APPENDIX A

Aquatic Habitat

2020/2021 Aquatic Habitat and Hydraulic Study Technical Data Report

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Hydraulic Study Technical Data Report

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2020/2021 AQUATIC HABITAT AND HYDRAULIC STUDY TECHNICAL DATA REPORT

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1.0 INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by Signal Gold Inc., (Signal), to conduct an Aquatic Habitat and Hydrology Study to support the Stog'er Tight Expansion; part of the Point Rousse Project. The Stog'er Tight Expansion is located approximately 6 km northeast of the town of Baie Verte, Newfoundland and Labrador (NL) (Figure 1.1). Signal currently operates gold mining and milling operations which includes 5 mining leases and 24 mineral licenses covering an area of approximately 57.94 km^2.

The Stog'er Tight Deposit partially underlays Camp Pond and adjacent areas to the east (Figure 1.1). Signal intends to develop a new pit (Gabbro Pit) between Camp Pond and Fox Pond in 2022. The Gabbro Pit will be developed using open pit mining methods over 25 months commencing in July 2022. The studies conducted in 2020/2021 were designed to provide baseline data on fish presence, fish habitat, and surface hydrology patterns that may be potentially affected by the Point Rousse Project, specifically the expansion at the Stog'er Tight Deposit.

The study site described in this report includes Camp Pond, its inlet, and outlet. If the project results in a HADD of fish habitat fish habitat, a Fisheries Act authorization will be required in order for the project to proceed.

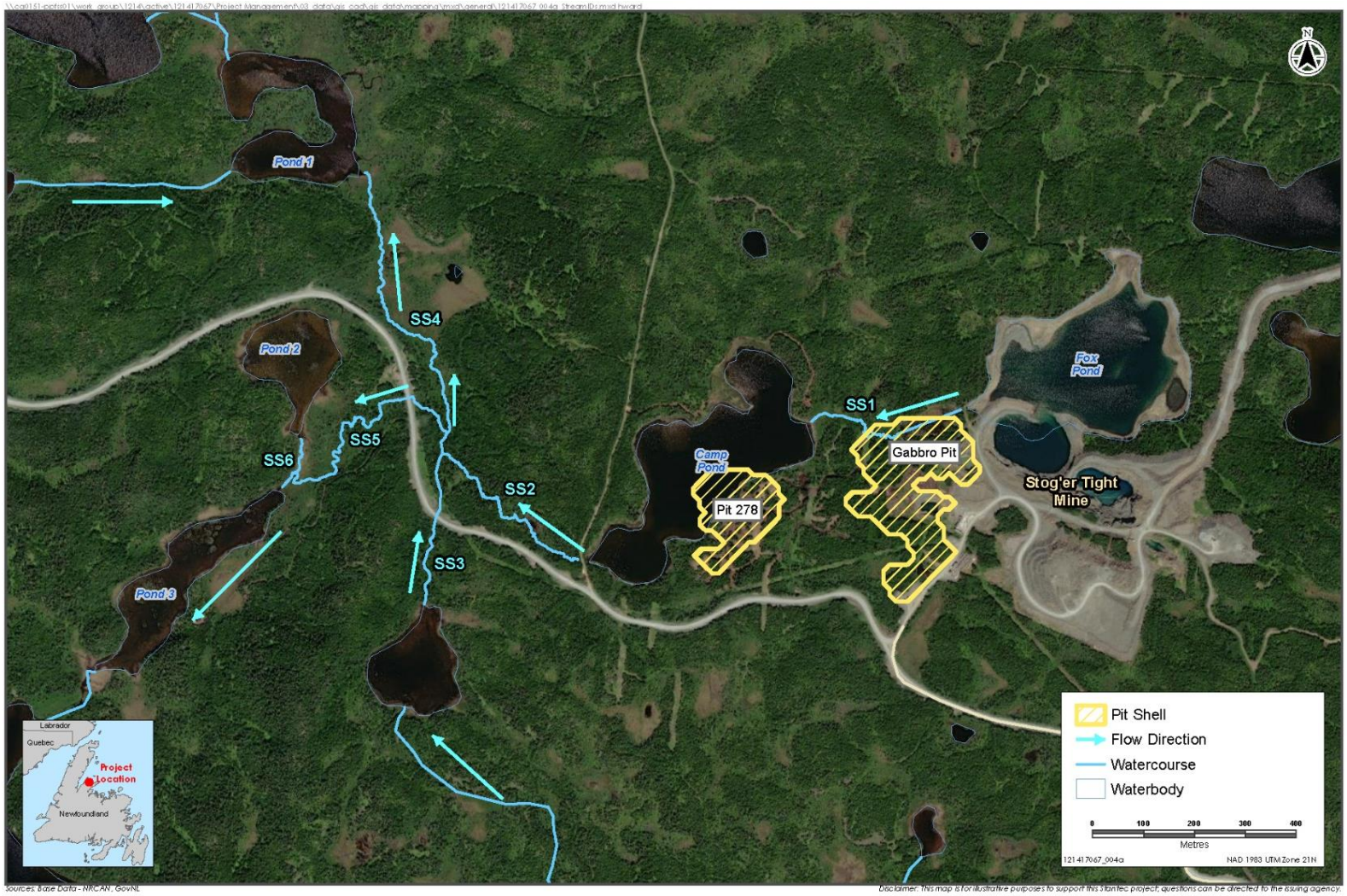

Figure 1.1 Location of Signal's Stog'er Tight Development

1.1 OBJECTIVES

The objectives of the Aquatic Habitat and Hydrology Study are:

- To determine fish presence and species composition in Camp Pond
- To determine fish presence and species composition in Camp Pond inflow and outflow
- To present the bathymetry and habitat characterization of Camp Pond
- To characterize habitat of Camp Pond inflows and outflows
- To collect baseline flow data on Camp Pond inflow and outflow to develop a stage-discharge relationship, known as a rating curve

1.2 STUDY TEAM

Tony Parr, Riley Shelley, Colin Jones, and Evelyn Reid conducted the field surveys for this study. Matt Steeves and Shannon Enes compiled this report, with technical review conducted by Barry Wicks and Sheldon Smith. Barry Wicks served as Project Manager. Deidre Puddister and Tony Decker were the Signal client contacts and provided Project details and coordination to support the field study.

2.0 METHODS

The 2020/2021 study included field surveys for:

- fish sampling in Camp Pond (October 27 to 30, 2020)
- fish sampling in Camp Pond inflow and outflow (June 18 to 21, 2021)
- bathymetry and habitat data collection in Camp Pond (October 27 to 30, 2020)
- Stream habitat characterization of Fox Pond outflow (stream SS1) and Camp Pond Outflow streams (SS2, SS4, SS5 and SS6). (October 27 to 30, 2020)
- High level habitat classification of Ponds 1, 2 and 3 from shore. (October 27 to 30, 2020)
- baseline flow data collection on Camp Pond inflows and outflows (November 2020 to December 2021)

2.1 FISH SAMPLING

Fishing activity was conducted in accordance with Experimental Licenses NL-6039-20 and NL-6493-21 obtained from Fisheries and Oceans Canada (DFO). Fish surveys and according to methods described in Sooley et al. (1997).

2.1.1 Camp Pond

Fish presence and species composition in Camp Pond was assessed by setting two Fyke traps perpendicular to shore in the shallow, shoreline areas of Camp Pond. Traps were left to fish for approximately 24 hours at FN1 and FN2, then moved to two new locations within Camp Pond (FN3 and FN4), for another 24-hour fishing period. This resulted in a total fishing effort of four trap-nights. Captured fish were measured, weighed, identified (to species), and released alive. Fyke trap locations are shown on Figure 2.2. Fish sampling data are included in Appendix A; Table A1.

2.1.2 Camp Pond Inlet and Outlet

Fish presence and species composition in Camp Pond inlet and outlet was assessed using an LR-24, Smith Root electrofisher. Quantitative electrofishing was conducted at two locations (E1 and E2) downstream of Camp Pond on June 18 and 21, 2021 as shown on Figure 2.1. Systematic fishing of the sites was repeated for a minimum of four passes or until the number of fish captured was less than 10% of the 1st pass and less than 50% of the subsequent pass. Electrofishing passes were completed moving in an upstream direction. A team of two people completed the sampling; one person operated the electrofisher and the second used a dip net to capture stunned fish. After each electrofishing sweep, captured fish were identified to species, measured for fork length (mm) and weight (g). Sampled fish were released outside the barricaded sampling area, after each pass. Barrier nets were checked regularly for breaches that would allow fish to enter or leave the barricaded area. Maintenance of the barrier nets was performed, as required.

Shallow water depths within the Camp Pond inlet, resulted in conditions that prevented quantitative electrofishing. Qualitative electrofishing was conducted intermittently along the Camp Pond inlet on June 19, 2021. Electrofishing was conducted moving in an upstream direction. Captured fish were identified to species, measured for fork length (mm) and weight (g). Sampled fish were released downstream as electrofishing progressed upstream. The 2021 electrofishing data is provided in Appendix A; Table A2.

