

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET

LOCATION.--Lat 63°56'06", long 160°18'18", in NW¹/₄ NE¹/₄ sec. 18, T.18 S., R.8 W. (Unalakleet D-3 quad), Hydrologic Unit 19050102, on the right bank, 3.5 mi upstream from mouth of the Chiroskey River, 28 mi upstream from mouth, 15 mi east of Unalakleet.

DRAINAGE AREA.--1,048 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to September 1999 (no winter record), October 1999 to current year.

REVISED RECORDS.--WRD-AK-99-1: 1998.

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above sea level from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. 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	1090	e940	e380	e228	e164	e142	e125	e2000	4770	1610	803	1830
2	1060	e900	e372	e226	e163	e142	e125	e4000	6290	1550	772	1720
3	1040	e870	e366	e224	e162	e141	e125	e4000	9340	1470	750	1630
4	1030	e830	e360	e222	e161	e140	e124	e3500	7370	1400	728	1630
5	1090	e800	e344	e220	e160	e140	e124	e3600	5870	1410	698	1630
6	1100	e770	e334	e217	e159	e139	e124	e4500	4950	1360	675	1640
7	1060	e740	e324	e215	e158	e139	e123	e6000	4360	1280	673	1810
8	1030	e710	e316	e213	e157	e138	e123	e8000	4020	1240	716	1770
9	1020	e690	e310	e208	e156	e138	e122	e10000	3850	1220	714	1690
10	1010	e670	e305	e200	e155	e137	e122	e11000	3540	1240	664	1890
11	1050	e650	e296	e196	e154	e137	e122	e12000	3290	1570	622	2410
12	1090	e630	e294	e193	e153	e136	e121	e13000	3230	1560	606	2900
13	1080	e610	e292	e190	e152	e136	e121	e15000	3060	1400	588	3610
14	1050	e590	e288	e187	e151	e135	e121	e17500	2870	1300	568	5260
15	1030	e575	e286	e184	e150	e135	e120	e18000	2810	1230	552	6090
16	1080	e560	e283	e183	e150	e134	e120	e17000	2680	1190	539	8820
17	1200	e545	e280	e181	e149	e134	e120	e16000	2520	1170	527	10600
18	1210	e530	e278	e180	e149	e133	e120	13200	2470	1190	522	9400
19	1230	e515	e274	e179	e148	e133	e120	10000	3100	1220	518	6970
20	1350	e495	e270	e178	e147	e132	e120	8490	2860	1160	519	5390
21	1460	e480	e265	e177	e147	e132	e120	7990	2530	1100	573	4460
22	1460	e465	e260	e175	e146	e131	e122	7720	2350	1040	774	5030
23	1490	e450	e250	e173	e146	e131	e128	7030	2220	986	969	6820
24	e1500	e440	e246	e172	e145	e130	e136	6390	2140	952	1510	8400
25	e1400	e430	e244	e171	e144	e129	e150	5920	2030	952	1960	8270
26	e1440	e420	e242	e170	e144	e128	e170	5920	1920	985	2120	7930
27	e1480	e410	e240	e169	e143	e128	e200	6370	1830	934	1900	7170
28	e1420	e400	e238	e168	e143	e127	e400	6290	1740	895	1750	6310
29	e1300	e395	e235	e167	---	e127	e700	5780	1670	867	1770	5380
30	e1160	e385	e233	e166	---	e126	e1000	5480	1610	863	1900	4540
31	e1000	---	e230	e165	---	e126	---	5200	---	843	1930	---
TOTAL	37010	17895	8935	5897	4256	4156	5568	266880	103290	37187	29910	143000
MEAN	1194	596	288	190	152	134	186	8609	3443	1200	965	4767
MAX	1500	940	380	228	164	142	1000	18000	9340	1610	2120	10600
MIN	1000	385	230	165	143	126	120	2000	1610	843	518	1630
AC-FT	73410	35490	17720	11700	8440	8240	11040	529400	204900	73760	59330	283600
CFSM	1.14	0.57	0.28	0.18	0.15	0.13	0.18	8.21	3.29	1.14	0.92	4.55
IN.	1.31	0.64	0.32	0.21	0.15	0.15	0.20	9.47	3.67	1.32	1.06	5.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2005, BY WATER YEAR (WY)#

