NEW GOLD RAINY RIVER MINE
APPENDIX D
ANNUAL MONITORING REPORT – OFFSET PLAN FOR FISHERIES ACT

ANNUAL MONITORING OF COMPENSATION MEASURES 2022

YEAR 5 OF 5

REPORT PREPARED FOR:

New Gold Inc
Rainy River Mine
P.O. Box 5
Emo, Ontario
P0W 1E0

REPORT PREPARED BY:

Ecometrix Incorporated
www.ecometrix.ca
Mississauga, ON

Ref. 22-3015
13 December 2022

ANNUAL MONITORING OF COMPENSATION MEASURES 2022

YEAR 5 OF 5

<original signed by>

Dion Kelly
Technical Lead, Author

<original signed by>

Joe Tetreault
Project Manager and Reviewer

ECUTIVE SUMMARY

The Rainy River Mine (RRM) is owned and operated 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 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 mine required the deposit of mine waste (e.g., tailings or overburden) into waterbodies frequented by fish. An amendment to Schedule 2 of the Metal and Diamond Mining Effluent Regulations (MDMER), formerly the Metal Mining Effluent Regulation (MMER), was therefore required to move forward with these activities. RRM was required to develop and submit an approved Fish Habitat Compensation Plan (FHCP) that outlined the offset plan to ensure no net loss of fish habitat in keeping with the Department of Fisheries and Oceans (DFO) policy. The original No Net Loss Plan (NNLP) that formed the basis of the agreement was prepared in 2014 as part of the Environmental Assessment. The FHCP included an outline of the compensation as well as the monitoring was originally submitted in 2015, with an updated version, based on changes to the mine design, submitted in 2017. This FHCP then became the contractual commitment of RRM to construct and monitor the compensation features.

Ecometrix was retained by New Gold to conduct the 2022 FHCP outlined monitoring of the compensation works. The monitoring is comprised of fish community and fish habitat compensation assessment, as well as a yearly report to be provided to the DFO. The data provided herein represents the fifth year of the post-construction monitoring of compensation works consisting of three stream features (Stockpile Diversion channel, West Creek Diversion Channel, and Clark Creek Diversion Channel) and two pond features (West Creek Pond, and Clark Creek Pond). Note that the original compensation works also included Stockpile Pond. However, this feature is not functioning as intended due to water short-circuiting through the dam and the outflow apron. Consequently, New Gold is presently investigating the design and creation of additional compensation measures to meet the requirements of habitat included in Schedule 2. These investigations are ongoing and once created will be monitored for their effectiveness and reported to DFO on a revised schedule that will be included in an amended compensation plan.

In 2022, the RRM site experienced the highest total precipitation recorded in the past five years for the period of April through July. This aided the connectivity between the diversion channels and the ponds during the summer months but also influenced fishing efforts, such as electrofishing. Backpack electrofishing in stream features however remains an effective method to assess the fish community in this habitat type. Conversely, minnow trap efforts may not be the most appropriate method to monitor these features due to habitat but also trap avoidance by the species present.

The RRM Compensation Annual Performance surveys conducted in May and July 2022 resulted in varied results for channels and ponds. The fish species diversity criterion (i.e., species diversity of nine or more) was achieved at the West Creek and Stockpile Pond Diversion Channels but not the Clark Creek Diversion Channel. Fish species diversity ranged from eight (8) identified species in the Clark Creek Diversion Channel to thirteen (13) in the West Creek Diversion Channel. Since the studies began in 2018, both the Stockpile Pond Diversion and Clark Creek Diversion Channels have typically had low fish species diversity. In 2022 however, the Stockpile Pond Diversion Channel had twelve (12) species identified. Overall, West Creek Pond contained the largest and most diverse fish assemblage, with 13 species identified in 2022. Clark Creek Pond typically contains a less diverse assemblage, but this may be more indicative of natural variability in community structures rather than a deficiency in available built-habitat and/or feature design failure.

The results of the first five years of the monitoring indicate that the Stockpile Pond Diversion Channel has met biological success criteria when water is present. However, the failure of the pond to maintain an appropriate water level means that at certain times under low water conditions a portion of the Stockpile Pond Diversion goes dry and consequently does not function. Adding further compensation works to replace the non-functioning Stockpile Pond will also include a redesign of the pond location to change it to a flow-through system. This should provide a more consistent amount of water and allow the diversion to regularly function as intended. Further monitoring of the Stockpile Pond Diversion channel should be undertaken following the changes to the existing Stockpile Pond area.

The West Creek Diversion Channel and the West Creek Pond have achieved species diversity and life cycle usage during all five monitoring years. Since these compensation features are functional, physically, and biologically stable, monitoring efforts should be focused on the Clark Creek Diversion Channel, Clark Creek Pond, and Stockpile Pond Diversion Channel.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1.0 Introduction

1.1 Site Description

The Rainy River Mine (RRM) is owned and operated 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, off Highway 600 within the Township of Chapple and the District of Rainy River. The RRM is 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 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 two main objectives of the compensation program are:

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

The scope of the monitoring for both the form and function of the habitat and the fish community endpoints were outlined in the revised FHCP (AMEC 2017). Accordingly, this report summarizes the results of the 2022 RRM Compensation Measures Monitoring Program surveys conducted in May (high-flow) and July (low-flow) at Stockpile Diversion, West Creek Pond and West Creek Diversion and Clark Creek Pond, and Clark Creek Diversion and determines if DFO success criteria were achieved (**Table 1-2**).

