
May 19, 2026

Stasia Ferby
Project Assessment Director
BC Environmental Assessment Office
By Email: Stasia.Ferbey@gov.bc.ca

SUBJECT: Tenas Project Fish and Fish Habitat Additional Baseline Studies Completed in 2025

Dear Ms. Ferbey:

As requested by the EAO, Telkwa Mining Limited (Telkwa Mining) is pleased to provide the report on fish and fish habitat which was completed based on the field program conducted in 2025 by SLR Consulting.

If you have any questions please do not hesitate to contact Dan Farmer at 604-220-5703 or dan.farmer@telkwa-mining.ca.

Sincerely,



Daniel J. Farmer
Project and Development Manager
Telkwa Mining Limited

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Attachments:

Attachment 1: 2025 Fish and Fish Habitat Technical Report, Tenas Project, SLR Consulting (Canada) Ltd.



2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

Suite 1410 – 409 Granville Street, Vancouver, BC V6C 1T2

Prepared by:

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SLR Project No.: 201.089602.00001

May 6, 2026

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By	Authorized By
0	May 6, 2026	Christian Lackey	Kirby Ottenbreit	Lori Hooper Mandy Gregg



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Executive Summary

Telkwa Mining Limited (Telkwa Mining) retained SLR Consulting (Canada) Ltd. (SLR) to conduct 2025 fish and fish habitat studies in support of the Tenas Project, a proposed open-pit metallurgical coal mine near Smithers, BC. The program addressed regulatory and stakeholder requirements and built on previous baseline work.

Fish and fish habitat studies were completed in 2025 across Tenas Creek, Goathorn Creek, Four Creek, and Helps Creek to assess species presence, abundance, and habitat conditions. Backpack electrofishing using multi-pass depletion was conducted for all known fish bearing reaches, with two additional sites surveyed in Helps Creek. Rainbow Trout were present at every site, with CPUE values ranging from **0.25 to 2.38 fish/100 s**. Dolly Varden were detected in Tenas Creek, Goathorn Creek, and Four Creek, with CPUE ranging **0.07–1.10 fish/100 s**. Juvenile Coho Salmon were captured at Helps Creek Site 1 and Tenas Creek Reach 1, with CPUE values between **0.23–1.37 fish/100 s**. Estimated fish densities across survey sites ranged from **0.085 to 4.80 fish/m²**.

Spawning habitat assessments revealed **limited spawning habitat** across most surveyed creeks. In Tenas Creek, suitable spawning habitat occurred only in the lower portion of Reach 1. Goathorn Creek contained sparse, localized gravel patches with limited suitability. Four Creek offered mostly limited habitat, with the exception of Reach 2, where glide units provided **moderate-quality** spawning substrate and adequate depth. Helps Creek exhibited **minimal to no suitable spawning substrate** throughout the surveyed area.

Additional habitat assessments were conducted in **Goathorn Tributary J247**, upstream of a potential fish barrier. The tributary was characterized by fine substrates, intermittent nonconnected pools, and a downstream culvert with an upstream pool measuring 0.39 m deep. Electrofishing, minnow trapping, and eDNA sampling were completed; **no fish were detected** through any of the methods.

Reconnaissance visual spawner surveys were carried out during three multiday field sessions between August and November 2025. **Pink Salmon** were the only species observed spawning, with activity documented in Reach 1 of both Goathorn Creek and Tenas Creek. No other spawning salmonids or redds were confirmed during bank walk or unmanned aerial vehicle (UAV) surveys.

To supplement field studies, historical data for the Bulkley and Telkwa rivers were reviewed. Available information was limited; however, SLR conducted a reconnaissance 1:20,000 fish habitat survey to improve spatial coverage. Historical species presence for both systems was confirmed through the provincial Habitat Wizard database.



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Appendix O	Aging Structures Lab Report



Acronyms and Abbreviations

µS/cm	microsiemens per centimeter
BC	British Columbia
CES	Critical Effect Size
cm	centimeters
CO	Coho Salmon
CPUE	Catch Per Unit Effort
CV	Coefficient of Variation
DELTs	Deformities, erosion, lesions, and tumors
DV	Dolly Varden
eDNA	Environmental DNA
EF	Electrofishing
ERM	Environmental Resources Management
ES	Effect Size
FHAP	Fish Habitat Assessment Procedure
g	Grams
HU	Habitat Unit
km	kilometres
L	Lamprey (General)
LKC	Lake Chub
m	metre
mg/L	milligram per litre
mm	millimeters
MoE	Ministry of Environment
NTU	Nephelometric Turbidity Units
RB	Rainbow Trout
RISC	Resources Information Standards Committee
SLR	SLR Consulting (Canada) Ltd.
STD	Standard Deviation
Telka Mining	Telka Mining Limited
UAV	Unmanned Aerial Vehicle
UTM	Universal Transverse Mercator
YOY	Young-of-year



1.0 Introduction

1.1 Project Description

The Tenas Project (the Project) is a proposed surface coal mine owned and operated by Telkwa Mining Limited (Telkwa Mining) located 25 kilometres (km) south of Smithers and 7 km southwest of Telkwa in northwestern British Columbia (BC). The Project includes an open pit mine with a coal processing plant, water management infrastructure, ancillary facilities, train infrastructure, and a series of management ponds which will contain submerged, potentially acid-generating materials. The expected life-of-mine is approximately 26.5 years, which includes construction, operation, decommission, and reclamation phases.

1.2 Environmental Setting and Background

The Project is located near Tenas Creek, Goathorn Creek, and Four Creek, all of which are located within the Telkwa River watershed. Tenas Creek is located to the north and west of the proposed mine site, Goathorn Creek to the north and the east, and Four Creek to the east and the south. Four Creek and Tenas Creek flow into Goathorn Creek, which in turn flows into the Telkwa River. The Telkwa River is a tributary of the Bulkley River and ultimately the Skeena River, which discharges into the Pacific Ocean approximately 180 km west of the project (ERM 2019) (Figure 1).

There are several barriers to fish movement within these three creeks: a hanging culvert in Four Creek approximately 200 m upstream of the confluence with Goathorn Creek has been identified as an obstruction to upstream fish movement, an 8 m high waterfall approximately 15 km upstream for Tenas Creek marks the upstream extent of fish presence in Tenas Creek, and a 10 m waterfall in the headwaters of Goathorn Creek prevents upstream movement of fish.

Fish species recorded within the Project study area include:

- Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*O. kisutch*), Pink Salmon (*O. gorbuscha*), Rainbow Trout/Steelhead Trout (*O. mykiss*), and Dolly Varden (*Salvelinus malma*) in Goathorn Creek (MoF, 2025);
- Rainbow/Steelhead Trout, Dolly Varden, and Mountain Whitefish (*Prosopium williamsoni*) in Tenas Creek (MoF 2025);
- An isolated population of Dolly Varden upstream of the hanging culvert in Four Creek, and a population of Dolly Varden and Rainbow Trout in Four Creek downstream of the hanging culvert (SLR, 2025); and
- Coho Salmon, Chinook Salmon, Pink Salmon, Rainbow Trout, Steelhead, Dolly Varden, Mountain Whitefish, Peamouth Chub (*Mylocheilus caurinus*), and an unidentified sucker species (*Catostomus spp.*) in the Telkwa River (MoF 2025).



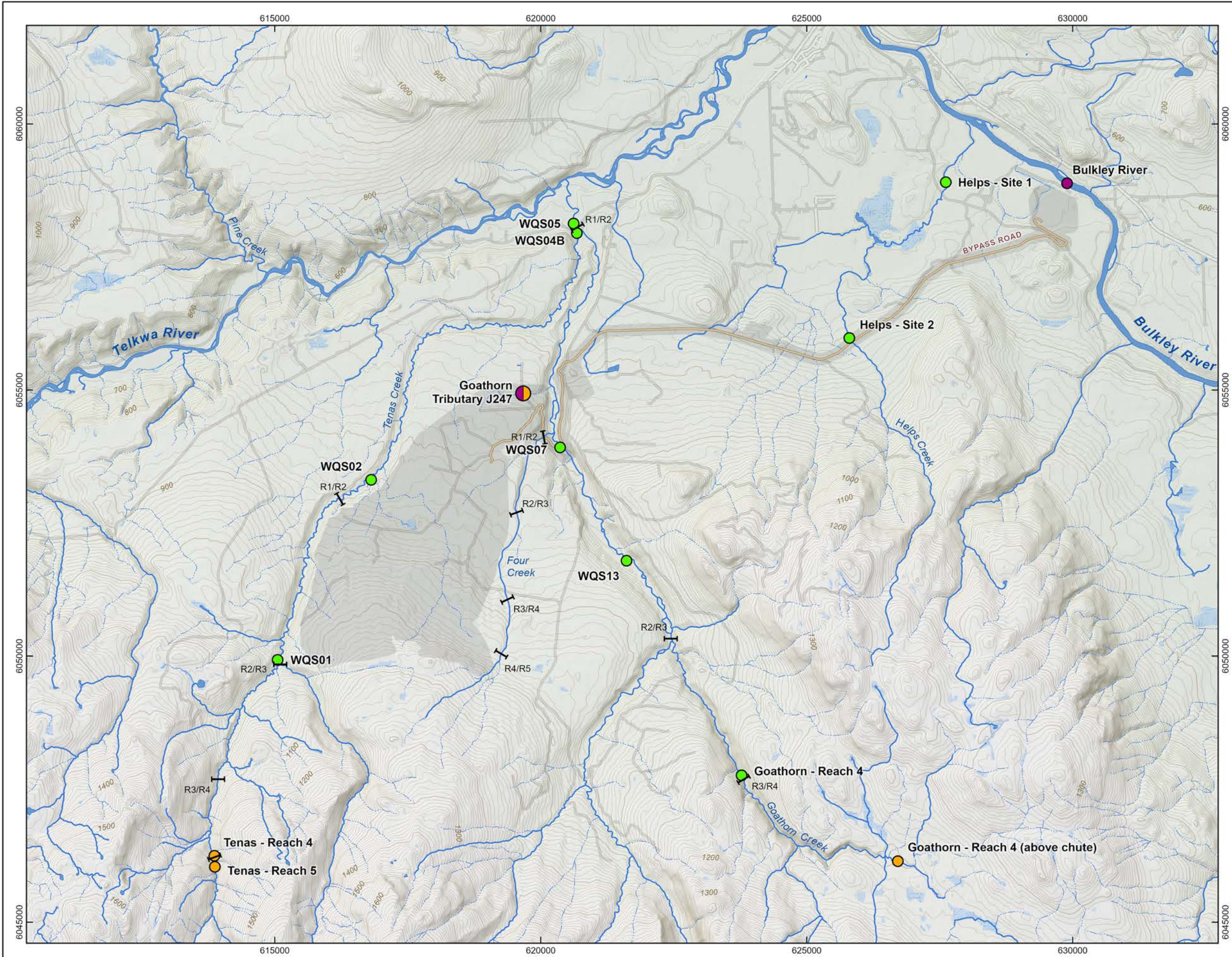
1.3 Scope of Work

SLR Consulting (Canada) Ltd. (SLR) was retained by Telkwa Mining Limited (Telkwa Mining) to conduct the following fish and fish habitat baseline studies in 2025:

- Fish abundance surveys in Tenas Creek, Goathorn Creek, and Helps Creek (Section 2);
- Fish spawning habitat assessment in Tenas Creek, Goathorn Creek, Four Creek, and Helps Creek (Section 3);
- Fish habitat and fish presence/absence surveys in Goathorn Tributary J247 (Section 4);
- Reconnaissance of fall salmon spawning survey in Tenas Creek, Goathorn Creek, and Helps Creek (Section 5).
- Desktop review of work completed in Telkwa River and Bulkley River (Section 6)
- This technical report presents the methods and results of these studies.

These studies were requested by the Office of Wet'suwet'en as a part of their 2022 review of the Tenas Metallurgical Coal Project's BC Environmental Assessment Application (TCL, 2022; Skeena Fisheries Commission, 2022).





KEY MAP

LEGEND

- Fish Abundance Survey
- Fish Presence/Absence Survey
- Fish Habitat Assessment
- Reach Break
- Watercourse¹
- Intermittent or Indeterminate Watercourse¹
- Proposed Bypass Road
- Paved Road²
- Resource Road²
- Wetland¹
- Proposed Project Footprint

1 - BC Freshwater Atlas
2 - BC Digital Road Atlas (for clarity, not all roads displayed)

01234

KILOMETRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:70,000
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: May 6, 2026

NORTH

Source Notes:
Base map data provided by Natural Resources Canada (CanVec, CDEM) and The Government of British Columbia (BC Freshwater Atlas, Digital Road Atlas). Contour interval is 10 metres (minor) and 100 metres (major). All elevations in metres above sea level.

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	Tenas Project Footprint and Fish and Fish Habitat Survey Locations	
	REF. NO. 2404901-MR-025-01	REV. C

2.0 Fish Abundance Surveys

2.1 Methods

Closed-site backpack electrofishing surveys were conducted in August 2025 at five sites in Goathorn Creek, two sites in Helps Creek, and five sites in Tenas Creek (Table 1). The electrofishing sites were co-located with historical surface water monitoring sites where possible, and within reasonable proximity to road and helicopter access points.

Depending on the survey, electrofishing was completed by a team of two or three biologists using a Smith Root LR24 backpack electrofisher and block nets positioned at the upstream and downstream ends of each site. Each site within Tenas Creek and Goathorn Creek had a target survey area of 200 m² within each close site. A site surveyed in reach 4 of Goathorn Creek upstream of the fish barrier (chute) to assess fish presence/abundance above the chute (UTM: 9U 624102 6047299). Two sites, with a target survey area of 200 m² were selected for Helps Creek; one located between Lawson Road/Telkwa-Houston FSR and the Bulkley River confluence and the second at the proposed bypass road bridge crossing.

Captured fish were identified to species, and a subsample of each species was weighed, measured for fork length and total length, and assessed for evidence of deformities, erosion, lesions, and tumors (DELTs). Scales were collected from a subset of Rainbow Trout at each location for age analysis.

Table 1: Fish Abundance Survey Locations in Goathorn Creek, Tenas Creek, and Helps Creek

Watercourse	Reach/Site	Coordinates (UTM Zone 9U)	
		Easting	Northing
Helps Creek	Site 1	627615	6058906
	Site 2	625801	6055978
Goathorn Creek	WQS05	620620	6058142
	WQS07	620356	6053930
	WQS13	621611	6051794
	4	623776	6047760
	4 (above chute)	626608	6046157
Tenas Creek	WQS04B	620679	6057949
	WQS02	616812	6053313
	WQS01	615054	6049929
	4	613865	6046248
	5	613874	6046041



2.1.1 Data Analysis

2.1.1.1 Catch per Unit Effort

Catch per Unit Effort (CPUE) was calculated based on the first pass at each electrofishing site using the equation as follows:

$$\text{Catch per Unit Effort (CPUE)} = \frac{\text{Total Catch}}{\text{Total Electrofishing Seconds}}$$

2.1.1.2 Fish Community

Rainbow Trout and Dolly Varden communities were characterized using length frequency distributions.

Differences in length between locations were assessed using a simple T-test and were considered statistically significant at $p < 0.05$. Differences were also assessed using effect size (ES) as per Environment Canada (2012), as follows:

$$\text{Effect Size (ES)} = \frac{(|X_1 - X_2|)}{STD}$$

Where:

X_1 = the mean length of fish caught at site 1

X_2 = the mean length of fish caught at site 2

STD = the pooled standard deviation.

The Critical Effect Size (CES), defined as the criteria for environmental significance and as discussed in Metal Mining Technical Guidance for Environmental Effects Monitoring (Environment Canada 2012), was considered to be a 25% difference in length and an effect size greater than 1.0 between sites.

2.1.1.3 Fish Condition

Published standard weight equations were used for assessment of Rainbow Trout condition (Simpkins and Hubert 1996). For Dolly Varden, reference length and weight data were compiled for 806 Dolly Varden from a series of environmental reports written by the Alaska Department of Fish and Game (Clawson 2024; Clawson 2023; Clawson 2022; Legere and Timothy 2016).

The length and weight data were used to assess Rainbow Trout and juvenile Dolly Varden condition using the following equations for each species:

$$\text{Rainbow Trout: } \log_{10}W_s = (3.024 \times \log_{10}TL) - 5.023$$

$$\text{Dolly Varden: } \log_{10}W_s = (2.9551 \times \log_{10}FL) - 4.9468$$

where: W_s is the standard weight in grams

TL is the total length in millimeters

FL is the fork length in millimeters

The fish weight data were used to calculate the Relative Weight (W_r), as follows:

$$W_r = \frac{W_t}{W_s}$$



Where: W_r = Relative weight

W_t = measured weight in grams (g)

W_s = Standard weight

To test for an 'effect' between the measured weight and Standard Weight, a W_r between 0.90 and 1.10 (i.e., $\pm 10\%$) was assessed as within the CES for fish condition as defined in Environment Canada (2012).

2.1.1.4 Fish Age

Rainbow Trout scales were sent to North/South Consultants Ltd. for age determination. Scales were pressed between two glass slides and viewed under a dissecting microscope with reflected light. All structures were viewed by an experienced ageing technician, with quality control checks completed on ten percent of the samples by a second technician.

2.1.2 eDNA Sampling

Water samples were collected for environmental DNA (eDNA) analysis in reach 4 of Goathorn Creek above the fish barrier (chute). eDNA refers to the genetic material shed by fish into their environment and can be used to detect the presence of fish.

Sampling followed laboratory-provided, standard sampling protocols, which involves collection of a water sample by submersion of a clean sample bottle in flowing water. Each sample was collected, placed in an ice-filled cooler, then filtered to extract DNA. All collected samples were then filtered through a filter paper using a clean vacuum pump apparatus. The filter paper was preserved, labelled, and sent to the laboratory for analysis. Protocols for cleaning and minimizing the potential for cross-contamination were followed throughout the sample collection and preservation process, as described in laboratory provided sampling protocols.

Water samples collected for eDNA analysis included one field replicate, and a trip blank for QA/QC purposes. eDNA samples were sent to Mérieux NutriSciences, a certified laboratory, for preservation and analysis following the appropriate standard operating procedures. Each sample was tested for genetic material integrity using the IntegritE-DNA method, then analyzed for the presence of Pink Salmon, Coho Salmon, and Rainbow Trout genetic material. A general assay was also completed for general fish presence (non-species specific).

2.2 Results

Fish catch data for 2025 are presented in Appendix A. The results of the analyses of fish community attributes are presented in the following subsections.

2.2.1 Goathorn Creek and Tenas Creek

2.2.1.1 Catch per Unit Effort (CPUE)

Electrofishing CPUE in the project area ranged from 0.25 to 2.38 fish/100s for Rainbow Trout, 0.07 to 1.10 fish/100s for Dolly Varden, and 0.23 fish/100s for Coho Salmon (Table 2).

Rainbow Trout were the most abundant species captured in Tenas Creek and Goathorn Creek (Table 2). The only Coho Salmon captured were in reach 1 of Tenas Creek.



Table 2: Electrofishing First-Pass Catch Data

Watercourse	Reach/Site	EF Seconds	RB		DV		CO	
			#	CPUE	#	CPUE	#	CPUE
Goathorn Creek	WQS05	2825	15	0.53	2	0.07	-	-
	WQS07	1907	5	0.26	5	0.26	-	-
	WQS13	1575	4	0.25	4	0.25	-	-
	4	1175	15	1.27	5	0.42	-	-
Tenas Creek	WQS04B	1300	31	2.38	5	0.38	3	0.23
	WQS02	1917	30	1.56	12	0.63	-	-
	WQS01	1267	4	0.31	14	1.10	-	-

EF = electrofishing; RB = Rainbow Trout; DV = Dolly Varden; CO = Coho Salmon; # = number caught; CPUE = catch per unit effort (fish per 100 seconds of EF)

Fish Density was calculated for 200 m² of each reach in Tenas Creek and Goathorn Creek. Fish density ranged from 0.085 fish/ m² to 0.480 fish/ m² (Table 3).

Table 3: Multi-pass Depletion Abundance for All Species Captured

Stream	Reach/Site	Number of passes	Fish captured	Estimated population in sample area	Fish Density (Fish/m ²)
Goathorn	WQS05	4	49	49	0.245
	WQS07	3	17	17	0.085
	WQS13	3	17	17	0.085
	4	3	37	37	0.185
Tenas	WQS04B	4	93	96	0.480
	WSQ02	4	66	66	0.330
	WQS01	4	41	41	0.205

Rainbow trout fish density was calculated for the same area and ranged from 0.040 fish/m² to 0.405 fish/ m² (Table 4).

Table 4: Multi-pass Depletion Abundance for Rainbow Trout

Stream	Reach	Number of passes	Fish captured	Estimated population in sample area	Fish Density (Fish/m ²)
Goathorn	WQS05	4	47	47	0.235
	WQS07	3	11	11	0.055
	WQS13	3	8	8	0.040
	4	3	29	29	0.145
Tenas	WQS04B	4	78	81	0.405
	WSQ02	4	45	45	0.225
	WQS01	4	12	12	0.060



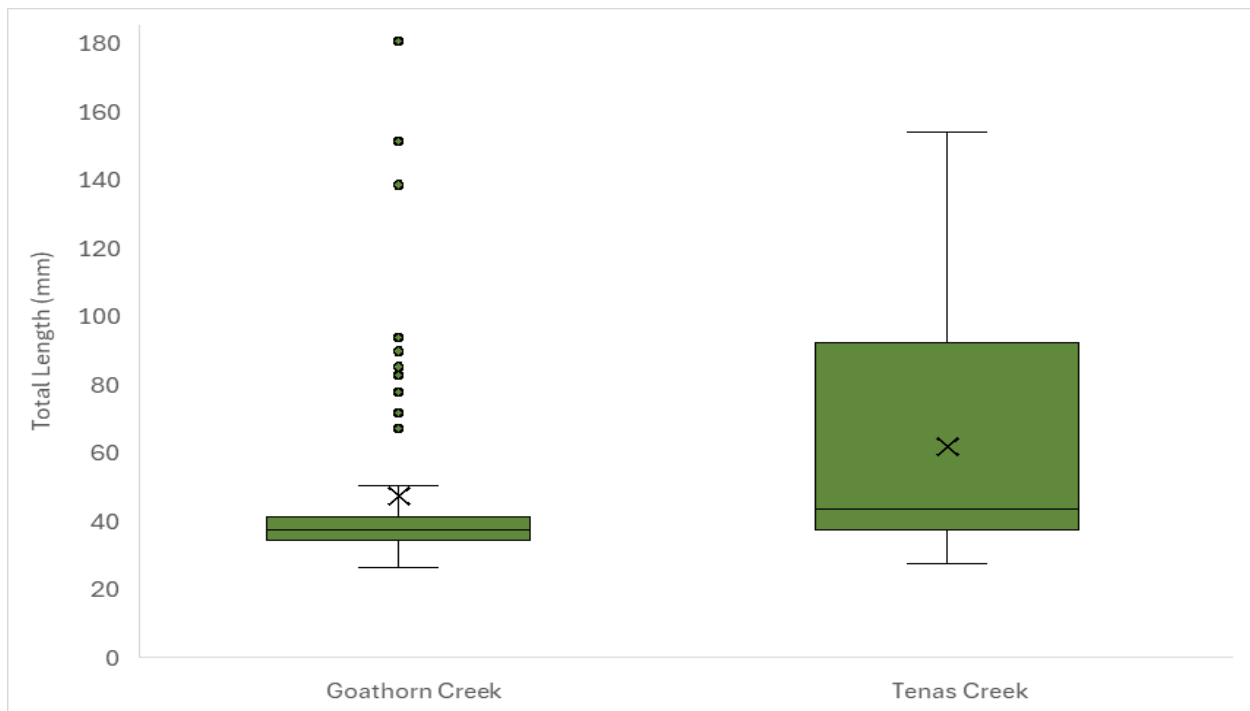
2.2.1.2 Fish Length

Lengths were measured for up to 30 individuals fish per species, encompassing a broad range of body sizes, at each of the sites in Goathorn Creek and Tenas Creek. Fish length analysis was completed for Rainbow Trout and Dolly Varden as they were the only species consistently captured throughout the sampling area.

Fish length was characterized for Rainbow Trout and Dolly Varden that were captured in Tenas Creek (n = 80 RB, 57 DV) and Goathorn Creek (n = 81 RB, 24 DV). Individual fish data is presented in Appendix B.

Rainbow Trout ranged from 27 mm to 154 mm in total length in Tenas Creek, and from 26 mm to 181 mm in Goathorn Creek (Figure 2). Median total length was 43 mm in Tenas Creek and 37mm in Goathorn Creek. The mean total length of Rainbow Trout was 62 mm in Tenas Creek and 47 mm in Goathorn Creek, which are both greater than the median and indicate the total length data are positively skewed (Figure 2). Goathorn Creek's Rainbow Trout size distribution is heavily represented by young-of-year (YOY) and may be a result of most fish moving downstream into larger habitats in the Telkwa and Bulkley Rivers as they mature.

Figure 2: Rainbow Trout Total Length in Tenas Creek and Goathorn Creek



Notes: The lower line of the boxplot is the 25th percentile of the data, the middle line is the median, the upper line is the 75th percentile, the black cross is the mean, and the circles are the outliers. The boxplot whiskers represent the upper and lower limits of normal range, defined as 1.5 x Interquartile Range.

The mean length of Rainbow Trout caught in Goathorn Creek was approximately 23% greater than in Tenas Creek, with an effect size of approximately 0.47 (Table 5). The total lengths of Rainbow Trout were therefore comparable between the two creeks.



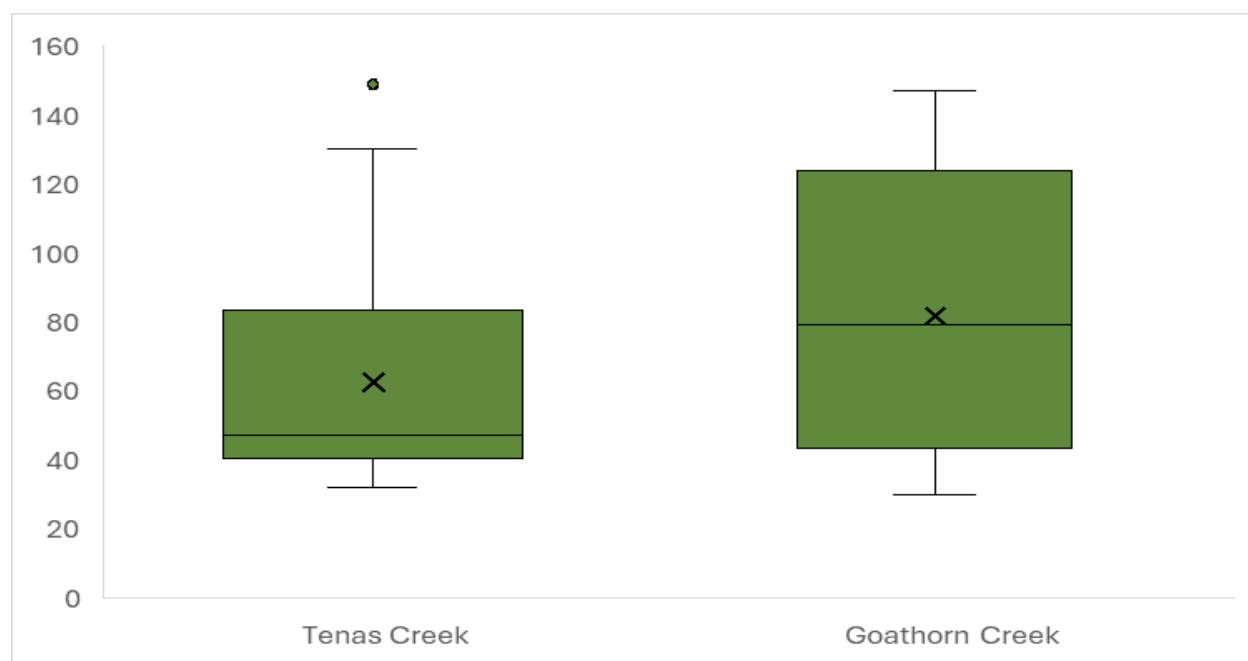
Table 5: Rainbow Trout Total Length Summary Statistics

Comparison	T-test	Spooled	Effect Size	Difference (%)
Rainbow Trout Total length				
Goathorn Creek & Tenas Creek	0.003	30.81	0.469	23.5
Dolly Varden Fork Length				
Goathorn Creek & Tenas Creek	0.047	34.19	0.490	21.1

Dolly Varden ranged from 32 mm to 149 mm in fork length in Tenas Creek, and from 30 mm to 147 mm in Goathorn Creek (Figure 3). The median fork length was 47 mm in Tenas Creek and 64 mm in Goathorn Creek. The mean fork length of Dolly Varden was 62 mm in Tenas Creek and 79 mm in Goathorn Creek. Which are both greater than the median and indicate the total length data were positively skewed (Figure 3).

The mean fork length of Dolly Varden caught in Goathorn Creek was approximately 21% greater than in Tenas Creek, with an effect size of approximately 0.49 between Goathorn Creek and Tenas Creek (Table 5). The fork lengths of Dolly Varden were therefore comparable between the two creeks.

Figure 3: Dolly Varden Fork Length in Tenas Creek and Goathorn Creek

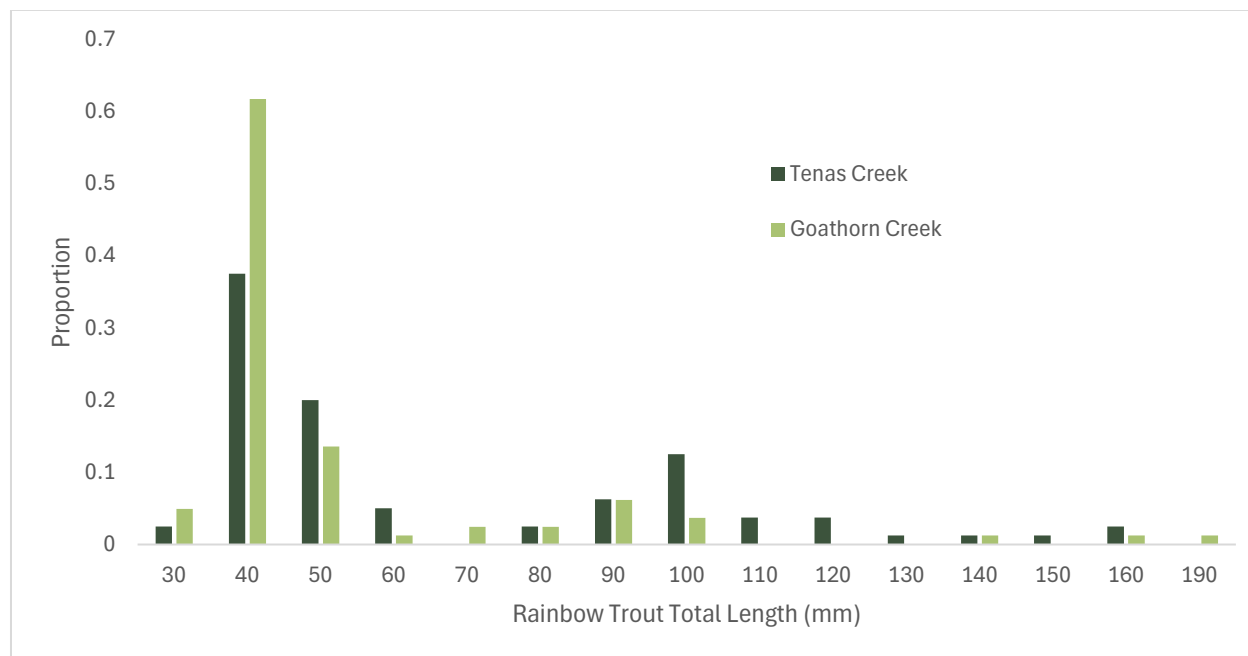


Notes: The lower line of the boxplot is the 25th percentile of the data, the middle line is the median, the upper line is the 75th percentile, the black cross is the mean, and the circles are the outliers. The boxplot whiskers represent the upper and lower limits of normal range, defined as 1.5 x Interquartile Range.

The total length for Rainbow Trout in Tenas Creek and Goathorn Creek was comparable, with most YOY fish varying in total length between 30 mm to 60 mm, and with the majority of year-1 Rainbow Trout varying in total length from 80 mm to 120 mm (Figure 4). Rainbow Trout between 60 mm to 80 mm in total length and greater than 120 mm were relatively uncommon (Figure 4).



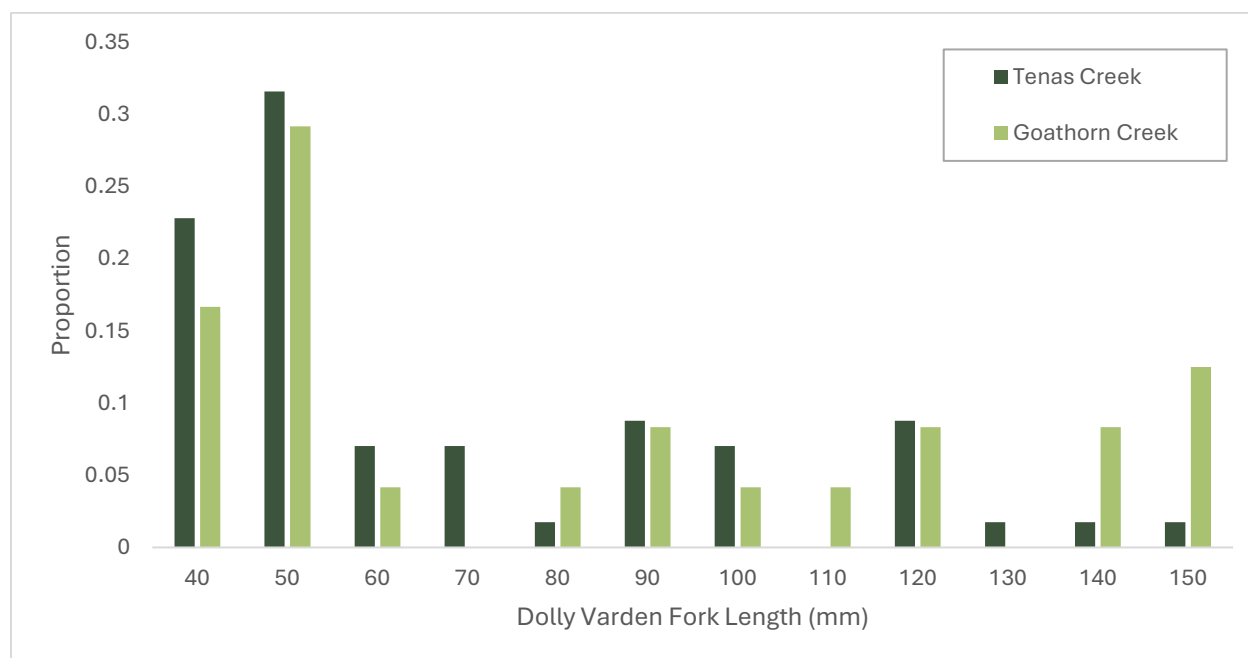
Figure 4: Total Length Distribution of Rainbow Trout in Tenas Creek and Goathorn Creek



Note: Bin size was 10 mm, with the maximum length for each bin on the X-axis.

The fork length for Dolly Varden in Tenas Creek and Goathorn Creek was comparable for YOY fish, with fork length ranging from approximately 40 mm to 70 mm, and 1-year fish varying from 80mm to 120mm. Dolly Varden greater than 120 mm in length were much more common in Goathorn than Tenas (Figure 5).

Figure 5: Fork Length Distribution of Dolly Varden in Tenas Creek and Goathorn Creek



Note: The bin size was 10 mm, with the maximum length for each bin on the X-axis.

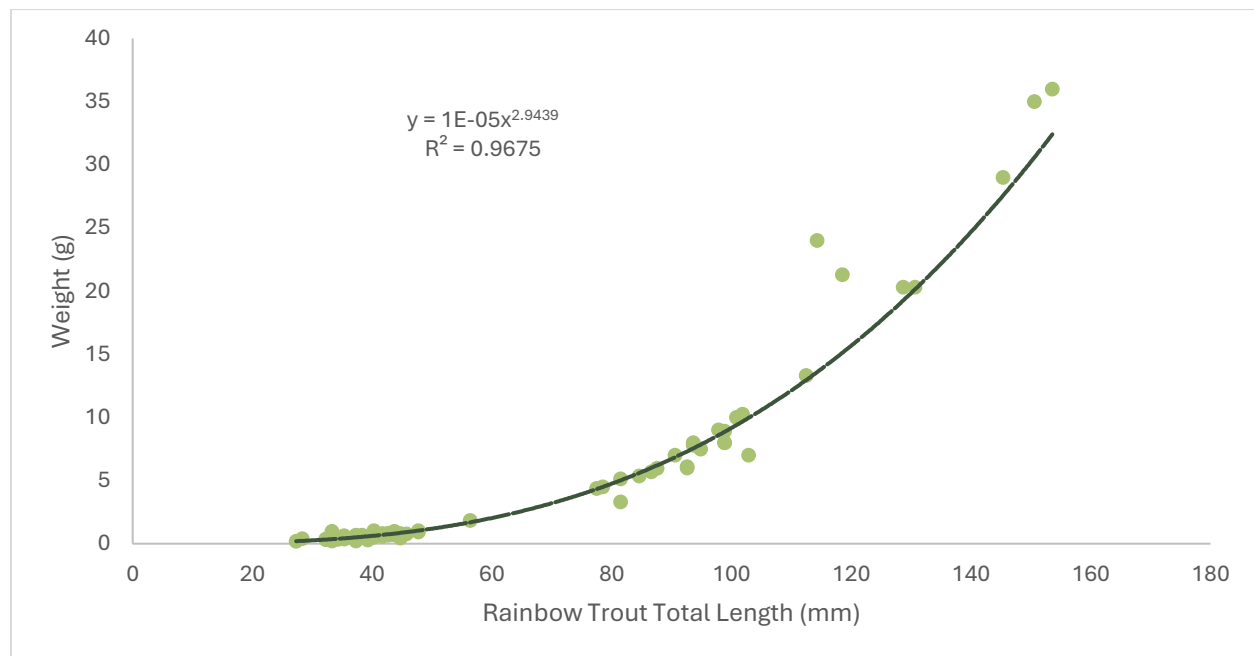


2.2.1.3 Fish Condition

Weights were measured for up to 30 of each species of fish per reach in Tenas Creek and Goathorn Creek. Fish condition analysis was completed for Rainbow Trout and Dolly Varden as they were the only species consistently captured throughout the sampling area. Fish data is presented in Appendix B.

There was an allometric relationship ($R^2 = 0.97$) between length and weight for Tenas Creek Rainbow Trout, with weight increasing from 0.2 g at 27 mm total length to 36 g at 154 mm total length (Figure 6).

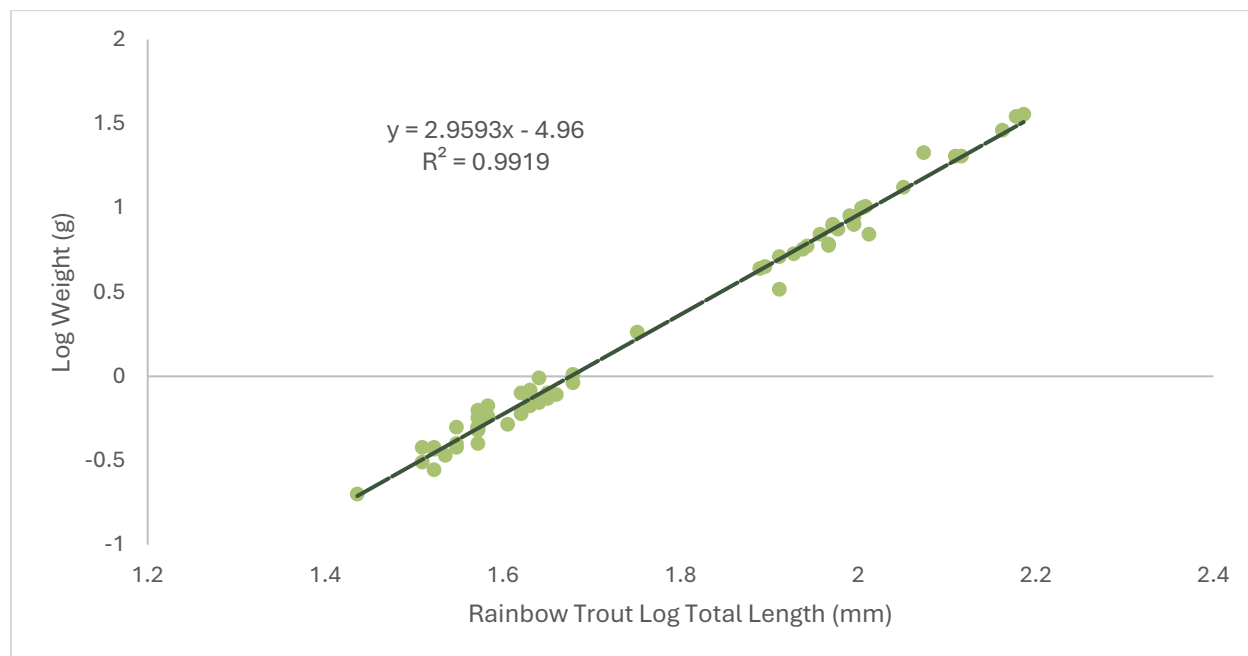
Figure 6: Rainbow Trout Log Total Length (mm) vs Weight (g) in Tenas Creek



The length and weight data was log transformed and compared with the standard weight equation (Simpkins and Hubert 1996) for lotic Rainbow Trout (Figure 7). The length/weight data did not closely match the standard weight equation, with a mean residual of 0.19 and maximum of 1.75 for Tenas Creek (data not shown). However, high residuals may have been caused by inaccuracies during weighing of very small fish (perhaps due to small amounts of water being present on very small fish or an issue with scale accuracy at the low end of measured weights), thus adding error to measured weights. When small fish outliers with a residual value of greater than 0.3 were removed from the data set the length/weight did match the standard weight equation with a mean residual of 0.10 and maximum of 0.40 for Tenas Creek. Residuals did not increase or decrease with fish length. This data indicates that the standard weight equation for lotic Rainbow Trout was appropriate for Tenas Creek.



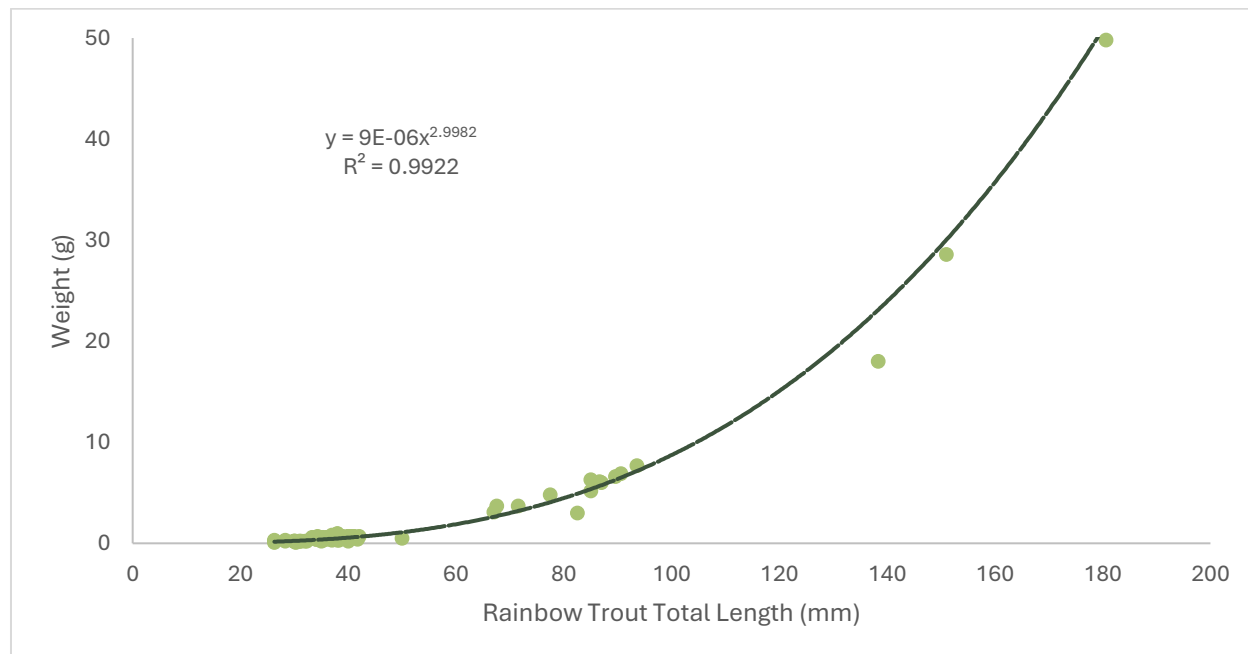
Figure 7: Rainbow Trout Log Total Length (mm) vs Log Weight (g) in Tenas Creek



Note: YOY fish with high residuals removed from this chart

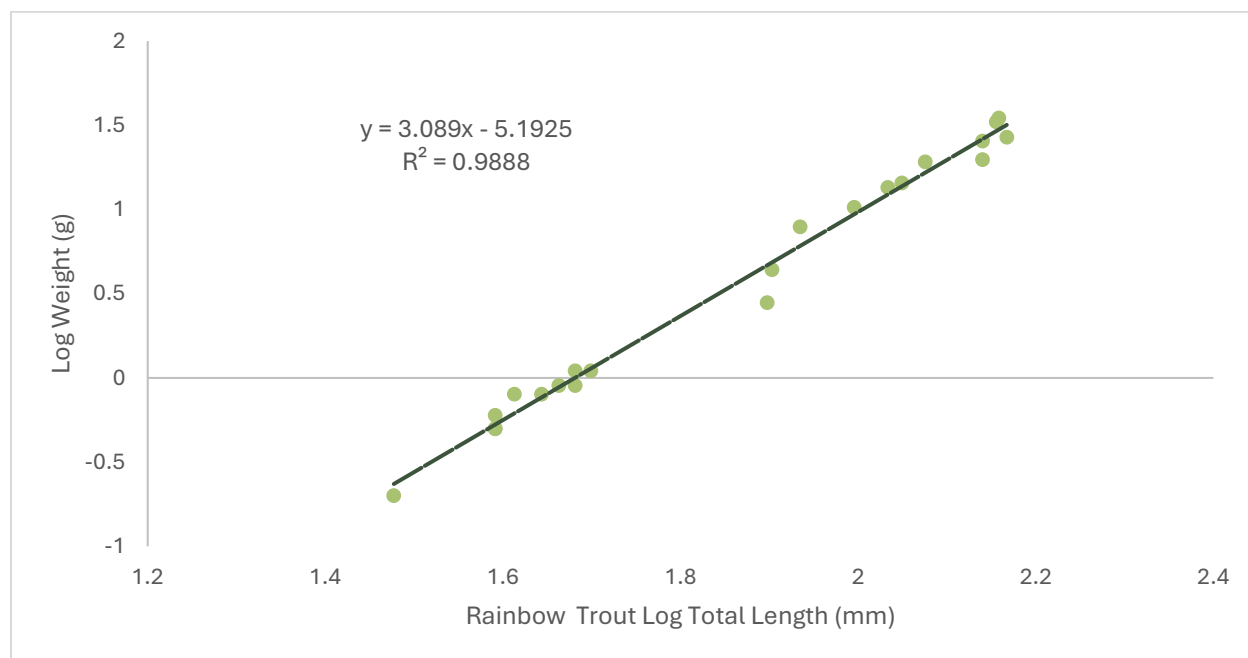
There was an allometric relationship ($R^2 = 0.99$) between length and weight For Goathorn Creek Rainbow Trout, with weight increasing from 0.1 g at 26 mm total length to 49.8 g at 181 mm total length (Figure 8).