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MEAN	1534	690	269	166	131	117	256	4520	3537	1620	2721	2762
MAX	2190	1181	342	200	152	134	783	8609	8788	2571	5690	4767
(WY)	2003	2004	2003	2003	2005	2005	2004	2005	2001	2003	1998	2005
MIN	1037	394	198	147	116	98.2	105	1182	1216	562	809	1339
(WY)	2002	2002	2002	2002	2001	2001	2001	2001	1997	1997	2002	2004

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

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1997 - 2005#	
ANNUAL TOTAL	609190		663984			
ANNUAL MEAN	1664		1819		1528	
HIGHEST ANNUAL MEAN					1819	
LOWEST ANNUAL MEAN					1005	
HIGHEST DAILY MEAN	15500		18000		19600	
LOWEST DAILY MEAN	a120	Feb 11	b120	Apr 15	c95	Mar 21 2001
ANNUAL SEVEN-DAY MINIMUM	120	Feb 11	120	Apr 15	95	Mar 21 2001
MAXIMUM PEAK FLOW			d	May 15	f19700	Jun 8 2001
MAXIMUM PEAK STAGE					98.41	Jun 8 2001
MAXIMUM PEAK STAGE			g98.19	May 14	g99.58	May 23 2002
ANNUAL RUNOFF (AC-FT)	1208000		1317000		1107000	
ANNUAL RUNOFF (CFSM)	1.59		1.74		1.46	
ANNUAL RUNOFF (INCHES)	21.62		23.57		19.81	
10 PERCENT EXCEEDS	5460		5890		3780	
50 PERCENT EXCEEDS	1030		673		718	
90 PERCENT EXCEEDS	120		133		120	

See Period of Record; partial years were used in monthly statistics

a From Feb. 11 to Apr. 5

b From Apr. 15 to Apr. 21

c From Mar. 21 to Apr. 10

d Undetermined, see highest daily mean

f From rating curve extended above 8800 ft³/s

g Backwater from ice

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982-83, 1998 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: June 1998 to current year.

INSTRUMENTATION.--Electronic water-temperature recorder set for one-hour recording interval.

REMARKS.-- No record from December 26 to January 21 and February 15-16 due to frozen probe. Records represent water temperature at the sensor within 0.5°C. Temperature was compared with the stream average by cross section on June 29 and August 13. No variation was found within the June 29 cross section, a 0.1°C variation found within the August 13 cross section. The variation found between mean stream temperature and sensor temperature was less than 0.5°C.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 15.5°C, July 14, 2004; minimum, 0.0°C, many days during winter and spring breakup periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 14.0°C, June 28-29 July 25-27; minimum, 0.0°C, many days during fall, winter and spring breakup periods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Stream width, feet (00004)	Sample location, cross section ft from rt bank (72103)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Temperature, water, deg C (00010)	Temperature, air, deg C (00020)
JUN								
29...	1701	249	10.0	88.42	1660	10	14.0	19.5
29...	1702	249	50.0	88.42	1660	10	14.0	19.5
29...	1703	249	100.0	88.42	1660	10	14.0	19.5
29...	1704	249	200.0	88.42	1660	10	14.0	19.5
29...	1705	249	200.0	88.42	1660	10	14.0	19.5
AUG								
13...	1800	250	5.0	87.24	584	10	12.9	24.5
13...	1820	250	30.0	87.24	584	10	12.8	24.5
13...	1830	250	75.0	87.24	584	10	12.8	24.5
13...	1840	250	115.0	87.24	584	10	12.9	24.5
13...	1855	250	215.0	87.24	584	10	12.9	24.5