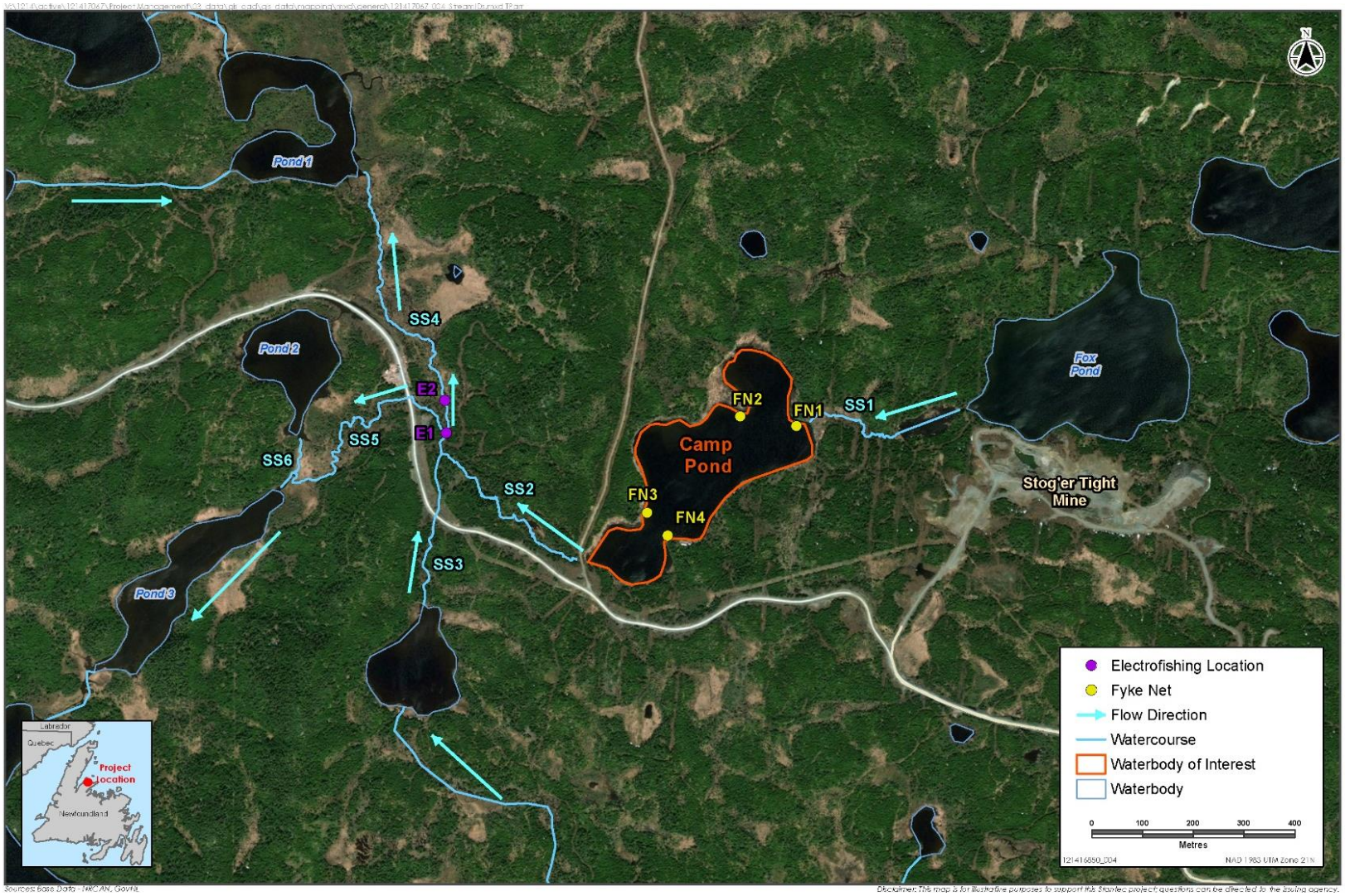

Figure 2.1 Fyke Trap and Quantitative Electrofishing Locations in Camp Pond during the 2020 and 2021 Aquatic Habitat Studies

2.2 BATHYMETRY AND FISH HABITAT CLASSIFICATION

Detailed habitat classification was conducted on Camp Pond, the stream flowing into Camp Pond from Fox Pond (SS1) and the outflow of Camp Pond (SS2, SS4, SS5, and SS6) on October 28 and 30, 2020. Aquatic habitats within SS2 were not classified as it is not expected to be impacted by potential changes in flow from Camp Pond (located upstream of potential impacts to streamflow). In addition, a high-level habitat classification of Ponds 1, 2 and 3 were conducted from the shoreline on October 29, 2020.

2.2.1 Ponds

A detailed habitat classification and bathymetry survey was conducted at Camp Pond as per methods described in the Standard Methods Guide for the Classification/Quantification of Lacustrine Habitat in Newfoundland and Labrador (Bradbury et al 2001). Pond habitat was characterized by boat and included a description of approximate depth, substrate type, and amount of aquatic vegetation. Substrate was characterized based on descriptions provided in Table 2.1. Habitat features were recorded on a hard copy map showing the outline Camp Pond. A habitat map was generated summarizing the general habitat types present.

Table 2.1 Classification of Substrate

Class	Substrate	Description
Coarse	Bedrock (Br)	Continuous solid rock exposed by scouring forces.
	Boulder (B)	Boulder-sized rocks from 25 cm to greater than 1 m in diameter.
Medium	Rubble (R)	Large rocks from 14 to 25 cm in diameter.
	Cobble (C)	Moderate to small size rocks from 3 to 13 cm in diameter.
	Gravel (G)	Small stones from 2 mm to 3 cm in diameter.
Fine	Sand (S)	Fine deposits ranging from 0.06 to 2 mm in diameter.
	Silt (Si)	Fine material less than 0.06 mm in diameter, often carried by currents.
	Muck (M)	Silt and clay containing greater than 85% organic (detritus).
	Clay (mud)	Material of inorganic origin with greasy feel between fingers and no apparent structure.
	Fines (F)	Smaller-sized material of less than 0.06 mm. This classification is used for an indeterminate mix of sand, silt, muck and clay when the dominant component is not determined.
Adapted from: Bradbury et al 2001 and McCarthy et al 2007 (Draft)		

Bathymetry data were acquired with a dual beam 80/200 kHz frequency transducer (Garmin International Inc., Olathe, Kansas, USA) and a WAAS-enabled chart plotting unit (GPSMAP 531s, Garmin International Inc., Olathe, Kansas, USA), which had an estimated positioning error of < 3 m. Transects were run a maximum distance of 25 m apart, both parallel and perpendicular to shore, to obtain adequate survey coverage. The entire area of Camp Pond was surveyed.

A high-level habitat characterization was conducted from the shore near the outflows of Ponds 1, 2 and 3 (Figure 2.1). The high-level characterization included a description of the substrate, abundance of aquatic vegetation and approximate depth.

2.2.2 Streams

Stream habitat classification was conducted according to methods outlined in the "Standard Methods Guide for the Classification of Riverine Habitats in Newfoundland and Labrador" (McCarthy et al. 2007 (Draft)).

Stream habitat was characterized by obtaining velocity measurements and depth readings at ¼, ½, and ¾ of the stream width within approximately 50 m reaches / segments of the stream. Within each 50 m segment the habitat was described based on substrate type, meso habitat type, stream gradient, riparian vegetation, and cover. Photos looking upstream and downstream were taken within each stream segment at representative locations and GPS coordinates were recorded. Potential barriers to fish migration were noted, photographed and georeferenced. A photo log is included in Appendix B.

2.3 BASELINE HYDROLOGY

The Stog'er Tight project area drains to Fox Pond and Camp Pond. Fox Pond flows southwest into Camp Pond through SS1 and is currently in water level recovery due to previous mining operations. The main outflow of Camp Pond is SS2, which converges with SS3 approximately 400 m northwest of the outlet of Camp Pond into SS4. SS5 is a tributary of SS4 that flows west into Pond 3, while SS4 flows north into Pond 1. Pond 2 flows via SS6 into SS5 approximately 65 m from the outlet (Figure 2.2).

2.3.1 Hydrometric Monitoring Stations

Four water level logger stations (LL1, LL2, LL3, and LL4) and one barometric logging station (LL4) were established within the Camp Pond Watershed between October 28, 2020 – October 30, 2020 to provide data on baseline stream water levels and flows (Figure 3.1). Each of the levelogger monitoring stations were equipped with a Solinst Levelogger Edge (M5/F-15), while one station (LL4) also included a Solinst Barologger Edge (M1.5/F5). Prior to field station setup, the leveloggers and the barometric logger were tested to confirm operation and communications and to initialize the system and record appropriate serial numbers. The leveloggers recorded the temperature and level measurements within each watercourse at 5-minute intervals. Site and monitoring details are presented in Table 2.2.

Table 2.2 Details of Hydrometric Monitoring Locations

Station	Coordinates	Date of Installation	Watercourse	Drainage Area (km^2)	Location
LL1	49.96678˚N, 56.08350˚W	October 28, 2020	SS1	0.592	Downstream of Fox Pond
LL2	49.966033˚N, 56.093726˚W	October 30, 2020	SS2	1.22	Downstream of Camp Pond
LL3	49.965975˚N, 56.094067˚W	October 30, 2020	SS3	2.00	Downstream of Unnamed Pond
LL4	49.966361˚N, 56.093975˚W	October 30, 2020	SS4	3.22	Most downstream station

LL1 is located on SS1 between Fox Pond and Camp Pond. It has an upstream catchment area of 0.592 km^2 and is currently experiencing the effects of Fox Pond in water level recovery. LL2 is located downstream of Camp Pond on SS2, just upstream of the convergence of SS2 and SS3. LL2 has an upstream catchment area of 1.22 km^2. LL3 is the sole station located on SS3 and has a catchment area of 2.00 km^2. LL4 is located downstream of the three other hydrometric monitoring stations (LL1, LL2, and LL3) on SS4 and combines flows from SS2 and SS3. The upstream catchment area for LL4 is 3.22 km^2. The catchment areas are presented on Figure 2.3.

Channel cross sections were collected at each hydrometric monitoring station to visually observe the channel conditions and to support the water level and flow measurements. A meter tape and meter stick were used to record the cross sections. The meter tape was tied off between two permanent station stakes on the channel banks and was pulled taut to reduce sagging of the line. A level was used to determine whether the tape was horizontal. A meter stick was then used to determine the height of the ground elevation to the meter tape at regular intervals across the watercourse, identifying changes in topography.