Figure 8: Rainbow Trout Total Length (mm) vs Weight (g) in Goathorn Creek



The length and weight data was log transformed and compared with the standard weight equation (Simpkins and Hubert 1996) for lotic Rainbow Trout (Figure 9). The length/weight data did not closely match the standard weight equation, with a mean residual of 0.25 and maximum of 0.86 for Goathorn Creek (data not shown). When small fish outliers with a residual value of greater than 0.3 were removed from the data set, as was done for Tenas Creek rainbow trout, the length/weight data still did not match the standard weight equation with a mean residual of 0.14 and maximum of 0.42. Residuals did not increase or decrease with fish length. This data indicates that the standard weight equation for lotic Rainbow Trout does not accurately represent the Rainbow Trout in Goathorn Creek.

Figure 9: Rainbow Trout Log Total Length (mm) vs Log Weight (g) in Goathorn Creek



Note: YOY fish with high residuals removed from this chart

The mean relative weight for Rainbow Trout was 1.04 ± 0.32 in Tenas Creek and 0.97 ± 0.33 in Goathorn Creek, (Table 6). The Rainbow Trout captured in Tenas Creek and Goathorn were therefore within the CES of 0.90 and 1.10.

Table 6: Summary Statistics for Relative Weight

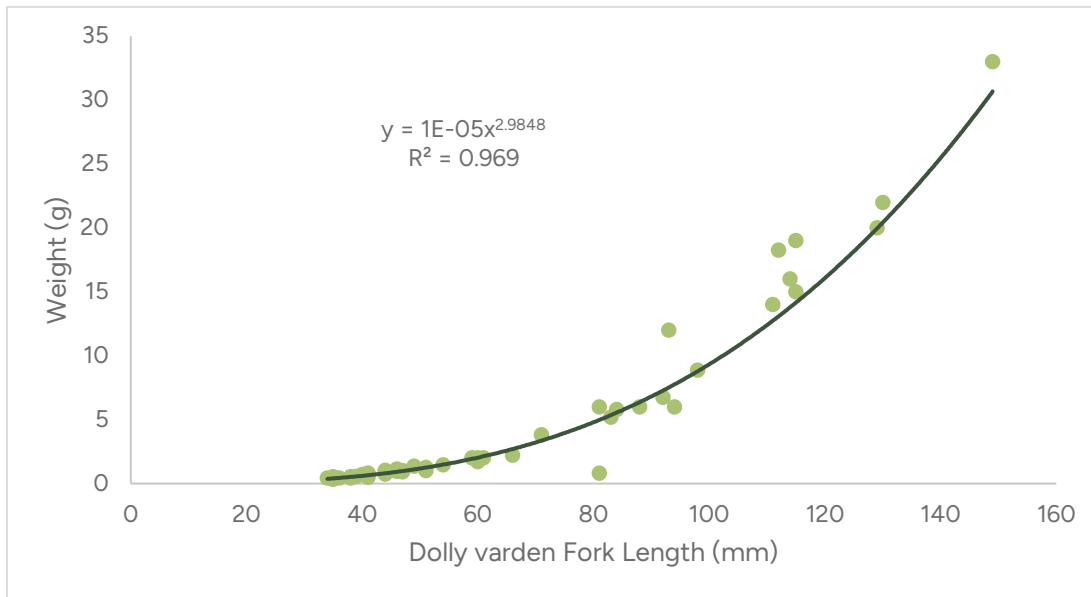
Species	N	Mean	STD	CV (%)
Tenas Creek Rainbow Trout	75	1.04	0.32	31
Goathorn Creek Rainbow Trout	81	0.97	0.33	34

Notes: STD = Standard Deviation, CV = Coefficient of Variation

There was an allometric relationship ($R^2 = 0.97$) between length and weight for Tenas Creek Dolly Varden, with weight increasing from 0.34 g at 35 mm fork length to 33 g at 149 mm fork length (Figure 10).



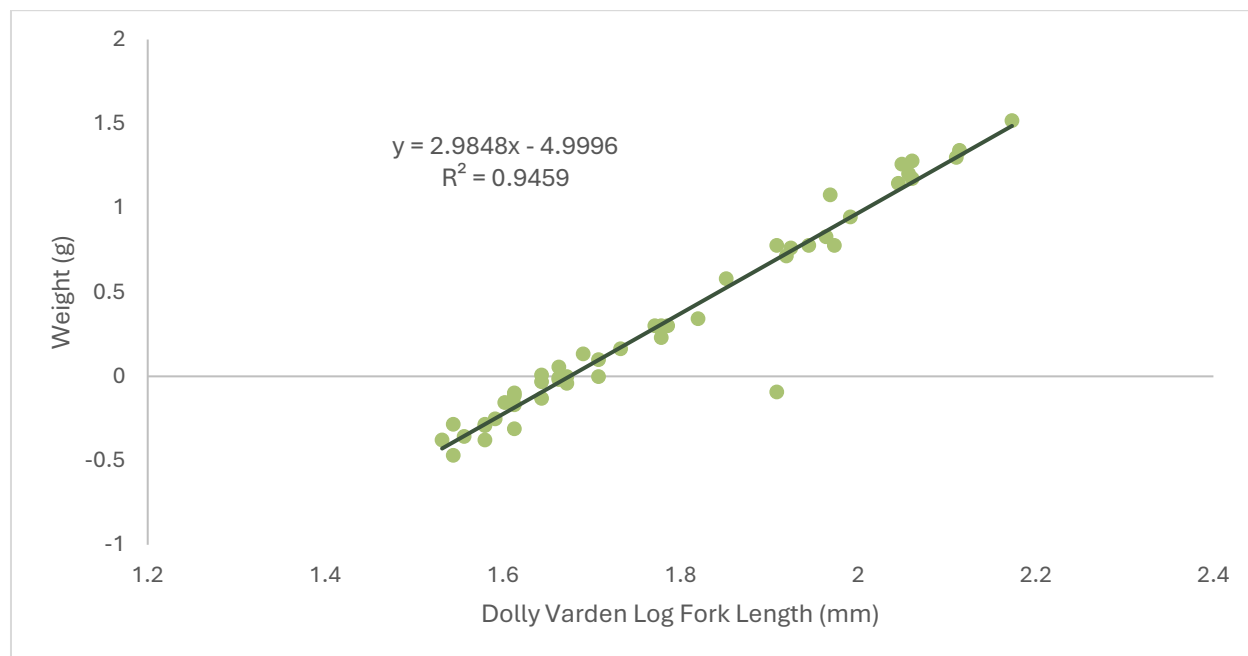
Figure 10: Dolly Varden Fork Length (mm) vs Weight (g) in Tenas Creek



The length and weight data were log transformed and compared with the standard weight equation for Dolly Varden (Figure 11). The length/weight data did not match the standard weight equation, with a mean residual value of approximately 0.27 and a maximum residual value of 1.70 (data not shown). However, high residuals may have been caused by inaccuracies during weighing of very small fish (perhaps due to small amounts of water being present on very small fish or an issue with scale accuracy at the low end of measured weights), thus adding error to measured weights. When small fish outliers with a residual value of greater than 0.3 were removed from the data set the length/weight data still did not match the standard weight equation with a mean residual of 0.15 and maximum of 0.84 for Tenas Creek; residuals did not increase or decrease with fish length. The data indicates that the standard weight equation for Dolly Varden does not accurately represent the Dolly Varden in Tenas Creek.



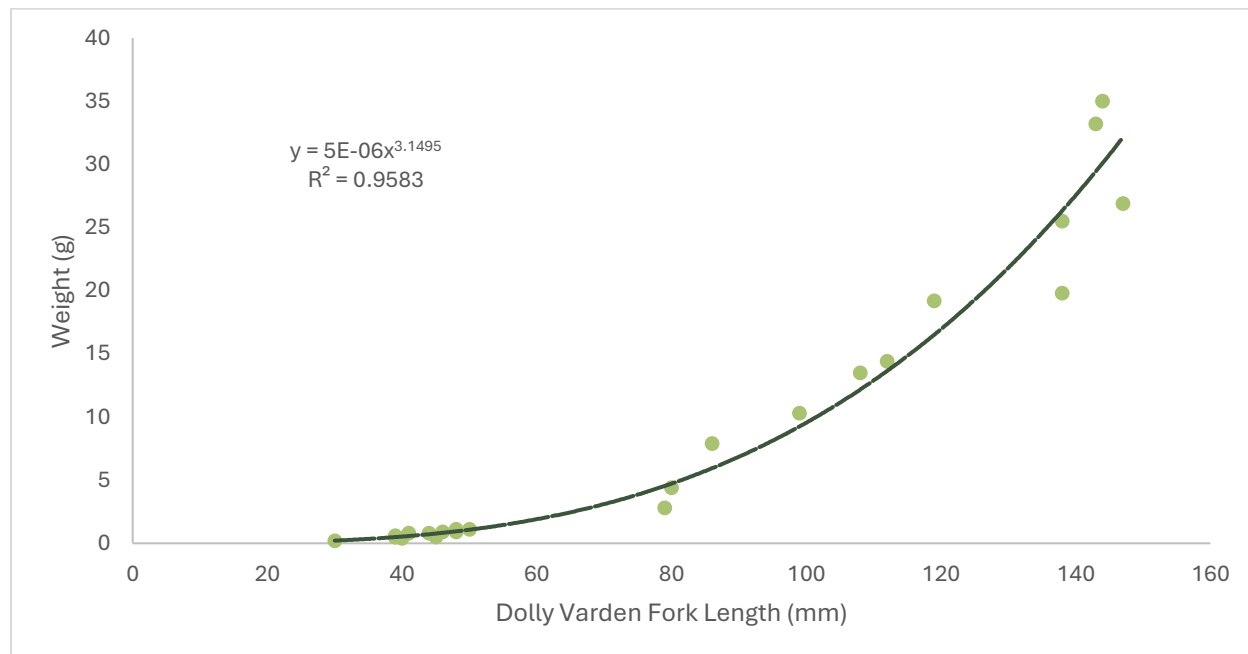
Figure 11: Dolly Varden Log Fork Length (mm) vs Log Weight (g) in Tenas Creek



Note: YOY fish with high residuals removed from this chart

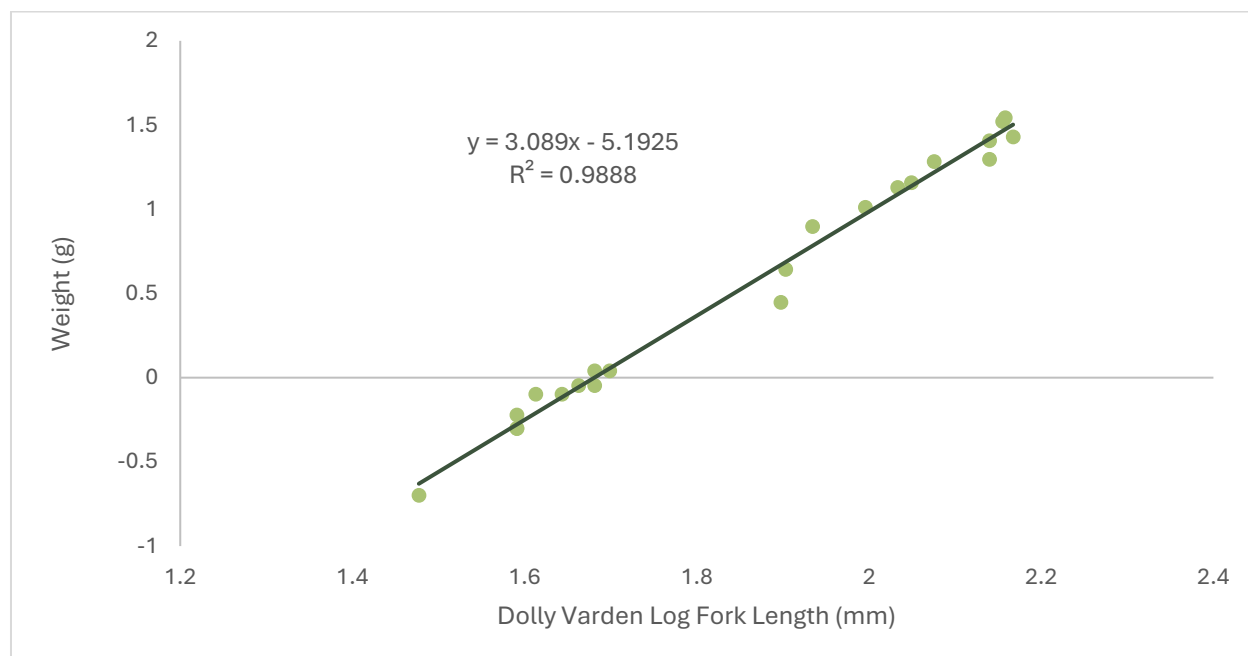
There was an allometric relationship ($R^2 = 0.96$) between length and weight for Goathorn Creek Dolly Varden, with weight increasing from 0.32 g at 31 mm fork length to 35 g at 150 mm fork length (Figure 12).

Figure 12: Dolly Varden Fork Length (mm) vs Weight (g) in Goathorn Creek



The length and weight data was log transformed and compared with the standard weight equation for Dolly Varden (Figure 13). The length/weight data did not match the standard weight equation, with a mean residual value of approximately 0.17 and a maximum residual value of 0.42 (data not shown). As with length/weight data from Dolly Varden in Tenas Creek, very small fish with a residual value of greater than 0.3 were removed from the dataset to see if inaccuracies with weighing small fish improved correlation with the standard weight equation. Data still did not match the standard weight equation with a mean residual of 0.15 and maximum of 0.39 for Goathorn Creek; residuals did not increase or decrease with fish length. The data indicates that the standard weight equation for Dolly Varden does not accurately represent the Dolly Varden in Goathorn Creek.

Figure 13: Dolly Varden Log Fork Length (mm) vs Log Weight (g) in Goathorn Creek



Note: YOY fish with high residuals removed from this chart

Mean relative weight for Dolly Varden was 1.16 ± 0.45 in Tenas Creek and 0.98 ± 0.21 in Goathorn Creek (Table 7). The Dolly Varden captured in Tenas Creek were above the CES of 1.10, therefore slightly heavier on average for a given fork length than the Dolly Varden used to develop the standard weight equation. The Dolly Varden in Goathorn Creek were within the CES for fish condition and similar weight to the Dolly Varden used to develop the standard weight equation.

Table 7: Summary Statistics for Relative Weight

Species	N	Mean	STD	CV (%)
Tenas Creek Dolly Varden	55	1.16	0.45	38
Goathorn Creek Dolly Varden	24	0.98	0.21	21

Notes: STD = Standard Deviation, CV = Coefficient of Variation



2.2.1.4 Fish Age

Scale samples were collected from 24 Rainbow Trout caught in Tenas Creek, and from 12 Rainbow Trout caught in Goathorn Creek (Table 8). Rainbow Trout age varied from 1 year to 2 years in both Tenas Creek and Goathorn Creek. The minimum fork length was 112 mm for two-year-old fish (Table 8). The lack of Rainbow Trout caught above age 2 may indicate adult fish migrate out of Tenas and Goathorn Creek into larger, more productive habitats in the Telkwa River. Full lab report can be found in Appendix N.

Table 8: Rainbow Trout Age Analysis

Creek	Site/Reach	Fork length (mm)	Age	Creek	Site/Reach	Fork length (mm)	Age
Tenas	WQS04B	89	1	Goathorn	WQS05	89	1
	WQS04B	82	1		WQS05	85	1
	WQS04B	90	1		WQS05	79	1
	WQS04B	97	1		WQS05	74	1
	WQS04B	121	1		WQS05	173	2
	WQS04B	89	1		WQS05	86	1
	WQS04B	96	1		WQS05	82	1
	WQS04B	122	1		WQS07	80	1
	WQS04B	86	1		WQS07	80	1
	WSQ02	94	1		WQS07	85	1
	WSQ02	93	1		WQS13	147	2
	WSQ02	98	1		WQS13	131	2
	WSQ02	88	1				
	WSQ02	94	1				
	WSQ02	94	1				
	WSQ02	146	2				
	WSQ02	138	2				
	WSQ02	143	2				
	WQS01	106	1				
	WQS01	124	2				
	WQS01	80	1				
	WQS01	112	2				
	WQS01	83	1				



2.2.1.5 Goathorn Reach 4 Fish Presence

Two sampling events occurred on September 1, 2025, to survey for fish presence above the fish barrier (chute) in reach 4 of Goathorn Creek. An electrofishing sampling event, consisting of 1600 seconds of effort, covering 200 meters of area above the chute. No fish were caught.

There was eDNA also collected at the same site, prior to electrofishing. Samples were sent to Mérieux NutriSciences and analyzed for presence of Rainbow Trout, Pink Salmon, Coho Salmon, and a general fish assay. All assays came up negative, i.e., no Rainbow Trout, Pink Salmon, Coho Salmon, or general fish DNA found. The full lab report is in Appendix I.

2.2.2 Tenas Access Corridor

2.2.2.1 Catch Per Unit Effort

Electrofishing CPUE in Helps Creek ranged from 1.50 to 2.27 fish/100s for Rainbow Trout, and 1.37 fish/100s for CO (Table 9).

Rainbow Trout were the most abundant species captured in Helps Creek (Table 9). Coho Salmon were only captured at Site 1.

Table 9: Electrofishing First-Pass Catch Data

Watercourse	Site	EF Seconds	RB		CO	
			#	CPUE	#	CPUE
Helps Creek	1	1460	22	1.50	20	1.37
	2	924	21	2.27	-	-

Notes: EF = electrofishing; RB = Rainbow Trout; CO = Coho Salmon; # = number caught; CPUE = catch per unit effort (fish per 100 seconds of EF)

Fish Density was calculated for 200 m² of each site in Helps Creek. Fish density ranged from 0.235 fish/m² to 0.480 fish/m² (Table 10).

Table 10: Multi-pass Depletion Abundance for All Species Captured

Stream	Site	Number of passes	Fish captured	Estimated population in sample area	Fish Density (Fish/m ²)
Helps Creek	1	3	92	96	0.480
	2	4	47	47	0.235

Rainbow trout fish density was calculated for the same area and ranged from 0.235 fish/m² to 0.240 fish/m² (Table 11). Coho density in reach 1 of Helps Creek was 0.225 fish/m².

Table 11: Multi-pass Depletion Abundance for Rainbow Trout

Stream	Site	Number of passes	Fish captured	Estimated population in sample area	Fish Density (Fish/m ²)
Helps Creek	1	3	48	48	0.240
	2	4	47	47	0.235

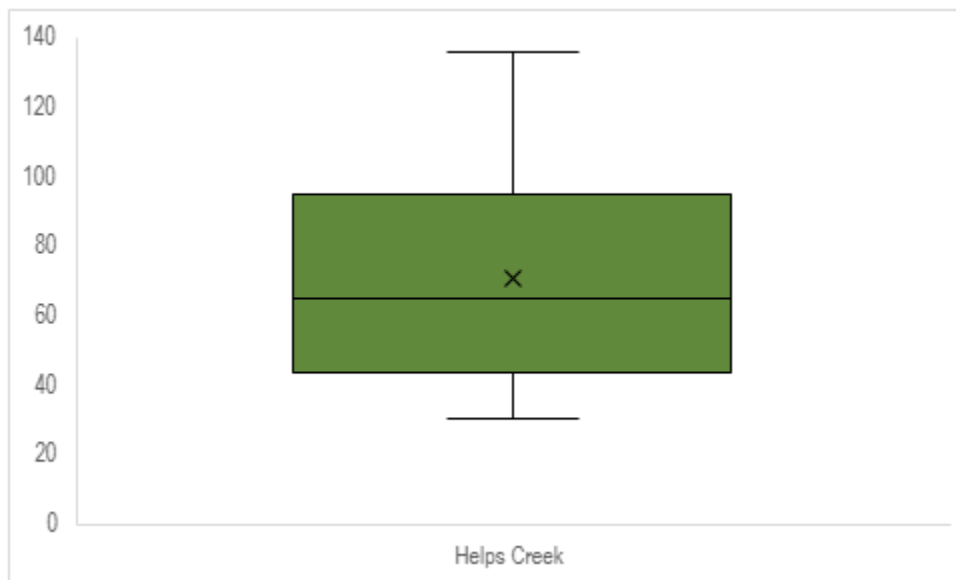


2.2.2.2 Fish Length

Lengths were measured for up to 30 individuals per species, encompassing a broad range of body sizes, at each of the sites in Goathorn Creek and Tenas Creek. Fish Length was characterized for Rainbow Trout as they were the only species consistently captured in Helps Creek (n = 71 RB). Fish data are presented in Appendix B.

Rainbow Trout ranged from 30 mm to 136 mm in total length in (Figure 14), with the median total length of 65 mm. The mean total length of Rainbow Trout was 71 mm, which is greater than the median and indicates the total length data were positively skewed (Figure 14).

Figure 14: Rainbow Trout Total Length in Helps Creek

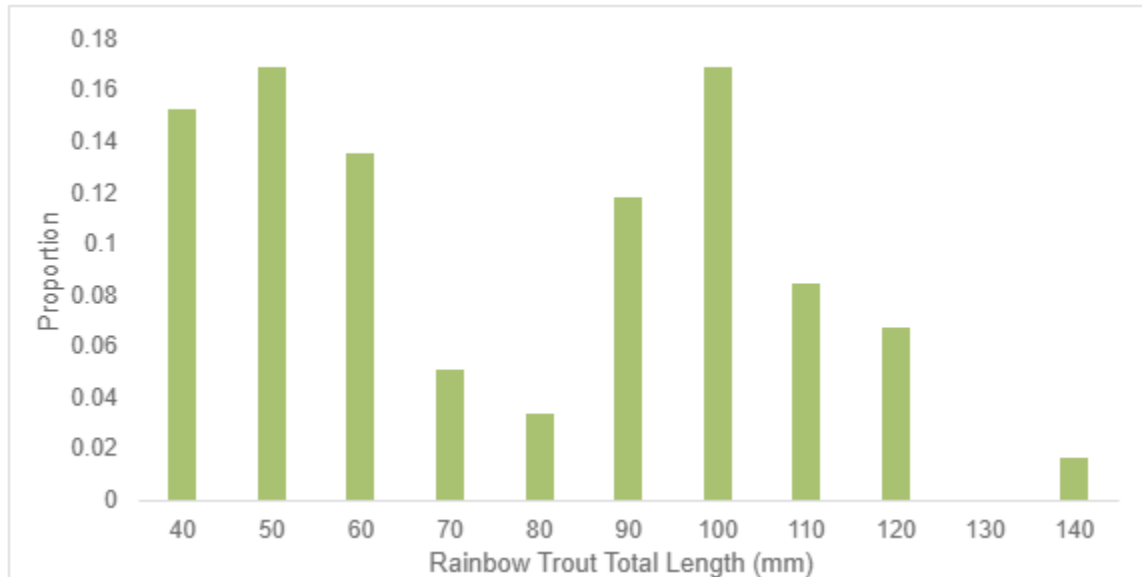


Notes: The lower line of the boxplot is the 25th percentile of the data, the middle line is the median, the upper line is the 75th percentile, and the black x is the mean. The boxplot whiskers represent the upper and lower limits of normal range, defined as 1.5xInterquartile Range).

In Helps Creek YOY rainbow trout total length ranged between 30 mm to 60 mm and with the majority of year-1 Rainbow Trout varying in total length from 80 mm to 120 mm (Figure 15). Rainbow Trout greater than 120 mm were relatively uncommon (Figure 15).



Figure 15: Total Length Distribution of Rainbow Trout in Helps Creek



Note: The bin size was 10 mm, with the maximum length for each bin on the X-axis.

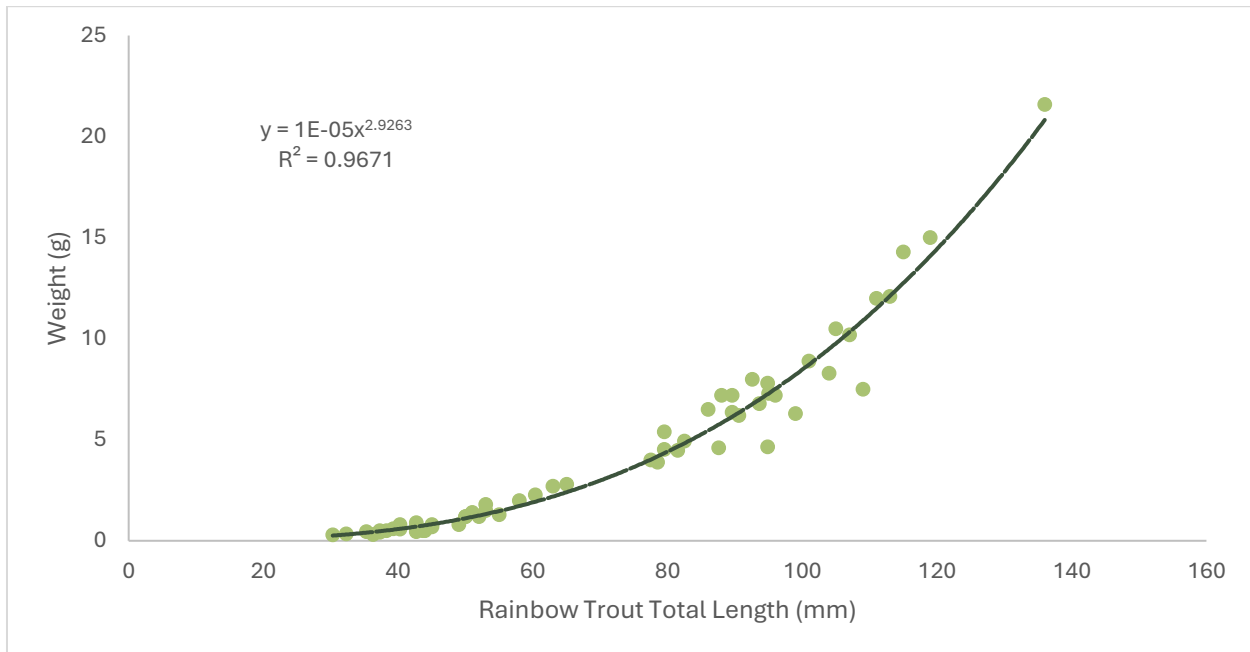
2.2.2.3 Fish Condition

Weights were measured for up to 30 of each species of fish per site in Helps Creek. Fish condition analysis was completed for Rainbow Trout as they were the only species consistently captured throughout the sampling area. Individual fish data is presented in Appendix B.

There was an allometric relationship ($R^2 = 0.97$) between length and weight for Helps Creek Rainbow Trout, with weight increasing from 0.3 g at 30 mm total length to 21.6 g at 136 mm total length (Figure 16).



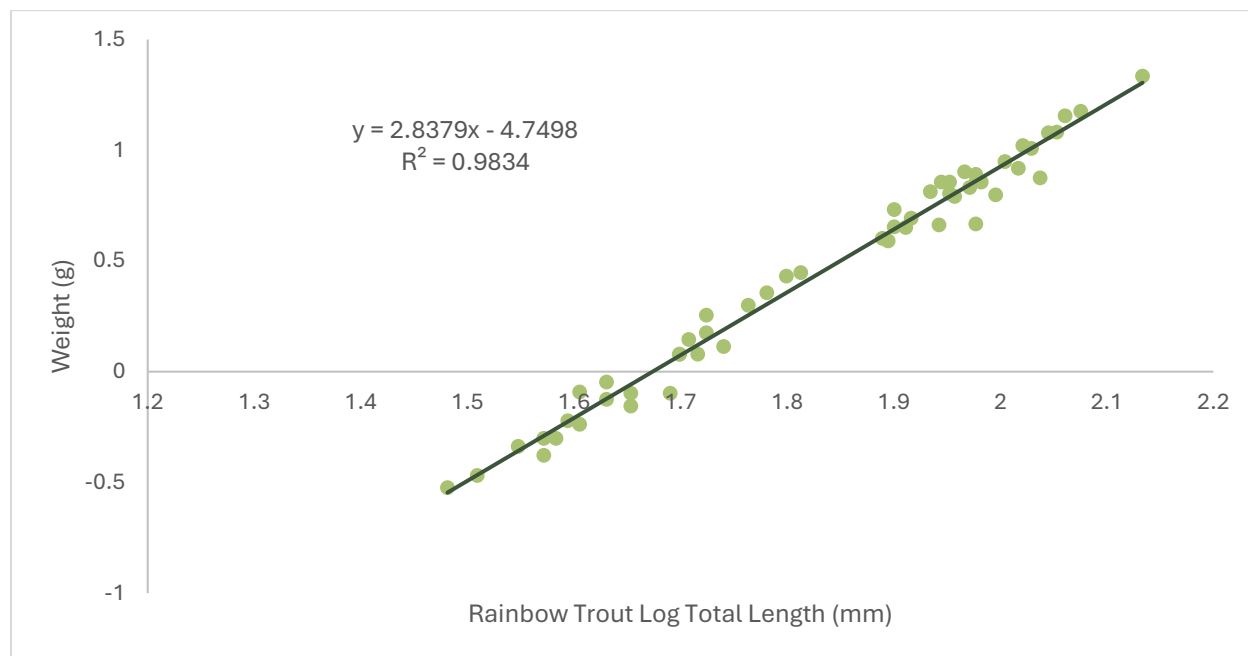
Figure 16: Rainbow Trout Total Length (mm) vs Weight (g) in Helps Creek



The length and weight data was log transformed and compared with the standard weight equation (Simpkins and Hubert 1996) for lotic Rainbow Trout (Figure 17). The length/weight data did not closely match the standard weight equation, with a mean residual of 0.13 and maximum of 0.41 for Helps Creek. However, high residuals may have been caused by inaccuracies during weighing of very small fish (perhaps due to small amounts of water being present on very small fish or an issue with scale accuracy at the low end of measured weights), thus adding error to measured weights. When small fish outliers with a residual value of greater than 0.3 were removed from the data set the length/weight data still did not match the standard weight equation with a mean residual of 0.11 and maximum of 0.41 for Helps Creek; residuals did not increase or decrease with fish length. This data indicates that the standard weight equation for lotic Rainbow Trout was not appropriate for the Rainbow Trout in Helps Creek.



Figure 17: Rainbow Trout Log Total Length (mm) vs Log Weight (g)



Note: YOY fish with high residuals removed from this chart

The mean relative weight for Rainbow Trout was 0.95 ± 0.16 in Helps Creek (Table 12). The Rainbow Trout captured in Helps Creek were therefore with the CES of 0.90 and 1.10. Rainbow Trout were therefore similar weights on average for a given total length than the Rainbow Trout used to develop the standard weight equation.

Table 12: Summary Statistics for Relative Weight

Species	N	Mean	STD	CV (%)
Helps Creek Rainbow Trout	58	0.95	0.16	17

Notes: STD = Standard Deviation, CV = Coefficient of Variation

2.2.2.4 Fish Age

Scale samples were collected from 10 Rainbow Trout caught in Helps Creek (Table 13). Rainbow Trout age varied from 1 year to 2 years in Helps Creek. The minimum fork length was 109 mm for two-year-old fish (Table 13). The lack of Rainbow Trout caught above age 2 may indicate adult fish migrate out of Tenas and Goathorn Creek into larger, more productive habitats in the Telkwa River. Full lab report can be found in Appendix N.



Table 13: Rainbow Trout Age Analysis

Creek	Site	Fork length (mm)	Age
Helps	1	96	1
	1	96	1
	1	128	2
	1	92	1
	1	109	2
	1	84	1
	1	108	1
	1	94	1
	1	94	1
	1	104	1

3.0 Critical Spawning Habitat Surveys

Spawning habitat quality and distribution within the watersheds surrounding the project area, i.e., Goathorn Creek, Tenas Creek, Four Creek, and Helps Creek, is relatively unknown. The primary goal of the Critical Spawning Habitat Surveys was to provide more detail regarding spawning area quality within the aforementioned creeks. This information was then used for site selection during the Fall Spawning Program. A secondary goal was to provide more detailed information regarding rearing habitat quality within the study area.

3.1 Methods

The surveys followed level 1 Fish Habitat Assessment Procedure (FHAP) methodologies according to Johnson and Slaney (1997). FHAP was completed within Goathorn, Tenas, Four Creek, and Helps Creek. All known fish bearing reaches within Goathorn Creek, Tenas Creek, and Four Creek were surveyed for a targeted 500m. Helps Creek had 2 sites; one located between Lawson Road/Telkwa-Houston FSR and the Bulkley River confluence, and the second at the proposed bypass road bridge crossing.

Mesohabitat type (i.e., pool, riffle, glide, cascade), habitat unit category, distance and length, and gradient were collected for each habitat unit. Stratified systematic subsampling was used to determine which habitat units (HUs) would have detailed habitat data completed. The frequency of detailed habitat information was every other (1 in 2) HU for each mesohabitat type.

Detailed habitat data collected included the following:

- Water depth, bankfull depth, wetted width, bankfull channel width, and pool measurements (pool depth, riffle crest depth, residual depths, and pool type);
- Stream bed characteristics, spawning gravel amount and type;
- Large woody debris tally, habitat cover characteristics, off-channel habitat type and accessibility, riparian vegetation characteristics, canopy closure;



- Disturbance indicators and barriers;
- Spawning and rearing habitat ranking from limited (low volume and/or low quality), moderate, and abundant (high volume and/or high quality).

Stream discharge and in-situ water quality was collected once at the beginning of each survey. Aerial footage was collected using an Unmanned Aerial Vehicle (UAV) at sites where possible.

3.2 Results

3.2.1 Goathorn Creek, Tenas Creek, and Four Creek

Full habitat unit data for each survey can be found in Appendix C. A map book displaying all habitat units can be found in Appendix K.

3.2.1.1 Tenas Creek

A 480 m portion in the lower section of Tenas Creek Reach 1 was assessed as having 6 distinct habitat units, including 5 riffle and 2 pool mesohabitat types. Detailed FHAP data was collected in these habitat units on July 21, 2025. Riffle habitat dominated (66.7%), with smaller proportions of pool (33.3%) habitat. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 1 lower are provided in Table 14. The dominant bed material for riffles was cobbles, and fines for pools. The dominant cover type varied slightly between and within mesohabitat types, and included boulders, deep pools, and overhanging vegetation. Spawning habitat across riffle habitat units was moderate, as most riffle habitat units had some suitable substrate present with adequate flows and water depth. No spawning habitat was observed in pool habitat units. Rearing habitat quality across riffle habitat units varied from low to moderate, with high water velocities and an absence of cover limiting rearing opportunities. Most of the rearing habitat occurred in side channels that provided refuge from high flows and abundant cover. Rearing habitat across pools was moderate with cover provided by deep pools and woody debris.

A 686 m portion of upper section of Tenas Creek Reach 1 was assessed as having 10 distinct habitat units, including 5 riffle and 5 glide mesohabitat types. Detailed FHAP data was collected in these habitat units on July 14, 2025. Riffle (50%) and glide (50%) habitat were represented equally within the survey area. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in upper reach 1 are provided in Table 14. The dominant bed material for both riffle and glide habitat was cobbles, while one glide contained predominantly fine substrates due to the influence of beaver dams. The dominant cover type varied slightly between and within mesohabitat types, and included overhanging vegetation, boulders, and large woody debris. Spawning habitat within riffle habitat units was limited to gravel along edges of water and small pockets within the channel. Spawning habitat within glide habitat units was not present due to lack of suitable substrate. Rearing habitat in riffle habitat units was limited due to fast flows and a lack of cover. Rearing habitat in glide habitat units varied from limited to moderate dependent on the amount of available cover. The surveyed area was highly disturbed by beaver activity. The main channel was abandoned (Photo 7 – Appendix L), as flows were redirected by beaver dams through a forested area (Photo 8 – Appendix L).

A 526 m portion of Tenas Creek Reach 2 was assessed as having one distinct riffle habitat unit. Detailed FHAP data was collected in these habitat units on July 14, 2025. Riffle habitat dominated (100%) with no glide, pool, cascade, or 'other' habitat units present. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 2 are



provided in Table 14. The dominant bed material of cobbles and boulders were subdominant. The dominant cover type was boulders with large woody debris as subdominant. Spawning habitat was limited throughout the surveyed area. Small pockets of appropriate spawning substrate were present behind boulders and along water's edge; however, bed material for most of the survey area was too large to accommodate spawning. Rearing habitat was limited due to lack of cover from high-velocity riffles. Small areas of rearing habitat were present behind boulders and in log jams.

A 1025 m portion of Tenas Creek Reach 3 was assessed as having 21 habitat units, including 11 riffle, 6 glide and 4 pool mesohabitat types. FHAP data were collected in these habitat units on July 13, 2025. Reach 3 was dominated by riffle habitat (52.4%), with smaller amounts of glide (38.6%) and pool (19%) habitats. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 3 are provided in Table 14. The dominant bed material across all habitat types was cobbles. The dominant cover type for riffle habitat units was overhanging vegetation, deep pool in pool habitat units, and undercut banks in glide habitat units. Spawning habitat across all habitat units was limited due to a lack of suitable spawning substrates. Rearing habitat across riffle and glide habitat units was moderate, while pool habitat units had abundant rearing habitat in the form of deep pools which provide cover and refuge from fast flows.

Table 14: Habitat summary for Tenas Creek

Site name	# of habitat Units	Avg. Wetted Width (m)	Avg. Bankfull Width (m)	Avg. Water Depth (m)	Avg. Grad. (%)	Dom. (sub. dom.) bed mat.	Relative Percent Riffle (%)	Relative Percent Glide (%)	Relative Percent Pool (%)
Reach 1 Lower	6	5.7	7.7	0.3	1.7	Cobbles (boulders)	66.7	0	33.3
Reach 1 Upper	10	5.1	10.4	0.3	2.4	Cobbles (gravel)	50	50	0
Reach 2	1	7.3	12.3	0.3	3	Cobbles (boulders)	100	0	0
Reach 3	21	4.8	7.7	0.3	2	Cobbles (gravels)	52.4	28.6	19

3.2.1.2 Goathorn Creek

A 566 m portion of Goathorn Creek Reach 1 was assessed as having 3 distinct habitat units, including 1 riffle mesohabitat type for the mainstem, and 2 riffle mesohabitat types for off channel habitat. Detailed FHAP data was collected in these units on July 15, 2025. Riffle habitat dominated (100%) with no glide, pool, cascade, or 'other' habitat units present. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 1 are provided in Table 15. The dominant bed material for mainstem riffle habitat unit was cobbles while the dominant bed material for off channel habitat units was gravels. The dominant cover type for the mainstem riffle habitat unit was large woody debris, while dominant cover type for the off-channel riffle habitat units was overhanging vegetation. Spawning habitat across all habitat units was limited. While there is spawning substrate available throughout the reach it was in low volume and limited to isolated pockets along the waters edge. A moderate amount of rearing habitat was observed in the off-channel habitat units as they provide refuge from fast flows and more abundant cover.



A 547 m portion of Goathorn Creek Reach 2 was assessed as having 1 distinct riffle habitat unit for the entirety of the surveyed area. Detailed FHAP data was collected in this habitat unit on July 18, 2025. Riffle habitat dominated (100%) with no glide, pool, cascade, or 'other' habitat units present. Average wetted width, bankfull width, water depth, and gradient for the habitat unit assessed in reach 2 are provided in Table 15. The dominant bed material was cobbles with sub-dominant being gravel. The dominant cover type across the habitat unit was boulders, with subdominant cover being overhanging vegetation. Spawning habitat across the habitat unit was moderate, some appropriate spawning gravel for salmonids was present with adequate depth and flow. Rearing habitat was limited due to fast flows and deep water present.

A 504 m portion of Goathorn Creek Reach 3 was assessed as having 2 distinct units, including 1 riffle mesohabitat type for the mainstem and 1 riffle mesohabitat type for off channel habitat. Detailed FHAP data was collected in these habitat units on July 15, 2025. Riffle habitat dominated (100%) with no glide, pool, cascade, or 'other' habitat units present. Average wetted width, bankfull width, water depth, and gradients for the habitat unit assessed in reach 3 are provided in Table 15. The dominant bed material for all habitat units was cobbles. The dominant cover type for the mainstem riffle habitat unit was boulders, while dominant cover type for the off-channel riffle habitat unit was large woody debris. Spawning habitat across all habitat units was limited, appropriate substrate for salmonid spawning was observed infrequently during the survey and was limited to isolated pockets along the water's edge. Rearing habitat was limited across all habitat units due to lack of cover and refuge from high flows.

A 501 m portion of Goathorn Creek Reach 4 was assessed as having 6 distinct habitat units, including 1 riffle, 3 pools, and 2 cascade mesohabitat types. FHAP data was collected in these habitat units on July 15, 2025. Pool habitat dominated (50%) of the habitat units present, with smaller amounts of riffle (16.7%) and cascade (33.3%) habitat units. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 4 are provided in Table 15. The dominant bed material for pools and riffles habitat units was cobbles, and boulders for cascades habitat units. The dominant cover type varied between and within mesohabitat types and included boulders and deep pools. Spawning habitat across riffle habitat units was limited and only present in small pockets of gravel near the water's edge. Spawning habitat within pool and cascade habitat units was also limited to some appropriate gravel along the water's edge. Rearing habitat across riffle and cascade habitat units was limited due to a lack of cover and refuge from fast flows. Rearing habitat across pool habitat units was moderate with deep pools and boulders providing cover and refuge from fast flows.

Table 15: Habitat summary for Goathorn Creek

Site name	# of habitat Units	Avg. Wetted Width (m)	Avg. Bankfull Width (m)	Avg. Water Depth (m)	Avg. Grad. (%)	Dom. (sub. dom.) bed mat.	Relative Percent Riffle (%)	Relative Percent Glide (%)	Relative Percent Pool (%)	Relative Percent Cascade (%)
Reach 1	3	14.3	37.1	0.4	1.0	Cobbles (boulders)	100	0	0	0
Reach 2	1	9.6	13.9	0.4	2.0	Cobbles (boulders)	100	0	0	0
Reach 3	2	5.3	9.1	0.25	2.0	Cobbles (boulders)	100	0	0	0
Reach 4	6	5.7	8.7	0.51	2.5	Cobbles (gravel)	16.7	0	50	33.3



3.2.1.3 Four Creek

A 358 m portion of Four Creek Reach 1 was assessed as having 10 distinct habitat units, including 3 riffle, 3 glide, 2 cascade, and 2 'other' mesohabitat types. The other mesohabitat types consisted of a braided wetland and a completely dry channel. FHAP data was collected in these habitat units on July 18, 2025. Riffle (30%) and glide (30%) habitat both equally represented the habitat present, with smaller amounts of cascade (20%) and 'other' (20%) habitat. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 1 are provided in Table 16. The dominant bed material for riffles habitat units was cobbles, fines for glides habitat units, cobbles for cascades habitat units, and fines for 'other' habitat units. Dominant cover type varied between and within mesohabitat types, and included boulders, large woody debris, and overhanging vegetation. Spawning habitat across all habitat units was limited due to low volume of appropriate spawning substrate and shallow water depths. Rearing habitat across glide habitats units was moderate to abundant due to slow flows and a large volume of cover. Rearing habitat across riffle habitat units varied from limited to moderate, some habitat units had abundant cover while some had very limited cover. Rearing habitat within the 'other' braided wetland habitat unit was abundant as it provided a refuge from flow and abundant cover, while rearing habitat in the dry channel 'other' habitat unit was nonexistent.

A 421 m portion of Four Creek Reach 2 was assessed as having 19 distinct habitat units, including 10 riffle and 9 glide mesohabitat types. FHAP data was collected in these habitat units on July 16, 2025. Riffle habitat dominated (52.6%) with a smaller proportion of glide habitats (47.4%). Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 2 are provided in Table 16. The dominant bed material varied in riffle habitat units between cobbles and gravel; in glide habitats units the dominant bed material was gravel. The dominant cover type varied between riffle habitat units and consisted of overhanging vegetation, boulders, and small woody debris, while dominant cover type in glide habitat units was overhanging vegetation. Spawning habitat across riffle habitat units was limited due to lack of appropriate spawning substrate. Spawning habitat across glide habitat units was moderate, appropriate spawning gravel was present with adequate water depth. Rearing habitat varied from limited to moderate between riffle habitat units, some units provided cover and refuge from fast flows with some lacked cover and refuge from fast flows. Rearing habitat within glides habitat units was moderate, with abundant overhanging vegetation and refuge from fast flows. One glide habitat unit had limited rearing habitat due to a lack of cover.

A 459 m portion of Four Creek Reach 3 was assessed as having 7 distinct habitat units, including 4 riffle and 2 glide mesohabitat types. FHAP data was collected in these habitat units on July 19, 2025. Riffle habitat dominated (57.1%) with a smaller proportion of glide habitat (42.9%) present. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 3 are provided in Table 16. The dominant bed material in riffle habitat units was cobbles, while glide habitat units varied between cobbles and gravel. The dominant cover type across all habitat units was overhanging vegetation. Spawning habitat across all habitat units was limited due to a lack of appropriate spawning substrate and low flows, pockets of appropriate spawning substrate were present but did not have enough area coverage to facilitate spawning. Rearing habitat across the majority of habitat units was moderate, cover and refuge from flow was present. One glide habitat unit had abundant rearing habitat due to slow flow and abundant cover in the form of overhanging vegetation, high amount of functional woody debris, and undercut banks.

A 369 m portion of Four Creek Reach 4 was assessed as having 8 distinct habitat units, including 4 riffle and 4 glide mesohabitat types. FHAP data was collected in these habitat units



on July 17, 2025. Riffle habitat and glide habitat types were both equally represented at 50% each. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 4 are provided in Table 16. The dominant substrate type for riffle habitat units was cobbles and gravel for glide habitat units. Dominant cover type within riffle habitat units was boulders. Glide habitat units dominant cover varied and included overhanging vegetation and large woody debris. Spawning habitat across all habitat units was limited due to lack of appropriate spawning gravel and water depth, one glide habitat unit had abundant spawning substrate but during time of survey flows were too slow and water depth was too low to facilitate spawning. Rearing habitat across majority of habitat units was moderate, adequate cover and refuge from fast flows was present. One riffle habitat unit had limited rearing habitat due to high gradient making juvenile fish movement difficult.

A 411 m portion of Four Creek Reach 5 was assessed as having 7 distinct habitat units, including 4 glide, 2 riffle, and 1 cascade mesohabitat types. FHAP data was collected in these habitat units on July 17, 2025. Glide habitat dominated (57.1%) with a smaller amount of riffle (28.6%) and cascade (14.3%) habitat represented. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed in reach 5 are available in Table 16. The dominant bed material for glide habitat units varied and included gravels, cobbles, and fines. Riffle and cascade habitat units dominant bed material was cobbles. The dominant cover type varied between and within mesohabitat types, including boulders, overhanging vegetation, and undercut banks. Spawning habitat across all habitat units was limited due to a lack of appropriate spawning gravels and water depth. Rearing habitat in glide habitat units varied from limited to moderate depending on amount of cover observed, some units provided abundant cover. Rearing habitat in riffle and cascade habitat units was limited due to steep gradients potentially limiting juvenile fish movement.

Table 16: Habitat summary for Four Creek

Site name	# of habitat Units	Avg. Wetted Width (m)	Avg. Bankfull Width (m)	Avg. Water Depth (m)	Avg. Grad. (%)	Dom. (sub. dom.) bed mat.	Relative Percent Riffle (%)	Relative Percent Glide (%)	Relative Percent Pool (%)	Relative Percent Cascade (%)
Reach 1*	10	1.6	5.0	0.1	2.8	Fines (boulders)	30	30	0	20
Reach 2	19	1.7	3.4	0.1	2.5	Gravel (cobbles)	52.6	47.4	0	0
Reach 3	7	1.8	2.9	0.1	2.0	Cobbles (boulders)	57.1	42.9	0	0
Reach 4	8	1.5	2.7	0.1	3.1	Gravel (boulders)	50	50	0	0
Reach 5	7	1.5	2.7	0.1	3.7	Cobbles (boulders)	28.6	57.1	0	14.3

* Reach 1 had "other" habitat unit types present and not shown in the summary table.