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
2	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
3	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
4	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
5	3.0	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
6	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
7	2.5	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
8	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
9	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
10	3.0	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
11	3.0	2.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
12	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
13	2.5	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
14	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
15	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
16	3.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
17	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
18	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
19	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
20	2.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
21	2.0	1.5	2.0	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
22	1.5	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	1.5	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	1.5	1.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.5	0.0	0.0	0.0	0.0	0.0	---	---	---	0.0	0.0	0.0
27	2.0	0.5	1.0	0.0	0.0	0.0	---	---	---	0.0	0.0	0.0
28	1.0	1.0	1.0	0.0	0.0	0.0	---	---	---	0.0	0.0	0.0
29	1.5	1.0	1.0	0.0	0.0	0.0	---	---	---	0.0	0.0	0.0
30	1.0	0.0	0.5	0.0	0.0	0.0	---	---	---	0.0	0.0	0.0
31	0.0	0.0	0.0	---	---	---	---	---	---	0.0	0.0	0.0
MONTH	3.0	0.0	1.7	0.0	0.0	0.0	---	---	---	---	---	---

15565700 UNALAKLEET RIVER ABOVE CHIROSKEY RIVER NEAR UNALAKLEET—Continued

TEMPERATURE, WATER (DEGREES CELSIUS), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	1.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.5	1.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.0	1.5
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	1.5	2.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.5	3.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5	3.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.0	3.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.5	4.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.0	3.5
15	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	4.0	2.5	3.0
16	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	4.0	3.5	4.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	3.0	3.5
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	3.5	4.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.0	3.5
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	3.5	4.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	4.0	5.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.0	4.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	4.5	5.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	5.0	6.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.0	6.5
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.0	6.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	6.5	6.5
29	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	7.0	6.5	6.5
30	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	7.5	6.5	7.0
31	---	---	---	0.0	0.0	0.0	---	---	---	---	---	---
MONTH	---	---	---	0.0	0.0	0.0	0.0	0.0	0.0	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.0	5.5	6.0	13.0	11.0	12.0	13.0	11.0	12.0	8.5	7.5	8.0
2	5.5	5.0	5.5	13.5	11.5	12.5	12.0	10.5	11.5	7.5	7.0	7.0
3	5.0	4.5	4.5	13.5	11.5	12.5	11.5	10.0	10.5	7.5	7.0	7.0
4	5.0	4.5	5.0	13.5	11.5	12.5	11.5	10.5	10.5	8.0	7.0	7.5
5	7.0	5.0	5.5	13.5	11.5	12.5	11.0	10.5	10.5	7.5	7.5	7.5
6	---	7.0	7.0	13.5	11.5	12.5	11.0	10.5	10.5	8.0	7.5	7.5
7	8.5	---	---	12.5	11.5	12.0	11.0	10.0	10.5	8.5	8.0	8.0
8	9.0	8.5	8.5	11.5	10.5	11.0	11.5	10.0	11.0	8.5	7.5	8.0
9	8.5	8.0	8.5	10.5	10.0	10.0	12.5	10.0	11.5	8.0	7.5	7.5
10	9.5	8.0	8.5	10.0	9.0	9.5	13.0	11.5	12.0	8.0	7.5	7.5
11	9.0	8.0	9.0	9.0	8.5	9.0	12.0	11.0	11.5	8.0	8.0	8.0
12	8.5	7.5	8.0	10.0	9.0	9.5	11.5	10.0	10.5	8.0	7.0	7.5
13	10.0	8.5	9.0	11.0	10.0	10.5	13.0	10.5	11.5	7.5	7.0	7.0
14	11.0	9.5	10.0	11.5	9.5	10.5	12.5	11.5	12.0	7.0	7.0	7.0
15	11.5	10.0	10.5	13.0	10.5	12.0	12.0	11.0	11.5	7.0	7.0	7.0
16	12.0	10.5	11.0	13.5	12.0	12.5	12.0	10.5	11.5	7.0	6.5	7.0
17	12.5	11.0	12.0	12.5	11.5	12.0	11.5	10.5	11.0	6.5	6.5	6.5
18	12.0	10.0	11.5	12.0	11.0	11.5	10.5	9.5	10.0	6.5	6.0	6.0
19	10.0	9.0	9.5	11.5	10.0	10.5	9.5	8.5	9.0	6.0	6.0	6.0
20	10.5	8.5	9.5	12.5	10.5	11.5	9.0	8.5	9.0	6.0	6.0	6.0
21	10.5	10.0	10.0	13.0	11.5	12.0	9.5	8.5	9.0	6.0	6.0	6.0
22	10.5	9.5	10.0	13.5	11.5	12.5	9.5	9.0	9.5	6.5	6.0	6.0
23	11.0	9.5	10.0	13.5	12.0	12.5	10.0	9.5	9.5	6.5	6.5	6.5
24	12.0	10.0	11.0	13.5	12.0	12.5	10.0	9.5	9.5	6.5	5.5	5.5
25	12.0	10.5	11.5	14.0	11.5	12.5	10.0	9.0	9.5	5.5	5.5	5.5
26	12.5	11.0	11.5	14.0	12.5	13.0	9.5	9.0	9.0	5.5	5.5	5.5
27	13.0	11.5	12.0	14.0	12.0	13.0	9.0	8.5	8.5	5.5	5.0	5.0
28	14.0	12.0	13.0	13.5	12.5	13.0	8.5	8.5	8.5	5.0	4.0	4.5
29	14.0	13.0	13.5	13.0	11.5	12.0	9.0	8.0	8.5	4.5	4.0	4.0
30	13.5	12.0	12.5	11.5	11.0	11.5	9.5	8.5	9.0	4.0	3.0	3.5
31	---	---	---	13.0	11.0	11.5	9.0	8.5	9.0	---	---	---
MONTH	---	---	---	14.0	8.5	11.7	13.0	8.0	10.2	8.5	3.0	6.5