Manual flow measurements were taken using a SonTek FlowTracker meter within the permanent station stakes according to the mid-section method (Environment Canada 1999). The mid-section method involves measuring the channel area and water velocities of a watercourse throughout a cross section and dividing the channel into equal panels to take each velocity and depth reading. The same panels are used at each subsequent site visit for consistency. The velocity is taken at 60% of the water depth if the water depth is equal to or less than 0.5 m, or at 20%, 60%, and 80% of the water depth for water depths greater than 0.5 m. The average velocity between each panel is multiplied by the distance between each panel and the average depth between panels to get the flow. The flows for each panel are summed to produce the total flow of the channel. The date and time of the assessment and temperature of the watercourse were recorded during the manual flow measurements.

Levelogger raw data collects absolute pressure including both water column pressure plus barometric pressure. Barometeric pressure for each station was compensated by converting the barologger pressure readings into the water column equivalent using the Solinst Pressure Conversion Factors (Solinst 2017). The barologger levels were subtracted from the levelogger readings for each station to compensate for absolute pressure yielding water column equivalent water levels. The leveloggers level readings were then compensated for the offset, or the difference between the elevation of the levelogger pressure sensor and the elevation of the watercourse thalweg. The water levels were plotted over time for each hydrometric station with manual water level measurements plotted as a comparison.

Repeated measurements of water level or stage were plotted against the discharge on a graph and a flow rating curve, otherwise referred to as a stage:discharge curve, developed by using the best fitted regression equation. The Root Mean Squared (R^2) of the line of best fit represents a lower variance between the observed and predicted data with values closer to 1.0. The stage-discharge curve depends on the hydraulic characteristics of the watercourse and will vary over time if the channel morphology changes. Subtle changes to the watercourse may include growth of aquatic vegetation in the summer, shifting of a mobile-bed stream bottom, or substantial changes due to flood events or nearby construction. These changes might require a minor or temporary adjustment to streamflow records and subsequent rating curve relationships in the future.

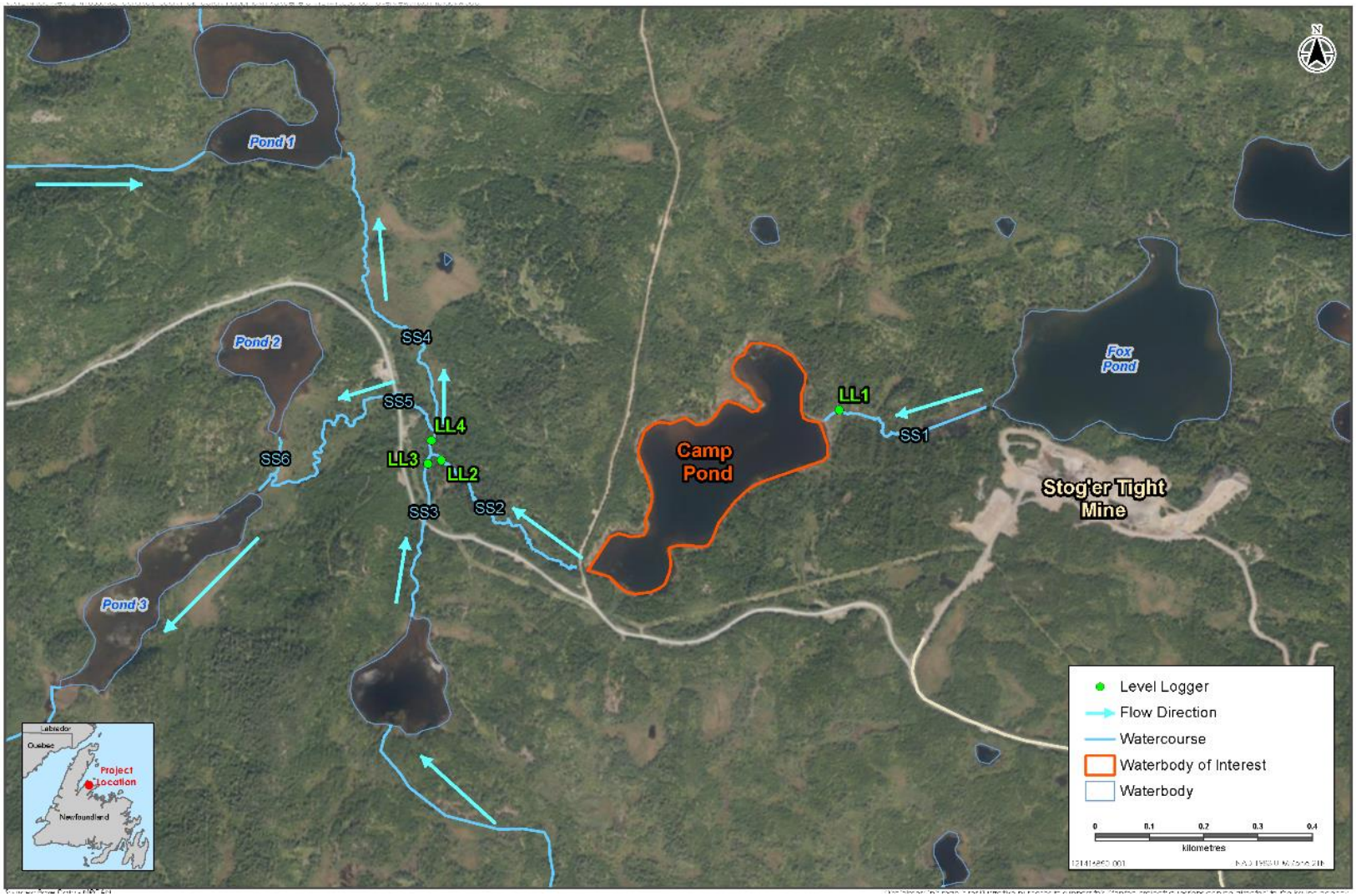

Figure 2.2 2020/2021 Hydrometric Monitoring Locations

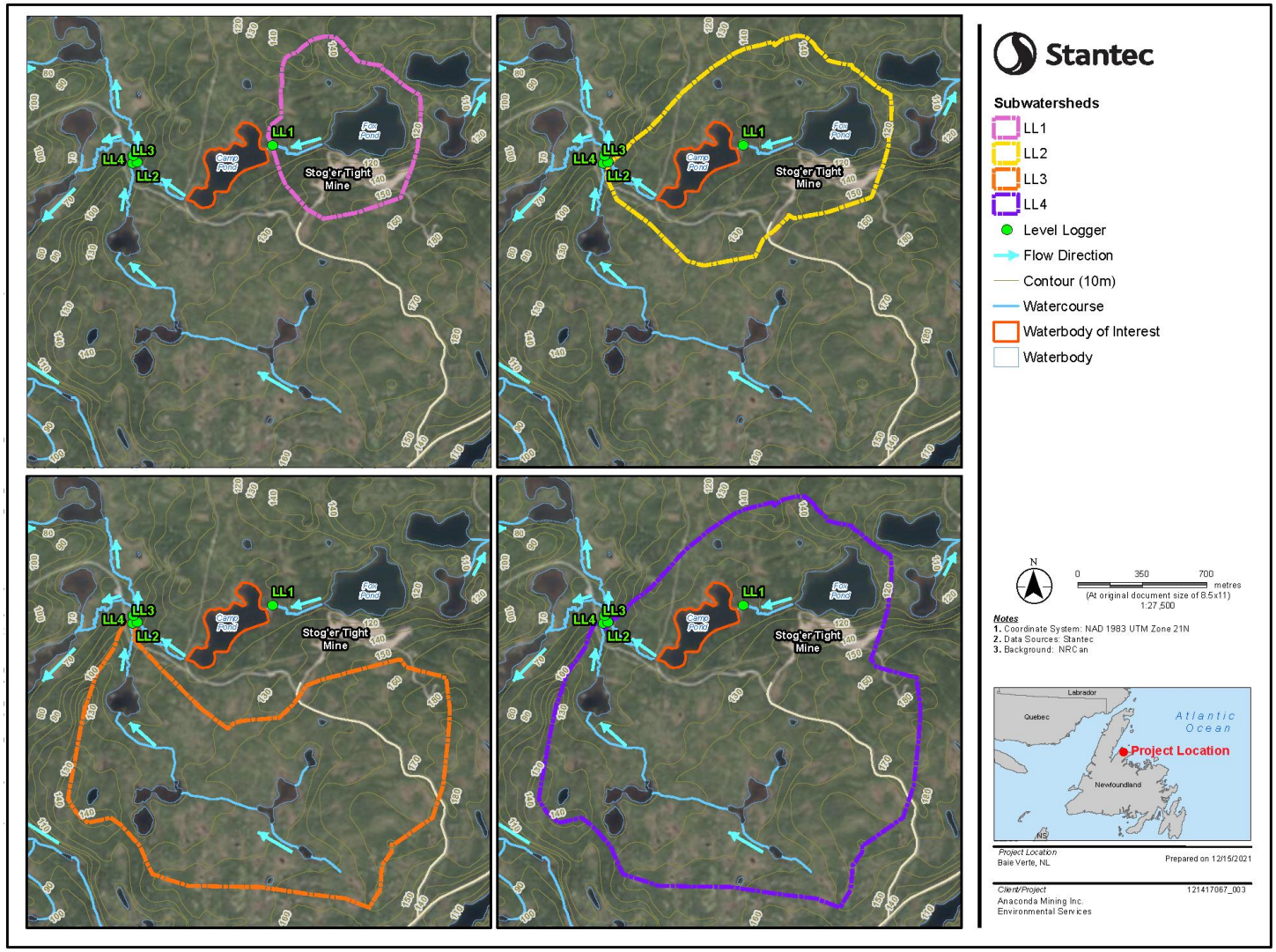

Figure 2.3 Hydrometric Monitoring Station Catchment Areas

3.0 RESULTS

Results of fish sampling, habitat classification and hydrological sampling are described below.

3.1 FISH SAMPLING

3.1.1 Camp Pond

The fish sampling conducted at Camp Pond confirmed the presence of brook trout (*Salvelinus fontinalis*), only; no other fish species were caught. A summary of effort, catch, and fish morphometric measurements is provided in Table 3.1. In total, 5,766 minutes of effort resulted in the capture of 230 brook trout. Brook trout length ranged 83 mm to 301 mm with a mean length of 178 mm. Brook trout weight ranged 5.6 g to 227.8 g with a mean weight of 56.8 g. Brook trout condition ranged 0.7 to 1.2 with a mean condition of 0.9.