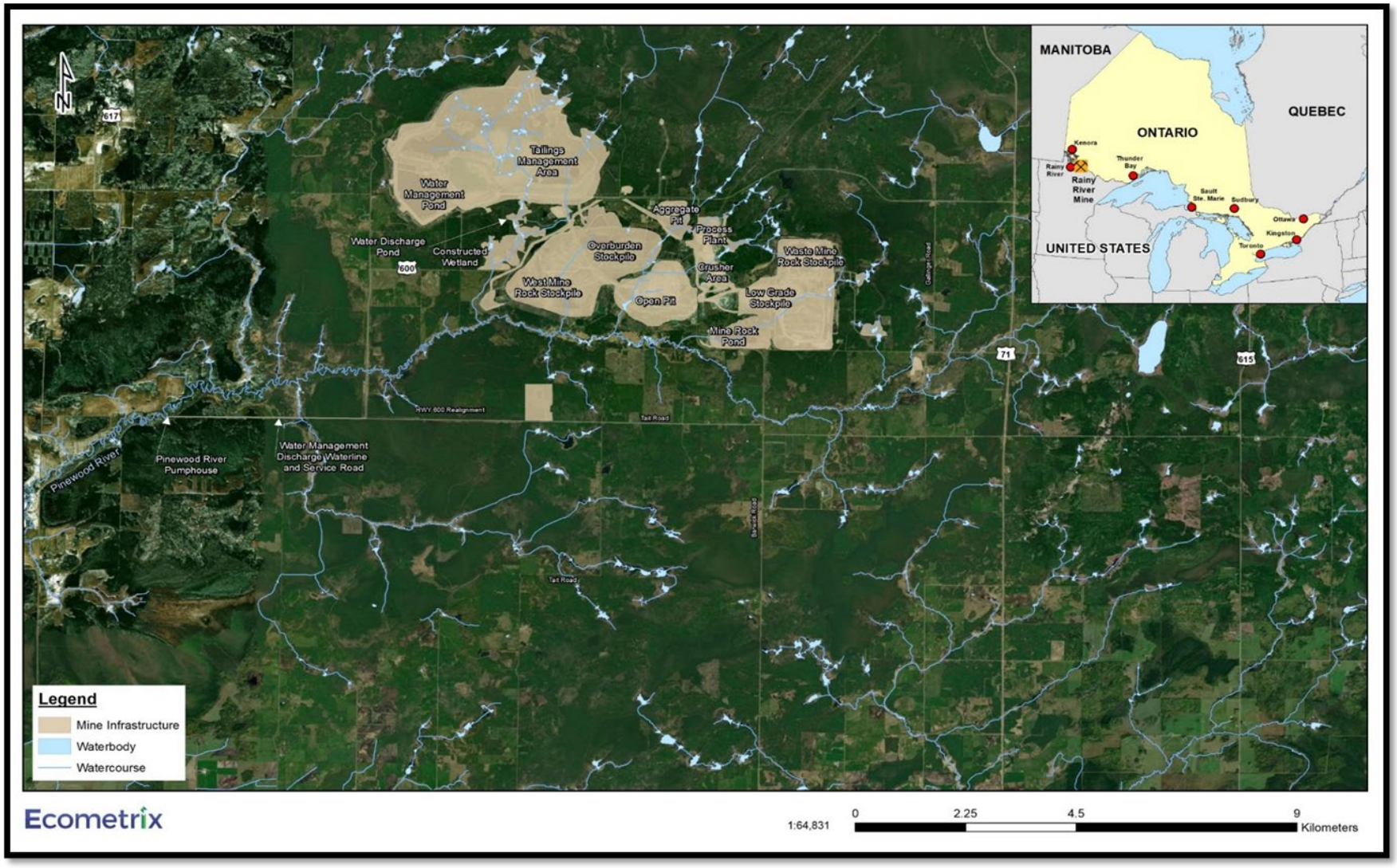


Figure 1-1 : Location and Layout, Rainy River Mine

Table 1-2 : Compensation 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 (2018, 2019, 2020, 2021 and 2022).
	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 each of the 2 Diversion areas (Clark Creek Diversion and West Creek Diversion).	
	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 each of the compensation features (Clark Creek Diversion and West Creek Diversion).	
	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.

The RRM Compensation Measures Monitoring Program was conducted by WSP (formerly Wood/AMEC Foster Wheeler) in 2018, Minnow 2019-2020, and Ecometrix 2021-2022 using methods described in **Section 2.0.** Throughout the past five years, assessment of physical function, stability, and vegetation of compensation streams and ponds identified varying degrees to which features meet the DFO criteria success. Successes have included stable (no erosion) channels and ponds, >90% vegetation cover, but have also identified areas of improvement, including intermittent low flow within the Stockpile Pond Diversion Channel.

Fish community assemblages, species presence, and multiple age classes within respective features have remained consistent since surveys began in 2018. Species number has varied depending on fishing method and catch per unit effort.

2.0 Methods

2.1 2022 Compensation Plan Annual Monitoring Overview

The RRM Compensation Measures Monitoring Program in 2022 was completed over two surveys conducted on May 17th to May 21st (assessing stream flow and fish habitat) and July 18th to July 28th, 2022 (assessing fish habitat and fish community assessments) at all compensation features (**Figure 2-1**). As noted, Stockpile Pond was not part of the features assessed as New Gold is exploring options to replace this feature. These constructed features were created as part of the mine development and operation plan to facilitate the deposition of mine waste (i.e., tailings or mine rock) into water frequented by fish. Surveys of constructed features focused on habitat and flow connectivity within stream features and fish communities in stream and pond compensation features.

The compensation features include two different watercourses:

1) West Creek Diversion (Stockpile Pond Diversion Channel, West Creek Pond, and West Creek Diversion Channel); and,

2) Clark Creek Diversion (Clark Creek Pond and Clark Creek Diversion Channel).

The locations of all features and the stream sampling stations are indicated in Figure 2-1. The construction of Clark Creek Pond was completed in early 2016 while the construction of the Clark Creek Diversion Channel was completed by late 2016. The Stockpile Pond Diversion Channel was constructed by early 2016, whereas the West Creek Pond and diversion channel construction was completed by late 2017. Annual monitoring for compensation features was scheduled (AMEC 2017) to be conducted until 2022 depending on the results compared to the success criteria **(Table 1-2**) at the end of five (5) years of monitoring.

The fish habitat and fish communities were assessed within each of the watercourses, utilizing methods outlined in the Fish Habitat and Compensation Plan (FHCP) and provided in the following sections (AMEC 2017).

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, when possible. During both the May and July surveys there were instances that due to safety, transects were not possible at the previously established locations. At each point along conducted 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), however, the July survey did not represent low

flow as this was the wettest summer period encountered on site since the features have been constructed. Results of the stream flow measurements are detailed in **Section 3.0**.

2.1.2 Pond Depth Measurements

WSP (formerly Wood/AMEC Foster Wheeler) installed Solinst 3001 LT Levelogger Edge, M10 water level loggers at each pond. These loggers measured depth and temperature data in 15-minute intervals. Depth compensation corrections were calculated using the measurements from a Solinst 3001 Barologger Edge. RRM environmental department staff download logger data quarterly; the latest download was collected in November 2022.