3.2.2 Tenas Access Corridor

A 439 m survey was completed for site 1 of Helps Creek and was assessed as having 32 distinct habitat units, including 16 riffle and 16 glide mesohabitat types. FHAP data was collected in these habitat units on July 20, 2025. Riffle habitat and glide habitat types were both equally represented at 50% each. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed for site 1 are provided in Table 17. The dominant bed



material varied between gravels and cobbles for riffle habitat units. The dominant bed material varied between cobbles, gravels, and fines for glide habitat units. The dominant cover type across all habitat units was overhanging vegetation. Spawning habitat through all habitat units was limited due to fines underlying appropriate spawning substrate. Rearing habitat in riffle habitat units ranged from moderate to abundant, abundant cover and refuge from fast flows provided good rearing habitat. Rearing habitat across glide habitat units was abundant, abundant cover and slow flows provide excellent rearing habitat for juvenile fish.

A 626 m survey was completed for site 2 of Helps Creek and was assessed as having 9 distinct habitat units, including 5 riffle and 4 glide mesohabitat types. FHAP data was collected in these habitat units on August 21, 2025. Riffle habitat dominated (55.6%) with a smaller amount of glide habitat (44.4%) present. Average wetted width, bankfull width, water depth, and gradients for the habitat units assessed for site 1 are provided in Table 17. The dominant bed material varied between and within mesohabitat types, including cobbles, gravel, and fines. The dominant cover type across all habitat units was overhanging vegetation. Spawning habitat across all habitat units was limited by appropriate spawning substrate, appropriate size gravel observed was not well sorted from other sizes of substrate. Rearing habitat across all habitat units was moderate except for one glide, overhanging vegetation provided abundant cover, however faster flows and shallower depths reduce rearing habitat quality. One glide habitat unit provided abundant rearing habitat with abundant overhanging vegetation, adequate water depth, and slow flows.

Table 17: Habitat summary for Helps Creek

Site name	# of habitat Units	Avg. Wetted Width (m)	Avg. Bankfull Width (m)	Avg. Water Depth (m)	Avg. Grad. (%)	Dom. (sub. dom.) bed mat.	Relative Percent Riffle (%)	Relative Percent Glide (%)	Relative Percent Pool (%)
Site 1	32	1.7	3.6	0.1	1.4	Gravel (fines)	50	50	0
Site 2	9	2.5	3.6	0.1	2.1	Cobbles (gravels)	55.6	44.4	0



4.0 Goathorn Creek Tributary J247 Fish Habitat and Community Assessment

4.1 Methods

In June 2025, reconnaissance level habitat surveys were conducted by a team of two biologists in Goathorn Tributary J247. The purpose of these surveys was to provide a qualitative description of fish habitat within the tributary and determine fish presence above a potential steep gradient fish barrier identified during the 2024 habitat assessment, as approximately 200 m upstream from the confluence of Goathorn Creek. This Goathorn site was assessed as the location was recommended by the OW as a potential fish habitat offsetting project for the Tenas Project (Skeena Fisheries Commission, 2022).

Habitat surveys were completed in June and July during a historically high-flow period when it was expected fish would be seeking refuge within the smaller tributaries of Goathorn Creek. Each site was 100m in length and habitat was characterized using the Reconnaissance 1:20,000 Fish and Fish Habitat Inventory Protocol (RISC 2001). The following data were collected at each survey location:

- Bankfull width (m);
- Wetted width (m);
- Bankfull depth (cm);
- Water velocity (m/s) and depth (m) cross sections;
- Composition (%) of boulder, cobble, gravel, and fines substrate;
- Total cover for fish (%);
- Composition (%) of fish cover by type; and
- In situ water quality:
 - Water temperature (°C)
 - Dissolved oxygen (mg/L)
 - Specific conductivity (µS/cm)
 - pH.

Bankfull width, wetted width, and bankfull depth were measured at three to five transects, spaced approximately 2.5 m apart. Velocity-depth cross sections were measured at these same transects using a Hach FH950 Flow Meter and wading rod. In-situ measurements of stream temperature, dissolved oxygen, specific conductivity, and pH were measured using a YSI Pro DSS multimeter. Potential barriers to fish migration were recorded.

Reconnaissance level habitat survey data and in situ surface water data are provided in Appendix D, and site photos in Appendix E.



Table 18: Stream Habitat Survey Sites

Sample Month	Watercourse	Coordinates (UTM Zone 9U)	
		Easting	Northing
June	Goathorn Creek Tributary 1 (J247)	619702	6054923
July	Goathorn Creek Tributary 1 (J247)	619702	6054923

Open site, backpack electrofishing and minnow trapping were conducted in July 2025 where conditions were suitable in the survey area. Fish sampling was completed by a team of two biologists using a Smith Root LR24 backpack electrofisher. Minnow trapping used Gee style traps. Set time and date, pull time and date, number of traps, and trap location were recorded for each minnow sampling event.

A water sample was collected for eDNA analysis from a large pool found within the survey area. Sampling followed laboratory-provided standard sampling protocol, which involves collection of a water sample by submersion of a clean sample bottle in flowing water. Two water samples were collected, placed in an ice-filled cooler, then filtered to extract DNA. All collected samples were then filtered through a filter paper using a clean vacuum pump apparatus. This filter paper was preserved, labelled, and sent to the laboratory for analysis. Protocols for cleaning and minimizing the potential for cross-contamination were followed throughout the sample collection and preservation process, as described in laboratory provided sampling protocol.

Water samples collected for eDNA analysis included two field replicates. The eDNA samples were sent to Mérieux NutriSciences, a certified laboratory, for preservation and analysis and followed appropriate standard operating procedures. Each sample was tested for genetic material integrity using the IntegritE-DNA method, then analyzed for the presence of Pink Salmon, Chinook Salmon, Cutthroat trout, Mountain Whitefish, Coho Salmon, Rainbow Trout genetic material. A general assay was also completed for general fish presence (non-species specific)

4.2 Results

Goathorn Creek Tributary 1 (J247) had an average bankfull depth of 0.37 m. The dominant substrate consisted of fines, with cover provided by overhanging vegetation, small woody debris, and a large pool. Pools occurred intermittently throughout the survey reach and were not hydraulically connected by surface flow. Stream gradient declined from approximately 8% at the upstream end to 0.5% downstream. A culvert was located approximately 25 m upstream of the survey start. A large pool (0.39 m deep) had formed upstream of the culvert; however, it was too deep and dark for effective electrofishing and was revisited July 2, 2025 for additional fish sampling. One pass of electrofishing was completed in all pools that were present and safe to sample (Table 19). No fish were detected in the pools within the survey reach.



Table 19: Electrofishing summary for Goathorn Tributary J247

Watercourse	Pass	EF Seconds	RB		DV		CO	
			#	CPUE	#	CPUE	#	CPUE
J247	1	450	-	-	-	-	-	-

The crew returned to the large pool above the culvert in J247 July 2, 2025, to collect eDNA samples and set overnight minnow traps. Water samples for eDNA analysis were collected prior to setting traps. No fish were observed nor captured in the minnow traps (Table 20). Samples were sent to Mérieux NutriSciences and analyzed for presence of Pink Salmon, Chinook Salmon, Cutthroat trout, Mountain Whitefish, Coho Salmon, Rainbow Trout genetic material. A general assay was also completed for general fish presence (non-species specific). All assays came up negative which corroborated results of electrofishing and minnow trapping. The full lab report for eDNA analysis is provided in Appendix F.

Table 20: Minnow trapping summary for Goathorn Tributary J247

Watercourse	Set date	Set Time	Pull date	Pull Time	Number of Traps	Fish Caught	CPUE
J247	02/07/2025	15:25	03/07/2025	15:00	12	-	-

5.0 Reconnaissance Fall Spawning Surveys

The presence and timing of Pink, Chinook, and Coho migration and/or spawning in Goathorn Creek and Tenas Creek is currently unknown. These species have been documented in the surrounding Bulkley and Telkwa River. Coho Salmon spawning in the Telkwa River occurs in late October to mid-November (Bustard 1983a). Chinook and Pink Salmon were predicted to be spawning within the upper Bulkley area in mid-August to late September (Bustard, D. 1983b; Wilson, T & Rabnett, K, 2007). Previous spawning surveys conducted for the project did not observe salmon spawning, however those surveys were short in duration and were limited to October (ERM 2019, SLR 2025). The objective of this survey was to conduct reconnaissance bank walks over an extended period and at different periods during the spawning season to document the presence of Coho, Pink, and Chinook salmon in Goathorn, Tenas, and Helps Creeks. The presence of spawning Dolly Varden was also recorded if and when observed. Four Creek was surveyed for evidence/observations of Dolly Varden spawning. Survey locations were chosen based on the 2025 Critical Spawning Habitat Program results.

5.1 Methods

Three fall spawner survey trips were conducted in Goathorn Creek, Tenas Creek, and Helps Creek between August and November 2025, when Chinook Salmon, Pink Salmon, Coho Salmon, and Dolly Varden were predicted to be migrating and spawning. Surveys were conducted via a visual survey (bank walk) and UAV flights.

The spawner surveys were completed for a minimum of 500m within each reach of Goathorn Creek, Four Creek, and Tenas Creek. Helps Creek had two sites, one located between Lawson Road/Telkwa-Houston FSR and the Bulkley River confluence and the second at the proposed Bypass Road (Tenas Access Corridor) bridge crossing (Figure 18). The field crew walked the banks of the creek and recorded observations of spawning activity (i.e., spawning fish, dead spawners, and redds). High density spawning areas were designated where a high density of



spawning fish or redds were observed in one location. High density spawning areas were defined as 5+ redds or 10+ spawners in one location. Suitable spawning habitat features, including spawning substrate, fish cover, and potential fish holding areas, were also identified. UAV flights were used to expand survey lengths within each reach. The UAV footage was reviewed for evidence of spawning activity, potential holding areas, and potential resting areas. UAV footage was captured for most sites for the August and September trips, however high winds and equipment failure during the October trip inhibited UAV usage during those surveys and footage was not collected.

Observer efficiency estimates were derived by comparing visibility in open stream sections to areas where visibility was hindered by instream cover like logs or boulders, as well as overhead canopy cover. Individual estimates were then compared among observers, leading to a consensus on the overall estimate. The overall estimate is provided as a percentage of the total area of the creek that the surveyors were able to visual survey for spawning salmonids.

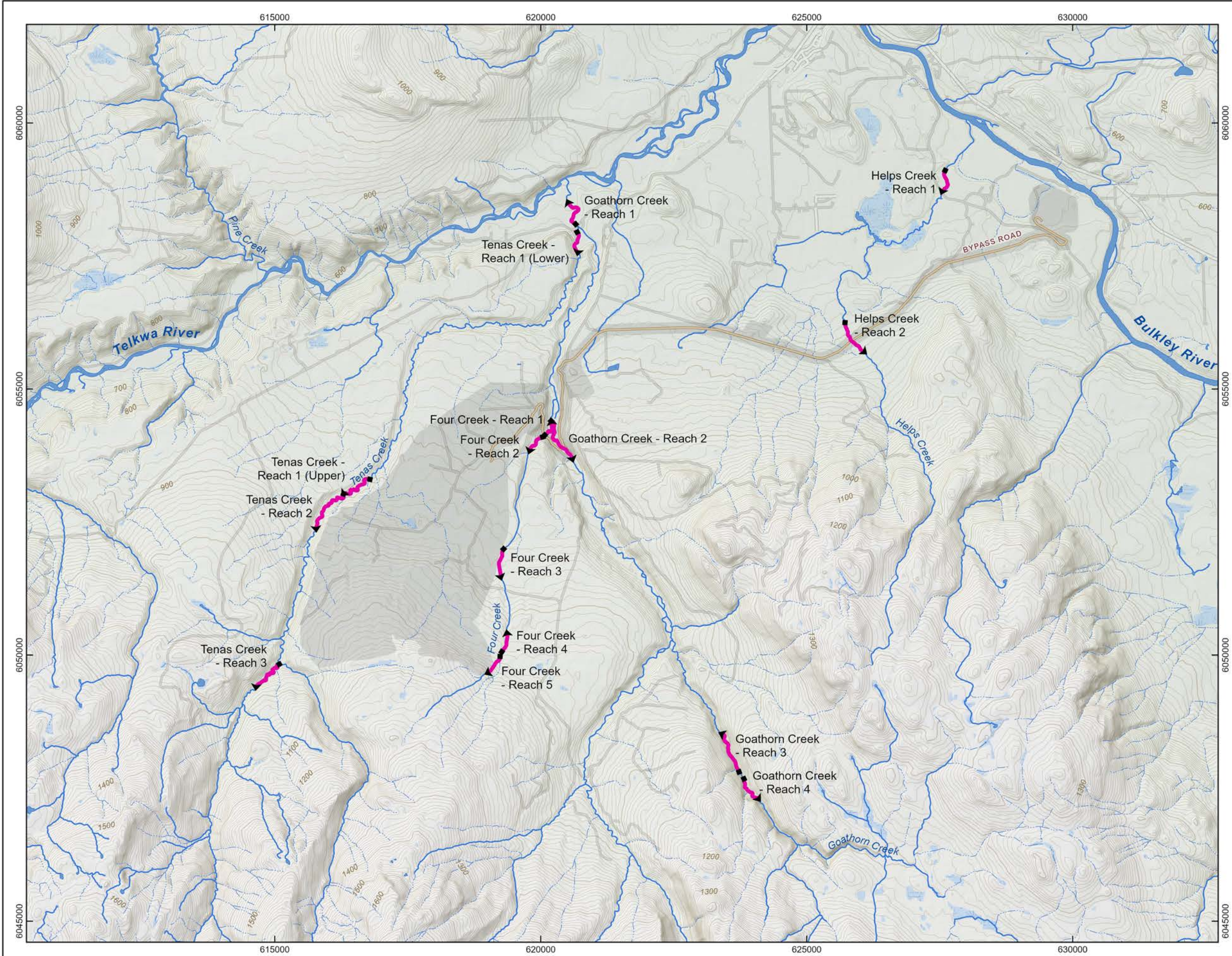
5.1.1 eDNA Methods

Water samples were collected for environmental DNA (eDNA) analysis in reach 2 of Goathorn Creek and reach 2 of Tenas Creek. eDNA refers to the genetic material shed by fish into their environment and can be used to detect the presence of fish.

Sampling followed laboratory-provided, standard sampling protocols, which involves collection of a water sample by submersion of a clean sample bottle in flowing water. Each sample was collected, placed in an ice-filled cooler, then filtered to extract DNA. All collected samples were then filtered through a filter paper using a clean vacuum pump apparatus. The filter paper was preserved, labelled, and sent to the laboratory for analysis. Protocols for cleaning and minimizing the potential for cross-contamination were followed throughout the sample collection and preservation process, as described in laboratory provided sampling protocols.

Water samples collected for eDNA analysis included one field replicate, and a trip blank for QA/QC purposes. eDNA samples were sent to Mérieux NutriSciences, a certified laboratory, for preservation and analysis following the appropriate standard operating procedures. Each sample was tested for genetic material integrity using the IntegritE-DNA method, then analyzed for the presence of Pink Salmon, Coho Salmon, and Rainbow Trout genetic material. A general assay was also completed for general fish presence (non-species specific).





KEY MAP

LEGEND

- Spawner Survey
- Watercourse¹
- Intermittent or Indeterminate Watercourse¹
- Proposed Bypass Road
- Paved Road²
- Resource Road²
- Wetland¹
- Proposed Project Footprint

1 - BC Freshwater Atlas
2 - BC Digital Road Atlas (for clarity, not all roads displayed)

0 1 2 3 4
KILOMETRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:70,000
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: May 6, 2026

Source Notes:
Base map data provided by Natural Resources Canada (CanVec, CDEM) and The Government of British Columbia (BC Freshwater Atlas, Digital Road Atlas). Contour interval is 10 metres (minor) and 100 metres (major). All elevations in metres above sea level.

NORTH

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	Fall Spawner Survey Sites	
	REF. NO.	2404901-MR-025-02
	Figure 18	REV. A

5.2 Results

5.2.1 Goathorn Creek, Tenas Creek, and Four Creek

Water clarity and weather conditions were good for visual observations during bank walk surveys in Goathorn Creek, Tenas Creek, and Four creek (i.e., low turbidity, wetted depth less than 1 m, sufficient sunlight, and no precipitation), and observer efficiency averaged approximately 67% for bank walks. UAV observer efficiency was highest in Goathorn Creek reach 1 at 50% during the surveys. For all other reaches where UAV survey was conducted observer efficiency was reduced to 25% due to overhanging vegetation and light reflecting off the water. Bank walk surveys therefore provided the best visibility.

In situ water quality was collected prior to each survey and results are summarized in Table 21. High turbidity levels in Four Creek were observed on two occasions, August 31 and September 19, however that did not hinder observer efficiency. Across the study area, water temperature ranged from 8.7-15.8 degrees Celsius for the August trip, 5.4-10.3 for the September trip, and 0.1-2.7 for the October trip. In situ water quality data are provided in Appendix G.

Table 21: Mean water quality values for each creek surveys per trip

Stream	Temp. (°C)	pH	DO (mg/L)	DO (%)	Specific conductivity (µS/cm)	Conductivity (µS/cm)	Turbidity (NTU)
August 28 – September 3							
Tenas Creek	11.3	8.0	10.2	93.2	151.6	112.2	0.6
Goathorn Creek	11.8	7.4	9.7	89.9	136.2	104.5	0.5
Four Creek	10.2	7.8	9.5	84.5	304.0	217.9	3.9
September 19 – September 26							
Tenas Creek	7.5	7.7	10.5	86.7	170.2	113.2	2.2
Goathorn Creek	7.8	7.1	10.8	91.0	157.4	105.6	0.9
Four Creek	7.5	7.7	10.4	86.8	317.5	211.4	0.4*
October 27 – November 3							
Tenas Creek	0.7	7.9	13.0	90.9	153.3	82.0	0.5
Goathorn Creek	0.9	7.7	12.9	90.4	145.5	78.7	0.5
Four Creek	0.7	8.0	12.4	86.0	258.1	138.2	0.1
* High turbidity event removed from mean turbidity calculation							



Visual spawner surveys were completed for a minimum of 500 meters within each reach of Goathorn Creek, Tenas Creek, and Four Creek. Pink Salmon spawners were observed in Goathorn Creek reach 1 and Tenas Creek reach 1. Five surveys were completed between August 29 and November 3, 2025 in reach 1 of Goathorn Creek. 259 live Pink Salmon spawners were observed in total, with 114 observed on September 18 (Table 22).

Table 22: Goathorn Reach 1 Visual Observation Results Summary for Pink Salmon

Date	Total Live	Total Dead	Redds
29-08-2025	101	0	5
18-09-2025	144	162	80
24-09-2025	14	70	90
27-10-2025	0	20	0
03-11-2025	0	0	0

Spawning surveys were conducted at two separate, 500 m long locations in Tenas Creek Reach 1 (Figure 18). The Critical Spawning Program determined the upper extent of Tenas Creek reach 1 was impacted by beaver dams and lacked appropriate spawning habitat. Consequently, spawning survey efforts in the fall program focused on lower Tenas Reach 1 which contained more suitable salmonid spawning habitat. Five surveys were completed between August 28 and November 3 in the lower reach 1 site of Tenas Creek. Forty-five live Pink Salmon were observed in total, with highest number (35) observed on September 19 (Table 23).

Table 23: Tenas Reach 1 Lower Visual Observation Results Summary for Pink Salmon

Date	Total Live	Total Dead	Redds
28-08-2025	0	0	0
19-09-2025	35	40	6
24-09-2025	10	10	23
27-10-2025	0	0	0
03-11-2025	0	0	0

Dolly Varden spawners were not observed in abundance during the spawning surveys. One large Dolly Varden (estimated between 20-30 cm in length) migrating upstream was observed in Tenas upper reach 1 on September 26. 2 Dolly Varden (estimated between 10-15 cm in length) were observed in Four Creek reach 5 on October 31, holding together over appropriate spawning gravel. However, no active Dolly Varden spawning or redds were observed.

Chinook and Coho salmon were not observed in Tenas Creek or Goathorn Creek during the visual or UAV surveys. Data for all visual spawner surveys completed can be found in Appendix H.

High density spawning areas for Pink Salmon were found solely in Goathorn Reach 1. Six locations were identified as having 5+ redds or 10+ spawners. These locations are shown in Figure 19. A total of 50 redds were observed throughout the fall spawning program, with the highest number of redds observed at site 4 in reach 1 of Goathorn Creek (Table 24). Dominant



substrates for site 2-6 were gravel, while site 1 was cobbles. Further habitat details can be found in Section 3.2 and Appendix C.

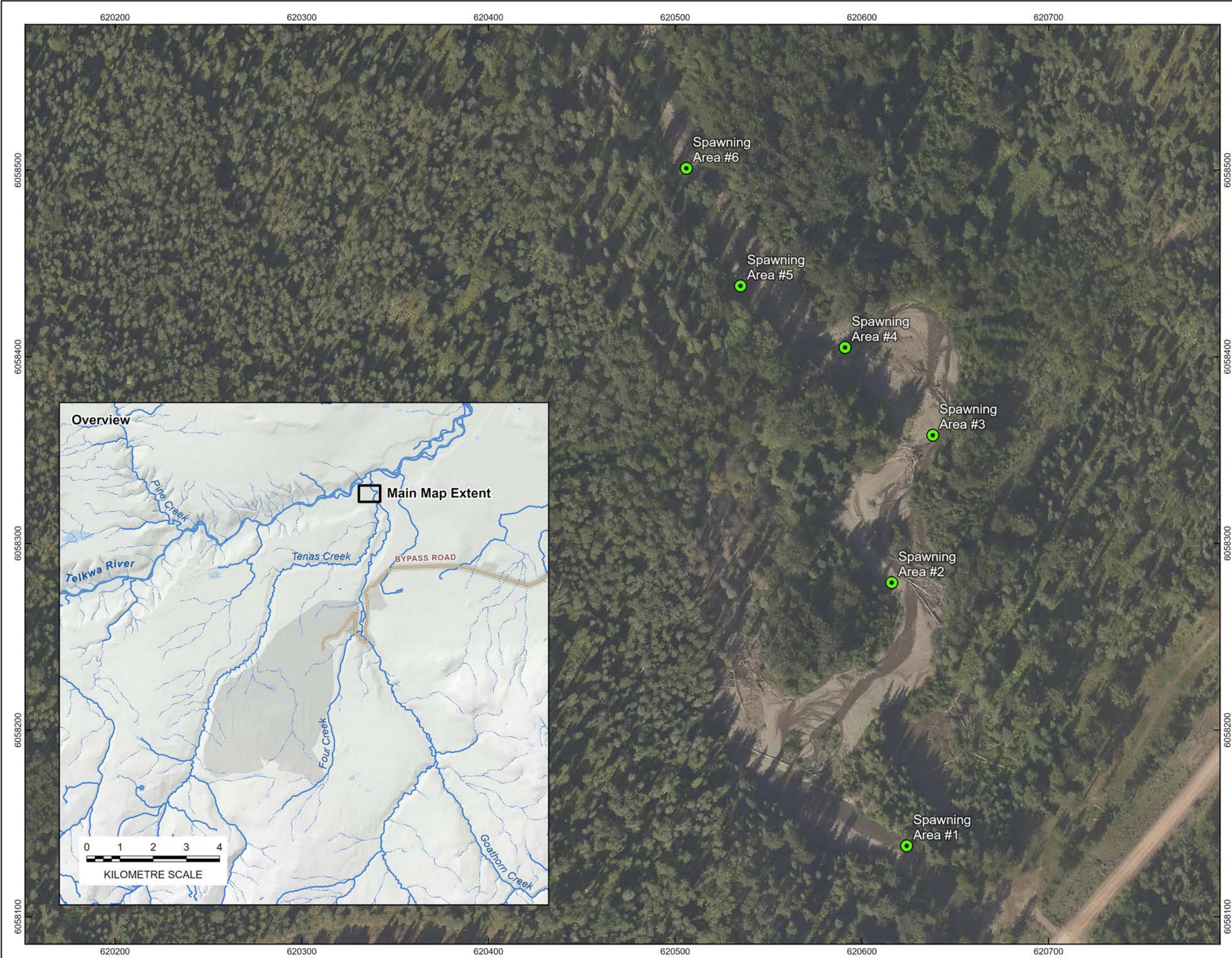
Table 24: Goathorn Reach 1 High Density Spawning Area Summary

Spawning Area #	UTM easting	UTM Northing	Redd Count
1	620624	6058138	8
2	620616	6058279	7
3	620638	6058358	10
4	620591	6058405	12
5	620535	6058438	6
6	620506	6058501	7

5.2.1.1 eDNA Sampling Results

Water samples were collected for eDNA analysis at two sites; one in Goathorn Reach 2 and one in Tenas Reach 2. These analyses aimed to test for upstream extents of Coho Salmon, Chinook Salmon, and Pink Salmon. All assays for salmon DNA came up negative. The full lab report can be found in Appendix I.





KEY MAP

LEGEND

High Density Spawning Area

0 25 50 75 100

METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:2,000
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: May 6, 2026

Source Notes:
Imagery (2017) provided by Telkwa Mining Limited. Overview base map data provided by Natural Resources Canada (CanVec, CDEM) and The Government of British Columbia (BC Freshwater Atlas).

NORTH

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	High Density Spawning Areas	
	REF. NO. 2404901-MR-025-03	
	Figure 19	REV. A

5.2.2 Tenas Access Corridor

Three separate spawning surveys were completed in Helps Creek in 2025: August 28 to September 3, September 29 to September 26, and October 27 to November 3. Water clarity and weather conditions were good for visual observations during bank walk surveys in Helps Creek (i.e., low turbidity, wetted depth less than 1 m, sufficient sunlight, and no precipitation), and observer efficiency averaged approximately 57.5% for bank walks. Water depth in Helps Creek site 1 increased substantially during the October survey and reduced observer efficiency to 35% during the bank walk. UAV observer efficiency along Helps Creek was reduced to 20% during the survey due to abundant overhanging vegetation. Bank walk surveys therefore provided the best visibility.

In situ water quality was collected prior to each survey and results are summarized in Table 25. The mean water temperature in Helps Creek was 12.3°C during the August trip, 7.9°C during the September trip, and 2.55 °C during the October trip. In situ water quality data are provided in Appendix G.

Table 25: Mean Water Quality Values for Helps Creek Surveys Per Trip

Stream	Temp. (°C)	pH	DO (mg/L)	DO (%)	Specific conductivity (µS/cm)	Conductivity (µS/cm)	Turbidity (NTU)
August 28 – September 3							
Helps	12.3	8.2	7.7	71.9	224.1	168.9	3.5
September 19 – September 26							
Helps	7.9	6.8	7.6	73.9	265.9	178.5	1.1
October 27 – November 3							
Helps	2.5	7.6	11.6	85.1	211.7	120.7	1.0

No spawners of species were observed during the bank walk or UAV surveys in Helps Creek. Data for all visual spawner surveys completed can be found in Appendix H.

The lower site on Helps Creek was not considered to be suitable habitat for salmon spawning, as no appropriate spawning gravel was found. The upper site on Helps Creek was not considered to have appropriate spawning habitat. Small patches of appropriate substrate were present, however, it was not well sorted and had large substrate incorporated. Detailed habitat descriptions can be found in Section 3.2 and Appendix C.

5.2.2.1 eDNA Sampling Results

Water samples were collected for eDNA analysis at Helps Creek site 2 to test for the upstream extent of Coho Salmon, Chinook Salmon, and Pink Salmon. Samples were sent to Mérieux NutriSciences and analyzed for presence of Pink Salmon, Chinook Salmon, and Coho Salmon genetic material. All assays came up negative. The full lab report is provided in Appendix I.



6.0 Bulkley River and Telkwa River Fish Habitat and Community Desktop Review

A desktop review of publicly available databases was completed for the Bulkley and Telkwa River (Habitat Wizard, EcoCat, iMapBC). The relevant documents pertaining to fish and fish habitat within the Bulkley and Telkwa River watersheds, surrounding the project site, including the existing conditions report completed by ERM in 2019, were reviewed.

One site on the Bulkley River (Figure 1) was characterized using the Reconnaissance 1:20,000 Fish and Fish Habitat Inventory Protocol (RISC 2001) by two SLR biologist on July 21, 2025. Methods for this survey follow the same as those described in Section 4.1. No fish sampling was completed as fish community within the Bulkley River is well studied. The purpose of this field survey was to provide a qualitative description of fish habitat within the Bulkley River around the proposed rail infrastructure site and aid filling in information gaps of the desktop review.

Table 26. Bulkley River Fish Habitat and Community Site Location

Sample Month	Watercourse	Coordinates (UTM Zone 9U)	
		Easting	Northing
July	Bulkley River	629556	60590991

6.1 Results

Historical fish habitat data found during the desktop review was limited either to the tributaries of the Bulkley and Telkwa River or areas too far away to consider relevant to the study area. Therefore, habitat information is limited to the baseline study conducted by ERM in 2017 – 2018. Historical fish species presence was accessible through the BC Ministry of Environment Habitat Wizard tool.

6.1.1 Telkwa River

Two sites within the Telkwa River were surveyed using the Reconnaissance 1:20,000 Fish and Fish Habitat Inventory Protocol (RISC 2001) methods to describe fish and fish habitat both upstream and downstream of the Telkwa River's confluence with Goathorn Creek (ERM 2019). Channel width ranged from 35m – 45m for both surveyed areas. At both sites surveyed rearing habitat was considered good with boulders providing the dominant cover type. Substrate within both sites was cobble (dominant) with boulder (sub-dominant). Spawning habitat for salmonids was considered fair upstream of the Goathorn Creek confluence, and high quality downstream of the confluence. Over wintering in this area was considered fair as there were few areas of slow flows and deep pools (ERM 2019).

Fish community sampling was conducted in 2017 and 2018 as part of the baseline study completed by ERM (ERM 2019). The 2017 study captured Coho Salmon, Dolly Varden, Steelhead/rainbow trout, and mountain whitefish. The 2018 study captured Coho salmon, Dolly Varden, and steelhead/rainbow trout (ERM 2019). These findings are relatively consistent with historical data which shows historical presence of Chinook Salmon, Coho Salmon, Dolly Varden, mountain whitefish, peamouth chub, pink salmon, rainbow/steelhead salmon, and sucker (general) (*Catostomus sp*) (B.C. Ministry of Environment 2025).



6.1.2 Bulkley River

During the Baseline study conducted between 2017-2018, two sites within the Bulkley River were surveyed using the Reconnaissance 1:20,000 Fish and Fish Habitat Inventory Protocol (RISC 2001) methods to describe fish and fish habitat both upstream and downstream of the Bulkley River confluence with the Telkwa River (ERM 2019). The Bulkley River is a large S1 stream and channel width was approximately 120 m within the study area. Across both sites, the dominant substrate type was gravel with cobbles as subdominant. Spawning habitat is considered good at the upstream site as there is appropriate substrate for salmon spawning. Downstream of the confluence with the Telkwa River is considered a critical spawning location with abundant spawning gravel. Both sites had limited in rearing habitat, due to a lack of cover for small fish. However, some rearing opportunities were present in back-channel sloughs. Overwintering habitat is limited upstream of the confluence due to a lack of deep pools. The site downstream of the confluence with Telkwa River was considered good overwintering habitat as it had enough depth in the mainstem to provide refuge in the winter (ERM 2019).

SLR completed a Reconnaissance 1:20,000 Fish and Fish Habitat Inventory Protocol (RISC 2001) for a 770m length of the river further upstream, located near the proposed rail infrastructure (Figure 1). Stream width ranged from 132m – 171m in the survey area. Substrate type was cobble (dominant) and boulder (subdominant). Rearing habitat was limited due to a lack of cover for small fish. During the survey, high turbidity in stream made it difficult to see spawning habitat quality, however, patches of well sorted spawning gravel were observed along the river edges. Overwintering was not assessed due to limited visibility and water depth. The completed site card can be found in Appendix J.

Fish community sampling was conducted in 2017 and 2018 as part of the baseline study completed by ERM (ERM 2019). In 2017 Coho salmon, Lamprey (general), Steelhead/rainbow trout, sucker (general) were captured/observed. In 2018 Chinook salmon, Dolly Varden, Lamprey (general) (*Lampetra sp*), Longnose sucker (*Catostomus Catostomus*), Minnow (general), Northern Pikeminnow (*Ptychocheilus oregonensis*), Steelhead/rainbow trout, Sucker (general), and White Sucker (*Catostomus commersoni*) were captured (ERM 2019). Historical data indicates the presence of Bull trout (*Salvelinus confluentus*), burbot (*Lota lota*), Chinook Salmon, Chum salmon (*Oncorhynchus keta*), Coastrange sculpin (*Cottus aleuticus*), Coho salmon, cutthroat trout, Dolly Varden, Lake Chub (*Couesius plumbeus*), Lake trout (*Salvelinus namaycush*), Lake whitefish (*Coregonus clupeaformis*), Lamprey (general), Large scale sucker (*Catostomus macrocheilus*), Longnose Dace (*Rhynchithys cataractae*), Longnose Sucker (*Catostomus Catostomus*), Mountain white fish, pacific lamprey (*Lampetra tridentata*), peamouth chub, pink salmon, prickly sculpin (*Cottus asper*), steelhead/rainbow trout, Sucker (general), Sockeye salmon (*Oncorhynchus nerka*), Three spine stickleback (*Gasterosteus aculeatus*), and white sucker in the Bulkley River (B.C. Ministry of Environment. 2025).



7.0 Conclusion and Recommendations

Information provided in this report is intended to provide a characterization of fish and fish habitat within the Tenas Project area watercourses: Tenas Creek, Goathorn Creek, Four Creek, and Helps Creek. The study confirms that fish communities are dominated by Rainbow Trout/Steelhead and Dolly Varden, with observations of Coho Salmon and Pink Salmon, and evidence of pink salmon spawning in lower Goathorn Creek. Rainbow Trout/Steelhead are widely distributed across all surveyed creeks. Dolly Varden are present in Tenas, Goathorn, and Four Creeks, with an isolated population above a hanging culvert in Four Creek. Fish distribution and upstream limits of fish presence are constrained by natural and anthropogenic barriers within the watershed. No fish were detected above the "chute" in Goathorn Reach 4, nor above the waterfall (15 km upstream) in Tenas Creek, through electrofishing or eDNA.

Habitat assessments indicate spawning habitat is generally limited and patchily distributed across the study area, with moderate-quality spawning substrates occurring only in select reaches (e.g., lower Tenas Creek Reach 1 and portions of Goathorn Creek). Rearing habitat is similarly variable, with higher-quality habitats associated with off-channel areas, pools, and structurally complex features. Fish abundance and density metrics demonstrate relatively low to moderate productivity consistent with small, gradient-controlled systems. Fish condition metrics generally fall within expected ranges, suggesting that current habitat conditions are not limiting growth at a population level.

Importantly, the baseline dataset establishes quantitative benchmarks for key indicators including fish abundance (CPUE, density), size structure, condition (relative weight), and habitat availability. These parameters provide an appropriate foundation for future environmental assessment, effects prediction, and the design of an Aquatic Effects Monitoring Program (AEMP).

From a regulatory perspective, the results highlight that the Project interacts with fish-bearing watercourses that support regionally important salmonid species, albeit with constrained spawning capacity. Consistent with the environmental assessment submitted for the project, future permitting should consider demonstration of avoidance, mitigation, and offsetting of potential effects to fish and fish habitat, supported by an effects-based monitoring framework.

Ongoing fish tissue sampling is recommended at compliance sites in Tenas, Goathorn, and Four Creeks to update the dataset originally collected for the environmental assessment (EA). Establishing current baseline fish tissue data will be critical for long-term monitoring as part of an aquatic effects monitoring program. In addition, further baseline data collection is required to support targeted monitoring of Dolly Varden and associated fish habitat in Four Creek. This information will help detect potential changes in habitat conditions linked to alterations in the flow regime and will inform adaptive management processes established in a Fisheries Act authorization. Together, these efforts will support evidence-based decision-making and help ensure that any emerging effects on fish and fish habitat are identified and addressed in a timely manner.



8.0 Closure

This report was prepared, reviewed, and approved by the undersigned.

Regards,

SLR Consulting (Canada) Ltd.



Christian Lackey, R.P.Bio.
Fisheries Biologist



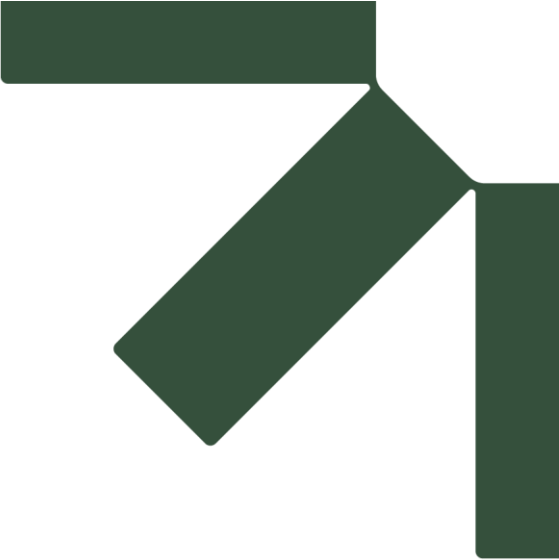
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9.0 References

- B.C. Ministry of Environment (MoF). 2025. Habitat Wizard [web application]. Victoria, B.C.
Available: <http://www.env.gov.bc.ca/habwiz/> (November 30, 2025).
- Bustard, D. 1983a. 1982 Investigations of Adult Coho Salmon in the Telkwa River, Smithers, BC. Produced by Dave Bustard and Associates for Crowsnest Resources Ltd.
- Bustard, D. 1983b. 1982 Investigations of adult pink salmon in the Telkwa River. Produced for READ Environmental & Planning Associates Ltd.
- Clawson, C.M. 2024. Aquatic Biomonitoring at Red Dog Mine. 2023. Alaska Department of Fish and Game No. 24-04. Fairbanks. Alaska. 94pp. Available online at: [ADF&G Technical Report No. 24-04: Aquatic Biomonitoring at Red Dog Mine 2023 \(alaska.gov\)](#).
- Clawson, C.M. 2023. Aquatic Biomonitoring at Red Dog Mine. 2022. Alaska Department of Fish and Game No. 23-02. Fairbanks. Alaska. 101pp. Available online at: [ADF&G Technical Report 23-02: Aquatic Biomonitoring at Red Dog Mine, 2022 \(alaska.gov\)](#).
- Clawson, C.M. 2022. Aquatic Biomonitoring at Red Dog Mine, 2021. Alaska Department of Fish and Game No. 23-02. Fairbanks. Alaska. 102pp. Available online at: [ADF&G Technical Report 22-01: Aquatic Biomonitoring at Red Dog Mine, 2021 \(alaska.gov\)](#).
- Environment Canada. 2012. Metal Mining Technical Guidance for Environmental Effects Monitoring. Available online at: <https://www.ec.gc.ca/eseeem/default.asp?lang=En&n=aec7c481-1>. 550pp.
- ERM. 2019. Tenas Project 2017 to 2018 Baseline Report. Prepared by ERM. Prepared for Telkwa Coal Ltd.
- Legere, N.M. and J. Timothy. 2016. Tulsequah Chief acid mine drainage and Dolly Varden char whole body metal concentrations. Alaska Department of Fish and Game. Technical Report No. 16-06. Douglas. Alaska. 368pp. Available online at: [Tulsequah Chief acid mine drainage and Dolly Varden char whole body metals concentrations \(alaska.gov\)](#).
- RISC. 2001. Reconnaissance (1:20,000) Fish and Fish Habitat Inventory: Standards and Procedures, version 2.0.
- Simpkins, D.G. and W.A. Hubert. 1996. Proposed Revision of the Standard Weigh Equation for Rainbow Trout. J. Fresh. Ecol. 11 (3).
- Skeena Fisheries Commission. 2022. Fish and Fish Habitat and the Tenas Coal Project: Current Status and Potential Impacts to Wet'suwet'en Interests. Prepared for the Office of the Wet'suwet'en.
- SLR. 2025. Tenas Project 2024 Fish and Fish Habitat Technical Report. Prepared by SLR. Prepared for Telkwa Mining Ltd.
- Telkwa Coal Ltd. (TCL). 2022. BC EAO Application -- Tenas Project. Submitted to the BC EAO in May 2022.
- Wilson, T., and Rabnett, K. 2007. Fish Passage Assessment of Highway 16 and CN Rail in the Bulkley River Watershed. Prepared by Skeena Fisheries Commission.