15583500 ETTA CREEK NEAR COUNCIL

LOCATION.--Lat 64°41'56", long 164°09'57", in SE¹/₄ NE¹/₄ NE¹/₄ sec. 24, T.9 S., R.28 W. (Solomon C-5 quad), Seward Peninsula, Hydrologic Unit 19050104, on the left bank, .2 mi upstream from mouth at the East Fork of Solomon River, 25 miles southwest of Council, Alaska.

DRAINAGE AREA.--1.33 mi².

PERIOD OF RECORD.--July 2001 to current year (no winter record).

GAGE.--Water-stage recorder. Elevation of gage is 330 ft above sea level from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 20 ft³/s, September 24, 2005, gage-height 50.55 ft; Minimum discharge not determined, occurs during winter.

EXTREMES FOR CURRENT PERIOD.-- October 2004, May to September 2005: maximum discharge during period, 20 ft³/s, September 24, gage height 50.55 ft. Minimum discharge not determined, occurs during winter.

WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	---	---	---	---	---	---	e0.40	6.9	3.6	2.3	3.8
2	1.4	---	---	---	---	---	---	e0.45	6.8	3.4	2.3	3.9
3	1.4	---	---	---	---	---	---	e0.50	6.4	3.3	2.3	3.8
4	1.3	---	---	---	---	---	---	e0.55	6.0	3.3	2.3	3.7
5	1.3	---	---	---	---	---	---	e0.60	5.9	3.1	2.4	3.7
6	1.3	---	---	---	---	---	---	e0.65	6.2	2.9	2.6	3.6
7	1.3	---	---	---	---	---	---	e0.70	6.4	2.8	3.1	3.5
8	1.3	---	---	---	---	---	---	e0.80	6.4	2.7	3.0	3.4
9	1.3	---	---	---	---	---	---	e0.90	6.0	2.8	3.2	3.9
10	1.4	---	---	---	---	---	---	e1.0	5.9	3.1	3.4	3.8
11	1.3	---	---	---	---	---	---	e1.4	6.0	3.2	3.6	4.1
12	1.2	---	---	---	---	---	---	e1.8	6.0	2.9	3.9	5.0
13	1.2	---	---	---	---	---	---	e2.0	5.8	2.9	3.9	5.7
14	1.2	---	---	---	---	---	---	e2.2	5.8	2.9	3.8	5.8
15	e1.1	---	---	---	---	---	---	e2.4	5.6	2.9	3.7	9.9
16	e1.1	---	---	---	---	---	---	e2.6	5.4	3.1	3.6	13
17	e1.1	---	---	---	---	---	---	e2.7	5.6	2.8	3.5	11
18	e1.0	---	---	---	---	---	---	e2.8	5.9	2.7	3.4	11
19	e1.0	---	---	---	---	---	---	e2.9	5.3	2.7	3.3	11
20	e1.0	---	---	---	---	---	---	e3.0	5.0	2.7	3.2	10
21	e0.90	---	---	---	---	---	---	e3.3	4.8	2.7	3.1	9.9
22	e0.90	---	---	---	---	---	---	e3.6	4.7	2.7	3.0	10
23	e0.90	---	---	---	---	---	---	e4.0	4.5	2.7	3.1	15