Table 3.1 Summary of Catch, Effort, and Descriptive Statistics for Fish Sampling in Camp Pond (October 2020)

Parameter		Fishing Location				
		Fyke Net 1	Fyke Net 2	Fyke Net 3[A]	Fyke Net 4[A]	Summary
Effort (minutes)		1,440	1,440	1,436	1,450	5,766
Total Catch		11	50	85[a]	84[a]	230
Fork Length (mm)	Min	127	83	111	92	83
	Mean	182	171	182	190	178
	Max	222	301	235	270	301
Weight (g)	Min	19.2	5.6	12.1	7.2	5.6
	Mean	57.0	52.7	57.6	60.1	56.8
	Max	86.9	227.8	98.9	151.1	227.8
Condition (K)	Min	0.8	0.7	0.7	0.7	0.7
	Mean	0.9	0.9	0.9	0.9	0.9
	Max	1.0	1.0	1.1	1.2	1.2

Note:
[A] Due to the large number of trout captured in fyke net 3 and 4 a subset of twenty four were measured and weighed

3.1.2 Camp Pond Inlet and Outlet

The fish sampling conducted at the inlet (SS1) and outlet (SS2) of Camp Pond confirmed the presence of brook trout at both locations and American eel (*Anguilla rostrata*) within the Camp Pond outlet. A summary of effort, catch, and brook trout morphometric measurements are provided in Table 3.2 for the Camp Pond Inlet and Outlet.

Two 100 m^2 quantitative electrofishing sites (E1 and E2) were established within the Camp Pond outlet resulting in 4,095 seconds of effort and the capture of 118 brook trout and two American eel. Brook trout length at the Camp Pond outlet ranged 31 mm to 200 mm with a weight range from 0.2 g to 76.4 g, and their condition ranged from 0.5 to 5.2 (see Table 3.2 and note explaining high condition factor).

Qualitative electrofishing was conducted intermittently along the Camp Pond Inlet in 2021. Shallow water depths, paired with boulder and cobble substrate and subterranean sections resulted in conditions that restricted electrofishing to sections with suitable depths. The majority of suitable electrofishing habitat was observed in the shrub wetland/outlet section near the inflow to Camp Pond and approximately half of the 503 seconds of electrofishing effort was expended there, with the remaining effort expended in the grassed wetland and rock channel sections. The results from the June 2021 electrofishing program resulted in the capture of 36 brook trout, 34 of those brook trout were caught within the Shrub Wetland / Outlet, with the remaining two fish caught in the grassed wetland and the rock channel section. During the June 2021 electrofishing program, no fish were caught upstream of the rock channel section. Brook trout ranged from 24 to 61 mm, with a weight range of 0.2 g to 28.7 g, and their condition ranged from 0.5 to 1.7 (Table 3.2).

Table 3.2 Summary of Brook Trout Catch, Effort, and Descriptive Statistics for Fish Sampling in Camp Pond Inlet/Outlet (June 2021)

Parameter		Fishing Location		
		Camp Pond Outlet – E1 (June 18, 2021)	Camp Pond Outlet - E2 (June 21, 2021)	Camp Pond Inlet (June 19, 2021)
Effort (seconds)		2,090	2,005	503
Total Catch		63	55	34
Fork Length (mm)	Min	32	31	24
	Mean	89	79	42
	Max	200	136	61
Weight (g)	Min	1.7	0.2	0.1
	Mean	9.8	7.0	0.9
	Max	76.4	28.7	2.6
Condition (K)	Min	0.5	0.5	0.4
	Mean	1.2	1.1	1.1
	Max	5.2	1.7	5.2[A]

Note:
[A] Brook trout condition factor of 5.2 likely due to erroneous weight of a young of the year individual

Data from the quantitative electrofishing sites within the Camp Pond outlet were entered into MicroFish 3.0 for Windows software to calculate population size using Zippin's method. This method assumes a constant probability of capture. The resulting population estimate and 95% confidence intervals are listed in Table 3.3 for electrofishing sites E1 and E2. The population estimates ranged from 60 to 64 fish/100m^2, with a biomass between 420.0 and 627.2 g/100m^2(Table 3.3).

Table 3.3 Population Estimates with 95% Confidence Intervals for Camp Pond Outflow – Sites E1 and E2

Parameter	E1	E2	Average
Area (m²)	100	100	100
Catch (removal)	36, 13, 7, 5, 2	24, 18, 9, 4	NA
Population Estimate (#/Site)	64	60	62
95% Confidence Interval	61 to 67	52 to 68	Na
Population Estimate (#/100m²)	64	60	62
Biomass (g/100m²)	627.2	420.0	523.6
Note: NA – not applicable			

3.2 FISH HABITAT CLASSIFICATION

3.2.1 Ponds

Camp Pond covers an area of 84,969 m^2 with a maximum depth of 11.4 m (Figure 3.1). The pond substrates were observed to contain a high proportion of fines, with occasional pockets of gravel and cobble. These gravel/cobble pockets are predominantly located along the shorelines and classified as medium substrates on Figure 3.1 and the surface area for each substrate class are summarized in Table 3.2. There was very little submergent aquatic vegetation observed while conducting the habitat assessment and aquatic vegetation observed was predominantly of the floating variety (e.g., water lilies) and localized to areas adjacent to the shoreline. The riparian vegetation is predominantly spruce and shrubs with minimal overhanging vegetation. The inlet to Camp Pond (SS1) is located in the northeastern section in an area with shallow water depths and the single outlet from Camp Pond (SS2) is located in the southwestern corner.

