ANNUAL MONITORING OF OFFSET MEASURES-2021

YEAR 5 OF 5

REPORT PREPARED FOR:

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YEAR 5 OF 5

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EXECUTIVE SUMMARY

The Rainy River Mine (RRM) is owned by New Gold Inc. (New Gold). The mine is located approximately 65 km northwest of Fort Frances and 420 km northwest of Thunder Bay, Ontario. It is located off of Highway 600 within the Township of Chapple and the District of Rainy River. The RRM is located within the Pinewood River watershed which flows past the mine, eventually draining into the Rainy River approximately 40 km downstream. At present, operations at RRM are comprised of open pit and underground mining with ore processed at the Rainy River Mill, located on site.

Development of the RRM required an Authorization according to Section 35(2) (b) of the *Fisheries Act* (Authorization 15-HCAA-0039). The approved offset plan associated with the authorization resulted in the creation of Teeple Pond and the rerouted Teeple Pond Outlet. According to the Offset Plan, annual monitoring was scheduled for the first five years post-construction, with the methods to be employed and the success criteria of the offset habitats provided within the Offset Monitoring Plan (Amec Foster Wheeler 2015) (included as part of the Offset Plan submission package). The monitoring includes fish community and fish habitat (form and function) assessments. This information is to be summarized in a report on an annual basis and provided to the Department of Fisheries and Oceans (DFO). The data provided herein represents the fifth and final year of the initial annual post-construction monitoring of the offset measures (i.e., Teeple Pond and Teeple Pond Outlet).

In 2021 the RRM site received less that the 20-year Environment Canada norm for six of seven months (between January and July). Owing to both the lack of precipitation and ongoing beaver activity at the outlet of Teeple Pond into the constructed channel, the Teeple Pond Outlet was generally dry in 2021 and did not provide connectivity to Teeple Pond. This impacted the status of fish passage from the Pond to downstream habitats. Spring flow monitoring (freshet period) over the five year period at the Outlet indicated that when beaver activity at the inlet was managed, connectivity occurred throughout the constructed habitat and the form and function was maintained. However, in the summer of 2021 there was no water in the constructed outlet with the exception of the pool at the downstream end.

Within the Outlet when water is present the habitat form is consistent with that intended and the fish community utilizes the channel. However, contingency measures should be explored to enhance water level stabilization and a more permanent connectivity between the Pond and the Outlet. Constructed and naturalized fish habitat within the Pond has maintained its form and function and is providing habitat for a high number of fish species. Similar to 2019 and 2020 the depth of Teeple Pond remained stable throughout the year, providing adequate overwintering refugia for fish.

The riparian cover along the banks of the both the Teeple Pond Outlet and Teeple Pond have propagated successfully and exceed the 80% success criteria. As such, there is no need for supplemental vegetative plantings.

Species richness based on fish captures in the Teeple Pond Outlet and Teeple Pond in 2021 was two (2) and eight (8), respectively. Elevated and stabilized water levels in the Outlet that increase connectivity to Teeple Pond will likely increase species richness in the channel although historical data for the drainages in this area may indicate that a diversity success criterion of nine species may be unattainable.

The July fish community survey in the Teeple Pond Outlet was relegated to one small pool at the downstream end as the remaining constructed channel was dry at that time. Persistence of fish in this pool and multiple age classes in the catches indicated it provided good refuge for resident aquatic life during periods of low water. Teeple Pond did not meet the diversity success criterion (species richness of nine or more) in 2021. Fish catches within Teeple Pond included multiple age-classes including young of the year (YOY) indicating adequate spawning and rearing habitat for the species inhabiting the Pond.

Based on the findings of the 2021 RRM Offset Annual Performance surveys conducted in May and July 2021, Teeple Pond and the Teeple Outlet did not meet all of the success criteria for abundance. Seines net effort in the Pond continually exceed success criterion whereas minnow trap and electrofishing do not. These results may not be reflective of the success of the fish community establishment but the large amount of effort employed in a relatively small area as well as potential avoidance behaviour of minnow traps by some species present.

The fish species diversity criterion has never been achieved for Teeple Outlet and this criterion has only been achieved once in Teeple Pond (2018). The lack of consistent success with respect to species diversity is likely the related to low water levels in the Outlet whereas in the Pond it is likely more a function of the fish species diversity and abundance within the drainage. The abundance and diversity results are similar to most past monitoring years. Diversity and fish abundance in both features would likely increase with increased periods of suitable water levels and connectivity to between the Pond and Outlet and the Outlet and downstream habitat. Stream modifications conducted by a landowner downstream of the RRM site may enhance connectivity to Teeple Pond under normal water level conditions.

As mentioned, this was the fifth of five years of prescribed annual monitoring as stipulated under the Authorization. However, success criteria have not all been demonstrated for each of Teeple Pond and the Teeple Pond Outlet as of 2021. Based on the 2021 monitoring results a prioritized approach should be taken to address the Teeple Pond Outlet's state of connectivity with Teeple Pond (form and function) with additional implementation of a contingency to address fish community diversity (targeted fish relocation). According to Table 6 of the Offset Plan the mode of failure states as; "water level not consistent with those specified in the plans" the stated contingencies are to; "adjust the grades of structures to alter water levels" and "excavate pools to specific depths" (Amec Foster Wheeler 2015). These contingencies will be explored in 2022. With respect to species diversity Table 6 indicates that an approved contingency may be relocating species from local creeks to constructed habitat, if said habitat is suitable. In consideration of this, it is recommended that subsequent assessment of candidate sources and species be investigated in 2022.

As contingency measure planning and implementation is recommended, post-construction monitoring of any contingencies should occur following a consistent methodology to that undertaken in previous years. However, the duration and frequency of monitoring associated with these contingencies should be discussed with DFO in keeping with the tenants of expected physical and ecological change.

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1.0 Introduction

1.1 Site Description

The RRM is owned by New Gold. The mine is located approximately 65 km northwest of Fort Frances and 420 km northwest of Thunder Bay, Ontario (Figure 1-1). It is located off of Highway 600 within the Township of Chapple and the District of Rainy River. The RRM is located within the Pinewood River watershed which flows past the mine, eventually draining into the Rainy River approximately 40 km downstream.

Exploration of the RRM area began in 1967. Table 1-1 provides a history of site development. Commissioning occurred in 2017. Key mine-related infrastructure on the site includes an open pit, underground mine portal, waste rock stockpiles, rock crushing facilities, ore storage facilities, a processing plant, a Tailings Management Area (TMA), watercourse diversions, site drainage works, a fuel tank farm, explosives manufacturing facilities and explosives storage facilities (Figure 1-1).

Table 1-1: Summary of exploration, development and ownership changes for the Rainy River Mine

Year	Activity
1967	First record of exploration
2005	Property purchased by Rainy River Resources Ltd.
2008	Rainy River Resources Ltd. commences baseline data collection
2013	New Gold Inc. purchases RRM
2014	Environmental Assessment submitted (AMEC 2014)
2015	Site construction begins
2017	Mine commissioned September 2017

1.2 Objectives

The objectives of the offset program are:

- Monitor the offset features with respect to fish community and fish habitat; and,
- Report on the monitoring as it relates to the success criteria outlined in the DFO issued authorization.

The scope of the monitoring program for both the form and function of the habitat and the fish community endpoints were outlined in the Offset Monitoring included as part of the request for Authorization package (Amec Foster Wheeler 2015). Accordingly, this report summarizes the results of the 2021 RRM Offset Measures Monitoring Program surveys conducted in May (high-flow) and July (low-flow) at Teeple Pond and the Teeple Pond Outlet and determines if DFO success criteria were achieved (Table 1-2).