Appendix A Fish Catch Data

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Appendix A: Fish Catch Data

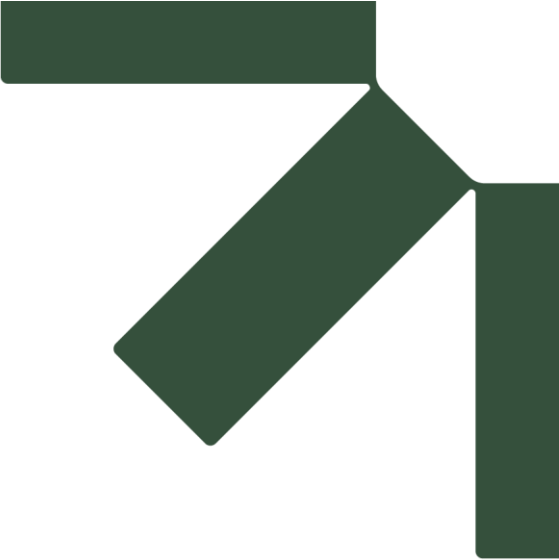
Date	Watercourse	Reach	Pass #	Species	Catch count	Measured Count	Gear	Seconds
23-Aug-25	Tenas Creek	1	1	DV	5	5	EF	1300
23-Aug-25	Tenas Creek	1	1	CO	3	3	EF	1300
23-Aug-25	Tenas Creek	1	1	RB	31	30	EF	1300
23-Aug-25	Tenas Creek	1	2	RB	23	3	EF	1315
23-Aug-25	Tenas Creek	1	2	DV	2	2	EF	1315
23-Aug-25	Tenas Creek	1	2	CO	2	2	EF	1315
23-Aug-25	Tenas Creek	1	3	RB	15	1	EF	1201
23-Aug-25	Tenas Creek	1	4	DV	3	3	EF	1120
23-Aug-25	Tenas Creek	1	4	RB	9	0	EF	1120
24-Aug-25	Tenas Creek	2	1	DV	12	12	EF	1917
24-Aug-25	Tenas Creek	2	1	RB	30	30	EF	1917
24-Aug-25	Tenas Creek	2	2	DV	4	4	EF	1895
24-Aug-25	Tenas Creek	2	2	RB	9	3	EF	1895
24-Aug-25	Tenas Creek	2	3	DV	3	3	EF	1917
24-Aug-25	Tenas Creek	2	3	RB	5	0	EF	1917
24-Aug-25	Tenas Creek	2	4	DV	2	2	EF	1630
24-Aug-25	Tenas Creek	2	4	RB	1	0	EF	1630
23-Aug-25	Tenas Creek	3	1	DV	14	14	EF	1267
23-Aug-25	Tenas Creek	3	1	RB	4	4	EF	1267
23-Aug-25	Tenas Creek	3	2	DV	7	7	EF	1216
23-Aug-25	Tenas Creek	3	2	RB	6	6	EF	1216
23-Aug-25	Tenas Creek	3	3	DV	4	4	EF	1197
23-Aug-25	Tenas Creek	3	3	RB	2	2	EF	1197
23-Aug-25	Tenas Creek	3	4	DV	4	4	EF	1150
29-Aug-25	Helps Creek	1	1	CO	20	20	EF	1460
29-Aug-25	Helps Creek	1	1	RB	22	22	EF	1460
29-Aug-25	Helps Creek	1	2	CO	11	10	EF	1550
29-Aug-25	Helps Creek	1	2	RB	17	17	EF	1550
29-Aug-25	Helps Creek	1	2	L	3	3	EF	1550
29-Aug-25	Helps Creek	1	3	CO	6	0	EF	1390
29-Aug-25	Helps Creek	1	3	RB	9	0	EF	1390
29-Aug-25	Helps Creek	1	3	LKC	1	1	EF	1390
29-Aug-25	Helps Creek	1	3	L	1	1	EF	1390
23-Aug-25	Helps Creek	2	1	RB	21	21	EF	924
23-Aug-25	Helps Creek	2	2	RB	12	9	EF	894
23-Aug-25	Helps Creek	2	3	RB	12	0	EF	862
23-Aug-25	Helps Creek	2	4	RB	2	0	EF	878
28-Aug-25	Goathorn Creek	1	1	DV	2	2	EF	2825
28-Aug-25	Goathorn Creek	1	1	RB	15	15	EF	2825
28-Aug-25	Goathorn Creek	1	2	RB	18	14	EF	2755
28-Aug-25	Goathorn Creek	1	3	RB	8	1	EF	2848
28-Aug-25	Goathorn Creek	1	4	RB	6	2	EF	2736
28-Aug-25	Goathorn Creek	2	1	DV	5	5	EF	1907
28-Aug-25	Goathorn Creek	2	1	RB	5	5	EF	1907
28-Aug-25	Goathorn Creek	2	2	DV	1	1	EF	1925



Appendix A: Fish Catch Data

Date	Watercourse	Reach	Pass #	Species	Catch count	Measured Count	Gear	Seconds
28-Aug-25	Goathorn Creek	2	2	RB	6	6	EF	1925
26-Aug-25	Goathorn Creek	3	1	DV	4	4	EF	1575
26-Aug-25	Goathorn Creek	3	1	RB	4	4	EF	1575
26-Aug-25	Goathorn Creek	3	2	DV	3	3	EF	1579
26-Aug-25	Goathorn Creek	3	2	RB	3	3	EF	1579
26-Aug-25	Goathorn Creek	3	3	DV	2	2	EF	1512
26-Aug-25	Goathorn Creek	3	3	RB	1	1	EF	1512
26-Aug-25	Goathorn Creek	4	1	DV	5	5	EF	1175
26-Aug-25	Goathorn Creek	4	1	RB	15	15	EF	1175
26-Aug-25	Goathorn Creek	4	2	DV	2	2	EF	1136
26-Aug-25	Goathorn Creek	4	2	RB	8	8	EF	1136
26-Aug-25	Goathorn Creek	4	3	DV	1	1	EF	1165
26-Aug-25	Goathorn Creek	4	3	RB	6	1	EF	1165





Appendix B Individual Fish Data

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Appendix B: Individual Fish Data															
Date	Watercourse	Reach	Capture Method	Equipment	Species	Fork Lenth (mm)	Total Length (mm)	Log Length (mm)	Weight (g)	Log Weight (g)	Log Standard Weight (g)	Standard Weight (g)	Relative Weight	Scale Sample Collected	Scale Age Analysis (years)
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR24	Rainbow Trout	173	181	2.256718	49.8	1.697229	1.722027	52.72622	0.944502	Yes	2
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR25	Rainbow Trout	89	94	1.971276	7.7	0.886491	0.878517	7.559921	1.018529	Yes	1
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR26	Rainbow Trout	86	91	1.957128	6.9	0.838849	0.83671	6.866091	1.004939	Yes	1
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR27	Rainbow Trout	85	90	1.952308	6.6	0.819544	0.822465	6.644547	0.993296	Yes	1
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR28	Rainbow Trout	82	87	1.937518	6.1	0.78533	0.778759	6.008404	1.015245	Yes	1
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR29	Rainbow Trout	74	78	1.889302	4.8	0.681241	0.636275	4.327882	1.109087	Yes	1
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR30	Rainbow Trout	69	72	1.854731	3.7	0.568202	0.534116	3.420705	1.081648	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR31	Rainbow Trout	65	68	1.829754	3.7	0.568202	0.460306	2.886063	1.282023	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR32	Rainbow Trout	79	83	1.916454	3	0.477121	0.716513	5.206107	0.576246	Yes	1
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR33	Rainbow Trout	39	40	1.605197	0.7	-0.154902	-0.203282	0.626208	1.11784	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR34	Rainbow Trout	33	34	1.535167	0.7	-0.154902	-0.410227	0.388842	1.800216	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR35	Rainbow Trout	40	42	1.62024	0.6	-0.221849	-0.158828	0.6937	0.864927	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR36	Rainbow Trout	34	35	1.547652	0.6	-0.221849	-0.373335	0.423317	1.417378	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR37	Rainbow Trout	33	34	1.535167	0.6	-0.221849	-0.410227	0.388842	1.543042	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR38	Rainbow Trout	32	33	1.522314	0.6	-0.221849	-0.448211	0.356278	1.684076	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR39	Rainbow Trout	36	37	1.571592	0.5	-0.30103	-0.302587	0.49821	1.003592	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR40	Rainbow Trout	35	36	1.559787	0.5	-0.30103	-0.337474	0.459755	1.087536	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR41	Rainbow Trout	34	35	1.547652	0.5	-0.30103	-0.373335	0.423317	1.181149	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR42	Rainbow Trout	40	42	1.62024	0.4	-0.39794	-0.158828	0.6937	0.576618	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR43	Rainbow Trout	37	38	1.583085	0.4	-0.39794	-0.268624	0.538735	0.742479	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR44	Rainbow Trout	36	37	1.571592	0.4	-0.39794	-0.302587	0.49821	0.802874	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR45	Rainbow Trout	33	34	1.535167	0.4	-0.39794	-0.410227	0.388842	1.028695	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR46	Rainbow Trout	37	38	1.583085	0.3	-0.522879	-0.268624	0.538735	0.55686	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR47	Rainbow Trout	34	35	1.547652	0.3	-0.522879	-0.373335	0.423317	0.708689	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR48	Rainbow Trout	27	28	1.451633	0.3	-0.522879	-0.657079	0.220252	1.362074	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR49	Rainbow Trout	25	26	1.419791	0.3	-0.522879	-0.751177	0.177347	1.691602	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR50	Rainbow Trout	31	32	1.509068	0.2	-0.69897	-0.487353	0.325572	0.614304	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR51	Rainbow Trout	30	31	1.495406	0.2	-0.69897	-0.527727	0.29667	0.674151	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR52	Rainbow Trout	29	30	1.481299	0.2	-0.69897	-0.569413	0.269518	0.742066	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR53	Rainbow Trout	27	28	1.451633	0.2	-0.69897	-0.657079	0.220252	0.908049	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR54	Rainbow Trout	29	30	1.481299	0.1	-1	-0.569413	0.269518	0.371033	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR55	Rainbow Trout	25	26	1.419791	0.1	-1	-0.751177	0.177347	0.563867	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR56	Dolly Varden	138	-	2.139879	25.5	1.40654	1.376757	23.80985	1.070985	No	-
28-Aug-25	Goathorn Creek	1	Backpack Electrofishing	Smith Root LR57	Dolly Varden	86	-	1.934498	7.9	0.897627	0.769836	5.886218	1.342118	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR58	Rainbow Trout	80	85	1.929419	6.3	0.799341	0.754826	5.686249	1.107936	Yes	1
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR59	Rainbow Trout	85	87	1.939519	6	0.778151	0.784673	6.090786	0.985095	Yes	1
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR60	Rainbow Trout	80	85	1.929419	5.2	0.716003	0.754826	5.686249	0.914487	Yes	1
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR61	Rainbow Trout	36	37	1.568202	0.8	-0.09691	-0.312607	0.486847	1.643225	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR62	Rainbow Trout	39	40	1.60206	0.7	-0.154902	-0.212553	0.612982	1.141959	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR63	Rainbow Trout	48	50	1.69897	0.5	-0.30103	0.073826	1.185294	0.421836	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR64	Rainbow Trout	34	35	1.544068	0.5	-0.30103	-0.383925	0.413119	1.210304	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR65	Rainbow Trout	36	37	1.568202	0.3	-0.522879	-0.312607	0.486847	0.616209	No	-

Appendix B: Individual Fish Data

Date	Watercourse	Reach	Capture Method	Equipment	Species	Fork Lenth (mm)	Total Length (mm)	Log Length (mm)	Weight (g)	Log Weight (g)	Log Standard Weight (g)	Standard Weight (g)	Relative Weight	Scale Sample Collected	Scale Age Analysis (years)
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR66	Rainbow Trout	34	35	1.544068	0.3	-0.522879	-0.383925	0.413119	0.726182	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR67	Rainbow Trout	34	35	1.544068	0.3	-0.522879	-0.383925	0.413119	0.726182	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR68	Rainbow Trout	31	32	1.50515	0.2	-0.69897	-0.498931	0.317007	0.630901	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR69	Dolly Varden	44	46	1.643453	0.8	-0.09691	-0.090233	0.812395	0.984743	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR70	Dolly Varden	80	85	1.90309	4.4	0.643453	0.677021	4.753585	0.925617	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR71	Dolly Varden	41	42	1.612784	0.8	-0.09691	-0.180862	0.659383	1.213256	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR72	Dolly Varden	39	40	1.591065	0.6	-0.221849	-0.245045	0.568794	1.054863	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR73	Dolly Varden	45	47	1.653213	0.5	-0.30103	-0.061392	0.868177	0.575919	No	-
28-Aug-25	Goathorn Creek	2	Backpack Electrofishing	Smith Root LR74	Dolly Varden	39	40	1.591065	0.5	-0.30103	-0.245045	0.568794	0.879053	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR75	Rainbow Trout	147	151	2.178977	28.6	1.456366	1.492295	31.06668	0.920601	Yes	2
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR76	Rainbow Trout	131	138	2.140916	18	1.255273	1.379822	23.9785	0.750673	Yes	2
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR77	Rainbow Trout	64	67	1.826075	3.1	0.491362	0.449434	2.81471	1.101357	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR78	Rainbow Trout	30	31	1.491362	0.2	-0.69897	-0.539677	0.288618	0.692958	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR79	Rainbow Trout	30	31	1.491362	0.2	-0.69897	-0.539677	0.288618	0.692958	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR80	Rainbow Trout	29	30	1.477121	0.2	-0.69897	-0.581759	0.261964	0.763465	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR81	Rainbow Trout	29	30	1.477121	0.2	-0.69897	-0.581759	0.261964	0.763465	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR82	Rainbow Trout	29	30	1.477121	0.2	-0.69897	-0.581759	0.261964	0.763465	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR83	Rainbow Trout	29	30	1.477121	0.2	-0.69897	-0.581759	0.261964	0.763465	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR84	Dolly Varden	138	178	2.139879	19.8	1.296665	1.376757	23.80985	0.831589	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR85	Dolly Varden	112	119	2.049218	14.4	1.158362	1.108844	12.84826	1.120775	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR86	Dolly Varden	108	114	2.033424	13.5	1.130334	1.062171	11.53906	1.169939	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR87	Dolly Varden	48	51	1.681241	1.1	0.041393	0.021436	1.050597	1.047024	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR88	Dolly Varden	46	48	1.662758	0.9	-0.045757	-0.033184	0.926437	0.971464	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR89	Dolly Varden	39	40	1.591065	0.5	-0.30103	-0.245045	0.568794	0.879053	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR90	Dolly Varden	40	41	1.60206	0.4	-0.39794	-0.212553	0.612982	0.652548	No	-
26-Aug-25	Goathorn Creek	3	Backpack Electrofishing	Smith Root LR91	Dolly Varden	30	31	1.477121	0.2	-0.69897	-0.581759	0.261964	0.763465	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR92	Rainbow Trout	37	38	1.579784	0.98	-0.008774	-0.278381	0.526767	1.860405	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR93	Rainbow Trout	37	38	1.579784	0.9	-0.045757	-0.278381	0.526767	1.708535	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR94	Rainbow Trout	41	42	1.623249	0.7	-0.154902	-0.149936	0.70805	0.988631	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR95	Rainbow Trout	40	41	1.612784	0.7	-0.154902	-0.180862	0.659383	1.061599	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR96	Rainbow Trout	40	41	1.612784	0.7	-0.154902	-0.180862	0.659383	1.061599	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR97	Rainbow Trout	39	40	1.60206	0.7	-0.154902	-0.212553	0.612982	1.141959	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR98	Rainbow Trout	38	39	1.591065	0.7	-0.154902	-0.245045	0.568794	1.230674	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR99	Rainbow Trout	37	38	1.579784	0.7	-0.154902	-0.278381	0.526767	1.328861	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR100	Rainbow Trout	40	41	1.612784	0.6	-0.221849	-0.180862	0.659383	0.909942	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR101	Rainbow Trout	38	39	1.591065	0.6	-0.221849	-0.245045	0.568794	1.054863	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR102	Rainbow Trout	35	36	1.556303	0.6	-0.221849	-0.34777	0.448983	1.336355	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR103	Rainbow Trout	38	39	1.591065	0.5	-0.30103	-0.245045	0.568794	0.879053	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR104	Rainbow Trout	36	37	1.568202	0.5	-0.30103	-0.312607	0.486847	1.027016	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR105	Rainbow Trout	36	37	1.568202	0.5	-0.30103	-0.312607	0.486847	1.027016	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR106	Rainbow Trout	36	37	1.568202	0.5	-0.30103	-0.312607	0.486847	1.027016	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR107	Rainbow Trout	35	36	1.556303	0.5	-0.30103	-0.34777	0.448983	1.113629	No	-



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26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR108	Rainbow Trout	35	36	1.556303	0.5	-0.30103	-0.34777	0.448983	1.113629	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR109	Rainbow Trout	34	35	1.544068	0.5	-0.30103	-0.383925	0.413119	1.210304	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR110	Rainbow Trout	39	40	1.60206	0.4	-0.39794	-0.212553	0.612982	0.652548	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR111	Rainbow Trout	37	38	1.579784	0.4	-0.39794	-0.278381	0.526767	0.759349	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR112	Rainbow Trout	36	37	1.568202	0.4	-0.39794	-0.312607	0.486847	0.821613	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR113	Rainbow Trout	34	36	1.556303	0.4	-0.39794	-0.34777	0.448983	0.890903	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR114	Rainbow Trout	33	34	1.531479	0.4	-0.39794	-0.421127	0.379204	1.05484	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR115	Rainbow Trout	33	34	1.531479	0.4	-0.39794	-0.421127	0.379204	1.05484	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR116	Rainbow Trout	37	38	1.579784	0.3	-0.522879	-0.278381	0.526767	0.569512	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR117	Rainbow Trout	34	35	1.544068	0.3	-0.522879	-0.383925	0.413119	0.726182	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR118	Rainbow Trout	33	35	1.544068	0.3	-0.522879	-0.383925	0.413119	0.726182	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR119	Rainbow Trout	39	40	1.60206	0.2	-0.69897	-0.212553	0.612982	0.326274	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR120	Rainbow Trout	34	35	1.544068	0.2	-0.69897	-0.383925	0.413119	0.484122	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR121	Dolly Varden	144	150	2.158362	35	1.544068	1.431377	27.00082	1.296257	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR122	Dolly Varden	143	149	2.155336	33.2	1.521138	1.422434	26.45048	1.255176	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR123	Dolly Varden	147	151	2.167317	26.9	1.429752	1.457839	28.6972	0.937374	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR124	Dolly Varden	119	123	2.075547	19.2	1.283301	1.186649	15.36911	1.249259	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR125	Dolly Varden	99	105	1.995635	10.3	1.012837	0.950502	8.922808	1.154345	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR126	Dolly Varden	79	82	1.897627	2.8	0.447158	0.660878	4.58013	0.611336	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR127	Dolly Varden	50	51	1.69897	1.1	0.041393	0.073826	1.185294	0.928039	No	-
26-Aug-25	Goathorn Creek	4	Backpack Electrofishing	Smith Root LR128	Dolly Varden	48	49	1.681241	0.9	-0.045757	0.021436	1.050597	0.856656	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR129	Rainbow Trout	128	136	2.133539	21.6	1.334454	1.358021	22.80451	0.947181	Yes	2
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR130	Rainbow Trout	111	119	2.075547	15	1.176091	1.186649	15.36911	0.975983	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR131	Rainbow Trout	109	115	2.060698	14.3	1.155336	1.142768	13.89211	1.029361	Yes	2
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR132	Rainbow Trout	108	113	2.053078	12.1	1.082785	1.120252	13.19022	0.917346	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR133	Rainbow Trout	104	111	2.045323	12	1.079181	1.097334	12.51221	0.959063	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR134	Rainbow Trout	99	105	2.021189	10.5	1.021189	1.026016	10.61736	0.988947	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR135	Rainbow Trout	96	107	2.029384	10.2	1.0086	1.050232	11.22618	0.90859	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR136	Rainbow Trout	94	101	2.004321	8.9	0.94939	0.97617	9.466078	0.940199	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR137	Rainbow Trout	96	104	2.017033	8.3	0.919078	1.013735	10.32132	0.804161	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR138	Rainbow Trout	104	109	2.037426	7.5	0.875061	1.073999	11.85766	0.632502	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR139	Rainbow Trout	92	95	1.977724	7.3	0.863323	0.897571	7.89898	0.92417	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR140	Rainbow Trout	92	96	1.982271	7.2	0.857332	0.91101	8.147225	0.883736	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR141	Rainbow Trout	84	88	1.944483	7.2	0.857332	0.799341	6.300003	1.142857	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR142	Rainbow Trout	84	86	1.934498	6.5	0.812913	0.769836	5.886218	1.104274	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR143	Rainbow Trout	94	99	1.995635	6.3	0.799341	0.950502	8.922808	0.706056	Yes	1
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR144	Rainbow Trout	62	65	1.812913	2.8	0.447158	0.41054	2.573595	1.087972	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR145	Rainbow Trout	61	63	1.799341	2.7	0.431364	0.370431	2.346558	1.150622	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR146	Rainbow Trout	55	58	1.763428	2	0.30103	0.264306	1.837833	1.088238	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR147	Rainbow Trout	51	53	1.724276	1.8	0.255273	0.148608	1.408016	1.278394	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR148	Rainbow Trout	50	53	1.724276	1.5	0.176091	0.148608	1.408016	1.065329	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR149	Rainbow Trout	49	51	1.70757	1.4	0.146128	0.099241	1.256726	1.114006	No	-



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29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR150	Rainbow Trout	52	55	1.740363	1.3	0.113943	0.196146	1.57089	0.827556	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR151	Rainbow Trout	50	52	1.716003	1.2	0.079181	0.124161	1.330949	0.901612	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR152	Rainbow Trout	48	50	1.69897	1.2	0.079181	0.073826	1.185294	1.012407	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR153	Rainbow Trout	48	50	1.69897	1.2	0.079181	0.073826	1.185294	1.012407	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR154	Rainbow Trout	48	49	1.690196	0.8	-0.09691	0.047898	1.116602	0.716459	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR155	Rainbow Trout	44	45	1.653213	0.8	-0.09691	-0.061392	0.868177	0.921471	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR156	Rainbow Trout	43	45	1.653213	0.7	-0.154902	-0.061392	0.868177	0.806287	No	-
29-Aug-25	Helps Creek	1	Backpack Electrofishing	Smith Root LR157	Rainbow Trout	43	44	1.643453	0.5	-0.30103	-0.090233	0.812395	0.615464	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR158	Rainbow Trout	88	93	1.966611	8	0.90309	0.864732	7.323727	1.09234	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR159	Rainbow Trout	90	95	1.977037	7.8	0.892095	0.895543	7.862181	0.992091	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR160	Rainbow Trout	42	44	1.640581	0.5	-0.30103	-0.09872	0.796673	0.62761	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR161	Rainbow Trout	85	90	1.952308	7.2	0.857332	0.822465	6.644547	1.083595	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR162	Rainbow Trout	89	94	1.971276	6.79	0.83187	0.878517	7.559921	0.898158	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR163	Rainbow Trout	85	90	1.952308	6.37	0.804139	0.822465	6.644547	0.958681	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR164	Rainbow Trout	86	91	1.957128	6.2	0.792392	0.83671	6.866091	0.902988	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR165	Rainbow Trout	29	30	1.481299	0.3	-0.522879	-0.569413	0.269518	1.113099	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR166	Rainbow Trout	76	80	1.900367	5.4	0.732394	0.668975	4.666324	1.157228	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR167	Rainbow Trout	79	83	1.916454	4.94	0.693727	0.716513	5.206107	0.948886	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR168	Rainbow Trout	90	95	1.977037	4.65	0.667453	0.895543	7.862181	0.591439	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR169	Rainbow Trout	83	88	1.942504	4.6	0.662758	0.793494	6.215755	0.740055	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR170	Rainbow Trout	76	80	1.900367	4.52	0.655138	0.668975	4.666324	0.968643	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR171	Rainbow Trout	78	82	1.911158	4.48	0.651278	0.700862	5.021828	0.892105	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR172	Rainbow Trout	74	78	1.889302	4	0.60206	0.636275	4.327882	0.92424	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR173	Rainbow Trout	75	79	1.89487	3.9	0.591065	0.652729	4.494996	0.867631	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR174	Rainbow Trout	58	60	1.780821	2.27	0.356026	0.315705	2.068734	1.097289	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR175	Rainbow Trout	41	43	1.63053	0.9	-0.045757	-0.128422	0.744009	1.209663	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR176	Rainbow Trout	39	40	1.605197	0.81	-0.091515	-0.203282	0.626208	1.2935	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR177	Rainbow Trout	41	43	1.63053	0.75	-0.124939	-0.128422	0.744009	1.008053	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR178	Rainbow Trout	38	39	1.594282	0.6	-0.221849	-0.235537	0.581384	1.032021	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR179	Rainbow Trout	39	40	1.605197	0.58	-0.236572	-0.203282	0.626208	0.92621	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR180	Rainbow Trout	37	38	1.583085	0.5	-0.30103	-0.268624	0.538735	0.928099	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR181	Rainbow Trout	36	37	1.571592	0.5	-0.30103	-0.302587	0.49821	1.003592	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR182	Rainbow Trout	34	35	1.547652	0.46	-0.337242	-0.373335	0.423317	1.086657	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR183	Rainbow Trout	41	43	1.63053	0.45	-0.346787	-0.128422	0.744009	0.604832	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR184	Rainbow Trout	36	37	1.571592	0.42	-0.376751	-0.302587	0.49821	0.843018	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR185	Rainbow Trout	31	32	1.509068	0.34	-0.468521	-0.487353	0.325572	1.044316	No	-
23-Aug-25	Helps Creek	2	Backpack Electrofishing	Smith Root LR186	Rainbow Trout	35	36	1.559787	0.31	-0.508638	-0.337474	0.459755	0.674272	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR187	Rainbow Trout	121	114	2.05816	24	1.380211	1.135269	13.65429	1.757689	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR188	Rainbow Trout	122	129	2.109477	20.3	1.307496	1.286916	19.36049	1.048527	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR189	Rainbow Trout	97	102	2.007961	10.25	1.010724	0.986926	9.703438	1.056327	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR190	Rainbow Trout	96	101	2.003676	10	1	0.974263	9.424594	1.061054	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR191	Rainbow Trout	89	94	1.971276	8	0.90309	0.878517	7.559921	1.058212	Yes	1



Appendix B: Individual Fish Data

Date	Watercourse	Reach	Capture Method	Equipment	Species	Fork Lenth (mm)	Total Length (mm)	Log Length (mm)	Weight (g)	Log Weight (g)	Log Standard Weight (g)	Standard Weight (g)	Relative Weight	Scale Sample Collected	Scale Age Analysis (years)
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR192	Rainbow Trout	89	94	1.971276	7.8	0.892095	0.878517	7.559921	1.031757	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR193	Rainbow Trout	90	95	1.977037	7.5	0.875061	0.895543	7.862181	0.953934	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR194	Rainbow Trout	82	87	1.937518	5.7	0.755875	0.778759	6.008404	0.948671	Yes	1
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR195	Rainbow Trout	78	82	1.911158	5.14	0.710963	0.700862	5.021828	1.023532	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR196	Rainbow Trout	75	79	1.89487	4.49	0.652246	0.652729	4.494996	0.998889	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR197	Rainbow Trout	54	56	1.751048	1.83	0.262451	0.227722	1.689359	1.083251	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR198	Rainbow Trout	46	48	1.678609	1.03	0.012837	0.013659	1.03195	0.99811	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR199	Rainbow Trout	39	40	1.605197	1.02	0.0086	-0.203282	0.626208	1.628852	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR200	Rainbow Trout	42	44	1.640581	0.98	-0.008774	-0.09872	0.796673	1.230115	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR201	Rainbow Trout	32	33	1.522314	0.98	-0.008774	-0.448211	0.356278	2.750658	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR202	Rainbow Trout	46	48	1.678609	0.92	-0.036212	0.013659	1.03195	0.891516	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR203	Rainbow Trout	41	43	1.63053	0.83	-0.080922	-0.128422	0.744009	1.115579	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR204	Rainbow Trout	43	45	1.650405	0.8	-0.09691	-0.069689	0.851747	0.939246	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR205	Rainbow Trout	40	42	1.62024	0.8	-0.09691	-0.158828	0.6937	1.153236	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR206	Rainbow Trout	41	43	1.63053	0.79	-0.102373	-0.128422	0.744009	1.061816	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR207	Rainbow Trout	44	46	1.660011	0.78	-0.107905	-0.041301	0.909283	0.857819	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR208	Rainbow Trout	43	45	1.650405	0.74	-0.130768	-0.069689	0.851747	0.868802	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR209	Rainbow Trout	41	43	1.63053	0.67	-0.173925	-0.128422	0.744009	0.900527	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR210	Rainbow Trout	36	37	1.571592	0.67	-0.173925	-0.302587	0.49821	1.344814	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR211	Rainbow Trout	36	37	1.571592	0.63	-0.200659	-0.302587	0.49821	1.264526	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR212	Rainbow Trout	34	35	1.547652	0.62	-0.207608	-0.373335	0.423317	1.464624	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR213	Rainbow Trout	40	42	1.62024	0.6	-0.221849	-0.158828	0.6937	0.864927	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR214	Rainbow Trout	37	38	1.583085	0.58	-0.236572	-0.268624	0.538735	1.076595	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR215	Rainbow Trout	36	37	1.571592	0.57	-0.244125	-0.302587	0.49821	1.144095	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR216	Rainbow Trout	32	33	1.522314	0.56	-0.251812	-0.448211	0.356278	1.571805	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR217	Rainbow Trout	39	40	1.605197	0.52	-0.283997	-0.203282	0.626208	0.830395	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR218	Rainbow Trout	36	37	1.571592	0.48	-0.318759	-0.302587	0.49821	0.963449	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR219	Rainbow Trout	31	32	1.509068	0.38	-0.420216	-0.487353	0.325572	1.167177	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR220	Rainbow Trout	32	33	1.522314	0.37	-0.431798	-0.448211	0.356278	1.038514	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR221	Rainbow Trout	36	37	1.571592	0.23	-0.638272	-0.302587	0.49821	0.461652	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR222	Dolly Varden	40	-	1.60206	0.7	-0.154902	-0.212553	0.612982	1.141959	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR223	Dolly Varden	39	-	1.591065	0.84	-0.075721	-0.245045	0.568794	1.476809	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR224	Dolly Varden	41	-	1.612784	0.8	-0.09691	-0.180862	0.659383	1.213256	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR225	Dolly Varden	36	-	1.556303	0.67	-0.173925	-0.34777	0.448983	1.492263	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR226	Dolly Varden	39	-	1.591065	0.56	-0.251812	-0.245045	0.568794	0.984539	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR227	Dolly Varden	38	-	1.579784	0.52	-0.283997	-0.278381	0.526767	0.987154	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR228	Dolly Varden	41	-	1.612784	0.49	-0.309804	-0.180862	0.659383	0.743119	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR229	Dolly Varden	36	-	1.556303	0.44	-0.356547	-0.34777	0.448983	0.979993	No	-
23-Aug-25	Tenas Creek	1	Backpack Electrofishing	Smith Root LR230	Dolly Varden	38	-	1.579784	0.42	-0.376751	-0.278381	0.526767	0.797317	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR231	Rainbow Trout	146	154	2.186391	36	1.556303	1.514205	32.67418	1.101787	Yes	2
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR232	Rainbow Trout	143	151	2.177825	35	1.544068	1.488891	30.82411	1.135475	Yes	2
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR233	Rainbow Trout	138	145	2.162355	29	1.462398	1.443176	27.74445	1.045254	Yes	2



Appendix B: Individual Fish Data

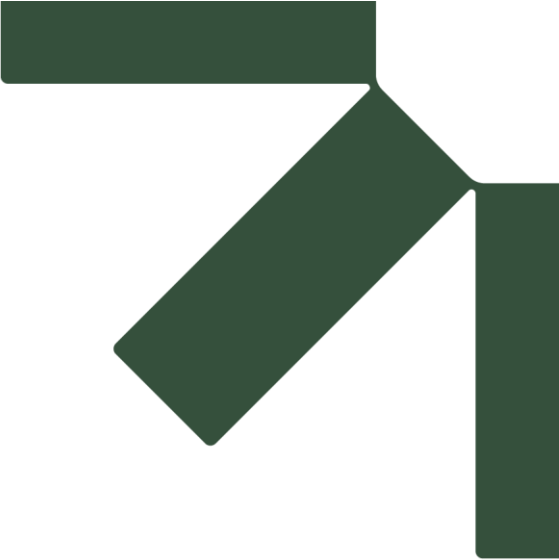
Date	Watercourse	Reach	Capture Method	Equipment	Species	Fork Lenth (mm)	Total Length (mm)	Log Length (mm)	Weight (g)	Log Weight (g)	Log Standard Weight (g)	Standard Weight (g)	Relative Weight	Scale Sample Collected	Scale Age Analysis (years)
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR234	Rainbow Trout	93	98	1.990561	9	0.954243	0.935506	8.619981	1.044086	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR235	Rainbow Trout	94	99	1.994977	8.9	0.94939	0.948556	8.882916	1.001923	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR236	Rainbow Trout	94	99	1.994977	8	0.90309	0.948556	8.882916	0.900605	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR237	Rainbow Trout	94	99	1.994977	8	0.90309	0.948556	8.882916	0.900605	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR238	Rainbow Trout	98	103	2.012204	7	0.845098	0.999465	9.987687	0.700863	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR239	Rainbow Trout	86	91	1.957128	7	0.845098	0.83671	6.866091	1.019503	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR240	Rainbow Trout	88	93	1.966611	6.1	0.78533	0.864732	7.323727	0.832909	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR241	Rainbow Trout	88	93	1.966611	6	0.778151	0.864732	7.323727	0.819255	Yes	1
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR242	Rainbow Trout	78	82	1.911158	3.3	0.518514	0.700862	5.021828	0.657131	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR243	Rainbow Trout	41	43	1.63053	0.72	-0.142668	-0.128422	0.744009	0.967731	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR244	Rainbow Trout	37	38	1.583085	0.67	-0.173925	-0.268624	0.538735	1.243653	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR245	Rainbow Trout	34	35	1.547652	0.6	-0.221849	-0.373335	0.423317	1.417378	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR246	Rainbow Trout	36	37	1.571592	0.5	-0.30103	-0.302587	0.49821	1.003592	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR247	Rainbow Trout	36	37	1.571592	0.5	-0.30103	-0.302587	0.49821	1.003592	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR248	Rainbow Trout	36	37	1.571592	0.5	-0.30103	-0.302587	0.49821	1.003592	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR249	Rainbow Trout	34	35	1.547652	0.5	-0.30103	-0.373335	0.423317	1.181149	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR250	Rainbow Trout	36	37	1.571592	0.48	-0.318759	-0.302587	0.49821	0.963449	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR251	Rainbow Trout	43	45	1.650405	0.45	-0.346787	-0.069689	0.851747	0.528326	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR252	Rainbow Trout	36	37	1.571592	0.4	-0.39794	-0.302587	0.49821	0.802874	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR253	Rainbow Trout	34	35	1.547652	0.4	-0.39794	-0.373335	0.423317	0.944919	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR254	Rainbow Trout	27	28	1.451633	0.4	-0.39794	-0.657079	0.220252	1.816099	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR255	Rainbow Trout	34	35	1.547652	0.38	-0.420216	-0.373335	0.423317	0.897673	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR256	Rainbow Trout	32	33	1.522314	0.38	-0.420216	-0.448211	0.356278	1.066582	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR257	Rainbow Trout	33	34	1.535167	0.34	-0.468521	-0.410227	0.388842	0.874391	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR258	Rainbow Trout	31	32	1.509068	0.31	-0.508638	-0.487353	0.325572	0.95217	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR259	Rainbow Trout	38	39	1.594282	0.3	-0.522879	-0.235537	0.581384	0.51601	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR260	Rainbow Trout	36	37	1.571592	0.3	-0.522879	-0.302587	0.49821	0.602155	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR261	Rainbow Trout	32	33	1.522314	0.28	-0.552842	-0.448211	0.356278	0.785902	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR262	Rainbow Trout	32	33	1.522314	0.22	-0.657577	-0.448211	0.356278	0.617495	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR263	Rainbow Trout	26	27	1.436004	0.2	-0.69897	-0.703266	0.198031	1.009941	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR264	Dolly Varden	149	-	2.173186	33	1.518514	1.475183	29.86639	1.104921	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR265	Dolly Varden	130	-	2.113943	22	1.342423	1.300114	19.95786	1.102323	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR266	Dolly Varden	129	-	2.11059	20	1.30103	1.290204	19.50759	1.025242	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR267	Dolly Varden	114	-	2.056905	16	1.20412	1.13156	13.53816	1.181845	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR268	Dolly Varden	115	-	2.060698	15	1.176091	1.142768	13.89211	1.07975	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR269	Dolly Varden	93	-	1.968483	12	1.079181	0.870264	7.417609	1.617772	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR270	Dolly Varden	94	-	1.973128	6	0.778151	0.88399	7.655792	0.78372	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR271	Dolly Varden	88	-	1.944483	6	0.778151	0.799341	6.300003	0.952381	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR272	Dolly Varden	83	-	1.919078	5.2	0.716003	0.724268	5.2999	0.981151	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR273	Dolly Varden	66	-	1.819544	2.2	0.342423	0.430134	2.692367	0.817125	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR274	Dolly Varden	61	-	1.78533	2	0.30103	0.329028	2.133183	0.937566	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR275	Dolly Varden	60	-	1.778151	2	0.30103	0.307815	2.03149	0.984499	No	-



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Date	Watercourse	Reach	Capture Method	Equipment	Species	Fork Lenth (mm)	Total Length (mm)	Log Length (mm)	Weight (g)	Log Weight (g)	Log Standard Weight (g)	Standard Weight (g)	Relative Weight	Scale Sample Collected	Scale Age Analysis (years)
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR276	Dolly Varden	59	-	1.770852	2	0.30103	0.286245	1.933058	1.03463	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR277	Dolly Varden	60	-	1.778151	1.7	0.230449	0.307815	2.03149	0.836824	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR278	Dolly Varden	54	-	1.732394	1.46	0.164353	0.172597	1.487979	0.981197	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR279	Dolly Varden	51	-	1.70757	1	0	0.099241	1.256726	0.795718	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR280	Dolly Varden	47	-	1.672098	1	0	-0.005584	0.987226	1.01294	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR281	Dolly Varden	46	-	1.662758	0.98	-0.008774	-0.033184	0.926437	1.057817	No	-
24-Aug-25	Tenas Creek	2	Backpack Electrofishing	Smith Root LR282	Dolly Varden	46	-	1.662758	0.96	-0.017729	-0.033184	0.926437	1.036229	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR283	Rainbow Trout	112	119	2.073718	21.3	1.32838	1.181245	15.17907	1.403248	Yes	2
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR284	Rainbow Trout	124	131	2.116176	20.32	1.307924	1.306711	20.26336	1.002795	Yes	2
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR285	Rainbow Trout	106	113	2.051153	13.33	1.12483	1.114561	13.0185	1.023928	Yes	1
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR286	Rainbow Trout	83	88	1.942504	5.96	0.775246	0.793494	6.215755	0.958854	Yes	1
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR287	Rainbow Trout	80	85	1.92737	5.36	0.729165	0.748772	5.607537	0.955856	Yes	1
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR288	Rainbow Trout	74	78	1.889302	4.37	0.640481	0.636275	4.327882	1.009732	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR289	Rainbow Trout	42	44	1.640581	0.7	-0.154902	-0.09872	0.796673	0.878654	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR290	Dolly Varden	115	-	2.060698	19	1.278754	1.142768	13.89211	1.367683	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR291	Dolly Varden	112	-	2.049218	18.26	1.261501	1.108844	12.84826	1.421205	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR292	Dolly Varden	111	-	2.045323	14	1.146128	1.097334	12.51221	1.118907	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR293	Dolly Varden	98	-	1.991226	8.87	0.947924	0.937472	8.659088	1.024357	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR294	Dolly Varden	92	-	1.963788	6.75	0.829304	0.856389	7.184382	0.939538	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR295	Dolly Varden	81	-	1.908485	6	0.778151	0.692964	4.93133	1.21671	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR296	Dolly Varden	84	-	1.924279	5.8	0.763428	0.739638	5.490826	1.056307	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR297	Dolly Varden	71	-	1.851258	3.8	0.579784	0.523854	3.340824	1.137444	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR298	Dolly Varden	41	-	1.612784	1.78	0.25042	-0.180862	0.659383	2.699494	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR299	Dolly Varden	45	-	1.653213	1.52	0.181844	-0.061392	0.868177	1.750795	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR300	Dolly Varden	49	-	1.690196	1.36	0.133539	0.047898	1.116602	1.217981	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR301	Dolly Varden	51	-	1.70757	1.26	0.100371	0.099241	1.256726	1.002605	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR302	Dolly Varden	46	-	1.662758	1.14	0.056905	-0.033184	0.926437	1.230521	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR303	Dolly Varden	44	-	1.643453	1.02	0.0086	-0.090233	0.812395	1.255548	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR304	Dolly Varden	36	-	1.556303	1	0	-0.34777	0.448983	2.227258	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR305	Dolly Varden	44	-	1.643453	0.93	-0.031517	-0.090233	0.812395	1.144764	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR306	Dolly Varden	47	-	1.672098	0.91	-0.040959	-0.005584	0.987226	0.921775	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR307	Dolly Varden	32	-	1.50515	0.85	-0.070581	-0.498931	0.317007	2.68133	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR308	Dolly Varden	81	-	1.908485	0.81	-0.091515	0.692964	4.93133	0.164256	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR309	Dolly Varden	33	-	1.518514	0.79	-0.102373	-0.459439	0.347185	2.275446	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR310	Dolly Varden	41	-	1.612784	0.77	-0.113509	-0.180862	0.659383	1.167759	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR311	Dolly Varden	44	-	1.643453	0.74	-0.130768	-0.090233	0.812395	0.910887	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR312	Dolly Varden	41	-	1.612784	0.68	-0.167491	-0.180862	0.659383	1.031268	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR313	Dolly Varden	35	-	1.544068	0.52	-0.283997	-0.383925	0.413119	1.258716	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR314	Dolly Varden	38	-	1.579784	0.51	-0.29243	-0.278381	0.526767	0.96817	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR315	Dolly Varden	34	-	1.531479	0.42	-0.376751	-0.421127	0.379204	1.107582	No	-
23-Aug-25	Tenas Creek	3	Backpack Electrofishing	Smith Root LR316	Dolly Varden	35	-	1.544068	0.34	-0.468521	-0.383925	0.413119	0.823007	No	-





Appendix C Fish Habitat Assessment Procedure Data

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Goathorn Creek	1	9	620637	6058423	Downstream Extent	2025-07-15	1	1	Riffle	500	1	yes	Frequent bars, channel braids, Log jams present	-	-	0.98	1.35	0.92	1.08	0.34	0.46	0.36	0.39	15.3	15.2	12.3	14.27	21.95	40	49.5	37.15	-
Goathorn Creek	1	9	620649	6058418	Downstream Extent	2025-07-15	1	2	Riffle	30	2	yes	Extensive riffles	-	-	0.52	0.98	0.3	0.6	0.12	0.03	0.05	0.07	2.16	0.8	0.78	1.25	7.9	8.23	6.4	7.51	-
Goathorn Creek	1	9	620641	6058368	Downstream Extent	2025-07-15	1	2	Riffle	10	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goathorn Creek	2	9	620198	6054392	Downstream Extent	2025-07-18	1	1	Riffle	547	2	yes	Extensive riffles	-	-	0.92	1.06	0.87	0.95	0.45	0.43	0.32	0.4	8	7.3	13.4	9.57	12	13.3	16.3	13.87	-
Goathorn Creek	3	9	623515	6048192	Downstream Extent	2025-07-15	1	1	Riffle	476	2	Yes	Extensive riffles	-	-	0.91	0.98	0.93	0.94	0.21	0.24	0.29	0.25	4.8	3.8	7.3	5.3	7.2	11.4	8.8	9.13	-
Goathorn Creek	3	9	623668	6047966	Downstream Extent	2025-07-15	1	2	Riffle	28	1	Yes	-	-	-	0.48	-	-	-	0.15	-	-	-	2.7	-	-	-	5.8	-	-	-	-
Goathorn Creek	4	9	623820	6047651	Downstream Extent	2025-07-15	1	1	Riffle	153	2	yes	Hanging LWD	-	-	0.99	0.87	1.13	1	0.18	0.14	0.34	0.22	4.85	4.2	6.2	5.08	9.8	9.8	8.3	9.3	-
Goathorn Creek	4	9	623864	6047512	Downstream Extent	2025-07-15	2	1	Pool	11	1	yes	-	-	Scour	-	-	-	-	0.69	0.73	0.81	0.74	-	-	-	-	-	-	-	-	0.82
Goathorn Creek	4	9	623871	6047504	Downstream Extent	2025-07-15	3	1	Cascade	263	5	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goathorn Creek	4	9	624040	6047330	Downstream Extent	2025-07-15	4	1	Pool	3	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goathorn Creek	4	9	624042	6047329	Downstream Extent	2025-07-15	5	1	Cascade	61	5	yes	-	-	-	1.17	0.86	0.89	0.97	0.31	0.32	0.43	0.35	6.2	5.2	7.4	6.27	7.8	6.8	9.5	8.03	-
Goathorn Creek	4	9	624098	6047306	Downstream Extent	2025-07-15	6	1	Pool	10	1	yes	-	-	Scour	-	-	-	-	0.58	0.89	0.69	0.72	-	-	-	-	-	-	-	-	0.89
Tenas Creek	1 (Lower)	9	620674	6057964	Downstream Extent	2025-07-21	1	1	Riffle	186	1	yes	-	-	-	0.92	0.57	0.66	0.72	0.31	0.27	0.24	0.27	5.5	5.95	5.65	5.7	8.75	7.9	6.55	7.73	-
Tenas Creek	1 (Lower)	9	620687	6057802	Downstream Extent	2025-07-21	2	1	Pool	10	1	yes	-	-	Scour	-	-	-	-	0.56	0.81	0.72	0.7	-	-	-	-	-	-	-	-	0.89
Tenas Creek	1 (Lower)	9	620690	6057793	Downstream Extent	2025-07-21	3	1	Riffle	204	3	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	1 (Lower)	9	620642	6057628	Downstream Extent	2025-07-21	4	1	Pool	4	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	1 (Lower)	9	620642	6057623	Downstream Extent	2025-07-21	5	1	Riffle	56	2	yes	-	-	-	0.69	0.7	0.81	0.73	0.19	0.27	0.29	0.25	7.9	7.9	5.9	7.23	8.45	8.4	10.4	9.08	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Tenas Creek	1 (Lower)	9	620666	6057606	Downstream Extent	2025-07-21	5	2	Riffle	20	2	yes	-	-	-	0.59	0.58	0.57	0.58	0.17	0.17	0.1	0.15	5.9	3.8	2.95	4.22	10.4	4.8	3.6	6.27	-
Tenas Creek	1 (Upper)	9	616281	6053018	Downstream Extent	14/07/2025	1	1	Glide	6	1	yes	-	-	-	1	0.8	0.69	0.83	0.45	0.32	0.25	0.34	6	6	8	6.67	11.5	12	11	11.5	-
Tenas Creek	1 (Upper)	9	616499	6053091	Downstream Extent	14/07/2025	2	1	Riffle	351	2	yes	Channel braids	-	-	1.3	0.9	0.9	1.03	0.3	0.24	0.32	0.29	3.7	7.8	6.1	5.87	12.8	14	16.1	14.3	-
Tenas Creek	1 (Upper)	9	616323	6053045	Downstream Extent	14/07/2025	3	2	Glide	24	2	yes	-	-	-	0.47	0.37	0.35	0.4	0.16	0.14	0.16	0.15	2.4	2.1	2.6	2.37	4	2.6	4.3	3.63	-
Tenas Creek	1 (Upper)	9	616541	6053096	Downstream Extent	14/07/2025	4	1	Glide	45	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	1 (Upper)	9	616559	6053113	Downstream Extent	14/07/2025	5	2	Riffle	30	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	1 (Upper)	9	616551	6053124	Downstream Extent	14/07/2025	5	1	Riffle	34	3	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	1 (Upper)	9	616553	6053122	Downstream Extent	14/07/2025	6	1	Glide	10	2	yes	-	-	-	1.31	1.57	1.53	1.47	0.35	0.51	0.55	0.47	5.2	6	6.2	5.8	7.8	8.5	9.9	8.73	-
Tenas Creek	1 (Upper)	9	616546	6053154	Downstream Extent	14/07/2025	7	1	Riffle	38	4	yes	-	-	-	1.26	1.27	0.92	1.15	0.33	0.29	0.23	0.28	4.8	4.5	5.2	4.83	11.5	15.1	14.6	13.73	-
Tenas Creek	1 (Upper)	9	616563	6053167	Downstream Extent	14/07/2025	8	1	Glide	21	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	1 (Upper)	9	616672	6053228	Downstream Extent	14/07/2025	9	1	Riffle	127	3	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	2	9	616178	6052960	Downstream Extent	14/07/2025	1	1	Riffle	526	3	yes	-	-	-	0.78	0.71	0.79	0.76	0.29	0.38	0.23	0.3	6.5	6.2	9.1	7.27	9.2	9.7	17.9	12.27	-
Tenas Creek	3	9	615076	6049826	Downstream Extent	13/07/2025	1	1	Riffle	20	4	yes	-	-	-	0.75	0.5	0.55	0.6	0.15	0.28	0.3	0.24	3	3.85	2.9	3.25	6.7	7.2	6.75	6.88	-
Tenas Creek	3	9	615059	6049817	Downstream Extent	13/07/2025	3	1	Glide	6	1	yes	-	-	-	0.55	0.6	0.74	0.63	0.24	0.36	0.41	0.34	3.8	3.5	2.9	3.4	7.6	6.9	6.3	6.93	-
Tenas Creek	3	9	615053	6049816	Downstream Extent	13/07/2025	5	1	Riffle	175	3	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614959	6049729	Downstream Extent	13/07/2025	7	1	Pool	8	1	yes	-	-	Scour					0.76	0.59	0.71	0.69									0.79
Tenas Creek	3	9	614957	6049721	Downstream Extent	13/07/2025	8	1	Riffle	157	3	yes	-	-	-	0.5	0.55	0.45	0.5	0.29	0.17	0.22	0.23	3.9	5.1	4.7	4.57	6.7	7.1	7.3	7.03	
Tenas Creek	3	9	614908	6049651	Downstream Extent	13/07/2025	9	1	Glide	10	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614902	6049642	Downstream Extent	13/07/2025	11	1	Riffle	10	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614891	6049624	Downstream Extent	13/07/2025	12	1	Glide	6	2	yes	-	-	-	0.48	0.49	0.47	0.48	0.26	0.22	0.3	0.26	3.6	3.9	3.7	3.73	7.4	7.1	6.8	7.1	-
Tenas Creek	3	9	614887	6049618	Downstream Extent	13/07/2025	14	1	Riffle	52	3	yes	-	-	-	0.35	0.55	0.34	0.41	0.14	0.34	0.17	0.22	6.5	7.1	11.85	8.48	12.2	11.9	13.3	12.47	-
Tenas Creek	3	9	614859	6049576	Downstream Extent	13/07/2025	15	1	Glide	10	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614851	6049570	Downstream Extent	13/07/2025	16	1	Riffle	102	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614777	6049508	Downstream Extent	13/07/2025	17	1	Pool	1	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614776	6049508	Downstream Extent	13/07/2025	18	1	Riffle	134	3	yes	-	-	-	0.65	0.55	0.5	0.57	0.2	0.3	0.17	0.22	6.1	3.5	4.1	4.57	7.3	6.6	8.1	7.33	-
Tenas Creek	3	9	614707	6049433	Downstream Extent	13/07/2025	19	1	Glide	5	1	yes	-	-	-	0.8	0.78	0.81	0.8	0.25	0.42	0.55	0.41	5.6	4.3	3.7	4.53	6.4	7.2	6.3	6.63	-
Tenas Creek	3	9	614706	6049428	Downstream Extent	13/07/2025	20	1	Riffle	45	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614663	6049428	Downstream Extent	13/07/2025	21	1	Pool	1	1	yes	-	-	Scour	-	-	-	-	0.63	0.4	0.72	0.58	-	-	-	-	-	-	-	-	0.8
Tenas Creek	3	9	614662	6049429	Downstream Extent	13/07/2025	22	1	Riffle	125	3	yes	-	-	-	0.6	0.7	0.57	0.62	0.13	0.4	0.34	0.29	4.51	7.4	6.1	6	7.1	8.3	8	7.8	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Tenas Creek	3	9	614579	6049390	Downstream Extent	13/07/2025	23	1	Pool	5	0	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614574	6049388	Downstream Extent	13/07/2025	24	1	Riffle	58	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614578	6049339	Downstream Extent	13/07/2025	25	1	Glide	7	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	3	9	614576	6049333	Downstream Extent	13/07/2025	26	1	Riffle	76	3	yes	-	-	-	0.47	0.52	0.68	0.56	0.17	0.24	0.26	0.22	6	5.7	3.3	5	8.45	8.1	5.7	7.42	-
Four Creek	1	9	620132	6054184	Downstream Extent	2025-07-18	1	1	Cascade	78	8	yes	-	-	-	0.78	0.88	0.76	0.81	0.08	0.12	0.14	0.11	2.12	1.45	2.05	1.87	6.3	4.2	3.5	4.6	-
Four Creek	1	9	620134	6054185	Downstream Extent	2025-07-18	2	1	Glide	2	1	yes	-	-	-	0.78	0.82	0.8	0.8	0.16	0.21	0.17	0.18	1.2	1.5	1.4	1.37	5	5.4	4.9	5.1	-
Four Creek	1	9	620160	6054209	Downstream Extent	2025-07-18	3	1	Cascade	41	5	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	1	9	620176	6054201	Downstream Extent	2025-07-18	4	1	Glide	19	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	1	9	620177	6054200	Downstream Extent	2025-07-18	5	1	Riffle	2	3	yes	-	-	-	0.62	0.59	0.6	0.6	0.06	0.06	0.03	0.05	2.4	2.2	2.8	2.47	4	3.65	3.5	3.72	
Four Creek	1	9	620186	6054198	Downstream Extent	2025-07-18	6	1	Glide	10	2	yes	-	-	-	0.52	0.75	0.63	0.63	0.16	0.15	0.13	0.15	1.35	1.4	2.2	1.65	3.05	4.8	5.9	4.58	
Four Creek	1	9	620213	6054221	Downstream Extent	2025-07-18	7	1	Riffle	35	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	1	9	620207	6054288	Downstream Extent	2025-07-18	8	1	Other	69	1	yes	-	-	-	0.46	0.45	0.6	0.5	0.13	0.12	0.13	0.13	1.7	1.05	0.8	1.18	3.2	3.5	1.8	2.83	-
Four Creek	1	9	620202	6054331	Downstream Extent	2025-07-18	9	1	Riffle	45	1	yes	-	-	-	0.39	0.46	0.5	0.45	0.09	0.07	0.07	0.08	1.5	1.1	1.5	1.37	7.7	10.3	10.1	9.37	-
Four Creek	1	9	620198	6054388	Downstream Extent	2025-07-18	10	1	Other	57	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	620053	6054093	Downstream Extent	2025-07-16	1	1	Riffle	79	4	yes	-	-	-	0.73	0.75	0.69	0.72	0.16	0.18	0.08	0.14	2.9	2	1.4	2.1	5.4	3	3.05	3.82	-
Four Creek	2	9	619984	6054084	Downstream Extent	2025-07-16	2	1	Glide	2	1	yes	-	-	-	0.63	0.87	0.53	0.68	0.24	0.35	0.31	0.3	3.1	2.3	2.3	2.57	4.7	4.3	3.7	4.23	-
Four Creek	2	9	619982	6054083	Downstream Extent	2025-07-16	3	1	Riffle	58	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619942	6054061	Downstream Extent	2025-07-16	4	1	Glide	3	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619941	6054058	Downstream Extent	2025-07-16	5	1	Riffle	7	4	yes	-	-	-	0.91	0.78	0.75	0.81	0.1	0.1	0.1	0.1	1.3	0.85	2.05	1.4	3.6	3.9	2.3	3.27	-
Four Creek	2	9	619939	6054051	Downstream Extent	2025-07-16	6	1	Glide	6	1	yes	-	-	-	0.65	0.83	0.68	0.72	0.09	0.22	0.14	0.15	1.85	1.75	1.6	1.73	2.2	2.7	2.05	2.32	-
Four Creek	2	9	619935	6054046	Downstream Extent	2025-07-16	7	1	Riffle	55	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619904	6054005	Downstream Extent	2025-07-16	8	1	Glide	11	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Four Creek	2	9	619907	6053995	Downstream Extent	2025-07-16	9	1	Riffle	15	2	yes	-	-	-	0.72	0.66	0.59	0.66	0.12	0.09	0.09	0.1	0.67	0.8	0.9	0.79	2.9	2.4	2.65	2.65	-
Four Creek	2	9	619906	6053981	Downstream Extent	2025-07-16	10	1	Glide	3	1	yes	-	-	-	0.68	0.76	0.74	0.73	0.07	0.13	0.15	0.12	1.35	1.9	2.25	1.83	2.4	2.65	2.45	2.5	-
Four Creek	2	9	619906	6053978	Downstream Extent	2025-07-16	11	1	Riffle	23	5	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619898	6053957	Downstream Extent	2025-07-16	12	1	Glide	2	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619896	6053956	Downstream Extent	2025-07-16	13	1	Riffle	9	4	yes	-	-	-	0.62	0.59	0.61	0.61	0.05	0.1	0.04	0.06	0.75	0.5	0.43	0.56	3.6	3.65	3.8	3.68	-
Four Creek	2	9	619889	6053952	Downstream Extent	2025-07-16	14	1	Glide	1	1	yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619888	6053951	Downstream Extent	2025-07-16	15	1	Riffle	4	3	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619884	6053949	Downstream Extent	2025-07-16	16	1	Glide	27	1	yes	-	-	-	0.72	0.83	0.78	0.78	0.09	0.31	0.23	0.21	1.7	2	3.4	2.37	4.8	5.3	3.9	4.67	-
Four Creek	2	9	619857	6053943	Downstream Extent	2025-07-16	17	1	Riffle	68	4	yes	-	-	-	0.73	0.57	0.55	0.62	0.08	0.09	0.09	0.09	1.5	2.3	1.75	1.85	3.95	4.4	3.5	3.95	-
Four Creek	2	9	619813	6053905	Downstream Extent	2025-07-16	18	1	Glide	8	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	2	9	619808	6053899	Downstream Extent	2025-07-16	19	1	Riffle	40	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	3	9	619297	6051991	Downstream Extent	2025-07-19	1	1	Riffle	137	2	yes	-	-	-	0.61	0.68	0.69	0.66	0.05	0.05	0.08	0.06	1.35	1.4	2.65	1.8	3.05	2.3	3.1	2.82	-
Four Creek	3	9	619269	6051861	Downstream Extent	2025-07-19	2	1	Glide	4	1	yes	-	-	-	0.64	0.55	0.69	0.63	0.1	0.12	0.17	0.13	2.3	1.75	2.2	2.08	2.4	2.1	3	2.5	-
Four Creek	3	9	619262	6051838	Downstream Extent	2025-07-19	3	1	Glide	6	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	3	9	619267	6051858	Downstream Extent	2025-07-19	4	1	Riffle	6	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	3	9	619259	6051834	Downstream Extent	2025-07-19	5	1	Riffle	116	4	yes	-	-	-	0.59	0.6	0.62	0.6	0.15	0.11	0.6	0.29	1.8	1.3	1.2	1.43	2	2.6	3.3	2.63	-
Four Creek	3	9	619219	6051732	Downstream Extent	2025-07-19	6	1	Glide	6	1	yes	-	-	-	0.63	0.58	0.59	0.6	0.1	0.12	0.05	0.09	2.05	2.05	1.6	1.9	4.2	3.7	2.75	3.55	-
Four Creek	3	9	619216	6051727	Downstream Extent	2025-07-19	7	1	Riffle	168	5	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	4	9	619327	6050156	Downstream Extent	2025-07-17	1	1	Riffle	101	4	yes	-	-	-	0.69	0.73	0.77	0.73	0.18	0.06	0.11	0.12	1.65	3.15	0.75	1.85	2.35	4.2	2.1	2.88	
Four Creek	4	9	619330	6050157	Downstream Extent	2025-07-17	2	1	Glide	3	1	yes	-	-	-	0.61	0.66	0.63	0.63	0.11	0.08	0.07	0.09	1.25	1.35	1.45	1.35	2.8	2.95	3.5	3.08	



