

Table 2-1. Mitchell Creek Monthly Water Quality (Continued).

	Month	Average					95th Percentile					HDS Quality	Alaska Water Quality Criteria -- Fresh Water	
		MC1A-US	MC1A	MC1	MC1B	Average	MC1A-US	MC1A	MC1	MC1B	Average		Acute	Chronic
TSS	January	107	-	79	59	82	121	-	87	60	89	12	1000	1000
	February	105	-	77	82	88	134	-	115	104	118		1000	1000
	March	114	-	72	65	83	124	-	91	66	94		1000	1000
	April	121	-	86	114	107	180	-	145	152	159		1000	1000
	May	194	684	189	187	314	331	964	394	224	478		1000	1000
	June	237	-	237	122	199	333	-	342	135	270		1000	1000
	July	278	161	320	170	232	532	161	605	174	368		1000	1000
	August	239	743	244	90	329	487	743	526	92	462		1000	1000
	September	240	-	216	116	191	364	-	322	160	282		1000	1000
	October	86	-	133	64	94	100	-	382	78	187		1000	1000
	November	75	-	76	68	73	90	-	95	79	88		1000	1000
	December	95	-	69	63	76	117	-	88	65	90		1000	1000
<b>Total</b>														
Cu	January	2.5	-	1.4	1.0	1.7	3.5	-	1.5	1.0	2.0	0.064	0.20	0.12
	February	2.3	-	1.4	1.0	1.6	2.8	-	1.6	1.3	1.9		0.20	0.12
	March	2.0	-	1.1	0.9	1.3	2.2	-	1.3	0.9	1.5		0.20	0.12
	April	2.8	-	1.1	1.0	1.6	6.0	-	1.5	1.1	2.9		0.18	0.11
	May	1.9	2.8	1.3	1.0	1.7	5.9	3.1	2.1	1.2	3.1		0.11	0.07
	June	2.0	-	1.7	0.9	1.5	6.0	-	2.1	1.0	3.0		0.08	0.05
	July	0.4	0.8	0.9	0.3	0.6	1.0	0.8	1.8	0.3	1.0		0.04	0.03
	August	0.6	0.1	0.4	0.3	0.3	2.2	0.1	0.7	0.3	0.8		0.03	0.02
	September	0.8	-	0.6	0.7	0.7	1.9	-	1.0	1.0	1.3		0.07	0.04
	October	1.9	-	1.4	1.2	1.5	4.6	-	2.4	1.4	2.8		0.11	0.07
	November	2.0	-	1.8	1.5	1.8	2.5	-	2.2	1.7	2.1		0.16	0.10
	December	2.4	-	1.4	1.2	1.6	3.6	-	1.6	1.2	2.1		0.18	0.11
Fe	January	105	-	42	27	58	136	-	43	28	69	0.63	-	1
	February	102	-	47	36	62	122	-	67	48	79		-	1
	March	82	-	33	28	47	94	-	43	28	55		-	1
	April	120	-	47	56	74	184	-	99	79	120		-	1
	May	137	119	62	65	96	424	122	111	83	185		-	1
	June	53	-	47	20	40	114	-	68	22	68		-	1
	July	16	21	28	12	19	35	21	71	12	35		-	1
	August	15	12	10	10	12	32	12	15	12	18		-	1
	September	28	-	20	23	24	67	-	33	32	44		-	1
	October	67	-	37	39	47	141	-	66	48	85		-	1
	November	78	-	48	40	55	113	-	64	42	73		-	1
	December	84	-	36	31	51	112	-	51	33	65		-	1
Zn	January	3.8	-	1.7	1.2	2.2	4.4	-	1.8	1.3	2.5	0.024	0.12	0.12
	February	4.0	-	1.9	1.4	2.5	4.6	-	2.2	1.7	2.8		0.12	0.12