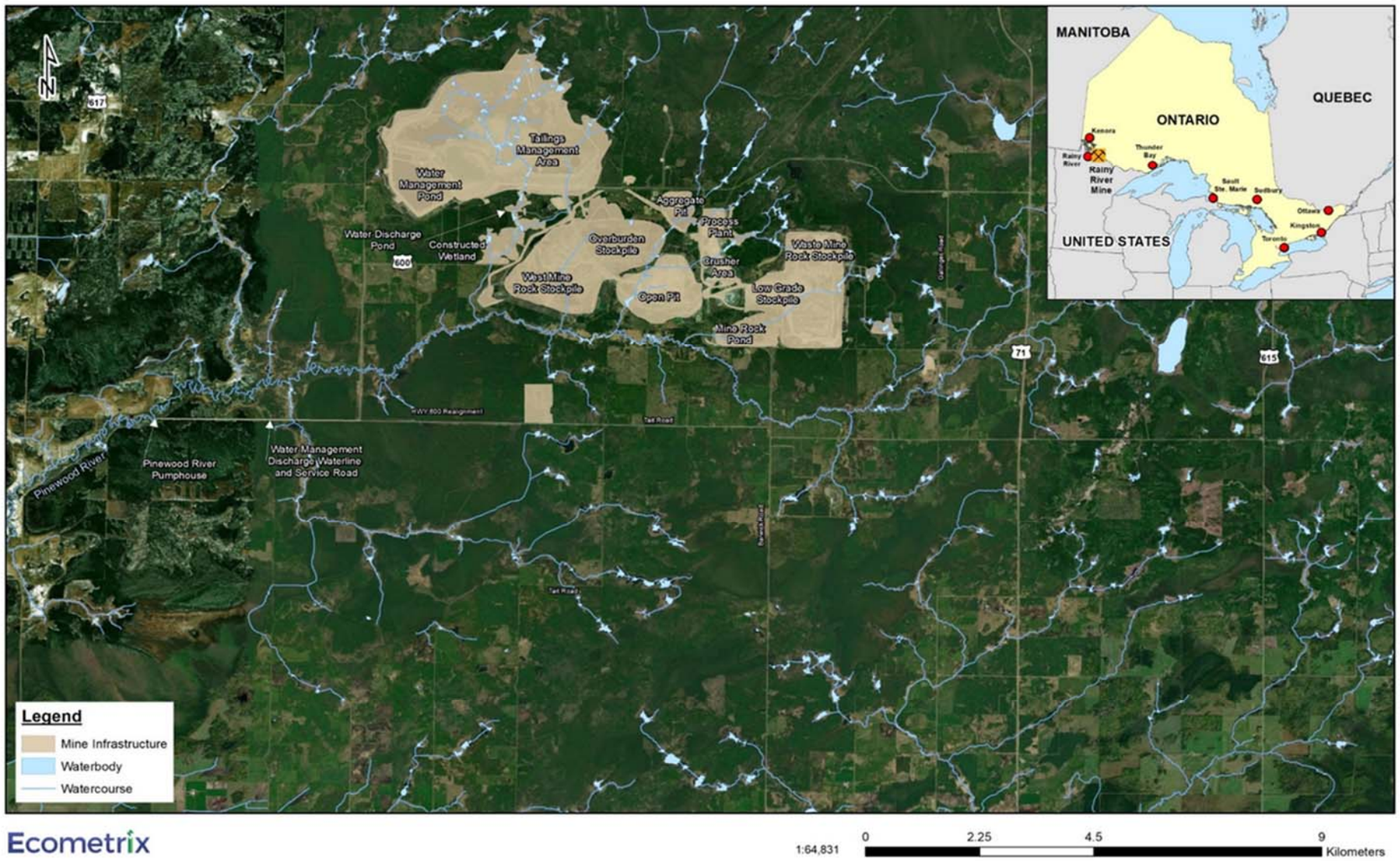

Figure 1-1: Location and Layout, Rainy River Mine

Table 1-2: Offset Plan Monitoring Requirements and Success Criteria

Attribute	Monitoring Requirement	Success Criteria	Report Schedule
Physical Function of compensation Measures	Water level gauges with an automated water level logger will be used to monitor water levels in the constructed ponds for 5 years following construction.	Water levels are consistent with those specified in the design and the diversion channels and ponds allow for passage of fish.	Annual Monitoring Reports due to DFO on or before December 31 (2017, 2018, 2019, 2020, and 2021).
	Water depth measurements of the pond area will be conducted once per year during the monitoring period (5 years) to confirm refuge areas are maintained[a].		
	Water level data from ponds will be used to evaluate frequency and duration of flows in the discharge channel. Water depth and velocity measurements in the discharge channel will be taken in pools, flats, and riffles during at least one low flow period and high flow period each year (for 5 years). This data will be used to assess the channel conditions for fish passage (spring freshet recommended for high flow measurement).		
	Fish presence within the diversion channels will be monitored once per summer during the monitoring period (5 years) to assess fish access to the diversion channels.		
Stability of Habitat Structures	Observations will be made once per year during the monitoring period, during low flow for best visibility to confirm that constructed features are in place and functional.	Constructed habitat features remain in place, shorelines and graded features are stable and not eroding (greater than 80% of features are considered stable).	
	Stability of the features and general condition will be assessed by mapping and photo documenting the perimeter of the ponds and the diversion channels once per year. Consistent vantage points will be used to provide between year comparisons.		
	Riparian vegetation cover and planting success will be monitored annually by estimating the percent cover of herbaceous ground cover and the percent survival of planted stock (shrubs).	Riparian vegetation cover and plantings achieve 80% coverage of area, and or survival of planted stock.	
Fish Species Presence, Life Cycle Usage, and Abundance	Fish sampling will be conducted annually during the summer for 5 years.	Minimum of 9 species of fish present in Teeple Pond and Teeple Pond Outlet	
	Minimum fishing effort per pond: minnow traps (1,500 trap hours), seine nets (10 individual [15 m] net hauls), and electrofishing (10,000 seconds). Additional effort and methods may be used to confirm larger bodied species and species presence.	Multiple year classes including young of the year fish are present in the offset features.	
	Minimum fishing effort per diversion channel: minnow traps (250 trap hours), electrofishing (1,000 seconds). Additional effort and methods may be used to confirm larger bodied species, species presence, and species movement throughout the channel.	Overall Catch-per-Unit-Effort (CPUE) for all species combined, for at least two of the following capture methods (electrofishing, minnow traps, and seine nets); Minnow Trap CPUE ≥ 2 fish per trap hour; Seine Net CPUE ≥ 16 fish per 15 m net pull; Electrofishing CPUE ≥ 44 fish per 1,000 seconds	

[a] Data collected by RRM and provided to Ecometrix for annual reports.

2.0 Methods

2.1 Offset Plan Annual Monitoring Overview

The RRM Offset Measures Monitoring Program was conducted over two surveys (high-flow and low-flow) conducted from May 25th to 27th and July 20th to 28th, 2021. These surveys focused on fish habitat (May and July) and fish community (July) assessments, at the Teeple Pond and Teeple Pond Outlet, the offset features (Figure 2-1). The spring survey focused on habitat and flow connectivity within outlet while the mid-summer survey focused on habitat and fish communities in both Outlet and Pond feature.

The offset features include Teeple Pond and the associated downstream Teeple Pond Outlet channel. These two constructed features were created as part of an Authorization under the Fisheries Act Section 35(2)(b) that was needed for lost/altered habitat that occurred during mine site construction. Construction of these features began in 2015 with both features being completed in 2016.

Offset features are to be monitored annually according to the Offset plan (Amec Foster Wheeler 2015). The methods utilized to monitor the fish habitat and fish communities are provided in the following sections.

2.1.1 Stream Flow Measurements

Water velocity and depth were measured along a wetted channel cross-sectional width at each of the pre-established locations. At each point along transects both water depth and water velocity were measured. Depth was measured to the nearest centimetre using a graduated wading rod attached to the flow meter and velocity was measured with a SonTek FlowTracker2 Acoustic Doppler Velocimeter (ADV®) portable velocity meter (SonTek a XyLem Brand, San Diego, CA). Flow measurements targeted a variety of habitats including pool, riffle, and run/flat areas of the outlet channel. Flow measurements were to be taken during both a high-flow period (spring freshet) and a low-flow period (mid-summer). All established transect locations were dry in the summer period (See **Section 3.0** Results).

2.1.2 Pond Depth Measurements

Wood (formerly AMEC Foster Wheeler) installed Solinst 3001 LT Levellogger Edge, M10 water level loggers in the Pond. These logger measured depth and temperature data in 15 minute intervals. Depth compensation corrections were calculated using the measurements from a Solinst 3001 Barologger Edge. RRM environment department staff download logger data quarterly; the latest download was collected on November 22nd or 23rd, 2021.

2.1.3 Fish Habitat Assessment

Surveys of constructed features such as boulders and woody debris piles were conducted in the summer facilitated by low water conditions. These fish habitat surveys were completed in both Teeple Pond and the Teeple Pond outlet. The assessment of the riparian vegetation was also

conducted in the summer season through photo-documentation and subsequent estimation of vegetative ground cover that surrounds both the Outlet and the Pond.

2.1.4 Fish Community Assessment

The fish community within the Teeple Pond Outlet was assessed using a backpack electrofishing and overnight minnow trapping effort. As a result of the low water levels encountered during the survey the amount of effort utilized was reduced compared to that prescribed in Table 1-2, but appropriate for the amount of habitat available. That is, in July, the Teeple Pond Outlet was dry except for a small pool at the downstream end of the constructed portion prior to returning to a natural stream. The backpack electrofishing unit was adjusted to appropriate voltage, frequency, and duty cycle settings based on target fish size, water conductivity, and temperature to minimize the risk of harm to fish. Minnow traps were baited with dry cat food prior to deployment.

In Teeple Pond the fish community was assessed using beach seines, backpack electrofisher and minnow traps with the amount of effort consistent with that prescribed in Table 1-2. A variety of habitats within the Pond were targeted according to species preference (Scott and Crossman 1998). All captured fish were handled carefully, identified to species, and enumerated based on effort type. A subset of fish of a variety of sizes for each species were measured for fork and total length using an appropriately sized measuring board, and for round body weight using an Ohaus® Scout® Pro analytical balance (Model SP601). An external examination was conducted on all fish retained for measurements. Detailed observations were made on any features of the fish which did not appear normal (i.e., wounds, tumors, parasites, fin fraying, gill parasites, or lesions). All captured fish were released near the location of capture, with fish measurements recorded on waterproof field data collection sheets.

It should be noted that electrofishing is the most quantitative method for determining fish species diversity followed by seines and minnow traps. Electrofishing and seining are active methods whereas minnow traps are passive and some species are not prone to effective capture based on their habitat usage and behaviour (Jackson and Harvey 1997). Consequently, when discussing catches results are presented from most to least quantitative.

2.2 Data Analysis

Habitat data including stream flow, pond level, vegetative community and total vegetative cover were compared to DFO success criteria (Table1-2). The number of fish captured were used to calculated Catch-Per-Unit-Effort (CPUE; by gear type). Measurement data from a subset of individuals from each captured species was used to create length histograms to infer age distribution. CPUE, age distributions and the number of species were compared to DFO success criteria (Table 1-2).

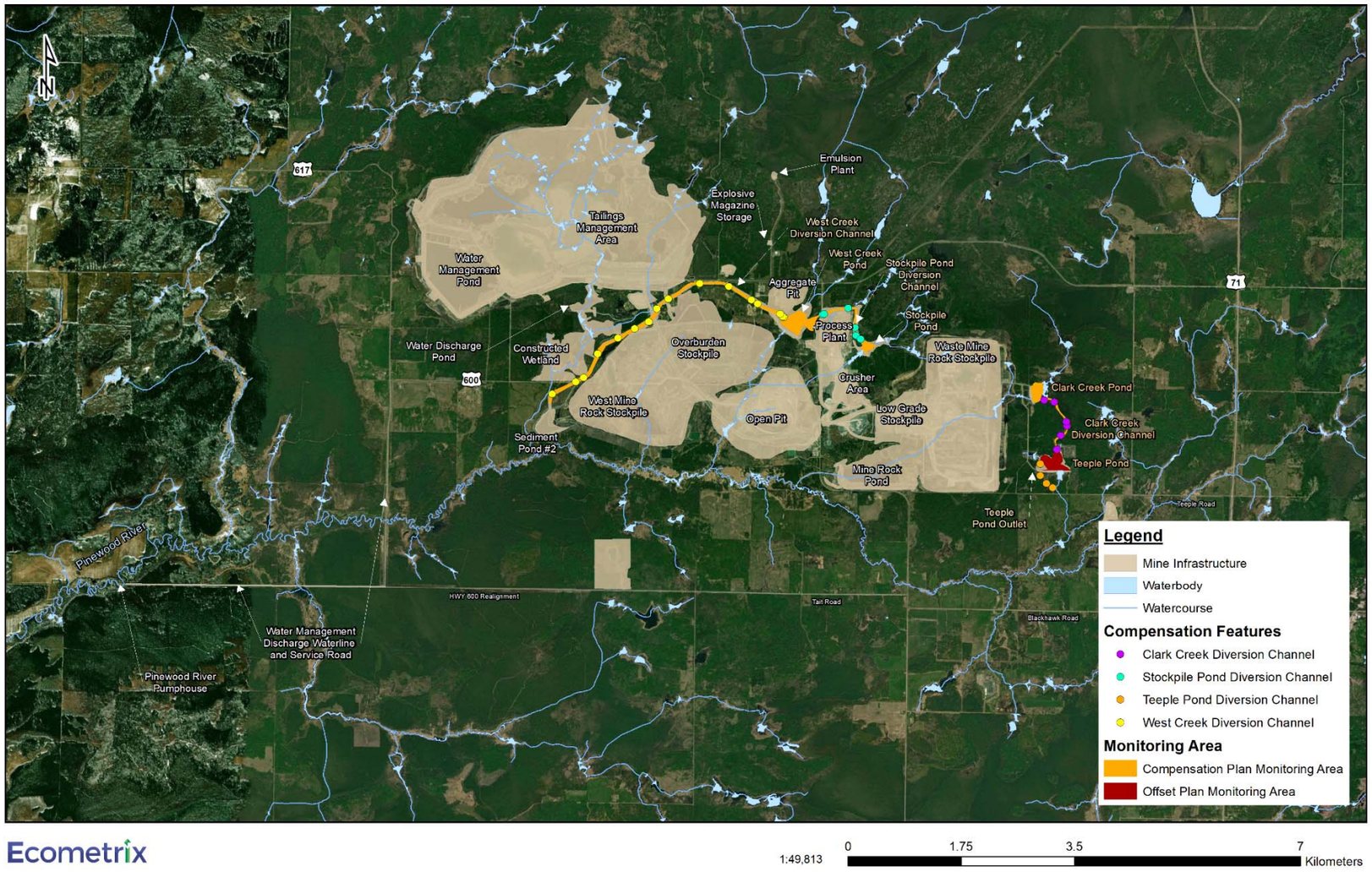

Figure 2-1: Offset Monitoring Areas, Rainy River Mine

3.0 Offset Plan Annual Monitoring

3.1 Physical Conditions and Vegetation

3.1.1 Teeple Pond Outlet

The Teeple Pond Outlet channel had an average depth and flow velocity of 12.7 cm and 0.02 m/s respectively during the spring survey. In the spring, transect TPDD-3 had a wetted width of approximately 0.6 m and a depth of <5 cm. and contained no measurable flow. In the summer season all four transect locations were dry and consequently no flow, depth or channel width measurements were conducted (Table 3-1, Appendix Tables A.1).