24	e0.80	---	---	---	---	---	---	e4.6	4.2	2.6	2.9	18
25	e0.80	---	---	---	---	---	---	e5.5	4.2	2.8	2.8	17
26	e0.80	---	---	---	---	---	---	e7.0	4.1	2.6	2.7	16
27	e0.70	---	---	---	---	---	---	7.7	4.0	2.5	2.9	15
28	e0.70	---	---	---	---	---	---	7.4	3.9	2.6	3.4	14
29	e0.70	---	---	---	---	---	---	7.3	3.8	2.4	3.5	13
30	e0.60	---	---	---	---	---	---	7.1	3.7	2.3	3.7	11
31	e0.60	---	---	---	---	---	---	6.9	---	2.3	3.9	---
TOTAL	33.00	---	---	---	---	---	---	94.75	161.2	88.0	97.8	262.5
MEAN	1.06	---	---	---	---	---	---	3.06	5.37	2.84	3.15	8.75
MAX	1.4	---	---	---	---	---	---	7.7	6.9	3.6	3.9	18
MIN	0.60	---	---	---	---	---	---	0.40	3.7	2.3	2.3	3.4
MED	1.1	---	---	---	---	---	---	2.6	5.7	2.8	3.2	9.9
AC-FT	65	---	---	---	---	---	---	188	320	175	194	521
CFSM	0.80	---	---	---	---	---	---	2.30	4.04	2.13	2.37	6.58
IN.	0.92	---	---	---	---	---	---	2.65	4.51	2.46	2.74	7.34

e Estimated

15743850 DAHL CREEK NEAR KOBUK

LOCATION.--Lat 66°56'46", long 156°54'32", in NW¹/₄ SE¹/₄ sec. 21, T. 18 N., R.9 E. (Shungnak D-2 quad), Hydrologic Unit 19050302, on right bank 25 ft downstream from bridge on road to Bornite at west end of Dahl Creek landing strip, 3.5 mi upstream from mouth, 3 mi north of Kobuk, and 7.3 miles northeast of Shungnak.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--Annual maximum, water years 1986-87, April 1988 to current year. (No winter record in water years 1989, 1991-92, 1994, 1996 and 2005.)

REVISED RECORDS.--WDR AK-88-1: 1986(M).

GAGE.--Water-stage recorder. Elevation of gage is 225 ft above sea level, from topographic map. July 16, 1986, to April 28, 1988, the water-stage recorder was operated to obtain annual maximums. Prior to August 17, 1994 at site 50 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 1840 ft³/s, August 17, 1994, gage height 6.73 ft, from rating curve extended above 170 ft³/s on basis of slope-area measurement of peak flow; minimum not determined, occurs during winter.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 192 ft³/s, May 30, gage height 5.32 ft; minimum not determined, occurs during winter.