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Four Creek	4	9	619352	6050246	Downstream Extent	2025-07-17	3	1	Riffle	98	5	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	4	9	619355	6050250	Downstream Extent	2025-07-17	4	1	Glide	5	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	4	9	619356	6050264	Downstream Extent	2025-07-17	5	1	Riffle	15	6	yes	-	-	-	0.67	0.73	0.56	0.65	0.09	0.1	0.11	0.1	1.2	1.75	1.25	1.4	3.05	3.3	2.15	2.83	-
Four Creek	4	9	619358	6050270	Downstream Extent	2025-07-17	6	1	Glide	7	2	yes	-	-	-	0.59	0.48	0.5	0.52	0.11	0.11	0.12	0.11	1.7	1.75	1.4	1.62	1.95	2.1	2.4	2.15	-
Four Creek	4	9	619366	6050395	Downstream Extent	2025-07-17	7	1	Riffle	137	4	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	4	9	619366	6050398	Downstream Extent	2025-07-17	8	1	Glide	3	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	5	9	619239	6049966	Downstream Extent	2025-07-17	1	1	Glide	4	2	yes	-	-	-	0.41	0.48	0.33	0.41	0.12	0.12	0.11	0.12	1.4	0.8	0.7	0.97	2.05	2.15	2.2	2.13	-
Four Creek	5	9	619240	6049962	Downstream Extent	2025-07-17	2	1	Riffle	13	5	yes	-	-	-	0.74	0.54	0.56	0.61	0.11	0.06	0.1	0.09	1.5	1	0.8	1.1	4	1.75	2.4	2.72	-
Four Creek	5	9	619239	6049951	Downstream Extent	2025-07-17	3	1	Glide	2	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	5	9	619237	6049949	Downstream Extent	2025-07-17	4	1	Riffle	11	9	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	5	9	619231	6049941	Downstream Extent	2025-07-17	5	1	Riffle	4	1	yes	-	-	-	0.95	0.7	0.8	0.82	0.41	0.29	0.25	0.32	3.2	2.9	2.1	2.73	3.5	3.3	2.35	3.05	-
Four Creek	5	9	619230	6049937	Downstream Extent	2025-07-17	6	1	Cascade	375	6	yes	-	-	-	0.59	0.6	0.34	0.51	0.07	0.11	0.05	0.08	1.5	1.1	0.7	1.1	3.55	3.55	1.95	3.02	-
Four Creek	5	9	619015	6049670	Downstream Extent	2025-07-17	7	1	Glide	2	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627571	6058704	Downstream Extent	2025-07-20	1	1	Riffle	5	1	yes	-	-	-	0.79	0.8	0.72	0.77	0.1	0.13	0.06	0.1	1.1	2.55	2.05	1.9	5	4.5	4.1	4.53	-
Helps Creek	1	9	627574	6058703	Downstream Extent	2025-07-20	2	1	Glide	3	1	yes	-	-	-	0.67	0.62	0.68	0.66	0.13	0.19	0.1	0.14	1.5	1.3	1.3	1.37	3.9	3.4	3.05	3.45	-
Helps Creek	1	9	627581	6058702	Downstream Extent	2025-07-20	3	1	Riffle	8	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627583	6058705	Downstream Extent	2025-07-20	4	1	Glide	4	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627585	6058708	Downstream Extent	2025-07-20	5	1	Riffle	4	1	yes	-	-	-	0.67	0.67	0.7	0.68	0.07	0.06	0.04	0.06	2.4	2.05	1.8	2.08	3.7	3.4	3.35	3.48	-
Helps Creek	1	9	627591	6058711	Downstream Extent	2025-07-20	6	1	Glide	8	1	yes	-	-	-	0.99	0.52	0.57	0.69	0.35	0.08	0.13	0.19	2.75	3.15	2.45	2.78	3.85	6.4	6.45	5.57	-
Helps Creek	1	9	627595	6058709	Downstream Extent	2025-07-20	7	1	Riffle	5	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Helps Creek	1	9	627599	6058711	Downstream Extent	2025-07-20	8	1	Glide	4	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627599	6058715	Downstream Extent	2025-07-20	9	1	Riffle	4	2	yes	-	-	-	0.53	0.63	0.58	0.58	0.09	0.08	0.19	0.12	1	1.85	1.45	1.43	3.8	3.8	2.7	3.43	-
Helps Creek	1	9	627601	6058720	Downstream Extent	2025-07-20	10	1	Glide	5	1	yes	-	-	-	0.69	0.63	0.63	0.65	0.2	0.24	0.09	0.18	1.65	1.6	2.15	1.8	2.9	3.4	5.2	3.83	-
Helps Creek	1	9	627609	6058727	Downstream Extent	2025-07-20	11	1	Riffle	12	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627611	6058737	Downstream Extent	2025-07-20	12	1	Glide	18	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627620	6058739	Downstream Extent	2025-07-20	13	1	Riffle	11	2	yes	-	-	-	0.67	0.59	0.6	0.62	0.03	0.08	0.09	0.07	1.1	1	0.6	0.9	4.6	2.3	2.2	3.03	-
Helps Creek	1	9	627624	6058748	Downstream Extent	2025-07-20	14	1	Glide	10	1	yes	-	-	-	0.59	0.66	0.83	0.69	0.11	0.14	0.3	0.18	1.35	1.4	2.5	1.75	2.95	3.5	5	3.82	-
Helps Creek	1	9	627630	6058768	Downstream Extent	2025-07-20	15	1	Riffle	25	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627635	6058778	Downstream Extent	2025-07-20	16	1	Glide	13	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627639	6058785	Downstream Extent	2025-07-20	17	1	Riffle	12	2	yes	-	-	-	0.5	0.54	0.53	0.52	0.05	0.06	0.07	0.06	0.6	0.65	0.9	0.72	1.4	1.2	1.8	1.47	-
Helps Creek	1	9	627639	6058798	Downstream Extent	2025-07-20	18	1	Glide	17	1	yes	-	-	-	0.65	0.62	0.6	0.62	0.19	0.16	0.1	0.15	1.8	1.4	1.6	1.6	2.4	1.5	1.6	1.83	-
Helps Creek	1	9	627643	6058800	Downstream Extent	2025-07-20	19	1	Riffle	5	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627660	6058874	Downstream Extent	2025-07-20	20	1	Glide	90	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627659	6058879	Downstream Extent	2025-07-20	21	1	Riffle	5	2	yes	-	-	-	0.55	0.56	0.53	0.55	0.08	0.09	0.05	0.07	0.45	0.8	0.55	0.6	4.7	4.9	5.2	4.93	-
Helps Creek	1	9	627632	6058902	Downstream Extent	2025-07-20	22	1	Glide	40	1	yes	-	-	-	0.61	0.54	0.53	0.56	0.07	0.07	0.06	0.07	2.9	0.75	1.5	1.72	3.2	4.1	3.2	3.5	-
Helps Creek	1	9	627623	6058905	Downstream Extent	2025-07-20	23	1	Riffle	10	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627619	6058944	Downstream Extent	2025-07-20	24	1	Glide	47	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627615	6058948	Downstream Extent	2025-07-20	25	1	Riffle	10	2	yes	-	-	-	0.55	0.52	0.49	0.52	0.06	0.04	0.05	0.05	2.2	2.75	0.7	1.88	2.5	3.3	3.4	3.07	-
Helps Creek	1	9	627610	6058956	Downstream Extent	2025-07-20	26	1	Glide	17	1	yes	-	-	-	1.05	0.52	0.5	0.69	0.59	0.15	0.05	0.26	3.1	2	3.3	2.8	5.6	3.2	4.1	4.3	-
Helps Creek	1	9	627607	6058960	Downstream Extent	2025-07-20	27	1	Riffle	6	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627607	6058964	Downstream Extent	2025-07-20	28	1	Glide	4	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627607	6058964	Downstream Extent	2025-07-20	29	1	Riffle	4	2	yes	-	-	-	0.5	0.55	0.51	0.52	0.04	0.05	0.09	0.06	1	0.9	1.2	1.03	3.6	3.5	3.4	3.5	-
Helps Creek	1	9	627613	6058980	Downstream Extent	2025-07-20	30	1	Glide	17	1	yes	-	-	-	0.58	0.55	0.58	0.57	0.24	0.14	0.1	0.16	2.4	2.2	2.05	2.22	3.6	3.05	4	3.55	-
Helps Creek	1	9	627613	6058984	Downstream Extent	2025-07-20	31	1	Riffle	5	2	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	1	9	627611	6058993	Downstream Extent	2025-07-20	32	1	Glide	10	1	no	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Reach	Habitat Unit UTM Zone	Habitat Unit UTM Easting	Habitat Unit UTM Northing	UTM Location	Date (YYYY-MM-DD)	Habitat Unit Number	Habitat Unit Category	Habitat Unit Type	Habitat Unit Length (m)	Gradient (%)	Detailed Habitat Information	Disturbance Indicators	Barriers	Pool Type	Bankfull Depth 1 (m)	Bankfull Depth 2 (m)	Bankfull Depth 3 (m)	Bankfull Depth Average (m)	Water Depth 1 (m)	Water Depth 2 (m)	Water Depth 3 (m)	Water Depth Average (m)	Wetted Width 1 (m)	Wetted Width 2 (m)	Wetted Width 3 (m)	Wetted Width Average (m)	Bankfull Width 1 (m)	Bankfull Width 2 (m)	Bankfull Width 3 (m)	Bankfull Width Average (m)	Max. Pool Depth (m)
Helps Creek	2	9	625964	6055796	Downstream Extent	2025-08-21	1	1	Riffle	86	3	Yes	-	-	-	0.7	0.23	0.2	0.38	0.07	0.12	0.1	0.1	3.37	3.2	2.2	2.92	3.3	3.32	3	3.21	-
Helps Creek	2	9	625958	6055800	Downstream Extent	2025-08-21	2	1	Glide	8	2	Yes	-	-	-	0.23	0.25	0.19	0.22	0.18	0.2	0.06	0.15	2.55	2.78	3.78	3.04	3.24	3.53	4.69	3.82	-
Helps Creek	2	9	625902	6055864	Downstream Extent	2025-08-21	3	1	Riffle	94	2	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	2	9	625905	6055869	Downstream Extent	2025-08-21	4	1	Glide	6	1	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	2	9	625887	6055888	Downstream Extent	2025-08-21	5	1	Riffle	51	3	Yes	-	-	-	0.21	0.22	0.19	0.21	0.07	0.06	0.05	0.06	1.89	0.99	1.13	1.34	6.3	3.32	2.18	3.93	-
Helps Creek	2	9	625880	6055890	Downstream Extent	2025-08-21	6	1	Glide	8	1	Yes	-	-	-	0.38	0.29	0.31	0.33	0.27	0.18	0.28	0.24	3.31	2.93	1.63	2.62	3.55	3.09	3.3	3.31	-
Helps Creek	2	9	625772	6056054	Downstream Extent	2025-08-21	7	1	Riffle	219	3	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	2	9	625771	6056057	Downstream Extent	2025-08-21	8	1	Glide	4	1	No	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	2	9	625739	6056171	Downstream Extent	2025-08-21	9	1	Riffle	150	3	Yes	-	-	-	0.29	0.39	0.23	0.3	0.1	0.15	0.09	0.11	3.08	2.62	1.89	2.53	3.94	4.42	3.29	3.88	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub-Dominant Cover Type	Sub-Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Goathorn Creek	-	-	Cobbles	Boulders	17	3	1	21	Large Woody Debris	10	Overhanging Vegetation	6	1-20%	Shrub / Herb	Young Forest	L	AR	Slough	Accessible at most flows	30	Extensive wide riffle with frequent braids and bars. Cobble dominated with off channel habitat. Spawning habitat is limited, gravel not observed frequently in the main channel. Gravel isolated to water edges in pockets. Rearing habitat not frequent. Off channel slough present, providing low flows and 60% overhanging vegetation cover, fine sediment, 30 meters long at current flow. Fry and juvenile seen using slough as refuge.
Goathorn Creek	-	-	Gravel	Fines	1	0	0	1	Overhanging Vegetation	30	Small Woody Debris	4	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Side channel is small and slow moving, separated by perennials greater than 1 m. Spawning habitat is very poor. Gravel present but covered in sediment and isolated to narrow centre of channel, approximately 10cm wide. Rearing habitat is moderate. Channel is mostly covered by overhanging vegetation and provides refuge from fast flows. Fry seen swimming throughout. Side channel is attached to slough from main channel.
Goathorn Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goathorn Creek	-	-	Cobbles	Boulders	12	3	0	15	Boulders	20	Overhanging Vegetation	5	1-20%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	Accessible at most flows	50	Habitat is a riffle that extends +500 dominated by cobble and sub-dominated by boulders. Boulders provide abundant cover. Gravel is present in pockets surrounding boulders throughout the unit. Spawning habitat is moderate, large gravels are present throughout the habitat unit, with sorted gravels at 15cm deep with abundant flow. Rearing habitat is limited. Presence of channels connected to a seasonal wetland provides abundant rearing habitat. Flows within the channel are fast and deep, providing little cover.
Goathorn Creek	-	-	Cobbles	Boulders	9	2	0	11	Boulders	18	Overhanging Vegetation	10	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	500 meter extensive riffle. Limited rearing and spawning habitat. Spawning habitat is limited, trace amount of gravels at a max depth of 10 cm along water edge. Poor rearing habitat throughout. Lack of cover or slow flows. Possible side channel within habitat. See secondary habitat.
Goathorn Creek	-	-	Cobbles	Gravel	30	5	0	35	Large Woody Debris	70	Overhanging Vegetation	10	1-20%	Shrub / Herb	Young Forest	L	AR	Side Channel	Accessible at most flows	30	Full of deadfall, only able to observe 1/5th of side channel. Visible portion is riffle dominated by cobble. Poor spawning habitat, slow flow and shallow depth. Large gravel across stream bed. Possible rearing habitat, most of the channel is sheltered by LWD.
Goathorn Creek	-	-	Cobbles	Boulders	6	0	0	6	Boulders	30	Overhanging Vegetation	10	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Extensive fast flowing riffle with trace gravels along 120 meter length. Spawning gravel present sporadically in shallow water edges, in pockets of ~2-4m². Rearing habitat limited, boulders abundant in fast flows, eddies present for shelter from the flows.
Goathorn Creek	0.21	0.61	Cobbles	Gravel	0	0	0	0	Boulders	10	Overhanging Vegetation	5	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	4 meter long pool with large boulders providing cover. Spawning habitat is limited, gravel along water edges and behind boulders. Suitable Rearing habitat, protection from fast flows along with cover under large boulders.
Goathorn Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goathorn Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goathorn Creek	-	-	Boulders	Cobbles	4	0	0	4	Boulders	40	Deep Pool	12	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is 90 meter cascade with 2 pools and abundant boulders throughout. Spawning habitat is limited, gravels are in small slower sections along water edges. Flow is very fast with a steep gradient. Poor rearing habitat, high flows and cascading riffles provide little slow moving cover. The 2 present pools were not measured due to safety.
Goathorn Creek	0.13	0.76	Bedrock	Cobbles	1	0	0	1	Deep Pool	60	Boulders	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a deep pool at the end of a high gradient chute. Pool contains large amount of gravel, cobble, boulders, and bedrock. Suitable Spawning habitat on the outer perimeter of pool with sorted gravel in 20cm edges. Deep pool provides suitable rearing habitat from fast flows. Unlikely for fish to travel above chute.
Tenas Creek	-	-	Cobbles	Boulders	12	2	0	14	Boulders	40	Overhanging Vegetation	10	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is a 200 meter long rifle with a dominant substrate of cobbles and sub-dominated by boulders. Cover consists of boulders, overhanging vegetation, and undercut banks. Spawning habitat is moderate, gravels distributed in pockets throughout channels in moderate flows and depths greater than 15cm. Rearing habitat is poor, fast flows and deep water throughout channels. Cover is present in the form of boulders throughout channels, overhanging vegetation provides cover along the edges, trace amounts of undercut banks throughout channels
Tenas Creek	0.16		Fines	Boulders	2	2	0	4	Deep Pool	70	Large Woody Debris	10	1-20%	Deciduous	Young Forest	N	-	None	-	-	Habitat unit is a 10 meter scour pool, dominated by fines and sub-dominated by cobbles. Pool is deep and provides cover for fish, LWD also provides cover. Spawning habitat is poor, with deep water and a lack of gravels. Rearing habitat is present, juvenile and adult fish seen holding inside of the pool. Large woody debris and small woody debris provide cover, while the deep pool provides refuge from fast flows.
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	Cobbles	Gravel	4	1	0	5	Overhanging Vegetation	30	Small Woody Debris	10	1-20%	Shrub / Herb	Young Forest	L	AR	Side Channel	Accessible at most flows	30	Habitat is a riffle that extends beyond 50 meters, substrate is dominated by cobbles and sub-dominated by gravels. Cover is comprised of overhanging vegetation, small woody debris, and large woody debris. Spawning habitat is present, large area of gravel that is in water deeper than 15cm, with moderately fast flows. Rearing habitat moderate, sections of unit have a high percentage of cover and slower flows providing refuge for small fish.



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub- Dominant Cover Type	Sub- Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Tenas Creek	-	-	Fines	Gravel	2	0	0	2	Overhanging Vegetation	70	Small Woody Debris	40	21-40%	Shrub / Herb	Young Forest	L	AR	Side Channel	Accessible at most flows		Habitat unit is a 20 m long riffle that is secondary channel running parallel to the main channel. The substrate is dominated by fines and sub-dominated by gravel. Spawning habitat is poor, gravel is mixed with fines throughout. Rearing habitat is moderate, habitat unit is abundantly covered by overhanging vegetation, small woody debris provides refuge for small fish inside of the stream.
Tenas Creek	-	-	Cobbles	Gravel	1	0	0	1	Overhanging Vegetation	3	Large Woody Debris	1	1-20%	Shrub / Herb	Shrub / Herb	N	-	-	-	-	Short glide ~6 meter length. No spawning habitat, substrate is cobble with larger than appropriate substrate for spawning. Reading habitat severely limited, small amount of cover.
Tenas Creek	-	-	Cobbles	Gravel	32	4	0	36	Large Woody Debris	12	Small Woody Debris	10	21-40%	Mixed Deciduous / Coniferous	Young Forest	L	AR	Side Channel	Accessible at most flows	30	Riffle is extensive and braids into multiple channels upon entering young forest. Spawning gravel is present within forest, gravel is present in shallow water. Rearing habitat is limited, fast flow and limited pools.
Tenas Creek	-	-	Fines	Gravel	2	0	0	2	Overhanging Vegetation	25	Small Woody Debris	5	1-20%	Shrub / Herb	Young Forest	N		Side Channel	Accessible at most flows	20	Small off channel habitat, access during current flows, likely no access at low flows. Slow flowing glide running adjacent to mainstream, separated by perennial veg. Suitable rearing habitat from main stem fast flows. No spawning habitat observed.
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	Cobbles	Boulders	0	0	0	0	Boulders	15	Overhanging Vegetation	2	1-20%	Shrub / Herb	Young Forest	N	-	None	-	-	Small glide, very small amount of cover. No suitable spawning gravel. Rearing habitat limited, lower flow but there is a lack of cover.
Tenas Creek	-	-	Cobbles	Gravel	2	0	0	2	Boulders	18	Overhanging Vegetation	3	1-20%	Shrub / Herb	Young Forest	L	R	None	-		Short riffle with trace amounts of spawning habitat. Trace Spawning gravel present in centre and edges of wetted channel. Rearing habitat limited, boulders and eddies present. Flow is fast for fry. Dolly Varden juvenile observed using boulder for cover.
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Riffle extends beyond site. End of reach survey.
Tenas Creek	-	-	Cobbles	Boulders	27	1	0	28	Boulders	20	Large Woody Debris	15	1-20%	Shrub / Herb	Shrub / Herb	L	AR	None	-	-	Limited spawning habitat throughout channel. Substrate is not appropriate, cobbles and boulders are too big. Isolated pockets of spawning gravel behind large boulders and along edge of wetted width. Rearing habitat limited, fast flowing water. Limited habitat present is from boulders and log jams.
Tenas Creek	-	-	Cobbles	Gravel	7	0	0	7	Overhanging Vegetation	30	Large Woody Debris	20	1-20%	Shrub / Herb	Young Forest	L	R	None	-		Spawning gravel very trace. Most is currently dry however at higher flows possible trace amounts of gravel and habitat. Spawning habitat poor due to gradient and spawning habitat mostly at higher flows possible flows only.
Tenas Creek	-	-	Cobbles	Fines	1	0	0	1	Undercut Banks	6	Overhanging Vegetation	5	1-20%	Deciduous	Young Forest	L	R	None	-	-	Pretty similar to previous site. Trace gravel cobbles are too large for spawning salmon or trout.
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	0.25		Cobbles	Gravel	2	0	0	2	Deep Pool	70	Overhanging Vegetation	40	1-20%	Shrub / Herb	Young Forest	L	R	-	-	-	Trace gravel, poor spawning habitat
Tenas Creek			Cobbles	Gravel	20	0	0	20	Overhanging Vegetation	30	Undercut Banks	5	1-20%	Shrub / Herb	Young Forest	L	R	-	-	-	Trace amounts of spawning gravel with moderate amount of fines within. Water depth not sufficient to support salmon spawning.
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	Cobbles	Gravel	1	2	0	3	Undercut Banks	10	Boulders	3	1-20%	Shrub / Herb	Young Forest	L	AR	-	-	-	-
Tenas Creek	-	-	Cobbles	Gravel	20	0	2	22	Overhanging Vegetation	20	Large Woody Debris	5	1-20%	Shrub / Herb	Young Forest	L	AR	-	-	-	Braided channel with some sections representing some glide and riffle. Elevated mid channel bar. Area appears disturbed by possible high water event.
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	0.17		Cobbles	Gravel	0	1	0	1	Deep Pool	70	Large Woody Debris	6	1-20%	Shrub / Herb	Young Forest	N	-	-	-	-	-
Tenas Creek	-	-	Cobbles	Gravel	5	4	0	9	Overhanging Vegetation	30	Boulders	10	1-20%	Shrub / Herb	Young Forest	L	R	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub- Dominant Cover Type	Sub- Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tenas Creek	-	-	Cobbles	Gravel	6	3	0		Overhanging Vegetation	20	Large Woody Debris	5	1-20%	Shrub / Herb	Young Forest	N	-	-	-	-	-
Four Creek	-	-	Cobbles	Boulders	3	0	0	3	Boulders	30	Small Woody Debris	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is a 70m long cascade that starts 25 meters downstream of a perched culvert. Channel is dominated by cobble and sub-dominated by boulders. Spawning gravel is present in pockets of channel, gravel is in water shallower than 15cm. Rearing habitat is poor, cover from flows present behind boulders. Small woody debris provides limited cover throughout riffle length.
Four Creek	-	-	Fines	Boulders	1	2	0	3	Large Woody Debris	50	Undercut Banks	30	1-20%	Shrub / Herb	Young Forest	N	-	None	-	3	Habitat unit is a small 2 meter glide with abundant cover. Large woody debris covers most of the glide and slows flows, undercut banks provide abundant refuge. Spawning habitat is poor, no gravel present, channel is dominated by fines. Rearing habitat is abundant, slow flows and cover provides refuge from cascades and predators.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek			Cobbles	Boulders	0	0	0	0	Overhanging Vegetation	50	Boulders	30	21-40%	Shrub / Herb	Young Forest	N	-	None	-	30	Habitat unit is a 30 m riffle dominated by cobble and sub-dominated by boulders. Abundant overhanging vegetation and boulder cover. Spawning habitat is poor, trace to no gravels present, slow flows and shallow depths throughout unit. Rearing habitat is moderate, overhanging vegetation and boulders provide abundant cover.
Four Creek			Fines	Cobbles	4	0	0	4	Large Woody Debris	20	Small Woody Debris	15	41-70%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is an 8 meter long glide with shallow depths, slow flows, and abundant large woody debris. Spawning habitat is poor, gravel present in small shallow pockets within slow flows. Rearing habitat moderate, large woody debris and small woody debris provide abundant cover within the channel, overhanging vegetation provides moderate cover above the channel.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Fines	Gravel	5	0	0	5	Overhanging Vegetation	90	Instream Vegetation	5	1-20%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	50	Habitat unit is a wetland that has signs of seasonally flooding. Channels braid throughout. Overhanging vegetation covers 90% of channels. Dominated by fines. Spawning habitat is poor, slow flows and trace spawning gravel. Fine substrate and organic matter abundant. Rearing habitat abundant, slow flows and abundant cover throughout.
Four Creek	-	-	Cobbles	Gravel	8	0	0	8	Boulders	10	Small Woody Debris	3	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is a riffle dominated by cobbles and sub-dominated by gravels. Poor cover throughout habitat unit. Spawning habitat limited, characterized by slow flow, shallow water, and pockets of gravel. Rearing habitat very poor. Shallow waters, small amount of cover. Large woody debris and boulders provide limited refuge for small fish. Water moves underground at the downstream point, leaving channel dry with pockets of puddles downstream of habitat unit
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Cobbles	Gravel	7	2	0	9	Overhanging Vegetation	45	Boulders	25	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is an extensive at riffle at a high gradient with low flows. Gravel is present throughout at depths shallower than 15cm. Spawning habitat limited, small gravel throughout riffle, but it is shallower than 15cm requirement at current flows. Creek is small in width and depth, limiting large fish travel. Rearing habitat is present, abundant cover due to overhanging vegetation and boulders, gradient and low flow limits travel.
Four Creek	-	-	Gravel	Cobbles	0	0	0	0	Overhanging Vegetation	90	Undercut Banks	5	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a 3 meters long riffle with abundant gravel and cover. Spawning gravel present within the glide. Gravels present at depths greater than 15cm with low flow. Moderate rearing habitat. Boulders provide refuge from fast flows, overhanging vegetation covers 90% of glide.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Cobbles	Boulders	4	0	0	4	Overhanging Vegetation	95	Boulders	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Riffle extends for 20 meters at a gradient of 4%. Heavily covered by overhanging vegetation. Low flows. Poor spawning habitat, trace gravels at shallow depths with low flows. Rearing habitat moderate. Channel is 95% covered by overhanging vegetation, flows are slow, boulders provide refuge.
Four Creek	-	-	Gravel	Fines	1	0	0	1	Overhanging Vegetation	90	Undercut Banks	3	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a 7m glide under dense overhanging vegetation. Spawning gravel present underneath low flows and shallow water depth. Rearing habitat moderate, dense overhanging vegetation cover with trace undercut banks.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub- Dominant Cover Type	Sub- Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Four Creek	-	-	Gravel	Boulders	1	0	0	1	Boulders	25	Small Woody Debris	4	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a riffle that extends 15 meters. Gravel and boulder dominated, shallow flow. Poor spawning habitat, gravel inbetween boulders in small pockets, low flow throughout. Reading habitat present, boulders provide refuge from flows.
Four Creek	-	-	Gravel	Fines	-	0	0	0	Overhanging Vegetation	8	Boulders	4	1-20%	Shrub / Herb	Young Forest	H	AR	None	-	-	Glide is 3m in length, dominated by gravel, shallow water depth, and slow flows. Spawning habitat is available in deepest portions, below 15cm. Glide is 80% comprised of gravel, 20% of fines. Water flow is slow and low. Rearing habitat is limited due to lack of cover. Glide provides slow flows for smaller fish.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Gravel	Cobbles	2	0	0	2	Small Woody Debris	20	Overhanging Vegetation	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is 15 meter long riffle. Small woody debris provides cover throughout. Dominated by gravel with low flows. Spawning habitat is poor, gravel throughout with very low flows. Poor rearing habitat, minimal flows, lack of cover from predators.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Unable to take measurements, glide is 90% under deadfall. Dead fall not functional as woody debris as it is hanging over the creek.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Gravel	Cobbles	5	0	0	5	Overhanging Vegetation	45	Large Woody Debris	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is glide separated by very short riffles. Excludes riffles since lengths were 1m or less. Glide dominated by gravel. Spawning habitat present, gravel abundant across channel width and at depths greater than 15cm. Slow flows throughout glide. Rearing habitat moderate. Overhanging vegetation, small woody debris, large woody debris and undercut banks provide extensive cover. Observed juvenile-adult Dolly Varden using cover.
Four Creek	-	-	Cobbles	Boulders	6	0	0	6	Overhanging Vegetation	30	Small Woody Debris	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a 70m long riffle that is dominated by cobbles and boulders. Spawning habitat is limited, gravels shallower than 15cm, gravel in small isolated pockets and between other substrates. Rearing habitat moderate, cover provided by overhanging vegetation, small woody debris, large woody debris, and slow flow areas by boulders.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Cobbles	Boulders	20	0	0	20	Overhanging Vegetation	65	Boulders	30	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is a 130 meter long riffle dominated by cobbles and sub-dominated by boulders. Overhanging vegetation provides cover throughout the unit. Gravel is present in pockets. Spawning habitat is poor, there are areas of spawning gravel, shallow depths and slow flows limit suitability. Rearing habitat is moderate, log jams, overhanging vegetation, and boulders provide abundant cover and shelter for small fish.
Four Creek	-	-	Cobbles	Gravel	3	0	0	3	Overhanging Vegetation	40	Large Woody Debris	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is a 4 meter long glide with abundant overhanging vegetation cover and LWD. Substrate is dominated by cobbles and sub-dominated by gravel. Spawning habitat is limited, gravel is abundant but is large/mixed well with cobble. Spawning gravel not suitable for small trout (on average 60mm). Slow flows present throughout. Rearing habitat is abundant, slow flows and abundant cover provided by overhanging vegetation and large woody debris. Undercut bank is present, providing further cover.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Cobbles	Boulders	10	4	0	14	Overhanging Vegetation	40	Large Woody Debris	20	1-20%	Shrub / Herb		L	AR	None	-	14	Habitat unit is a 140 meter long riffle dominated by cobbles and sub-dominated by gravel. Overhanging vegetation and woody debris throughout the channel. Undercut banks present periodically. Spawning habitat is poor, limited spawning gravel, slow flows, and shallow depths. Rearing habitat is moderate, Large Woody Debris and Small Woody Debris provide cover and snow flows throughout channel. Overhanging vegetation provides cover among most of the channel.
Four Creek	-	-	Gravel	Fines	1	0	0	1	Overhanging Vegetation	70	Large Woody Debris	5	1-20%	Shrub / Herb	Young Forest	H	AR	None	-	-	Habitat is a 6 meter long glide, dominated by gravels and sub-dominated by fines. Overhanging vegetation covers most of the glide. Spawning habitat is poor, gravel is present in large pockets. Flow is slow ovetop of gravels with shallow depths. Fines underlying most of the gravel. Rearing habitat is moderate, slow flows and abundant overhanging vegetation cover provides refuge. Small amount of in-stream cover, limited to LWD on the downstream extent.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek			Cobbles	Gravel	7	11	0	18	Boulders	40	Undercut Banks	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Riffle extends to 140 meters, dominated by cobbles with gravels in pockets throughout. Boulders, undercut banks, and large woody debris provide cover throughout extent. Spawning habitat is poor, shallow depths and trace amount of gravel at a gradient of 4%. Gravel present in small pockets throughout channel at depths of 15cm or less. Rearing habitat is moderate, several areas with abundant undercut banks, large woody debris, overhanging vegetation, and boulders provide refuge from flows and predators.
Four Creek			Gravel	Cobbles	3	0	0	3	Large Woody Debris	25	Overhanging Vegetation	10	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a glide that extends 3 meters dominated by gravels and sub-dominated by cobbles. Slow flows and shallow depths throughout. Spawning habitat is poor due to slow flows and shallow depths. Gravel present but not well sorted. Rearing habitat is moderate, slow flows, large woody debris, and boulders provide some cover.



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub- Dominant Cover Type	Sub- Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Cobbles	Boulders	0	0	0	0	Boulders	50	Overhanging Vegetation	15	21-40%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a 25m long riffle dominated by cobbles and boulders. Gravel is very trace throughout riffle, in pockets on the edge of the water, and in between boulders. Spawning habitat is poor, gravels only present in small pockets or between boulders in shallow depths. Rearing habitat is limited, high gradient and low levels make fish travel difficult. Boulders provide refuge from fast flows.
Four Creek	-	-	Gravel	Boulders	0	0	0	0	Overhanging Vegetation	20	Small Woody Debris	20	1-20%	Shrub / Herb	Young Forest	H	AR	None	-	7	Habitat unit is a 7 meter glide, dominated by gravel and sub-dominated by boulders. Small woody debris and overhanging vegetation provide cover. Spawning habitat is limited, abundant spawning gravel but are in shallow depths and low flows. Rearing habitat moderate, small woody debris, overhanging vegetation, and undercut banks provide abundant cover for small fish, low flows present.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	Cobbles	Gravel	0	0	0	0	Undercut Banks	8	Overhanging Vegetation	5	> 90%	Shrub / Herb	Mature Forest	L	AR	None	-	-	Habitat is a 4 meter glide domanited by gravel and sub-dominated by cobble. Limited cover with undercut banks and overhanging vegetation. Spawning habitat is limited, appropriately sized gravels are at a depth of less than 15 cm in slow flows. Rearing habitat limited, cover provided by undercut banks, slow flows for small fish.
Four Creek	-	-	Cobbles	Boulders	4	0	0	4	Overhanging Vegetation	25	Boulders	15	1-20%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat unit is a riffle that runs for 10 meters. Cobble dominate substrate, sub-dominated by boulders. Spawning habitat is poor, trace gravels and water depths of less than 15 cm. Rearing habitat is poor with a shallow depth and fast flows. Boulders provide limited refuge from flows, overhanging vegetation and undercut banks provide cover.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May represent a cascade in higher flows.
Four Creek	-	-	Fines	Boulders	3	1	0	4	Boulders	15	Large Woody Debris	20	41-70%	Shrub / Herb	Young Forest	L	AR	None	-	-	Habitat is a glide that is 4 meters long, deep slow flows with large woody debris and boulders providing cover. Spawning habitat is poor, gravel is present in small shallow pockets along the edge of the glide. Slow flows throughout glide. Rearing habitat is moderate, large woody debris provides cover from above stream, boulders provide cover within stream. Slow flows within entire glide. Glide is in a hydro station pool.
Four Creek	-	-	Cobbles	Gravel	15	0	0	15	Overhanging Vegetation	45	Boulders	20	21-40%	Shrub / Herb	Young Forest	L	AR	None	-	-	Confluence at habitat unit 6, survey continued on four creek upstream towards the south west. Habitat unit is a 6% gradient cascade that extends 400 meters, dominated by cobbles, sub-dominated by gravels and boulders. Spawning habitat is limited, gravel present in pockets habitat unit, shallow depths throughout. Gravels are in water shallower than 15cm or are dry along water edge. Reading habitat is limited, overhead vegetation throughout habitat unit covers the stream, undercut banks and boulders provide refuge from flow. Gradient and flows would likely limit small fish travel.
Four Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Cobbles	Fines	2	0	0	2	Overhanging Vegetation	90	Small Woody Debris	10	0%	Shrub / Herb	Shrub / Herb	L	R	Seasonally Flooded Wetland	At Most Flows	1000	Habitat unit is a riffle entering a wetland, dominated by cobbles and sub-dominated by fines. Channel is 90% covered by overhanging vegetation, with small woody debris inside of the channel. Spawning habitat is poor, slow flows, silty bottom, and shallow depths do not provide abundant spawning habitat. Rearing habitat is abundant, slow flows and a large amount of cover provide rearing habitat for fish.
Helps Creek	-	-	Cobbles	Fines	4	0	0	4	Overhanging Vegetation	90	Undercut Banks	15	0%	Shrub / Herb	Shrub / Herb	N	-	Seasonally Flooded Wetland	At Most Flows	-	Habitat is a small glide dominated by cobbles and sub dominated by fines. Channel is almost completely covered by overhanging vegetation. Poor Spawning habitat, fines and cobbles dominate a slow moving glide, no exposed gravel in the channel. Rearing habitat abundant, overhanging vegetation and undercut banks provide coverage in slow flows for small fish.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Gravel	Cobbles	2	0	0	2	Overhanging Vegetation	90	Small Woody Debris	15	0%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At Most Flows	-	Habitat is a 4 meter riffle dominated by gravel and sub dominated by cobbles. Overhanging vegetation covers the entire channel. Spawning habitat is poor, gravel is present but is mixed with fines, shallow depth, slow flows, also present throughout. Rearing habitat is abundant, riffle ends in a deeper section with plenty of woody debris coverage. Whole channel is covered in overhanging vegetation providing abundant cover for small fish.
Helps Creek	-	-	Gravel	Fines	2	1	0	3	Overhanging Vegetation	85	Small Woody Debris	20	0%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat is a 8 meter glide dominated by gravels and sub-dominated by fines. Cover is abundant. Spawning habitat is poor, gravel that is present is covered in fines, fine is sub-dominant. Slow flow and shallow depth throughout. Rearing habitat is abundant, overhanging vegetation is covering the entire channel, slow flows and woody debris provide cover for small fish.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

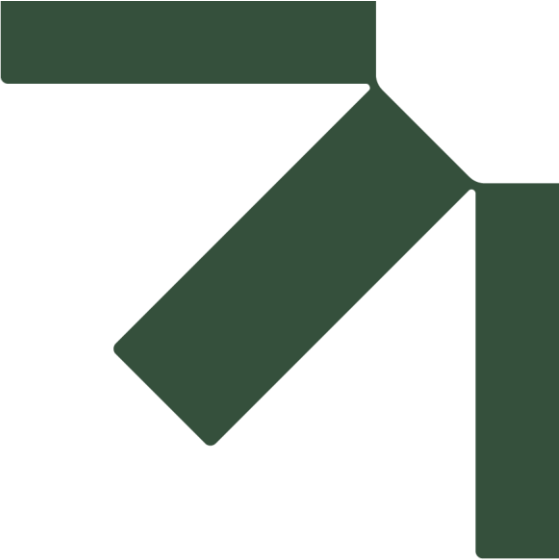
Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub- Dominant Cover Type	Sub- Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Cobbles	Gravel	0	0	0	0	Overhanging Vegetation	60	Instream Vegetation	10	0%	Shrub / Herb	Shrub / Herb	L	R	Seasonally Flooded Wetland	At High Flows Only	-	Habitat Unit is a 4 meter long riffle that is dominated by cobbles and sub dominated by gravel. Overhanging vegetation is the most abundant cover type. Spawning habitat is poor. Gravel present in pockets, within shallow and slow flowing water. Rearing habitat is moderate, overhanging vegetation covers most of the channel, in-stream vegetation is present.
Helps Creek	-	-	Cobbles	Gravel	0	0	0	0	Overhanging Vegetation	40	Instream Vegetation	5	0%	Shrub / Herb	Shrub / Herb	L	R	Seasonally Flooded Wetland	At High Flows Only	-	Habitat unit is a 5 meter glide dominated by cobble. Overhanging vegetation covers most of the channel. Poor spawning habitat, trace gravel, shallow depths, slow flows. Rearing habitat moderate. Over hanging vegetation present, slow moving water provides refuge for small fish.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Gravel	Fines	-	0	0	0	Overhanging Vegetation	90	Small Woody Debris	20	0%	Shrub / Herb		L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat is a riffle with a dominant substrate of gravels and sub dominated by fines. Overhanging vegetation throughout. Spawning habitat limited, slow flows, shallow depths, fines underlaying substrate. Rearing habitat abundant, overhanging vegetation cover, small woody debris, slow flows, provide refuge.
Helps Creek	-	-	Fines	Gravel	-	0	0	0	Overhanging Vegetation	85	Small Woody Debris	10	0%	Shrub / Herb	Shrub / Herb	L	R	Seasonally Flooded Wetland	At High Flows Only	-	Habitat is glide, dominated by fines with trace gravels throughout. Overhanging vegetation is abundant, small woody debris within the channel. Spawning habitat poor, almost all fine substrate, slow flows. Rearing habitat abundant, deep water, slow flows, nearly complete cover.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Cobbles	Gravel	0	0	0	0	Overhanging Vegetation	90	Instream Vegetation	2	0%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At Most Flows	-	Habitat unit is a riffle, dominated by cobbles and gravels. Grass hangs over channel providing 90% coverage. Spawning habitat is limited, gravel present in a narrow shallow channel, mixed thoroughly with fines. Rearing habitat is moderate, narrow shallow flows throughout channel. Greatly covered by overhanging vegetation.
Helps Creek	-	-	Gravel	Fines	0	0	0	0	Overhanging Vegetation	70	Instream Vegetation	1	0%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat unit is a 25 meter long glide dominated by gravel and fines. Coverage consists of tall grass throughout riparian area. Spawning habitat poor, shallow slow moving water throughout channel, fine substrate overlays majority. Rearing habitat is abundant, slow flows and coverage present.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Gravel	Fines	0	0	0	0	Overhanging Vegetation	15	Undercut Banks	2	1-20%	Shrub / Herb	Shrub / Herb	L	R	Seasonally Flooded Wetland	At High Flows Only	-	Habitat is a small riffle, with overhanging vegetation and limited undercut banks. Substrate is predominantly gravel and fines. Spawning habitat is poor, gravels present in narrow shallow channel. Fines throughout. Rearing is poor, little cover provided for smaller fish.
Helps Creek	-	-	Gravel	Fines	0	0	0	0	Overhanging Vegetation	60	Small Woody Debris	10	0%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat is a deep glide that flows for 40 meters. Channel is covered by overhanging vegetation. Substrate is dominated by gravel and fines. Silt clouded entire channel. Spawning habitat is poor, fines throughout channel covering gravels. Very slow flows. Rearing habitat is abundant, slow flows, deep water, and coverage throughout.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Gravel	Fines	0	0	0	0	Overhanging Vegetation	80	Instream Vegetation	15	1-20%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat unit is a 15m riffle that is dominated by gravel and fines. Covered by overhanging vegetation and instream veg. Spawning habitat poor, slow flow, narrow channel, and shallow depth. Rearing habitat moderate, extensive cover throughout.
Helps Creek	-	-	Cobbles	Gravel	0	0	0	0	Overhanging Vegetation	50	Small Woody Debris	15	0%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat is a glide that's is dominated by cobbles and gravels, with abundant overhanging cover. Spawning habitat is poor, slow flows and turbid waters. Rearing habitat abundant. Overhanging vegetation and small woody debris provide abundant cover. Young of year seen throughout. Slow flows.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Cobbles	Gravel	0	0	0	0	Overhanging Vegetation	95	Small Woody Debris	20	0%	Shrub / Herb	Shrub / Herb	L	R	Seasonally Flooded Wetland	At High Flows Only	-	Habitat unit is a 3 meter long riffle that is covered almost entirely by overhanging vegetation. Spawning habitat is poor, shallow depths, slow flows, very trace spawning gravel. Rearing habitat is moderate, cover on whole channel, narrow channel and low flows limit cover.
Helps Creek	-	-	Gravel	Fines	2	0	0	2	Overhanging Vegetation	80	Small Woody Debris	10	1-20%	Shrub / Herb	Shrub / Herb	L	AR	Seasonally Flooded Wetland	At High Flows Only	-	Habitat unit is a glide dominated by gravels and fines. Overhanging vegetation covers most of channel. Spawning habitat is poor, slow flows, abundant fines throughout. Rearing habitat abundant, cover throughout, deep water.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Appendix C: Fish Habitat
Assessment Procedure Data

Water Body	Riffle Crest Depth (m)	Res. Pool Depth (m)	Bed Material - Dominant	Bed Material - Subdominant	Large Woody Debris (10–20 cm)	Large Woody Debris (20–50 cm)	Large Woody Debris (>50 cm)	Large Woody Debris (total)	Dominant Cover Type	Dominant Cover (%)	Sub-Dominant Cover Type	Sub-Dominant Cover (%)	Canopy Cover (%)	Riparian Vegetation Type	Riparian Vegetation Stage	Spawning Gravel Amount	Spawning Gravel Type	Off Channel Habitat Type	Off Channel Habitat Access	Off Channel Habitat Length (m)	Comments
Helps Creek	-	-	Cobbles	Gravel	5	0	0	5	Overhanging Vegetation	75	Undercut Banks	10	41 - 70%	Shrub / Herb	Young Forest	Trace (L)	R	None	-	-	Habitat unit is a 82 m riffle characterized by cobbles and gravel, mixed together well. Spawning habitat is limited, rearing habitat is moderate.
Helps Creek	-	-	Gravel	Cobbles	0	0	0	0	Overhanging Vegetation	50	Small Woody Debris	15	1 - 20%	Shrub / Herb	Young Forest	Trace (L)	R	None	-	-	Spawning habitat is limited due to a lack of spawning gravels, and deep water. Rearing habitat is moderate, abundant cover from overhanging vegetation throughout the riffle, undercut banks provide additional cover. Areas where boulders provide refuge from flows.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Gravel	Cobbles	3	0	0	3	Overhanging Vegetation	35	Small Woody Debris	10	21 - 40%	Shrub / Herb	Young Forest	Trace (L)	R	Side Channel	At Most Flows	3	Habitat is a riffle that is 31 meters long characterized by gravels and cobbles. Shallow depths, and mixed substrate create poor spawning habitat, side channel contains moderate rearing habitat. Spawning is poor, fast flows and shallow depths do not provide abundant spawning gravels. Rearing habitat is moderate, some areas have slow flows including small side channel. Abundant cover.
Helps Creek	-	-	Fines	Gravel	6	0	0	6	Overhanging Vegetation	60	Small Woody Debris	20	21 - 40%	Shrub / Herb	Young Forest	Trace (L)	R	None	-	-	Habitat is a 5m glide, characterized by fines and gravels. Habitat is almost completely covered and slow flowing with deeper water for the creek. Spawning habitat is poor, lack of sorted gravel, gravel of varying sizes are mixed together, and habitat is characterized by low flows.Rearing habitat is abundant, while unit is slow, deep, and covered.
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helps Creek	-	-	Cobbles	Boulders	15	0	0	15	Overhanging Vegetation	30	Boulders	15	41 - 70%	Shrub / Herb	Young Forest	Trace (L)	R	None	-	-	Habitat is a 150 meter rifle characterized by cobbles and boulders. Observed 20+ salmonids, suspected rainbow trout. Spawning habitat moderate to low, suitable gravels present in pockets along shallow edges of water. Spawning gravel is trace but present in pockets. Fry and juvenile seen. Rearing habitat moderate, pockets of slow deeper water provided habitat for small fish. Cover throughout provided by overhanging vegetation and boulders, eddies and slow flow areas provide refuge.





