



Resolute Bay – Community Harbour

Environmental and Socio-Economic Existing Conditions Report

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Part 2 of 2

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Appendix A: Supporting Tables (Field Program)



Appendix A: Water Quality Field Results (ESEB Report Section 5)



Table A-1: Water Quality (General Water Chemistry (2019))

Site	Date	pH	Hardness (as CaCO ₃) - Total Calculated	Hardness (as CaCO ₃) - Dissolved	Total Organic Carbon	Total Suspended Solids	Nitrate as N	Nitrate plus nitrite as N	Nitrite as N	Ammonia as N	Filter and HNO ₃ Preservation	Sulphur - Dissolved	Sulphur - Total	Orthophosphate	Total Phosphorus
CCME (2007)		(pH units)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(none)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
		(7 - 8.7)	---	---	---	---	3.6	---	---	---	---	---	---	---	---
RB 1 DEEP	18-Aug-19	7.95	5560	5780	93 ¹	10.4	---	---	---	1.3	FIELD	860	831	0.019	0.023
RB 1 SHALLOW	18-Aug-19	7.88	4650	5000	85 ¹	6.8	---	---	---	0.68	FIELD	747	691	0.011	0.030
RB 2 DEEP	18-Aug-19	7.96	5430	5700	100 ¹	9.2	---	---	---	1.1	FIELD	872	811	0.019	0.022
RB 2 SHALLOW	18-Aug-19	7.89	4680	4790	81 ¹	8.0	---	---	---	1.4	FIELD	721	700	0.0099	0.014
RB 3 DEEP	18-Aug-19	7.92	4800	245	87 ¹	< 4.0	---	---	---	0.75	FIELD	37	717	0.012	0.012
RB 3 SHALLOW	18-Aug-19	7.92	4710	4910	84 ¹	6.4	---	---	---	0.82	FIELD	754	704	0.011	0.012
RB 4 DEEP	18-Aug-19	7.96	6870	276	94 ¹	14.0	---	---	---	0.61	FIELD	41	951	0.013	0.015
RB 4 SHALLOW	18-Aug-19	7.89	6420	244	83 ¹	< 4.0	---	---	---	0.82	FIELD	37	869	0.013	0.012

Note: 1. Detection Limit raised due to sample matrix

Table A-2: Water Quality (Total Metals (2019))

Site ¹	Date	pH	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Potassium	Selenium	Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium
	(dd-mmm-yy)	(pH units)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
CCME Marine Water Aquatic Life (2007)		(7 - 8.7)	---	---	12.5	---	---	---	---	0.12	---	1.5	---	---	---	---	---	---	---	0.016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RB1 D	18-Aug-19	7.95	47	< 0.50	2.49	9.2	< 1.0	< 1.0	3780	0.062	360	< 0.50	< 0.10	< 0.50	17	< 0.10	155	1130	1.96	< 0.0020	9.8	0.50	---	336	< 0.50	< 1000	< 0.050	---	7600	< 0.10	< 1.0	< 10	2.76	< 10	< 5.0	< 10
RB1 S	18-Aug-19	7.88	32	< 0.50	2.15	7.8	< 1.0	< 1.0	3160	< 0.050	299	0.79	< 0.10	0.57	< 10	< 0.10	135	948	< 0.50	< 0.0020	8.2	0.60	---	281	< 0.50	< 1000	< 0.050	---	6250	< 0.10	< 1.0	< 10	2.31	< 10	7.0	< 10
RB2 D	18-Aug-19	7.96	35	< 0.50	2.08	8.5	< 1.0	< 1.0	3580	0.051	353	< 0.50	< 0.10	< 0.50	10	< 0.10	152	1100	1.57	< 0.0020	9.8 ⁸	0.54	---	330	< 0.50	< 1000	< 0.050	---	7400	< 0.10	< 1.0 ⁸	< 10	2.75	< 10	< 5.0	< 10
RB2 S	18-Aug-19	7.89	33	< 0.50	2.06	7.7	< 1.0	< 1.0	3190	< 0.050	298	< 0.50	< 0.10	0.57	< 10	< 0.10	131	956	< 0.50	< 0.0020	8.6	0.44	---	285	< 0.50	< 1000	< 0.050	---	6250	< 0.10	< 1.0	< 10	2.32	< 10	< 5.0	< 10
RB3 D	18-Aug-19	7.92	35	< 0.50	1.82	8.0	< 1.0	< 1.0	3220	< 0.050	314	< 0.50	< 0.10	< 0.50	< 10	< 0.10	135	975	< 0.50	< 0.0020	8.8	0.49	---	296	< 0.50	< 1000	< 0.050	---	6650	< 0.10	< 1.0	< 10	2.42	< 10	< 5.0	< 10
RB3 S	18-Aug-19	7.92	32	< 0.50	2.11	7.6	< 1.0	< 1.0	3130	< 0.050	307	0.73	< 0.10	< 0.50	< 10	< 0.10	132	957	< 0.50	< 0.0020	8.4	0.46	---	290	< 0.50	< 1000	< 0.050	---	6490	< 0.10	< 1.0	< 10	2.37	< 10	< 5.0	< 10
RB4 D	18-Aug-19	7.96	222	3.72	2.91	17.8	< 1.0	< 1.0	3680	0.289 ²	957	3.97 ²	5.33	80.0	147	2.74	149	1090	105	< 0.0020	10.4	18.1	---	331	< 0.50	< 1000	0.111	---	8340	0.11	1.9	< 10	3.06	< 10	12300	< 10
RB4 S	18-Aug-19	7.89	215	3.51	2.47	17.6	< 1.0	< 1.0	3230	0.220 ²	913	4.03 ²	5.35	80.4	139	2.67	136	1010	105	< 0.0020	9.3	17.7	---	299	< 0.50	< 1000	0.086	---	7530	< 0.10	2.8	< 10	2.73	< 10	12400	< 10

Note:

1. D= Deep and S = Shallow

2.

	parameters above applied guideline/criteria		non-detect parameters above applied guideline/criteria.		parameters at applied guideline/criteria	<div><div>1. Matrix Spike outside acceptance criteria due to sample matrix interference.</div><div>2. Values exceeding Canadian Environmental Quality Guidelines for the Protection of Aquatic Life (CCME, 1999 and Updates, last update v7 2007) <i>Chromium</i>: Standard is for Chromium VI as it is the most conservative value</div></div>
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Table A-3: Water Quality (Dissolved Metals (2019))

Site	Date	pH	Aluminum	Antimony	Arsenic	Barium	Beryllium	Bismuth	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Potassium	Selenium	Silicon	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Zirconium
	(dd-mmm-yy)	(pH units)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
CCME Marine Water Aquatic Life (2007)		(7 - 8.7)	---	---	12.5	---	---	---	---	0.12	---	1.5	---	---	---	---	---	---	---	0.016	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
RB1 D	18-Aug-19	7.95	20	< 0.50	2.72	9.0	< 1.0	< 1.0	4080	0.066	373	1.13	< 0.10	0.90	14	< 0.10	164	1180	2.24	< 0.0020	10.3	0.55	---	351	< 0.50	< 1000	< 0.050	---	7790	< 0.10	< 1.0	< 10	2.86	11	< 5.0	< 10
RB1 S	18-Aug-19	7.88	20	< 0.50	2.91	7.9	< 1.0	< 1.0	3410	0.056	321	1.30	< 0.10	0.92	24	< 0.10	143	1020	0.68	< 0.0020	8.7	0.97	---	297	< 0.50	< 1000	< 0.050	---	6680	< 0.10	1.3	< 10	2.55	11	6.1	< 10
RB2 D	18-Aug-19	7.96	35	< 0.50	2.96	9.4	< 1.0	< 1.0	3970	0.080	382	< 0.50	< 0.10	0.81	15	< 0.10	162	1150	1.51	< 0.0020	10.6	0.60	---	347	< 0.50	< 1000	< 0.050	---	7570	< 0.10	< 1.0	< 10	2.84	< 10	< 5.0	< 10
RB2 S	18-Aug-19	7.89	31	< 0.50	2.52	8.2	< 1.0	< 1.0	3460	< 0.050	322	1.15	0.20	< 0.50	14	0.24	140	969	< 0.50	< 0.0020	8.7	0.50	---	288	< 0.50	< 1000	< 0.050	---	6560	< 0.10	1.0	< 10	2.45	10	< 5.0	< 10
RB3 D	18-Aug-19	7.92	< 10	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	174	< 0.050	15.7	< 0.50	< 0.10	< 0.50	< 10	< 0.10	< 20	50.0	< 0.50	< 0.0020	< 1.0	< 0.20	---	15.0	< 0.50	< 1000	< 0.050	---	325	< 0.10	< 1.0	< 10	0.122	< 10	< 5.0	< 10
RB3 S	18-Aug-19	7.92	49	< 0.50	2.33	8.9	< 1.0	< 1.0	3360	0.057	339	1.58 ²	< 0.10	0.56	22	< 0.10	140	987	< 0.50	< 0.0020	9.1	0.74	---	293	< 0.50	< 1000	< 0.050	---	6460	< 0.10	1.1	< 10	2.52	< 10	< 5.0	< 10
RB4 D	18-Aug-19	7.96	< 10	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	194	< 0.050	17.6	< 0.50	< 0.10	< 0.50	< 10	< 0.10	< 20	56.4	< 0.50	< 0.0020	< 1.0	< 0.20	---	16.7	< 0.50	< 1000	< 0.050	---	367	< 0.10	< 1.0	< 10	0.140	< 10	< 5.0	< 10
RB4 S	18-Aug-19	7.89	< 10	< 0.50	< 0.50	< 1.0	< 1.0	< 1.0	168	< 0.050	16.1	< 0.50	< 0.10	< 0.50	< 10	< 0.10	< 20	49.6	< 0.50	< 0.0020	< 1.0	< 0.20	---	14.8	< 0.50	< 1000	< 0.050	---	323	< 0.10	< 1.0	< 10	0.125	< 10	< 5.0	< 10

Note:
1. D= Deep and S = Shallow
2.

	parameters above applied guideline/criteria.		non-detect parameters above applied guideline/criteria.		parameters at applied guideline/criteria.	1. Matrix Spike outside acceptance criteria due to sample matrix interference. 2. Values exceeding Canadian Environmental Quality Guidelines for the Protection of Aquatic Life (CCME, 1999 and Updates, last update v7 2007) <i>Chromium</i> : Standard is for Chromium VI as it is the most conservative value
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Appendix A: Fish and Fish Habitat Field Results (ESEB Report Section 7)



Table A-4: Fish and Fish Habitat (Intertidal Survey Data 2024)

Transect No.	Transect Length (m)	Time		Quadrat No.	Slope Distance (m)		Substrate		Vegetation		Transect Used (Y/N)	Amphipods Present (Y/N)
		Start	Stop		Start	Stop	Type	Cover	Species	Abundance		
28-Aug-24												
1	7	14:15	14:24	Q1	0	-	CO	50	-	-	Y	N
				Q2	1.5	-	GR	40	-	-		
							CO	60	-	-		
				Q3	3	-	GR	95	-	-		
							CO	5	-	-		
				Q4	4.5	-	GR	50	-	-		
Q5	6	-	GR	50	-	-						
2	7	14:29	14:34	Q1	0	-	CO	100	-	-	Y	N
				Q2	1.5	-	CO	20	-	-		
							GR	80	-	-		
				Q3	3	-	GR	85	-	-		
							CO	15	-	-		
				Q4	4.5	-	GR	15	-	-		
CO	85	-	-									
Q5	6	-	GR	100	-	-						
3	5.5	14:38	14:45	Q1	0	-	GR	100	-	-	Y	N
				Q2	1.3	-	GR	95	-	-		
							CO	5	-	-		
				Q3	2.6	-	GR	95	-	-		
							CO	5	-	-		
				Q4	3.9	-	CO	85	-	-		
GR	15	-	-									
Q5	5.2	-	GR	45	-	-						

Transect No.	Transect Length (m)	Time		Quadrat No.	Slope Distance (m)		Substrate		Vegetation		Transect Used (Y/N)	Amphipods Present (Y/N)
		Start	Stop		Start	Stop	Type	Cover	Species	Abundance		
							CO	55	-	-		
4	8.0	14:52	14:54	Q1	0	-	GR	100	-	-	Y	N
				Q2	1.9	-	GR	100	-	-		
				Q3	3.8	-	CO	75	-	-		
							GR	25	-	-		
				Q4	5.4	-	CO	5	-	-		
							GR	95	-	-		
				Q5	7.6	-	GR	75	-	-		
							CO	25	-	-		
5	9.4	15:00	15:05	Q1	0	-	GR	100	-	-	Y	N
				Q2	2.4	-	CO	20	-	-		
							GR	80	-	-		
				Q3	4.8	-	GR	35	-	-		
							CO	25	-	-		
							SA	40	-	-		
				Q4	7.2	-	GR	5	-	-		
							CO	95	-	-		
				Q5	9.6	-	CO	100	-	-		
6	8.3	15:07	15:10	Q1	0	-	CO	15	-	-	Y	N
							GR	75	-	-		
							SA	10	-	-		
				Q2	2.1	-	GR	100	-	-		
				Q3	4.2	-	SA	80	-	-		
							GR	10	-	-		
							CO	10	-	-		
				Q4	6.3	-	GR	100	-	-		

Transect No.	Transect Length (m)	Time		Quadrat No.	Slope Distance (m)		Substrate		Vegetation		Transect Used (Y/N)	Amphipods Present (Y/N)
		Start	Stop		Start	Stop	Type	Cover	Species	Abundance		
				Q5	8.4	-	CO	85	-	-		
							GR	15	-	-		
7	7.8	15:15	NR	Q1	0	-	CO	100	-	-	Y	N
				Q2	1.9	-	CO	10	-	-		
							GR	90	-	-		
				Q3	3.8	-	SA	100	-	-		
				Q4	5.7	-	GR	90	-	-		
							CO	10	-	-		
				Q5	7.6	-	GR	80	-	-		
							CO	20	-	-		
8	8.3	15:22	NR	Q1	0	-	GR	95	-	-	Y	N
							CO	5	-	-		
				Q2	2.1	-	GR	100	-	-		
				Q3	4.2	-	GR	100	-	-		
				Q4	6.3	-	SA	20	-	-		
							GR	70	-	-		
							CO	10	-	-		
				Q5	8.4	-	CO	85	-	-		
							GR	15	-	-		

Note: CO = cobble; GR = gravel; SA = sand

Table A-5: Fish and Fish Habitat (Intertidal Survey Data 2019)

