5380	6650	5100	2460
15	5630	e6330	1260	827	796	752	812	4460	5340	6520	5050	2340
16	5020	e9940	1230	829	795	742	848	4510	5470	6370	5110	2210
17	4540	e10700	1210	819	796	735	892	4550	6560	6220	5190	2070
18	4110	8490	1190	820	797	715	932	4540	7750	6090	5350	2000
19	3800	6940	1180	812	798	712	967	4520	8460	6140	5490	1970
20	3550	5750	1160	823	802	708	996	4610	8790	6220	5610	1900
21	3300	4900	1130	816	818	697	1030	4860	8860	6190	5620	1860
22	3090	4190	1130	794	850	695	1060	5110	8810	6170	5540	1860
23	2910	3710	1100	790	852	688	1100	5380	8680	6510	5550	1850
24	2770	3250	1070	795	858	684	1140	5690	8560	6660	5920	1840
25	2720	2890	1040	789	852	680	1190	6010	8410	6480	5800	1840
26	2770	2610	1010	799	854	676	1240	6160	8400	6360	5620	2040
27	2760	2430	994	781	854	675	1320	6210	8410	6680	5490	2320
28	2700	2230	997	764	848	662	1380	6150	8340	6980	5330	2410
29	2650	2100	994	760	844	657	1430	5950	8150	6930	5040	2450
30	2560	1960	962	758	---	646	1480	5740	7940	6670	4750	2540
31	2440	---	945	758	---	645	---	5570	---	6320	4510	---
TOTAL	181680	113000	38932	25440	22886	23021	27530	132600	202380	206060	166510	82180
MEAN	5861	3767	1256	821	789	743	918	4277	6746	6647	5371	2739
MAX	13400	10700	1830	924	858	846	1480	6210	8860	7810	5940	4360
MIN	2440	1960	945	758	720	645	643	1590	5020	6090	4510	1840
MED	4290	2500	1230	820	795	742	830	4510	5770	6650	5340	2450
AC-FT	360400	224100	77220	50460	45390	45660	54610	263000	401400	408700	330300	163000
CFSM	9.24	5.94	1.98	1.29	1.24	1.17	1.45	6.75	10.6	10.5	8.47	4.32
IN.	10.66	6.63	2.28	1.49	1.34	1.35	1.62	7.78	11.87	12.09	9.77	4.82

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

MEAN	5811	3658	1171	642	611	595	789	4145	6613	6548	5295	2674
CFSM	9.17	5.77	1.85	1.01	0.96	0.94	1.24	6.54	10.43	10.33	8.35	4.22
IN	10.57	6.44	2.13	1.17	1.04	1.08	1.39	7.54	11.64	11.91	9.63	4.71
AC-FT	357320	217680	71980	39480	35140	36610	46940	254850	393480	402640	325600	159110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2004, BY WATER YEAR (WY)#

MEAN	3358	1905	1171	835	684	528	556	1969	5455	6996	6337	5210
MAX	8955	6739	3755	2807	2066	1122	1071	4277	10010	10480	11430	11490
(WY)	1980	2003	2003	1981	1981	1977	1980	2004	1953	1980	1977	1967
MIN	1264	654	364	310	251	208	262	658	3268	4868	3651	2629
(WY)	1956	1951	1951	1951	1949	1951	1952	1952	1972	1996	1969	1969

See Period of Record and Remarks; partial years used in monthly statistics
e Estimated

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15258000 KENAI RIVER AT COOPER LANDING—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1947 - 2004#	
ANNUAL TOTAL	1201452		1222219			
ANNUAL MEAN	3292		3339		2935	
ANNUAL MEAN	*3186		*3224		*2860	
HIGHEST ANNUAL MEAN					4499 1977	
LOWEST ANNUAL MEAN					2102 1969	
HIGHEST DAILY MEAN	13400	Oct 8	13400	Oct 8	22500	Sep 21 1974
LOWEST DAILY MEAN	643	Apr 11	643	Apr 2	100	Mar 28 1964
ANNUAL SEVEN-DAY MINIMUM	654	Apr 10	650	Mar 29	190	Mar 15 1951
MAXIMUM PEAK FLOW			a13600	Oct 7	b23100	Sep 21 1974
MAXIMUM PEAK STAGE			14.07	Oct 8	17.18	Sep 21 1974
INSTANTANEOUS LOW FLOW			612	Apr 2	c0.00	Mar 27 1964
ANNUAL RUNOFF (AC-FT)	2383000		2424000		2126000	
ANNUAL RUNOFF (AC-FT)	*2306760		*2340830		2072000	
ANNUAL RUNOFF (CFSM)	*5.03		*5.09		*4.51	
ANNUAL RUNOFF (INCHES)	*68.22		*69.22		*61.26	
10 PERCENT EXCEEDS	6820		6760		6980	
50 PERCENT EXCEEDS	2280		2380		1670	
90 PERCENT EXCEEDS	922		752		420	

See Period of Record and Remarks; partial years used in monthly statistics
 Values shown on this page are unadjusted for inflow from diversion, unless
 otherwise noted

* Adjusted to account for inflow from diversion, see Remarks

a Maximum peak flow recorded on Oct. 7 and Oct. 8

b Result of release of stored water from glacier-dammed lake at head of unnamed
 glacier in the Snow River Basin

c No flow, Mar. 27 and Mar. 28, 1964, caused by earthquake