Appendix D Goathorn Tributary J247 Site Card

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

SITE CARD

STREAM NAME (gaz) <u>Geothorn Trib J247</u> (local)																	
WATERSHED CODE																	
ILP MAP #			ILP #			NID MAP #			NID #								
REACH # <u>1 - 1</u>			SITE # <u>1</u>			FIELD UTM <u>19U 1619702 16054923</u>			SITE LG <u>100</u>			ACCESS <u>Foot</u>					
DATE <u>20101215</u>			TIME <u>111418</u>			AGENCY <u>SLR</u>			CREW <u>Spencer, S. Carina, H.</u>			FISH FORM <u>Y</u> ☐ N ☐					
CHANNEL mthd <u>Rule</u> GRADIENT % <u>0.33</u> EMS <u>Do 3.33 m/s</u> REQ. # <u>1</u>																	
CHANNEL WIDTH (m) <u>1.25 2.05 8</u> TEMP <u>9.1</u> COND. <u>61</u> μ S/cm																	
WETTED WIDTH (m) <u>7 0.5 1.0 0.85 0.97 1.14</u> pH <u>6.2</u> TURB. <u>T M L (C)</u>																	
RES. POOL DEPTH (m) <u>0.39</u> FLD SNS <u>None</u>																	
W ₆ Dp (m) <u>10.2 10.57 0.35 10.37</u> STAGE <u>D</u> M H No Vis. Ch. ☐ Dry/Int. ☒ DW ☐ Tribs. ☐																	
COVER	COVER Total																
	Type	SWD	LWD	B	U	DP	OV	IV	CROWN CLOSURE								
	AMT	<u>5</u>	<u>T</u>	<u>T</u>	<u>T</u>	<u>T</u>	<u>D</u>	<u>N</u>	0	1-20%	21-40%	41-70%	71-90%	> 90%			
	LOC	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	0	1	2	3	<u>4</u>	5			
	LWD FNC	<u>N</u>	<u>F</u>	<u>A</u>	DIST		<u>C</u>	<u>E</u>	INSTREAM VEG <u>(N) A M V</u>								
	LB SHP	<u>U</u>	<u>V</u>	<u>S</u>	<u>(D)</u>	RB SHP		<u>U</u>	<u>V</u>	<u>S</u>	<u>(D)</u>						
	TEXTURE	<u>F</u>	<u>G</u>	<u>C</u>	<u>B</u>	<u>R</u>	<u>A</u>	TEXTURE		<u>F</u>	<u>G</u>	<u>C</u>	<u>B</u>	<u>R</u>	<u>A</u>		
	RIP. VEG.	<u>N</u>	<u>G</u>	<u>S</u>	<u>C</u>	<u>D</u>	<u>(M)</u>	<u>W</u>	RIP. VEG.		<u>N</u>	<u>G</u>	<u>S</u>	<u>C</u>	<u>D</u>	<u>(M)</u>	<u>W</u>
	STAGE	INIT	SHR	PS	<u>(V)</u>	MF	NA	STAGE		INIT	SHR	PS	<u>(V)</u>	MF	NA		
	PATTERN TM ME IM IR <u>(S)</u> ST																
ISLANDS <u>(N)</u> O I F S AN																	
BARS <u>(N)</u> SIDE DIAG MID SPAN BR																	
COUPLING <u>(DC)</u> PC CO																	
CONFINEMENT EN CO FC <u>(OC)</u> UN N/A																	
FEATURES	C	NID MAP #	NID #	TYPE	HT/LG (m)	mthd	PHOTO	COMMENTS	UTM								
				<u>Culvert</u>	<u>0.5</u>	<u>5</u>	<u>R</u>	<u>F</u>	<u>Culvert covered by debris on the</u>	<u>19U 1619683</u>	<u>16054931</u>						
							<u>R</u>	<u>F</u>	<u>inlet</u>								
							<u>R</u>	<u>F</u>									
							<u>R</u>	<u>F</u>									

WATER

MORPHOLOGY

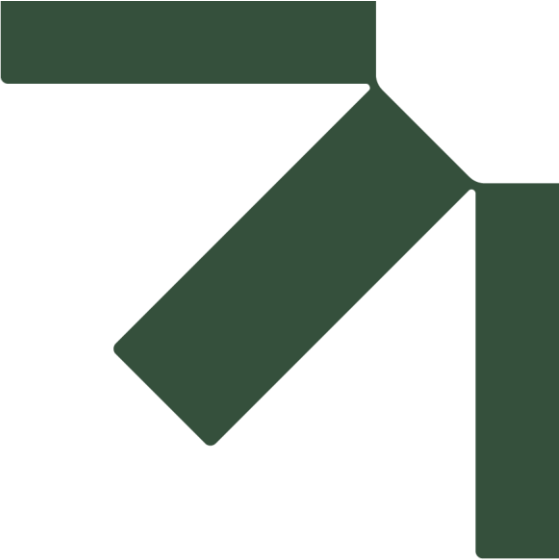
HABITAT QUALITY	Habitat was a dry/intermittent stream with few pools/water throughout
	One large pool was found above blocked culvert. Unable to assess
	due to dark water / steep banks.

FSZ ☐

PHOTO DOCUMENTATION	ROLL #	#	FOCLG	DIR	COMMENTS

WILDLIFE	GROUP	WILDLIFE OBSERVATIONS	GROUP	WILDLIFE OBSERVATIONS

COMMENTS	C	C



Appendix E Goathorn Tributary J247 Site Photographs

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Site Photographs

Photo 1: Deep pool found upstream of culvert on Goathorn Tributary J247



Photo 2: Smaller isolated pool upstream of potential fish barrier



Photo 3: Deep pool upstream of potential fish barrier, June 19, 2025



Photo 4: Tributary J247 creek culvert downstream of pool, June 19, 2025



Photo 5: Tributary J247 creek bed upstream of pool, June 19, 2025.



Photo 6: Dry channel upstream of pool, July 2, 2025.

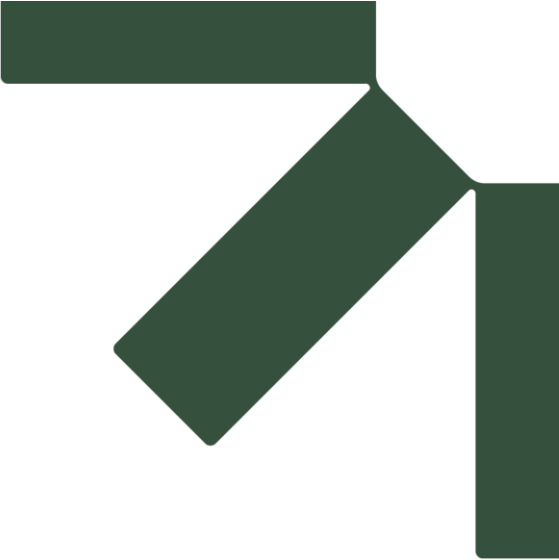


Photo 7: Tributary J247 pool above portetial fish barrier with minnow traps,
July 2, 2025.



Photo 8: Tributary J247 creek bed upstream of pool, July 2, 2025





Appendix F Goathorn Tributary J247 eDNA Lab Report

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Laboratory Report of qPCR run controls performed for the eDNA assay

☒

qPCR Positive Controls for correct assembly of assay reactions were successful for all technical plate runs.

☒

qPCR Negative Controls for detection of assay contamination were successful for all technical plate runs.

Date Received:	2025-07-15
COC Number:	20250715-1
Project Number:	Teikwa Mining Limited
Location Name:	J247 Tributary of Goathorn Ck.
PO #:	201.V24219.00000
Quote #:	N/A

Master Sort	MXNS Case ID	Client Sample Name	Site ID	Sample replicate	Location name	Collection date	Collection Time	Collected by	Zone	Easting	Northing	Filtration Date	Filtered by	Filtration start time	Filtration end time	Filtering time (calc)	Sample Volume (L)	Sample Contents	Preservation Method	Test for (TT)
1	SL20250078	J247-1	N/A	1	J247 Tributary of Goathorn Ck.	2025-07-02	15:10	SLR	N/A	N/A	N/A	2025-07-02	SLR	N/A	N/A	N/A	N/A	Site water	Silica	eFish1, eONGO5, eONK14
2	SL20250079	J247-2	N/A	2	J247 Tributary of Goathorn Ck.	2025-07-02	15:12	SLR	N/A	N/A	N/A	2025-07-02	SLR	N/A	N/A	N/A	N/A	Site water	Silica	eONMY5, eONT55, ePRWi4, eONCL4

Laboratory Report of qPCR run controls performed for the eDNA assay

✓

qPCR Positive Controls for correct assembly of assay reactions were successful for all technical plate runs.

✓

qPCR Negative Controls for detection of assay contamination were successful for all technical plate runs.

Date Received:	2025-07-15
COC Number:	20250715-1
Project Number:	Telkwa Mining Limited
Location Name:	J247 Tributary of Goathorn Ck.
PO #:	201.V24219.00000
Quote #:	N/A

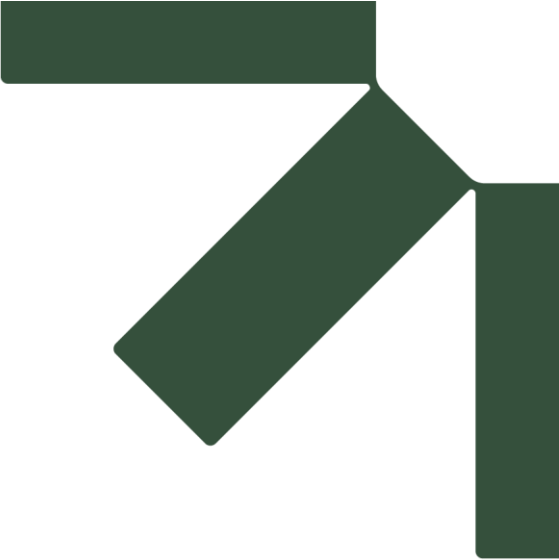
Master Sort	MXNS Case ID	Client Sample Name	Site ID	Sample replicate	Location name	Collection date	Amplifiable DNA Frequency / 4	Amplifiable DNA Call	Clean-Up Required	Amplifiable DNA Frequency / 4 (After Clean-up)	Amplifiable DNA Call After Clean-up	eFish1 Frequency / 8	eONGO5 Frequency / 8	eONK14 Frequency / 8	eONCL4 Frequency / 8	eONMY5 Frequency / 8	ePRW14 Frequency / 8	eONT55 Frequency / 8	Comment
1	SL20250078	J247-1	N/A	1	J247 Tributary of Goathorn Ck.	2025-07-02	4/4	Yes	No	N/A	N/A	0/8	0/8	0/8	N/A	N/A	N/A	N/A	
2	SL20250079	J247-2	N/A	2	J247 Tributary of Goathorn Ck.	2025-07-02	4/4	Yes	No	N/A	N/A	N/A	N/A	N/A	0/8	0/8	0/8	0/8	

MXNS Case ID	Sample Name	IntegritE-DNA™					After Clean-up IntegritE-DNA™					eFish1					eONGO5					eONKI4					eONMY5				
		qPCR Run	Well	Ct Value	Score	Frequency / 4	qPCR Run	Well	Ct Value	Score	Frequency / 4	qPCR Run	Well	Ct Value	Score	Frequency / 8	qPCR Run	Well	Ct Value	Score	Frequency / 8	qPCR Run	Well	Ct Value	Score	Frequency / 8	qPCR Run	Well	Ct Value	Score	Frequency / 8
SL20250078	J247-1	250716Q1	A06	18.06	1	4/4	N/A	N/A	N/A	N/A	N/A	250716Q3	A10	N/A	0	0/8	250716Q4	A01	N/A	0	0/8	250716Q5	A05	N/A	0	0/8	N/A	N/A	N/A	N/A	N/A
		250716Q1	B06	18.03	1							250716Q3	B10	N/A	0		250716Q4	B01	N/A	0		250716Q5	B05	N/A	0						
		250716Q1	C06	18.01	1							250716Q3	C10	N/A	0		250716Q4	C01	N/A	0		250716Q5	C05	N/A	0						
		250716Q1	D06	18.20	1							250716Q3	D10	N/A	0		250716Q4	D01	N/A	0		250716Q5	D05	N/A	0						
						250716Q3	E10	N/A	0		250716Q4	E01	N/A	0		250716Q5	E05	N/A	0												
SL20250079	J247-2	250716Q1	E06	16.75	1	4/4	N/A	N/A	N/A	N/A	N/A	250716Q3	F10	N/A	0		250716Q4	F01	N/A	0		250716Q5	F05	N/A	0						
		250716Q1	F06	16.97	1							250716Q3	G10	N/A	0		250716Q4	G01	N/A	0		250716Q5	G05	N/A	0						
		250716Q1	G06	16.88	1							250716Q3	H10	N/A	0		250716Q4	H01	N/A	0		250716Q5	H05	N/A	0						
		250716Q1	H06	17.25	1							N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	250716Q7	A01	N/A	0	0/8	
						250716Q7	B01	N/A	0	250716Q7	C01	N/A	0	250716Q7	D01	N/A	0	250716Q7	E01	N/A	0	250716Q7	F01	N/A	0	250716Q7	G01	N/A	0	250716Q7	H01

MXNS Case ID	Sample Name	eONTS5					ePRWI4					eONCL4					Sort
		qPCR Run	Well	Ct Value	Score	Frequency / 8	qPCR Run	Well	Ct Value	Score	Frequency / 8	qPCR Run	Well	Ct Value	Score	Frequency / 8	
SL20250078	J247-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
																	2
																	3
																	4
																	5
																	6
																	7
																	8
SL20250079	J247-2	250716Q8	A04	N/A	0	0/8	250716Q9	A07	N/A	0	0/8	250716Q10	A10	N/A	0	0/8	9
		250716Q8	B04	N/A	0		250716Q9	B07	N/A	0		250716Q10	B10	N/A	0		10
		250716Q8	C04	N/A	0		250716Q9	C07	N/A	0		250716Q10	C10	N/A	0		11
		250716Q8	D04	N/A	0		250716Q9	D07	N/A	0		250716Q10	D10	N/A	0		12
		250716Q8	E04	N/A	0		250716Q9	E07	N/A	0		250716Q10	E10	N/A	0		13
		250716Q8	F04	N/A	0		250716Q9	F07	N/A	0		250716Q10	F10	N/A	0		14
		250716Q8	G04	N/A	0		250716Q9	G07	N/A	0		250716Q10	G10	N/A	0		15
		250716Q8	H04	N/A	0		250716Q9	H07	N/A	0		250716Q10	H10	N/A	0		16

MXNS Case ID	Sample Name	Positive Controls			
		Primer Set	qPCR run	Well	Positive Control Ct
SL20250078	J247-1	ePlant5	250716Q1	A08	21.00
		ePlant5	250716Q1	B08	20.97
		eFish1	250716Q3	A12	21.96
		eFish1	250716Q3	B12	22.09
		eONGO5	250716Q4	A03	20.98
		eONGO5	250716Q4	B03	21.19
		eONKI4	250716Q5	A07	34.30
		eONKI4	250716Q5	B07	33.73
SL20250079	J247-2	eONMY5	250716Q7	A03	37.39
		eONMY5	250716Q7	B03	37.51
		eONTS5	250716Q8	A06	36.42
		eONTS5	250716Q8	B06	36.27
		ePRWI4	250716Q9	A09	35.04
		ePRWI4	250716Q9	B09	34.60
		eONCL4	250716Q10	A12	34.40
		eONCL4	250716Q10	B12	33.97

Blank and Negative controls					
Primer Set	qPCR run	Well	Negative Control Ct	Score	Detection Frequency
ePlant5	250716Q1	A07	36.55	0	0/4
ePlant5	250716Q1	B07	37.52	0	Blank 250715
ePlant5	250716Q1	C07	36.25	0	
ePlant5	250716Q1	D07	37.08	0	
ePlant5	250716Q1	E07	N/A	0	0/4
ePlant5	250716Q1	F07	41.96	0	NTC
ePlant5	250716Q1	G07	N/A	0	
ePlant5	250716Q1	H07	42.11	0	
eFish1	250716Q3	A11	N/A	0	0/8
eFish1	250716Q3	B11	N/A	0	NTC
eFish1	250716Q3	C11	N/A	0	
eFish1	250716Q3	D11	N/A	0	
eFish1	250716Q3	E11	N/A	0	
eFish1	250716Q3	F11	N/A	0	
eFish1	250716Q3	G11	N/A	0	
eFish1	250716Q3	H11	N/A	0	
eONGO5	250716Q4	A02	N/A	0	0/8
eONGO5	250716Q4	B02	N/A	0	NTC
eONGO5	250716Q4	C02	N/A	0	
eONGO5	250716Q4	D02	N/A	0	
eONGO5	250716Q4	E02	N/A	0	
eONGO5	250716Q4	F02	N/A	0	
eONGO5	250716Q4	G02	N/A	0	
eONGO5	250716Q4	H02	N/A	0	
eONKI4	250716Q5	A06	N/A	0	0/8
eONKI4	250716Q5	B06	N/A	0	NTC
eONKI4	250716Q5	C06	N/A	0	
eONKI4	250716Q5	D06	N/A	0	
eONKI4	250716Q5	E06	N/A	0	
eONKI4	250716Q5	F06	N/A	0	
eONKI4	250716Q5	G06	N/A	0	
eONKI4	250716Q5	H06	N/A	0	
eONMY5	250716Q7	A02	N/A	0	0/8
eONMY5	250716Q7	B02	N/A	0	NTC
eONMY5	250716Q7	C02	N/A	0	
eONMY5	250716Q7	D02	N/A	0	
eONMY5	250716Q7	E02	N/A	0	
eONMY5	250716Q7	F02	N/A	0	
eONMY5	250716Q7	G02	N/A	0	
eONMY5	250716Q7	H02	N/A	0	
eONTS5	250716Q8	A05	N/A	0	0/8
eONTS5	250716Q8	B05	N/A	0	NTC
eONTS5	250716Q8	C05	N/A	0	
eONTS5	250716Q8	D05	N/A	0	
eONTS5	250716Q8	E05	N/A	0	
eONTS5	250716Q8	F05	N/A	0	
eONTS5	250716Q8	G05	N/A	0	
eONTS5	250716Q8	H05	N/A	0	
ePRWI4	250716Q9	A08	N/A	0	0/8
ePRWI4	250716Q9	B08	N/A	0	NTC
ePRWI4	250716Q9	C08	N/A	0	
ePRWI4	250716Q9	D08	N/A	0	
ePRWI4	250716Q9	E08	N/A	0	
ePRWI4	250716Q9	F08	N/A	0	
ePRWI4	250716Q9	G08	N/A	0	
ePRWI4	250716Q9	H08	N/A	0	
eONCL4	250716Q10	A11	N/A	0	0/8
eONCL4	250716Q10	B11	N/A	0	NTC
eONCL4	250716Q10	C11	N/A	0	
eONCL4	250716Q10	D11	N/A	0	
eONCL4	250716Q10	E11	N/A	0	
eONCL4	250716Q10	F11	N/A	0	
eONCL4	250716Q10	G11	N/A	0	
eONCL4	250716Q10	H11	N/A	0	



Appendix G In Situ Water Quality Data

2025 Fish and Fish Habitat Technical Report

Tenas Project

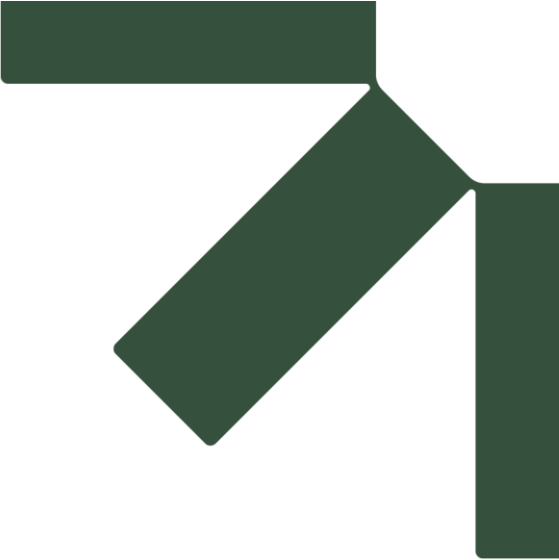
Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Appendix G: In Situ Water Quality Data												
Water Body	Reach	Date	WQ Meter	UTM Easting	UTM Northing	Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Specific Conductivity (uS/cm)	Conductivity (uS/cm)	Turbidity (NTU)
Four Creek	1	2025-09-02	YSI ProDSS	620059	6054115	11.1	7.76	9.49	86.2	302.6	221.7	0.17
Four Creek	2	2025-09-02	YSI ProDSS	620042	6054093	9.9	7.85	9.61	84.9	301.2	214.1	0.03
Four Creek	3	2025-09-01	YSI ProDSS	619288	6052003	10.2	7.68	9.5	84.6	279.1	200.1	0.48
Four Creek	4	2025-08-31	YSI ProDSS	619259	6050061	10.2	7.86	9.47	84.3	317.6	227.7	17.19
Four Creek	5	2025-08-31	YSI ProDSS	619228	6049971	9.6	7.78	9.39	82.5	319.6	225.9	1.46
Goathorn Creek	1	2025-08-29	YSI ProDSS	620678	6058087	15.8	7.92	9.75	98.3	187.8	154.7	0.61
Goathorn Creek	2	2025-09-02	YSI ProDSS	620188	6054396	13.6	7.69	9.5	91.4	177.8	139	0.41
Goathorn Creek	3	2025-08-31	YSI ProDSS	623738	6047797	9.2	6.76	9.72	84.4	89.9	62.7	0.72
Goathorn Creek	4	2025-08-31	YSI ProDSS	623823	6047672	8.8	7.25	9.95	85.7	89.4	61.7	0.45
Helps Creek	1	2025-09-03	YSI ProDSS	627597	6059099	13	8.8	7.09	66.8	254.1	193.6	6.5
Helps Creek	2	2025-09-03	YSI ProDSS	625973	6055771	11.7	7.68	8.4	77	194.1	144.3	0.5
Tenas Creek	1	2025-08-28	YSI ProDSS	620636	6057944	14.1	8.24	9.86	96	162.5	128.7	0.76
Tenas Creek	1	2025-08-30	YSI ProDSS	616414	6053110	11.4	7.79	9.7	88.9	148.9	110.2	0.31
Tenas Creek	3	2025-08-30	YSI ProDSS	615088	6049838	8.7	7.91	10.73	92.3	149.3	102.9	0.49
Tenas Creek	2	2025-08-30	YSI ProDSS	616288	6053026	11.2	8.06	10.52	95.8	145.7	107.2	0.95
Four Creek	1	2025-09-19	YSI ProDSS	620075	6054149	8.4	7.71	10.5	89.6	322.7	220.5	106.98
Four Creek	2	2025-09-22	YSI ProDSS	619796	6053889	8.1	7.4	10.36	87.8	258	174.7	0.38
Four Creek	3	2025-09-21	YSI ProDSS	619297	6051999	7.7	7.88	10.46	87.7	308	206.3	0.28
Four Creek	4	2025-09-21	YSI ProDSS	619264	6050082	6.8	7.75	10.35	84.9	348.7	227.4	0.41
Four Creek	5	2025-09-21	YSI ProDSS	619233	6049980	6.7	7.92	10.24	83.9	350	227.9	0.64
Goathorn Creek	1	2025-09-24	YSI ProDSS	620679	6058091	5.7	7.52	11.93	95.1	180.2	113.7	2.08
Goathorn Creek	2	2025-09-19	YSI ProDSS	620196	6054390	10	6.79	10.35	91.7	204.3	145.9	0.39
Goathorn Creek	2	2025-09-25	YSI ProDSS	620481	6053812	6.6	7.55	11.25	91.8	183.6	119.1	1.44
Goathorn Creek	3	2025-09-20	YSI ProDSS	623747	6047793	8.1	6.79	10.11	85.5	110.3	74.6	0.24
Goathorn Creek	4	2025-09-20	YSI ProDSS	623810	6047695	8.6	7.07	10.59	90.8	108.5	74.6	0.28
Helps Creek	1	2025-09-23	YSI ProDSS	627591	6059071	7.4	6.79	7.61	63.2	309.6	205.1	1.9
Helps Creek	2	2025-09-23	YSI ProDSS	625849	6055948	8.4	6.89	7.57	84.6	222.2	151.9	0.36
Tenas Creek	1	2025-09-20	YSI ProDSS	616303	6052953	10	7.62	10.18	90.2	163.7	116.7	0.89
Tenas Creek	1	2025-09-24	YSI ProDSS	620654	6057927	6.2	7.95	11.75	95	175.8	112.7	0.99
Tenas Creek	1	2025-09-26	YSI ProDSS	616440	6053103	6.1	7	8.86	71.1	201.1	127.6	1.6
Tenas Creek	2	2025-09-20	YSI ProDSS	616170	6052940	10.3	7.78	10.14	90.6	162.1	116.6	7.78
Tenas Creek	2	2025-09-26	YSI ProDSS	616183	6052960	5.4	7.89	11.47	90.7	158.3	99	1.24
Tenas Creek	3	2025-09-22	YSI ProDSS	615091	6049832	7.2	8.02	10.64	88.5	160.4	106.5	0.47
Four Creek	1	2025-10-28	YSI ProDSS	620059	6054135	0.5	8.17	13.02	90.5	286.9	152.7	0.17
Four Creek	2	2025-10-28	YSI ProDSS	620301	6053631	0.3	8.12	12.18	84.1	287.4	151.9	-0.3
Four Creek	3	2025-10-31	YSI ProDSS	619294	6051998	0.8	7.94	12.77	89.4	240.9	129.6	-0.22
Four Creek	4	2025-10-31	YSI ProDSS	619268	6050083	1	8.02	12.12	85.3	237.7	128.6	0.39
Four Creek	5	2025-10-31	YSI ProDSS	619231	6049992	0.9	8	12.16	85.4	237.4	128.2	0.47
Goathorn Creek	1	2025-10-27	YSI ProDSS	620680	6058089	0.9	7.79	12.34	86.6	181.6	97.9	0.14
Goathorn Creek	1	2025-11-03	YSI ProDSS	620676	6058087	0.2	7.66	13.77	94.8	168.4	88.8	0.23
Goathorn Creek	2	2025-10-28	YSI ProDSS	620189	6054392	1.6	7.74	12.7	90.9	191.2	105.9	0.87
Goathorn Creek	2	2025-11-02	YSI ProDSS	620205	6054396	1.1	7.77	12.99	91.7	164.7	89.5	0.02
Goathorn Creek	3	2025-11-01	YSI ProDSS	623726	6047796	1	7.84	12.64	88.8	83.6	45.2	0.74
Goathorn Creek	4	2025-11-01	YSI ProDSS	623810	6047697	0.9	7.69	12.78	89.7	83.5	45.1	0.82
Helps Creek	1	2025-10-29	YSI ProDSS	627604	6059105	2.4	7.66	11.98	87.7	236.7	134.6	1.89
Helps Creek	2	2025-10-29	YSI ProDSS	625849	6055927	2.7	7.62	11.21	82.5	186.7	106.8	0.03
Tenas Creek	1	2025-10-27	YSI ProDSS	620632	6057943	1.1	7.99	12.78	90.2	161.8	88	0.49
Tenas Creek	1	2025-10-30	YSI ProDSS	616419	6053109	0.4	7.74	12.46	87.5	152.6	80.9	0.32
Tenas Creek	1	2025-11-03	YSI ProDSS	620674	6057961	0.1	7.89	13.56	93	157	82.2	0.46
Tenas Creek	2	2025-10-30	YSI ProDSS	616193	6052965	0.7	7.84	13.14	91.7	152.3	81.7	0.36
Tenas Creek	2	2025-11-02	YSI ProDSS	616187	6052964	1	7.89	13.12	92.3	142.6	77.2	0.7
Goathorn Creek	1	2025-09-18	YSI ProDSS	620682	6058087	7.7	8.05	11.2	94	201.1	134.4	-
Tenas Creek	1	2025-09-19	YSI ProDSS	620672	6057955	9.3	7.64	10.27	90.7	192.1	134.5	0.41





Appendix H Visual Spawner Survey Data

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

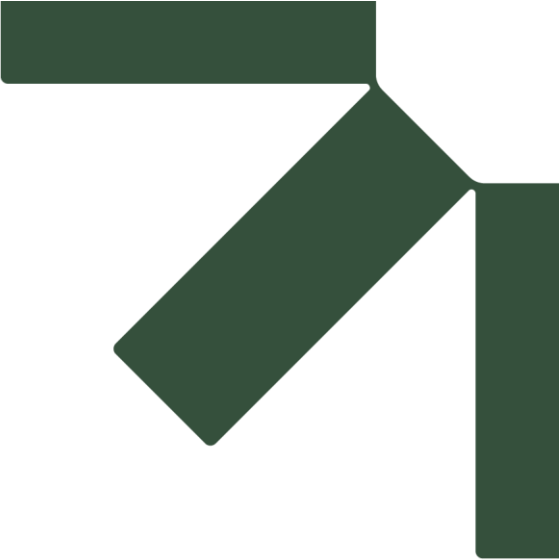
SLR Project No.: 201.089602.00001

May 6, 2026

Appendix H: Visual Spawner Survey Data

Water Body	Site ID	Date	UTM Easting	UTM Northing	Bank Walk Length (m)	Holding/Migrating	Spawning	Spent	Total Live	Redds	Observer Efficiency (%)	Total Dead
Tenas Creek	1	2025-08-28	620654	6057608	600	0	0	0	0	0	100	0
Goathorn Creek	1	2025-08-29	620680	6058085	750	90	10	1	101	5	65	0
Tenas Creek	1	2025-08-30	616785	6053305	950	0	0	0	0	0	70	0
Tenas Creek	2	2025-08-30	615766	6052371	1000	0	0	0	0	0	65	0
Tenas Creek	3	2025-08-30	614623	6049403	1000	0	0	0	0	0	70	0
Four Creek	4	2025-08-31	619363	6050417	500	0	0	0	0	0	65	0
Four Creek	5	2025-08-31	619001	6049656	550	0	0	0	0	0	65	0
Goathorn Creek	3	2025-08-31	623393	6048508	1000	0	0	0	0	0	65	0
Goathorn Creek	4	2025-08-31	624090	6047303	600	0	0	0	0	0	65	0
Four Creek	3	2025-09-01	619245	6051458	650	0	0	0	0	0	65	0
Four Creek	1	2025-09-02	620185	6054389	500	0	0	0	0	0	65	0
Four Creek	2	2025-09-02	619779	6053840	600	0	0	0	0	1	65	0
Goathorn Creek	2	2025-09-02	620575	6053744	1000	0	0	0	0	0	75	0
Helps Creek	1	2025-09-03	627554	6058700	550	0	0	0	0	0	55	0
Helps Creek	2	2025-09-03	625713	6056243	900	0	0	0	0		70	0
Tenas Creek	1	2025-09-17	620674	6057566	600	31	4	0	35	6	65	40
Goathorn Creek	1	2025-09-18	620540	6058427	780	115	27	2	144	80	65	162
Four Creek	1	2025-09-19	620192	6054389	500	0	0	0	0	0	65	0
Goathorn Creek	2	2025-09-19	620498	6053822	700	0	0	0	0	0	65	0
Goathorn Creek	3	2025-09-20	623376	6048532	1000	0	0	0	0	0	65	0
Goathorn Creek	4	2025-09-20	624102	6047300	800	0	0	0	0	0	65	0
Tenas Creek	1	2025-09-20	616777	6053309	1000	0	0	0	0	0	65	0
Tenas Creek	2	2025-09-20	615775	6052401	900	0	0	0	0	0	65	0
Four Creek	3	2025-09-21	619246	6051461	700	0	0	0	0	0	55	0
Four Creek	4	2025-09-21	619361	6050450	600	0	0	0	0	0	65	0
Four Creek	5	2025-09-21	619007	6049660	600	0	0	0	0	0	65	0
Four Creek	2	2025-09-22	620040	6054090	600	0	0	0	0	0	65	0
Tenas Creek	3	2025-09-22	614643	6049391	1000	0	0	0	0	0	65	0
Helps Creek	1	2025-09-23	627564	6058702	550	0	0	0	0	0	65	0
Helps Creek	2	2025-09-23	626048	6055681	900	0	0	0	0	0	65	0
Goathorn Creek	1	2025-09-24	620509	6058515	800	13	0	1	14	90	65	70
Tenas Creek	1	2025-09-24	620693	6057572	600	9	0	1	10	23	65	10
Goathorn Creek	2	2025-09-25	620205	6054398	700	0	0	0	0	0	65	0
Tenas Creek	1	2025-09-26	616773	6053313	1000	1	0	0	1	0	65	0
Tenas Creek	2	2025-09-26	615762	6052405	1000	0	0	0	0	0	65	0
Goathorn Creek	1	2025-10-27	620509	6058510	800	0	0	0	0	0	65	20
Tenas Creek	1	2025-10-27	620718	6057528	750	0	0	0	0	0	65	0
Four Creek	1	2025-10-28	620193	6054390	500	0	0	0	0	0	75	0
Four Creek	2	2025-10-28	619780	6053851	500	0	0	0	0	0	65	0
Goathorn Creek	2	2025-10-28	620576	6053674	1000	0	0	0	0	0	70	0
Helps Creek	1	2025-10-29	627563	6058699	550	0	0	0	0	0	35	0
Helps Creek	2	2025-10-29	625731	6056188	1000	0	0	0	0	0	55	0
Tenas Creek	1	2025-10-30	616780	6053310	780	0	0	0	0	0	65	0
Tenas Creek	2	2025-10-30	615776	6052347	1000	0	0	0	0	0	65	0
Four Creek	3	2025-10-31	619252	6051450	600	0	0	0	0	0	60	0
Four Creek	4	2025-10-31	619361	6050447	530	0	0	0	0	0	60	0
Four Creek	5	2025-10-31	618999	6049667	620	2	0	0	2	0	60	0
Goathorn Creek	3	2025-11-01	623385	6048532	1000	0	0	0	0	0	60	0
Goathorn Creek	4	2025-11-01	624099	6047301	600	0	0	0	0	0	60	1
Goathorn Creek	2	2025-11-02	620589	6053634	1100	0	0	0	0	0	75	0
Tenas Creek	2	2025-11-02	616074	6052909	1200	0	0	0	0	0	80	0
Goathorn Creek	1	2025-11-03	620504	6058515	800	0	0	0	0	0	80	0
Tenas Creek	1	2025-11-03	629265	6058785	600	0	0	0	0	0	75	0





Appendix I Abundance and Spawning Survey eDNA Lab Report

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Laboratory Report of qPCR run controls performed for the eDNA assay

- qPCR Positive Controls for correct assembly of assay reactions were successful for all technical plate runs.
- qPCR Negative Controls for detection of assay contamination were successful for all technical plate runs.

Date Received:	2025-12-03
COC Number:	20251203
Project Number:	Telikwa Mining Limited
Location Name:	Tenas Ck, Goathorn Ck and Helps Ck
Quote #:	N/A
PO #:	201.89602.00001

Master Sort	Client Sample Name	MXNS Case ID	Sample replicate	Collection date	Collection Time	Collected by	Zone	Easting	Northing	Filtration Date	Filtered by	Filtration start time	Filtration end time	Filtrating time (calc)	Sample Volume (L)	Sample Contents	Preservation Method	Test for (TT)
1	R1 Tenas Creek 02	SL20250093	R1	2025-11-02	14:30	N/A	N/A	N/A	N/A	2025-11-02	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
2	R2 Tenas Creek 02	SL20250094	R2	2025-11-02	14:30	N/A	N/A	N/A	N/A	2025-11-02	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
3	R3 Tenas Creek 02	SL20250095	R3	2025-11-02	14:30	N/A	N/A	N/A	N/A	2025-11-02	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
4	R1 Goathorn Creek 02	SL20250096	R1	2025-10-30	16:16	N/A	N/A	N/A	N/A	2025-10-30	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
5	R2 Goathorn Creek 02	SL20250097	R2	2025-10-30	16:16	N/A	N/A	N/A	N/A	2025-10-30	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
6	R3 Goathorn Creek 02	SL20250098	R3	2025-10-30	16:16	N/A	N/A	N/A	N/A	2025-10-30	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
7	R1 Helps Creek 02	SL20250099	R1	2025-10-29	10:10	N/A	N/A	N/A	N/A	2025-10-29	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
8	R2 Helps Creek 02	SL20250100	R2	2025-10-29	10:10	N/A	N/A	N/A	N/A	2025-10-29	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
9	R3 Helps Creek 02	SL20250101	R3	2025-10-29	10:10	N/A	N/A	N/A	N/A	2025-10-29	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONTS
10	Travel Blank	SL20250102	Blank	2025-11-03	13:57	N/A	N/A	N/A	N/A	2025-11-03	N/A	N/A	N/A	N/A	N/A	Blank	Silica	ONGO, ONKI, ONTS
11	GH04	SL20250103	N/A	2025-09-01	N/A	N/A	N/A	N/A	N/A	2025-09-01	N/A	N/A	N/A	N/A	N/A	Site water	Silica	ONGO, ONKI, ONMY, eFish

Laboratory Report of qPCR run controls performed for the eDNA assay

☑ qPCR Positive Controls for correct assembly of assay reactions were successful for all technical plate runs.

☑ qPCR Negative Controls for detection of assay contamination were successful for all technical plate runs.

