

Supplemental Item S5 - Summary of surface area of ice, surficial deposits, and bedrock within sampled watersheds, Wrangell Arc, Wrangell-St. Elias Mountains, Alaska-Canada

	area (km ²)													% of watershed												
Catchment	Ice	Water	Qs	QTV	Tp	Oa	JKs	Kvi	Ji	JTr	Pp	Pz	Total	Ice	Water	Qs	QTV	Tp	Oa	JKs	Kvi	Ji	JTr	Pp	Pz	
Northeastern																										
Francis	0.0	0.0	38.3	56.7	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	95.3	0.0	0.0	40.3	59.7	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	
Rocker	0.0	0.0	4.7	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.3	35.9	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Ptarmagin	0.0	14.1	166	148	11.2	0.0	1.6	0.0	0.0	0.5	0.8	0.0	343	0.0	4.1	48.6	43.3	3.3	0.0	0.5	0.0	0.0	0.1	0.2	0.0	
Willow	0.0	0.1	9.2	3.7	0.0	0.0	0.0	10.7	0.0	0.0	0.0	0.0	23.7	0.0	0.4	38.5	15.4	0.0	0.0	0.0	44.4	0.0	0.0	0.0	0.0	
Cross	55.8	0.0	50.0	9.6	22.5	0.0	0.0	0.0	0.0	14.7	60.2	0.0	213	26.2	0.0	23.5	4.5	10.6	0.0	0.0	0.0	0.0	6.9	28.3	0.0	
Chisana	496	19.5	781	109	39.0	0.0	439	119	0.0	120	69.5	0.0	2193	22.6	0.9	35.6	5.0	1.8	0.0	20.0	5.4	0.0	5.5	3.2	0.0	
Total	552	33.8	1050	336	72.7	0.0	441	130	0.0	136	131	0.0	2880	19.1	1.2	36.4	11.7	2.5	0.0	15.3	4.5	0.0	4.7	4.5	0.0	
Eastern																										
Duke	66.9	0.0	374	44.4	7.5	0.9	0.0	0.0	0.0	3.4	12.5	158	668	10.1	0.0	56.5	6.7	1.1	0.1	0.0	0.0	0.0	0.5	1.9	23.9	
Donjek	1545	0.0	1394	192	25.2	4.3	0.0	10.2	59.5	41.0	196	968	4435	34.9	0.0	31.5	4.3	0.6	0.1	0.0	0.2	1.3	0.9	4.4	21.9	
Lime	1.5	0.0	18.1	9.7	0.9	0.0	0.0	0.0	0.0	7.7	43.5	0.0	81.3	1.8	0.0	22.3	12.0	1.1	0.0	0.0	0.0	0.0	9.5	53.7	0.0	
Upper White	442	12.0	728	351	25.4	0.0	0.0	23.1	0.0	105	152	0.0	1838	24.1	0.7	39.6	19.1	1.4	0.0	0.0	1.3	0.0	5.7	8.3	0.0	
Lower White	1559	19.7	2987	793	50.6	1.3	2.2	23.2	0.0	129	299	115	5980	25.8	0.3	49.5	13.1	0.8	0.0	0.0	0.4	0.0	2.1	5.0	1.9	
Total	3614	31.7	5501	1390	110	6.5	2.2	56.5	59.5	286	703	1242	13002	27.8	0.2	42.3	10.7	0.8	0.0	0.0	0.4	0.5	2.2	5.4	9.5	
Southern																										
Kuskalana	118	0.0	100	29.0	64.5	0.0	5.7	0.0	5.2	84.8	4.4	0.0	412	28.8	0.0	24.6	7.1	15.8	0.0	1.4	0.0	1.3	20.7	1.1	0.0	
Kotsina	267	0.3	183	65.6	19.7	0.0	34.1	0.0	43.0	189	28.8	0.0	831	32.2	0.0	22.0	7.9	2.4	0.0	4.1	0.0	5.2	22.8	3.5	0.0	
Kennicott	344	1.9	134	25.1	28.4	0.0	48.5	0.0	0.0	115	0.0	0.0	698	49.3	0.3	19.3	3.6	4.1	0.0	6.9	0.0	0.0	16.5	0.0	0.0	