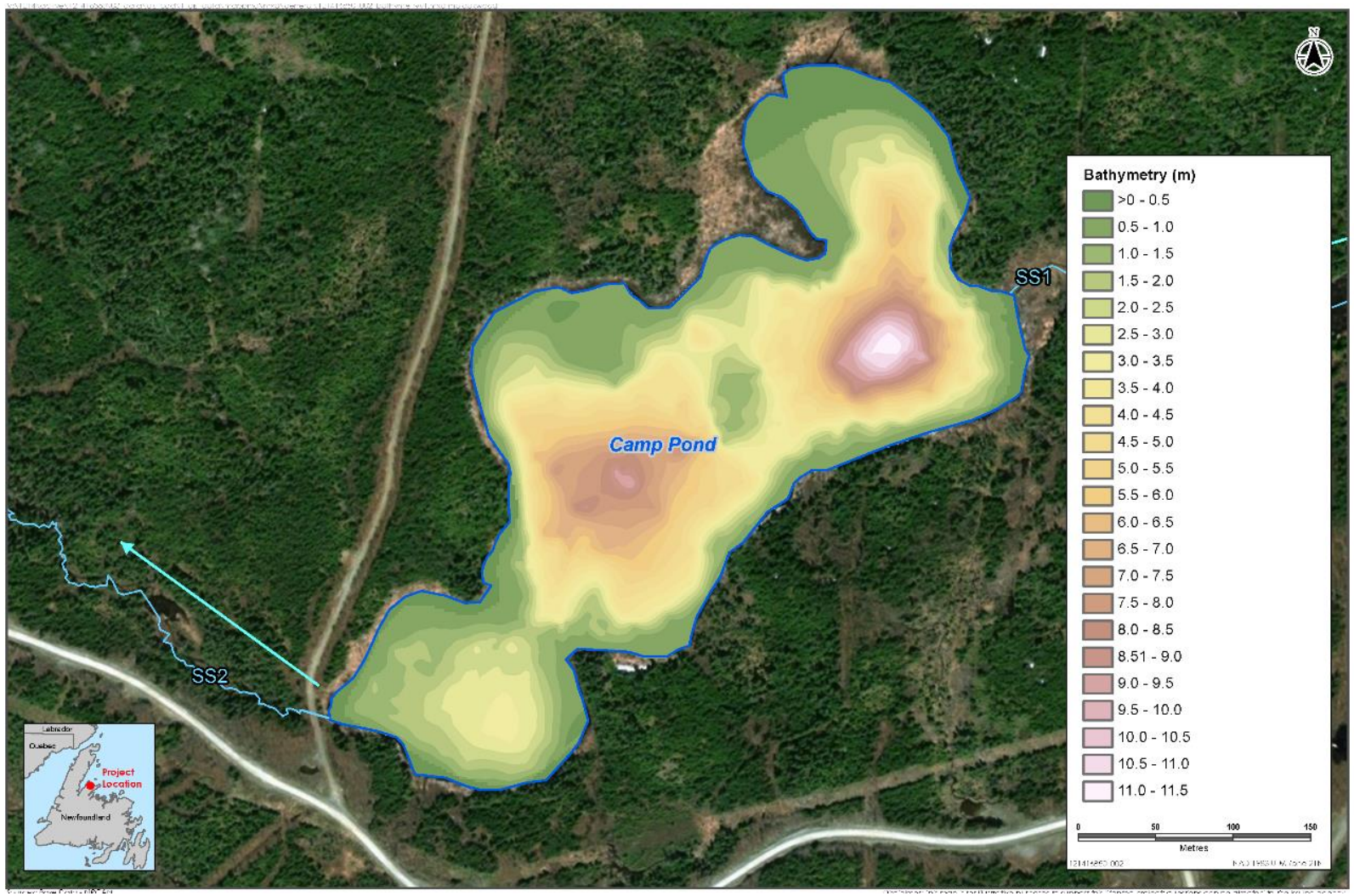

Figure 3.1 Bathymetry of Camp Pond

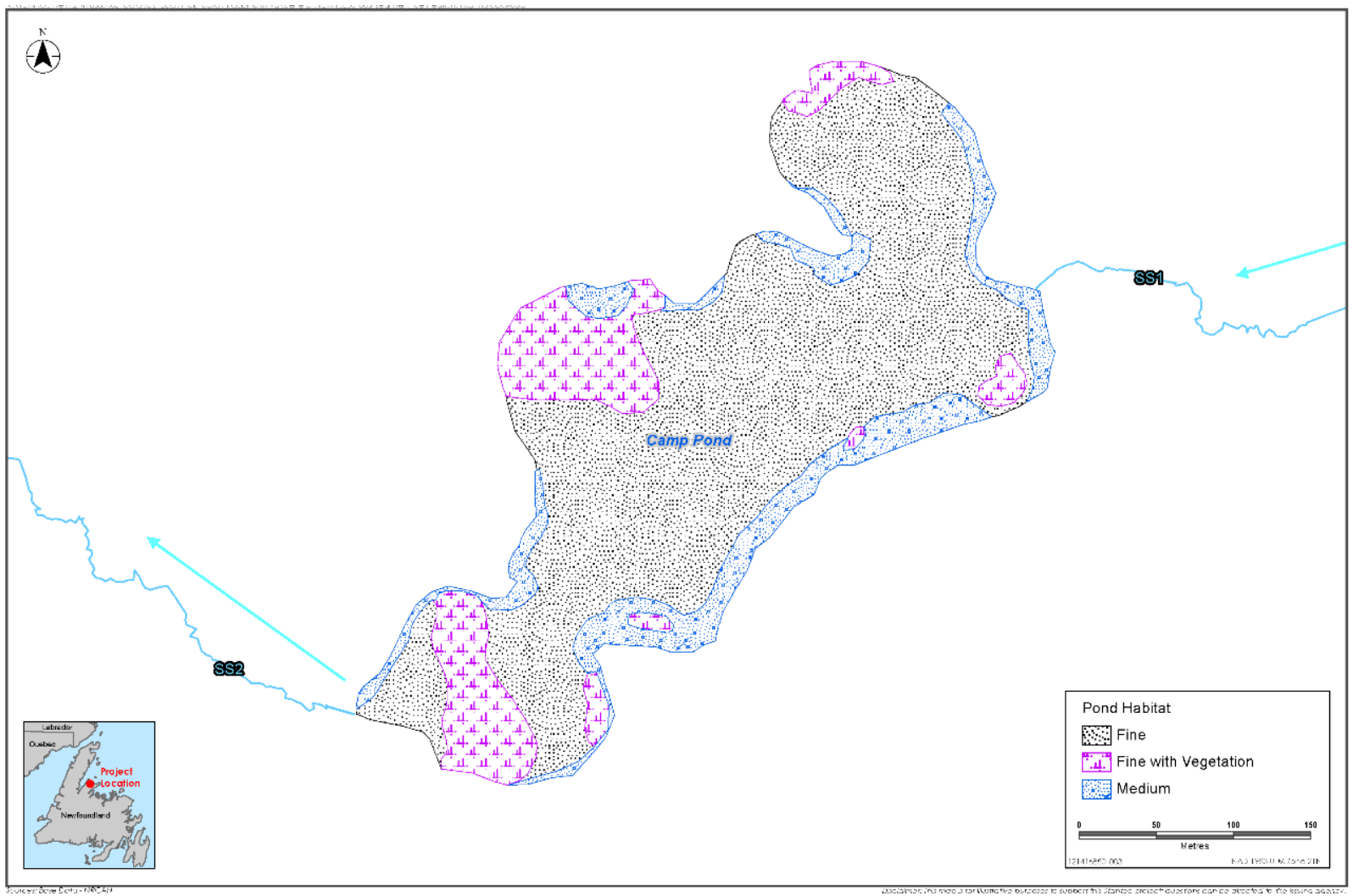

Figure 3.2 Habitat Map of Camp Pond

Table 3.4 Summary of Detailed Camp Pond Habitat Area by Substrate and Aquatic Vegetation

Pond	Approximate Area in m²				
	Fine Substrates (<2 cm diameter)	Fine Substrates / Aquatic Vegetation	Medium Substrates (2 to 25 cm diameter)	Medium Substrates / Aquatic Vegetation	Course (>25 cm diameter)
Camp Pond	58,284	13,965	12,131	0	589
Note: Course substrates were observed intermittently with fine substrates and accounted for approximately 1% of the total surface area					

Ponds 1, 2, 3, contained a high proportion of fines and were shallow (<2 m). Pond 1 was noted to have boulders sporadically located around the pond. Pond 2 has the smallest footprint and shallowest water depth of the three ponds assessed and may become dry during the summer months. All three ponds are expected to provide fish habitat during the ice-free months, though may freeze to the bottom in winter and may not provide over-wintering habitat.

Table 3.5 Summary of High-Level Pond Surveys

Pond	Substrate	Aquatic Vegetation	Approximate Area in m²	Approximate Depth (m)
Pond 1	99% Fines	Sparse (100% emergent)	45,311	1.5 to 2
Pond 2	100% Fines	Abundant (50% floating leaved (i.e., lily pads), 50% submergent)	26,953	<1
Pond 3	100% Fines	Abundant (50% floating leaved (i.e., lily pads), 50% submergent)	37, 690	1.5 to 2

3.2.2 Streams

The streams associated with Camp Pond contain a substantial amount of pooled habitat, which is often associated with higher proportions of fines or gravel substrates. The dominant riparian vegetation is shrub. There is a moderate amount of overhead cover provided by shrub/tree and low amount of instream cover provided by large and small woody debris and instream vegetation. Brook trout and American eel were observed within Camp Pond outlet with brook trout observed in the lower reach of Camp Pond inlet.

The aquatic habitat within Camp Pond inlet can generally be defined by the barriers to flow and fish passage that exist within the stream. A fish habitat assessment conducted by Gemtec (2016) described Fox Pond outlet in five general sections as shown in Figure 4.1. Photos of Camp Pond Inlet are provided in Appendix B.

Upstream Channel Section – A 70 m long section of channelized flowing from Fox Pond to a berm. The channel in this section was comprised of rubble and cobble sized rock with limited streamside vegetation (Gemtec 2016). Flow passes under/through the berm and a narrow channel was observed draining into the Open-water wetland downstream. The berm represents a barrier to fish passage. Additionally, during the June 2021 electrofishing program, Fox Pond water levels were lower than the channel and water from Fox Pond was not draining via the outlet.

Open-water Wetland – A section of stagnant flow with abundant instream vegetation, consisting of emergent grasses and submergent vegetation (Photo 1 – Appendix B). Substrates were fines, consisting of organics and silt. A beaver dam exists at the downstream end of the open-water wetland impounding flow and restricting fish movement. This section measures 35 m in width and 125 m in length and was less than 1 m deep.

Rock Channel Section – Downstream from the open-water wetland the watercourse flows through/under the beaver dam and narrows to approximately 2 m. Beyond the beaver dam, slope increases resulting in intermittent pooled habitats (Photo 2 - Appendix B) and barriers to fish passage (Photo 3 – Appendix B). There is a portion of channel in this section that appears to have been modified previously, the channel in this area has been straightened and deepened and appears anthropogenic (possible trench related to past mining activities). Multiple impediments to fish passage were observed within this section including intermittent ponded habitat located 195 to 220 m downstream from Fox Pond and a subterranean section 220 to 235 m downstream from Fox Pond (Photo 4 – Appendix B)

Grassed Wetland / Beaver Meadow – Habitat in this section is a result of an old beaver dam downstream (Photo 5 – Appendix B). This flat grassed wetland generally disperses the channelized flow throughout this wetland; however, a narrow (0.20 m), shallow (0.17 m), intermittent channel does meander downstream towards the second beaver dam and flows under/through the beaver dam. This beaver dam represents a barrier to fish passage.

Shrub Wetland / Outlet - The lower 50 m of Camp Pond inlet, approximately 355 m to 405 m downstream of Fox Pond, contains rocky substrate in the gravel to small boulder range, with an increasing proportion of fines at the confluence with Camp Pond (Photo 6 - Appendix B). Water depths were shallow at the time of the electrofishing survey (June 2021) and observations indicate this watercourse may periodically run dry during the summer months. There is very little instream or overhead cover in this section of the stream.

SS-2 was the only outlet observed draining Camp Pond. SS2 joins with SS3 approximately 360 m downstream of Camp Pond before splitting into SS4 and SS5 which eventually drain into Baie Verte through a series of ponds and watercourses. SS2 was composed of primarily low gradient habitats, dominated comprised of riffle/run and pool habitats. In the upper 150 m of SS2 substrates had a higher proportion of fines, this is likely due to the amount of flat-water habitat present in this reach. From 150 m to 250 m downstream of Camp Pond the presence of bedrock and boulder resulted in a series of step pools and cascades. The substrate changed accordingly with very little fines, gravel or cobble/rubble observed in this reach.

SS4 and SS5 are both low gradient watercourses, habitat was predominately pooled with secondary riffle/run habitat. The substrate in both watercourses was gravel with fines and a smaller proportion of cobble/rubble and occasional boulders. Overhead cover was higher in SS4 and SS5 than upstream as the watercourse narrowed and the riparian vegetation (grasses and shrubs) encroached on the channel.

A summary of habitat attributes for fish habitat surveys is provided in Table 3.5.