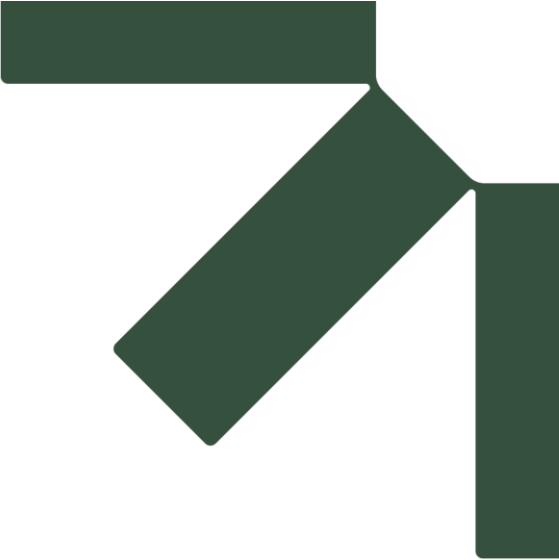
Date Received:	2025-12-03
COC Number:	20251203
Project Number:	Telkwa Mining Limited
Location Name:	Tenas Ck, Goathorn Ck and Helps Ck
Quote #:	N/A
PO #:	201.89602.00001

Master Sort	Client Sample Name	MXNS Case ID	Sample replicate	Collection date	Collection Time	Collected by	Zone	Easting	Amplifiable DNA Positive Detection Frequency / 4	Amplifiable DNA Call	Clean-Up Required	Amplifiable DNA Frequency / 4 (After Clean-up)	Amplifiable DNA Call After Clean-up	eONGO5 Positive Detection Frequency / 8	eONK14 Positive Detection Frequency / 8	eONTS5 Positive Detection Frequency / 8	eFish1 Positive Detection Frequency / 8	eONMY5 Positive Detection Frequency / 8	Comment
1	R1 Tenas Creek 02	SL20250093	R1	2025-11-02	14:30	N/A	N/A	N/A	1/4	No	Yes	4/4	Yes	0/8	0/8	0/8	Not Requested	Not Requested	
2	R2 Tenas Creek 02	SL20250094	R2	2025-11-02	14:30	N/A	N/A	N/A	3/4	Yes	No	N/A	N/A	0/8	0/8	0/8	Not Requested	Not Requested	
3	R3 Tenas Creek 02	SL20250095	R3	2025-11-02	14:30	N/A	N/A	N/A	4/4	Yes	No	N/A	N/A	0/8	0/8	0/8	Not Requested	Not Requested	
4	R1 Goathorn Creek 02	SL20250096	R1	2025-10-30	16:16	N/A	N/A	N/A	4/4	Yes	No	N/A	N/A	0/8	0/8	0/8	Not Requested	Not Requested	
5	R2 Goathorn Creek 02	SL20250097	R2	2025-10-30	16:16	N/A	N/A	N/A	4/4	Yes	No	N/A	N/A	0/8	0/8	0/8	Not Requested	Not Requested	
6	R3 Goathorn Creek 02	SL20250098	R3	2025-10-30	16:16	N/A	N/A	N/A	0/4	No	Yes	4/4	Yes	0/8	0/8	0/8	Not Requested	Not Requested	
7	R1 Helps Creek 02	SL20250099	R1	2025-10-29	10:10	N/A	N/A	N/A	4/4	Yes	No	N/A	N/A	0/8	0/8	0/8	Not Requested	Not Requested	
8	R2 Helps Creek 02	SL20250100	R2	2025-10-29	10:10	N/A	N/A	N/A	0/4	No	Yes	0/4	No	N/A	N/A	N/A	Not Requested	Not Requested	
9	R3 Helps Creek 02	SL20250101	R3	2025-10-29	10:10	N/A	N/A	N/A	0/4	No	Yes	4/4	Yes	0/8	0/8	0/8	Not Requested	Not Requested	
10	Travel Blank	SL20250102	Blank	2025-11-03	13:57	N/A	N/A	N/A	0/4	No	No	N/A	N/A	0/8	0/8	0/8	Not Requested	Not Requested	
11	GH04	SL20250103	N/A	2025-09-01	N/A	N/A	N/A	N/A	4/4	Yes	No	N/A	N/A	0/8	0/8	Not Requested	0/8	0/8	

Sample Name	MXNS Case ID	IntegritE-DNA™					After Clean-up IntegritE-DNA™					eONGO5					eONK4					eONTSS					eFish1					eONMY5					Sort
		qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 4	qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 4	qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 8	qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 8	qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 8	qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 8	qPCR Run	Well	Ct Value	Score	Positive Detection Frequency / 8	
R1 Tenas Creek 02	SL20250093	251208Q4	G04	26.88	1	1/4	251210Q6	E03	26.85	1	4/4	251212Q3	A01	N/A	0	0/8	251211Q5	A01	N/A	0	0/8	251211Q2	A01	N/A	0	0/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
		251208Q4	E04	27.00	0		251210Q6	G03	27.08	1		251212Q3	B01	N/A	0		251211Q5	B01	N/A	0		251211Q2	B01	N/A	0											2	
		251208Q4	F04	27.09	0		251210Q6	F03	27.12	1		251212Q3	C01	N/A	0		251211Q5	C01	N/A	0		251211Q2	C01	N/A	0											3	
		251208Q4	H04	27.39	0		251210Q6	H03	27.39	1		251212Q3	D01	N/A	0		251211Q5	D01	N/A	0		251211Q2	D01	N/A	0											4	
												251212Q3	E01	N/A	0		251211Q5	E01	N/A	0		251211Q2	E01	N/A	0											5	
R2 Tenas Creek 02	SL20250094	251208Q4	A05	26.73	1	3/4	N/A	N/A	N/A	N/A	N/A	251212Q3	F01	N/A	0		251211Q5	F01	N/A	0		251211Q2	F01	N/A	0											6	
		251208Q4	C05	26.77	1							251212Q3	G01	N/A	0		251211Q5	G01	N/A	0		251211Q2	G01	N/A	0											7	
		251208Q4	B05	26.90	1							251212Q3	H01	N/A	0		251211Q5	H01	N/A	0		251211Q2	H01	N/A	0											8	
		251208Q4	D05	27.16	0							251212Q3	A02	N/A	0	0/8	251211Q5	A02	N/A	0	0/8	251211Q2	A02	N/A	0	0/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9		
												251212Q3	B02	N/A	0		251211Q5	B02	N/A	0		251211Q2	B02	N/A	0											10	
R3 Tenas Creek 02	SL20250095	251208Q4	B05	26.90	1							251212Q3	C02	N/A	0		251211Q5	C02	N/A	0		251211Q2	C02	N/A	0											11	
		251208Q4	D05	27.16	0							251212Q3	D02	N/A	0		251211Q5	D02	N/A	0		251211Q2	D02	N/A	0											12	
												251212Q3	E02	N/A	0		251211Q5	E02	N/A	0		251211Q2	E02	N/A	0										13		
												251212Q3	F02	N/A	0		251211Q5	F02	N/A	0		251211Q2	F02	N/A	0										14		
												251212Q3	G02	N/A	0		251211Q5	G02	N/A	0		251211Q2	G02	N/A	0											15	
R1 Gothorn Creek 02	SL20250096	251208Q4	E05	25.16	1	4/4	N/A	N/A	N/A	N/A	N/A	251212Q3	H02	N/A	0		251211Q5	H02	N/A	0		251211Q2	H02	N/A	0												16
		251208Q4	G05	25.20	1							251212Q3	A03	N/A	0	0/8	251211Q5	A03	N/A	0	0/8	251211Q2	A03	N/A	0	0/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	17		
		251208Q4	F05	25.35	1							251212Q3	B03	N/A	0		251211Q5	B03	N/A	0		251211Q2	B03	N/A	0											18	
		251208Q4	H05	25.67	1							251212Q3	C03	N/A	0		251211Q5	C03	N/A	0		251211Q2	C03	N/A	0											19	
												251212Q3	D03	N/A	0		251211Q5	D03	N/A	0		251211Q2	D03	N/A	0											20	
R2 Gothorn Creek 02	SL20250097	251208Q4	E06	26.04	1	4/4	N/A	N/A	N/A	N/A	N/A	251212Q3	E03	N/A	0		251211Q5	E03	N/A	0		251211Q2	E03	N/A	0												21
		251208Q4	B06	26.40	1							251212Q3	F03	N/A	0		251211Q5	F03	N/A	0		251211Q2	F03	N/A	0												22
		251208Q4	C06	26.43	1							251212Q3	G03	N/A	0		251211Q5	G03	N/A	0		251211Q2	G03	N/A	0											23	
		251208Q4	D06	26.69	1							251212Q3	H03	N/A	0		251211Q5	H03	N/A	0		251211Q2	H03	N/A	0											24	
																																				25	
R3 Gothorn Creek 02	SL20250098	251208Q4	A07	27.30	0	0/4	251210Q6	C04	27.36	1	4/4	251212Q3	A04	N/A	0	0/8	251211Q5	A04	N/A	0	0/8	251211Q2	A04	N/A	0	0/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	26
		251208Q4	C07	27.30	0		251210Q6	A04	27.40	1		251212Q3	B04	N/A	0		251211Q5	B04	N/A	0		251211Q2	B04	N/A	0												27
		251208Q4	B07	27.36	0		251210Q6	D04	27.46	1		251212Q3	C04	N/A	0		251211Q5	C04	N/A	0		251211Q2	C04	N/A	0												28
		251208Q4	D07	27.73	0		251210Q6	B04	27.52	1		251212Q3	D04	N/A	0		251211Q5	D04	N/A	0		251211Q2	D04	N/A	0												29
												251212Q3	E04	N/A	0		251211Q5	E04	N/A	0		251211Q2	E04	N/A	0											30	
R2 Helps Creek 02	SL20250099	251208Q4	E07	24.09	1	4/4	N/A	N/A	N/A	N/A	N/A	251212Q3	F04	N/A	0		251211Q5	F04	N/A	0		251211Q2	F04	N/A	0												31
		251208Q4	G07	24.13	1							251212Q3	G04	N/A	0		251211Q5	G04	N/A	0		251211Q2	G04	N/A	0												32
		251208Q4	F07	24.29	1							251212Q3	H04	N/A	0		251211Q5	H04	N/A	0		251211Q2	H04	N/A	0												33
		251208Q4	H07	24.40	1							251212Q3	A05	N/A	0	0/8	251211Q5	A05	N/A	0	0/8	251211Q2	A05	N/A	0	0/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	34		
												251212Q3	B05	N/A	0		251211Q5	B05	N/A	0		251211Q2	B05	N/A	0											35	
R3 Helps Creek 02	SL20250100	251208Q4	E08	27.58	0	0/4	251210Q6	C05	27.72	1	4/4	251212Q3	C05	N/A	0		251211Q5	C05	N/A	0		251211Q2	C05	N/A	0												36
		251208Q4	B08	35.78	0		251210Q6	F04	35.69	0		251212Q3	D05	N/A	0		251211Q5	D05	N/A	0		251211Q2	D05	N/A	0												37
		251208Q4	D08	36.08	0		251210Q6	E04	35.96	0		251212Q3	E05	N/A	0		251211Q5	E05	N/A	0		251211Q2	E05	N/A	0												

Positive Controls			
Primer Set	qPCR run	Well	Positive Control Ct
ePlant5	251208Q4	B11	24.13
ePlant5	251208Q4	A11	24.14
ePlant5	251210Q6	F11	24.03
ePlant5	251210Q6	E11	24.09
eONTS5	251211Q2	A12	35.99
eONTS5	251211Q2	B12	36.33
eFish1	251211Q3	B10	36.16
eFish1	251211Q3	A10	37.02
eONMY5	251211Q4	H10	37.76
eONMY5	251211Q4	G10	38.25
eONK14	251211Q5	A12	34.08
eONK14	251211Q5	B12	34.15
eONGO5	251212Q3	A12	21.10
eONGO5	251212Q3	B12	21.30

Blank and Negative controls					
Primer Set	qPCR run	Well	Negative Control Ct	Score	Detection Frequency
ePlant5	251208Q4	B10	35.42	0	0/4
ePlant5	251208Q4	A10	35.50	0	Blank 251208-1
ePlant5	251208Q4	C10	35.79	0	
ePlant5	251208Q4	D10	36.61	0	
ePlant5	251208Q4	G10	40.15	0	0/4
ePlant5	251208Q4	F10	40.60	0	NTC
ePlant5	251208Q4	E10	N/A	0	
ePlant5	251208Q4	H10	N/A	0	
ePlant5	251210Q6	D11	36.17	0	0/4
ePlant5	251210Q6	A11	40.09	0	NTC
ePlant5	251210Q6	C11	45.57	0	
ePlant5	251210Q6	B11	N/A	0	
eONTS5	251211Q2	A11	N/A	0	0/8
eONTS5	251211Q2	B11	N/A	0	NTC
eONTS5	251211Q2	C11	N/A	0	
eONTS5	251211Q2	D11	N/A	0	
eONTS5	251211Q2	E11	N/A	0	
eONTS5	251211Q2	F11	N/A	0	
eONTS5	251211Q2	G11	N/A	0	
eONTS5	251211Q2	H11	N/A	0	
eFish1	251211Q3	A09	N/A	0	0/8
eFish1	251211Q3	B09	N/A	0	NTC
eFish1	251211Q3	C09	N/A	0	
eFish1	251211Q3	D09	N/A	0	
eFish1	251211Q3	E09	N/A	0	
eFish1	251211Q3	F09	N/A	0	
eFish1	251211Q3	G09	N/A	0	
eFish1	251211Q3	H09	N/A	0	
eONMY5	251211Q4	A12	N/A	0	0/8
eONMY5	251211Q4	B12	N/A	0	NTC
eONMY5	251211Q4	C12	N/A	0	
eONMY5	251211Q4	D12	N/A	0	
eONMY5	251211Q4	E12	N/A	0	
eONMY5	251211Q4	F12	N/A	0	
eONMY5	251211Q4	G12	N/A	0	
eONMY5	251211Q4	H12	N/A	0	
eONK14	251211Q5	A11	N/A	0	0/8
eONK14	251211Q5	B11	N/A	0	NTC
eONK14	251211Q5	C11	N/A	0	
eONK14	251211Q5	D11	N/A	0	
eONK14	251211Q5	E11	N/A	0	
eONK14	251211Q5	F11	N/A	0	
eONK14	251211Q5	G11	N/A	0	
eONK14	251211Q5	H11	N/A	0	
eONGO5	251212Q3	A11	N/A	0	0/8
eONGO5	251212Q3	B11	N/A	0	NTC
eONGO5	251212Q3	C11	N/A	0	
eONGO5	251212Q3	D11	N/A	0	
eONGO5	251212Q3	E11	N/A	0	
eONGO5	251212Q3	F11	N/A	0	
eONGO5	251212Q3	G11	N/A	0	
eONGO5	251212Q3	H11	N/A	0	



Appendix J Bulkley River Site Card

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

SITE CARD

STREAM NAME (gaz.)		Bulkley		(local)	
WATERSHED CODE					
ILP MAP #	ILP #	NID MAP #		NID #	
REACH #	-	SITE #	1	FIELD UTM	19U 1629556 160590991
DATE	201215101721	TIME	1131415	AGENCY	SLR
CREW		Spencer, S. S. Shm. / na. T.		FISH FORM	
ACCESS		Foot / Truck			

CHANNEL		mthd		Range		Finger		GRADIENT %		EMS		Do 9.42		REQ. #	
CHANNEL WIDTH (m)		140		171		160		132		143		164		132	
WETTED WIDTH (m)		134		165		150		125		120		129		155	
RES. POOL DEPTH (m)		-		-		-		-		0.5		0.5		-	
W ₀ Dp (m)		-		-		-		-		-		-		-	
STAGE		L M H		No Vis. Ch.		DW		Dry/Int.		-		-		-	
COVER		Total		17%		CROWN CLOSURE		0		1-20%		21-40%		41-70%	
Type		SWD		LWD		B		U		DP		OV		IV	
AMT		N		T		T		N		N		N		T	
LOC		P		P		P		P		P		P		P	
LWD FNC		N		E		A		DIST		C		E		V	
LB SHP		U		V		S		O		RB SHP		U		V	
TEXTURE		F		G		C		B		R		A		A	
RIP. VEG.		N		G		S		C		D		M		W	
STAGE		INIT		SHR		PS		YF		MF		NA		NA	

COVER		DIST		C E		INSTREAM VEG		N		A		M		V	
PATTERN		TM		ME		IM		IR		(S)		ST		-	
ISLANDS		N		(D)		I		F		S		AN		-	
BARS		N		SIDE		DIAG		(MID)		SPAN		BR		-	
COUPLING		(DC)		PC		CO		-		-		-		-	
CONFINEMENT		EN		CO		FC		OC		(UN)		N/A		-	

FEATURES		C		NID MAP #		NID #		TYPE		HT / LG (m)		mthd		PHOTO		COMMENTS		UTM	
														R		F			
														R		F			
														R		F			
														R		F			

HABITAT QUALITY

FSZ ☐PHOTO
DOCUMENTATION

ROLL # # FOC LG DIR COMMENTS

WILDLIFE

GROUP

WILDLIFE OBSERVATIONS

GROUP

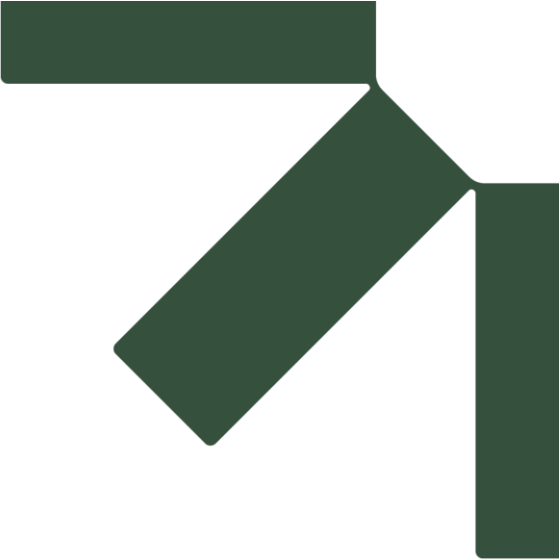
WILDLIFE OBSERVATIONS

COMMENTS

C

Unable to do full 1.35 km
Measured up to safe bank

C



Appendix K Fish Habitat Assessment Procedure Map Book

2025 Fish and Fish Habitat Technical Report

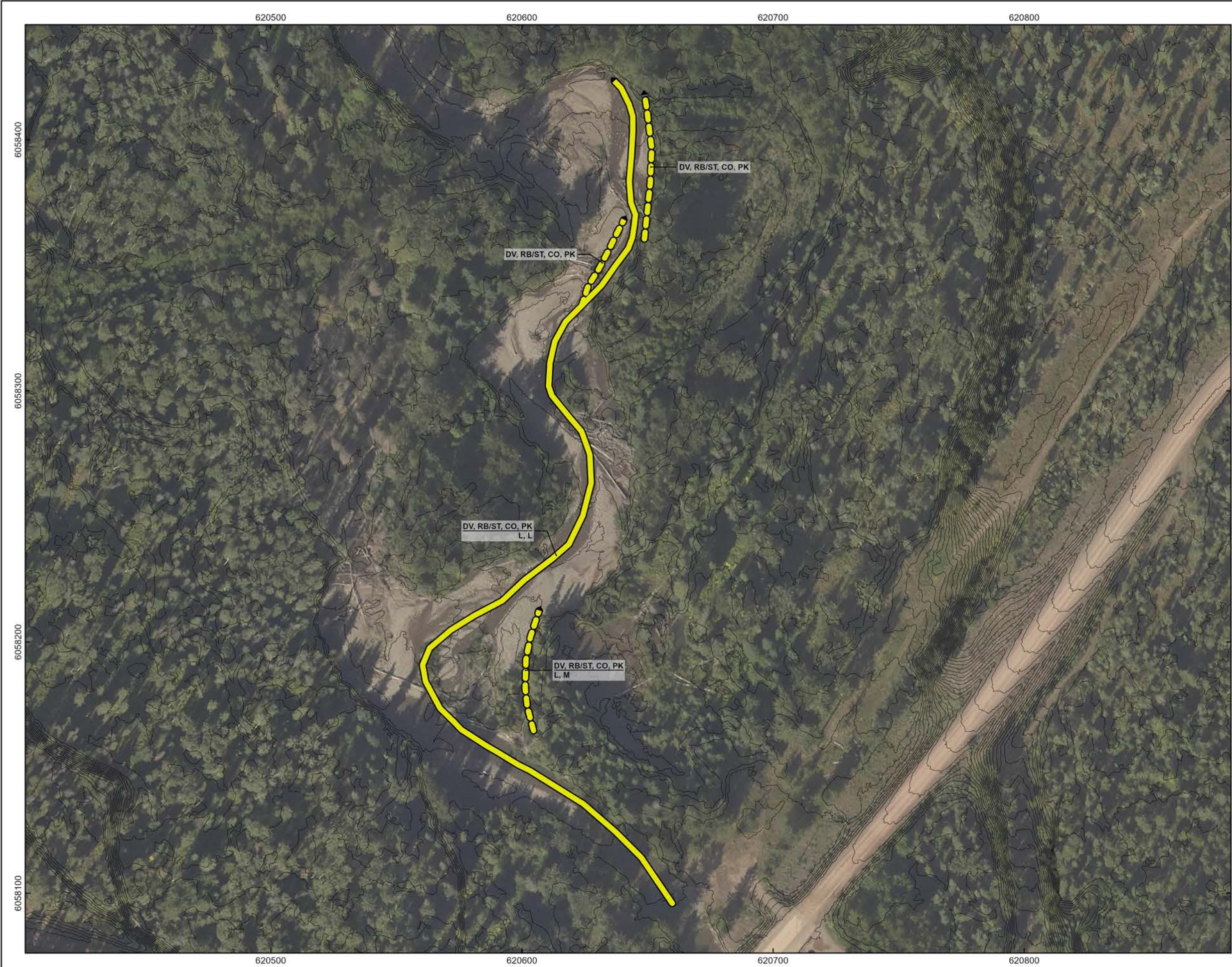
Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026





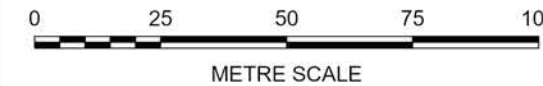
LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description	
Fish Species	Habitat Quality (Spawning, Rearing)
Fish Species Codes:	Habitat Quality Codes:
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed



North American Datum 1983
 Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,500
 Page Size: Tabloid (11 x 17 inches)

Drawn: BE
 Checked: KO
 Date: February 12, 2026

Source Notes:
 Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT
 Telkwa Mining Limited

PROJECT
 Tenas Project

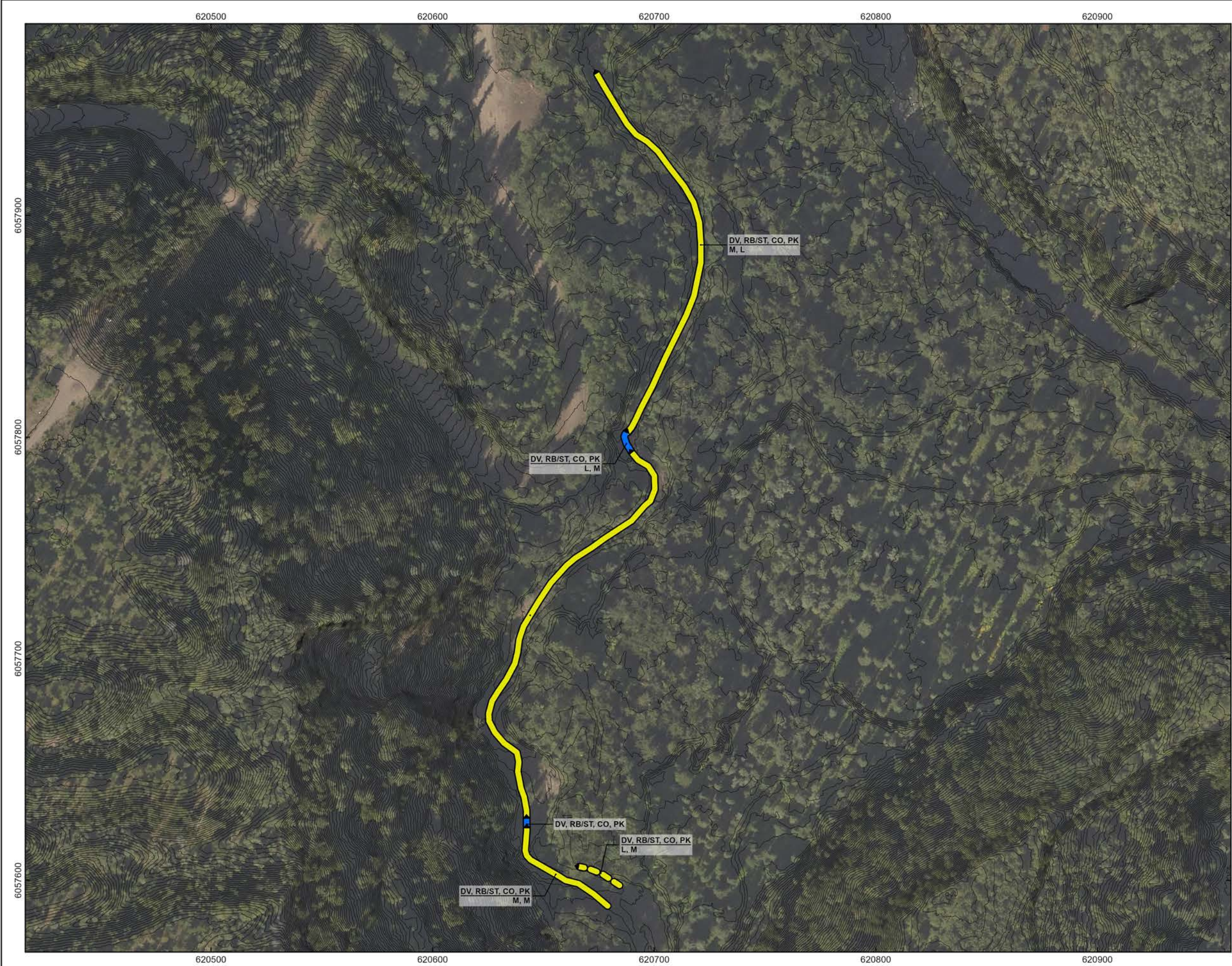
TITLE
 FHAP Survey Results:
 Goathorn Creek - Reach 1

SLR

REF. NO. 201.089602.00001

Figure 1-1

REV. A



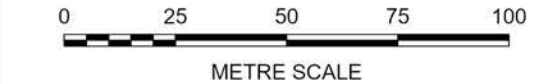
LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description	
Fish Species	
Habitat Quality (Spawning, Rearing)	
Fish Species Codes:	Habitat Quality Codes:
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed



North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,700
Page Size: Tabloid (11 x 17 inches)

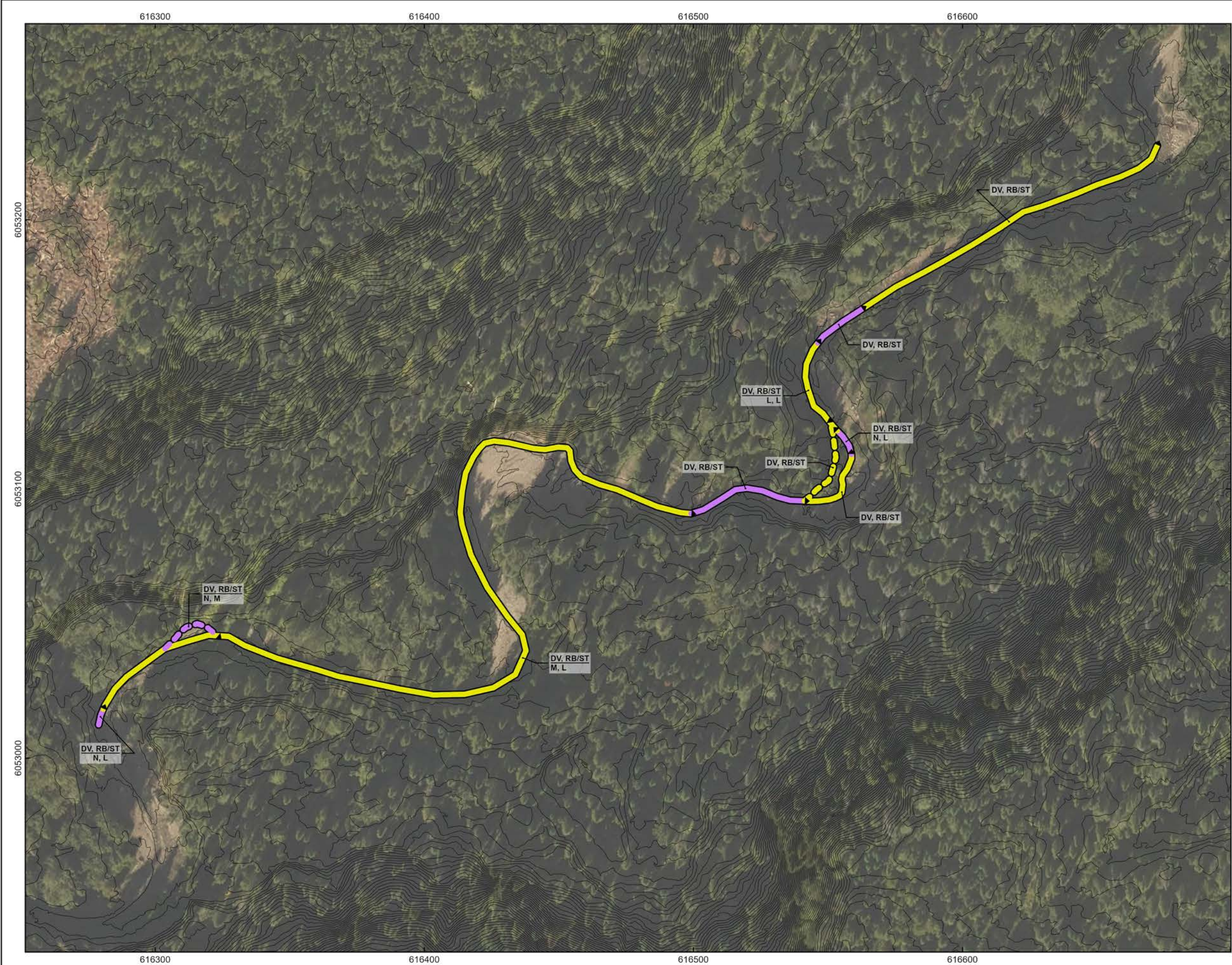
Drawn: BE
Checked: KO
Date: February 12, 2026

DRAFT

NORTH

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	FHAP Survey Results: Tenas Creek - Reach 1 (Lower)	
	REF. NO.	201.089602.00001
	Figure 1-2	REV. A



LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed



North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,400
Page Size: Tabloid (11 x 17 inches)

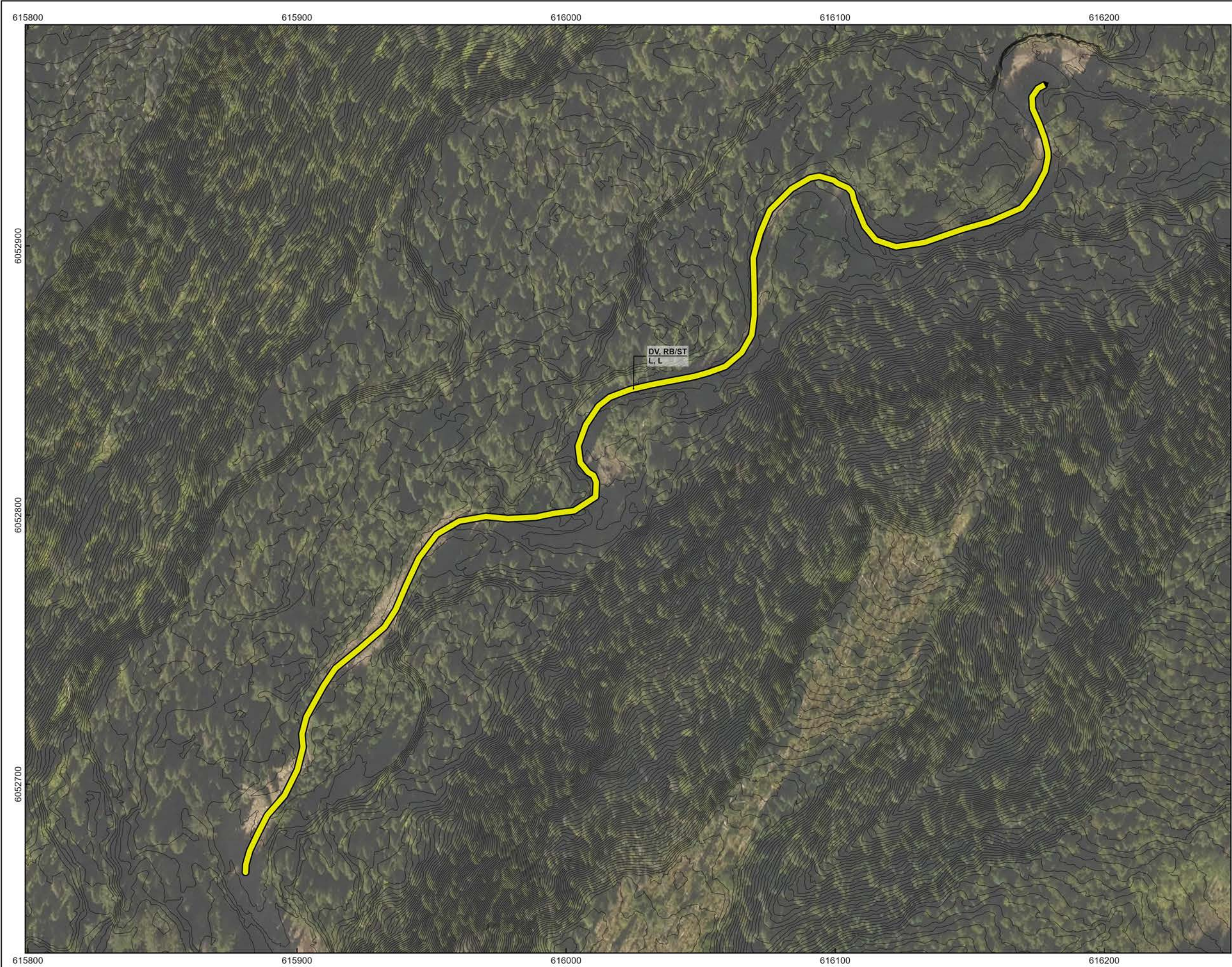
Drawn: BE
Checked: KO
Date: February 12, 2026

DRAFT

NORTH

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT	Telkwa Mining Limited		
PROJECT	Tenas Project		
TITLE	FHAP Survey Results: Tenas Creek - Reach 1 (Upper)		
	REF. NO.	201.089602.00001	
	Figure 1-3		REV. A



KEY MAP

LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	
Habitat Quality (Spawning, Rearing)	
Fish Species Codes:	Habitat Quality Codes:
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed

0 25 50 75

METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,400
Page Size: Tabloid (11 x 17 inches)

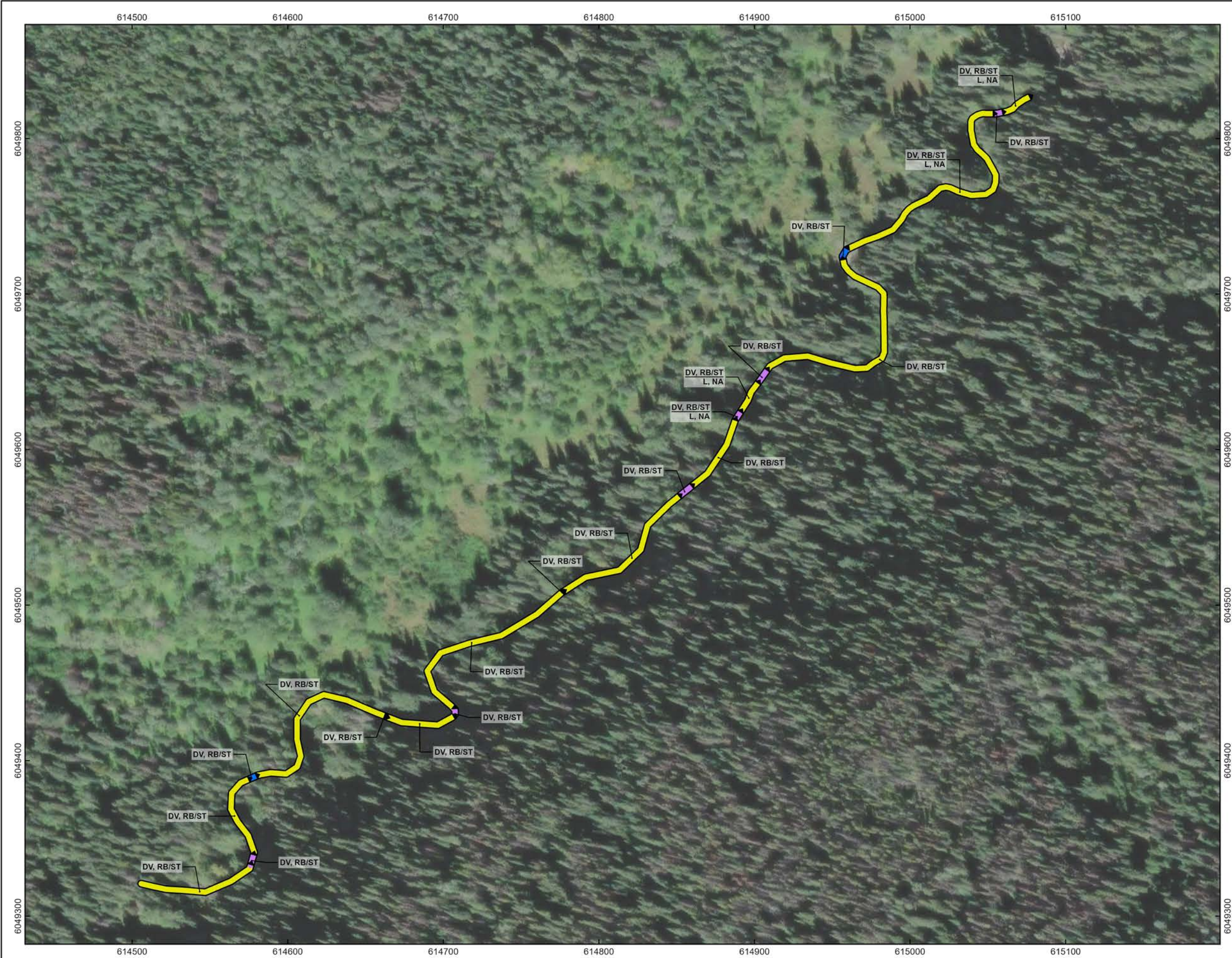
Drawn: BE
Checked: KO
Date: February 12, 2026

DRAFT

NORTH

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT	Telkwa Mining Limited		
PROJECT	Tenas Project		
TITLE	FHAP Survey Results: Tenas Creek - Reach 2		
	REF. NO.	201.089602.00001	REV. A
	Figure 1-4		



KEY MAP

LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
Fish Species Codes:	Habitat Quality Codes:
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed

0 25 50 75 100 125 150

METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:2,400
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: February 12, 2026

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT

Telkwa Mining Limited

PROJECT

Tenas Project

TITLE

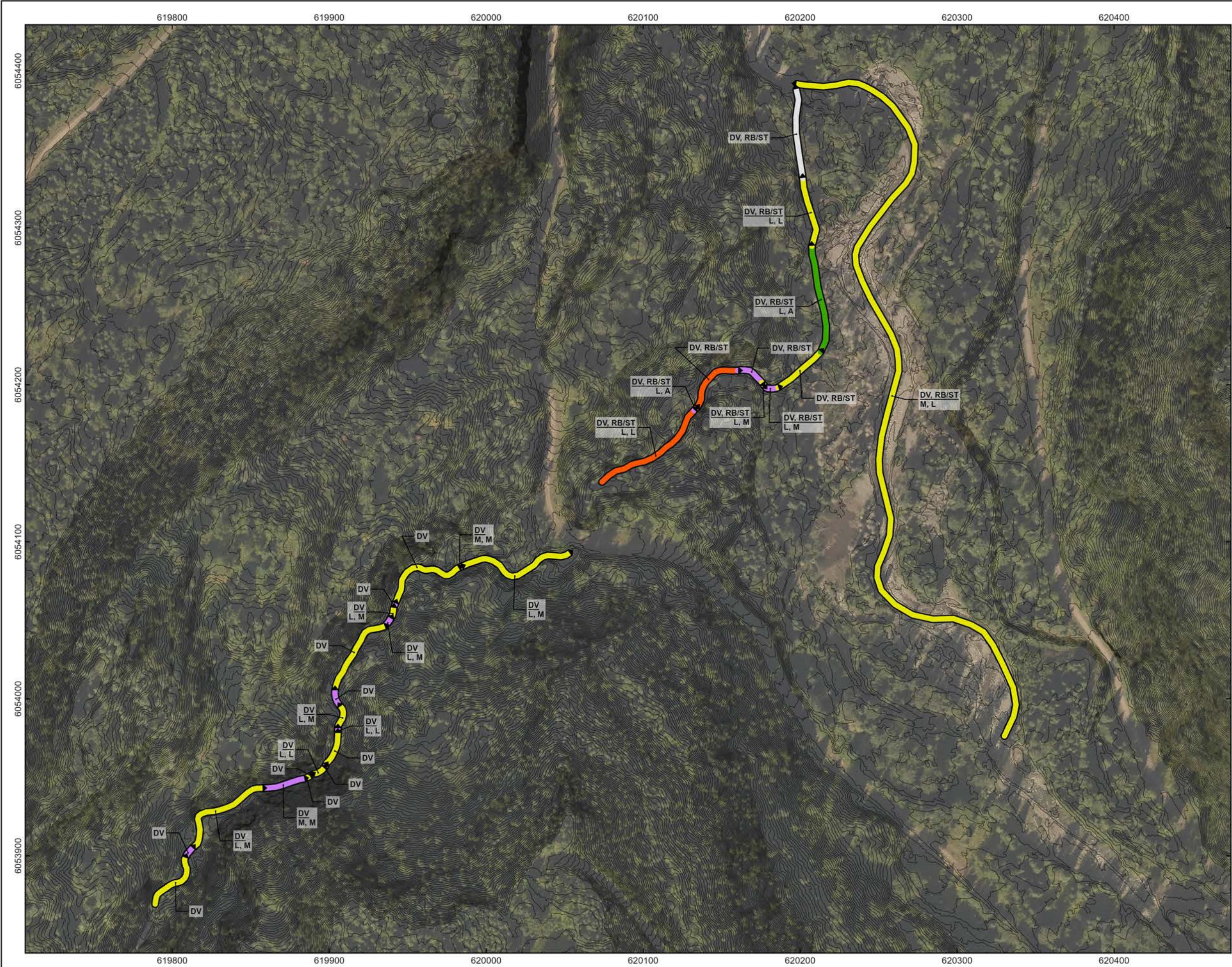
**FHAP Survey Results:
Tenas Creek - Reach 3**

SLR

REF. NO. 201.089602.00001

Figure 1-5

REV. A



LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed



North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:2,400
Page Size: Tabloid (11 x 17 inches)

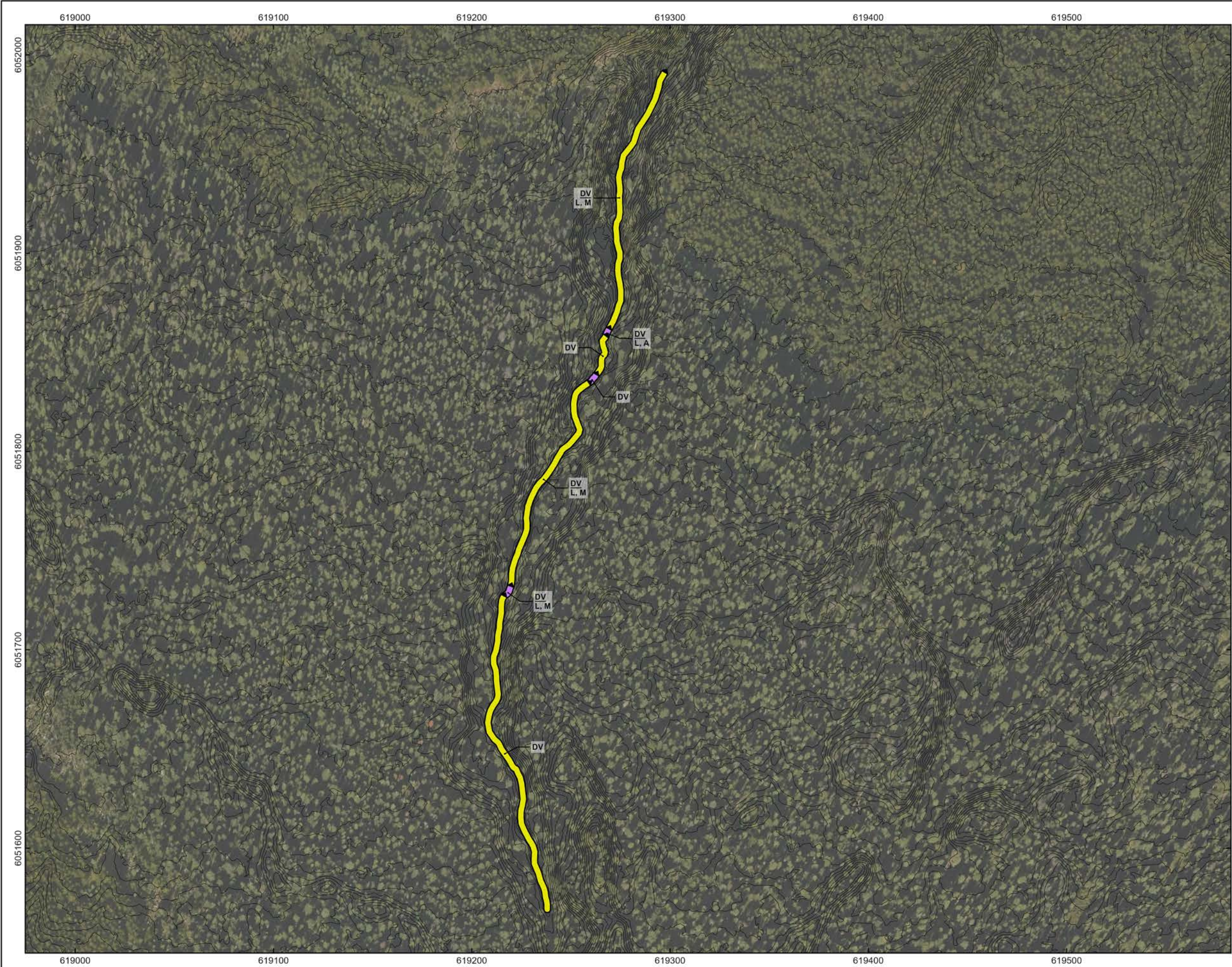
Drawn: BE
Checked: KO
Date: February 12, 2026

DRAFT

NORTH

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	FHAP Survey Results: Four Creek - Reaches 1 and 2 & Goathorn Creek - Reach 2	
	REF. NO.	201.089602.00001
	Figure 1-6	REV. A



KEY MAP

LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed

0 25 50 75 100 125

METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,900
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: February 12, 2026

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

DRAFT

NORTH

CLIENT

Telkwa Mining Limited

PROJECT

Tenas Project

TITLE

**FHAP Survey Results:
Four Creek - Reach 3**

REF. NO. 201.089602.00001

Figure 1-7

REV. A



KEY MAP

LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
Fish Species Codes:	Habitat Quality Codes:
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed

0 25 50 75 100

METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,500
Page Size: Tabloid (11 x 17 inches)

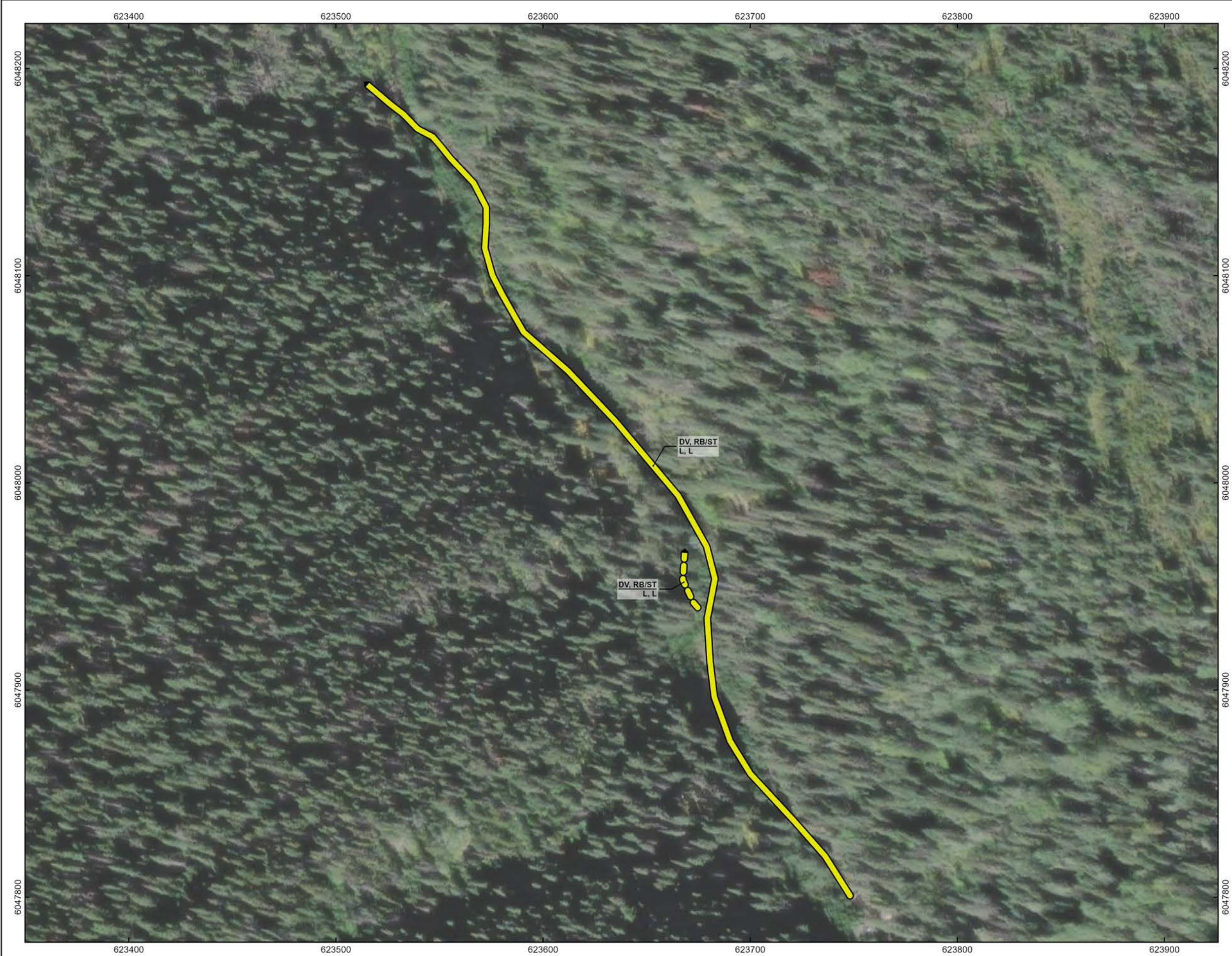
Drawn: BE
Checked: KO
Date: February 12, 2026

DRAFT

NORTH

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT	Telkwa Mining Limited		
PROJECT	Tenas Project		
TITLE	FHAP Survey Results: Four Creek - Reach 4		
	REF. NO.	201.089602.00001	REV. A
	Figure 1-8		



LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed

0 25 50 75 100
METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,800
Page Size: Tabloid (11 x 17 inches)

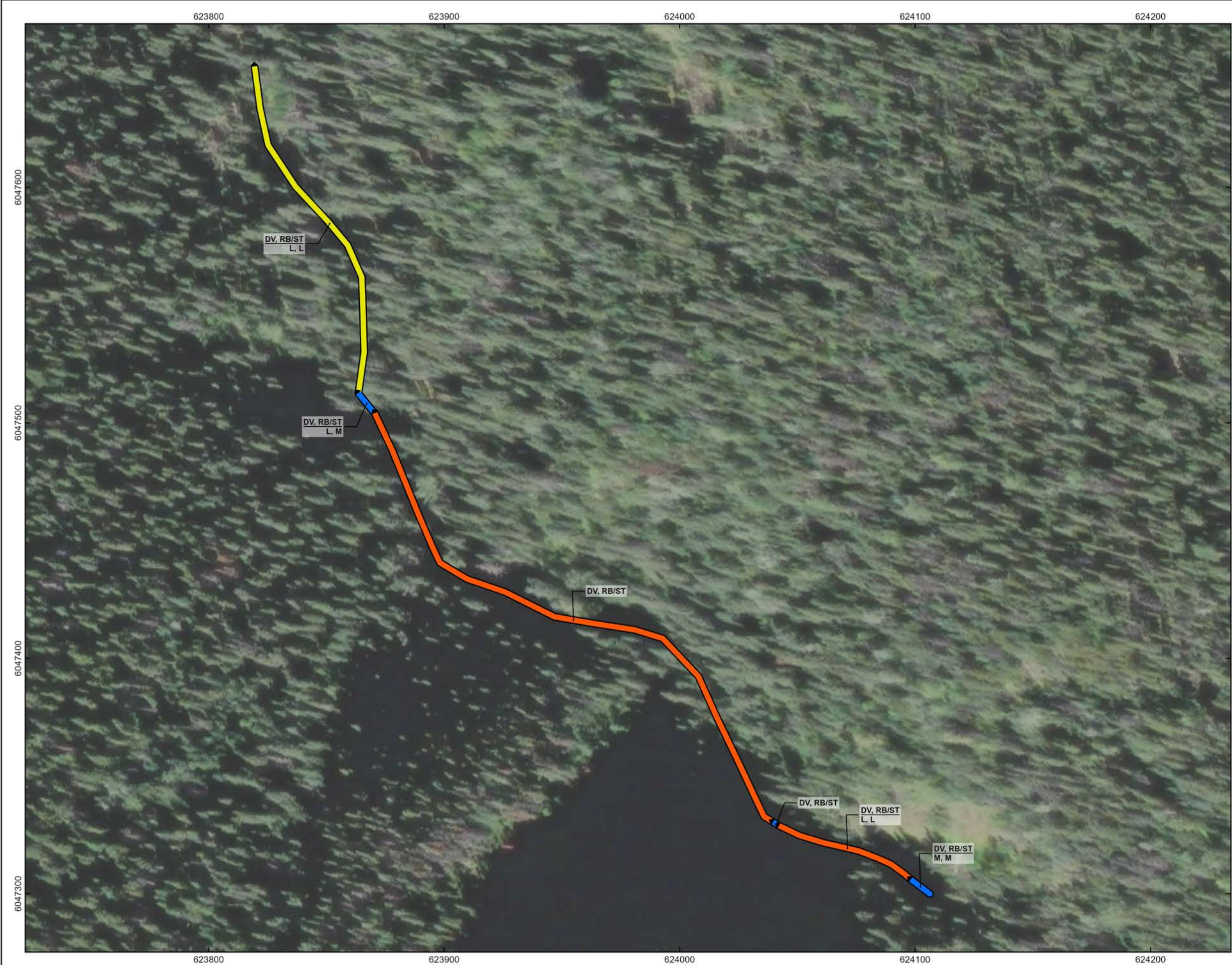
Drawn: BE
Checked: KO
Date: February 12, 2026

DRAFT

NORTH

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	FHAP Survey Results: Goathorn Creek - Reach 3	
	REF. NO. 201.089602.00001	REV. A
	Figure 1-10	



LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description	
Fish Species	Habitat Quality (Spawning, Rearing)
Fish Species Codes:	Habitat Quality Codes:
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed



North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,600
Page Size: Tabloid (11 x 17 inches)

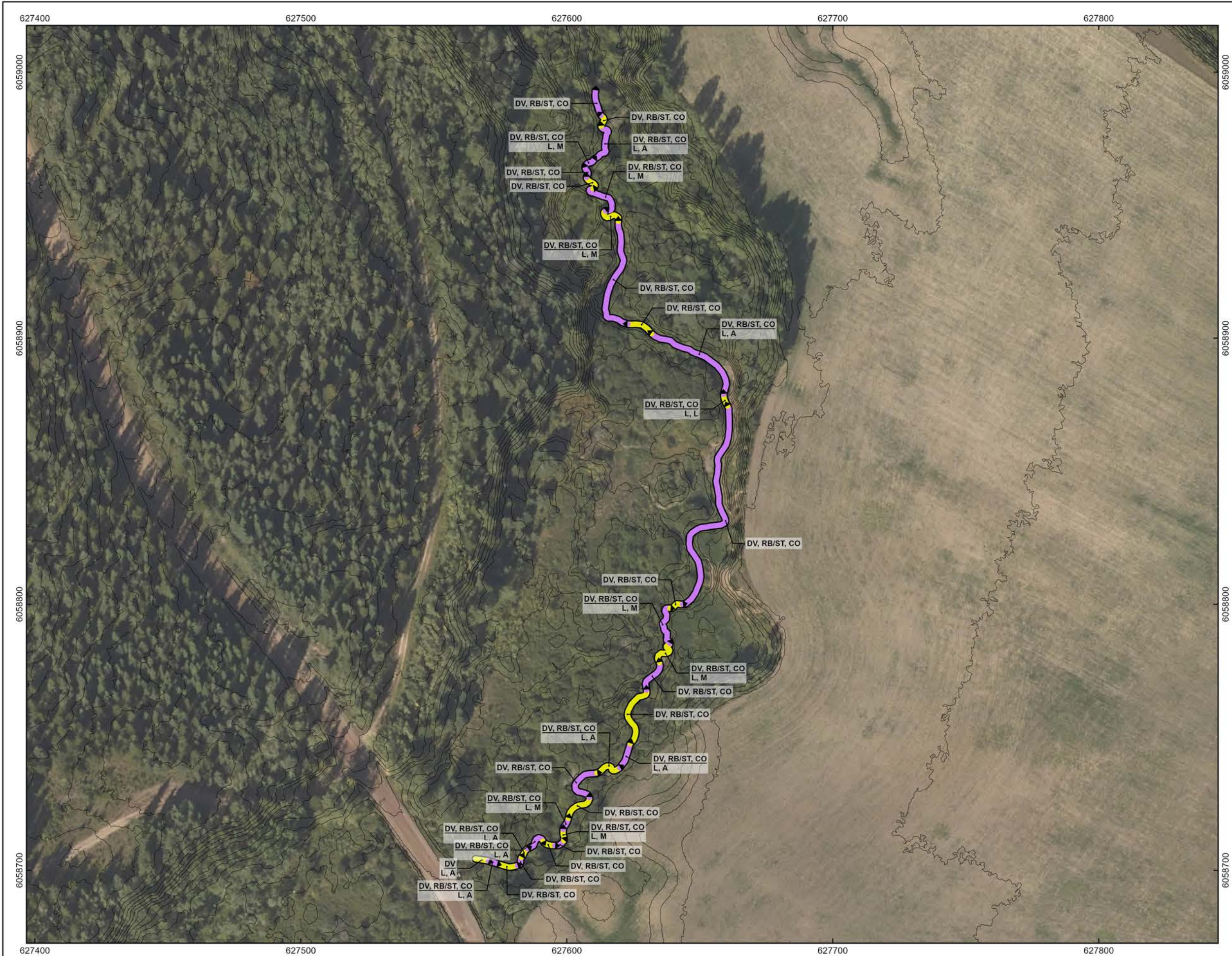
Drawn: BE
Checked: KO
Date: February 12, 2026

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

DRAFT

NORTH

CLIENT	Telkwa Mining Limited	
PROJECT	Tenas Project	
TITLE	FHAP Survey Results: Goathorn Creek - Reach 4	
	REF. NO.	201.089602.00001
	Figure 1-11	REV. A



LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description	
Fish Species	Habitat Quality (Spawning, Rearing)
Fish Species Codes: DV: Dolly Varden RB: Rainbow Trout ST: Steelhead CO: Coho PK: Pink	Habitat Quality Codes: A: Abundant M: Moderate L: Limited N: None NA: Not Assessed



North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:1,400
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: February 12, 2026

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

DRAFT NORTH

CLIENT	Telkwa Mining Limited		
PROJECT	Tenas Project		
TITLE	FHAP Survey Results: Helps Creek - Reach 1		
	REF. NO.	201.089602.00001	
	Figure 1-12		REV.