Transect No.	Transect Length (m)	Quadrat No.	Transect Distance (m)	Substrate (%)		Vegetation (%)		Invertebrates			Fish (n)		Transect Used (Y/N)	Amphipods Present (Y/N)
				Type	Percent	Species	Abundance	Species	Abundance	Measure	Species	Abundance		
19-Aug-19														
1	-	Q1	0	CO	70	-	-	-	-	-	-	-	Y	N
				GR	30	-	-	-	-	-	-	-		
		Q2	2	CO	40	-	-	-	-	-	-	-		
				GR	60	-	-	-	-	-	-	-		
		Q3	4	CO	30	-	-	-	-	-	-	-		
				GR	70	-	-	-	-	-	-	-		
		Q4	6	CO	10	-	-	-	-	-	-	-		
				GR	90	-	-	-	-	-	-	-		
		Q5	8	GR	100	-	-	-	-	-	-	-		
Q6	10	GR	100	-	-	-	-	-	-	-				
2	80	1	0	GR	100	-	-	-	-	-	-	-	Y	N
		2	5	GR	100	-	-	-	-	-	-	-		
		3	10	CO	10	-	-	-	-	-	-	-		
				GR	90	-	-	-	-	-	-	-		
		4	15	CO	10	-	-	-	-	-	-	-		
				GR	90	-	-	-	-	-	-	-		
		5	20	GR	100	-	-	-	-	-	-	-		
		6	25	GR	100	-	-	-	-	-	-	-		
3	100	1	0	CO	50	-	-	-	-	-	-	-	Y	N
				GR	50	-	-	-	-	-	-	-		
		2	4	CO	30	-	-	-	-	-	-	-		
				GR	70	-	-	-	-	-	-	-		
		3	8	CO	10	-	-	-	-	-	-	-		

Transect No.	Transect Length (m)	Quadrat No.	Transect Distance (m)	Substrate (%)		Vegetation (%)		Invertebrates			Fish (n)		Transect Used (Y/N)	Amphipods Present (Y/N)
				Type	Percent	Species	Abundance	Species	Abundance	Measure	Species	Abundance		
				GR	90	-	-	-	-	-	-	-		
		4	12	GR	100	Stringy green algae	50	-	-	-	-	-		
		5	16	GR	100	-	-	-	-	-	-	-		
		6	20	GR	100	-	-	-	-	-	-	-		
4	280	1	0	CO	10	-	-	-	-	-	-	-	Y	N
				GR	90	-	-	-	-	-	-	-		
		2	1.5	CO	20	-	-	-	-	-	-	-		
				GR	80	-	-	-	-	-	-	-		
		3	3	GR	70	-	-	-	-	-	-	-		
				SA	30	-	-	-	-	-	-	-		
		4	4.5	CO	5	-	-	-	-	-	-	-		
				GR	95	-	-	-	-	-	-	-		
		5	6	GR	100	-	-	-	-	-	-	-		
		6	7.5	GR	100	-	-	-	-	-	-	-		
5	105	1	0	CO	70	-	-	-	-	-	-	-	Y	N
				GR	30	-	-	-	-	-	-	-		
		2	1.5	CO	30	-	-	-	-	-	-	-		
				GR	70	-	-	-	-	-	-	-		
		3	3	CO	20	-	-	-	-	-	-	-		
				GR	80	-	-	-	-	-	-	-		
		4	4.5	CO	10	-	-	-	-	-	-	-		
				GR	90	-	-	-	-	-	-	-		
		5	6	CO	5	-	-	-	-	-	-	-		
				GR	95	-	-	-	-	-	-	-		
		6	7.5	GR	100	-	-	-	-	-	-	-		

Transect No.	Transect Length (m)	Quadrat No.	Transect Distance (m)	Substrate (%)		Vegetation (%)		Invertebrates			Fish (n)		Transect Used (Y/N)	Amphipods Present (Y/N)
				Type	Percent	Species	Abundance	Species	Abundance	Measure	Species	Abundance		
6	130	1	0	CO	100	-	-	-	-	-	-	-	Y	N
		2	2	CO	100	-	-	-	-	-	-	-		
		3	4	CO	50	-	-	-	-	-	-	-		
				GR	50	-	-	-	-	-	-	-		
		4	6	CO	5	-	-	-	-	-	-	-		
				GR	95	-	-	-	-	-	-	-		
		5	8	CO	10	-	-	-	-	-	-	-		
				GR	90	-	-	-	-	-	-	-		
		6	10	GR	100	-	-	-	-	-	-	-		
7	140	1	0	CO	100	-	-	-	-	-	-	-	Y	N
		2	2.5	CO	50	-	-	-	-	-	-	-		
				GR	50	-	-	-	-	-	-	-		
		3	5	CO	30	-	-	-	-	-	-	-		
				GR	70	-	-	-	-	-	-	-		
		4	7.5	CO	10	-	-	-	-	-	-	-		
				GR	90	-	-	-	-	-	-	-		
		5	9	CO	5	-	-	-	-	-	-	-		
				GR	95	-	-	-	-	-	-	-		
		6	10.5	CO	20	-	-	-	-	-	-	-		
				GR	80	-	-	-	-	-	-	-		

Note: CO = cobble; GR = gravel; SA = sand

Table A-6: Fish and Fish Habitat (Subtidal ROV Video Data Analysis (2024))

Survey Time	Transect No.	ROV Maximum Depth (m)	Tide Height (m)	Depth (CD, m)	Substrate		Vegetation					Invertebrates					Fish			
Start					Type	Percent Cover	Species Name		Abundance	Categorization	Confidence	Species Name		Abundance	Metric	Categorization	Species Name		Abundance	Categorization
							Common	Scientific				Common	Scientific				Common	Scientific		
27-Aug-24																				
10:39	T1	6.9	0.78	6.1	SA	90	sugar kelp	<i>Saccharina latissima</i>	20	infrequent	possible	-	-	-	-	-	-	-	-	-
					SH	5	brown filamentous algae	-	10	infrequent	-	-	-	-	-	-	-	-	-	-
					CO	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:49	T2	6.1	0.73	5.4	SA	90	sugar kelp	<i>Saccharina latissima</i>	45	moderate	possible	truncated soft-shell clam	<i>Mya truncata</i>	5	density (m²)	trace	-	-	-	-
					SH	5	brown filamentous algae	-	45	moderate	possible	-	-	-	-	-	-	-	-	-
					CO	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:59	T3	6.2	0.73	5.5	SA	95	sugar kelp	<i>Saccharina latissima</i>	30	moderate	possible	truncated soft-shell clam	<i>Mya truncata</i>	3	density (m²)	trace	sculpin		1	trace
					CO	5	brown filamentous algae	-	50	moderate	possible	comb jelly	-	2	count	trace	-	-	-	-
					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11:28	T4	7	0.67	6.3	SA	80	sugar kelp	<i>Saccharina latissima</i>	30	moderate	possible	brittle star	<i>Ophiuroidea</i>	10	count	trace	-	-	-	-
					SH	10	brown filamentous algae	-	20	infrequent	-	truncated soft-shell clam	<i>Mya truncata</i>	6	density (m²)	trace	-	-	-	-
					CO	10	unidentified kelp	-	<5	-	-	-	-	-	-	-	-	-	-	
11:54	T5	2.4	0.64	1.8	BO	5	rockweed	<i>Fucus sp.</i>	20	infrequent	probable	comb jelly		2	count	trace	-	-	-	-
					SH	45	brown filamentous algae	-	70	abundant	NA	-	-	-	-	-	-	-	-	-
					CO	50	green filamentous algae	-	5	trace	-	-	-	-	-	-	-	-	-	-
12:06	T6	1.7	0.62	1.1			sugar kelp	<i>Saccharina latissima</i>	<5	trace	possible	-	-	-	-	-	-	-	-	
					CO	55	rockweed	<i>Fucus sp.</i>	15	infrequent		comb jelly		4	count	trace	-	-	-	-
					SH	30	brown filamentous algae	-	80	abundant	-	sea angel	<i>Clione limacina</i>	2	count	trace	-	-	-	-
12:15	T7	1	0.60	0.4	BO	5	green filamentous algae	-	5	trace	-	-	-	-	-	-	-	-	-	
					CO	75	brown filamentous algae	-	85	abundant	-	-	-	-	-	-	-	-	-	-
					SH	15	unidentified green algae	-	<5	trace	-	-	-	-	-	-	-	-	-	-
12:20	T8	9.9	0.60	9.3	SA	5	rockweed	<i>Fucus sp.</i>	<5	trace	probable	-	-	-	-	-	-	-	-	
					BO	5	sugar kelp	<i>Saccharina latissima</i>	35	moderate	possible	truncated soft-shell clam	<i>Mya truncata</i>	4	density (m²)	trace	-	-	-	-
					CO	30	brown filamentous algae	-	30	moderate	-	-	-	-	-	-	-	-	-	-
14:08	T9	1.5	0.62	0.9	SH	5	unidentified green algae	-	<5	trace	-	-	-	-	-	-	-	-	-	
					SA	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					SA	85	brown filamentous algae	-	15	infrequent	-	sea angel	<i>Clione limacina</i>	1	count	trace	-	-	-	-
14:20	T10	1.4	0.65	0.8	CO	15	green filamentous algae	-	<5	trace	-	-	-	-	-	-	-	-	-	
					SA	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					BO	10	-	-	-	-	-	jelly	<i>Aglantha digitale</i>	4	count	trace	-	-	-	-
14:30	T11	3.6	0.68	2.9	SA	80	brown filamentous algae	-	55	moderate	-	comb jelly		2	count	trace	-	-	-	-
					SH	5	unidentified green algae	-	5	trace	possible	-	-	-	-	-	-	-	-	-
					CO	15	sugar kelp	<i>Saccharina latissima</i>	10	trace	possible	-	-	-	-	-	-	-	-	-
14:40	T12	5.4	0.71	4.7			green filamentous algae	-	5	trace	-	-	-	-	-	-	-	-	-	
					SA	80	brown filamentous algae	-	60	abundant		truncated soft-shell clam	<i>Mya truncata</i>	30	density (m²)	abundant	-	-	-	-
					CO	15	sugar kelp	<i>Saccharina latissima</i>	10	trace	possible	-	-	-	-	-	-	-	-	-
15:18	T13	9.9	0.79	9.1	SH	5	-	-	-	-	-	-	-	-	-	-	-	-	-	
					BO	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					SA	55	sugar kelp	<i>Saccharina latissima</i>	15	infrequent	possible	truncated soft-shell clam	<i>Mya truncata</i>	30	density (m²)	abundant	-	-	-	-
15:27	T14	10.2	0.84	9.4	CO	30	brown filamentous algae	-	50	moderate		folded-stomach jelly	<i>Ptychogastria polaris</i>	1	count	trace	-	-	-	-
					SH	5	unidentified green algae	-	<5	trace	-	-	-	-	-	-	-	-	-	-
					BO	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15:52	T15	5.3	0.89	4.4	SA	90	sugar kelp	<i>Saccharina latissima</i>	25	infrequent	possible	truncated soft-shell clam	<i>Mya truncata</i>	6	density (m²)	trace	-	-	-	-
					CO	5	brown filamentous algae	-	40	moderate	-	hydroid	-	10	density (m²)	moderate	-	-	-	-
					SH	5	-	-	-	-	-	unidentified mollusk	-	5	count	trace	-	-	-	-

Survey Time	Transect No.	ROV Maximum Depth (m)	Tide Height (m)	Depth (CD, m)	Substrate		Vegetation					Invertebrates					Fish			
Start					Type	Percent Cover	Species Name		Abundance	Categorization	Confidence	Species Name		Abundance	Metric	Categorization	Species Name		Abundance	Categorization
							Common	Scientific				Common	Scientific				Common	Scientific		
16:02	T16	9.1	0.93	8.2	CO	5	unidentified green algae	-	10	trace	-	-	-	-	-	-	-	-	-	-
					BO	5	brown filamentous algae		30	moderate		comb jelly		1	count	trace	-	-	-	-
					CO	10	sugar kelp	Saccharina latissima	50	moderate	possible	-	-	-	-	-	-	-	-	-
					SA	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16:12	T17A	11.2	0.98	10.2	CO	40	brown filamentous algae		25	moderate		sea cucumber		8	count	trace	-	-	-	-
					SH	15	sugar kelp	Saccharina latissima	30	moderate	possible	truncated soft-shell clam	Mya truncata	6	density (m²)	trace	-	-	-	-
					SA	40	encrusting coralline algae		5	trace	possible	-	-	-	-	-	-	-	-	-
					BO	<5	green filamentous algae		10	trace	-	-	-	-	-	-	-	-	-	-
28-Aug-24																				
09:15	T17B	5.4	0.98	4.4	BO	10	sugar kelp	Saccharina latissima	15	infrequent	possible	unidentified jelly		2	count	trace	unidentified fish		2	trace
					CO	65	brown filamentous algae		50	moderate	-	-	-	-	-	-	-	-	-	-
					SA	10	rockweed	Fucus sp.	20	infrequent	probable	-	-	-	-	-	-	-	-	-
					SH	15	dulse	Palmaria sp.	10	trace	-	-	-	-	-	-	-	-	-	-
							unidentified green algae		5	trace	-	-	-	-	-	-	-	-	-	
09:26	T18	8.4	1.11	7.3	SA	80	rockweed	Fucus sp.	<5	trace	possible	truncated soft-shell clam	Mya truncata	4	density (m²)	trace	-	-	-	-
					CO	20	sugar kelp	Saccharina latissima	40	moderate	possible	brittle star	Ophiuroidea	15	count	infrequent	-	-	-	-
					-	-	brown filamentous algae		35	moderate	-	-	-	-	-	-	-	-	-	-
09:34	T19	5.4	1.11	4.3	SA	10	sugar kelp	Saccharina latissima	10	trace	possible	helicid pterorpod	Limacina helicina	1	count	trace	Arctic cod	Boreogadus saida	300	abundant
					CO	50	brown filamentous algae		40	moderate		-	-	-	-	-	-	-	-	-
					BO	20	rockweed	Fucus sp.	10	infrequent	possible	-	-	-	-	-	-	-	-	-
					SH	20	sea lettuce	Ulva sp.	<5	trace	possible	-	-	-	-	-	-	-	-	-
					-	-	dulse	Palmaria sp.	5	trace	-	-	-	-	-	-	-	-	-	
09:47	T20	3.8	1.08	2.7	SA	40	sugar kelp	Saccharina latissima	20	infrequent	possible	-	-	-	-	-	-	-	-	-
					CO	50	brown filamentous algae	-	40	moderate	-	-	-	-	-	-	-	-	-	-
					BO	5	rockweed	Fucus sp.	20	infrequent	probable	-	-	-	-	-	-	-	-	-
					SH	5	green filamentous algae	-	5	trace	-	-	-	-	-	-	-	-	-	-
10:03	T21	2.3	1.05	1.3	SA	80	brown filamentous algae	-	60	abundant	-	helicid pteropod	Limacina helicina	1	count	trace	arctic cod (dead)	Boreogadus saida	1	trace
					CO	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					BO	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					SH	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:16	T22	4.5	1.02	3.5	SA	15	sugar kelp	Saccharina latissima	40	moderate	possible	Unidentified jelly	-	1	count	trace	-	-	-	-
					CO	80	brown filamentous algae		50	moderate	-	-	-	-	-	-	-	-	-	-
					BO	5	rockweed	Fucus sp.	5	trace	possible	-	-	-	-	-	-	-	-	-
10:26	T23 (not plotted)	3.5	0.99	2.5	SA	90	sugar kelp	Saccharina latissima	15	infrequent	possible	jelly	Aglantha digitale	1	count	trace	-	-	-	-
					CO	5	brown filamentous algae	-	30	moderate	-	-	-	-	-	-	-	-	-	-
					SH	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:39	T24	7.4	0.95	6.5	SA	40	sugar kelp	Saccharina latissima	20	infrequent	possible	brittle star	-	3	count	trace	-	-	-	-
					CO	50	brown filamentous algae		20	infrequent		-	-	-	-	-	-	-	-	-
					BO	5	dulse	Palmaria sp.	<5	trace	possible	-	-	-	-	-	-	-	-	-
					SH	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10:47	T25	7.5	0.95	6.6	SA	90	sugar kelp	Saccharina latissima	25	moderate	possible	truncated soft-shell clam	Mya truncata	5	density (m²)	trace	-	-	-	-
					CO	5	unidentified kelp		5	trace		hydroid		3	density (m²)	trace	-	-	-	-
					SH	5	-	-	-	-	-	-	-	-	-	-	-	-	-	
10:56	T26	10.5	0.92	9.6	SA	95	sugar kelp	Saccharina latissima	25	moderate	possible	truncated soft-shell clam	Mya truncata	10	density (m²)	moderate	-	-	-	-
					CO	5	rockweed	Fucus sp.	5	trace	possible	hydroid		2	density (m²)	trace	-	-	-	-
					SH	<5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11:14	T27	9.8	0.89	8.9	SA	30	sugar kelp	Saccharina latissima	20	infrequent	possible	truncated soft-shell clam	Mya truncata	10	density (m²)	moderate	-	-	-	-
					CO	50	rockweed	Fucus sp.	15	infrequent	possible	comb jelly		2	count	trace	-	-	-	-
					BO	5	brown filamentous algae	-	10	infrequent	-	jelly	Aglantha digitale	1	count	trace	-	-	-	-
					SH	15	-	-	-	-	-	-	-	-	-	-	-	-	-	
11:28	T28	10.5	0.85	9.7	SA	90	sugar kelp	Saccharina latissima	40	moderate	possible	truncated soft-shell clam	Mya truncata	10	density (m²)	moderate	-	-	-	-
					CO	10	-	-	-	-	-	comb jelly		4	count	trace	-	-	-	-
					BO	>5	-	-	-	-	-	-	-	-	-	-	-	-	-	