Riparian vegetation along Teeple Pond Outlet is extensive with little exposed soil. Cattail, grasses and sedges (*Carex* spp.) comprised the majority of the vegetation (Appendix Photo B-1 and B-2). Other species included, red clover (*Trifolium pratense*) small willow (*Salex* sp.) and alder (Alnus sp.). Submergent macrophytes were primarily coontail whereas burreed, pond weed and sedges along the shoreline were the dominant instream emergent vegetation. Throughout the constructed channel instream cover for fish is comprised of numerous boulder clusters and pool habitat. However, monitoring over the last five years indicates that the Outlet only provides seasonal habitat and is not meeting the intent of the Offset Plan (Appendix Photo B-2) due to insufficient connectivity to Teeple Pond as a result of beaver activity and in 2021 likely the result of extremely low amounts of precipitation (Section 3.1.2). It should be noted that during the May Outlet survey a beaver dam was present at the upstream end of Outlet and beaver activity continued until early summer.

3.1.2 Teeple Pond

Similar to the results in 2019 and 2020, Teeple Pond depths from January 1st to November 22nd 2021, fluctuated around 1 m. Depths ranged from a low 0.69 m to a high of 1.25 m (Figure 3-1). Teeple Pond water levels were very similar to those observed in both 2019 and 2020 (Figure 3-2).

The shoreline of Teeple Pond is well vegetated with the primary species identified including cattails, sedges and grasses. Aside from the wetted dam face, greater than 90% of the perimeter of the Pond has a robust and self-sustaining riparian vegetation community (Appendix Photo B-3). Within the Pond there were many submergent macrophytes including burreed, pond lily, pond weed and coontail. In-water structures remain stable from original construction and include boulders and wood debris piles that continue to provide cover for fish. The beaver dam observed in May was likely affecting the Pond level and the water level within the Pond / Outlet complex.

Table 3-1: Teeple Pond Outlet Depth and Flow Measurements, May 2021

Waterbody	Monitoring Station	Station Depth (cm)		Area Depth (cm)		Station Flow (m/s)		Area Flow (m/s)	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Teeple Pond Diversion Channel	TPDD-01	12.0	8.1	12.73	8.15	0.0003	0.0003	0.0055	0.02405
	TPDD-02	15.0	9.5			0.019	0.0461		
	TPDD-03	-	-			-	-		
	TPDD-04	11.8	7.9			0.0005	0.0007		

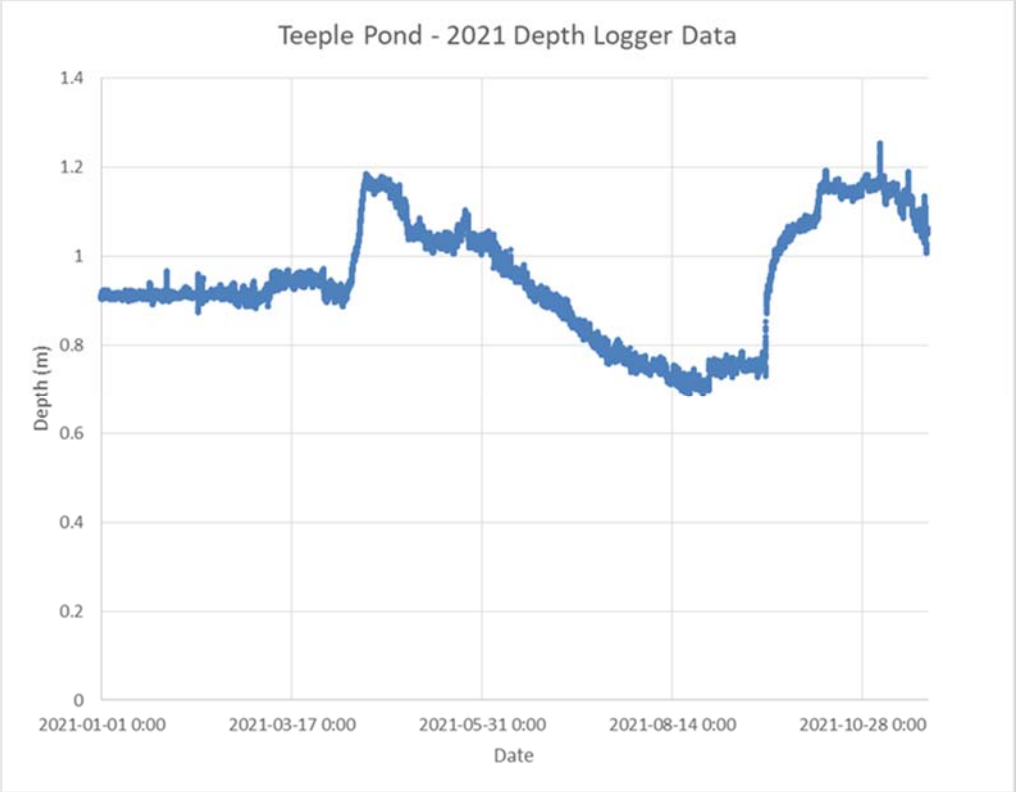

Figure 3-1: Teeple Pond Depth (January 01 to November 22, 2021)

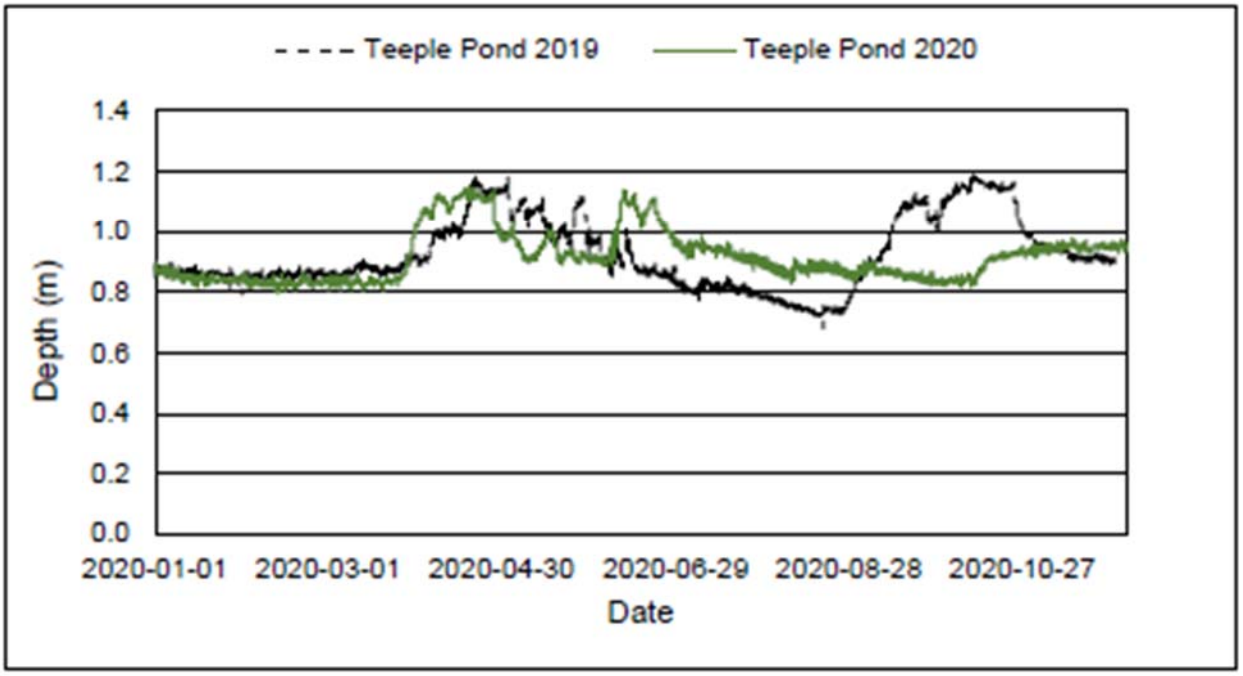

Figure 3-2: Teeple Pond Depth – 2019 and 2020 (from Minnow 2020)

3.2 Fish Community

Both Offset Plan features have success criteria for the establishment of a healthy resident fish community. These success criteria are to be met at each of Teeple Pond and Teeple Pond Outlet and include species diversity, fish abundance (CPUE) and an indication of sustainability through the presence of multiple year classes (Table 1-2).

3.2.1 Teeple Pond Outlet

Limited effort expended in the isolated pool at the downstream end of the Outlet resulted in the capture of a total of 16 fish representing three species. Brook Stickleback (*Culaea inconstans*) were the most common species followed by Central Mudminnow (*Umbra limi*), and dace species inferred from YOY (Tables 3-2 and 3-3). Fish capture results for Teeple Pond Outlet were 60 fish captured per 1,000 seconds of electrofishing effort and 0.03 fish captured per minnow trap hour (Table 3-3; Appendix Tables A.2 and A.4). These catches included individuals from multiple year classes of both Brook Stickleback and Central Mudminnow.

It should be noted that the amount of effort expend in the Teeple Pond Outlet was reduced due to the available habitat. The success criteria for electrofishing CPUE and multiple age classes present were met. The criteria for minnow traps and species diversity were not achieved. The results of the 2021 survey are similar to both 2019 and 2020 when neither minnow trap CPUE or species diversity achieved the success criteria (Table 3-4; Appendix Tables A.2 and A.4).

The 2021 survey represents the fifth year of monitoring at Teeple Pond Outlet (2017 through 2021). Electrofishing CPUE success criteria were met in each of the last three years (Table 3-4). As noted in previous reports the diversity target may be unrealistic as this feature has never approached the success criteria in any of the five years of monitoring (Table 3-4; Minnow 2019, 2020). This lack of diversity is likely the result of low water levels during the summer fish community timing but may also be related to the naturally low diversity that is consistent with the baseline and also may result from a lack of consistent connection with the Pinewood River downstream of the constructed outlet once the watercourse leaves the RRM property.

3.2.2 Teeple Pond

In Teeple Pond the fish community included (listed in order of abundance) Finescale Dace, Brook Stickleback, Northern Redbelly Dace, Central Mudminnow, Fathead Minnow, Brassy Minnow, Pearl Dace, and Johnny Darter (Tables 3-2 and 3-3). There was an abundant fish community in the Pond with a total of 6,911 fish captured. This included CPUEs of 31 fish per 1,000 seconds for electrofishing effort, 575 fish per 15 m seine net haul, and 0.49 fish captured per minnow trap hour (Table 3-3; Appendix Table A.3 to A.5). Histograms indicate that multiple age classes of a variety of species were captured in the Pond (Appendix Figure A-1).

Teeple Pond obtained the success criteria for seine net CPUE, multiple age classes and potentially for species diversity. Species diversity was eight not including YOY fish. However, a large amount of cyprinid YOYs were captured some of which may have been Creek Chub (*Semotilus atromaculatus*) since this species was identified in the Clark Creek Pond upstream and

has been identified in past surveys in Teeple Pond. The success criteria was not met for electrofishing or minnow trap CPUE (Table 3-4, Appendix Figure A-1, Appendix Tables A.3 to A.5).

Similar to the Outlet, Teeple Pond has been sampled for five consecutive years (2017 through 2021) with comparable results among years (Table 3-4). If the YOY cyprinid catches contained Creek Chub in addition to Finescale Dace and Northern Redbelly Dace then Teeple Pond would have met the success criteria for the second time in five surveys. Based on the number of YOY encountered it is fairly reasonable to think Creek Chub were present but as this was not confirmed is cannot be assumed. With respect to age classes the fish captured indicated successful recruitment and sustainability of the fish community with multiple age classes present.