KEY MAP

LEGEND

Habitat Unit Type

- Cascade
- Riffle
- Glide
- Pool
- Wetland
- Dry Channel
- Downstream Extent of Unit
- 2017 lidar contours (50 cm)

Note: Dashed line indicates secondary channel habitat

Label Description

Fish Species	Habitat Quality (Spawning, Rearing)
DV: Dolly Varden	A: Abundant
RB: Rainbow Trout	M: Moderate
ST: Steelhead	L: Limited
CO: Coho	N: None
PK: Pink	NA: Not Assessed

0 25 50 75 100 125

METRE SCALE

North American Datum 1983
Universal Transverse Mercator Projection Zone 9 North

Scale: 1:2,100
Page Size: Tabloid (11 x 17 inches)

Drawn: BE
Checked: KO
Date: February 12, 2026

Source Notes:
Base imagery (2017) provided by Telkwa Mining Ltd. for all sites except Goathorn Creek - Reaches 3 and 4, and Tenas Creek - Reach 3, where imagery is provided by Esri basemap service.

CLIENT

Telkwa Mining Limited

PROJECT

Tenas Project

TITLE

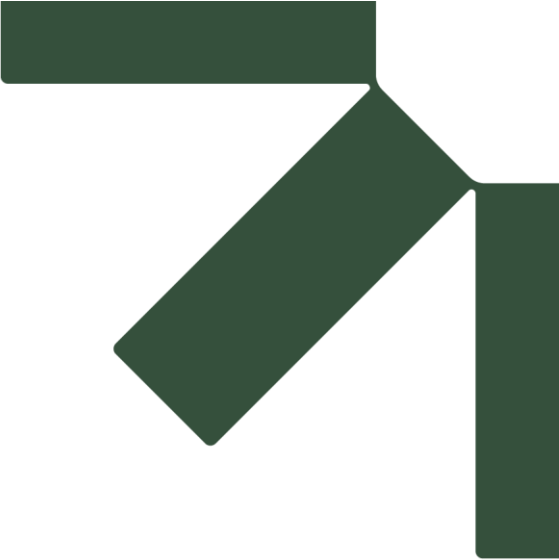
**FHAP Survey Results:
Helps Creek - Reach 2**

SLR

REF. NO. 201.089602.00001

Figure 1-13

REV. A



Appendix L Photolog

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Appendix L: Photolog

Photo 1: Deep Pool Upstream of Potential Gradient Barrier to Fish Migration in Goathorn Tributary J247 (June 19, 2025)



Photo 2: Goathorn Tributary J247 Minnow Trapped Pool (July 2, 2025)



Photo 3: Tenas Creek Reach 2 Habitat Unit (July 14, 2025)

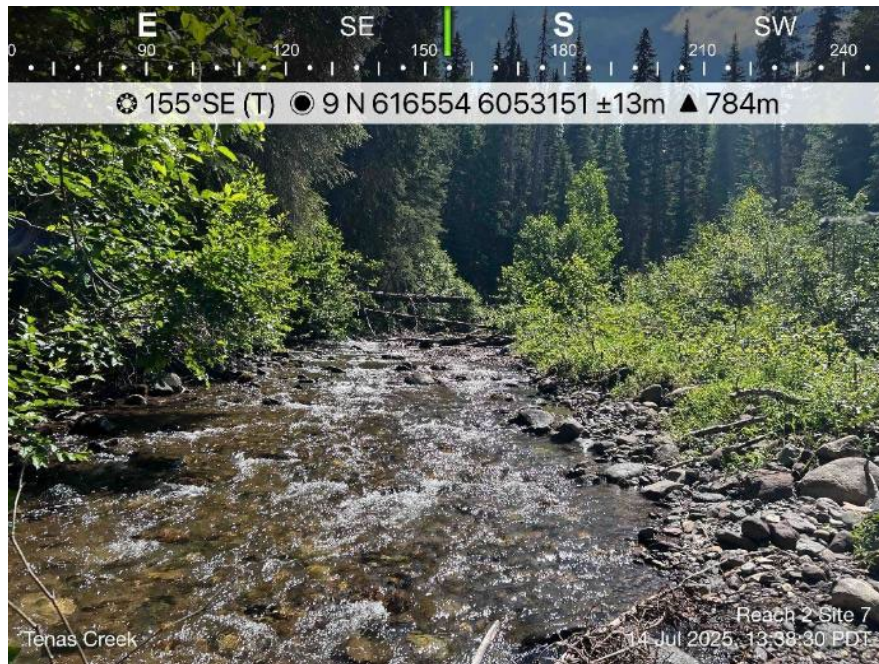


Photo 4: Tenas Creek Reach 3 Habitat Unit (July 13, 2025)



Photo 5: Goathorn Creek Reach 2 Riffle Habitat Unit (July 15, 2025)



Photo 6: Four Creek Reach 5 Habitat Unit (July 17, 2025)



Photo 7: Tenas Creek Upper Reach 1 Abandoned Channel (July 14, 2025)



Photo 8: Tenas Creek Upper Reach 1 redirected through forest away from Abandoned Channel (July 14, 2025)



Photo 9: Rainbow Trout Caught in Tenas Creek Reach 3 (August 23, 2025)



Photo 10: Rainbow Trout Caught in Tenas Creek Reach 1 (August 23, 2025)



Photo 11: Dolly Varden Caught in Goathorn Creek Reach 4 (August 26, 2025)



Photo 12: Coho Salmon Caught in Helps Creek Reach 1 (August 29, 2025)



Photo 13: Tenas Creek Reach 4, upstream view of fish abundance sampling site, (August 27, 2025)



Photo 14: Tenas Creek Reach 1 Spawning Gravels (September 24, 2025)



**Photo 15: Suspected Pink Salmon Redds Found in Goathorn Reach 1
(September 24, 2025)**



Photo 16: Spawned Out Pink Salmon, Goathorn Reach 1 (September 24, 2025)



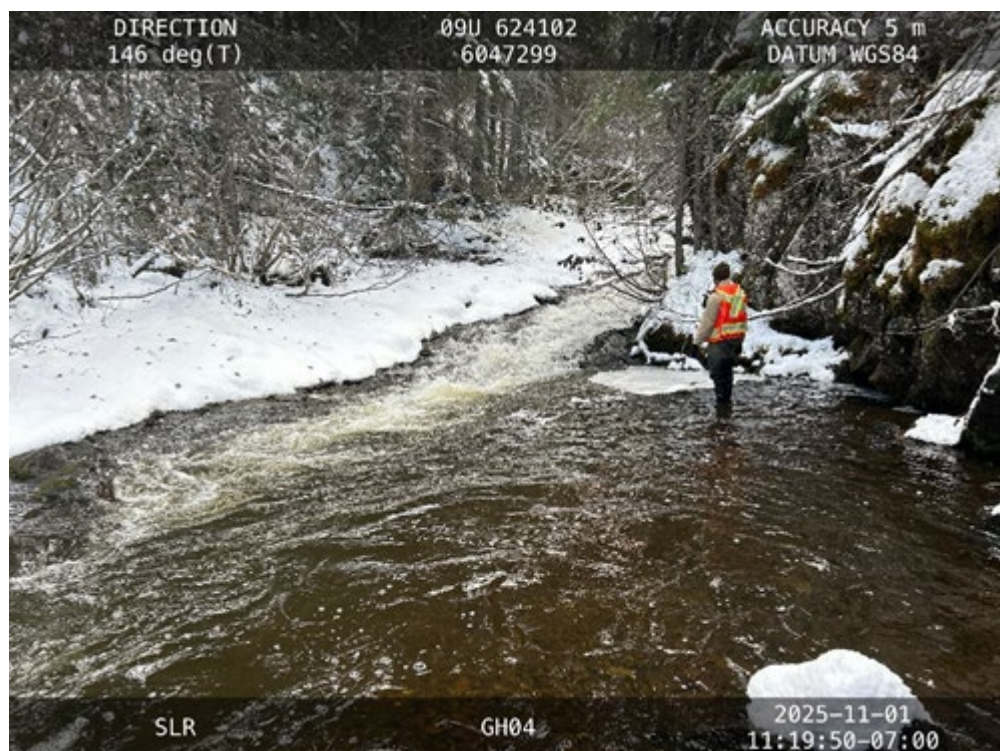
Photo 17: Spawned Out Pink Salmon Goathorn Creek Reach 1 (Augst 29, 2025)

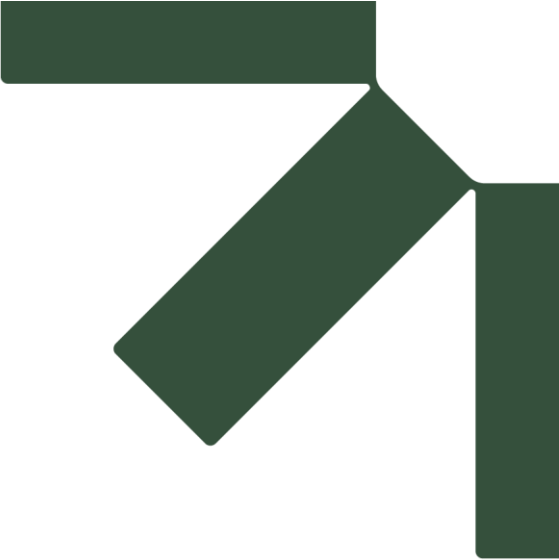


Photo 18: Four Creek Reach 5 Spawner Survey, October 31, 2025



Photo 19: Goathorn Creek Reach 4 Chute (November 1, 2025)





Appendix M Fish Collection Permit

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026



FISH COLLECTION PERMIT **Inventory**

File: 34770-20

Permit No.: **SLR CONSULTING (CANADA) LTD (ALeclair) SM25-975297**

Application No.: 100483054

Permit Holder: **SLR CONSULTING (CANADA) LTD.**
8 ST PAUL ST W
KAMLOOPS, BRITISH COLUMBIA V2C 1G1

Authorized Persons: Alexandra Leclair (Bio), Rick Palmer, Jason Baird, Stefan Grons Dahl, Irene Tuite, Shayna Trousdell, May Mason, Ed Desson, Tyrell Malowany, Diana Gawol, Fred Bugess, Cristopher Gomez, Christian Lackey, Kenna Roozendaal, Spencer Smith, Jacquie Pallard, Katie O-Dea, Karen Frazer, Matthew Lemanski, Byron Cousins, Glenn Hall, Carina Helm.

Pursuant to section 18 of the Angling and Scientific Collection Regulation, B.C. Reg. 125/90, the above-named persons are authorized to collect fish for scientific purposes (from non-tidal waters) subject to the terms set forth in this Permit:

Permitted Sampling Period: AUGUST 01, 2025 to DECEMBER 31, 2025

Permitted Waterbodies: See Appendix C - Map

Tenas Creek, 460-422700-0960 0-04900, UMT 9, 6058048N 620732E.

Helps Creek, 460-437000, UMT 9, 6060026N 628023E.

Goathorn Creek, 460-422700-0960 0-70100.

Four Creek, 460-422700-0960 0-25600, UMT 9, 6054214N, 620331E.

Permitted Sampling Techniques: AG, DN, EF, MT, SN (subject to permit terms)

Potential Species: RB, CT, LSU, LNC, ST, DV, BB (subject to permit terms)

Permitted Lethal Sampling, Tagging or Marking: NONE (subject to permit terms)

Provincial Terms: (Permit holder and authorized persons must be aware of all terms):

See Appendix A.

Region Specific Terms:

See Appendix A.

Authorized by:

Elissa Sweeney-Bergen
Deputy Regional Manager
Recreational Fisheries & Wildlife Programs

Date: July 14, 2025

Permit Fee \$25

APPENDIX A FISH COLLECTION PERMIT TERMS

Any Variation of the following terms will require explicit authorization by the appropriate regional Fish & Wildlife Section Head.

PROVINCIAL TERMS

1. This collecting permit is **only** valid for species listed as threatened, endangered, or extirpated under the *Species at Risk Act* (SARA) **in conjunction with a permit issued under Section 73 of SARA from Fisheries and Oceans Canada.**

NOTE: Contact the Department of Fisheries and Oceans for fish collecting permits for salmon or eulachon <https://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/forms/licence-sci-permis-eng.pdf> or for SARA listed species <https://www.dfo-mpo.gc.ca/species-especes/sara-lep/permits-permis/index-eng.html#apply>.

2. Any specimen's surplus to scientific requirements and any species not authorized for collection in this permit must be immediately and carefully released at the point of capture.
3. Fish collected under authority of this permit must not be used for food or any purpose other than the objectives set out in this permit. Dead fish must be disposed of in a manner that will not constitute a health hazard, nuisance, or a threat to wildlife.
4. No fish collected under authority of this permit must be transplanted unless separately authorized by the Federal/Provincial Introductions and Transfers Committee.
5. The permit holder must, within 90 days (120 days for the Kootenay/Boundary region and Peace region) of the expiry of this permit, submit a report of fish collection activities. Interim reports may also be required and must be submitted as required by the permit issuer. All submissions must be filed electronically to: <https://www2.gov.bc.ca/fish-data-submission-process>.

Reporting specifications, information and templates are available from this website and outline the mandatory information requirements. Prior notification of submission or questions regarding data report standards can be made to: fishdatasub@gov.bc.ca

6. The permit holder must comply with all Workers' Compensation Board requirements and other regulatory requirements. The permit holder is responsible for ensuring authorized persons listed on the permit are properly certified for specific sampling methods or activities (e.g., electroshocking).
7. Any workers not listed on the permit must be supervised by the permit holder or one of the authorized persons named on the permit.
8. All sampling equipment that has been previously used outside of B.C. must be cleaned of mud and dirt and disinfected with 100mg/L chlorine bleach before using in any water course to prevent the spread of fish pathogens (e.g., whirling disease) and/or invasive plant species. Any washed off dirt or mud must be disposed of in a manner such that it cannot enter a watercourse untreated.
9. No electrofishing is to take place in waters having a temperature less than five degrees C.
10. No sampling of fish in waters having a temperature greater than twenty degrees C.
11. Electrofishing must not be conducted in the vicinity of spawning gravel, redds, or spawning fish, or around gravels which are capable of supporting eggs or developing embryos of any species of salmonid at a time of year when such eggs or embryos may be present.
12. When work requires de-watering or isolation of the worksite in the stream, a permit for the salvage of fish and wildlife (General Wildlife permit) must be obtained prior to commencing work. All required salvage permits must be obtained from FrontCounter BC: <https://portal.nrs.gov.bc.ca/web/client/home>.

PROVINCIAL TERMS CONTINUED

13. Any fish or wildlife salvage must be carried out by a qualified environmental professional registered with a professional association (such as an RPBio). The qualified professional conducting salvage work must adhere to the conditions below in addition to those required in the Scientific Fish Collection permit.

- Salvage activities must be conducted to the Provincial Resource Information Standards Committee (RISC) standards for capture, data collection, handling, and release:

STREAM ISOLATION

- The QP must follow the standards and practices outlined in the Work Area Isolation Appendix found in the Standards and Best Practices for Instream Works. <http://www.env.gov.bc.ca/wld/documents/bmp/iswstdsbpsmarch2004.pdf>
- A QP must ensure that the worksite has been substantively isolated to prevent any fishes from entering the work area and efforts must be made to exclude fish from entrapment during installation of isolation works. (See section 14.2 of the Standards and Best Practices for Instream Works (MWLAP 2004).
- Dewatering must not result in HADD to fish habitat or the death of fish unless authorized by Fisheries and Oceans Canada.
- While dewatering the work site and dewatering during fish capture, all pump intakes are required to meet the federal COP for fish intake screening guidelines <https://www.dfo-mpo.gc.ca/pnw-ppc/codes/screen-ecran-eng.html>.

FISH CAPTURE

- Qualified professionals must determine appropriate sampling methods from the RISC standards based on water body type and habitat conditions <https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/fishml04.pdf>.
- Qualified professionals must use a risk hierarchy of passive to active and low risk to higher risk in collection methods (e.g., minnow traps, fyke nets, beach pole seines, electroshocking, angling).
- Qualified professional must conduct a **minimum of three** non-lethal collection methods in all fish salvages.
- For active collection methods a minimum of two consecutive passes of each method that produces a zero catch must be completed as per total population removal methodology (at a minimum 95% fish removal must be achieved). (<https://www.wildsalmoncenter.org/resources/field-protocols-best-monitoring-practices/>).
- Where work site isolation cannot be fully achieved (e.g., fast flowing streams, imperfect seal due to substrate) additional efforts are needed to prevent harm to fish. At the end of each workday, a passive form of fish capture (e.g., baited minnow traps) are to be placed in the isolation site. If fish are captured overnight, you must restart isolation procedures at the start of the workday.
- If species at risk are captured, work must stop until proper permits are obtained.

DATA COLLECTION

- Sampling/data collection is a requirement of the Scientific Collection Permit. Sample size requirements are listed in the table below.
- Scientific Fish Collection Permits require a Fish Data Submission Template to be completed. Step 4 (Stream Site Data) of the Fish Data Submission Template must be filled out for the location where fish are salvaged from. <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/fish/fish-and-fish-habitat-data-information/fish-data-submission/submit-fish-data>.

FISH RELEASE

- Fish must be released following RISC standards.
- All species are to be released in the same watercourse downstream of the work areas or a sufficient distance upstream (5 channel widths to a maximum of 100 meters) into waters of equivalent baseline quality and habitat type (pool, riffle, run).

Minimum Standards During Salvage for Fish Collection Sampling Effort*

Fish Species	Age Class	Size range	Minimum Sampling Size for lengths	Sample column required (from Individual Fish Data form)	Notes
Salmonids, including RB, CT(CCT), DV, BT, GR, LT, KO	fry	20 to 80 mm	up to 30 after 30 count	J (if possible), K	
	juvenile	81 mm-250 mm	Measure all fish caught	J, K, L	
	adult	greater than 250 mm	Measure all fish caught	J, K, L, M, N	
Coarse Fish (cyprinids, stickleback, dace, shiner, carp, pikeminnow)		under 200 mm	up to 30 after 30 count	J, K	
	Adult	over 200 mm	All	J, K, L, M	
Sport other (bass, perch, sunfish, walleye, northern pike)		all	up to 30 after 30 count	J, K, L	
Sculpin sp.		0-150mm (total length)	up to 30 after 30 count	J, K	
		Over 150mm	All	J, K, L	
Burbot, Lamprey		0-150 mm (total length)	All	J, K, L, N	
Listed Species (salish sucker, sturgeon, etc.)		All	All		Refer to SAR permit for conditions
All fishes not listed above		All	minimum 10 of each then count only	J, K, L	

Abbreviations for salmonids

RB-Rainbow

CT(CCT)-Cutthroat

DV-Dolly Varden

BT- Bull Trout

GR- Arctic Grayling

LT- Lake Trout

KO- Kokanee

REGION SPECIFIC TERMS**Skeena Region**

1. For information related to Fish Collection Permit Activities in the Skeena Region or for reporting accidental fish mortalities, and/or injuries that occur during salvage activities related to this permit, please report to the Skeena Regional office within 48 hrs. Contact Troy Larden at Troy.Larden@gov.bc.ca.

APPENDIX B ADVISORY

GENERAL

- It is the permit holder's responsibility to be aware of all applicable laws and the limits of this permit.

For example,

- This permit **does not** authorize the collection of fish in national or provincial parks.
- This permit does not authorize the collection of fish in tidal waters.
- This permit does not authorize the collection of eulachon or for salmon, other than kokanee.
- This permit is NOT authority to angle for fish without a valid angling licence.

It is the responsibility of the permit holder to obtain proper authorization.

- The Province is not liable for any illness contracted through fish handling. It is the responsibility of the permit holder to inform themselves of possible health hazards, and to ensure that all reasonably necessary safety measures are undertaken.
- If applicable, the permit holder is responsible for renewing this permit. The issuer is not obliged to send a reminder notice.

LEGISLATION

Below is a non-exhaustive list of provisions under the *Wildlife Act* and regulations that are relevant to this permit. It is the permit holder's responsibility to be aware of any provisions under the *Wildlife Act* or regulations that may apply to this permit.

Wildlife Act

Suspension and cancellation of permits

- 25** (1) A regional manager, for any cause he or she considers sufficient, and after providing an opportunity for the person to be heard, may suspend or cancel a permit held by a person, may order that the person is ineligible to obtain or renew a permit for a period and, if he or she does make an order, must inform the person of the period of ineligibility.
- (2) An officer may, without the necessity of holding a hearing, exercise the powers of a regional manager under this section to suspend a permit and, if a permit is suspended by an officer, the matter must be referred to the regional manager, who may confirm, reduce, extend or terminate the suspension.

Documents not transferable

- 81** Except as authorized by regulation or as otherwise provided under this Act, a licence, permit or limited entry hunting authorization is not transferable, and a person commits an offence if the person
- (a) allows his or her licence, permit or limited entry hunting authorization to be used by another person, or
 - (b) uses another person's licence, permit or limited entry hunting authorization.

Failure to pay fine

- 85** (1) This section applies if a person
- (a) fails to pay, within the time required by law, a fine imposed as a result of the person's conviction for an offence under this Act or the *Firearm Act*, and
 - (b) has been served with notice of this section.
- (2) In the circumstances referred to in subsection (1),
- (a) the person's right to apply for or obtain a licence, permit or limited entry hunting authorization under this Act is suspended immediately and automatically on the failure to pay the fine,
 - (b) all licences, permits and limited entry hunting authorizations issued to that person under this Act are cancelled immediately and automatically on the failure to pay the fine,
 - (b.1) the person must not apply for employment as an assistant guide,
 - (b.2) the person must not guide as an assistant guide, and
 - (c) the person commits an offence if, before that fine is paid, the person
 - (i) applies for, or in any way obtains, a licence, permit or limited entry hunting authorization under this Act,
 - (ii) does anything for which a licence, permit or limited entry hunting authorization under this Act is required,
 - (iii) applies for employment as an assistant guide, or
 - (iv) guides as an assistant guide

Proof of identity and authorization

- 97** (1) In this section, “**authorization**” means a licence, permit or limited entry hunting authorization issued under this Act.
- (2) Subject to subsection (5), a person who is required to hold an authorization must, on the request of an officer,
- (a) state the person’s name and address,
 - (b) produce prescribed photo identification, and
 - (c) demonstrate in accordance with subsection (3) that the person holds the authorization.
- (3) A person may demonstrate that the person holds an authorization by
- (a) producing the authorization, or
 - (b) unless the regulations require that the original authorization be produced,
 - (i) producing a legible copy of the authorization, or
 - (ii) if authorized by the regulations, stating a number assigned to the person by the director as an identification number for the person.
- (4) Subject to subsection (5), a person who would be required to hold a licence or permit issued under this Act were the person not exempt under section 11 (9) or 12 (b) must, on the request of an officer,
- (a) state the person’s name and address, and
 - (b) produce prescribed photo identification.
- (5) Subsections (2) (b) and (4) (b) do not apply to a person in a prescribed class of persons.
- (6) A person who contravenes subsection (2) or (4) commits an offence.

Wildlife Act General Regulation

Proof of identity

- 21.01** (1) For the purposes of section 97 (2)(b) and (4)(b) of the Act, the following photo identification is prescribed:
- (a) in the case of a person who is a resident or a non-resident, valid photo identification issued to a person by any of the following:
 - (i) the government of Canada;
 - (ii) the government of a province or territory, or an agent of the government of a province or territory, in which the person has a current address;
 - (iii) the Nisga’a Nation, if the person is a Nisga’a citizen;
 - (iv) a treaty first nation, if the person is a treaty first nation member of the treaty first nation;
 - (b) in the case of a person who is a non-resident alien,
 - (i) valid photo identification in the form of
 - (A) a passport, or
 - (B) a driver’s licence issued to the person by a foreign jurisdiction in which the person has a current address, or
 - (ii) a copy of a photo identification referred to in subparagraph (i) that has been certified as a true copy by
 - (A) a lawyer, or
 - (B) a notary who is a member in good standing under the *Notaries Act*
 - (c) in any case, a valid NEXUS card.
- (2) For the purposes of section 97 (5) of the Act, persons under 16 years of age are prescribed as exempt from the requirement to produce photo identification.

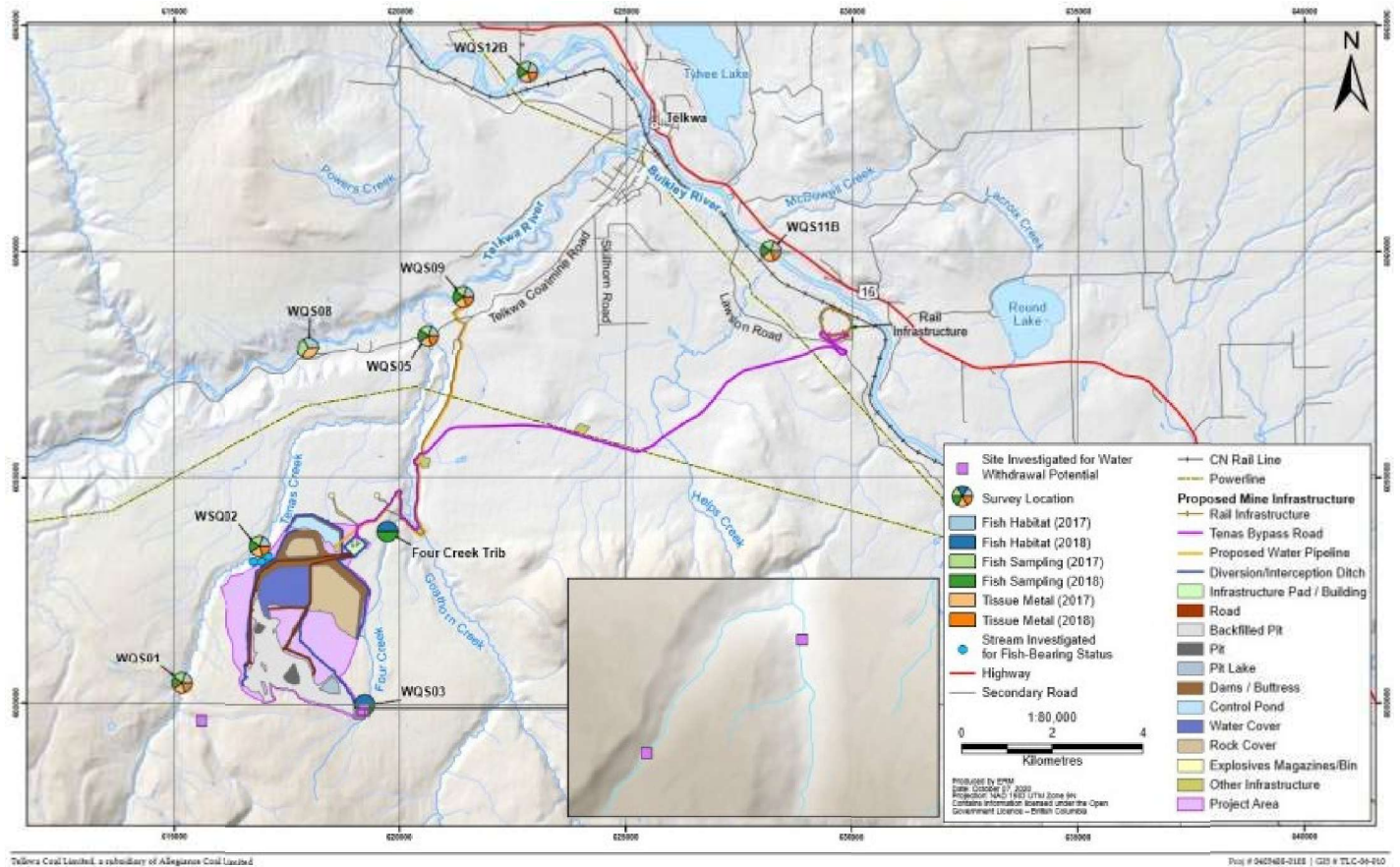
Freshwater Fish Regulation

Offences

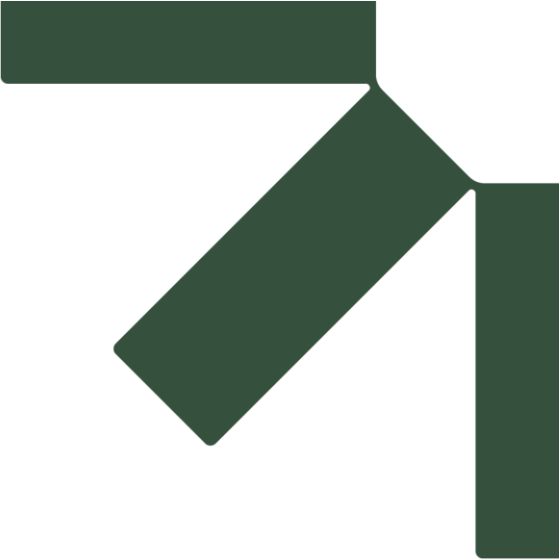
- 2** A person commits an offence where the person
- (a) has in possession,
 - (b) transports, or
 - (c) traffics in
- live fish unless authorized by a permit or a licence.

APPENDIX C

MAP



BRITISH COLUMBIA



Appendix N Fish Collection Permit Report

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

Fish Data Submission Spreadsheet Template -V 2.0, March 24, 2025

Step 1 Referencing and Locational Information

INSTRUCTIONS

STEP 2

STEP 3

STEP 4

IMPORTANT - Please Read:

Do Not Modify the Spreadsheet other than to enter your data! Modifying the spreadsheet may make it impossible to load your data.

All fields with Red column headings are required as a minimum data standard

All fields with Purple Headings are Required for specific situations. See "pop up" comments for each heading

All fields with Blue Headings are optional but preferred for most activities

For definitions, methods and recording instructions hover cursor over the red triangles in top right corners of field header boxes

Referencing Information - This Section is Required		Statement of Professional Sign-Off	
Scroll over Headings for Further Explanation		Scroll over Headings for Further Explanation	
		The information in this submission has been reviewed and verified by a Registered Professional Biologist (Pick list: Yes or No)	
Project Title:	Tenas Coal Mine	Biologist's Name:	Christian Lackey
Company/Agency	SLR Consulting (Canada) Ltd.	Registration Number:	4566
Company/Agency (Other)		Province of Registration:	British Columbia
Spreadsheet Recorder(s):	Christian Lackey		
Project Type:	Inventory (General)		
Other Project Type			
PROVINCIAL PERMIT NUMBER:	SM25-975297		
DFO PERMIT NUMBER:			

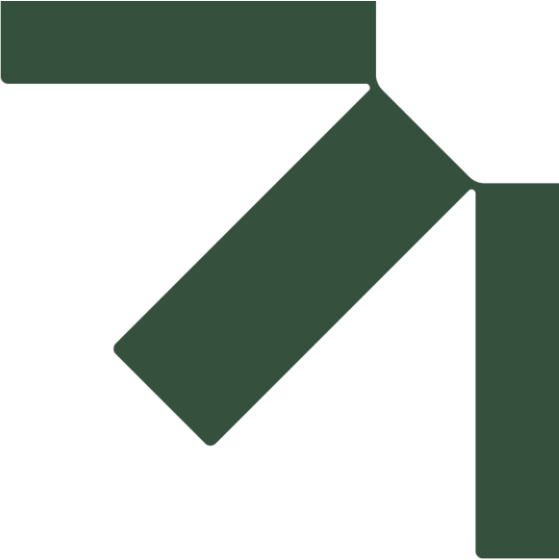
[illegible]

Step 2 Fisheries Collection Form Data

STEP 4

For definitions, methods and recording instructions hover cursor over the red triangles in top right corners of field header boxes

FIRST Enter the Reference Numbers before you enter the data. (Enter the Reference Numbers from the corresponding lines in the Step 1 worksheet)		Sampling Information																												Hover cursor over Fish Summary Heading and related headings for further information																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Drop Down List		Drop Down List		Drop Down List		Hover cursor over EF Effort heading for more information on EF Seconds, length, and width		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List		Drop Down List																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
REFERENCE NUMBER	Locational Info (This information fills in automatically)										Stream Condition			Site Effort			Electrofisher Specifications							Net/Trap Specifications							Fish Summary							Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	Gazetted Name	Local Name	Waterbody ID	Reach #	Site #	Temperature (°C)	Conductivity (µS/cm)	Turbidity	Sampling Method	Method Number	Haul # / Pass #	EF Seconds	EF Length (m)	EF Width (m)	Enclosure	Voltage	Frequency	Pulse	Make	Model	Bait Net type	Length (in)	Depth (in)	Ambush Size	Set	Net/Trap Effort				Date In	Time In	Date Out	Time Out	Soak Time	Index#	Species	Stage		Age	Total Number	Min. Length (mm)	Max. Length (mm)	Fish Activity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Appendix O Aging Structures Lab Report

2025 Fish and Fish Habitat Technical Report

Tenas Project

Telkwa Mining Limited

SLR Project No.: 201.089602.00001

May 6, 2026

2025/2026

Date Received: 30-Oct-25
Company Name: SLR Consulting
Project Name & #: Tenas Anundance #201.089602.00001
Client Contact: Lori Hooper / Shayna Trousdell
Client Email: lori.hooper@slrconsulting.com shayna.trousdell@slrconsulting.com
& Type of Structures: 46 SC
Work to be Completed: read as is
Special Instructions: na
Inventoried By: Ambrose
Set / Processed By:
Ageing Code: AGE-25-44
Invoice: [45 SC](#)

Location	Date	Structures (FR/OT/SC)	Species	Fish #	Age	Con. Index	QA/QC	Comments
					KA		DS	
TC01		SC	RNTR	1	1	F	1	
TC01		SC	RNTR	5	1	F		
TC01		SC	RNTR	6	1	F		
TC01		SC	RNTR	7	1	F		
TC01			RNTR	8	ns			no SC in env.
TC01		SC	RNTR	33	1	F		
TC01		SC	RNTR	36	1	F		
TC01		SC	RNTR	37	1	F		
TC01		SC	RNTR	52	1	F		
TC02		SC	RNTR	1	1	F	1	
TC02		SC	RNTR	2	1	F		
TC02		SC	RNTR	3	1	F		
TC02		SC	RNTR	4	1	F		
TC02		SC	RNTR	5	1	F		
TC02		SC	RNTR	6	1	F		
TC02		SC	RNTR	8	1	F		
TC02		SC	RNTR	31	2	F		
TC02		SC	RNTR	32	2	F		
TC02		SC	RNTR	33	2	F		
TC03		SC	RNTR	1	1	F	1	
TC03		SC	RNTR	2	2	F		
TC03		SC	RNTR	3	1	F		
TC03		SC	RNTR	4	2	F		
TC03		SC	RNTR	11	1	F		
HC01		SC	RNTR	5	1	F	1	
HC01		SC	RNTR	6	1	F		
HC01		SC	RNTR	7	2	F		
HC01		SC	RNTR	8	1	F		
HC01		SC	RNTR	9	2	F		
HC01		SC	RNTR	11	1	F		
HC01		SC	RNTR	12	1	F		
HC01		SC	RNTR	13	1	F		
HC01		SC	RNTR	14	1	F		
HC01		SC	RNTR	15	1	F		
GH01		SC	RNTR	2	1	F	1	
GH01		SC	RNTR	5	1	F		
GH01		SC	RNTR	12	1	F		
GH01		SC	RNTR	17	1	F		
GH01		SC	RNTR	34	2	F		
GH01		SC	RNTR	42	1	F		
GH01		SC	RNTR	43	1	F		
GH02		SC	RNTR	1	1	F		
GH02		SC	RNTR	2	1	F		
GH02		SC	RNTR	6	1	F		
GH03		SC	RNTR	1	2	F		
GH03		SC	RNTR	2	2	F		

2025/2026



Date Recieved:

Company Name:

Project Name & #:

Client Contact:

Client Email:

& Type of Structures:

Work to be Completed:

Special Instructions:

Inventoried By:

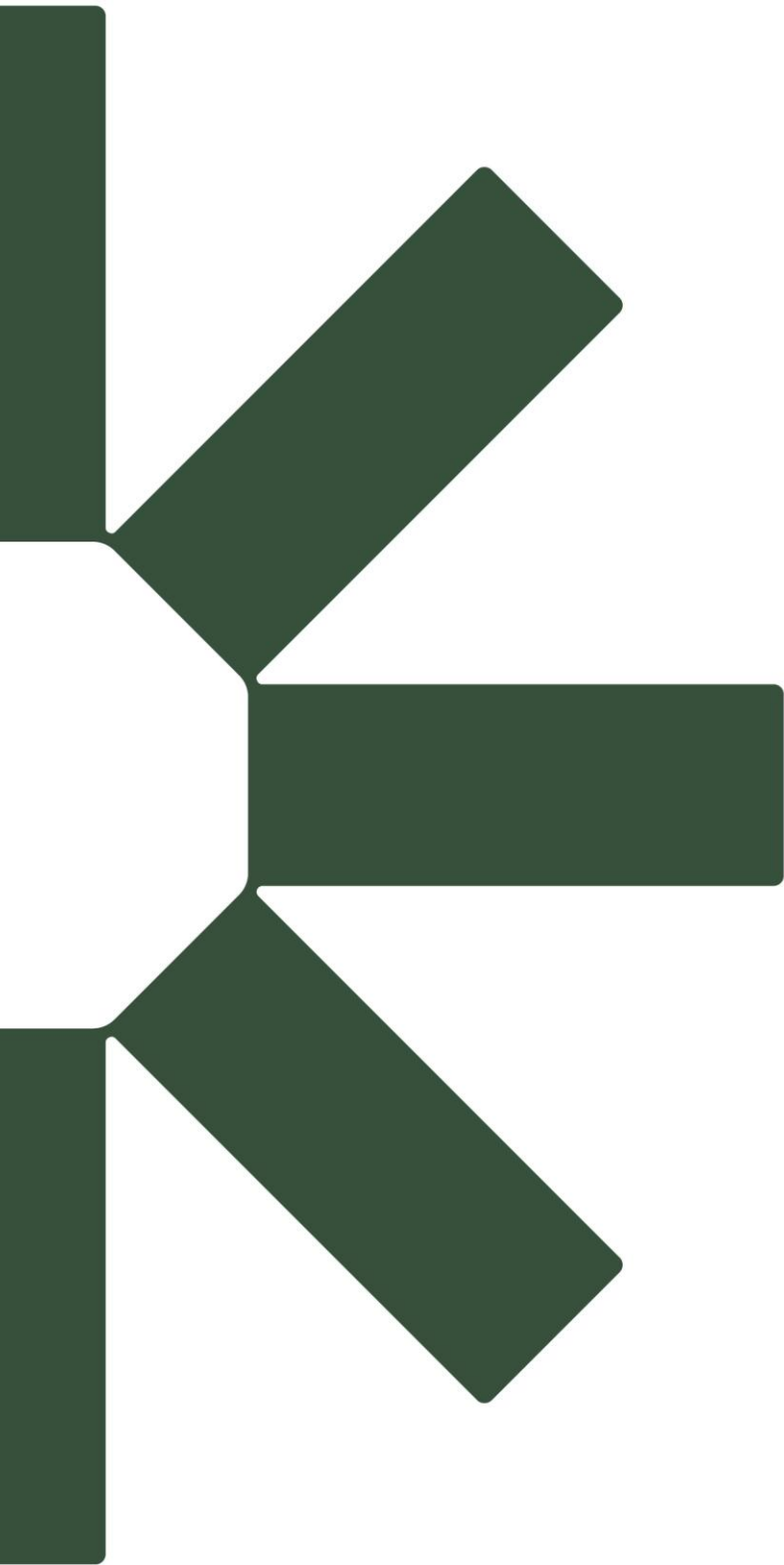
Set / Processed By:

Ageing Code:

Invoice:

Location	Date	Structures (FR/OT/SC)	Species	Fish #	Age	Con. Index	QA/QC	Comments
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2024/2025	Qualitative characteristics (pattern clarity)	Quantitative characteristics (repeatability)
Very Good (VG)	annuli are clear with no interpretation problems	Reader always gets the same age
Good (G)	annuli are clear with a few easy interpretation problems	Reader would get the same age most of the time for fish <10 years, within one year for fish 11-20 years
Fair (F)	annuli are fairly clear with some areas presenting easy and moderate interpretation problems	Reader would be within 1 year most of the time for fish <10 years and 2-3 years for fish >10 years
Poor (P)	annuli are fairly unclear presenting a number of difficult interpretation problems	Reader would be within 2-3 years most of the time for fish <10 years and 4-5 years for fish >10 years
Very Poor (VP)	annuli are very unclear presenting significant interpretation problems	Reader has little confidence in repeatability of age within 4-5 years



Making Sustainability Happen

**Attachment 1: 2025 Fish and Fish Habitat Technical
Report, Tenas Project, SLR Consulting
(Canada) Ltd.**