Survey Time	Transect No.	ROV Maximum Depth (m)	Tide Height (m)	Depth (CD, m)	Substrate		Vegetation					Invertebrates					Fish			
					Type	Percent Cover	Species Name		Abundance	Categorization	Confidence	Species Name		Abundance	Metric	Categorization	Species Name		Abundance	Categorization
							Common	Scientific				Common	Scientific				Common	Scientific		
11:37	T29	11.1	0.85	10.3	SA	90	sugar kelp	<i>Saccharina latissima</i>	30	moderate	possible	truncated soft-shell clam	<i>Mya truncata</i>	5	density (m²)	trace	-	-	-	-
					CO	5	-	-	-	-	brittle star		15	count	infrequent	-	-	-	-	
					SH	5	-	-	-	-	helicid pteropod	<i>Limacina helicina</i>	1	count	trace	-	-	-	-	
11:51	T30	12.7	0.82	11.9	SA	95	sugar kelp	<i>Saccharina latissima</i>	25	moderate	possible	truncated soft-shell clam	<i>Mya truncata</i>	10	density (m²)	moderate	-	-	-	-
					CO	5	-	-	-	-	hydroid		5	density (m²)	trace	-	-	-	-	
					SH	>5	-	-	-	-	comb jelly		4	count	trace	-	-	-	-	
					-	-	-	-	-	-	helicid pteropod	<i>Limacina helicina</i>	5	count	trace	-	-	-	-	
					-	-	-	-	-	-	brittle star		3	count	trace	-	-	-	-	
12:25	T31	9.6	0.73	8.9	SA	30	sugar kelp	<i>Saccharina latissima</i>	50	moderate	possible	comb jelly		8	count	trace	-	-	-	-
					CO	55	rockweed	<i>Fucus sp.</i>	10	infrequent	possible	jelly	<i>Aglantha digitale</i>	1	count	trace	-	-	-	-
					BO	5	brown filamentous algae	-	30	moderate	-	sea angel	<i>Clione limacina</i>	1	count	trace	-	-	-	-
					SH	10	-	-	-	-						-	-	-	-	
12:33	T32	14.8	0.73	14.1	SA	60	sugar kelp	<i>Saccharina latissima</i>	15	infrequent	possible	pelagic tunicate	<i>Oikopleura labradoriensis</i>	7	count	trace	-	-	-	-
					CO	20	brown filamentous algae	-	15	infrequent	-	truncated soft-shell clam	<i>Mya truncata</i>	5	density (m²)	trace	-	-	-	-
					BO	10	-	-	-	-	hydroid		5	density (m²)	trace	-	-	-	-	
					SH	10	-	-	-	-	brittle star		1	count	trace	-	-	-	-	
					-	-	-	-	-	-	tube-dwelling anemone	<i>Pachycerianthus borealis</i>	11	count	trace	-	-	-	-	
12:46	T33	10.4	0.71	9.7	SA	70	sugar kelp	<i>Saccharina latissima</i>	60	abundant	possible	rugose anemone	<i>Hormathia sp.</i>	1	count	trace	-	-	-	-
					CO	15	brown filamentous algae	-	10	infrequent		pelagic tunicate	<i>Oikopleura labradoriensis</i>	10	count	infrequent	-	-	-	-
					BO	5	rockweed	<i>Fucus sp.</i>	5	trace	possible	sea cucumber	<i>Psolus sp.</i>	3	count	trace	-	-	-	-
					SH	10	winged kelp	<i>Alaria sp.</i>	<5	trace	possible	brittle star	-	17	count	infrequent	-	-	-	-
					-	-	-	-	-	-	truncated soft-shell clam	<i>Mya truncata</i>	5	density (m²)		-	-	-	-	
12:56	T34	15.6	0.69	14.9	SA	75	sugar kelp	<i>Saccharina latissima</i>	50	moderate	possible	tube-dwelling anemone	<i>Pachycerianthus borealis</i>	20	density (m²)	abundant	-	-	-	-
					CO	10	brown filamentous algae	-	10	trace	-	truncated soft-shell clam	<i>Mya truncata</i>	10	density (m²)	infrequent	-	-	-	-
					BO	<5	unidentified algae mat	-	30	moderate	-	brittle star	-	10	density (m²)	moderate	-	-	-	-
					SH	15	-	-	-	-	feather duster	<i>Chone sp.</i>	10	count	infrequent	-	-	-	-	
					-	-	-	-	-	-	big tube	-	3	count	infrequent	-	-	-	-	
					-	-	-	-	-	-	pelagic tunicate	<i>Oikopleura labradoriensis</i>	50	count	moderate	-	-	-	-	
					-	-	-	-	-	-	helicid pteropod	<i>Limacina helicina</i>	1	count	trace	-	-	-	-	
29-Aug-24																				
11:40	T35	2.7	1.00	1.7	SA	5	sugar kelp	<i>Saccharina latissima</i>	10	trace	possible	unidentified jelly	-	5	count	trace	-	-	-	-
					CO	75	brown filamentous algae	-	50	moderate	-	comb jelly	-	2	count	trace	-	-	-	-
					BO	10	green filementous algae	-	10	trace	-	sea angel	<i>Clione limacina</i>	2	count	trace	-	-	-	-
					SH	10	rockweed	<i>Fucus sp.</i>	25	moderate	probable	-	-	-	-	-	-	-	-	
11:47	T36	5.2	1.00	4.2			unidentified red algae	-	<5	trace	-	-	-	-	-	-	-	-	-	
					SA	5	sugar kelp	<i>Saccharina latissima</i>	60	abundant	possible	comb jelly		1	count	trace	-	-	-	-
					CO	80	rockweed	<i>Fucus sp.</i>	5	trace	possible	hydromedusa jelly		1	count	trace	-	-	-	-
					BO	5	brown filamentous algae	-	10	infrequent	-	truncated soft-shell clam	<i>Mya truncata</i>	5	density (m²)	trace	-	-	-	-
					SH	10	-	-	-	-	sea angel	<i>Clione limacina</i>	1	count	trace	-	-	-	-	
11:55	T37	11.1	0.97	10.1			-	-	-	-										
					SA	90	sugar kelp	<i>Saccharina latissima</i>	30	moderate	possible	comb jelly		3	count	trace	-	-	-	-
					BO	5	-	-	-	-	-	pelagic tunicate	<i>Oikopleura labradoriensis</i>	12	count	infrequent	-	-	-	-
																	</			

Survey Time	Transect No.	ROV Maximum Depth (m)	Tide Height (m)	Depth (CD, m)	Substrate		Vegetation					Invertebrates					Fish			
Start					Type	Percent Cover	Species Name		Abundance	Categorization	Confidence	Species Name		Abundance	Metric	Categorization	Species Name		Abundance	Categorization
							Common	Scientific				Common	Scientific				Common	Scientific		
12:12	T38	21.3	0.94	20.4	SA	90	unidentified kelp	-	5	trace	-	brittle star		1	count	trace	-	-	-	-
					SH	10	brown filamentous algae		10	trace	possible	pelagic tunicate	<i>Oikopleura labradoriensis</i>	20	count	moderate	-	-	-	-
					-	-	-	-	-	-	-	comb jelly	-	3	count	trace	-	-	-	-
					-	-	-	-	-	-	-	hydriod	-	100	density (m²)	abundant	-	-	-	-
					-	-	-	-	-	-	-	clam	-	20	density (m²)	moderate	-	-	-	-
12:29	T39	21.5	0.91	20.6	SA	95	unidentified kelp	-	5	trace	-	pelagic tunicate	<i>Oikopleura labradoriensis</i>	1	count	trace	-	-	-	-
					BO	5	-	-	-	-	-	hydriod		100	density (m²)	abundant	-	-	-	-
					-	-	-	-	-	-	-	tube worm	<i>Echone papillosa</i>	10	density (m²)	infrequent	-	-	-	-
					-	-	-	-	-	-	-	tube-dwelling anemone	<i>Pachycerianthus borealis</i>	20	density (m²)	moderate	-	-	-	-

Note: CO = cobble; SA = sand; SH = shell hash; BO = boulder

Table A-7: Fish and Fish Habitat (Subtidal ROV Video Data Analysis (2019))

Survey Time	Transect No	ROV Depth (m)		Sounder Depth (m)	Tide Height (m)	Depth (CD, m)	Temperature (° C)	Substrate		Vegetation (%)			Invertebrates				
		Minimum	Maximum					Type	%	Species		Abundance	Species		Abundance	Measure	Categorization
										Common	Scientific		Common	Scientific			
18-Aug-19																	
10:40	1	4.8	8	5.1	0.6	4.5	4.2	S	80	sugar kelp	<i>Saccharina latissima</i>	60	-	-	-	-	-
								GR	20	filamentous diatom (poss)	<i>UNID</i>	<10	-	-	-	-	-
										filamentous brown algae	<i>Chordaria (poss)</i>	20	-	-	-	-	-
11:12	2	3.2	5.9	1.2	0.8	0.4	4.1	S	70	filamentous brown algae	<i>Chordaria (poss)</i>	30	clam	<i>Mya truncata (prob)</i>	10 to 30	Density (m²)	infrequent
								GR	20	-	-	-	-	-	-	-	-
								CO	10	sugar kelp	<i>Saccharina latissima</i>	50	-	-	-	-	-
										-	-	-	-	-	-	-	-
11:26	3	0.1	0.6	0.6	0.8	-0.2	4.3	CO	70	filamentous brown algae	<i>Chordaria (poss)</i>	40	-	-	-	-	-
								GR	20	-	-	-	-	-	-	-	-
								SA	<10	-	-	-	-	-	-	-	-
11:36	4	1.3	3.1	2.4	0.8	1.6	4.1	S	50	sugar kelp	<i>Saccharina latissima</i>	40	-	-	-	-	-
								GR	10	filamentous brown algae	<i>Chordaria (poss)</i>	60	-	-	-	-	-
								CO	40	-	-	-	-	-	-	-	-
11:47	5	0.1	1.8	0.6	0.8	-0.2	4.1	CO	20	filamentous brown algae	<i>Chordaria (poss)</i>	30	tube worm	<i>Echone papillosa (poss)</i>	3	count	trace
								GR	30	-	-	-	-	-	-	-	-
								S	50	-	-	-	-	-	-	-	-
12:03	6	0.6	2.1	1.7	1	0.7	4.1	CO	30	filamentous brown algae	<i>Chordaria (poss)</i>	40	-	-	-	-	-
								GR	20	-	-	-	-	-	-	-	-
								S	30	-	-	-	-	-	-	-	-
								BO	<10	-	-	-	-	-	-	-	-
12:18	7	3.8	6	4	1	3	4	S	70	sugar kelp	<i>Saccharina latissima</i>	80	-	-	-	-	-
								GR	30	filamentous brown algae	<i>Chordaria (poss)</i>	10	-	-	-	-	-
12:43	8	4.6	6.5	3.3	1	2.3	4.1	S	100	sugar kelp	<i>Saccharina latissima</i>	80	-	-	-	-	-
										filamentous brown algae	<i>Chordaria (poss)</i>	10	-	-	-	-	-
14:02	9	5.3	6.1	6.2	1.4	4.8	4.5	S	100	sugar kelp	<i>Saccharina latissima</i>	80	-	-	-	-	-
										filamentous brown algae	<i>Chordaria (poss)</i>	10	-	-	-	-	-
15:15	10	4.8	8	9.4	1.5	7.9	2.9	S		sugar kelp	<i>Saccharina latissima</i>	80	-	-	-	-	-
										filamentous brown algae	<i>Chordaria (poss)</i>	5	-	-	-	-	-
15:26	11	1.5	2.9	3.2	1.5	1.7	3.3	S	40	filamentous brown algae	<i>Chordaria (poss)</i>	30	clam	<i>Mya truncata (prob)</i>	<10	Density (m²)	trace
								GR	30	rockweed	<i>Fucus sp</i>	50	-	-	-	-	-
								CO	20	-	-	-	-	-	-	-	-
								BO	<10	-	-	-	-	-	-	-	-
15:37	12	1.6	3.1	2.3	1.5	0.8	3.4	S	70	rockweed	<i>Fucus sp</i>	40	-	-	-	-	-
								CO	20	filamentous brown algae	<i>Chordaria (poss)</i>	50	-	-	-	-	-
								BO	<10	-	-	-	-	-	-	-	-
15:45	13	0.8	2	1.9	1.5	0.4	3.3	S	50	filamentous brown algae	<i>Chordaria (poss)</i>	20	-	-	-	-	-
								CO	20	-	-	-	-	-	-	-	-
								GR	30	-	-	-	-	-	-	-	-
15:56	14	0.1	1.8	1.9	1.5	0.4	3.3	S	40	filamentous brown algae	<i>Chordaria (poss)</i>	15	-	-	-	-	-
								CO	40	-	-	-	-	-	-	-	-
								GR	20	-	-	-	-	-	-	-	-
16:06	15	2.2	3.1	2.3	1.4	0.9	3.4	S	40	filamentous brown algae	<i>Chordaria (poss)</i>	50	clam	<i>Mya truncata (prob)</i>	<10	Density (m²)	trace
								CO	20	rockweed	<i>Fucus sp</i>	30	-	-	-	-	-
								GR	30	-	-	-	-	-	-	-	-
								BO	<10	-	-	-	-	-	-	-	-
19-Aug-19																	
8:50	16	1.3	1.6	1.4	0.9	0.5	2.5	S	50	filamentous brown algae	<i>Chordaria (poss)</i>	60	lion's mane jelly	<i>Cyanea sp.</i>	1	count	trace
								CO	40	-	-	-	-	-	-	-	-
9:26	17	0.9	1.5	1.8	0.7	1.1	2.4	S	60	filamentous brown algae	<i>Chordaria (poss)</i>	40	-	-	-	-	-
								CO	40	rockweed	<i>Fucus sp</i>	20	-	-	-	-	-
9:34	18	4.2	6.4	5.4	0.7	4.7	2.1	S	80	sugar kelp	<i>Saccharina latissima</i>	80	clam	<i>Mya truncata (prob)</i>	<10	Density (m²)	trace
										-	-	-	-	-	-	-	-
								S	50	sugar kelp	<i>Saccharina latissima</i>	10	-	-	-	-	-