2.1.3 Fish Habitat Assessment

Fish habitat surveys were completed in both stream/channels and pond habitats during May and July 2022. Surveys included assessing constructed features like boulders and woody debris piles and evaluating riparian vegetation. The assessment procedure included photo-documentation and the subsequent estimation of vegetative ground cover that surrounds both the diversion and pond features.

2.1.4 Fish Community Assessment

The fish community within the diversion channels (Stockpile Pond Diversion Channel, West Creek Diversion Channel and Clark Creek Pond diversion channel) were assessed using a backpack electrofisher and overnight minnow trapping effort. The backpack electrofishing unit was adjusted to an 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 pond features (West Creek Pond and Clark Creek Pond) the fish community was assessed using beach seines, a backpack electrofisher and overnight minnow traps with the amount of effort 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 carefully, handled, 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.

Note that electrofishing is the most effective and quantitative method for determining fish species diversity followed by seines and minnow traps. Electrofishing and seining are active methods while minnow traps are passive. 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.

2.1.5 Data Analysis

Habitat data including stream flow, pond level, vegetative community and total vegetative cover were compared to DFO success criteria (**Table 1-2**). 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 from each compensation feature 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**).

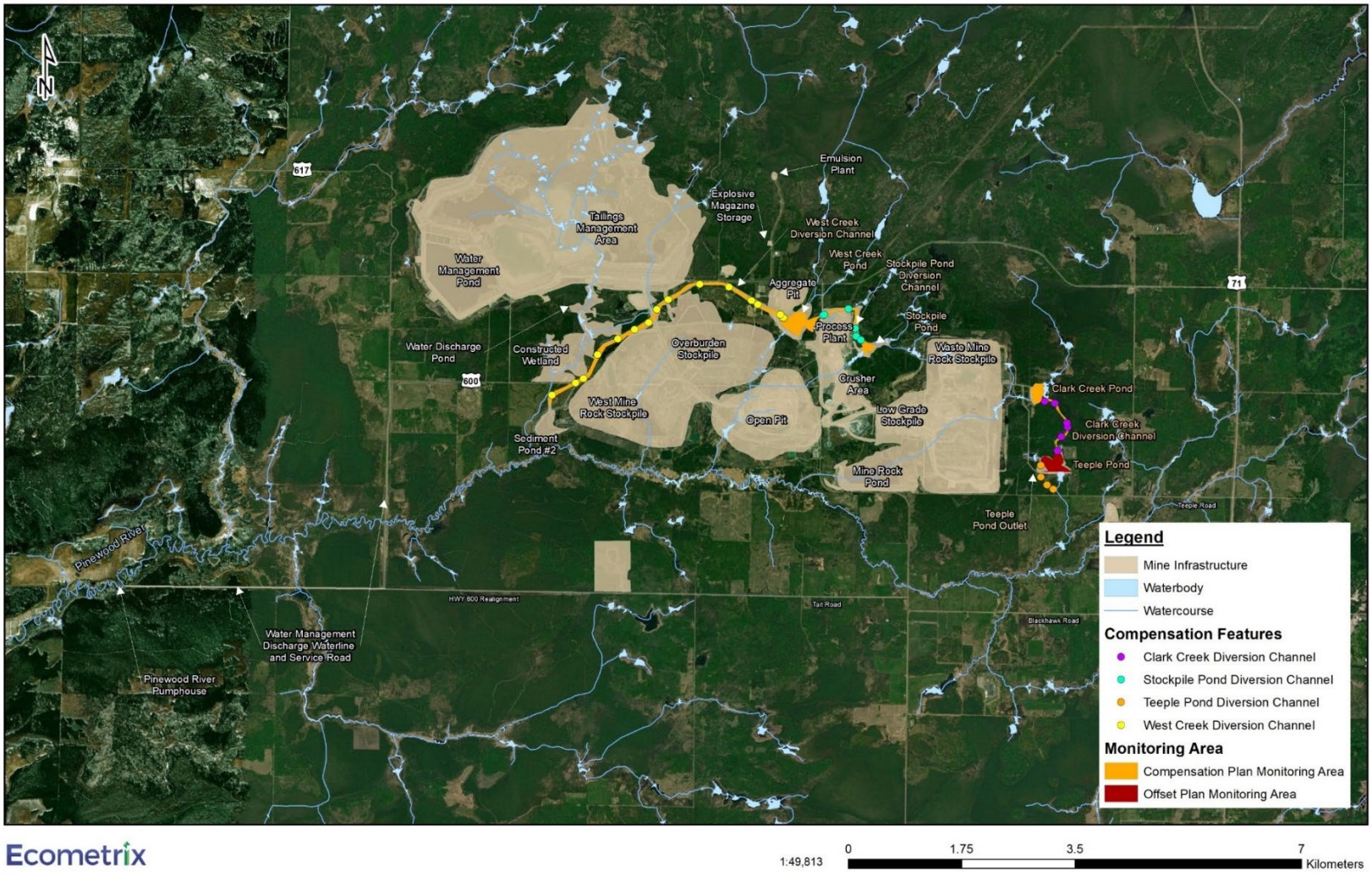


Figure 2-1 : Compensation Monitoring Areas, Rainy River Mine

3.0 Compensation Plan Annual Monitoring

3.1 Physical Conditions and Vegetation

All constructed cover habitat such as woody debris, boulder clusters, and pools appeared to be stable with no signs of erosion. The banks and riparian zones of all the diversion channels exceeded the success criteria of 80% cover.

3.1.1 Diversion Channels

The West Creek Diversion Channel flows from the outlet of West Creek Pond at the upstream end to Loslo Creek at the downstream end. The diversion is divided into upper and lower portions by the Haul Road (**Figure 2-1**). The banks of the channel are stable, showing no signs of erosion. In May 2022, the average depth and velocity in the upper and lower portions of the West Creek Diversion Channel were 0.28 m and 0.096 m/s, and 0.19 m and 0.169 m/s. (**Table 3-1**, **Table A - 2** and **Table A - 3**A.5, **Figure B - 4**, and **Figure B - 5**). Full transect profiles of the West Creek Channel were not completed during the July 2022 evaluation due to the increased rainfall and the fast-flowing waters. Additionally, any measurements taken at that time would not have been representative of the low-flow condition. The maximum depth and maximum velocity recorded at nine (9) stations in the upper portion of the West Creek Diversion Channel was 0.93 m (at WCDC-10) and 0.79 m/s (at WCDC-2). The lower portion of the channel had a maximum depth and flow of 1.05 m (at WCDC-A7) and 0.85 m/s, respectively. The average wetted width in the upstream part of the channel was 6.04 m with a maximum of 9.4 m whereas in the lower portion of the channel the average wetted width was 5.12 m with a maximum of 7.9 m.