Teeple Pond has exceeded the seine net CPUE success criteria by an order of magnitude in each monitoring year despite not meeting the CPUE criteria for the other two fishing methods (Table 3-4). As noted previously, minnow traps are not the most quantitative method to assess abundance and within a pond environment electrofishing also has limitations based on fishable habitat. Seine results indicate a very robust and abundant fish population has been established. Similar to the Outlet it may not be reasonable to expect the Pond to meet the species diversity criteria on a yearly basis given that during the low flow period the downstream Outlet may lack connectivity to the Pinewood River and a source of immigrating species. Even if a connection was more permanent past studies indicate species diversity in that area of the Pinewood is generally limited to an assemblage of less species than the success criteria.

Table 3-2: Species Presence during Offset Plan Annual Monitoring, Rainy River Mine 2021

Species	Stream Habitat	Pond Habitat
	Teeple Outlet	Teeple Pond
Brown Bullhead	-	-
Brassy Minnow	-	✓
Brook Stickleback	✓	✓
Creek Chub	✓	-
Central Mudminnow	✓	✓
Common Shiner	-	-
Fathead Minnow	-	✓
Finescale Dace	-	✓
Johnny Darter	-	✓
Northern Redbelly Dace	-	✓
Pearl Dace	-	✓
White Sucker	-	-
YOY Cyprinid	✓	-
Total Species Present[a]	2	8

Denotes waterbody achieved diversity success criterion of ≥ 9 species.
Notes: ✓ indicates species is present. "-" indicates species is not present.
[a] Does not include YOY Cyprinid.

Table 3-3: Fish Capture Summary during Offset Annual Monitoring, Rainy River 2021

a) Stream Features

Waterbody	Electrofishing			Minnow Trap		
	Total Effort[a]	Total Catch	Total CPUE[b]	Total Effort[a]	Total Catch	Total CPUE[b]
Teeple Pond Outlet	250	16	[c]0.06	152	4	0.03

b) Pond Features

Waterbody	Electrofishing			Minnow Trap			Seine Net		
	Total Effort[a]	Total Catch	Total CPUE[b]	Total Effort[a]	Total Catch	Total CPUE[b]	Total Effort[a]	Total Catch	Total CPUE[b]
Teeple Pond	10,048	316	0.03	1,700	841	0.49	1,060	5,754	5.43

[a] Effort defined as minnow trap = total trap hours, electrofishing = total seconds, and seine net = total m^2 seined.
[b] CPUE defined as minnow trap = number of fish per trap hour, electrofishing = number of fish per second, and seine net = number of fish per m^2.
[c] Estimate based on 15 fish captured in 1 small pool

Table 3-4: Offset Annual Monitoring Results Compared to DFO Success

		WaterBody	Teeple Pond	Teeple Pond Outlet
DFO Success Criteria	Diversity[a]	2017[b]	7	7
		2018[b]	9[e]	6
		2019[c]	6	4
		2020[c]	8	3
		20211	8	2
		Target	≥ 9 fish species	≥ 9 fish species
	Electrofishing	2017[b]	6	26
		2018[b]	5	42
		2019[c]	76	131
		2020[c]	14	108
		2021	31	60[d]
		Target	≥ 44 fish per 1,000 seconds	≥ 44 fish per 1,000 seconds
	Minnow Trap	2017[b]	0.5	0.32
		2018[b]	1.83	0.05
		2019[c]	0.18	0.01
		2020[c]	0.4	0.02
		2021	0.49	0.03
		Target	≥ 2 fish per trap hour	≥ 2 fish per trap hour
	Seine Net	2017[b]	216	NA
		2018[b]	98	NA
		2019[c]	978	NA
		2020[c]	327	NA
		2021	575	NA
		Target	≥ 16 fish per 15m trap haul	NA

Denotes value achieved success criterion.

[a] Total species count does not include young-of-year cyprinids.

[b] Previous studies conducted by Wood (Wood 2018ab).

[c] Previous studies conducted by Minnow (Minnow 2019, 2020)

[d] Estimate based on 15 fish captured in 1 small pool

[e] Species diversity includes inferred presence of Common Shiner previously encountered in low abundance during the 2017 studies (Wood 2018).

4.0 Conclusions

The key takeaways from the 2021 Offset monitoring area as follows:

- Riparian vegetation around both Teeple Pond and the Teeple Pond Outlet exceeded the establishment criteria of 80%;
- Both of the offset features have adequate fish cover in the form of boulder clusters and wood debris;
- In five years of monitoring the Teeple Pond Outlet, only the electrofishing CPUE and multiple year class success criteria have been met;
- Teeple Pond Outlet did not meet the success criterion for minnow trap CPUE in 2021 or in any of the four years prior;
- Teeple Pond met the fish success criteria for seine net CPUE and multiple age classes and has in each of the five years of monitoring;
- Teeple Pond did not meet the success criteria for CPUE using minnow traps or electrofishing;
- Neither Teeple Pond or the Teeple Pond Outlet met the success criterion for species diversity although the Pond fell just short;

Results of the five years of monitoring have been consistent in both offset features. Outlet shortfalls are largely related to low water levels typically observed during the fish survey timing. Within the Pond the fishable habitat and the catchability of the species present using the three different types of prescribed fishing gear is more likely the reason for the CPUE success targets only being met for seines. Functionally the consistent presence of multiple age classes of various species within the Pond and the abundant seine catches indicate that suitable spawning and rearing habitat exists and lend evidence to and diverse and sustainable baitfish community. Increased water levels in the Outlet resulting in more consistent connectivity with the downstream habitat (i.e., Pinewood River) may allow the species diversity success criterion to be achieved in both features.

Overall, neither Teeple Pond nor Teeple Outlet met all the success criteria as outlined in the Authorization. Teeple Pond has an abundant and sustainable fish community despite falling slightly short with respect to diversity metrics. Teeple Outlet was dry in July owing to the low precipitation levels in the first seven months of 2021 well as beaver activity.

5.0 Closure and Recommendations

The fifth year of Offset Annual Performance Monitoring indicated that Teeple Pond and Teeple Outlet did not meet all prescribed performance criteria and specifically the criteria specific to species diversity and abundance. Five years of monitoring are now complete as outlined in the Authorization and this is a reasonable amount of time to determine if the offset features are successful. Based on the 2021 results and the five years of results as a whole the offset features have not yet reached the objectives for determining offset success.

In 2021, flows in the Teeple Outlet were insufficient to allow fish passage during the May high-flow and July low-flow periods. As a result, minnow trap CPUE criteria were not met. Despite low water, electrofishing CPUE has met success criteria at Teeple Pond Outlet in each of the last three years of monitoring. It is reasonable to conclude that the method of greatest success in capturing fish is a reflection of the habitat type sampled and not indicative of any lack of abundance. Channelized structures are typically best sampled by backpack electrofishing, whilst ponds are best fished with seine nets for small-bodied fish when depth allows for such a technique. This should be considered when reviewing the success criteria.

In the case of Teeple Pond, fish are abundant as demonstrated by seine netting data. It is suggested that the preferred method of capture for the species in the Pond are by this method. Variability in capture methods do not necessarily indicate a lack of fish abundance and reproduction in the pond. The magnitude of captures by seine net must be weighed within the context of the original target for success as far surpassing the expectations for fish abundance in that ponded feature. The continued presence of YOY in the Pond indicates the continued success of this offset feature with respect to providing spawning and rearing habitat for small-bodied baitfish species. The species richness in the Pond remains close (8) to the performance criteria (9) indicating a diverse community.

The lack of consistent flows to the Teeple Pond Outlet from the Teeple Pond is likely related to the beaver activity and potentially low seasonal precipitation. As a result, the criterion of species richness in both the Pond and the Outlet may be met by ensuring connectivity of the features through some enhanced work on the outlet or supplemental stocking or other suitable species.

It is recommended that RRM staff discuss implementing contingency measures as outlined in the Authorization (Table 6, Amec Foster Wheeler 2015) and summarized below:

1) To address low water levels in Teeple Pond Outlet investigate solutions or mitigation to address water levels that are not consistent with those specific in the plan ensure stabilization of connectivity between the Outlet and Teeple Pond.

2) Species diversity within the Pond and Outlet remain below the target of nine species. It is recommended that New Gold review opportunities to relocate fish at the RRM under appropriate permits and approvals to increase the overall community diversity; and,

3) RRM staff should continue to manage beaver activity in the Teeple system to maintain the flows downstream.

6.0 References

Amec Foster Wheeler. 2015. Rainy River Project Offset Plan for Fisheries Act Section 35 (2)(b) Authorization. May 2015.

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Appendix A Detailed Survey Data

Table A-1: High-Flow Teeple Outlet Depth and Velocity Measurements, May 2021

Station	Measurement	Channel Interval									
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**Mean**
TPDD-01	Distance from shore (m)	0.25	0.5	0.75	1	1.25	1.5	1.75	-	-	-
	Depth (cm)	5	14	20	21	17	7	0	-	-	12.0
	Velocity (m/s)	0.0009	0.0006	0.0004	0.0002	0	0.0001	0	-	-	0.0003
TPDD-02	Distance from shore (m)	0.25	0.5	0.75	1	1.25	1.55	-	-	-	-
	Depth (cm)	13	23	25	21	6	2	-	-	-	15
	Velocity (m/s)	0.1132	0.0001	0.0004	0.0002	0.0012	0	-	-	-	0.0192
TPDD-03	Distance from shore (m)	No Surface Flow									
	Depth (cm)										
	Velocity (m/s)										
TPDD-04	Distance from shore (m)	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	-
	Depth (cm)	3	10	12	16	23	22	14	6	0	11.8
	Velocity (m/s)	0	0	0.0001	0.0016	0.0015	0.0011	0.0003	0.0001	0	0.0005

Table A-2: Detailed Minnow Trap Data for Creek Habitat, RRM, July 2021

Waterbody	Minnow Trap ID	UTM (NAD 83, 15U)		Set Date	Lift Date	Set Time	Lift Time	Traps (#)	Effort (hrs)	CPUE	Central Mudminnow		Brook Stickleback		Total Fish
		North	East								Catch	Mortality	Catch	Mortality	
Teeple Pond Outlet	TPO-MT1	5408583	429940	21-Jul-21	22-Jul-21	16:10	17:30	6	151.98	0.03	2	0	2	0	4
								Total	**151.98**	**0.03**	**2.00**	**0.00**	**2.00**	**0.00**	**4.00**

Note: Catch per unit effort (CPUE) calculated as the number of fish caught per hour

Table A-3: Detailed Minnow Trap Data for Pond Habitat, RRM, July 2021

Waterbody	Minnow Trap ID	UTM (NAD 83, 15U)		Set Date	Lift Date	Set Time	Lift Time	Traps (#)	Effort (hrs)	CPUE	Central Mudminnow		Brook Stickleback		Finescale Dace		Northern Redbelly Dace	
		North	East								Catch	Mortality	Catch	Mortality	Catch	Mortality	Catch	Mortality
Teeple Pond	TP-MT1	5408974	429781	20-Jul-21	22-Jul-21	13:45	8:25	4	170.68	0.299	2	0	3	0	24	0	1	0
	TP-MT2	5409022	429778	20-Jul-21	22-Jul-21	14:00	8:15	4	169.00	0.036	4	0	0	0	0	0	0	0
	TP-MT3	5409011	429823	20-Jul-21	22-Jul-21	14:05	8:20	4	169.00	0.609	3	0	51	0	12	0	34	0
	TP-MT4	5408906	429840	20-Jul-21	22-Jul-21	14:15	10:10	4	176.32	0.845	39	0	7	0	24	0	16	0
	TP-MT5	5408900	429849	20-Jul-21	22-Jul-21	14:20	10:15	4	175.68	0.831	2	0	4	0	40	0	100	0
	TP-MT6	5408846	429927	20-Jul-21	22-Jul-21	14:30	10:20	4	171.32	0.613	4	0	9	0	64	0	27	0
	TP-MT7	5408847	429954	20-Jul-21	22-Jul-21	14:35	10:25	4	175.32	0.371	4	0	14	0	35	0	10	0
	TP-MT8	5408846	430076	20-Jul-21	22-Jul-21	14:50	8:05	4	165.00	0.733	9	0	10	0	47	0	37	0
	TP-MT9	5408866	430169	20-Jul-21	22-Jul-21	15:00	7:50	4	163.32	0.141	3	0	3	0	17	0	0	0
	TP-MT10	5408904	430117	20-Jul-21	22-Jul-21	15:05	8:00	4	164.32	0.438	3	0	6	0	31	0	28	0
								Total	**1699.96**	**4.92**	**73.00**	**0.00**	**107.00**	**0.00**	**294.00**	**0.00**	**253.00**	**0.00**