Survey Time	Transect No	ROV Depth (m)		Sounder Depth (m)	Tide Height (m)	Depth (CD, m)	Temperature (° C)	Substrate		Vegetation (%)			Invertebrates				
		Minimum	Maximum					Type	%	Species		Abundance	Species		Abundance	Measure	Categorization
										Common	Scientific		Common	Scientific			
10:49	1	1	3.3	1.4	0.6	0.8	2.1	GR	30	rockweed	<i>Fucus sp</i>	20	-	-	-	-	-
								CO	30	filamentous brown algae	<i>Chordaria (poss)</i>	50	-	-	-	-	-
								S	40	sugar kelp	<i>Saccharina latissima</i>	30	-	-	-	-	-
11:10	1	2.6	8.7	3	0.6	2.4	1.9	S	20	sugar kelp	<i>Saccharina latissima</i>	50	brittle star	Ophiocten or Ophiura sp	2	count	trace
								GR	40			-	clam	<i>Mya truncata</i>	<5	Density (m²)	trace
								BR	40	filamentous brown algae	<i>Chordaria (poss)</i>	<10	-	-	-	-	-
11:19	1	4.5	10.6	8	0.6	7.4	1.8	S	40	sugar kelp	<i>Saccharina latissima</i>	-	brittle star	Ophiocten or Ophiura sp	1	count	trace
								GR	60	filamentous brown algae	<i>Chordaria (poss)</i>	-	-	-	-	-	-

Note: CO = cobble; GR = gravel; SA = sand; S = silt; BO = boulder; BR = bedrock

Appendix A: Terrestrial Vegetation Field Results (ESEB Report Section 8)



Table A-8: Terrestrial Vegetation (Abiotic Data Collected During Ecological Land Classification (2019))

Plot	Biome	Ecozone	Ecoregion	Community Type	Slope	Aspect	Soil Moisture Regime	Soil Nutrient Regime	Meso Slope Position	Exposure Type	Drainage	Mineral Soil Texture	Organic Soil Texture	Humus Form	Surface Shape	Coarse Fragment Content	Surficial Material
18-Aug-19																	
GD-17, GD-19, GD-21	Tundra	Northern Arctic	Parry Islands Plateau	Upland Lichen Barren	0->5 %	Variable to level	Very Xeric	Very Poor	Crest, Upper Slope, Middle Slope	Wind, Frost, Cold Air Drainage	Rapidly	DNC	N/A	N/A	Convex, Straight	>70 %	Regolith, undifferentiated
GD-18, GD-20	Tundra	Northern Arctic	Parry Islands Plateau	Wetland Moss Lowland	0-1 %	Mostly level	Hydric	Poor	Lower slope	Wind, Frost, Cold Air Drainage	Poorly, Very poorly	DNC	N/A	N/A	Concave, Straight	35-70 %	Regolith, undifferentiated
N/A	Tundra	Northern Arctic	Parry Islands Plateau	Disturbed Human-Caused	0->5 %	Mostly level though variable	Xeric	Very Poor	Level	Wind, Frost, Cold Air Drainage	Rapidly	DNC	N/A	N/A	Straight	>70 %	Regolith, undifferentiated
N/A	Tundra	Northern Arctic	Parry Islands Plateau	Coastal Shoreline and Flats	0->5 %	Southerly, westerly	Hygic	Poor	Middle Slope	Wind, Frost, Cold Air Drainage	Moderately Well, Imperfectly	DNC	N/A	N/A	Straight	>70 %	Littoral and nearshore sediments

Note:

N/A = not applicable

DNC = Did Not Collect

- Categories for abiotic conditions that were considered included the following:
- Slope: 0 %, 1 %, 2 %, 2-5 %, >5 %
- Aspect: level, mostly level, rolling, variable, northernly, southerly, easterly, westerly
- Soil Moisture Regime: very xeric, xeric, subxeric, submesic, mesic, subhygic, hygic, subhydric, hydric
- Soil Nutrient Regime: very poor, poor, medium, rich, very rich
- Meso Slope Position: crest, upper slope, middle slope, lower slope, toe, depression, level
- Exposure Type: wind, insolation, frost, cold air drainage, toxicity (atmospheric or soil), not applicable
- Drainage: very rapidly, rapidly, well, moderately well, imperfectly, poorly, very poorly
- Mineral Soil Texture: SAy, loamy, silty, clayey
- Organic Soil Texture: fibric, mesic, humic
- Humus Form: mor, moder, mull
- Surface Shape: concave, convex, straight
- Coarse Fragment Content: <20 %, 20-35 %, 35-70 %, >70 %

Table A-9: Terrestrial Vegetation (Vegetation Ground Plot Data (2019))

Plot	Community Type	Total Tree Layer %	Total Shrub Layer %	Total Forb Layer %	Total Graminoid Layer %	Total Non-vascular Layer %	Litter %	Water %	Mineral Soil %	Rock %	Species Name and Author	Common Name	Percent Foliar Cover
18-Aug-19													
GD-17	Upland Lichen Barren	0	0	0	0	0	0	0	0	100	N/A	N/A	N/A
GD-18	Wetland Moss Lowland	0	0	1	5	50	1	20	5	20	<i>Alopecurus magellanicus</i> Lam.	Alpine Meadow-Foxtail	5
											<i>Arctagrostis latifolia</i> (R. Br.) Griseb.	wideleaf polargrass	1
											<i>Cinclidium arcticum</i> Bruch & Schimp.	arctic cinclidium moss	25
											<i>Scorpidium scorpioides</i> (Hedw.) Limpr.	scorpidium moss	25
											<i>Saxifraga cernua</i> L.	nodding saxifrage	1
											<i>Saxifraga hirculus</i> L.	yellow marsh saxifrage	1
											<i>Stellaria humifusa</i> Rottb.	saltmarsh starwort	1
GD-19	Upland Lichen Barren	0	0	0	0	0	0	0	0	100	N/A	N/A	N/A
GD-20	Wetland Moss Lowland	0	0	1	5	50	1	20	5	20	<i>Alopecurus magellanicus</i> Lam.	Alpine Meadow-Foxtail	5
											<i>Arctagrostis latifolia</i> (R. Br.) Griseb.	wideleaf polargrass	1
											<i>Cinclidium stygium</i> Sw.	cinclidium moss	30
											<i>Orthothecium chryseum</i> (SchwÃgr.) Schimp. var. cochlearifolium (Lindb.) Limpr.	orthothecium moss	20
											<i>Saxifraga cernua</i> L.	nodding saxifrage	1
											<i>Saxifraga hirculus</i> L.	yellow marsh saxifrage	1
											<i>Stellaria humifusa</i> Rottb.	saltmarsh starwort	1
GD-21	Upland Lichen Barren	0	0	0	0	0	0	0	0	100	N/A	N/A	N/A
N/A	Disturbed Human-Caused	0	0	0	0	0	0	0	0	100	N/A	N/A	N/A
N/A	Coastal Shoreline and Flats	0	0	0	0	0	0	5	1	95	N/A	N/A	N/A

Table A-10: Terrestrial Vegetation (Vegetation Rare Plant Survey Data (2019))

Community Type	Strata	Species Name and Authority	Common Name
18-Aug-19			
Upland Lichen Barren	Shrubs	<i>Diapensia lapponica</i> L.	pincushion plant
Upland Lichen Barren	Shrubs	<i>Dryas integrifolia</i> Vahl	entireleaf mountain-avens
Upland Lichen Barren	Shrubs	<i>Salix arctica</i> Pall.	arctic willow
Upland Lichen Barren	Shrubs	<i>Saxifraga oppositifolia</i> L.	purple mountain saxifrage
Upland Lichen Barren	Forbs	<i>Cerastium arcticum</i> Lange	mouse-ear chickweed
Upland Lichen Barren	Forbs	<i>Draba subcapitata</i> Simmons	Ellesmereland whitlowgrass
Upland Lichen Barren	Forbs	<i>Minuartia rubella</i> (Wahlenb.) Hiern.	beautiful SAWort
Upland Lichen Barren	Forbs	<i>Oxyria digyna</i> (L.) Hill	alpine mountainsorrel
Upland Lichen Barren	Forbs	<i>Papaver</i> sp.	arctic poppy
Upland Lichen Barren	Forbs	<i>Parrya arctica</i> R. Br.	arctic false wallflower
Upland Lichen Barren	Forbs	<i>Saxifraga caespitosa</i> L.	tufted alpine saxifrage
Upland Lichen Barren	Forbs	<i>Saxifraga cernua</i> L.	nodding saxifrage
Upland Lichen Barren	Forbs	<i>Saxifraga platysepala</i> (Trautv.) Tolm.	broadsepal saxifrage
Upland Lichen Barren	Forbs	<i>Stellaria humifusa</i> Rottb.	saltmarsh starwort
Upland Lichen Barren	Graminoids	<i>Alopecurus magellanicus</i> Lam.	Alpine Meadow-Foxtail
Upland Lichen Barren	Graminoids	<i>Festuca brachyphylla</i> Schult. ex Schult. & Schult. f.	alpine fescue
Upland Lichen Barren	Graminoids	<i>Luzula confusa</i> Lindeberg	northern woodrush
Upland Lichen Barren	Bryophytes	<i>Distichium capillaceum</i> (Hedw.) Bruch & Schimp.	distichium moss
Upland Lichen Barren	Bryophytes	<i>Hypnum vaucheri</i> Lesq.	Vaucher's hypnum moss
Upland Lichen Barren	Bryophytes	<i>Schistidium rivulare</i> (Brid.) Podp.	streamside schistidium moss
Upland Lichen Barren	Bryophytes	<i>Racomitrium lanuginosum</i> (Hedw.) Brid.	racomitrium moss

Community Type	Strata	Species Name and Authority	Common Name
Upland Lichen Barren	Lichens	<i>Cetraria tilesii</i> Ach.	lichen
Upland Lichen Barren	Lichens	<i>Flavocetraria cucullata</i> (Bellardi) Karnefelt & A. Thell	snow lichen
Upland Lichen Barren	Lichens	<i>Flavocetraria nivalis</i> (L.) Karnefelt & A. Thell	snow lichen
Upland Lichen Barren	Lichens	<i>Lecidea tessellata</i> Flörke	lecidea lichen
Upland Lichen Barren	Lichens	<i>Lepraria neglecta</i> (Nyl.) Erichsen	dust lichen
Upland Lichen Barren	Lichens	<i>Verrucaria</i> spp.	lichens
Upland Lichen Barren	Lichens	<i>Thamnolia subuliformis</i> (Ehrh.) W.L. Culb.	whiteworm lichen
Upland Lichen Barren	Lichens	<i>Xanthoria elegans</i> (Link) Th. Fr.	elegant orange wall lichen
Wetland Moss Lowland	Shrubs	<i>Salix arctica</i> Pall.	arctic willow
Wetland Moss Lowland	Forbs	<i>Papaver</i> sp.	arctic poppy
Wetland Moss Lowland	Forbs	<i>Saxifraga cernua</i> L.	nodding saxifrage
Wetland Moss Lowland	Forbs	<i>Saxifraga hirculus</i> L.	yellow marsh saxifrage
Wetland Moss Lowland	Forbs	<i>Saxifraga nivalis</i> L.	alpine saxifrage
Wetland Moss Lowland	Forbs	<i>Stellaria humifusa</i> Rottb.	saltmarsh starwort
Wetland Moss Lowland	Graminoids	<i>Alopecurus magellanicus</i> Lam.	Alpine Meadow-Foxtail
Wetland Moss Lowland	Graminoids	<i>Arctagrostis latifolia</i> (R. Br.) Griseb.	wideleaf polargrass
Wetland Moss Lowland	Graminoids	<i>Festuca brachyphylla</i> Schult. ex Schult. & Schult. f.	alpine fescue
Wetland Moss Lowland	Graminoids	<i>Juncus biglumis</i> L.	twoflowered rush
Wetland Moss Lowland	Graminoids	<i>Luzula confusa</i> Lindeberg	northern woodrush
Wetland Moss Lowland	Graminoids	<i>Pleuropogon sabinei</i> R. Br.	false semaphoregrass
Wetland Moss Lowland	Bryophytes	<i>Brachythecium</i> sp.	moss
Wetland Moss Lowland	Bryophytes	<i>Catoscopium nigrum</i> (Hedw.) Brid.	black golf club moss
Wetland Moss Lowland	Bryophytes	<i>Cinclidium arcticum</i> Bruch & Schimp.	arctic cinclidium moss

