

WATER RESOURCE INFORMATION

Table A: DEFINITIONS OF UNITS AND ABBREVIATIONS
USED FOR MEASURING WATER USE AND FLOW

FLOWRATE

- cfs: Cubic feet per second. Used for measuring streamflow rates. 1 CFS = 449 GPM = 646,272 GPD
- GPD: Gallons per day. Used for measuring domestic, commercial and some industrial water use on a daily basis.
- GPM: Gallons per minute. Used for measuring well yields and other relatively small flowing systems. 1 GPM = 1,440 GPD
- MGD: Million gallons per day. Used for the total daily water use for larger appropriations. 1 MGD = 1,000,000 GPD

VOLUME

- AF: Acre-feet. A volume of water that would cover one acre to a depth of one foot. Used for large volume measurements. A flow of 1.5 CFS for 24 hours produces approximately 3 AF, which is approximately equal to one million gallons. 1 AF = 325,851 gallons.

CONCENTRATION

- ppm: Part per million. Used for measuring the concentrations of substances in water.

Table B: MISCELLANEOUS FLOW MEASUREMENTS (DGGS)

SURFACE WATER DATA

	Date	Discharge (cfs)	Water Temp. (°C)	pH	Dissolved Oxygen (ppm)
Chickaloon River	4/12/84	125	1.9	7.4	13.5
Kings River	4/10/84	52	2.5	6.9	13.9
Granite Creek	4/10/84	22	1.8	6.8	14.0
Moose Creek	4/11/84	19	2.1	6.8	13.8
" "	8/15/84	145	12.3	---	---

Table C: SURFACE WATER DATA

MISCELLANEOUS DISCHARGE MEASUREMENTS (DGGS)

Stream	Location	Drainage Area (sq. mi.)
Eska Creek near Sutton	Lat 61°43'44", Long 148°54'31", in NE1/4 Sec. 21, T.19N., R.3E., Matanuska-Susitna Borough, on right bank 100 ft. below culverts on Eska-Jonesville Road and 1.5 mi. northeast of Sutton.	13.4

<u>Date</u>	<u>Discharge</u> (cfs)	<u>Date</u>	<u>Discharge</u> (cfs)	<u>Date</u>	<u>Discharge</u> (cfs)
8- 4-65	24.4	5-12-75	46	7-18-79	63
5-19-66	7.70	5-19-75	34	5- 7-80	18
6-28-66	34	6-23-75	60	5-25-80	12
8-27-66	24	7-21-75	59	6- 6-80	61
9-29-66	11	9- 2-75	17	6-27-80	74
5-20-67	29	9-11-75	112	9-15-80	500
7-25-67	67	7-12-76	47	9-16-80	228
8-10-71	680	7- 5-77	55	9-17-80	135
7- 5-72	106	9-30-77	48	5-28-81	41
8-14-72	17	5-22-78	10	6-28-82	77
9-30-72	58	8- 2-78	22	9-13-82	89
6- 5-73	18	5- 2-79	83	5-11-83	21
6-16-73	94	5- 4-79	90	8-25-83	73
7-17-73	26	7-15-79	205	8-25-83	78
5-11-74	18				

Table D: EXISTING WELL LOG INFORMATION
(prior to December 1985)

Total wells in Moose Range = 26

(22 possibly additional)

Well Locations	Aquifer Material	Material Depth	Depth to Bedrock	Well Depth	Q (gal/min)	
T19N, R2E, Sec. 33						
	DAAD	--	--	36	40	1
	DABB	gravel	34	--	28	5
	DACB	sands	51	51	45	3
T19N, R3E, Sec. 10						
	CDCA	--	--	2	--	--
	CDDD	--	--	21	--	--
	DCBA	--	--	18	--	--
	DCDB	--	--	18	--	--
T19N, R3E, Sec. 15						
	BAAC	--	--	14	--	--
	BABB	--	--	18	--	--
	BBAB	--	--	38	--	--
	BBCB	--	--	36	--	--
	BBDB	--	--	49	--	--
	BCCB	--	--	--	21	10
T19N, R3E, Sec. 16						
	BCAA	--	--	5	--	--
	BCDC	--	--	54	--	--
	BCDD	--	--	14	--	--
T19N, R3E, Sec. 21						
	CACC	sand & gravel	48	--	48	10
T19N, R3E, Sec. 22						
	BCBC	--	--	--	118	7.5
	BCDB	--	--	--	18	17
	CADA	--	--	--	88	--
	CADD	--	--	--	91.5	--
	CDCC	--	--	--	51	--
	DDDD	sand & gravel	74	--	70	117
T19N, R3E, Sec. 23						
	BCCC	--	--	--	98	15
T19N, R3E, Sec. 30						
	CDDD	gravel, fine clay	178	--	178	--
T20N, R5E, Sec. 34						
	BADB	--	--	6	--	2