Table 3.6 Habitat Classification Data from the Inflow and Outflow of Camp Pond Surveyed in 2020

Location	Sub-section	Distance [1] (m)	Wetted Stream Width (m)	Channel Stream Width (m)	Mean Depth (m)			Velocity [2] (m/s)			Slope	Habitat Type (%)				Substrate [3] (%)					Riparian Vegetation [4] (%)			Overhead Cover (%)	Instream Cover (%)
					1/4	1/2	3/4	1/4	1/2	3/4		Riffle/Run	Pool	Flat	Pond	Fines	Gravel	Cobble / Rubble	Boulder	Bedrock	Grass	Shrub	Trees		
SS1	Wetland	195	35.00	35.00	0.35	0.00	0.00	-	-	-	<1	0	100	0	0	100	0	0	0	0	53	28	20	10	0
	Intermittent Pools	220	0.95	2.00	0.11	0.12	0.09	-	-	-	4	25	40	35	0	20	10	40	30	0	30	35	35	5	25
	Subterranean	235	0.00	0.00	0.00	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cascade/Rapid	280	0.91	0.92	0.09	0.10	0.11	0.50	0.30	0.00	3	35	40	25	0	20	30	35	15	0	30	45	25	30	10
	Riffle	305	0.88	1.45	0.09	0.10	0.11	0.15	0.20	0.11	2	60	40	0	0	50	10	30	10	0	30	45	25	35	10
	Shrub Wetland	355	0.20	0.35	0.14	0.17	0.20	-	-	-	<1	0	0	100	0	55	10	25	10	0	90	10	0	0	5
	Riffle	405	0.88	1.45	0.07	0.06	0.08	0.40	0.40	0.40	1	10	45	25	20	50	25	15	10	0	60	30	10	50	20
SS2	0 to 50 m	0	1.43	1.52	0.11	0.15	0.09	0.02	0.03	0.00	-	40	25	35	0	20	25	25	15	15	38	45	18	55	10
	50 to 100 m	50	0.73	1.28	0.09	0.13	0.09	0.03	0.04	0.03	-	35	25	40	0	30	25	25	15	5	25	60	15	75	10
	100 to 150 m	100	1.85	2.27	0.15	0.21	0.20	0.04	0.00	0.04	1	25	50	25	0	45	20	25	0	10	50	30	20	30	35
	150 to 200 m[a]	150	1.16	1.95	0.09	0.35	0.07	-	-	-	5	40	25	35	0	0	0	0	30	70	23	38	40	0	25
	200 to 250 m[b]	200	1.28	2.25	0.12	0.16	0.15	0.20	0.07	0.00	5	50	50	0	0	0	0	10	15	75	0	50	50	5	15
	250 to 300 m	250	2.11	2.32	0.16	0.20	0.17	0.03	0.12	0.03	4	65	35	0	0	0	0	15	20	65	13	40	48	5	15
	300 to 350 m	300	1.48	2.58	0.14	0.16	0.09	-	-	-	3	45	40	15	0	10	15	20	10	45	15	40	45	5	0
	350 to 400 m	350	1.87	1.97	0.20	0.15	0.11	-	-	-	1	50	50	0	0	30	45	20	5	0	30	50	20	15	5
SS4	0 to 50 m	0	1.87	1.97	0.20	0.15	0.11	-	-	-	1	50	50	0	0	30	45	20	5	0	30	50	20	15	5
	50 to 100 m	50	1.25	2.11	0.15	0.18	0.17	-	-	-	1	50	50	0	0	20	70	10	0	0	30	58	13	15	5
	100 to 150 m	100	1.09	1.25	0.16	0.18	0.21	0.25	0.26	0.14	1	50	50	0	0	20	70	10	0	0	30	58	13	15	10
	150 to 200 m	150	1.44	1.85	0.19	0.19	0.21	0.00	0.15	0.00	1	25	75	0	0	60	30	10	0	0	50	45	5	15	55
	200 to 250 m	200	1.60	2.21	0.17	0.18	0.15	0.2	0.15	0.12	1	5	95	0	0	30	65	5	0	0	38	55	8	90	15
	250 to 300 m	250	1.49	1.57	0.10	0.10	0.09	0.00	0.27	0.00	1	5	70	25	0	45	55	0	0	0	40	53	8	50	15
	300 to 350 m	300	2.08	2.18	0.13	0.18	0.14	0.00	0.26	0.00	1	5	70	25	0	45	45	0	10	0	68	28	5	35	30
	350 to 400 m	350	1.56	1.55	0.14	0.16	0.11	-	-	-	1	5	70	25	0	45	55	0	0	0	80	20	0	50	30
	400 to 450 m	400	2.11	2.21	0.19	0.19	0.16	0.00	0.00	0.00	1	10	65	25	0	35	55	5	5	0	53	40	8	80	30
	450 to 500 m	450	1.32	1.55	0.10	0.17	0.12	0.00	0.36	0.00	1	40	20	40	0	20	50	20	10	0	53	40	8	80	30
SS5	0 to 50 m	0	0.77	1.74	0.08	0.12	0.07	0.00	0.07	0.00	1	10	60	30	0	70	25	5	0	0	23	53	25	30	40
	50 to 100 m	50	1.30	2.19	0.14	0.11	0.04	0.00	0.04	0.06	1	10	60	30	0	70	25	5	0	0	23	53	25	20	40
	100 to 150 m	100	0.75	1.70	0.08	0.10	0.06	0.00	0.00	0.00	1	10	60	30	0	45	50	5	0	0	20	75	5	80	35
	150 to 200 m	150	1.00	1.15	0.04	0.12	0.11	0.00	0.90	0.00	1	10	60	30	0	45	55	0	0	0	20	73	8	90	35
	200 to 250 m	200	1.07	1.33	0.12	0.11	0.08	0.00	0.00	0.00	1	10	60	30	0	65	35	0	0	0	20	60	20	90	35
	250 to 300 m	250	1.50	1.71	0.11	0.14	0.13	0.05	0.07	0.06	1	10	75	15	0	45	55	0	0	0	20	60	20	90	45
	300 to 350 m	300	2.76	3.76	0.18	0.16	0.15	0.07	0.06	0.07	1	10	75	15	0	70	30	0	0	0	33	40	28	90	45
	350 to 400 m	350	2.13	2.70	0.21	0.22	0.17	-	-	-	1	10	75	15	0	70	30	0	0	0	60	30	10	90	45
SS6	0 to 65 m	400	0.64	1.12	0.04	0.05	0.06	-	-	-	1	100	0	0	0	40	50	5	5	0	75	25	0	100	30

Notes:
[1] Distance measured upstream to downstream
[a] Series of cascade pools down a steep slope
[b] Series of step pools down a bedrock slope

3.3 HYDROLOGY

3.3.1 Hydrometric Monitoring Stations

The four levelogger stations collected data from the end of October 2020 until the end of January 2021. New leveloggers were installed on May 14, 2021 and ran continuously until November 10, 2021. No data was collected between February 2021 to May 2021 due to a logger firmware issue identified by the manufacturer. The collected data was compensated for absolute pressure and the levelogger offset.

Channel cross-sections were collected in-field on December 13, 2021 for LL1, LL2, and LL3 and on December 14, 2021 for LL4 using a meter tape and meter stick as detailed in Section 2.3.1. Water elevations at the time of assessment were recorded and included in the channel cross-sections, presented on Figure 3.3.

3.3.2 Rating Curves

Rating curves were produced for LL3 at the outlet to the adjoining watershed to the Camp Pond watershed and LL4, the combined Camp Pond and adjoining watershed outlet. Additional manual measurements in 2022 will be required to produce rating curves for LL1 and LL2 with R^2 values approaching or higher than 0.80, A good regression relationship was found for the rating curve equations for LL3 (R^2= 0.7742) and LL4 (R^2= 0.9802). Table 3.7 summarizes the rating curve equations and R^2 values for station LL3 and LL4.

Table 3.7 Stage-Discharge Relationships for Hydrometric Stations

Station	Number of Spot Measurements	Rating Curve Equation	R^2
LL3	8	$y=4.3496x^{2.4991}$	0.7742
LL4	5	$y=13.954x^{3.6603}$	0.9802

The rating curve equations for LL3 and LL4 were used to convert the levelogger water level readings to flow. As LL4 is located downstream of the convergence of LL2 and LL3, the flows at LL3 could be reduced from LL4 to estimate the flows for LL2. As LL1 is influenced by the recovery of Fox Pond, an aerial reduction in watershed from LL2 to LL1 to correlate flows could not be completed and flows were not calculated for LL1. The hydrographs for LL2, LL3, and LL4 are presented in Figure 3.3, Figure 3.4, and Figure 3.5, respectively.

Flows were plotted using the 5-minute intervals collected by the leveloggers. The flows ranged from 0.007 m^3/s to 1.15 m^3/s for LL2, 0 m^3/s to 0.317 m^3/s for LL3, and 0.003 m^3/s to 1.34 m^3/s for LL4 during the May 2021 to November 2021 time period. The low flow periods occurred during July, while the peak flow occurred in October. Manual flow measurements ranged from 0.001 m^3/s to 0.018 m^3/s for LL1, 0.008 m^3/s to 0.046 m^3/s for LL2, 0.009 m^3/s to 0.376 m^3/s for LL3, and 0.012 m^3/s to 0.952 m^3/s for LL4. The low flows and high flows for the manual flow measurements corresponded with the lows and highs for the calculated flows.

A summary of each hydrometric station including the station information, cross sections, spot measurements, photos, stage:discharge graph (if applicable), water temperature graph, water level graph, and hydrograph is provided in Appendix C.