Community Type	Strata	Species Name and Authority	Common Name
Wetland Moss Lowland	Bryophytes	<i>Cinclidium stygium</i> Sw.	cinclidium moss
Wetland Moss Lowland	Bryophytes	<i>Cratoneuron filicinum</i> (Hedw.) Spruce	cratoneuron moss
Wetland Moss Lowland	Bryophytes	<i>Cyrtomnium hymenophylloides</i> (H&A;b.) Nyholm ex T. Kop.	cyrtomnium moss
Wetland Moss Lowland	Bryophytes	<i>Didymodon rigidulus</i> Hedw. var. <i>gracilis</i> (Schleich. ex Hook. & Grev.) R.H. Zander	rigid didymodon moss
Wetland Moss Lowland	Bryophytes	<i>Distichium capillaceum</i> (Hedw.) Bruch & Schimp.	distichium moss
Wetland Moss Lowland	Bryophytes	<i>Ditrichum flexicaule</i> (Schw&A;agr.) Hampe	ditrichum moss
Wetland Moss Lowland	Bryophytes	<i>Hypnum bambergeri</i> Schimp.	Bamberger's hypnum moss
Wetland Moss Lowland	Bryophytes	<i>Orthothecium chryseum</i> (Schw&A;agr.) Schimp. var. <i>cochlearifolium</i> (Lindb.) Limpr.	orthothecium moss
Wetland Moss Lowland	Bryophytes	<i>Scorpidium scorpioides</i> (Hedw.) Limpr.	scorpidium moss
Wetland Moss Lowland	Bryophytes	<i>Timmia</i> sp.	timmia moss

Appendix A: Migratory Birds and Wildlife Field Results (ESEB Report Sections 9, 10)



Table A-11: Wildlife and Migratory Birds (Incidental Wildlife Species Observed or Detected during Field Survey (2019))

Species Code	Species Name	Common Name	Count	Type	Easting	Northing	Coordinate System	Zone
17-Aug-19								
BRANT	<i>Branta bernicla</i>	brant	35	on shore	445917	8289728	UTM NAD83	15X
CORA	<i>Corvus corax</i>	common raven	1	flyover	447688	8286400	UTM NAD83	15X
GLGU	<i>Larus hyperboreus</i>	glaucous gull	3	on shore	447526	8287887	UTM NAD83	15X
GLGU	<i>Larus hyperboreus</i>	glaucous gull	2	on shore	447688	8286400	UTM NAD83	15X
SNBU	<i>Plectrophenax nivalis</i>	snow bunting	6	foraging	440822	8296028	UTM NAD83	15X
PAJA	<i>Stercorarius parasiticus</i>	parasitic jaeger	1	foraging	440216	8296179	UTM NAD83	15X
PAJA	<i>Stercorarius parasiticus</i>	parasitic jaeger	6	flyover	447688	8286400	UTM NAD83	15X
ARTE	<i>Sterna paradisaea</i>	arctic tern	12	foraging	439478	8296348	UTM NAD83	15X
ARTE	<i>Sterna paradisaea</i>	arctic tern	10	foraging	447688	8286400	UTM NAD83	15X
ARTE	<i>Sterna paradisaea</i>	arctic tern	3	foraging	447526	8287887	UTM NAD83	15X
18-Aug-19								
BRANT	<i>Branta bernicla</i>	brant	6	on shore	444414	8289762	UTM NAD83	15X
BASA	<i>Calidris bairdii</i>	Baird's SApiper	5	on shore	443233	8288468	UTM NAD83	15X
PUSA	<i>Calidris maritima</i>	purple SApiper	1	on shore	445815	8290128	UTM NAD83	15X
SNGO	<i>Chen caerulescens</i>	snow goose	14	foraging	440918	8296035	UTM NAD83	15X
CORA	<i>Corvus corax</i>	common raven	2	flyover	444414	8289762	UTM NAD83	15X
RETL	<i>Gavia stellata</i>	red-throated loon	2	flyover	444414	8289762	UTM NAD83	15X
SNBU	<i>Plectrophenax nivalis</i>	snow bunting	2	flyover	445815	8290128	UTM NAD83	15X
PAJA	<i>Stercorarius parasiticus</i>	parasitic jaeger	1	flyover	447841	8287273	UTM NAD83	15X
ARTE	<i>Sterna paradisaea</i>	arctic tern	5	foraging	447709	8287606	UTM NAD83	15X
ARTE	<i>Sterna paradisaea</i>	arctic tern	7	foraging	445917	8289729	UTM NAD83	15X

Species Code	Species Name	Common Name	Count	Type	Easting	Northing	Coordinate System	Zone
ARTE	<i>Sterna paradisaea</i>	arctic tern	3	flyover	445815	8290128	UTM NAD83	15X
ARFO	<i>Vulpes lagopus</i>	arctic fox	1	hunting	440050	8289280	UTM NAD83	15X
19-Aug-19								
SNOW	<i>Bubo scandiacus</i>	snowy owl	1	perched	443315	8290190	UTM NAD83	15X
POBE	<i>Ursus maritimus</i>	polar bear	1	in water near carcass	443639	8288635	UTM NAD83	15X

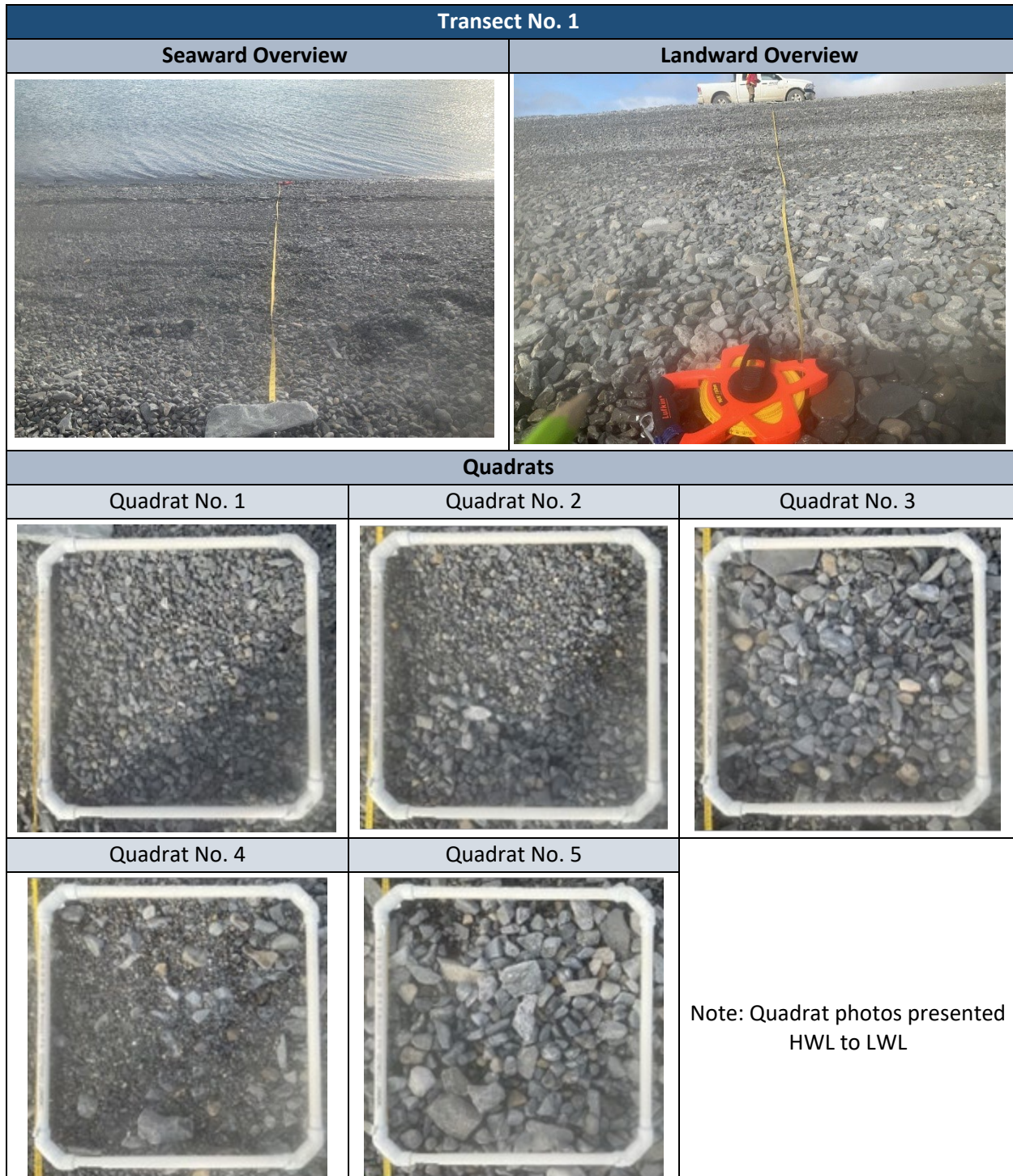
Table A-12: Wildlife and Migratory Birds (Bird Species Observed or Detected During Field Migratory Bird Point Count Survey (2019))



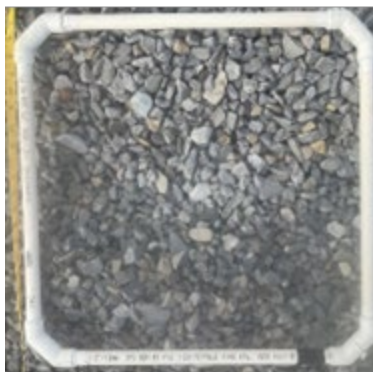




Point Count Name	Time start (5 min)	Wind kmph	Cloud Cover %	Temp C	Precip mm	Species Code	Species Name	Common Name	Count	Easting	Northing	Coordinate System	Zone
18-Aug-2019													
RB-PC-14	16:24	17	2	10	0	GLGU	<i>Larus hyperboreus</i>	glaucous gull	2	445811	8290034	UTM NAD83	15X
RB-PC-14	16:24	17	2	10	0	PUSA	<i>Calidris maritima</i>	purple SApiper	1	445811	8290034	UTM NAD83	15X
RB-PC-15	16:45	17	2	10	0	GLGU	<i>Larus hyperboreus</i>	glaucous gull	1	445546	8290334	UTM NAD83	15X
RB-PC-16	17:00	17	1	10	0	ARTE	<i>Sterna paradisaea</i>	arctic tern	4	445123	8290298	UTM NAD83	15X
RB-PC-17	17:10	17	1	10	0	GLGU	<i>Larus hyperboreus</i>	glaucous gull	2	444519	8289877	UTM NAD83	15X
RB-PC-18	17:30	17	1	10	0	CORA	<i>Corvus corax</i>	common raven	1	444298	8289536	UTM NAD83	15X
RB-PC-18	17:30	17	1	10	0	SNBU	<i>Plectrophenax nivalis</i>	snow bunting	5	444298	8289536	UTM NAD83	15X

Appendix B: Photos (Field Program)

















Photo B-1: Intertidal Transects Overview and Quadrats (2024)


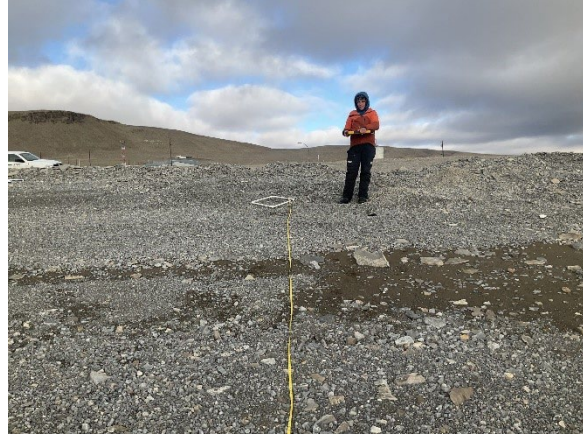














Transect No. 2		
Seaward Overview	Landward Overview	
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	
		<p>Note: Quadrat photos presented HWL to LWL</p>

Transect No. 3		
Seaward Overview	Landward Overview	
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Note: Quadrat photos presented HWL to LWL
		

Transect No. 4		
Seaward Overview	Landward Overview	
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Note: Quadrat photos presented HWL to LWL
		

Transect No. 5		
Seaward Overview	Landward Overview	
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Note: Quadrat photos presented HWL to LWL
		

Transect No. 6		
Seaward Overview	Landward Overview	
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Note: Quadrat photos presented HWL to LWL
		

Transect No. 7		
Seaward Overview		Landward Overview
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Note: Quadrat photos presented HWL to LWL
		






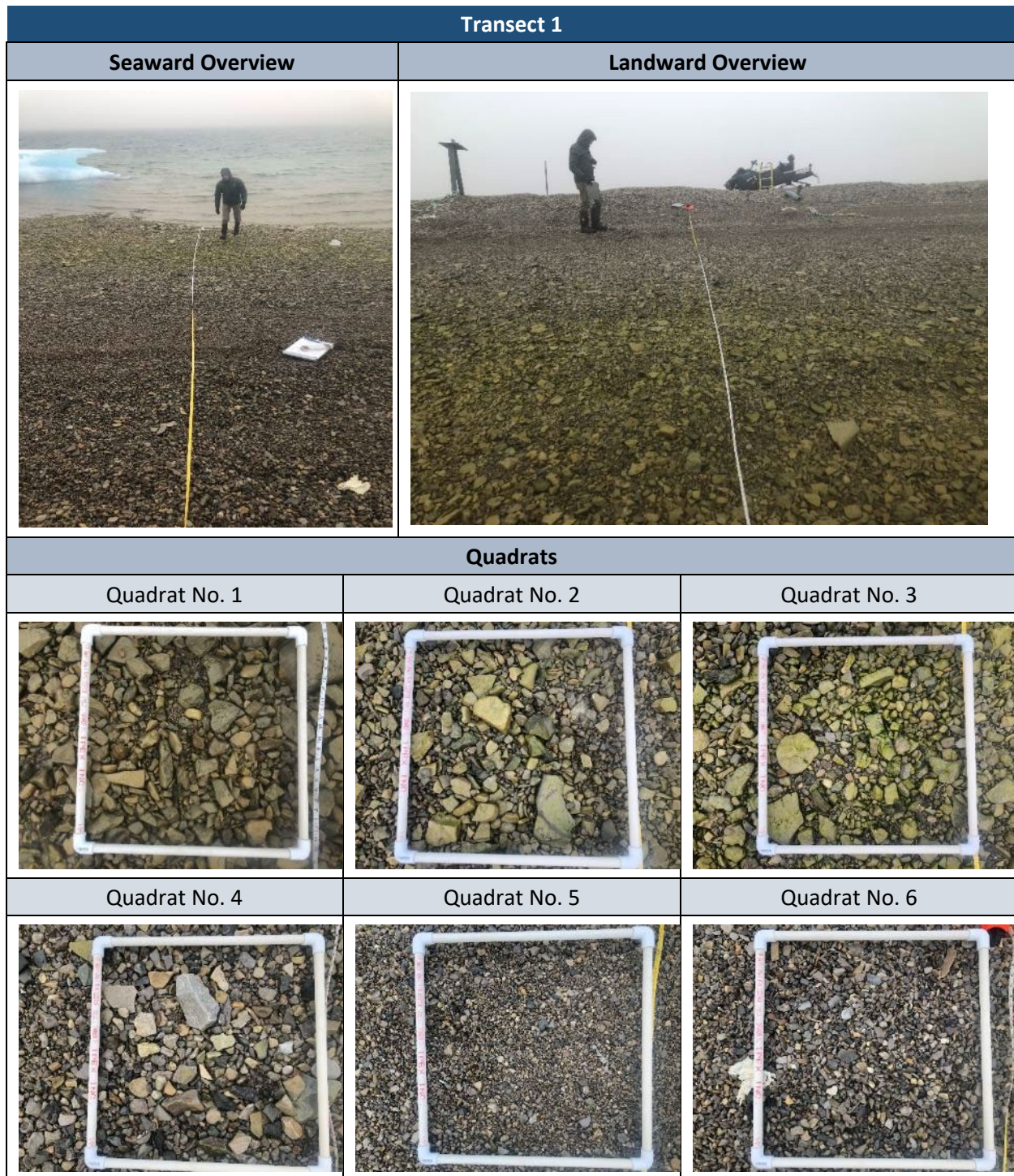
Transect No. 8		
Seaward Overview	Landward Overview	
		