West Creek Diversion Channel has performed as expected and successfully met the criteria for physical function and stability in 2022 and for the previous four monitoring cycles. The banks of the channel exceed the 80% vegetative cover criteria. Riparian vegetation along the length of the channel includes expansive areas with thistles, golden rods, honeysuckle, cattails, sedges, and grasses (Appendix Photo B). There is a mix of fast-flowing riffles coupled with pooled areas adjacent to wide steep banks. Aquatic vegetation including honey-suckle, water lilies, and algae are present throughout the system, with the substrate ranging from soft/silt bottom to rocky with some boulders. Clark Creek Diversion Channel had an average depth of 0.27 m and an average flow velocity of 0.024 m/s **(Table 3-1**) in May 2022. Flow measurements were conducted during the summer of 2022, but full transect were not representative of low-flow due to the depth and current velocities. The maximum depth and flow among four stations in July were 0.6 m (at CCDC-5) and 0.20 m/s (at CCDC-2). The presence of an expansive beaver dam (downstream of station CCDC-3) and increased rainfall in 2022 (**Figure A - 1**) contributed to an increase in water levels. With the recent high-water coverage, the channel width was ~20 m.

Clark Creek Diversion Channel is also very stable, showing no signs of erosion, with extensive vegetation along the banks and within the channel. Over the past 5 years, the vegetation along the channel has been >80% riparian vegetation cover, primarily consisting of grasses and

sedges. Areas of successional trees, such as speckled alder (*Alnus incana*), have continued to expand. A mix of arrowhead, cattails, and burreed are found within the channel.

During May 2022, the Stockpile Pond Diversion Channel contained a mean depth and flow of 0.16 m and 0.118 m/s (**Table 3-1, Figure A - 1**, **Figure B - 1**). This mean depth was greater than that observed during 2021 where approximately half the length of the channel was dry. The vegetation community along the banks of the Stockpile Pond Diversion Channel has been similar to that of the other two diversion channels in having > 80% vegetative cover and similar vegetative species.

3.1.2 Ponds

3.1.2.1 Physical Conditions

The depth of the West Creek Pond ranged from a minimum of 0.97 m in March 2022 to a peak level of 1.67 m in April 2022. These levels were comparable to those recorded over the past five years. Generally, the water levels were lower in January through March, increasing to a peak of 1.67 m during spring freshet before levels receded. Since June 2022, the water levels again gradually increased, eventually becoming more stable between September to November at approximate 1.35 m (**Figure 3-1**). The fluctuations seen within the West Creek mirror the increased precipitation patterns observed during 2022.

Depth measurements at Clark Creek Pond showed a similar pattern to West Creek Pond during the first half of the year; a stable level of approximately 1.5 m, increasing in freshet to approximately 1.98 m. Since then, the water levels while have generally decreased to approximate 1.55 m (**Figure 3-1**).

3.1.2.2 Vegetation

There has been >90% vegetative cover around both compensation ponds with the diverse forested habitat generally comprised of black spruce and trembling aspen, whereas emergent vegetation was primarily cattails, grasses, and sedges. Submergent vegetation was predominantly coontail, burreed and pondweed and to a lesser extend pond lily. Constructed fish cover, in the form of boulder piles and woody debris appeared stable and in place.

The edge of Clark Creek Pond has large expanses of flooded timber as well as willow and leatherleaf shrubs. There are also large expanses of aquatic species such as cattail, bulrush, sedges, and grasses (Appendix Photo B-12). The perimeter of the pond is well vegetated with greater than 90 % cover. Within the pond, the submergent vegetation community was similar to the other compensation ponds, with burreed (*Sparganium* sp.), coontail (*Ceratophyllum* sp.), and pond lily (Nymphaeaceae) the primary species observed.

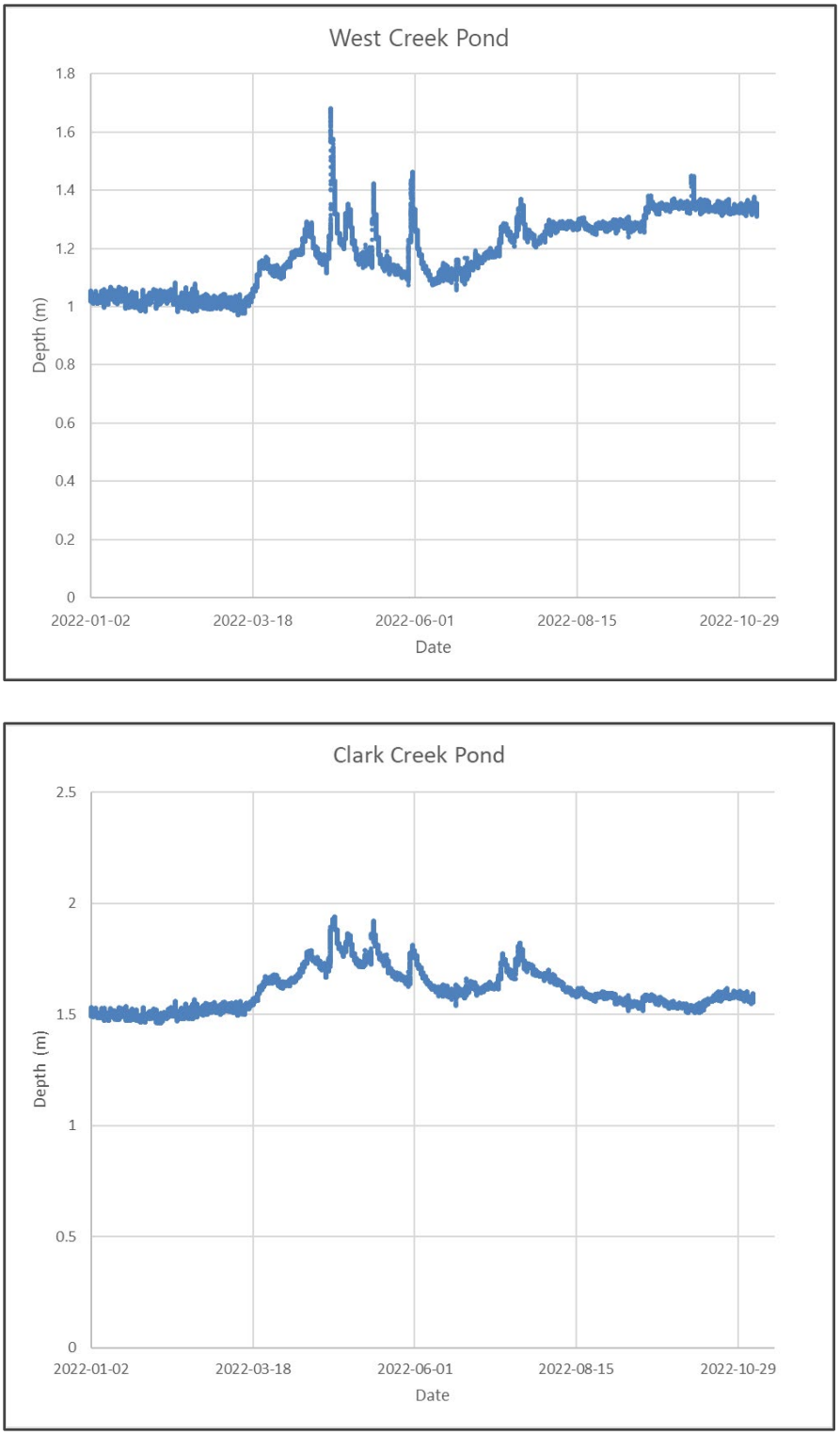
West Creek Pond is generally surround by existing vegetation that was left undisturbed during construction. The edges of the pond remain stable and vegetation in the form of bullrushes are present along much of the shoreline. Within the pond areas of submergent and emergent vegetation have remained stable during the monitoring period.