Note: Catch per unit effort (CPUE) calculated as the number of fish caught per hour

Table A-4: Detailed Minnow Trap Data for Pond Habitat, RRM, July 2021

Waterbody	Minnow Trap ID	UTM (NAD 83, 15U)		Set Date	Lift Date	Set Time	Lift Time	Traps (#)	Effort (hrs)	CPUE	Cyprinid YOY		Fathead Minnow		Brassy Minnow		Pearl Dace	
		North	East								Catch	Mortality	Catch	Mortality	Catch	Mortality	Catch	Mortality
Teeple Pond	TP-MT1	5408974	429781	20-Jul-21	22-Jul-21	13:45	8:25	4	170.68	0.299	20	0	0	0	1	0	0	0
	TP-MT2	5409022	429778	20-Jul-21	22-Jul-21	14:00	8:15	4	169.00	0.036	0	0	2	0	0	0	0	0
	TP-MT3	5409011	429823	20-Jul-21	22-Jul-21	14:05	8:20	4	169.00	0.609	1	0	2	0	0	0	0	0
	TP-MT4	5408906	429840	20-Jul-21	22-Jul-21	14:15	10:10	4	176.32	0.845	0	0	0	0	63	0	0	0
	TP-MT5	5408900	429849	20-Jul-21	22-Jul-21	14:20	10:15	4	175.68	0.831	0	0	0	0	0	0	0	0
	TP-MT6	5408846	429927	20-Jul-21	22-Jul-21	14:30	10:20	4	171.32	0.613	0	0	0	0	1	0	0	0
	TP-MT7	5408847	429954	20-Jul-21	22-Jul-21	14:35	10:25	4	175.32	0.371	0	0	0	0	0	0	2	0
	TP-MT8	5408846	430076	20-Jul-21	22-Jul-21	14:50	8:05	4	165.00	0.733	1	0	1	0	15	0	1	0
	TP-MT9	5408866	430169	20-Jul-21	22-Jul-21	15:00	7:50	4	163.32	0.141	0	0	0	0	0	0	0	0
	TP-MT10	5408904	430117	20-Jul-21	22-Jul-21	15:05	8:00	4	164.32	0.438	0	0	4	0	0	0	0	0
								Total	**1699.96**	**4.92**	**22.00**	**0.00**	**9.00**	**0.00**	**80.00**	**0.00**	**3.00**	**0.00**

Note: Catch per unit effort (CPUE) calculated as the number of fish caught per hour

Table A-5: Detailed Electrofishing Catch Results, RRM, July 2021

Waterbody	UTM (NAD 83, 15U)		Date	Length of Run (m)	Output Voltage (v)	Cycle Frequency (Hz)	Pass	Effort (sec)	CPUE	Central Mudminnow	Brook Stickleback	Brook Stickleback YOY	Finescale Dace	NRBD	CYPR YOY	Fathead Minnow	Brassy Minnow
	Lat	Long															
Teeple Pond	5408851	430187	22-Jul-21	250	200	60	TP-EF1	1442	44.38	33	5	0	3	3	19	1	0
	5408848	430116	22-Jul-21		265	60	TP-EF2	2570	32.68	54	8	0	4	2	10	0	6
	5408834	429797	22-Jul-21		250	60	TP-EF3	1990	23.12	31	3	0	4	2	5	1	0
	5408834	429797	23-Jul-21		250	60	TP-EF4	2018	22.30	24	9	0	5	1	6	0	0
	5408851	430187	23-Jul-21		260	60	TP-EF5	2028	37.97	42	11	0	8	6	9	1	0
Teeple Pond Outlet	5408583	429940	21-Jul-21	10	200	60	TPO-EF1	250	60.00	5	0	5	0	0	5	0	0

Note: Catch per unit effort (CPUE) calculated as the number of fish caught per 1000s of electrofishing effort

Table A-6: Detailed Seine Net Catch Results, RRM, July 2021

Waterbody	Seine Net ID	UTM (NAD 83, 15U)		Date	Set Time	Area Seined (m^2)	CPUE	Central Mudminnow		Brook Stickleback		Finescale Dace		Northern Redbelly Dace		Cyprinid YOY		Fathead Minnow	
		Lat	Long					Catch	Mortality	Catch	Mortality	Catch	Mortality	Catch	Mortality	Catch	Mortality	Catch	Mortality
Teeple Pond	TP-SN1	5408848	430182	28-Jul-21	9:45	100	354	0	0	17	0	17	0	126	0	17	0	177	0
	TP-SN2	5408845	430165	28-Jul-21	10:00	100	159	0	0	11	0	16	0	45	0	0	0	87	0
	TP-SN3	5408842	430134	28-Jul-21	10:20	100	290	0	0	7	0	9	0	44	0	11	0	219	0
	TP-SN4	5408838	430131	28-Jul-21	10:45	140	359.286	0	0	18	0	15	0	82	0	2	0	385	0
	TP-SN5	5408839	430131	28-Jul-21	11:00	120	846.667	0	0	4	0	22	0	127	0	2	0	858	0
	TP-SN6	5408839	430131	28-Jul-21	11:15	100	508	0	0	40	0	10	0	125	0	12	0	321	0
	TP-SN7	5411648	430130	28-Jul-21	11:45	100	462	0	0	64	0	10	0	46	0	0	0	342	0
	TP-SN8	5408843	430001	28-Jul-21	12:45	100	280	0	0	40	0	26	0	47	0	0	0	167	0
	TP-SN9	5408843	429969	28-Jul-21	13:00	100	1099	0	0	70	0	15	0	133	0	1	0	880	0
	TP-SN10	5408845	429940	29-Jul-21	13:15	100	1083	1	0	51	0	0	0	84	0	0	0	946	0
					Total	**1060**	**5441**	**1**	**0**	**322**	**0**	**140**	**0**	**859**	**0**	**45**	**0**	**4382**	**0**

Note: Catch per unit effort (CPUE) calculated as the number of fish caught per 100m^2 of seine net

Table A-7: Detailed Seine Net Catch Results, RRM, July 2021

Waterbody	Seine Net ID	UTM (NAD 83, 15U)		Date	Set Time	Area Seined (m2)	CPUE	Creek Chub		Brown Bullhead		Johnny Darter	
		North	East					Catch	Mortality	Catch	Mortality	Catch	Mortality
Teeple Pond	TP-SN1	5408848	430182	28-Jul-21	9:45	100	354	0	0	0	0	0	0
	TP-SN2	5408845	430165	28-Jul-21	10:00	100	159	0	0	0	0	0	0
	TP-SN3	5408842	430134	28-Jul-21	10:20	100	290	0	0	0	0	0	0
	TP-SN4	5408838	430131	28-Jul-21	10:45	140	359.286	0	0	1	0	0	0
	TP-SN5	5408839	430131	28-Jul-21	11:00	120	846.667	1	0	1	0	1	0
	TP-SN6	5408839	430131	28-Jul-21	11:15	100	508	0	0	0	0	0	0
	TP-SN7	5411648	430130	28-Jul-21	11:45	100	462	0	0	0	0	0	0
	TP-SN8	5408843	430001	28-Jul-21	12:45	100	280	0	0	0	0	0	0
	TP-SN9	5408843	429969	28-Jul-21	13:00	100	1099	0	0	0	0	0	0
	TP-SN10	5408845	429940	29-Jul-21	13:15	100	1083	0	0	1	0	0	0
					Total	**1060**	**5441**	**1**	**0**	**3**	**0**	**1**	**0**

Note: Catch per unit effort (CPUE) calculated as the number of fish caught per 100m^2 of seine net

Table A-8: Detailed Fish Measurements for Teeple Pond Outlet, RRM, July 2021

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
21-Jul-21	BSB	TPO-BSB-5	2.3	-	0.1	None	R
21-Jul-21	BSB	TPO-BSB-6	3.0	-	0.1	None	R
21-Jul-21	BSB	TPO-BSB-8	2.4	-	0.1	None	R
21-Jul-21	BSB	TPO-BSB-12	2.8	-	0.4	None	R
21-Jul-21	BSB	TPO-BSB-14	2.7	-	0.2	None	R
21-Jul-21	BSB	TPO-BSB-15	1.7	-	0.1	None	R
21-Jul-21	BSB	TPO-BSB-16	2.4	-	0.1	None	R
21-Jul-21	BSB	TPO-BSB-19	2.5	-	0.2	None	R
21-Jul-21	BSB	TPO-BSB-20	1.9	-	0.1	None	R
21-Jul-21	CMM	TPO-CMM-2	2.9	-	0.1	None	R
21-Jul-21	CMM	TPO-CMM-3	8.9	-	8.9	None	R
21-Jul-21	CMM	TPO-CMM-4	6.5	-	2.8	None	R
21-Jul-21	CMM	TPO-CMM-7	2.7	-	0.2	None	R
21-Jul-21	CMM	TPO-CMM-10	2.5	-	0.2	None	R
21-Jul-21	CMM	TPO-CMM-11	9.6	-	9.8	None	R
21-Jul-21	CMM	TPO-CMM-13	2.5	-	0.3	None	R
21-Jul-21	CMM	TPO-CMM-17	2.4	-	0.1	None	R
21-Jul-21	CMM	TPO-CMM-18	2.4	-	0.1	None	R
21-Jul-21	CYPR YOY	TPO-CYPR YOY-1	2.7	2.4	0.3	None	R
21-Jul-21	CYPR YOY	TPO-CYPR YOY-9	2.7	2.5	0.2	None	R