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Note: Quadrat photos presented HWL to LWL
		

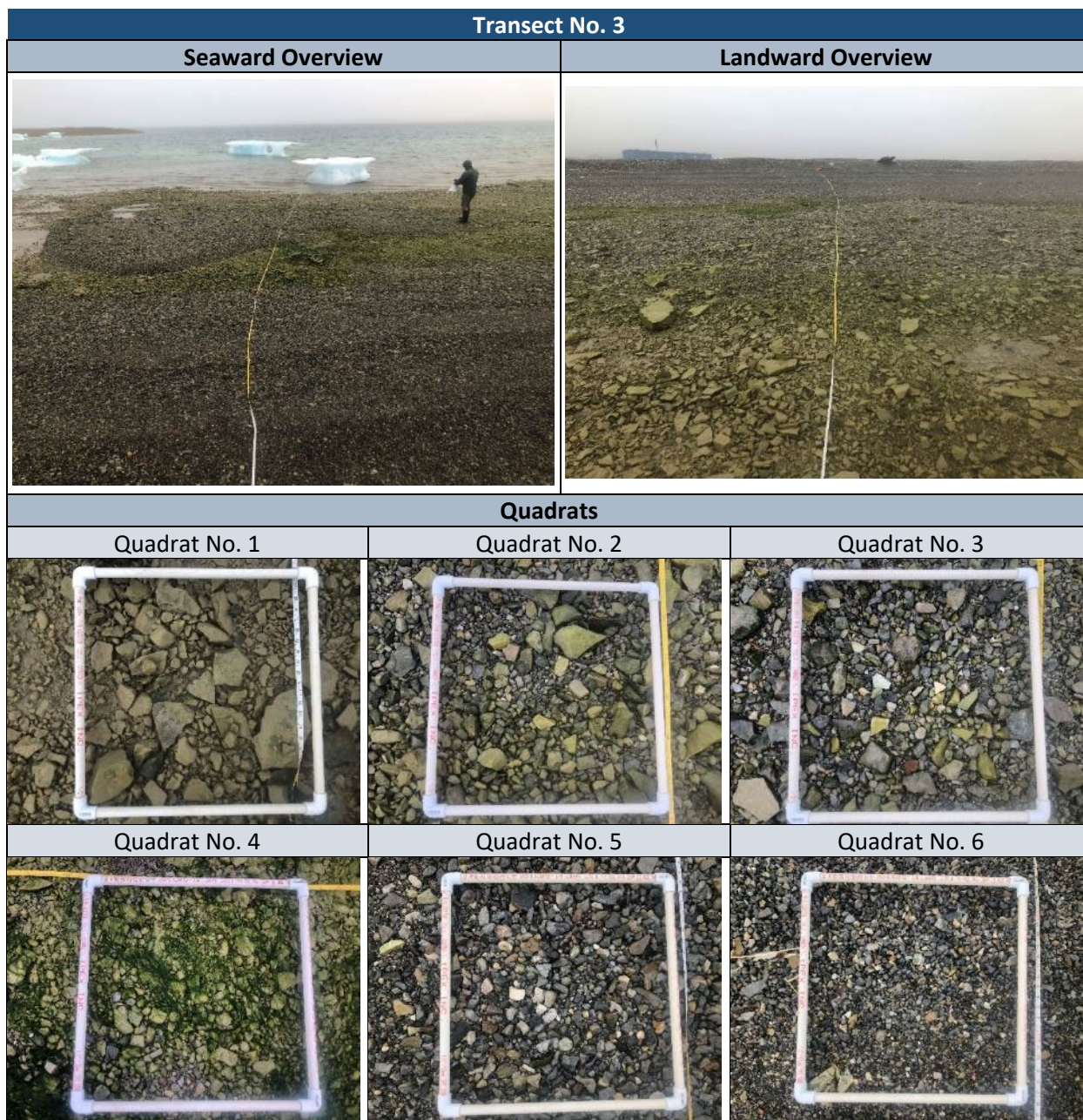
Photo B-2: Intertidal Transects Overview and Quadrats (2019)



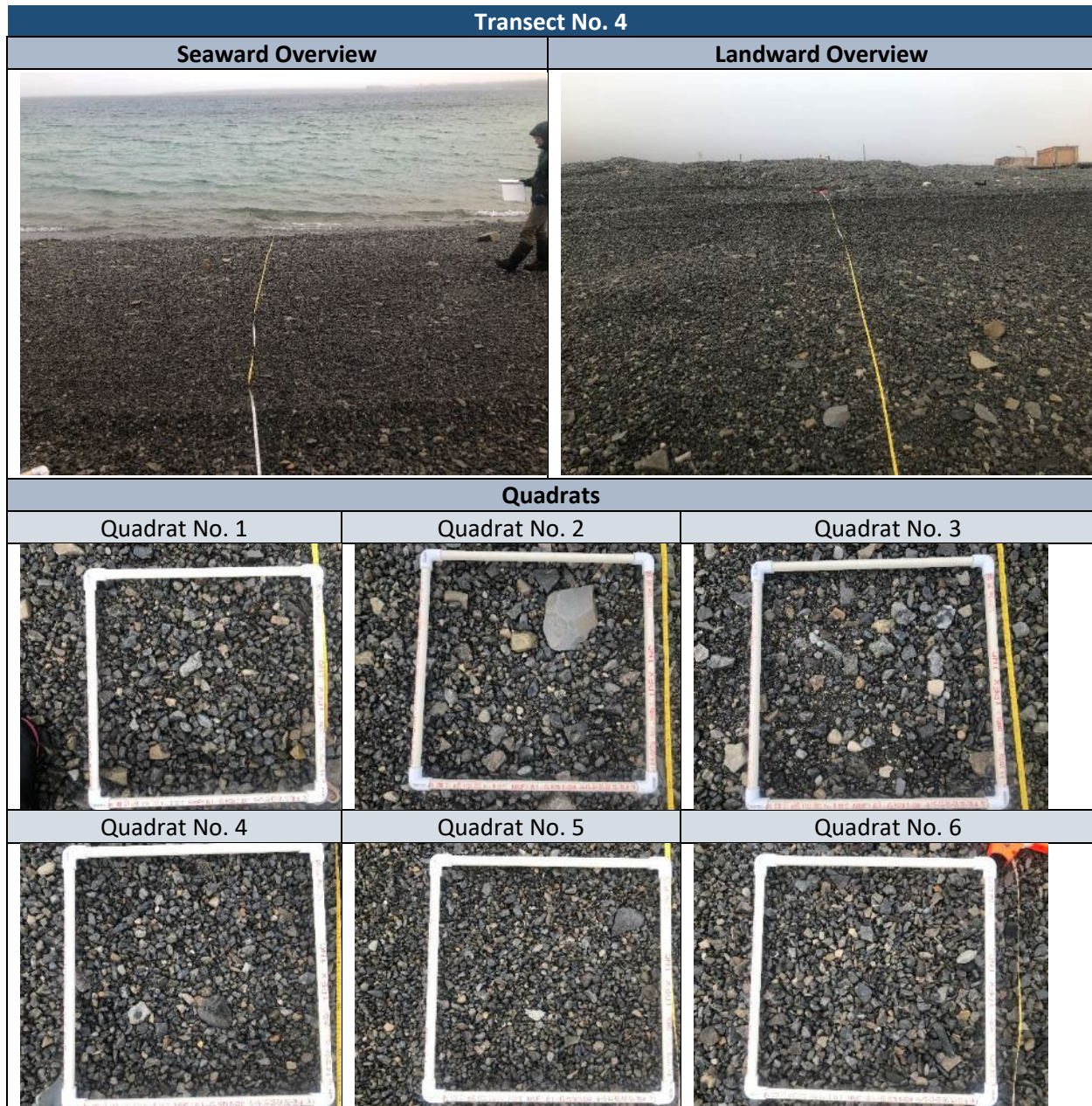
Note: Quadrat photos presented HWL to LWL









Note: Quadrat photos presented HWL to LWL



Note: Quadrat photos presented HWL to LWL

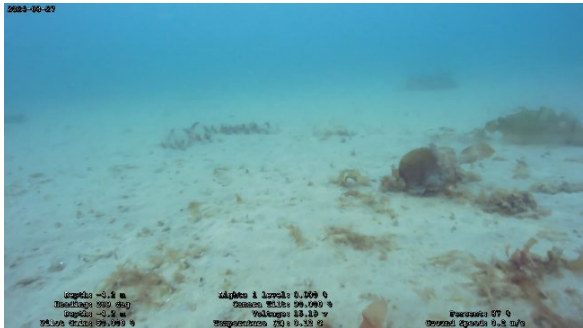
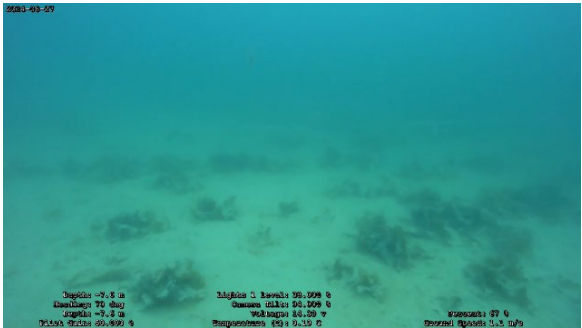
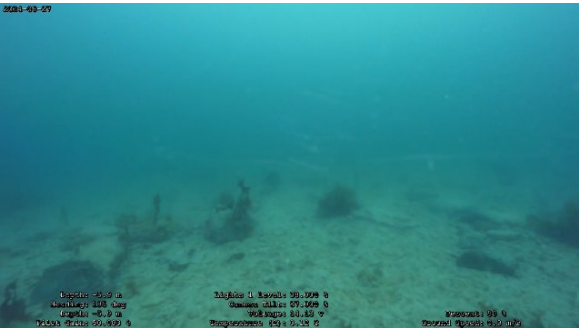
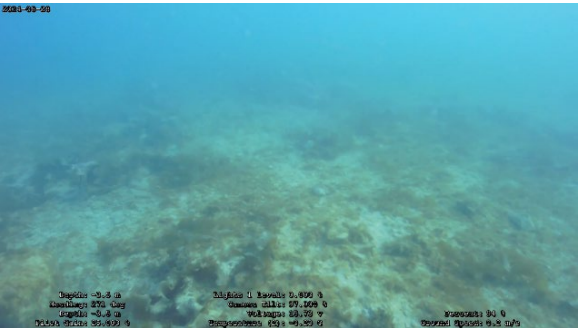
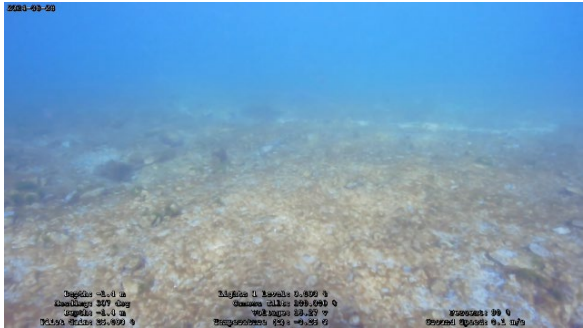
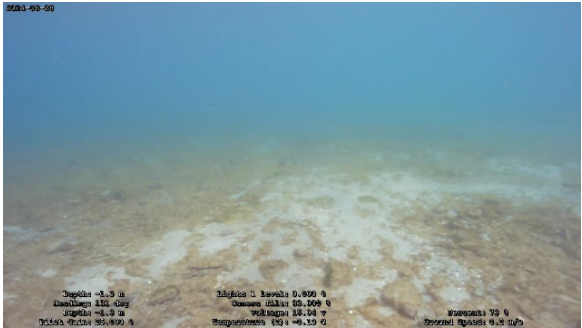
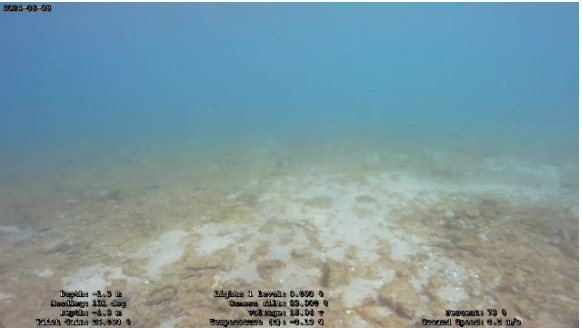
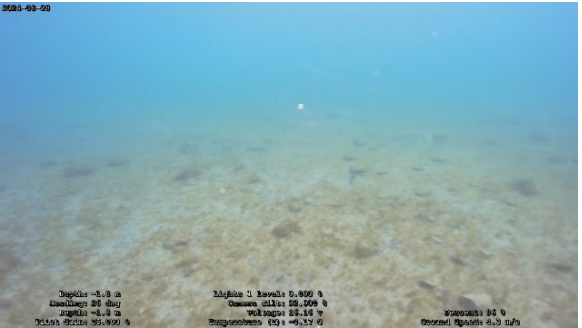
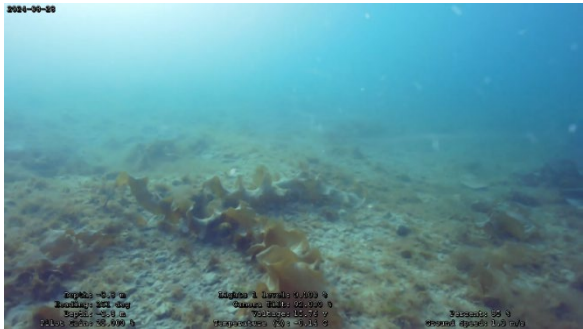
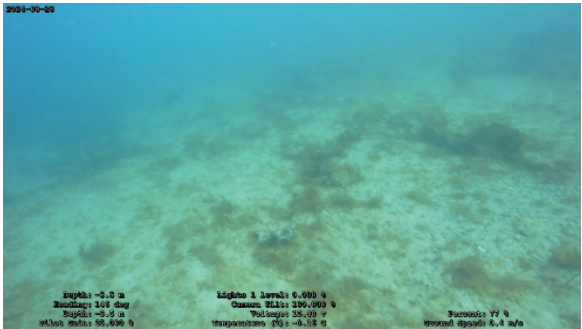
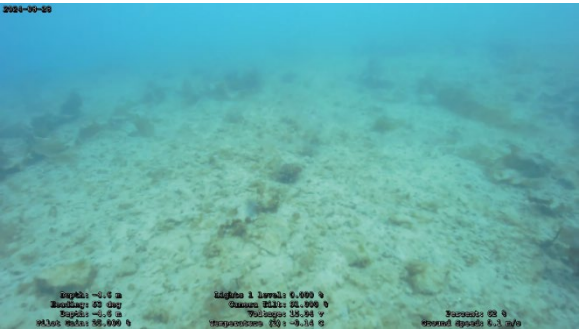
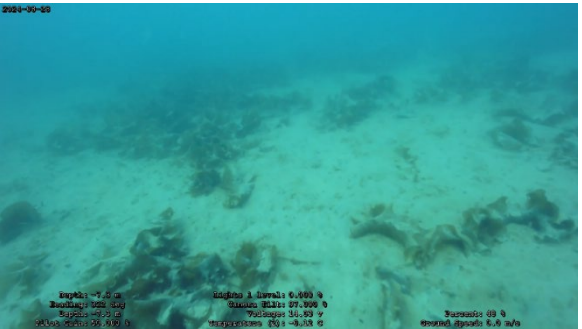