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	18	---	---	---	---	---	---	15	155	35	34	30
2	17	---	---	---	---	---	---	17	144	35	33	31
3	17	---	---	---	---	---	---	17	137	34	32	31
4	17	---	---	---	---	---	---	15	127	33	31	30
5	17	---	---	---	---	---	---	16	115	31	33	30
6	16	---	---	---	---	---	---	21	107	31	39	30
7	16	---	---	---	---	---	---	29	99	30	40	30
8	16	---	---	---	---	---	---	38	93	30	37	29
9	16	---	---	---	---	---	---	43	88	31	35	30
10	16	---	---	---	---	---	---	47	83	43	34	30
11	16	---	---	---	---	---	---	58	80	52	33	31
12	15	---	---	---	---	---	---	72	79	107	33	37
13	15	---	---	---	---	---	---	97	76	76	32	56
14	15	---	---	---	---	---	---	112	73	66	31	75
15	15	---	---	---	---	---	---	118	70	61	31	66
16	15	---	---	---	---	---	---	109	68	59	31	63
17	15	---	---	---	---	---	---	103	66	56	30	78
18	14	---	---	---	---	---	---	110	63	54	30	72
19	15	---	---	---	---	---	---	100	64	52	29	69
20	15	---	---	---	---	---	---	102	59	50	29	68
21	15	---	---	---	---	---	---	108	55	48	29	66
22	14	---	---	---	---	---	---	113	52	46	29	67
23	14	---	---	---	---	---	---	113	49	44	30	78
24	14	---	---	---	---	---	---	114	47	43	31	70
25	e14	---	---	---	---	---	---	122	45	41	32	69
26	14	---	---	---	---	---	---	138	41	40	31	69
27	14	---	---	---	---	---	---	157	39	39	30	68
28	13	---	---	---	---	---	---	e11 159	38	38	31	67
29	e12	---	---	---	---	---	---	e13 163	37	37	33	65
30	e11	---	---	---	---	---	---	170	36	36	31	62
31	e10	---	---	---	---	---	---	14 163	---	35	31	---
TOTAL	461	---	---	---	---	---	---	2759	2285	1413	995	1597
MEAN	14.9	---	---	---	---	---	---	89.0	76.2	45.6	32.1	53.2
MAX	18	---	---	---	---	---	---	170	155	107	40	78
MIN	10	---	---	---	---	---	---	15	36	30	29	29
AC-FT	914	---	---	---	---	---	---	5470	4530	2800	1970	3170
CFSM	1.35	---	---	---	---	---	---	8.09	6.92	4.14	2.92	4.84
IN.	1.56	---	---	---	---	---	---	9.33	7.73	4.78	3.36	5.40

e Estimated

15747000 WULIK RIVER BELOW TUTAK CREEK NEAR KIVALINA

LOCATION.--Lat 67°52'34", long 163°40'28", in NW¹/₄ sec. 34, T. 29 N., R. 22 W. (Noatak D-4 quad), Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank 0.1 mi downstream from Tutak Creek and 25 mi northeast of Kivalina.

DRAINAGE AREA.--705 mi².

PERIOD OF RECORD.--September 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 175 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. GOES satellite telemetry at station. Flow from 2.8 square miles of the drainage basin is regulated by a tailings dam at the Red Dog Mine site. Up to 25 ft³/s of the flow at the gage may be discharge from Red Dog Mine during the summer period.

