15294500 CHAKACHATNA RIVER NEAR TYONEK, AK

Western Cook Inlet Basin
Redoubt-Trading Bays Subbasin

LOCATION.--Lat 61°12′44″, long 152°21′26″ referenced to North American Datum of 1927, Kenai Peninsula Borough, AK, Hydrologic Unit 19020601, in NW ¼ SE ¼ SE ¼, sec. 17, T. 13 N., R 17 W., (Tyonek A-7 quad), on right bank just downstream from outlet of Lake Chakachamna, opposite Barrier Glacier, 19 miles upstream from Straight Creek, and 38 miles northwest of Tyonek.

DRAINAGE AREA.--1120.00 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June, 1959 to September, 1972. November, 2008 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,125 ft. above mean sea level (river-profile survey).

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470,000 ft^3/s, Aug. 11, 1971, gage height unknown, determined by field estimate at site 5 miles below gaging station. Discharge was result of sudden release of stored water in Chakachamna Lake when portions of terminus of Barrier Glacier was eroded away; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge for period November 20 to September 30, 18,200 ft^3/s, Jul. 17, gage height, 31.28 ft; minimum, 362 ft^3/s, Apr. 9, gage height, 10.95 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	e730	526	531	428	382	781	6,710	7,330	17,800	7,760
2	---	---	719	522	529	419	377	889	6,560	7,450	17,500	7,710
3	---	---	706	516	518	416	376	1,040	6,480	7,770	16,800	7,740
4	---	---	703	510	512	415	377	1,260	6,510	8,250	16,100	7,640
5	---	---	698	505	509	424	372	1,540	6,710	8,840	15,700	7,450
6	---	---	692	498	504	433	371	1,760	7,040	9,530	15,400	7,310
7	---	---	685	493	500	420	370	1,880	7,400	10,400	14,900	7,210
8	---	---	675	487	495	413	370	2,010	7,820	11,500	14,500	7,100
9	---	---	674	481	489	410	367	2,190	8,380	12,800	14,200	6,950
10	---	---	672	475	484	405	373	2,420	8,980	13,900	14,200	6,810
11	---	---	665	469	480	406	376	2,660	9,640	15,000	14,000	6,680
12	---	---	649	468	476	406	379	2,940	10,400	15,900	13,600	6,570
13	---	---	640	462	465	405	380	3,300	11,000	16,700	13,300	6,420
14	---	---	629	467	464	401	384	3,680	11,200	17,400	13,000	6,230
15	---	---	622	501	460	399	388	4,080	11,200	17,800	12,800	6,030
16	---	---	614	522	461	396	393	4,390	11,300	18,000	12,800	5,840
17	---	---	607	562	460	394	398	4,630	11,500	18,100	12,700	5,700
18	---	---	601	570	458	392	407	4,880	11,600	17,900	12,400	5,640
19	---	---	595	577	457	390	419	5,150	11,500	17,400	12,000	5,510
20	---	e820	589	574	e455	388	433	5,370	11,400	16,900	11,700	5,340
21	---	799	584	571	e445	386	454	5,490	11,300	16,500	11,400	5,160
22	---	786	578	567	443	384	481	5,580	11,100	16,700	11,100	4,960
23	---	773	e575	561	440	384	508	5,620	10,600	16,500	10,700	4,700
24	---	765	e570	559	439	381	534	5,660	10,000	15,900	10,300	4,460
25	---	762	e560	558	433	378	542	5,760	9,400	15,100	9,760	4,260
26	---	756	e558	555	e430	384	552	5,990	8,840	14,400	9,180	4,040
27	---	748	558	553	427	383	580	6,370	8,350	13,900	8,660	3,810
28	---	e745	550	546	427	380	614	6,710	7,920	13,900	8,270	3,610
29	---	e740	543	544	---	377	649	6,940	7,590	14,600	8,030	3,430
30	---	e735	538	545	---	384	702	6,960	7,390	15,700	7,900	3,280
31	---	---	531	536	---	380	---	6,850	---	17,000	7,820	---
Total	---	---	19,310	16,280	13,191	12,361	13,308	124,780	275,820	439,070	388,520	175,350
Mean	---	---	623	525	471	399	444	4,025	9,194	14,160	12,530	5,845
Max	---	---	730	577	531	433	702	6,960	11,600	18,100	17,800	7,760
Min	---	---	531	462	427	377	367	781	6,480	7,330	7,820	3,280
Ac-ft	---	---	38,300	32,290	26,160	24,520	26,400	247,500	547,100	870,900	770,600	347,800
Cfsm	---	---	0.56	0.47	0.42	0.36	0.40	3.59	8.21	12.6	11.2	5.22
In.	---	---	0.64	0.54	0.44	0.41	0.44	4.14	9.16	14.58	12.90	5.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2009, BY WATER YEAR (WY) #