	March	3.1	-	1.5	1.2	1.9	3.7	-	2.0	1.2	2.3		0.12	0.12
	April	4.3	-	1.5	1.4	2.4	7.7	-	2.4	1.8	4.0		0.11	0.11
	May	2.8	2.9	1.5	1.3	2.1	7.6	2.9	2.7	1.7	3.7		0.07	0.07
	June	1.1	-	1.0	0.5	0.9	2.4	-	1.3	0.6	1.5		0.05	0.05
	July	0.3	0.4	0.5	0.2	0.4	0.6	0.4	1.3	0.2	0.6		0.03	0.03
	August	0.3	0.1	0.3	0.2	0.2	0.9	0.1	0.4	0.3	0.4		0.03	0.03
	September	0.6	-	0.4	0.5	0.5	1.6	-	0.9	0.8	1.1		0.04	0.04
	October	1.6	-	1.0	1.1	1.2	3.0	-	1.5	1.1	1.9		0.07	0.07
	November	2.6	-	1.6	1.4	1.9	3.7	-	2.1	1.6	2.5		0.10	0.10
	December	3.0	-	1.5	1.3	1.9	3.7	-	1.8	1.4	2.3		0.11	0.11
As	January	0.14	-	0.04	0.02	0.07	0.19	-	0.05	0.03	0.09	0.00084	0.34	0.15
	February	0.16	-	0.07	0.05	0.09	0.28	-	0.12	0.09	0.16		0.34	0.15
	March	0.13	-	0.05	0.04	0.07	0.20	-	0.07	0.04	0.10		0.34	0.15
	April	0.19	-	0.11	0.16	0.15	0.35	-	0.31	0.25	0.30		0.34	0.15
	May	0.47	0.34	0.20	0.18	0.30	1.40	0.50	0.50	0.25	0.66		0.34	0.15
	June	0.11	-	0.11	0.02	0.08	0.23	-	0.19	0.03	0.15		0.34	0.15
	July	0.02	0.01	0.05	0.01	0.02	0.05	0.01	0.17	0.01	0.06		0.34	0.15
	August	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02		0.34	0.15
	September	0.04	-	0.02	0.03	0.03	0.10	-	0.05	0.05	0.07		0.34	0.15
	October	0.13	-	0.06	0.05	0.08	0.35	-	0.14	0.07	0.19		0.34	0.15
	November	0.12	-	0.05	0.05	0.07	0.18	-	0.08	0.05	0.10		0.34	0.15
	December	0.10	-	0.03	0.03	0.05	0.11	-	0.04	0.03	0.06		0.34	0.15
Se	January	0.009	-	0.004	0.004	0.006	0.012	-	0.004	0.004	0.007	0.001	-	0.005
	February	0.008	-	0.005	0.005	0.006	0.012	-	0.007	0.006	0.008		-	0.005
	March	0.006	-	0.003	0.004	0.004	0.008	-	0.004	0.004	0.005		-	0.005
	April	0.011	-	0.007	0.009	0.009	0.018	-	0.016	0.013	0.016		-	0.005
	May	0.023	0.016	0.010	0.011	0.015	0.073	0.020	0.021	0.014	0.032		-	0.005
	June	0.005	-	0.005	0.002	0.004	0.011	-	0.008	0.002	0.007		-	0.005
	July	0.001	0.001	0.003	0.001	0.001	0.002	0.001	0.010	0.001	0.003		-	0.005
	August	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001		-	0.005
	September	0.003	-	0.002	0.003	0.002	0.006	-	0.004	0.004	0.004		-	0.005
	October	0.007	-	0.004	0.004	0.005	0.016	-	0.008	0.005	0.009		-	0.005
	November	0.007	-	0.005	0.004	0.005	0.011	-	0.006	0.004	0.007		-	0.005
	December	0.006	-	0.003	0.003	0.004	0.007	-	0.004	0.004	0.005		-	0.005