Table 3-1: Diversion Channel Depth and Flow Measurements, May 2022

Waterbody	Monitoring Station	Station Depth (m)		Area Depth (m)		Station Flow (m/s)		Area Flow (m/s)	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Stockpile Pond Diversion Channel	SPDC-01	0.13	0.06	0.16	0.11	0.120	0.174	0.118	0.254
	SPDC-02	0.22	0.14			0.027	0.094		
	SPDC-03	0.09	0.06			0.385	0.475		
	SPDC-04	0.14	0.08			0.102	0.127		
	SPDC-05	0.24	0.18			0.027	0.029		
	SPDC-06	0.15	0.12			-0.008	0.033		
West Creek Diversion Channel (upstream of the Haul Road)	WCDC-01	0.14	0.07	0.28	0.24	0.119	0.127	0.096	0.175
	WCDC-02	0.13	0.08			0.188	0.335		
	WCDC-03	0.26	0.29			0.098	0.177		
	WCDC-04	0.22	0.14			0.049	0.106		
	WCDC-05	0.60	0.03			0.125	0.088		
	WCDC-06	0.33	0.24			0.091	0.154		
	WCDC-07	0.18	0.15			0.142	0.249		
	WCDC-08	0.45	0.39			0.028	0.048		
	WCDC-09	0.25	0.14			0.044	0.101		
West Creek Diversion Channel (downstream of the Haul Road)	WCDC-A1	0.12	0.10	0.19	0.20	0.134	0.196	0.169	0.326
	WCDC-A2	0.30	0.29			0.070	0.099		
	WCDC-A3	0.13	0.13			0.275	0.473		
	WCDC-A4	0.38	0.33			0.061	0.110		
	WCDC-A5	0.12	0.08			0.322	0.333		
	WCDC-A6	0.25	0.19			0.060	0.071		
	WCDC-A7	-	-			-	-		
	WCDC-A8	0.12	0.10			0.029	0.040		
	WCDC-A9	0.07	0.05			0.594	0.748		
Clark Creek Diversion Channel	CCDC-01	0.45	0.29	0.27	0.19	0.023	0.023	0.024	0.092
	CCDC-02	0.21	0.13			0.022	0.028		
	CCDC-03	0.22	0.11			0.018	0.036		
	CCDC-04	0.25	0.14			0.072	0.204		
	CCDC-05	-	-			-	-		
	CCDC-06	0.02	0.16			0.000	0.001		

Note: Stations on Stockpile, Clark Creek, and West Creek Diversion downstream of the Haul Road are labelled from downstream to upstream. West Creek Diversion upstream stations are labelled from West Creek Pond to the Haul Road.

Figure 3-1: West Creek Pond and Clark Creek Pond Depths (January 01 to November 22, 2022)



3.2 Fish Community

This survey represents the fifth annual monitoring (2018-2022) of the diversion channels at RRM. All compensation features have success criteria for the establishment of a healthy resident fish community. These success criteria must be met by both the stream (i.e., diversion) and pond features 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 Diversion Channels

The fish community included 13 identified species. These were (listed in order of abundance) Creek Chub (*Semotilus atromaculatus*), Brown Bullhead (*Ameiurus nebulosus*), Finescale Dace (*Chrosomus neogaeus),* Brook Stickleback (*Culaea inconstans*), Central Mudminnow (*Umbra limi*), Brassy Minnow (*Hybognathus hankinsoni*), Pearl Dace (*Margariscus margarita*), White Sucker (*Catostomus commersonii*), Johnny Darter (*Etheostoma nigrum)*, Common Shiner (*Luxilus cornutus*), Blackside Darter (Percina maculate), Northern Pike (*Esox Lucius*), and Fathead minnow (*Pimephales promelas*) (**Table 3-2**). The species identified and the overall number of species were similar to that observed in the previous four (4) years. In 2019, a maximum of 14 species were identified; that tally includes all the species identified in 2022. The electrofishing method of capture was difficult in the diversion channel during July 2022 because of the overgrowth of vegetation and high water levels. There were only eight (8) fish captured per 1,000 seconds of electrofishing effort **(Table 3-3**, **Table 3-4**; **Table A - 5**). Length frequency histograms indicate that multiple age classes of a variety of species were captured (**Table 3-2**; **Figure A-2**). The West Creek Diversion Channel obtained the success criteria for species diversity and multiple age classes present while the criterion for minnow trap CPUE was not obtained (**Table 3-2**, **Table A - 2**, **Table A - 5**, and **Table A - 6**).