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,468	1,206	800	607	502	442	441	1,255	6,096	12,090	12,030	6,029
Max	4,072	1,822	1,007	817	780	550	692	4,025	10,930	14,470	16,710	10,260
(WY)	(1966)	(1970)	(1964)	(1961)	(1961)	(1970)	(1971)	(2009)	(1971)	(1971)	(1971)	(1965)
Min	1,351	902	623	480	381	325	250	471	2,114	9,960	8,416	3,347
(WY)	(1972)	(1972)	(2009)	(1966)	(1960)	(1960)	(1960)	(1964)	(1965)	(1970)	(1969)	(1969)

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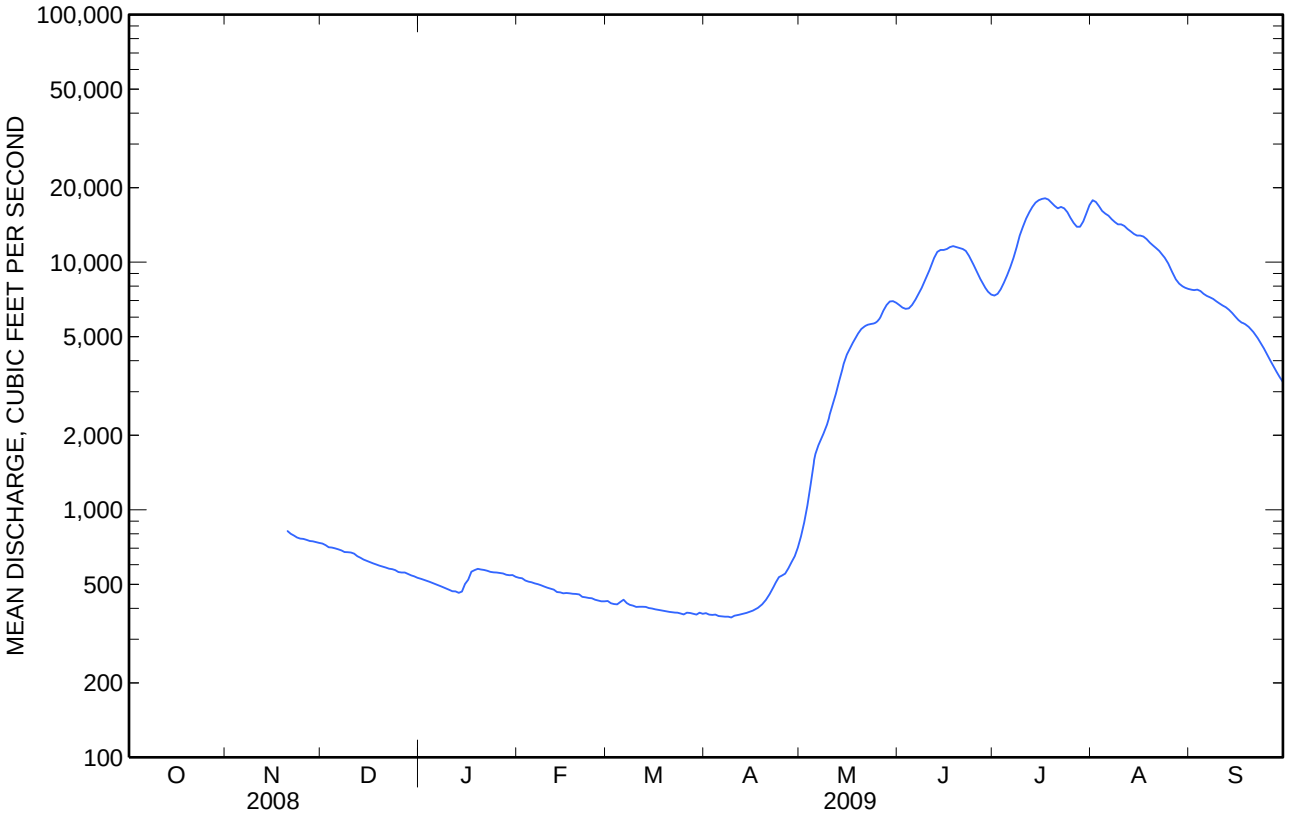
SUMMARY STATISTICS

	Water Years 1959 - 2009#	
Annual mean	3,645	
Highest annual mean	4,658	1971
Lowest annual mean	3,106	1970
Highest daily mean	90,000	Aug 11, 1971
Lowest daily mean	240	Apr 16, 1960
Annual seven-day minimum	240	Apr 16, 1960
Maximum peak flow	470,000	Aug 11, 1971
Annual runoff (ac-ft)	2,640,000	
Annual runoff (cfsm)	3.25	
Annual runoff (inches)	44.22	
10 percent exceeds	11,300	
50 percent exceeds	1,100	
90 percent exceeds	400	

See Period of Record; partial year was used in monthly statistics and break in record.