Nizina	686	3.1	217	300	22.8	0.0	91.9	0.0	0.0	116	55.7	0.0	1492	45.9	0.2	14.5	20.1	1.5	0.0	6.2	0.0	0.0	7.8	3.7	0.0	
Chitistone	148	0.0	95.1	89.6	14.5	0.0	17.4	0.0	0.0	142	77.8	0.0	584	25.3	0.0	16.3	15.3	2.5	0.0	3.0	0.0	0.0	24.3	13.3	0.0	
Hawkins	74.7	0.0	62.1	4.1	30.1	0.0	6.5	0.0	0.0	8.2	73.6	0.0	259	28.8	0.0	24.0	1.6	11.6	0.0	2.5	0.0	0.0	3.2	28.4	0.0	
Total	1638	5.3	792	514	180	0.0	204	0.0	48.1	655	240	0.0	4276	38.3	0.1	18.5	12.0	4.2	0.0	4.8	0.0	1.1	15.3	5.6	0.0	
Northwestern																										
Jacksina	175	1.1	293	497	0.0	0.0	1.2	11.2	0.0	0.0	0.0	0.0	978	17.9	0.1	30.0	50.8	0.0	0.0	0.1	1.1	0.0	0.0	0.0	0.0	
Monte Cristo	11.3	0.0	22.2	41.7	1.2	0.0	0.0	4.1	0.0	0.0	0.0	0.0	80.5	14.0	0.0	27.4	51.4	1.5	0.0	0.0	5.1	0.0	0.0	0.0	0.0	
Bond	43.3	0.0	21.6	0.0	11.5	0.0	0.0	66.2	0.0	6.4	30.2	0.0	179	24.1	0.0	12.0	0.0	6.4	0.0	0.0	36.8	0.0	3.5	16.8	0.0	
Nabesna	1479	19.9	1210	935	26.7	0.0	310	162	0.0	182	160	0.0	4485	32.9	0.4	27.0	20.8	0.6	0.0	6.9	3.6	0.0	4.1	3.6	0.0	
Total	1708	21.0	1548	1473	39.5	0.0	311	244	0.0	189	190	0.0	5723	29.9	0.4	27.0	25.7	0.7	0.0	5.4	4.3	0.0	3.3	3.3	0.0	
Western																										
Copper	386	10.2	503	373	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1272	30.3	0.8	39.5	29.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Drop	43.7	0.0	122	61.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	227	19.2	0.0	53.6	27.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Boulder	28.0	0.0	97.9	73.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	199	14.1	0.0	49.2	36.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Sanford	158	0.0	146	174	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	479	33.0	0.0	30.5	36.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	
Nadina E.	0.0	0.0	11.9	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0	0.0	56.7	44.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Dadina	38.1	0.0	53.0	111	0.0	0.0	0.4	0.0	8.3	0.0	15.8	0.0	226	16.8	0.0	23.4	48.7	0.0	0.0	0.2	0.0	3.7	0.0	6.9	0.0	
Chetaslina	85.3	0.0	286	134	0.0	0.0	0.2	0.0	22.9	0.0	6.2	0.0	535	15.9	0.0	53.4	25.1	0.0	0.0	0.0	0.0	4.3	0.0	1.2	0.0	
Total	739	10.2	1219	936	0.0	0.0	0.7	0.3	31.2	0.0	21.9	0.0	2959	25.0	0.3	41.2	31.6	0.0	0.0	0.0	0.0	1.1	0.0	0.7	0.0	
TOTAL	15763	194	19000	8362	804	13.0	1917	860	246	2530	2549	2483	54722	28.8	0.4	34.7	15.3	1.5	0.0	3.5	1.6	0.5	4.6	4.7	4.5	