Note: Quadrat photos presented HWL to LWL

Transect No. 5		
Seaward Overview	Landward Overview	
	No photo	
Quadrats		
Quadrat No. 1	Quadrat No. 2	Quadrat No. 3
		
Quadrat No. 4	Quadrat No. 5	Quadrat No. 6
		No photo

Note: Quadrat photos presented HWL to LWL

Photo B-3: Subtidal Transects Overview and Quadrats (2024)

Transect 15 – Photo 1		Transect 16 – Photo 2		Transect 17A – Photo 3		Transect 17B – Photo 4	
							
<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>	
Transect 18 – Photo 5		Transect 19 – Photo 6		Transect 20 – Photo 7		Transect 21 – Photo 8	
							
<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>	
Transect 22 – Photo 9		Transect 23 – Photo 10		Transect 24 – Photo 11		Transect 25 – Photo 12	
							
<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>		<div><div>Depth: ~1.5 m</div><div>Quadrat 1 Area: 0.250 m²</div><div>Quadrat 1 Volume: 0.375 m³</div><div>Quadrat 1 Weight: 11.10 g</div><div>Quadrat 1 Species: 0.00</div><div>Quadrat 1 Density: 0.000 g/m³</div></div>	

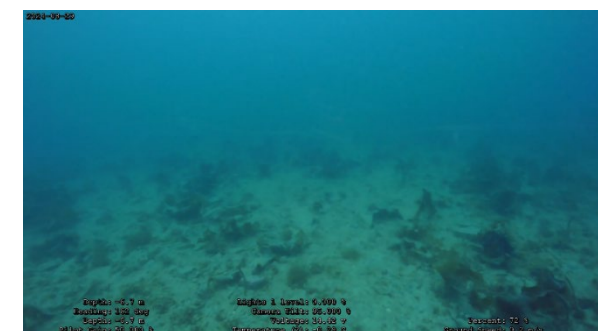
Transect 29 – Photo 16



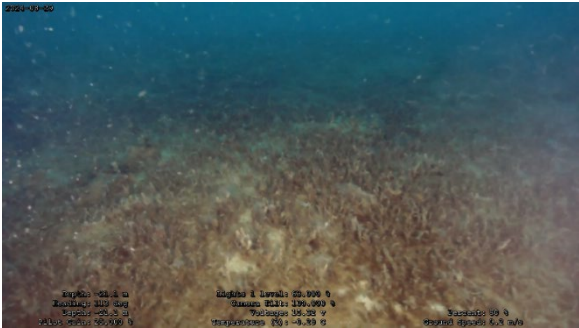
Transect 33 – Photo 20



Transect 37 – Photo 24



Transect 38 – Photo 25



Transect 39 – Photo 26

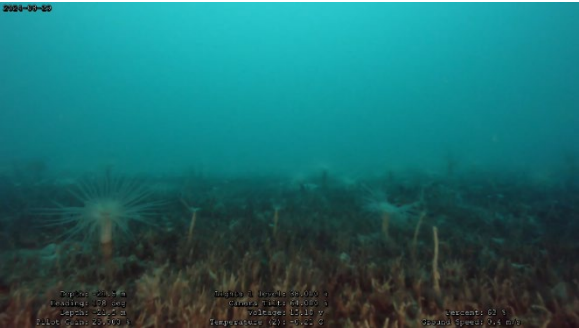





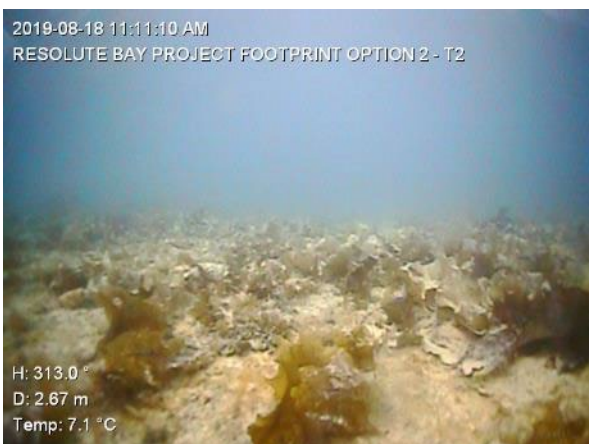




Photo B-4: Subtidal Transects Overview and Quadrats (2019)

Transect 1 – Photo 1 (Sugar kelp)	Transect 1 – Photo 2 (Thread brown algae)	Transect 1 – Photo 3 (Filamentous diatom)	Transect 1 – Photo 4
 <p>2019-08-18 10:41:27 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T1</p> <p>H: 188.2 ° D: 7.10 m Temp: 4.4 °C</p>	 <p>2019-08-18 10:42:24 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T1</p> <p>H: 284.3 ° D: 8.60 m Temp: 4.1 °C</p>	 <p>2019-08-18 10:42:00 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T1</p> <p>H: 294.9 ° D: 8.11 m Temp: 4.2 °C</p>	 <p>2019-08-18 10:42:56 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T1</p> <p>H: 318.9 ° D: 7.55 m Temp: 4.0 °C</p>
Transect 2 – Photo 1 (Clams)	Transect 2 – Photo 2 (Sugar kelp)	Transect 2 – Photo 3	Transect 2 – Photo 4
 <p>2019-08-18 11:10:49 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T2</p> <p>H: 285.1 ° D: 2.11 m Temp: 8.4 °C</p>	 <p>2019-08-18 11:11:10 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T2</p> <p>H: 313.0 ° D: 2.67 m Temp: 7.1 °C</p>	 <p>2019-08-18 11:13:06 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T2</p> <p>H: 170.3 ° D: 5.05 m Temp: 4.7 °C</p>	 <p>2019-08-18 11:10:27 AM RESOLUTE BAY PROJECT FOOTPRINT OPTION 2 - T2</p> <p>H: 346.7 ° D: 2.20 m Temp: 9.9 °C</p>

Transect 3 – Photo 1



Transect 3 – Photo 2



Transect 3 – Photo 3



Transect 3 – Photo 4



Transect 4 – Photo 1 (Sugar kelp)



Transect 4 – Photo 2 (Thread brown algae)



Transect 4 – Photo 3



Transect 4 – Photo 4



Transect 5 – Photo 1



Transect 5 – Photo 2 (Anthropogenic)



Transect 5 – Photo 3



Transect 5 – Photo 4



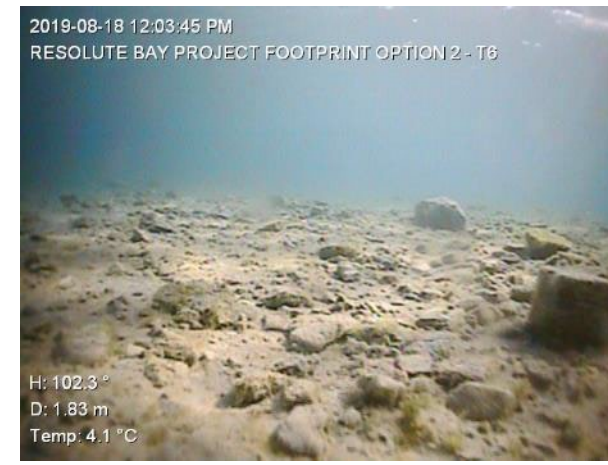
Transect 6 – Photo 1



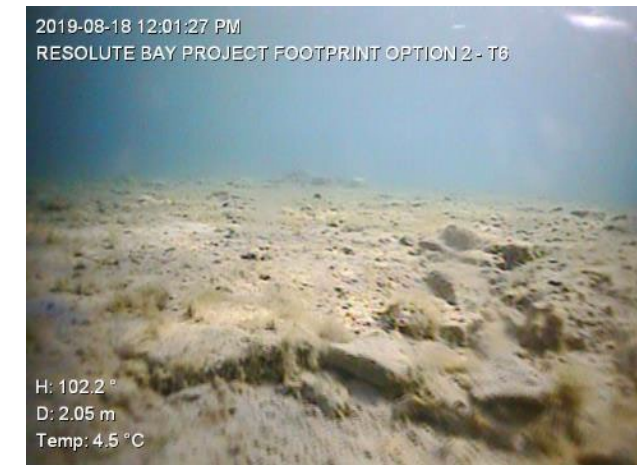
Transect 6 – Photo 2 (Anthropogenic)



Transect 6 – Photo 3



Transect 6 – Photo 4



Appendix C: Supporting Tables (Desktop)



Table C-1: List of Designated Areas in Nunavut

ID	Name		
1	Lower Estuary	83	De Salis Bay
8	Western Anticosti Island	84	Horton River
15	Outer Shelf Nain Bank	85	Western Banks Island
16	Outer Shelf Saglek Bank	86	Cape Bathurst / Ballie Island
45	Northern Labrador	87	Cape Bathurst Polynya
46	Nain Area	88	Darnley Bay Nearshore Migration and Feeding Corridor
52	Southwestern Hudson Bay Estuaries	159	Arctic Basin Multi-Year Pack Ice
53	Repulse Bay / Frozen Strait	160	Hopedale Saddle
54	Southampton Island	161	Lancaster Sound
55	Western Hudson Strait	162	Admiralty Inlet
56	Ungava Bay	163	Prince Leopold Island
57	Eastern Hudson Strait	164	Creswell Bay
58	James Bay	165	Bellot Strait
59	Belcher Islands	166	Cunningham Inlet
60	Norwegian Bay	167	Scott Inlet
61	Ellesmere Island Ice Shelves	168	Isabella Bay
62	Nansen-Eureka-Greely Fjord	169	Cape Searle
63	Archipelago Multi-Year Pack Ice	170	Eastern Cumberland Sound
64	Princess Maria Bay	171	Clearwater Fiord
65	Western Hudson Bay Coastline	172	Eclipse Sound / Navy Board Inlet
66	Rowley Island	173	Prince Regent Inlet
67	Igloolik Island	174	Gulf of Boothia
68	Fury and Hecla Strait	175	Peel Sound
69	Eastern Hudson Bay Coastline	176	Penny Strait
70	King William Island	177	Hatton Basin-Labrador Sea-Davis Strait
71	Diamond Jenness	178	Baffin Bay Shelf Break
72	Southern Victoria Island Coastline	179	Northern Baffin Bay
73	Lambert Channel	180	North Water Polynya
74	Viscount Melville Sound	181	Eastern Jones Sound
75	Chantrey Inlet	182	Resolute Passage
76	Bathurst Inlet	183	Cardigan Strait / Hell Gate
77	Queen Maud Gulf Coastline	184	Southern Baffin Bay
78	Beaufort Shelf Break and Slope	185	Kugmallit Canyon

ID	Name		
82	Southern Amundsen Gulf	186	Liverpool Bay

Table C-2: Species Specific observations of Benthic Amphipods in Nunavut (June 1996 to May 2001)

Latin Name	Site
<i>Acanthonotozoma serratum</i>	Upper Frobisher Bay
<i>Aceroides latipes</i>	
<i>Ampelisca eschrichti</i>	
<i>Andaniella pectinate</i>	
<i>Anonyx debruyni</i>	
<i>Anonyx nugax</i>	
<i>Arrhinopsis longicornis</i>	
<i>Byplis gaimardi</i>	
<i>Caprella dubia</i>	
<i>Dulichia porrecta</i>	
<i>Erichthonius tolli</i>	
<i>Guernea nordenskioldi</i>	
<i>Haliragen megalops</i>	
<i>Haploops tubicola</i>	
<i>Harpinia serrata</i>	
<i>Hippomedon sp.</i>	
<i>Ischyrocerus megalops</i>	
<i>Melita dentata</i>	
<i>Metopa cariana</i>	
<i>Metopa groenlandica</i>	Upper Frobisher Bay
<i>Monoculodes latinamus</i>	
<i>Monoculodes longirostris</i>	
<i>Monoculodes simplex</i>	
<i>Odius carinatus</i>	
<i>Orchomene groenlandica</i>	
<i>Orchomene minuta</i>	
<i>Orchomene serrata</i>	
<i>Paradulichia typica</i>	
<i>Paraleustes bicuspis</i>	
<i>Paroediceros lynceus</i>	
<i>Phoxocephalus holbolli</i>	
<i>Pleustes media</i>	