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	e270	e130	e94	e50	e38	e34	e32	e65	8450	1200	334	1330
2	e280	e120	e92	e49	e38	e34	e32	e72	6480	1020	325	1880
3	e290	e120	e90	e48	e38	e34	e32	e79	4980	879	320	2140
4	e290	e110	e88	e47	e38	e33	e32	e85	3790	770	321	1860
5	e280	e110	e86	e46	e37	e33	e32	e100	2930	696	378	1610
6	e260	e100	e84	e46	e37	e33	e32	e120	2640	655	679	1450
7	e250	e100	e82	e45	e37	e33	e32	e190	2560	613	3270	1320
8	e240	e95	e80	e45	e37	e33	e31	e300	2920	595	6190	1210
9	e230	e95	e78	e45	e37	e33	e31	e450	3730	579	21600	1140
10	e220	e90	e76	e44	e37	e33	e31	e760	3970	577	7720	1110
11	e220	e90	e76	e44	e36	e33	e31	e1200	4710	517	7120	1070
12	e210	e90	e74	e43	e36	e33	e31	e1900	4510	459	8100	1210
13	e210	e90	e72	e43	e36	e33	e31	e3000	4070	426	6520	1350
14	e210	e95	e70	e42	e36	e33	e31	e5200	3960	516	4570	1310
15	e220	e95	e68	e42	e36	e33	e31	e8000	3980	807	3370	1640
16	e220	e100	e68	e42	e36	e33	e31	4970	3930	860	2660	3090
17	e220	e105	e66	e42	e36	e33	e31	3320	3080	814	2190	3410
18	e210	e110	e66	e41	e35	e33	e31	3290	3140	793	1870	2920
19	e210	e110	e64	e41	e35	e33	e32	2560	3230	711	1650	2440
20	e200	e110	e62	e41	e35	e32	e33	2390	2320	646	1500	2070
21	e190	e110	e62	e41	e35	e32	e35	3040	2000	583	1410	1880
22	e190	e110	e60	e40	e35	e32	e37	3860	1840	526	1330	2720
23	e180	e110	e60	e40	e35	e32	e39	4760	1610	488	1420	5210
24	e170	e105	e58	e40	e35	e32	e40	6130	1540	455	1670	6640
25	e170	e105	e56	e40	e34	e32	e43	7300	1470	433	2480	4550
26	e160	e105	e56	e40	e34	e32	e46	11800	1420	421	2320	3420
27	e160	e100	e54	e39	e34	e32	e48	11800	1380	411	2010	2900
28	e150	e100	e54	e39	e34	e32	e53	10300	1320	390	1840	2420
29	e150	e98	e52	e39	---	e32	e55	9800	1340	381	1860	2020
30	e140	e96	e52	e39	---	e32	e60	10400	1310	365	1630	1700
31	e140	---	e50	e39	---	e32	---	9730	---	348	1420	---
TOTAL	6540	3104	2150	1322	1007	1014	1086	126971	94610	18934	100077	69020
MEAN	211	103	69.4	42.6	36.0	32.7	36.2	4096	3154	611	3228	2301
MAX	290	130	94	50	38	34	60	11800	8450	1200	21600	6640
MIN	140	90	50	39	34	32	31	65	1310	348	320	1070
AC-FT	12970	6160	4260	2620	2000	2010	2150	251800	187700	37560	198500	136900
CFSM	0.30	0.15	0.10	0.06	0.05	0.05	0.05	5.81	4.47	0.87	4.58	3.26
IN.	0.35	0.16	0.11	0.07	0.05	0.05	0.06	6.70	4.99	1.00	5.28	3.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2005, BY WATER YEAR (WY)#

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005		
MEAN	535	137	65.8	37.9	25.8	20.1	18.4	1994	3222	1595	2813	1679											
MAX	1542	290	111	70.0	49.3	39.5	38.8	4856	6669	6144	8458	3076											
(WY)	1994	1994	1986	1986	1986	1991	1991	1993	1989	1989	1994	2002											
MIN	207	63.1	34.2	21.5	12.0	9.10	9.00	20.6	1372	424	496	386											
(WY)	1997	2002	1988	1992	1992	1992	1992	1989	1988	1999	1991	1991											

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1985 - 2005#

	2004 CALENDAR YEAR	2005 WATER YEAR	1985 - 2005#
ANNUAL TOTAL	356246	425835	
ANNUAL MEAN	973	1167	1017
HIGHEST ANNUAL MEAN			1843
LOWEST ANNUAL MEAN			530
HIGHEST DAILY MEAN	13600	21600	29400
LOWEST DAILY MEAN	a22	b31	c9.0
ANNUAL SEVEN-DAY MINIMUM	22	31	9.0
MAXIMUM PEAK FLOW		30300	38500
MAXIMUM PEAK STAGE		11.38	12.21
MAXIMUM PEAK STAGE			d13.5
ANNUAL RUNOFF (AC-FT)	706600	844600	736500
ANNUAL RUNOFF (CFSM)	1.38	1.65	1.44
ANNUAL RUNOFF (INCHES)	18.80	22.47	19.59
10 PERCENT EXCEEDS	2880	3410	2900
50 PERCENT EXCEEDS	145	110	130
90 PERCENT EXCEEDS	24	33	15