Table A-9: Detailed Fish Measurements for Teeple Pond, RRM, July 2021

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
23-Jul-21	Brassy Minnow	TP-BM-01	7.8	7.3	4.7	None	R
23-Jul-21	Brassy Minnow	TP-BM-02	7	6.6	2.7	None	R
23-Jul-21	Brassy Minnow	TP-BM-03	7.1	6.6	3.6	None	R
23-Jul-21	Brassy Minnow	TP-BM-04	7.6	7.1	4.5	None	R
23-Jul-21	Brassy Minnow	TP-BM-05	3.1	2.8	0.2	None	R
23-Jul-21	Brassy Minnow	TP-BM-06	7.3	6.8	4.1	None	R
23-Jul-21	Brassy Minnow	TP-BM-07	6.3	5.9	2	None	R
23-Jul-21	Brassy Minnow	TP-BM-08	6.5	6	3.1	None	R
23-Jul-21	Brassy Minnow	TP-BM-09	6.9	6.5	2.9	None	R
23-Jul-21	Brassy Minnow	TP-BM-10	7.3	6.9	3.6	None	R
23-Jul-21	Brassy Minnow	TP-BM-11	7.4	7	4	None	R
23-Jul-21	Brassy Minnow	TP-BM-12	7.9	7.4	5.5	None	R
23-Jul-21	Brassy Minnow	TP-BM-13	6.8	6.4	2.7	None	R
23-Jul-21	Brassy Minnow	TP-BM-14	7.6	7.2	4.7	None	R
23-Jul-21	Brassy Minnow	TP-BM-15	7.4	7	6	None	R
23-Jul-21	Brassy Minnow	TP-BM-16	6.4	6	2.6	None	R
23-Jul-21	Brassy Minnow	TP-BM-17	7	6.6	3	None	R
23-Jul-21	Brassy Minnow	TP-BM-18	7	7.5	3.3	None	R
23-Jul-21	Brassy Minnow	TP-BM-19	6.9	6.5	3.3	None	R
23-Jul-21	Brassy Minnow	TP-BM-20	7.1	6.7	3.2	None	R
23-Jul-21	Brassy Minnow	TP-BM-21	7.6	7.2	3.8	None	R
23-Jul-21	Brassy Minnow	TP-BM-22	7.7	7.4	4.2	None	R
23-Jul-21	Brassy Minnow	TP-BM-23	6	5.5	1.9	None	R
23-Jul-21	Brassy Minnow	TP-BM-24	4.4	4.1	0.6	None	R
23-Jul-21	Brassy Minnow	TP-BM-25	6.1	5.7	2.4	None	R
23-Jul-21	Brassy Minnow	TP-BM-26	7.5	7	4	None	R
23-Jul-21	Brassy Minnow	TP-BM-27	7.5	7	4.1	None	R
23-Jul-21	Brassy Minnow	TP-BM-28	6.8	6.3	3	None	R
23-Jul-21	Brassy Minnow	TP-BM-29	8	7.5	5	None	R
23-Jul-21	Brassy Minnow	TP-BM-30	7.5	6.9	4	None	R
23-Jul-21	Brassy Minnow	TP-BM-31	7.8	7.2	4.2	None	R
23-Jul-21	Brassy Minnow	TP-BM-32	7.1	6.6	3.6	None	R
23-Jul-21	Brassy Minnow	TP-BM-33	8	7.5	4.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-01	3.8	-	0.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-02	2.6	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-03	2.3	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-04	2.4	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-05	3.4	-	0.2	None	R
23-Jul-21	Brook Stickleback	TP-BSB-06	3.2	-	0.2	None	R
23-Jul-21	Brook Stickleback	TP-BSB-07	3.9	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-08	4.6	-	0.4	None	R
23-Jul-21	Brook Stickleback	TP-BSB-09	4.1	-	0.4	None	R
23-Jul-21	Brook Stickleback	TP-BSB-10	1.9	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-11	2.5	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-12	3	-	0.4	None	R
23-Jul-21	Brook Stickleback	TP-BSB-13	3	-	0.3	None	R
23-Jul-21	Brook Stickleback	TP-BSB-14	2.7	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-15	3	2.9	0.3	None	R
23-Jul-21	Brook Stickleback	TP-BSB-16	2.8	-	0.2	None	R
23-Jul-21	Brook Stickleback	TP-BSB-17	2.2	-	0.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-18	4	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-19	4	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-20	4.4	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-21	3.9	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-22	4.6	-	1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-23	2.2	-	0.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-24	4.2	-	0.5	None	R

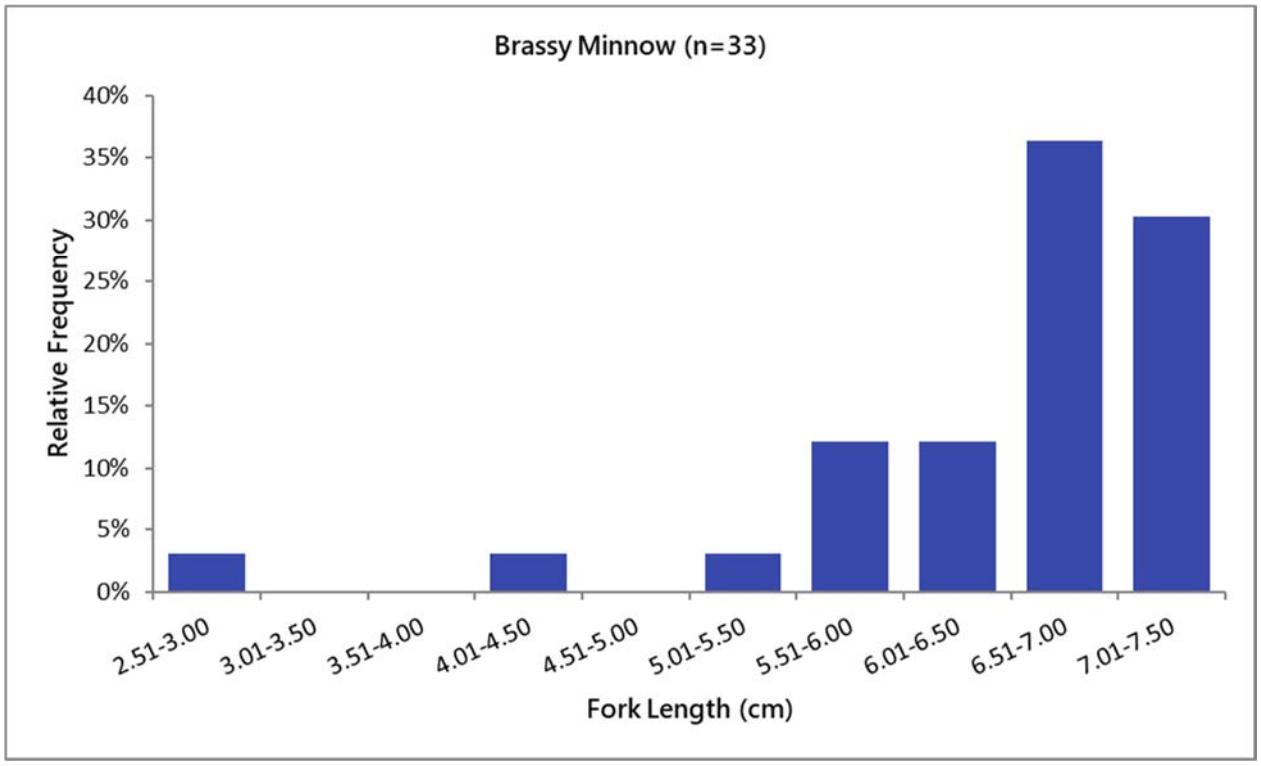
Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
23-Jul-21	Brook Stickleback	TP-BSB-25	2.1	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-26	4.3	-	0.3	None	R
23-Jul-21	Brook Stickleback	TP-BSB-27	5	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-28	4.1	-	1.5	None	R
23-Jul-21	Brook Stickleback	TP-BSB-29	4.2	-	0	None	R
23-Jul-21	Brook Stickleback	TP-BSB-30	4.6	-	1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-31	4.2	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-32	4.2	-	0.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-33	4.1	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-34	4.8	-	1.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-35	4.7	-	1.2	None	R
23-Jul-21	Brook Stickleback	TP-BSB-36	4.1	-	0.5	None	R
23-Jul-21	Brook Stickleback	TP-BSB-37	5	-	1.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-38	3.9	-	0.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-39	4.4	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-40	4.2	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-41	4.6	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-42	4.7	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-43	4.5	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-44	4.7	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-45	4.1	-	0.3	None	R
23-Jul-21	Brook Stickleback	TP-BSB-46	4.5	-	0.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-47	4.2	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-48	4.7	-	0.9	None	R
23-Jul-21	Brook Stickleback	TP-BSB-49	3.6	-	0.4	None	R
23-Jul-21	Brook Stickleback	TP-BSB-50	4.4	-	1.2	None	R
23-Jul-21	Brook Stickleback	TP-BSB-51	4.3	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-52	4.3	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-53	3.9	-	0.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-54	4.4	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-55	4.4	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-56	5	-	1.1	None	R
23-Jul-21	Brook Stickleback	TP-BSB-57	6.9	-	2.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-58	5.8	-	7.6	None	R
23-Jul-21	Brook Stickleback	TP-BSB-59	5.9	-	1.5	None	R
23-Jul-21	Brook Stickleback	TP-BSB-60	4.1	-	0.7	None	R
23-Jul-21	Brook Stickleback	TP-BSB-61	3.8	-	0.8	None	R
23-Jul-21	Brook Stickleback	TP-BSB-62	4.4	-	1.1	None	R
23-Jul-21	Central Mudminnow	TP-CMM-01	11.4	-	16.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-02	7.5	-	5.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-03	8.5	-	6.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-04	6.1	-	3.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-05	11.9	-	14.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-06	7.3	-	4.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-07	9.6	-	10.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-08	7.5	-	4.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-09	9	-	8.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-10	7.3	-	3.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-11	9.4	-	9.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-12	12.1	-	21.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-13	8.8	-	8.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-14	8.8	-	7.7	None	R
23-Jul-21	Central Mudminnow	TP-CMM-15	6.9	-	3.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-16	7.8	-	5.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-17	7.9	-	6.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-18	8.5	-	8.1	None	R
23-Jul-21	Central Mudminnow	TP-CMM-19	7.6	-	4.6	None	R