The Clark Creek Diversion Channel contained multiple age classes although the criteria for species diversity, electrofishing, and minnow trap effort were not met (**Table 3-4, Table A - 1**, **Table A - 5**, and **Table A - 6**). A total of 973 fish were captured during combined fishing efforts. The fish community included, (listed in order of abundance) Northern Redbelly Dace (*Chrosomus eos*), Finescale Dace, Fathead Minnow, Brook Stickleback, Brassy Minnow, Pearl Dace, Central Mudminnow, and Creek Chub (**Table 3-2**). This number of species is similar to that observed over the past 4 annual surveys; a previous maximum of seven (7) species were reported in the 2018 study. In 2022, fish capture results included CPUEs of 1 fish captured per 1,000 seconds of electrofishing effort and 1.57 fish captured per minnow trap hour (**Table 3-4**; **Table A - 5** and **Table A - 6**).

The success criteria for the number of species (>9) at the Stockpile Pond Diversion Channel was achieved in 2022. Twelve species (12) were identified and included (listed in order of abundance) Brown Bullhead, Northern Redbelly Dace, Fathead minnow, Creek Chub, Brook Stickleback, Pearl Dace, Brassy Minnow, White Sucker, Finescale Dace, Common Shiner, Central Mudminnow, and Johnny Darter (**Table 3-2** and **Table 3-3**). A similar number of species was previously identified in 2018. The CPUE for electrofishing and multiple ages classes were also successfully confirmed. Fish capture results equated to 136 fish captured per 1,000 seconds of electrofishing effort

(**Table 3-3**; **Table A - 5**). The range of total lengths for measured fish are indicated in Appendix A. The minnow trap effort of 2.52 fish per trap hour was the first occasion where the effort met the ≥2 fish per trap hour criterion. In 2018, the minnow trap effort was 0.42 fish per trap hour. In previous annual studies the amount of effort expended in the Stockpile Pond Diversion Channel was reduced due to the available habitat (**Table 3-3**; **Table A - 5** and **Table A - 6**). That is, minnow traps were not utilized in three previous monitoring cycles due to low water levels. In 2022, the water levels within the channel were higher than previously recorded as a result of precipitation levels higher than the 30-year average (**Appendix Figure A-1**).

The Clark Creek Pond diversion channel met the success criterion for electrofishing in 2019 and 2021 but has not met the diversity success criterion in any year. As noted in previous reports, the success criterion for minnow trap CPUE may be unrealistic as the stream features have never approached the success criterion in any of the five years of monitoring (**Table 3-4**). Electrofishing is normally a more effective method of sampling in small flowing systems, such as the diversion channels. The Clark Creek Diversion is crowded with vegetation along much of its length and electrofishing in high water conditions with heavy vegetation was difficult and not likely representative of the fish community abundance. It is also unlikely for nine (9) species to inhabit the diversion given the fact that the baseline date indicated that 80% of the community in that area was comprised of four species (AMEC 2013).

Table 3-2 : Species Presence during Compensation Plan Annual Monitoring, Rainy River

Species	Stream Habitat			Pond Habitat	
	West Creek Diversion Channel	Clark Creek Diversion Channel	Stockpile Pond Diversion Channel	West Creek Pond	Clark Creek Pond
Blackside Darter	✓	-	-	✓	-
Brassy Minnow	✓	✓	✓	✓	✓
Brook Stickleback	✓	✓	✓	✓	✓
Brown Bullhead	✓	-	✓	✓	-
Central Mudminnow	✓	✓	✓	✓	✓
Common Shiner	✓	-	✓	✓	-
Creek Chub	✓	✓	✓	✓	-
Fathead Minnow	-	✓	✓	✓	✓
Finescale Dace	✓	✓	✓	✓	✓
Golden Shiner	-	-	-	-	-
Johnny Darter	✓	-	✓	✓	-
Northern Pike	✓	-	-	-	-
Northern Redbelly Dace	-	✓	✓	✓	✓
Pearl Dace	✓	✓	✓	✓	✓
White Sucker	✓	-	✓	✓	✓
YOY	-	-	✓	✓	✓
Total No. of Species [a]	12	8	12	13	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 Compensation Annual Monitoring, Rainy River Mine 2022

a) Stream Features

Waterbody	Electrofishing			Minnow Trap		
	Total Effort[a]	Total Catch	Total CPUE[b]	Total Effort[a]	Total Catch	Total CPUE[b]
Stockpile Pond Diversion Channel	1,522	207	0.14	281.5	710	2.52
West Creek Diversion Channel	1,273	10	0.01	251.1	152	0.61
Clark Creek Diversion Channel	1,386	2	0.00	620	971	1.57

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]
West Creek Pond	10,371	291	0.03	1,627	459	0.28	1,314	2,311	1.76
Clark Creek Pond	10,121	429	0.04	1,728	2,867	1.66	1,040	676	0.65

[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.

Table 3-4 Compensation Annual Monitoring Results Compared to DFO Success Criteria

Year / Waterbody			Stockpile Pond Diversion Channel	West Creek Diversion Channel	Clark Creek Diversion Channel	Stockpile Pond	West Creek Pond	Clark Creek Pond
DFO Success Criteria	Diversity[a]	2018[b]	12	12	7	12	12	7
		2019[c]	-	14	4	11	14	6
		2020[c]	-	13	5	10	11	6
		2021	5	11	5	10	10	7
		2022	12	12	8	-	13	8
		Target	≥ 9 fish species					
	Electrofishing	2018[b]	31	86	16	5	2	4
		2019[c]	-	183	69	96	38	109
		2020[c]	-	151	28	39	11	52
		2021	215	206	56	44	27	76
		2022	136	8	1	-	28	42
		Target	≥ 44 fish per 1,000 seconds					
	Minnow Trap	2018[b]	0.42	0.35	0.06	1.01	1.73	1.02
		2019[c]	-	1.19	0.31	0.18	1.22	0.39
		2020[c]	-	0.89	0.23	0.58	0.49	0.29
		2021	-	0.88	0.23	0.96	1.07	0.48
		2022	2.52	0.61	1.57	-	0.28	1.66
		Target	≥ 2 fish per trap hour					
	Seine Net	2018[b]	-	-	-	538	255	172
		2019[c]	-	-	-	739	451	1,365
		2020[c]	-	-	-	314	294	461
		2021	-	-	-	362	688	530
		2022	-	-	-	-	231	68
		Target	N/A			≥ 16 fish per 15 m trap haul		

Denotes value achieved success criterion.

