

# YUKON ALASKA

## 15477768 SONORA CREEK ABOVE TRIBUTARY NEAR BIG DELTA

LOCATION.--Lat 64°23'22", long 144°46'40", in SW<sup>1</sup>/<sub>4</sub> sec.16, T.6 S., R.15 E. (Big Delta B-2 quad), Hydrologic Unit 19040503, on right bank, 2.5 miles upstream from mouth, 6.3 miles southeast of Pogo Mine Camp site, and 35 miles northeast of Big Delta.

DRAINAGE AREA.--6.05 mi<sup>2</sup>.

PERIOD OF RECORD.--May 2000 to September 2005 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1650 ft above sea level, from topographic map.

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

REVISIONS.--Peak discharges for the period of record have been revised and are tabulated below. They supersede figures published in reports for 2001 to 2004:

Date	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)	Date	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)
May 22, 2000	a47	21.17	Apr. 27, 2003	a42	21.09
May 23, 2001	17	20.47	May 7, 2004	a92	21.74
May 14, 2002	a76	21.56			

### 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	2.6	1.9	e1.4	e1.2	e1.1	e1.0	e1.0	9.5	3.0	5.3	8.5	4.6
2	2.3	1.9	e1.4	e1.2	e1.1	e1.0	e1.0	6.4	4.0	5.4	9.9	4.6
3	2.6	1.9	e1.4	e1.2	e1.1	e1.0	e1.0	6.9	7.3	5.4	7.9	4.5
4	2.5	1.9	e1.4	e1.2	e1.1	e1.0	e1.0	8.4	7.8	5.5	6.9	4.4
5	2.4	1.8	e1.4	e1.2	e1.0	e1.0	e1.0	7.0	5.7	6.0	6.5	4.3
6	2.5	e1.8	e1.4	e1.2	e1.0	e1.0	e1.0	6.4	4.3	6.3	6.6	4.3
7	2.5	e1.8	e1.4	e1.2	e1.0	e1.0	e1.0	8.1	3.7	6.4	6.3	4.2
8	2.5	e1.8	e1.4	e1.2	e1.0	e1.0	e1.0	10	3.5	6.2	5.9	4.3
9	2.4	e1.8	e1.3	e1.2	e1.0	e1.0	e1.0	10	3.3	6.1	5.7	4.3
10	2.4	e1.8	e1.3	e1.1	e1.0	e1.0	e1.0	8.3	3.2	6.0	5.4	4.3
11	2.3	e1.8	e1.3	e1.1	e1.0	e1.0	e1.0	6.5	3.1	5.7	5.2	4.3
12	2.3	e1.7	e1.3	e1.1	e1.0	e1.0	e1.0	5.0	3.2	5.5	5.1	4.3
13	2.4	e1.7	e1.3	e1.1	e1.0	e1.0	e1.0	5.0	4.4	5.3	4.9	4.2
14	2.3	e1.7	e1.3	e1.1	e1.0	e1.0	e1.0	4.3	4.2	5.1	4.8	4.2
15	2.2	e1.7	e1.3	e1.1	e1.0	e1.0	e1.0	3.6	4.6	5.0	4.7	4.2
16	2.2	e1.6	e1.3	e1.1	e1.0	e1.0	e1.0	3.1	3.9	4.9	4.6	4.1
17	2.0	e1.6	e1.3	e1.1	e1.0	e1.0	e1.0	4.0	4.5	5.6	4.6	4.1
18	e1.8	e1.6	e1.3	e1.1	e1.0	e1.0	e1.0	18	5.5	6.8	4.5	4.3
19	1.8	e1.6	e1.3	e1.1	e1.0	e1.0	e1.0	6.3	13	7.9	4.4	4.4
20	2.1	e1.6	e1.3	e1.1	e1.0	e1.0	e1.1	4.2	21	6.4	4.4	4.6
21	2.2	e1.6	e1.3	e1.1	e1.0	e1.0	e1.3	3.6	10	5.8	4.4	4.9
22	2.3	e1.6	e1.3	e1.1	e1.0	e1.0	e1.7	3.5	7.5	5.5	4.3	4.9
23	2.2	e1.5	e1.3	e1.1	e1.0	e1.0	e2.3	3.2	6.5	5.3	4.3	5.1
24	2.1	e1.5	e1.3	e1.1	e1.0	e1.0	e3.4	3.0	5.9	5.1	4.2	6.2
25	2.1	e1.5	e1.2	e1.1	e1.0	e1.0	e5.0	3.0	5.9	5.0	4.2	6.5
26	2.1	e1.5	e1.2	e1.1	e1.0	e1.0	6.4	3.1	5.7	4.9	4.2	6.0
27	2.1	e1.5	e1.2	e1.1	e1.0	e1.0	8.1	3.0	5.5	4.8	4.1	5.7
28	2.0	e1.5	e1.2	e1.1	e1.0	e1.0	8.5	3.0	5.3	5.0	4.1	5.4
29	2.0	e1.5	e1.2	e1.1	---	e1.0	9.5	3.0	5.1	4.8	4.1	5.4
30	2.0	e1.4	e1.2	e1.1	---	e1.0	11	2.9	5.0	5.1	4.2	5.4
31	2.0	---	e1.2	e1.1	---	e1.0	---	2.9	---	4.9	4.3	---
TOTAL	69.2	50.1	40.4	35.0	28.4	31.0	77.3	175.2	175.6	173.0	163.2	142.0
MEAN	2.23	1.67	1.30	1.13	1.01	1.00	2.58	5.65	5.85	5.58	5.26	4.73
MAX	2.6	1.9	1.4	1.2	1.1	1.0	11	18	21	7.9	9.9	6.5
MIN	1.8	1.4	1.2	1.1	1.0	1.0	1.0	2.9	3.0	4.8	4.1	4.1
MED	2.2	1.6	1.3	1.1	1.0	1.0	1.0	4.3	5.1	5.4	4.6	4.4
AC-FT	137	99	80	69	56	61	153	348	348	343	324	282
CFSM	0.37	0.28	0.22	0.19	0.17	0.17	0.43	0.93	0.97	0.92	0.87	0.78
IN.	0.43	0.31	0.25	0.22	0.17	0.19	0.48	1.08	1.08	1.06	1.00	0.87

### STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)#

	2000	2001	2002	2003	2004	2005
MEAN	4.15	2.64	1.90	1.51	1.39	1.31
MAX	6.03	3.89	2.63	2.03	1.68	1.50
(WY)	2001	2001	2001	2001	2003	2003
MIN	2.23	1.67	1.16	1.12	1.01	1.00
(WY)	2005	2005	2002	2002	2005	2005

# See Period of Record; partial year was used in monthly statistics  
a From rating curve extended above 16 cfs based on step-backwater analysis  
e Estimated

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005#	
ANNUAL TOTAL	1090.4		1160.4			
ANNUAL MEAN	2.98		3.18		3.35	
HIGHEST ANNUAL MEAN					3.64 2002	
LOWEST ANNUAL MEAN					3.18 2005	
HIGHEST DAILY MEAN	37	May 7	21	Jun 20	37	May 7 2004
LOWEST DAILY MEAN	b1.2	Dec 25	c1.0	Feb 5	0.94	Apr 20 2002
ANNUAL SEVEN-DAY MINIMUM	1.2	Dec 25	1.0	Feb 5	0.95	Apr 20 2002
MAXIMUM PEAK FLOW			36 Jun 20		92	May 7 2004
MAXIMUM PEAK STAGE			20.96 Jun 20		21.74	May 7 2004
INSTANTANEOUS LOW FLOW					d0.56	Mar 21 2000
ANNUAL RUNOFF (AC-FT)	2160		2300		2430	
ANNUAL RUNOFF (CFSM)	0.492		0.525		0.554	
ANNUAL RUNOFF (INCHES)	6.70		7.14		7.53	
10 PERCENT EXCEEDS	4.9		6.3		6.3	
50 PERCENT EXCEEDS	2.1		2.1		2.5	
90 PERCENT EXCEEDS	1.4		1.0		1.1	

# See Period of Record; partial year was used in monthly statistics  
b Dec. 25 through Dec. 31  
c Feb. 5 through Apr. 19  
d Minimum observed outside period of record, result of discharge measurement