Table 2-1. Mitchell Creek Monthly Water Quality (Completed).

Dissolved	Month	Average					95th Percentile					HDS Quality	Alaska Water Quality Criteria -- Fresh Water	
		MC1A-US	MC1A	MC1	MC1B	Average	MC1A-US	MC1A	MC1	MC1B	Average		Acute	Chronic
Cu	January	2.4	-	1.4	1.0	1.6	3.5	-	1.5	1.0	2.0	0.0046	0.19	0.11
	February	2.3	-	1.3	1.0	1.5	2.7	-	1.6	1.2	1.8		0.19	0.12
	March	2.0	-	1.1	0.8	1.3	2.3	-	1.3	0.8	1.5		0.19	0.12
	April	2.8	-	1.1	1.0	1.6	5.9	-	1.5	1.2	2.8		0.17	0.10
	May	2.1	2.8	1.3	1.0	1.8	6.9	3.2	2.1	1.2	3.4		0.11	0.07
	June	2.1	-	1.7	0.9	1.6	6.2	-	2.0	1.0	3.1		0.08	0.05
	July	0.3	0.8	0.8	0.2	0.5	1.0	0.8	1.7	0.2	0.9		0.04	0.03
	August	0.6	0.001	0.3	0.2	0.3	2.2	0.001	0.7	0.3	0.8		0.03	0.02
	September	0.7	-	0.5	0.6	0.6	2.0	-	1.1	1.0	1.3		0.06	0.04
	October	1.9	-	1.3	1.2	1.5	4.6	-	2.4	1.4	2.8		0.11	0.07
	November	2.1	-	1.8	1.5	1.8	2.6	-	2.2	1.7	2.1		0.16	0.10
	December	2.3	-	1.3	1.1	1.6	3.5	-	1.6	1.1	2.1		0.18	0.11
Fe	January	42.6	-	4.0	0.7	15.8	68.3	-	4.8	1.3	24.8	0.025	-	-
	February	39.8	-	3.2	0.8	14.6	52.6	-	8.3	1.8	20.9		-	-
	March	32.1	-	3.4	1.7	12.4	37.1	-	7.2	2.5	15.6		-	-
	April	71.3	-	14.1	16.0	33.8	134.2	-	47.0	26.8	69.3		-	-
	May	103.8	60.6	19.7	16.3	50.1	423.1	61.6	63.0	34.1	145		-	-
	June	25.6	-	11.2	4.9	13.9	82.9	-	18.3	5.4	35.5		-	-
	July	0.4	0.3	7.2	1.0	2.2	1.1	0.3	29.1	1.2	7.9		-	-
	August	3.0	0.02	2.0	1.2	1.5	9.9	0.02	5.4	2.2	4.3		-	-
	September	10.0	-	4.8	6.5	7.1	33.2	-	13.3	11.1	19.2		-	-
	October	38.6	-	12.2	9.8	20.2	107.6	-	28.2	18.2	51.3		-	-
	November	41.5	-	15.0	9.1	21.8	77.1	-	31.7	13.8	40.9		-	-
	December	36.6	-	8.1	4.7	16.5	68.8	-	13.5	7.2	29.8		-	-
Zn	January	3.7	-	1.7	1.2	2.2	4.3	-	1.8	1.3	2.5	0.0025	0.11	0.11
	February	4.0	-	1.9	1.4	2.4	4.5	-	2.2	1.6	2.8		0.12	0.12
	March	3.1	-	1.6	1.2	2.0	3.6	-	2.1	1.2	2.3		0.12	0.12
	April	4.4	-	1.5	1.4	2.4	7.8	-	2.5	2.0	4.1		0.10	0.10
	May	3.0	2.9	1.5	1.4	2.2	8.6	3.0	2.7	1.8	4.0		0.07	0.07
	June	1.2	-	1.0	0.5	0.9	2.6	-	1.3	0.6	1.5		0.05	0.05
	July	0.2	0.5	0.5	0.2	0.4	0.5	0.5	1.2	0.2	0.6		0.03	0.03
	August	0.3	0.02	0.2	0.2	0.2	0.9	0.02	0.4	0.3	0.4		0.02	0.02
	September	0.6	-	0.4	0.5	0.5	1.6	-	0.9	0.9	1.1		0.04	0.04
	October	1.6	-	1.0	1.1	1.2	3.1	-	1.5	1.1	1.9		0.07	0.07
	November	2.7	-	1.7	1.4	1.9	3.8	-	2.2	1.5	2.5		0.10	0.10