Latin Name	Site
<i>Pontoporeia affinis</i>	
<i>Rhachotropis inflata</i>	
<i>Socarnes sp.</i>	
<i>Syrrhoe crenulate</i>	
<i>Tryphosella schneideri</i>	
<i>Unciola leucopis</i>	
<i>Westwoodilla megalops</i>	
<i>Themisto abyssorum</i>	Hudson Strait, Frobisher Bay
<i>Themisto compressum</i>	
<i>Themisto libellula</i>	Hudson Strait, Frobisher Bay, Coats Island
<i>Multiple unnamed amphipod species</i>	Lancaster Sound, Jones Sound, Arctic Bay, Scott Inlet
<i>Calliopus laeviusculus</i>	Belcher Island, Lower Hudson Bay
<i>Ischyrocerus anguipes</i>	
<i>Pontogeneia inermis</i>	
<i>Pseudalibrotus litoralis</i>	
<i>Caprella Spp.</i>	
<i>Weyprechtia pinguis</i> ,	
<i>Onisimus litoralis</i>	Barrow Strait, Resolute
<i>Gammarus setosus</i>	
<i>Onisimus spp. Juveniles</i>	
<i>Ischyrocerus anguipes</i>	
<i>Pontogeneia inermis</i>	Chesterfield Inlet, northwest of Hudson bay
<i>Apherusa megalops</i>	
<i>Weyprechtia pinguis</i>	

Source: Devine *et al.* (2019); Estrada *et al.* (2012); Gaston and Elliott (2014); Pike and Welch (1990); Siferd *et al.* (1997); Wacasey *et al.* (1980)

Table C-3: List of Birds, their Federal and Territorial statuses, their preferred Foraging Strategy, and Potential to Nest (based on season-use) within or near the Project Study Area

Common name	Scientific Name	COSEWIC Status	SARA Status	Territorial Status	Foraging Location	Period of Use	Nesting Resource Requirements	Nesting Likelihood
American golden plover	<i>Pluvialis dominica</i>	Not assessed	Not listed	S3	Shoreline	Breeding and Migration	Elevated on sparse, low vegetation, well-drained rocky slopes	Likely
American pipit	<i>Anthus rubescens</i>	Not assessed	Not listed	SU	Ground forager	Breeding and Migration	Mesic vegetation along streams, grassy meadows, and dry, dwarf shrub matts	Low
Arctic tern	<i>Sterna paradisaea</i>	Not assessed	Not listed	S4	Nearshore	Breeding and Migration	Open country, close to water, no vegetation or low and sparse cover; rocky, gravelly islands, barrier beaches and spits, gravel moraines	Likely
Atlantic puffin	<i>Fratercula arctica</i>	Not assessed	Not listed	S3	Offshore	Breeding, Migration, and Overwinter	Burrows on rocky islands with short vegetation and on sea cliffs	Not Likely
Baird's Sandpiper	<i>Calidris bairdii</i>	Not assessed	Not listed	S5	Shoreline	Breeding and Migration	Dry, well-drained coastal and upland exposed tundra. Beach ridges, terrace banks, bare soil with sparse vegetation	Likely
Black guillemot	<i>Cepphus grille</i>	Not assessed	Not listed	S5	Nearshore	Breeding, Migration, and Overwinter	Colonies on rocky marine coasts of off-shore islands near shallow water	Not Likely
Black-bellied plover	<i>Pluvialis squatarola</i>	Not assessed	Not listed	S3	Shoreline	Breeding and Migration	Lowlands in coastal areas and on open, dry, heath tundra, dwarf shrub meadows, and dry exposed ridges, river banks, and beaches	Low
Black-legged kittiwake	<i>Rissa tridactyla</i>	Not assessed	Not listed	S5	Nearshore	Breeding and Migration	Colonies on cliff ledges of off-shore islands or inaccessible mainland	Not Likely
Brant	<i>Branta bernicla</i>	Not assessed	Not listed	S5	Coastal flats	Breeding and Migration	Colonial near salt marshes, estuaries, and deltas	Low
Buff-breasted Sandpiper	<i>Tryngites subruficollis</i>	Special Concern	Special Concern	S3	Ground forager	Breeding and Migration	Dry grassy tundra, shorelines, and rarely mudflats	Low
Cackling goose	<i>Branta hutchinsii</i>	Not assessed	Not listed	S5	Ground forager	Breeding and Migration	Variety of low Arctic regions with open view and adjacent to permanent freshwater (ponds, lakes, streams, marshes, and muskeg)	Not Likely
Canada goose	<i>Branta canadensis</i>	Not assessed	Not listed	S5	Grassy flats	Breeding and Migration	Broad range of habitats but often adjacent to freshwater	Low
Common eider	<i>Somateria mollissima</i>	Not assessed	Not listed	S3	Nearshore	Breeding, Migration, Overwinter	Local colonies along marine coasts, islands, and islets	Not Likely
Common loon	<i>Gavia immer</i>	Not at Risk	Not listed	S5	Marine coast	Breeding and Migration	Large lakes	Not Likely
Common raven	<i>Corvus corax</i>	Not assessed	Not listed	S5	Ground forager	Breeding and Overwinter	Habitat generalist; often on cliffs, trees, and human structures	Likely
Common redpoll	<i>Acanthis flammea</i>	Not assessed	Not listed	SU	Foliage gleaner	Breeding and Migration	Dry, rocky or damp substrates on dry heaths or rocky slopes	Not Likely
Dovekie	<i>Alle alle</i>	Not assessed	Not listed	S3	Offshore	Breeding, Migration, and Overwinter	Colonies on rocky marine coasts and cliffs	Not Likely
Glaucous gull	<i>Larus hyperboreus</i>	Not assessed	Not listed	S4	Nearshore	Breeding and Migration	Often in mixed colonies on marine and freshwater coasts, tundra, islands, cliffs, shorelines, and ice edges	Not Likely
Gyr Falcon	<i>Falco rusticolus</i>	Not at Risk	Not listed	S4	Open terrain	Breeding and Migration	Rocky outcrops, cliffs, and seacoasts	Not Likely
Hoary redpoll	<i>Acanthis hornemanni</i>	Not assessed	Not listed	S3	Foliage gleaner	Breeding and Migration	Similar to common redpoll but near dwarf or creeping shrubs	Moderate
Horned lark	<i>Eremophila alpestris</i>	Not assessed	Not listed	SU	Ground forager	Breeding and Migration	Open habitat on bare ground or short grasses	Likely

Common name	Scientific Name	COSEWIC Status	SARA Status	Territorial Status	Foraging Location	Period of Use	Nesting Resource Requirements	Nesting Likelihood
Iceland gull	<i>Larus glaucoides</i>	Not assessed	Not listed	S5	Nearshore	Migration	Colonies on rocky cliffs and fjords	Not Likely
Ivory gull	<i>Pagophila eburnean</i>	Endangered	Endangered	S1	Nearshore	Breeding, Migration, and Overwinter	Rocky islands and cliffs near pack ice	Not Likely
King eider	<i>Somateria spectabilis</i>	Not assessed	Not listed	S3	Nearshore	Breeding, Migration, Overwinter	Variety of tundra habitats but often on dry and well-drained in vegetation adjacent to freshwater	Not Likely
Lapland longspur	<i>Calcarius lapponicus</i>	Not assessed	Not listed	S5	Ground forager	Breeding and Migration	Wet, hummocky meadows; avoids rocky and bare terrain	Low
Long-tailed duck	<i>Clangula hyemalis</i>	Not assessed	Not listed	S4	Nearshore	Breeding, Migration, Overwinter	Wetlands or offshore islands with freshwater	Low
Long-tailed jaeger	<i>Stercorarius longicaudus</i>	Not assessed	Not listed	S5	Offshore	Migration and Overwinter	Tundra far from sea	Not Likely
Northern fulmar	<i>Fulmarus glacialis</i>	Not assessed	Not listed	S5	Offshore	Breeding, Migration, Overwinter	Steep sea cliffs	Not Likely
Northern wheatear	<i>Oenanthe Oenanthe</i>	Not assessed	Not listed	SU	Ground forager	Breeding and Migration	Dry, elevated rubble, rocky fields, stony hilltops, and precipices of rocky coasts	Likely
Pacific loon	<i>Gavia pacifica</i>	Not assessed	Not listed	SU	Marine coast	Breeding and Migration	Freshwater lakes	Not Likely
Parasitic jaeger	<i>Stercorarius parasiticus</i>	Not assessed	Not listed	S4S5	Offshore	Migration and Overwinter	Pelagic bird that nests on low-lying marshy tundra and dry, tussock-heath	Moderate
Pectoral Sandpiper	<i>Calidris melanotos</i>	Not assessed	Not listed	S4	Shoreline	Breeding and Migration	Flat, marshy tundra dominated by sedges and grasses	Not Likely
Peregrine falcon	<i>Falco peregrinus</i>	Not at Risk	Special Concern	S4	Open terrain	Breeding and Migration	Open landscapes with cliffs or tall human-made structures	Low
Pomarine jaeger	<i>Stercorarius pomarinus</i>	Not assessed	Not listed	S5	Offshore	Migration and Overwinter	Pelagic bird that nests irregularly in low-lying marshy tundra near small lakes	Not Likely
Purple Sandpiper	<i>Calidris maritima</i>	Not assessed	Not listed	S3	Shoreline	Breeding and Migration	Inland on mossy tundra, heath, and moorlands but also low tundra near shores on gravel-SA beaches along rivers	Likely
Red knot	<i>Calidris canutus</i>	Endangered	Endangered	S2	Shoreline	Breeding and Migration	Sparsely vegetated, dry, elevated tundra on ridges or slopes with low shrub cover	Likely
Red phalarope	<i>Phalaropus fulicarius</i>	Not assessed	Not listed	S4	Nearshore	Breeding and Migration	Coastal, poorly-drained, hummocky, level terrain on tundra dominated by sedges	Likely
Red-breasted merganser	<i>Mergus serrator</i>	Not assessed	Not listed	S5	Pursuit Diver	Breeding and Migration	Coastal near fresh, brackish or saltwater wetlands in sheltered bays	Not Likely
Red-necked phalarope	<i>Phalaropus lobatus</i>	Special Concern	Special Concern	S3	Nearshore	Breeding and Migration	Mossy hummocks and sedges close to standing water	Low
Red-throated loon	<i>Gavia stellate</i>	Not assessed	Not listed	S4	Marine coast	Breeding and Migration	Wetlands and larger ponds, lakes	Not Likely
Rock ptarmigan	<i>Lagopus muta</i>	Not assessed	Not listed	S5	Ground forager	Breeding and Overwinter	Well-drained, hummocky tundra with rocky ridges; outcrops and mixed vegetation	Low
Ross's gull	<i>Rhodostethia rosea</i>	Threatened	Threatened	S1	Nearshore	Breeding and Migration	Moist tundra and deltas with dwarf shrubs	Low

Common name	Scientific Name	COSEWIC Status	SARA Status	Territorial Status	Foraging Location	Period of Use	Nesting Resource Requirements	Nesting Likelihood
Rough-legged hawk	<i>Buteo lagopus</i>	Not at Risk	Not listed	SU	Rolling, open terrain	Breeding and Migration	Open tundra including rocky outcrops, escarpments, and cliffs	Low
Ruddy turnstone	<i>Arenaria interpres</i>	Not assessed	Not listed	S3	Shoreline	Breeding and Migration	Marshy slopes and flats near freshwater (marshes, streams, ponds) or tidal flats and beaches	Low
Sabine's gull	<i>Xema sabini</i>	Not assessed	Not listed	S4S5	Nearshore	Breeding and Migration	Moist tundra near fresh water (ponds and lakes), low-lying sea coasts and coastal islands	Low
Sanderling	<i>Calidris alba</i>	Not assessed	Not listed	S3	Shoreline	Breeding and Migration	Islands, peninsulas, and coastal tundra with well-vegetated moist to well-drained slopes, ridges, and alluvial plains	Low
Sandhill crane	<i>Grus canadensis</i>	Not assessed	Not listed	S5	Ground forager	Breeding and Migration	Eskers dominated by lichens	Moderate
Snow bunting	<i>Plectrophenax nivalis</i>	Not assessed	Not listed	S3	Ground forager	Breeding and Migration	Rocky areas and boulder scree near vegetated tundra	Likely
Snow goose	<i>Chen caerulescens</i>	Not assessed	Not listed	S5	Coastal flats	Breeding and Migration	Colonial near freshwater (ponds, lakes, streams, and braided deltas) often in wet meadows but also undulating terrain, exposed slopes, or cliff edges	Not Likely
Snowy owl	<i>Bubo scandiacus</i>	Not assessed	Not listed	S4	Rolling, open terrain	Breeding and Migration	Variety of tundra environments on distinct promontories	Moderate
Thayer's gull	<i>Larus thayeri</i>	Not assessed	Not listed	S4S5	Marine coast	Breeding and Migration	Colonies on steep cliffs	Not Likely
Thick-billed murre	<i>Uria lomvia</i>	Not assessed	Not listed	S5	Offshore	Breeding, Migration, and Overwinter	Large colonies on cliff ledges near deep, offshore waters and land fast ice	Not Likely
Tundra swan	<i>Cygnus columbianus</i>	Not assessed	Not listed	S5	Coastal flats	Migration	Tundra lakes, ponds, and coastal deltas	Not Likely
White-rumped Sandpiper	<i>Calidris fuscicollis</i>	Not assessed	Not listed	S5	Shoreline	Breeding and Migration	Well-vegetated, wet, meadows and low-lying areas near water	Low
Willow ptarmigan	<i>Lagopus lagopus</i>	Not assessed	Not listed	S5	Foliage gleaner	Breeding and Overwinter	Abundant shrubby vegetation, flat terrain, and moist areas	Not Likely
Yellow-billed loon	<i>Gavia adamsii</i>	Not at Risk	Not listed	S4	Marine coast	Breeding and Migration	Near water on ground, partially hidden in tundra vegetation	Not Likely

Note:

- Sources: (LePage *et al.*, 1998; Mallory & Fontaine, 2004; Cornell Lab of Ornithology, 2015; CESSC, 2016; Cornell Lab of Ornithology, 2019; Government of Canada, 2019q).
- Likelihood of nesting within HRQ and Community Harbour Study Area was based upon a qualitative assessment of results of the ecological land classification and habitat assessment and potential for the habitat to provide suitable nesting requirements. Similarly, other factors such as breeding range, location of known colonies, etc. were incorporated. Likely: the Study Area is located within the breeding range and the majority of available habitat provides preferred or suitable nesting habitat; Moderate: the Study Area is located within the breeding range and some of the available habitat may provide suitable nesting habitat; Low: the Study Area is located within the breeding range and some of the available habitat may provide marginal nesting habitat; Not Likely: the Study Area is located outside of the breeding range or outside of known colonies (or the species is colonial and such a colony would likely be known to locals given its proximity to the Hamlet), and available habitat is generally not suitable for nesting.

Territorial Rank Descriptions	
SX	Presumed Extirpated
SH	Possibly Extirpated
S1	Critically Imperiled
S2	Imperiled
S3	Vulnerable
S4	Apparently Secure
S5	Secure
SU	Unrankable
SNR	Unranked
SNA	Not Applicable