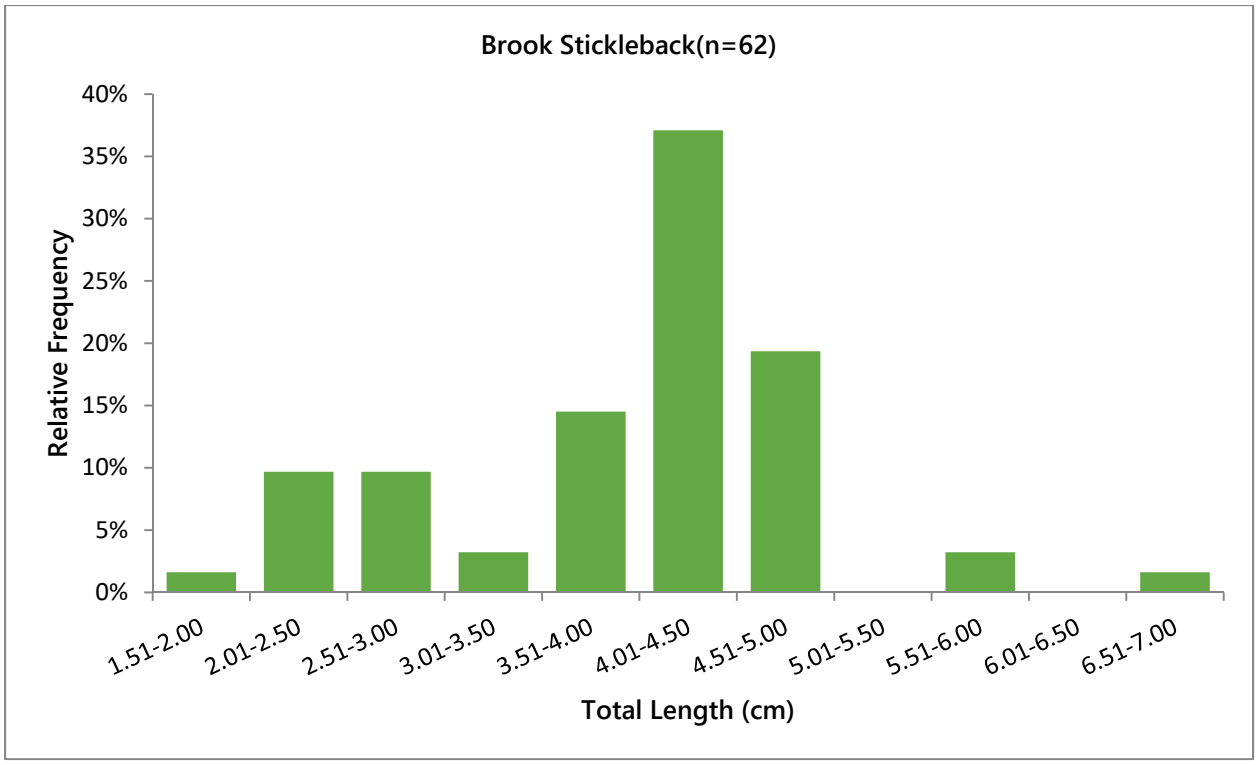
Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
23-Jul-21	Central Mudminnow	TP-CMM-20	3.6	-	0.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-21	3.3	-	0.1	None	R
23-Jul-21	Central Mudminnow	TP-CMM-22	3.3	-	0.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-23	6.9	-	4.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-24	8.5	-	7.4	None	R
23-Jul-21	Central Mudminnow	TP-CMM-25	8.2	-	2.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-26	5.5	-	1.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-27	3.1	-	0.1	None	R
23-Jul-21	Central Mudminnow	TP-CMM-28	8.7	-	2.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-29	3.5	-	0.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-30	3.5	-	0.4	None	R
23-Jul-21	Central Mudminnow	TP-CMM-31	5.7	-	2.7	None	R
23-Jul-21	Central Mudminnow	TP-CMM-32	2.9	-	0.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-33	2.8	-	0.2	None	R
23-Jul-21	Central Mudminnow	TP-CMM-34	11.6	-	15	None	R
23-Jul-21	Central Mudminnow	TP-CMM-35	3.5	-	0.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-36	9.2	-	9.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-37	8.4	-	7.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-38	7.3	-	4.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-39	4.4	-	0.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-40	7.7	-	6.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-41	10	-	9.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-42	90	-	8.4	None	R
23-Jul-21	Central Mudminnow	TP-CMM-43	7.8	-	5.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-44	6.8	-	3.1	None	R
23-Jul-21	Central Mudminnow	TP-CMM-45	8.1	-	6.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-46	8.9	-	7.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-47	10.6	-	12.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-48	6.7	-	3	DEAD	M
23-Jul-21	Central Mudminnow	TP-CMM-49	7.9	-	5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-50	11.2	-	15	None	R
23-Jul-21	Central Mudminnow	TP-CMM-51	8.2	-	5.8	None	R
23-Jul-21	Central Mudminnow	TP-CMM-52	9.7	-	9.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-53	7.6	-	4.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-54	11	-	13.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-55	8.9	-	7.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-56	9	-	8.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-57	7.6	-	4.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-58	6.2	-	2.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-59	6.2	-	2.8	None	R
23-Jul-21	Central Mudminnow	TP-CMM-60	8.8	-	7.7	None	R
23-Jul-21	Central Mudminnow	TP-CMM-61	8.5	-	6.7	None	R
23-Jul-21	Central Mudminnow	TP-CMM-62	7.7	-	5.1	None	R
23-Jul-21	Central Mudminnow	TP-CMM-63	7.6	-	4.7	None	R
23-Jul-21	Central Mudminnow	TP-CMM-64	9.3	-	9.8	None	R
23-Jul-21	Central Mudminnow	TP-CMM-65	7.8	-	4.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-66	8.4	-	6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-67	7.7	-	4.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-68	9.6	-	10	None	R
23-Jul-21	Central Mudminnow	TP-CMM-69	10	-	11.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-70	9	-	9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-71	7.2	-	4.7	None	R
23-Jul-21	Central Mudminnow	TP-CMM-72	7.5	-	3.8	DEAD	M
23-Jul-21	Central Mudminnow	TP-CMM-73	8	-	6.1	DEAD	M
23-Jul-21	Central Mudminnow	TP-CMM-74	7.3	-	4.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-75	11.6	-	18.3	None	R
23-Jul-21	Central Mudminnow	TP-CMM-76	9.5	-	8.7	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
23-Jul-21	Central Mudminnow	TP-CMM-77	8.3	-	6.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-78	7.2	-	4.4	None	R
23-Jul-21	Central Mudminnow	TP-CMM-79	7.8	-	5.9	None	R
23-Jul-21	Central Mudminnow	TP-CMM-80	8.6	-	6.6	None	R
23-Jul-21	Central Mudminnow	TP-CMM-81	7.5	-	5.5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-82	7.9	-	5	None	R
23-Jul-21	Central Mudminnow	TP-CMM-83	5.3	-	1.9	None	R
23-Jul-21	Fathead Minnow	TP-FHM-01	7.6	-	2.6	black worm/cyst in body >10	R
23-Jul-21	Fathead Minnow	TP-FHM-02	6.8	6.5	4.7	None	R
23-Jul-21	Fathead Minnow	TP-FHM-03	5.2	4.8	1.2	None	R
23-Jul-21	Fathead Minnow	TP-FHM-04	7.4	7.1	3.9	Photos of speciman (w/nuptial)	R
23-Jul-21	Fathead Minnow	TP-FHM-05	7	6.5	3.4	None	R
23-Jul-21	Fathead Minnow	TP-FHM-06	8.8	8.4	7.4	None	R
23-Jul-21	Fathead Minnow	TP-FHM-07	9.5	9.1	8	None	R
23-Jul-21	Fathead Minnow	TP-FHM-08	9	8.4	6.7	None	R
23-Jul-21	Fathead Minnow	TP-FHM-09	9.1	8.7	7.3	None	R
23-Jul-21	Fathead Minnow	TP-FHM-10	7.4	7	2.6	None	R
23-Jul-21	Fathead Minnow	TP-FHM-11	8.2	7.7	5.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-01	4.9	4.6	0.9	None	R
23-Jul-21	Finescale Dace	TP-FSD-02	4.3	3.9	1.1	None	R
23-Jul-21	Finescale Dace	TP-FSD-03	3.9	3.2	0.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-04	8.2	7.6	5.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-05	8.1	7.6	5.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-06	7.4	6.9	4.4	None	R
23-Jul-21	Finescale Dace	TP-FSD-07	10.4	9.6	10.9	None	R
23-Jul-21	Finescale Dace	TP-FSD-08	4.3	4	-	None	R
23-Jul-21	Finescale Dace	TP-FSD-09	5.2	4.8	1.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-10	4.4	4.1	0.9	None	R
23-Jul-21	Finescale Dace	TP-FSD-11	4.5	4.2	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-12	7.6	7.2	4.7	None	R
23-Jul-21	Finescale Dace	TP-FSD-13	9.7	9.1	8.7	None	R
23-Jul-21	Finescale Dace	TP-FSD-14	4.2	3.9	0.9	None	R
23-Jul-21	Finescale Dace	TP-FSD-15	4.5	4.3	1.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-16	4.2	3.9	1.1	None	R
23-Jul-21	Finescale Dace	TP-FSD-17	8.2	7.6	5.5	None	R
23-Jul-21	Finescale Dace	TP-FSD-18	7.6	7.2	6.7	None	R
23-Jul-21	Finescale Dace	TP-FSD-19	8.6	8.1	6.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-20	4.2	4	0.9	None	R
23-Jul-21	Finescale Dace	TP-FSD-21	4	3.8	0.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-22	7.4	6.9	4.3	None	R
23-Jul-21	Finescale Dace	TP-FSD-23	8.1	7.7	5.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-24	7.9	7.5	5.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-25	4.6	4.4	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-26	4.6	4.4	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-27	7.8	7.4	4.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-28	6.7	6.4	2.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-29	7.1	6.8	3.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-30	5.7	5.5	1.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-31	4.3	4	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-32	6.9	6.6	3	None	R
23-Jul-21	Finescale Dace	TP-FSD-33	7.4	7	4.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-34	4.4	4.2	3	None	R
23-Jul-21	Finescale Dace	TP-FSD-35	6.2	5.8	2.5	None	R
23-Jul-21	Finescale Dace	TP-FSD-36	7.8	7.4	5.1	None	R
23-Jul-21	Finescale Dace	TP-FSD-37	8.4	8.1	8.2	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
23-Jul-21	Finescale Dace	TP-FSD-38	8.1	7.7	5.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-39	5.7	5.4	1.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-40	9	8.5	6.4	None	R
23-Jul-21	Finescale Dace	TP-FSD-41	7.4	6.9	4	None	R
23-Jul-21	Finescale Dace	TP-FSD-42	8	7.5	5.9	Possibly hybridized w/ Pearl Dace	R
23-Jul-21	Finescale Dace	TP-FSD-43	4.4	4.1	1.3	None	R
23-Jul-21	Finescale Dace	TP-FSD-44	5.2	4.6	1.6	None	R
23-Jul-21	Finescale Dace	TP-FSD-45	7.6	7.2	4	None	R
23-Jul-21	Finescale Dace	TP-FSD-46	4.1	3.8	0.7	None	R
23-Jul-21	Finescale Dace	TP-FSD-47	9.5	9.1	9.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-48	4.3	4.1	0.7	None	R
23-Jul-21	Finescale Dace	TP-FSD-49	5.5	5.3	1.5	None	R
23-Jul-21	Finescale Dace	TP-FSD-50	8.5	8	5.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-51	4.5	4.3	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-52	4.1	3.8	0.9	None	R
23-Jul-21	Finescale Dace	TP-FSD-53	4.6	4.3	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-54	4.4	4.2	2.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-55	4.5	4.2	1	None	R
23-Jul-21	Finescale Dace	TP-FSD-56	4.7	4.4	1.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-57	5.5	5.7	1.8	None	R
23-Jul-21	Finescale Dace	TP-FSD-58	4.6	4.3	1.2	None	R
23-Jul-21	Finescale Dace	TP-FSD-59	4.4	4.2	1	None	R
23-Jul-21	Johnny Darter	TP-JD-01	2.2	-	0.1	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-01	3.9	3.7	0.4	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-02	6	5.7	2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-03	4.1	3.8	0.6	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-04	6.2	5.6	5.6	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-05	4	3.8	0.4	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-06	6.4	6	2.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-07	3.8	3.6	0.3	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-08	5.6	5.2	1.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-09	5.4	5.1	1.5	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-10	5.1	4.7	1.3	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-11	4.8	4.6	1.2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-12	5.1	4.8	1.1	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-13	5.5	5.2	1.4	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-14	5.7	5.4	1.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-15	6.2	5.9	2.4	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-16	5.9	5.7	1.2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-17	4.7	4.4	1	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-18	5.4	5.2	1.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-19	4.4	4.1	1.2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-20	5.6	5.4	1.7	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-21	5.7	5.5	1.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-22	5.4	5.1	1.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-23	6.8	6.3	2.4	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-24	6.8	6.5	1.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-25	6.4	6.1	2.6	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-26	4.8	4.6	1.2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-27	5.5	5.2	1.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-28	5.7	5.4	1.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-29	5.8	5.4	1.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-30	6.5	6.3	2.6	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-31	6	5.6	1.7	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-32	5.5	5.4	1.7	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-33	4.7	4.4	1.1	None	R