Notes: "-" denotes no data available (e.g., no water in Stockpile Pond Diversion Channel). N/A denotes a component not required as part of the monitoring program,

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

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

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

3.2.2 Ponds

West Creek Pond continued to meet the success criteria for species diversity, multiple age classes per species, and seining (Appendix A). Throughout the years, the survey results have generally been comparable with the West Creek Diversion Channel. There were 13 fish species identified in the West Creek Pond. These included (listed in order of abundance) White Sucker, Northern Redbelly Dace, Fathead Minnow, Brown Bullhead, Creek Chub, Central Mudminnow, Johnny Darter, Pearl Dace, Brook Stickleback, Finescale Dace, Common Shiner, Brassy Minnow, and Blackside Darter (**Table 3-2** and **Table 3-3**).

There were 291 fish captured during the electrofishing effort. This equates to 28 fish per 1,000 seconds of effort for this method. Multiple age classes, including YOY, were identified in West Creek Pond in 2022.

Similar to previous annual studies the minnow trap effort in the West Creek Pond resulted in <2 fish per trap hour. However, beach seine effort in the West Creek Pond resulted in 231 fish captured per 15 m seine net haul. This was greater than the success criterion of 16 fish per 15 m net pull. Histograms indicating the length frequencies of multiple age classes captured are indicated in **Table A - 5**).

Clark Pond obtained success criteria for the use by multiple age classes as well as electrofishing and seine net CPUEs. Success criteria were not obtained for species diversity or minnow trap CPUE (**Table 3-3**). In 2022, the fishing effort on Clark Creek Pond produced the highest number (3,972) of total fish captured at any of the compensation features. The fish community included (listed in order of abundance) Northern Redbelly Dace, Fathead Minnow, Finescale Dace, Brook Stickleback, Central Mudminnow, White Sucker, Pearl Dace, and Brassy Minnow (**Table 3-2** and **Table 3-3**). The catches resulted in CPUEs of 42 fish captured per 1,000 seconds of electrofishing effort, 1.75 fish captured per minnow trap hour and 68 fish captured per 15 m seine net haul, (**Table 3-3** and **Table 3-4**; **Table A - 5**, **Table A - 7**, and **Table A - 8**). Multiple age classes including YOY of various species were captured in Clark Creek Pond in 2022 (**Figure A - 6**).

Similar to the stream features, both ponds have met success criteria for use by multiple age classes and at least one fishing technique (i.e., seine net) (**Table 3-4**, **Table A - 4** to **Table A - 6**). As previously noted, the criteria of minnow trap CPUE may be unrealistic as the pond features have never approached the success criteria in any of the five years of monitoring (**Table 3-4**). West Creek Pond consistently meets the success criterion for diversity while Clark Creek Pond has remained similar in all five years (6-8 species), less than the success criterion of nine species (**Table 3-4**).

4.0 Conclusion

The key results of the studies between 2018 and 2022 Compensation Monitoring are as follows:

- All constructed compensation stream and pond features appear stable with no indication of shoreline erosion or migration of constructed fish habitat such as boulder clusters or woody debris piles.
- The vegetation communities both within and beside the constructed stream and ponded features are now well established and exceed the 80% cover criteria.
- All features met the success criteria for multiple age classes, indicating adequate habitat for spawning and rearing habitat for the species that exist within the ponds.
- Minnow trapping has not proven to be an effective method of confirming fish species and numbers within channelized or pond compensation features, although in 2022 in Clark Creek Diversion it was more effective than electrofishing due to the high water conditions.
- Beaver activity and precipitation additionally influence flow, water and connectivity within channels and ponds.
- Stockpile Pond Diversion Channel water levels have varied greatly over the past 5 years, primarily remaining below design basis, and subsequently preventing fish passage from West Creek Pond upstream to Stockpile Pond. This lack of connectivity will be addressed through the establishment of new compensation features to replace Stockpile Pond.
- The West Creek Diversion Channel, Stockpile Pond Diversion Channel and West Creek Pond obtained the success criterion for species diversity. Clark Creek Diversion Channel and Clark Creek Pond did not meet the species diversity criterion.

Overall, the West Creek Diversion Channel has consistently obtained success criteria for species diversity, at least one fishing technique and multiple year classes in all five years of sampling. Conversely, Clark Creek Diversion Channel has never obtained the diversity success criterion but has met the criteria for multiple age classes in each year and electrofishing CPUE twice in six years. The above normal rainfall during summer 2022 greatly influenced CPUE within the West Creek and Clark Creek Diversion Channels. The increased flow and water levels affected electrofishing efforts: species numbers and successful capture of species.

5.0 Closure and Recommendations

Based on the findings of the past five years of RRM Compensation Annual Performance surveys, the West Creek and the Clark Creek Diversion Channels typically contain sufficient fish habitat, vegetation cover levels and water levels, particularly during the spring months. This provides connectivity between West Creek Pond and Loslo Creek for the former and Clark Creek Pond and Teeple Pond for the latter.

Stockpile Pond Diversion Channel achieved the diversity, multiple year class and abundance criteria for electrofishing in 2022. Changes in the upstream configuration of Stockpile Pond to a more riverine system should help maintain the habitat in Stockpile Pond Diversion of larger portions of the year.

Considering the preceding, it is recommended that:

- RRM staff continue to manage any beaver activity within the compensation features that may hinder connectivity or water contributions to the diversions.
- Amend the Compensation success criteria such that the species diversity criterion be reduced from nine (9) species in the Clack Creek and Teeple Pond system to a more appropriate number based on baseline fish community data. This would be consistent with the Amended Offset Plan.
- Amend the Compensation plan such that success in one type of fishing effort most appropriate to the habitat is sufficient to indicate the habitat is functioning as intended. That is, seine nets in pond and electrofishing in diversion channels.
- Continued monitoring of the Stockpile Pond Diversion Channel both during and following any upstream changes that are undertaken.
- Taking into consideration the results of this study and those previous as well as the water conditions encountered in July 2022 (i.e., high water) consider the monitoring of West Creek Pond, West Creek Diversion Channel, Clark Creek Pond, and Clark Creek Diversion Channel complete and indicative of function fish habitat compensation features.

6.0 References

AMEC. 2013. Rainy River Resources Ltd. Rainy River Project: Fish Habitat No Net Loss Plan Section 35(2) Waterbodies Version B. December 2013.

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

AMEC Foster Wheeler. 2017. Rainy River Project: Compensation Plan for MMER Schedule 2 Amendment Waterbodies. January 2017

Jackson, D. A. and Harvey H. H. 1997. Qualitative and Quantitative Sampling of Lake Fish Communities. Canadian Journal of Fisheries and Aquatic Sciences, 1997. 54(12): 2807-2813

Scott, W.B. and Crossman, E.J. 1998. Freshwater Fishes of Canada. Galt House Publications, Oakville, Ontario.

