

YUKON ALASKA

15478040 PHELAN CREEK NEAR PAXSON

LOCATION.--Lat 63°14'27", Long 145°28'03", in SW¹/₄ sec. 28, T. 19 S., R. 12 E. (Mt.Hayes A-3 quad), Hydrologic Unit 19020102, on left bank about 1 mi downstream from terminus of Gulkana Glacier and 14.5 mi north of Paxson, Alaska.

DRAINAGE AREA.--12.2 mi².

PERIOD OF RECORD.--October 1966 to September 1978, annual maximums, water years 1984-85, October 1989 to current year. Water year 1994 not published, daily mean values of discharge are available from the computer files of the Alaska Science Center. Prior to October 1968, published as Gulkana Creek near Paxson.

GAGE.--Water-stage recorder. Datum of gage is 3,690 ft above sea level.

REMARKS.--Records are poor. Streamflow augmented by Gulkana Glacier and other glaciers that cover 7.5 mi² and 1.1 mi², respectively, of the drainage basin. A recording air temperature and precipitation gage at 4,860 ft above sea level, plus 3 snow and ice balance measurement sites, are located in the basin. Combined snow, ice, and water balances of the basin are published in other reports of the Geological Survey. 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	15	e8.7	e6.2	e5.3	e4.5	e3.8	e3.4	e4.5	112	306	139	83
2	15	e8.5	e6.1	e5.2	e4.5	e3.8	e3.4	e5.0	101	314	163	74
3	16	e8.4	e6.1	e5.2	e4.4	e3.8	e3.4	e6.0	103	389	175	74
4	16	e8.3	e6.1	e5.2	e4.4	e3.8	e3.4	e7.0	124	376	206	94
5	17	e8.1	e6.0	e5.2	e4.4	e3.8	e3.4	e8.0	152	391	229	113
6	16	e8.0	e6.0	e5.2	e4.4	e3.8	e3.4	e10	190	330	225	124
7	15	e7.8	e5.9	e5.1	e4.3	e3.8	e3.4	e15	194	438	238	125
8	e14	e7.7	e5.9	e5.1	e4.3	e3.7	e3.3	e20	196	475	288	98
9	14	e7.6	e5.9	e5.0	e4.3	e3.7	e3.3	e30	203	446	358	110
10	13	e7.5	e5.9	e5.0	e4.2	e3.7	e3.3	e40	236	511	457	189
11	13	e7.4	e5.8	e5.0	e4.2	e3.7	e3.3	e50	289	476	517	127
12	13	e7.3	e5.8	e5.0	e4.2	e3.7	e3.3	e60	255	363	508	142
13	12	e7.2	e5.8	e5.0	e4.2	e3.6	e3.3	e70	352	611	448	136
14	12	e7.1	e5.8	e5.0	e4.1	e3.6	e3.3	e85	339	631	487	101
15	12	e7.1	e5.7	e4.9	e4.1	e3.6	e3.3	e100	294	399	368	89
16	e12	e7.0	e5.7	e4.9	e4.1	e3.6	e3.3	e125	330	401	414	99
17	e12	e6.9	e5.7	e4.9	e4.0	e3.6	e3.3	e125	353	397	480	92
18	e11	e6.8	e5.6	e4.9	e4.0	e3.6	e3.3	e100	320	696	364	70
19	e11	e6.8	e5.6	e4.9	e4.0	e3.6	e3.3	84	370	473	299	65
20	e11	e6.7	e5.6	e4.8	e4.0	e3.6	e3.3	97	330	369	271	59
21	e11	e6.7	e5.6	e4.8	e4.0	e3.6	e3.3	102	303	306	422	49
22	e11	e6.6	e5.5	e4.8	e3.9	e3.6	e3.3	98	265	314	289	45
23	e10	e6.6	e5.5	e4.8	e3.9	e3.5	e3.4	96	256	238	375	59
24	e10	e6.5	e5.5	e4.7	e3.9	e3.5	e3.4	104	257	246	307	92
25	e10	e6.5	e5.5	e4.7	e3.9	e3.5	e3.4	108	259	235	186	56
26	e9.8	e6.4	e5.5	e4.7	e3.8	e3.5	e3.5	106	281	284	165	48
27	e9.6	e6.4	e5.4	e4.7	e3.8	e3.5	e3.6	111	314	344	143	44
28	e9.4	e6.3	e5.4	e4.6	e3.8	e3.5	e3.7	119	326	275	123	40
29	e9.3	e6.3	e5.4	e4.6	---	e3.4	e3.8	118	387	268	124	37
30	e9.1	e6.2	e5.3	e4.5	---	e3.4	e3.9	121	317	223	137	32
31	e8.9	---	e5.3	e4.5	---	e3.4	---	120	---	167	117	---
TOTAL	378.1	215.4	177.1	152.2	115.6	112.3	102.0	2244.5	7808	11692	9022	2566
MEAN	12.2	7.18	5.71	4.91	4.13	3.62	3.40	72.4	260	377	291	85.5
MAX	17	8.7	6.2	5.3	4.5	3.8	3.9	125	387	696	517	189
MIN	8.9	6.2	5.3	4.5	3.8	3.4	3.3	4.5	101	167	117	32
AC-FT	750	427	351	302	229	223	202	4450	15490	23190	17900	5090
CFSM	1.00	0.59	0.47	0.40	0.34	0.30	0.28	5.93	21.3	30.9	23.9	7.01
IN.	1.15	0.66	0.54	0.46	0.35	0.34	0.31	6.84	23.81	35.65	27.51	7.82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2005, BY WATER YEAR (WY)#

MEAN	12.5	6.18	4.36	3.38	2.84	2.51	2.38	19.7	156	318	260	62.5
MAX	36.6	15.1	8.67	5.32	5.00	4.71	4.00	72.4	414	536	516	129
(WY)	2004	2003	2003	1996	2004	2004	1971	2005	2004	2004	2004	1995
MIN	5.55	2.50	2.00	1.48	1.00	1.00	1.00	2.39	72.9	181	73.6	14.3
(WY)	1999	1978	1978	1967	1967	1967	1967	1992	1975	1991	1992	1992

See Period of Record; breaks in record.
e Estimated

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1967 - 2005#	
ANNUAL TOTAL	49146.6		34585.2			
ANNUAL MEAN	134		94.8		71.5	
HIGHEST ANNUAL MEAN					136	
LOWEST ANNUAL MEAN					43.0	
HIGHEST DAILY MEAN	725		696		1330	
LOWEST DAILY MEAN	a4.0	Aug 7	b3.3	Jul 18	c1.0	Aug 13 1997
ANNUAL SEVEN-DAY MINIMUM	4.0	Mar 23	3.3	Apr 8	1.0	Jan 16 1967
MAXIMUM PEAK FLOW			1120		2320	
MAXIMUM PEAK STAGE			9.59		11.51	
MAXIMUM PEAK STAGE					df14.70	
ANNUAL RUNOFF (AC-FT)	97480		68600		51820	
ANNUAL RUNOFF (CFSM)	11.0		7.77		5.86	
ANNUAL RUNOFF (INCHES)	149.86		105.46		79.66	
10 PERCENT EXCEEDS	546		330		261	
50 PERCENT EXCEEDS	7.6		8.3		6.0	
90 PERCENT EXCEEDS	4.0		3.6		2.0	

See Period of Record; breaks in record.

a From Mar. 23 to May 2

b From Apr. 8 to 22

c For many days in the winter and spring during water years 1967, 1969, 1978, and 1991

d Backwater from snow and ice

f Occurred in early Jun. as a result of flow over ice.