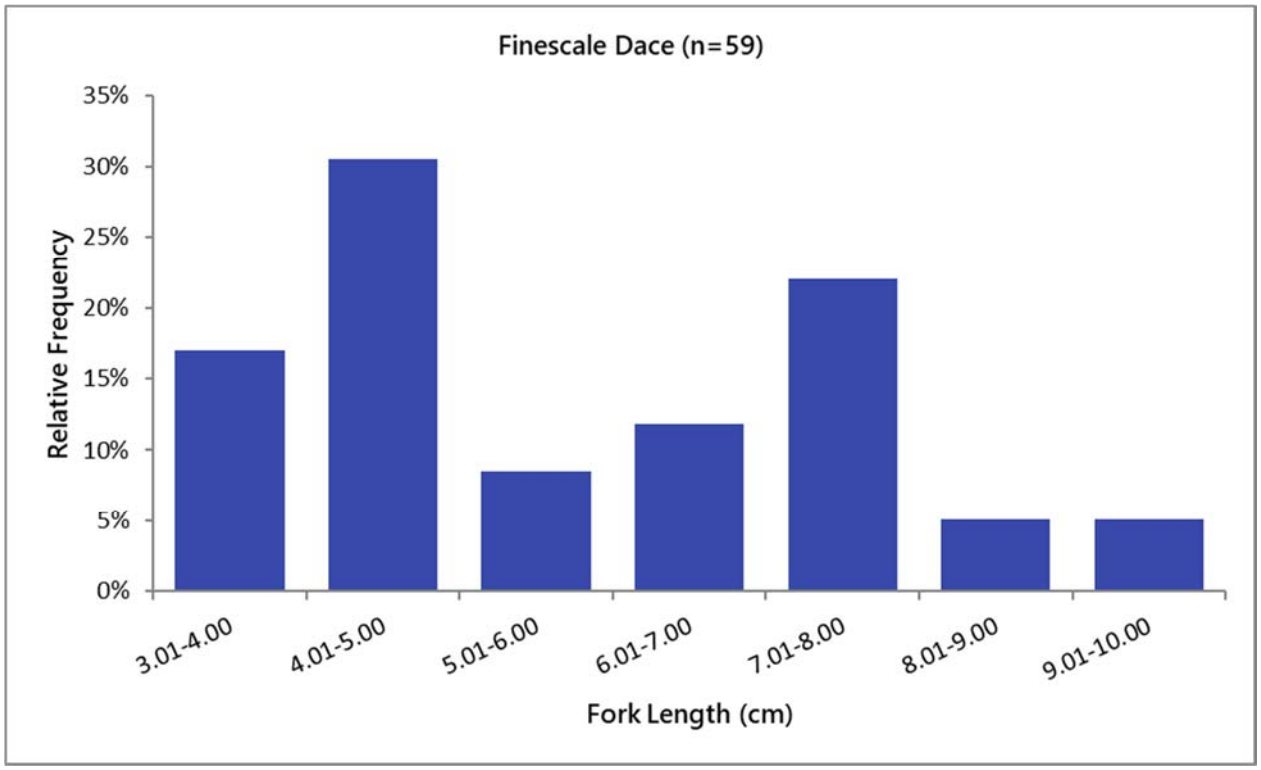
Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body Weight (g)	Abnormalities	Fate (M) Mortality (R) Released
23-Jul-21	Northern Redbelly Dace	TP-NRBD-34	4.5	4.3	0.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-35	5.8	5.4	1.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-36	4.1	3.4	0.7	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-37	4.6	4.3	0.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-38	4.4	4.1	0.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-39	1.2	2.8	0.6	OUTGROWTH//WORMS UNDER CHIN & CAUDAL OF TAIL	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-40	4.8	4.5	1.5	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-41	4	3.8	0.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-42	5.9	5.6	2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-43	6.3	5.9	2	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-44	6.7	6.3	0.8	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-45	4.8	4.5	1	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-46	4.7	4.4	0.9	None	R
23-Jul-21	Northern Redbelly Dace	TP-NRBD-47	4.3	4.1	0.8	None	R
23-Jul-21	Pearl Dace	TP-PD-01	11.4	10.7	13.8	None	R
23-Jul-21	Pearl Dace	TP-PD-02	10	9.5	10.6	None	R
23-Jul-21	Pearl Dace	TP-PD-03	9.4	8.9	8.4	None	R

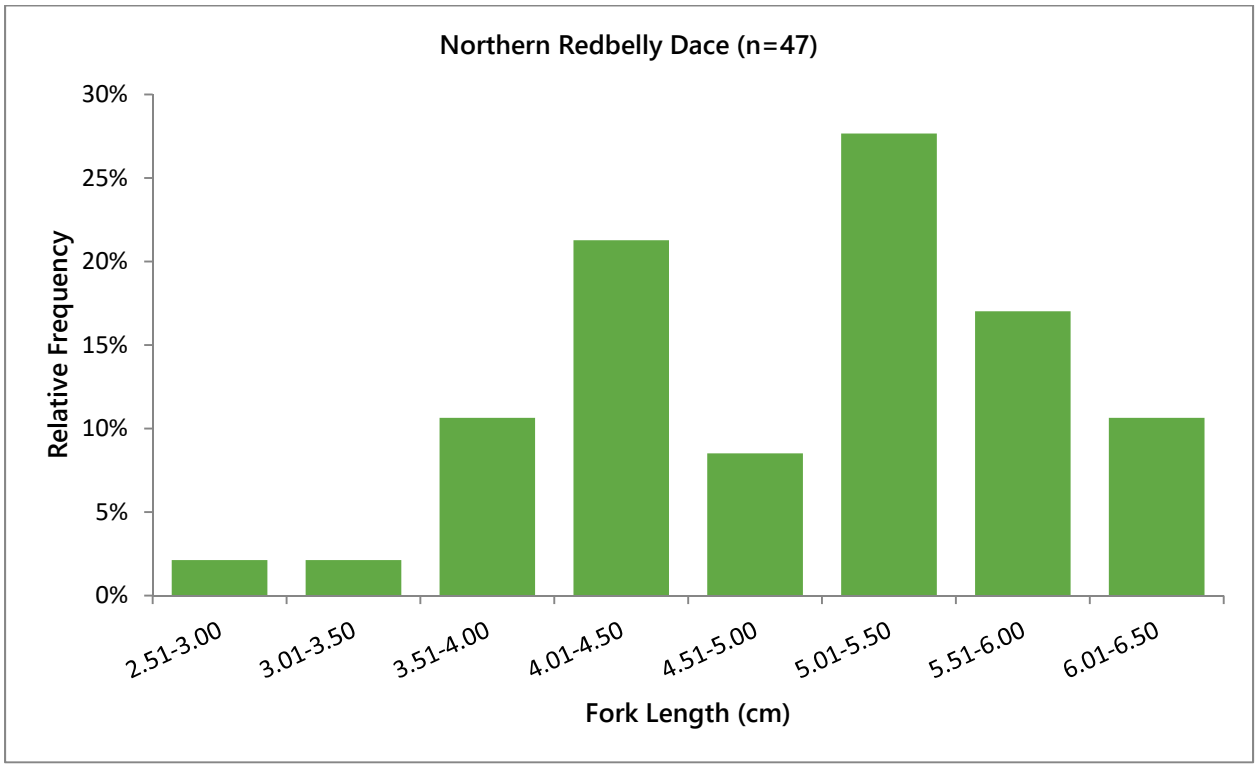




Note: Johnny Darter (n=1) and Pearl Dace (n=3) not plotted due to low capture

Figure A-1: Length frequency Distributions for Fish Collected at Teeple Pond, Rainy River Mine 2021





Note: Johnny Darter (n=1) and Pearl Dace (n=3) not plotted due to low capture

Figure A-1: Length frequency Distributions for Fish Collected at Teeple Pond, Rainy River Mine 2021

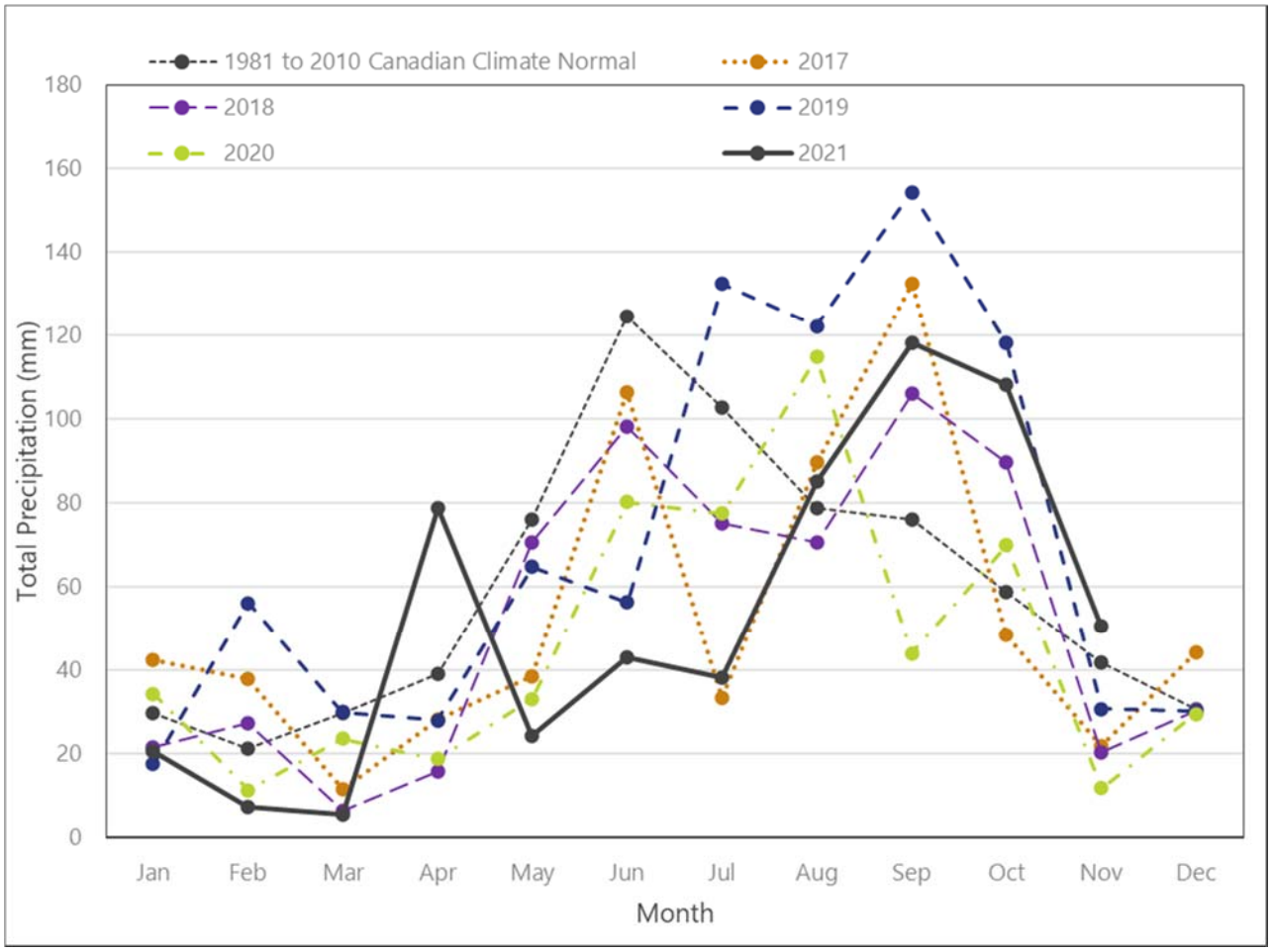


Figure A-2: Precipitation Values Measured in the Vicinity of Rainy River Mine

Appendix B Photos

Photo B-1: Teeple Pond Outlet Habitat, May 2021

Teeple Pond Outlet – May 2021	Teeple Pond Outlet – May 2021
	
Teeple Pond Outlet – May 2021	**Teeple Pond Outlet – May 2021**
	

Photo B-2: Teeple Pond Outlet Habitat – July 2021

Teeple Pond Outlet – July 2021	Teeple Pond Outlet (Dry Area) – July 2021
	
Teeple Pond Outlet (Dry Area) – July 2021	**Teeple Pond Outlet (Dry area) – July 2021**
	

Photo B-3: Teeple Pond Habitat – Jul 2021