Table E: WATER RIGHTS ON STATE FILE
(prior to December 1985)

WATER RIGHTS
within
MATANUSKA VALLEY MOOSE RANGE

Township 18 North, Range 1 East, SM	NONE
Township 18 North, Range 2 East, SM	NONE
Township 19 North, Range 1 East, SM	NONE
Township 19 North, Range 2 East, SM	NONE
Township 19 North, Range 3 East, SM	18
Section 22 ... ADL 212244 & ADL 214647	
Section 23 ... ADL 47807, 51119, & 77827; LAS 1919 & 2174	
Section 24 ... ADL 47808 & 51120	
Section 26 ... ADL 209748*, 210958*, 212267*, & 215285; LAS 1808	
Section 27 ... ADL 75453, 213125, & 214835; LAS 2668	
Township 19 North, Range 4 East, SM	1
Section 10 ... ADL 209844	
Township 19 North, Range 5 East, SM	NONE
Township 20 North, Range 2, 3, & 4 East, SM	NONE
Township 20 North, Range 5 East, SM	6
Section 25 ... ADL 214862 & 214863 & LAS 2866	
Section 27 ... ADL 40884 & 209457	
Section 34 ... ADL 209822	
Township 20 North, Range 6 East, SM	2
Section 29 ... ADL 40525	
Section 30 ... ADL 200649	
Township 20 North, Range 7 East, SM	NONE
Township 21 North, Range 2, 3, 4, 5, & 6 East SM	NONE
Township 21 North, Range 7 East, SM	1
Section 28 ... LAS 2055	
Township 22 North, Range 6 East, SM	NONE

TOTAL 28

Note: *is for water rights which may or may not be within range boundaries.

Table E (continued)

WATER RIGHTS
within
MATANUSKA VALLEY MOOSE RANGE

ADL/LAS	Quantity	Source	Application Permit or Certificate	Number of Months Of Use	Type
1. A 47807	96.0 AF	strm	cert	3	farming
2. A 47808	4500 GPD	well	cert	12	domestic
3. A 51119	96.0 AF	strm	cert	3	farming
4. A 51120	96.0 AF	strm	cert	3	farming
5. A 75453	500 GPD	well	cert	12	domestic
	200 GPD			3	lawn & garden
6. A 77827	700 GPD	well	cert	12	domestic
7. A 209748	500 GPD	well	cert	12	domestic
8. A 210958	500 GPD	well	cert	12	domestic
9. A 212244	500 GPD	well	permit	12	domestic
10. A 212267	500 GPD	well	cert	12	domestic
	19 GPD				livestock
11. A 213125	500 GPD	well	cert	12	domestic
12. A 214647	500 GPD	well	cert	12	grade school
13. A 214835	500 GPD	well	permit	12	domestic
14. A 215285	500 GPD	well	permti	12	domestic
15. L 1808	500 GPD	well	cert	12	domestic
	48 GPD				livestock
16. L 1919	500 GPD	well	appln	12	domestic
17. L 2174	500 GPD	well	cert	12	domestic
	3 GPD				livestock
18. L 2669	500 GPD	well	appln	12	domestic
	30 GPD				livestock
19. L 779	2500 GPD	well	permit	8	coal mine
20. A 40884	600 GPD	strm	cert	12	domestic
	00 GPD			3	farming
21. A 209457	500 GPD	well	cert	12	domestic
22. A 209822	500 GPD	well	permit	12	domestic
	.2 AF			5	lawn & garden
23. A 214862	500 GPD	well	permit	12	domestic
24. A 214863	265 GPD	strm	permit	12	domestic
	10 AF			5	lawn & garden
25. A 40525	3500 GPD	well (2)	cert	12	domestic
					livestock
26. A 200649	6.5 AF	strm	cert	3	farming
27. L 2055	1000 GPM	strm	appln	7	placer mine