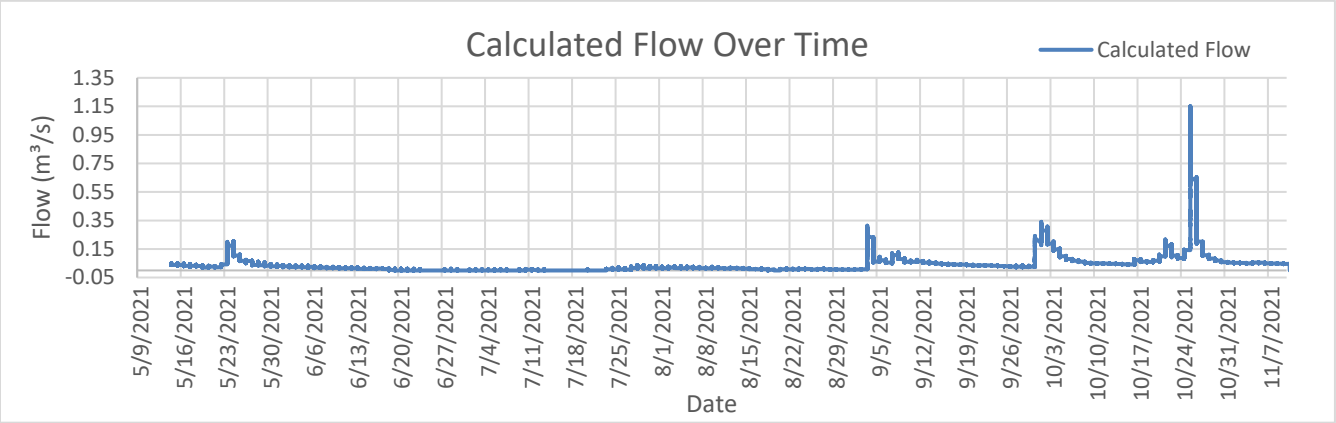

Figure 3.3 LL2 Calculated Hydrograph using a Reduction of LL3 from LL4

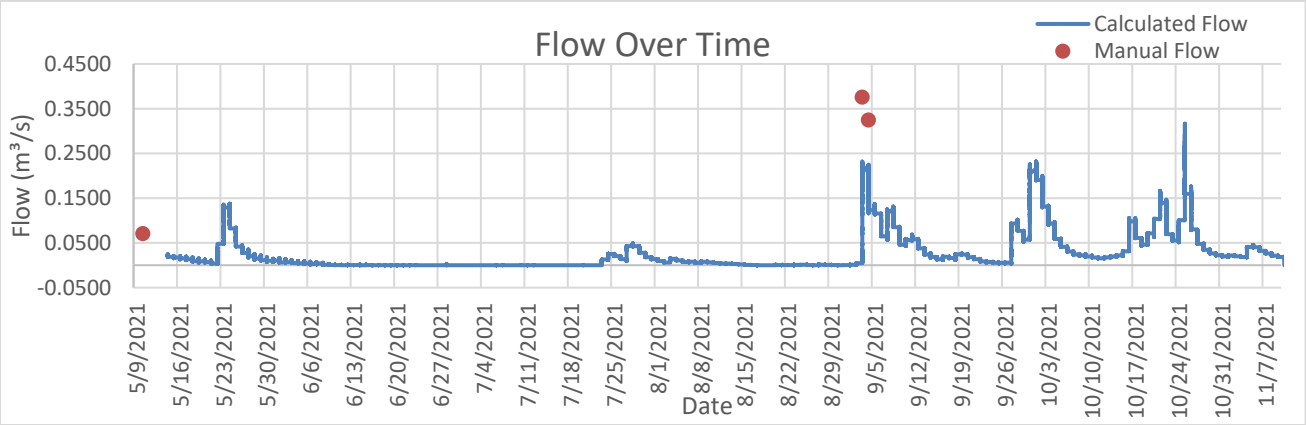

Figure 3.4 LL3 Hydrograph

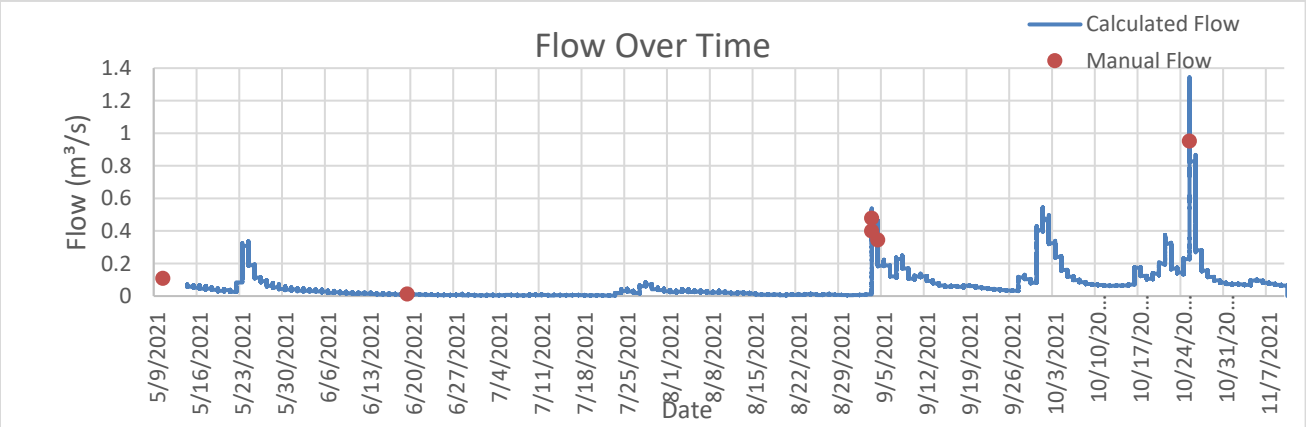

Figure 3.5 LL4 Hydrograph

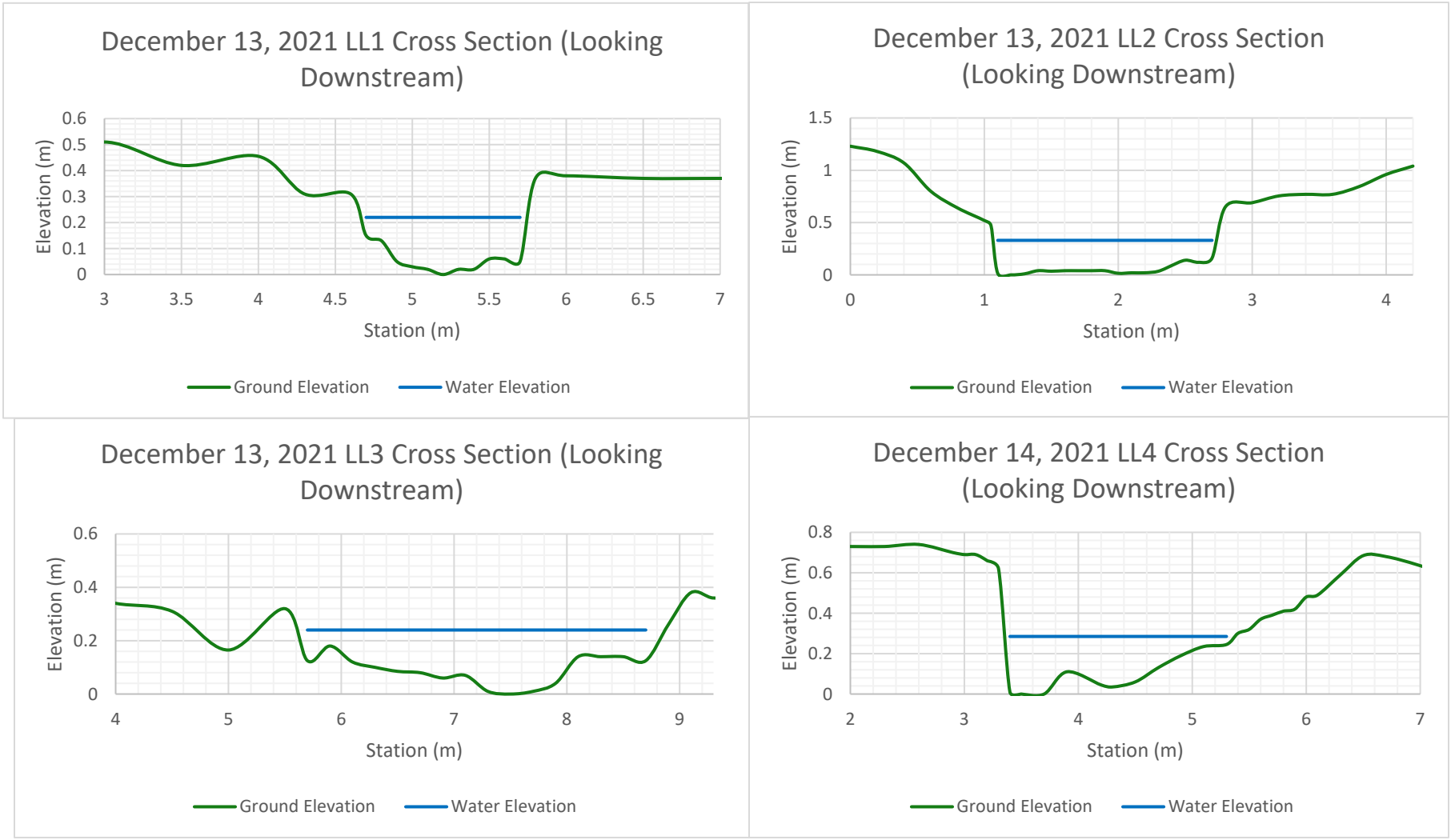

Figure 3.6 December Stream Channel Cross-Sections for Hydrological Stations (LL1, LL2, LL3 and LL4)

4.0 SUMMARY

The 2020 aquatic habitat and hydrology study confirmed the presence of brook trout in Camp Pond and in the lower 110 m of Camp Pond inlet (SS1), and both brook trout and American eel in the Camp Pond outlet (SS2). Based on a review of the field data, fish habitat is present within Camp Pond and both the inlet and outlet. Habitat within Camp Pond inlet (SS1) is limited to the lower reaches within the shrub wetland/outlet section. This reach provides habitat for juvenile brook trout. Fish habitat upstream of the shrub wetland/outlet section is generally poor, with barriers to fish passage and habitat unsuitable for spawning, overwintering, or rearing during most months (with the possible exception of high flow months).

Camp Pond had a maximum depth of 11.4 m, contained a high proportion of fines and low amount of aquatic vegetation. Ponds 1, 2, and 3 also contained a high proportion of fines and were shallow (<2 m).

The outlet of Camp Pond contains a substantial amount of pooled habitat, with higher proportions of fines or gravel substrates. The dominant riparian vegetation is shrub. There is a moderate amount of overhead cover provided by shrub/tree and low amount of instream cover provided by large and small woody debris and instream vegetation.