	December	3.0	-	1.4	1.2	1.9	3.6	-	1.7	1.3	2.2		0.11	0.11
As	January	0.003	-	0.0002	0.0001	0.001	0.005	-	0.0003	0.0001	0.002	0.00025	0.34	0.15
	February	0.002	-	0.0003	0.0003	0.001	0.003	-	0.001	0.001	0.001		0.34	0.15
	March	0.001	-	0.0002	0.0002	0.001	0.002	-	0.0003	0.0002	0.001		0.34	0.15
	April	0.013	-	0.006	0.006	0.008	0.031	-	0.023	0.011	0.021		0.34	0.15
	May	0.208	0.026	0.014	0.005	0.063	0.965	0.041	0.063	0.013	0.270		0.34	0.15
	June	0.008	-	0.001	0.0003	0.003	0.035	-	0.002	0.0003	0.012		0.34	0.15
	July	0.0002	0.0003	0.002	0.0001	0.001	0.001	0.0003	0.011	0.0001	0.003		0.34	0.15
	August	0.0002	0.0001	0.0001	0.0001	0.0001	0.001	0.0001	0.0004	0.0001	0.000		0.34	0.15
	September	0.001	-	0.0001	0.001	0.001	0.002	-	0.0003	0.002	0.001		0.34	0.15
	October	0.019	-	0.001	0.0002	0.007	0.086	-	0.003	0.0003	0.030		0.34	0.15
	November	0.005	-	0.001	0.0002	0.002	0.014	-	0.001	0.0002	0.005		0.34	0.15
	December	0.002	-	0.0003	0.0001	0.001	0.004	-	0.0005	0.0002	0.001		0.34	0.15
Se	January	0.001	-	0.002	0.002	0.002	0.002	-	0.002	0.002	0.002	0.001	-	0.005
	February	0.001	-	0.001	0.002	0.001	0.001	-	0.002	0.002	0.002		-	0.005
	March	0.001	-	0.001	0.002	0.002	0.002	-	0.002	0.002	0.002		-	0.005
	April	0.002	-	0.002	0.002	0.002	0.002	-	0.003	0.002	0.002		-	0.005
	May	0.014	0.003	0.002	0.002	0.005	0.061	0.004	0.005	0.002	0.018		-	0.005
	June	0.001	-	0.001	0.001	0.001	0.005	-	0.001	0.001	0.002		-	0.005
	July	0.0002	0.0005	0.001	0.0003	0.0004	0.0003	0.0005	0.002	0.0003	0.001		-	0.005
	August	0.0003	0.0004	0.0003	0.0003	0.0003	0.001	0.0004	0.0004	0.0003	0.0004		-	0.005
	September	0.0004	-	0.001	0.001	0.001	0.001	-	0.001	0.001	0.001		-	0.005
	October	0.002	-	0.001	0.001	0.002	0.006	-	0.002	0.001	0.003		-	0.005
	November	0.001	-	0.001	0.002	0.001	0.002	-	0.002	0.002	0.002		-	0.005
	December	0.001	-	0.001	0.002	0.001	0.001	-	0.001	0.002	0.001		-	0.005

## Notes:

All units in mg/L

Alaska State Metals Guidelines adapted from:

Parnell S., Hartig L. 2008. Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances. State of Alaska, Department of Environmental Conservation.

Alaska State TSS Guidelines adapted from:

18 AAC 70. 2017. Water Quality Standards. State of Alaska, Department of Environmental Conservation.