See Period of Record
a From Apr. 3-25
b From Apr. 8-18
c From Apr. 30 to May 10, 1985, and Mar. 4 to May 17, 1992
d From floodmarks, backwater from snow and ice
e Estimated

1574699020 IKALUKKROK CREEK 0.6 MILE BELOW RED DOG CREEK NEAR KIVALINA

LOCATION.--Lat 68°05'09", long 162°58'07", in Ne¹/₄ sec. 15, T. 31 N., R. 19 W. (De Long Mountains A-2 quad), Northwest Arctic Borough, Hydrologic Unit 19050404, on left bank 0.6 miles downstream from Red Dog Creek, 3 miles northwest of Red Dog Mine, 36 miles north of Noatak, and 48 miles northeast of Kivalina.

DRAINAGE AREA.--86.7 mi².

PERIOD OF RECORD.--June 2005 to current year. Miscellaneous measurements were collected from June 2001 to September 2004.

GAGE.--Water-stage recorder. Elevation of gage is 660 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Meteorburst telemetry at station. Flow from 2.8 square miles of the drainage basin is regulated by a tailings dam at the Red Dog Mine site. Up to 25 ft³/s of the flow at the gage may be discharge from Red Dog Mine during the summer period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, to be determined, August 9, 2005, gage height, 31.93 ft from flood marks; minimum not determined, occurs during the winter.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, to be determined, August 9, gage height, 31.93 ft from flood marks; minimum not determined, occurs during the winter.

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	---	---	---	---	---	---	---	---	1110	191	60	188
2	---	---	---	---	---	---	---	---	805	163	60	250
3	---	---	---	---	---	---	---	---	668	145	60	243
4	---	---	---	---	---	---	---	---	523	127	60	230
5	---	---	---	---	---	---	---	---	431	116	96	213
6	---	---	---	---	---	---	---	---	379	115	302	195
7	---	---	---	---	---	---	---	---	378	104	946	177
8	---	---	---	---	---	---	---	---	457	106	1530	172
9	---	---	---	---	---	---	---	---	544	101	1680	165
10	---	---	---	---	---	---	---	---	535	99	741	158
11	---	---	---	---	---	---	---	---	614	84	1050	149
12	---	---	---	---	---	---	---	---	593	75	1020	170
13	---	---	---	---	---	---	---	---	587	76	798	170
14	---	---	---	---	---	---	---	---	568	128	583	190
15	---	---	---	---	---	---	---	---	570	192	451	243
16	---	---	---	---	---	---	---	---	538	160	372	496
17	---	---	---	---	---	---	---	---	468	147	319	406
18	---	---	---	---	---	---	---	---	523	128	282	339
19	---	---	---	---	---	---	---	---	448	114	258	296
20	---	---	---	---	---	---	---	e300	332	104	238	264
21	---	---	---	---	---	---	---	e400	300	95	218	249
22	---	---	---	---	---	---	---	e500	280	88	210	346
23	---	---	---	---	---	---	---	e700	269	81	223	862
24	---	---	---	---	---	---	---	e900	256	77	265	693
25	---	---	---	---	---	---	---	e1200	245	75	293	527
26	---	---	---	---	---	---	---	e1700	242	72	267	441
27	---	---	---	---	---	---	---	e1700	228	70	248	390
28	---	---	---	---	---	---	---	e1500	233	73	240	343
29	---	---	---	---	---	---	---	e1350	236	66	229	295
30	---	---	---	---	---	---	---	1360	221	66	211	249
31	---	---	---	---	---	---	---	1200	---	62	195	---
TOTAL	---	---	---	---	---	---	---	---	13581	3300	13505	9109
MEAN	---	---	---	---	---	---	---	---	453	106	436	304
MAX	---	---	---	---	---	---	---	---	1110	192	1680	862
MIN	---	---	---	---	---	---	---	---	221	62	60	149
MED	---	---	---	---	---	---	---	---	453	101	265	249
AC-FT	---	---	---	---	---	---	---	---	26940	6550	26790	18070

e Estimated