The four leveloggers and one barometric logger installed in the Camp Pond watershed were used to document stream water level during 2020 and 2021. Manual *in-situ* measurements were recorded for each of the four stations and were used to produce rating curves for LL3 and LL4. Additional stream discharge measurements are recommended in 2022 to improve the rating curve relationships for LL1 and LL2. Water level data was converted to flow using the produced rating curves for LL3 and LL4. A hydrograph was calculated for LL2 by reducing the flows at LL4 by the flows at LL3. The flows ranged from 0.007 m^3/s to 1.15 m^3/s for LL2, 0 m^3/s to 0.317 m^3/s for LL3, and 0.003 m^3/s to 1.34 m^3/s for LL4 during the May 2021 to November 2021 recorded time period.

5.0 REFERENCES

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APPENDIX A

Fish Data

Appendix A FISH DATA

A.1 FISH SAMPLING DATA 2020

Legend

Method:	Fyke Net (FN)
Site:	Camp Pond
Coordinates:	Area of fish sampling in decimal degrees
Location:	Fishing location described as FN#
Start Date:	Date fishing commenced
Fishing Time:	Number of minutes fyke trapping was conducted
Species:	Brook trout (BT)
Count:	Number of fish associated with line entry
Length:	Fork length in mm
Weight:	Total weight in grams
(K) Condition:	Condition factor calculated as: $K = W \times 10^5 / L^3$
Where:	K = condition,
	W = Weight in g,
	L = Length in mm.

Table A.1 Fish Sampling Data 2020, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location	Survey Date	Effort (minutes)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	222	86.9	0.8
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	192	70.4	1.0
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	186	53.8	0.8
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	189	58.6	0.9
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	184	52.6	0.8
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	204	75.1	0.9
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	181	56.6	1.0
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	127	19.2	0.9
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	171	49.2	1.0
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	149	31.2	0.9
FN	Camp Pond	49.9667	-56.0841	Fyke 1	10/27/2020	1440	Brook trout	1	202	73.6	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	202	72.9	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	230	113.9	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	301	227.8	0.8
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	178	55.1	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	169	45.4	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	173	48.7	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	218	102.6	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	193	72.9	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	187	50.8	0.8
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	179	51.7	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	242	129.7	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	242	124.8	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	153	34	0.9

Table A.1 Fish Sampling Data 2020, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location	Survey Date	Effort (minutes)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	83	5.6	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	156	37.3	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	186	60.7	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	160	38.6	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	176	52.2	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	192	70.8	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	155	35.4	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	228	86.4	0.7
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	147	28.9	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	194	74.5	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	146	27.6	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	219	98.8	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	156	34.1	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	207	78.1	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	169	45.4	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	179	44.1	0.8
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	137	26.6	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	136	22.2	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	133	21.2	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	187	63.1	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	185	56.8	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	164	42	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	189	65.1	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	172	45.1	0.9

Table A.1 Fish Sampling Data 2020, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location	Survey Date	Effort (minutes)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	140	22.3	0.8
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	134	23.3	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	141	22.8	0.8
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	132	22.2	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	166	37.7	0.8
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	104	9.9	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	123	18.6	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	128	20.7	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	119	16.6	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	139	24.2	0.9
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	166	43.5	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	117	16.6	1.0
FN	Camp Pond	49.9668	-56.0856	Fyke 2	10/27/2020	1440	Brook Trout	1	197	63.2	0.8
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	235	98.9	0.8
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	199	66.8	0.8
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	166	38.5	0.8
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	209	73.8	0.8
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	160	40.3	1.0
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	201	72.6	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	215	84.7	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	191	67.4	1.0
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	130	20.6	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	175	50.7	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	183	61.8	1.0

Table A.1 Fish Sampling Data 2020, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location	Survey Date	Effort (minutes)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	179	53.3	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	126	17.5	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	172	51.4	1.0
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	203	74.7	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	111	12.1	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	151	37.5	1.1
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	214	81.1	0.8
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	182	52.7	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	179	51.8	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	221	97.7	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	172	49	1.0
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	180	42.7	0.7
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	1	209	83.8	0.9
FN	Camp Pond	49.9651	-56.0882	Fyke 3	10/28/2020	1436	Brook trout	61	-	-	-
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	227	103.6	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	209	90.2	1.0
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	119	15.1	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	129	25.1	1.2
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	270	151.1	0.8
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	259	166	1.0
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	208	84.8	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	93	7.2	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	190	68.7	1.0
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	92	7.2	0.9

Table A.1 Fish Sampling Data 2020, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location	Survey Date	Effort (minutes)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	204	78.2	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	206	77.5	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	216	93.8	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	195	63.8	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	186	62.4	1.0
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	176	52.1	1.0
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	227	118	1.0
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	174	47.2	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	190	60.9	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	168	44.1	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	196	67.1	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	244	100.1	0.7
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	165	40.5	0.9
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	1	210	74.2	0.8
FN	Camp Pond	49.9646	-56.0877	Fyke 4	10/28/2020	1450	Brook trout	60	-	-	-

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	200	76.4	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	70	3.3	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	115	15.3	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	136	26.6	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	98	9.6	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	92	8.9	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	130	21.2	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	78	5.6	1.2
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	85	6	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	85	7.1	1.2
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	135	27.6	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	100	10.3	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	79	5.3	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	123	20.4	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	76	5	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	62	2.5	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	91	7.6	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	93	9.3	1.2
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	127	22.8	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	115	14.4	0.9
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	101	10.3	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	77	4.6	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	87	7	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	72	3.6	1.0

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	99	10.4	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	65	2.8	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	78	5.3	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	95	9	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	72	3.9	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	74	4	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	66	3.2	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	143	29.7	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	106	13.1	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	73	4.4	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	69	3.3	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	Brook trout	1	64	2.8	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	American eel	1	~152	n/a	-
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 1	6/18/2021	610	American eel	1	~149	n/a	-
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	112	13.7	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	125	19.5	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	96	9	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	108	13.8	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	97	7.7	0.8
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	88	7.2	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	77	4.2	0.9
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	85	6.6	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	66	2.9	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	71	3.3	0.9

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	94	9	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	71	4.2	1.2
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 2	6/18/2021	548	Brook trout	1	70	2.9	0.8
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	94	9.4	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	97	12.2	1.3
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	64	4.9	1.9
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	65	6.5	2.4
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	81	7.9	1.5
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	71	4.8	1.3
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 3	6/18/2021	449	Brook trout	1	32	1.7	5.2
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 4	6/18/2021	235	Brook trout	1	81	10.3	1.9
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 4	6/18/2021	235	Brook trout	1	80	5.8	1.1
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 4	6/18/2021	235	Brook trout	1	89	8.5	1.2
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 4	6/18/2021	235	Brook trout	1	74	6.2	1.5
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 4	6/18/2021	235	Brook trout	1	68	3.2	1.0
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 5	6/18/2021	248	Brook trout	1	62	4.4	1.8
EF- Quan	Camp Pond - Outlet	49.9662	-56.0940	E1 - Pass 5	6/18/2021	248	Brook trout	1	63	5.2	2.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	94	8.2	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	136	28.7	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	94	9.3	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	38	0.7	1.3
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	131	27.4	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	120	18.2	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	110	14.8	1.1

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	122	21.2	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	96	9	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	107	12.5	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	80	5.7	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	107	14.5	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	59	2.3	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	76	4.3	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	33	0.2	0.6
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	69	3.1	0.9
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	70	3.5	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	66	3.3	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	120	19.2	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	68	3	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	66	3.2	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	46	1	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	73	4.1	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 1	6/21/2021	642	Brook trout	1	44	0.6	0.7
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	35	0.2	0.5
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	119	17.7	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	74	4.6	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	96	10.5	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	34	0.2	0.5
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	98	10.8	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	67	3.2	1.1

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	91	7.6	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	75	4.4	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	76	4.6	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	91	7.7	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	75	4.7	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	87	6.6	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	73	4.2	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	59	2.5	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	73	3.4	0.9
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	65	2.8	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 2	6/21/2021	533	Brook trout	1	44	0.9	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	109	14	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	70	3.5	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	71	3.8	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	84	6.9	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	86	6.9	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	77	4.7	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	82	5.8	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	37	0.5	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 3	6/21/2021	388	Brook trout	1	59	2.2	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 4	6/21/2021	442	Brook trout	1	93	8.7	1.1
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 4	6/21/2021	442	Brook trout	1	70	3.5	1.0
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 4	6/21/2021	442	Brook trout	1	72	4.4	1.2
EF- Quan	Camp Pond - Outlet	49.9668	-56.0938	E2 - Pass 4	6/21/2021	442	Brook trout	1	88	7.5	1.1

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	55	1.7	1.0
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	54	1.6	1.0
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	48	1.4	1.3
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	39	0.4	0.7
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	32	0.4	1.2
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	48	1.1	1.0
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	56	1.2	0.7
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	51	1.5	1.1
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	42	1.1	1.5
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	24	0.3	2.2
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	46	1.3	1.3
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	56	1.7	1.0
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	49	1.5	1.3
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	50	1.5	1.2
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	26	0.1	0.6
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	45	0.9	1.0
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	47	1.2	1.2
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	32	0.3	0.9
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	61	2.6	1.1
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	31	0.2	0.7
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	33	0.2	0.6
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	46	1.2	1.2
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	47	0.8	0.8
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	38	0.9	1.6

Table A.2 Fish Sampling Data 2021, (Stantec Project No: 121416850)

Fishing Method	Site	Latitude	Longitude	Location - Pass	Survey Date	Effort (seconds)	Species	Count	Fork Length (mm)	Weight (g)	Condition (K)
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	40	0.6	0.9
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	27	0.3	1.5
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	32	0.2	0.6
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	46	0.9	0.9
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	35	0.2	0.5
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	27	0.1	0.5
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	27	0.1	0.5
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	30	0.2	0.7
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	44	1.2	1.4
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	47	0.9	0.9
EF-Qual	Camp Pond - Inlet	49.9667	-56.0837	E3	6/19/2021	503	Brook trout	1	56	1.4	0.8