Wood. 2018a. 2018 Annual Monitoring Report – Schedule 2 MDMER Fish Habitat Compensation Plan. December 2017. Wood. 2018b. 2018 Annual Monitoring Report – Offset Plan for Fisheries Act Section 35(2)(b) Authorization. December 2018.

Wood. 2018b. 2018 Annual Monitoring Report – Offset Plan for Fisheries Act Section 35(2)(b) Authorization. December 2018.

Minnow (Minnow Environmental Inc.). 2019. Annual Monitoring of Compensation and Offset Measures 2019. Report prepared for New Gold Inc. Rainy River Mine. December 2019.

Minnow (Minnow Environmental Inc.). 2020. Annual Monitoring of Compensation and Offset Measures 2020. Report prepared for New Gold Inc. Rainy River Mine. December 2020.

Appendix A Detailed Survey Data

Table A - 1: Spring, High-Flow Transect Depth and Flow Velocity Data in the Stockpile Pond Diversion, May 2022

Station	Measurement	Channel Interval									Mean
		1	2	3	4	5	6	7	8	9	
SPDC-01	Distance from shore (m)	0	0.4	0.8	1.2	1.6	2	2.4	2.8	3	-
	Depth (cm)	0.08	0.1	0.14	0.22	0.23	0.16	0.11	0.08	0.08	0.1
	Velocity (m/s)	0.00882	0.0717	0.5563	0.2006	0.1004	0.0457	0.0129	0.0258	0.0572	0.120
SPDC-02	Distance from shore (m)	0	1	2	3	4	5	6	6.8	-	-
	Depth (cm)	0.05	0.2	0.26	0.38	0.35	0.36	0.06	0.1	-	0.2
	Velocity (m/s)	0	-0.00055	-0.02555	0.0191	0.255	-0.02092	-0.00001	0	-	0.027
SPDC-03	Distance from shore (m)	0	0.2	0.4	0.6	0.8	1	1.2	1.4	-	-
	Depth (cm)	0	0.06	0.12	0.12	0.15	0.17	0.09	0.02	-	0.1
	Velocity (m/s)	0	0.0012	0.2673	0.4188	1.1613	1.0684	0.1616	0	-	0.385
SPDC-04	Distance from shore (m)	0	0.25	0.5	0.75	1	1.25	1.5	1.75	-	-
	Depth (cm)	0	0.1	0.16	0.21	0.19	0.19	0.19	0.05	-	0.1
	Velocity (m/s)	0	0	0.0024	0.0564	0.2765	0.2829	0.0964	-	-	0.102
SPDC-05	Distance from shore (m)	0	0.45	0.9	1.35	1.8	2.25	-	-	-	-
	Depth (cm)	0	0.21	0.4	0.43	0.33	0.05	-	-	-	0.2
	Velocity (m/s)	0	0.0023	0.0622	0.0394	0.0554	0.0001	-	-	-	0.027
SPDC-06	Distance from shore (m)	0	0.4	0.8	1.2	1.6	2	-	-	-	-
	Depth (cm)	0	0.12	0.28	0.26	0.2	0.04	-	-	-	0.2
	Velocity (m/s)	0	0.0001	0.0235	0.0046	-0.0732	-0.0021	-	-	-	-0.008

Table A - 2: Spring, High-Flow Transect Depth and Flow Velocity Data in the West Creek Diversion Upstream of the Haul Road, May 2022

Station	Measurement	Channel Interval											Mean
		1	2	3	4	5	6	7	8	9	10	11	
WCD C-01	Distance from shore (m)	0	1	2	3	4	5	6	7	-	-	-	-
	Depth (cm)	0.02	0.12	0.12	0.11	0.28	0.24	0.13	0.13	-	-	-	0.1
	Velocity (m/s)	0.00 01	0.03 63	0.07 04	0.14 63	0.30 53	0.28 79	0.05 14	0.01 18	-	-	-	0.114
WCD C-02	Distance from shore (m)	0	1	2	3	4	4.5	5	6	7	8	-	-
	Depth (cm)	0.05	0.11	0.14	0.08	0.22	0.26	0.2	0.12	0.1	0. 02	-	0.13
	Velocity (m/s)	0	0.00 02	0.12 28	0.00 11	0.47 59	1.03 4	0.22 62	0.00 14	0.01 68	0	-	0.188
WCD C-03	Distance from shore (m)	0	0.7	1.4	2.1	2.8	3.5	4.2	-	-	-	-	-
	Depth (cm)	0	0.06	0.38	0.7	0.6	0.07	0.03	-	-	-	-	0.3
	Velocity (m/s)	0	0	0.04 48	0.47 28	0.17 06	0	0	-	-	-	-	0.098
WCD C-04	Distance from shore (m)	0	1	2	3	4	5	6	7	8	-	-	-
	Depth (cm)	0	0.14	0.2	0.29	0.32	0.27	0.17	0.13	0.5	-	-	0.224 444
	Velocity (m/s)	0	0.00 07	0.00 08	0.11 39	0.31 32	0.00 93	0.00 19	0	0	-	-	0.049
WCD C-05	Distance from shore (m)	0	0.4	0.8	1.2	1.6	2	2.4	-	-	-	-	-
	Depth (cm)	0.65	0.6	0.57	0.57	0.57	0.58	0.64	-	-	-	-	0.6
	Velocity (m/s)	0.20 72	0.23 01	0.17 67	0.15 43	0.05 48	0.02 55	0.02 31	-	-	-	-	0.124 53
WCD C-06	Distance from shore (m)	0	0.6	1.2	1.8	2.4	3	-	-	-	-	-	-
	Depth (cm)	0	0.24	0.43	0.63	0.53	0.13	-	-	-	-	-	0.3
	Velocity (m/s)	0	0.00 12	0.01 51	0.14 22	0.38 46	0.00 05	-	-	-	-	-	0.091
WCD C-07	Distance from shore (m)	0	0.6	1.2	1.8	2.4	3	3.6	-	-	-	-	-
	Depth (cm)	0	0.09	0.25	0.38	0.37	0.14	0.05	-	-	-	-	0.182 857
	Velocity (m/s)	0	0.00 04	0.00 24	0.37 11	0.61 3	0.00 61	0	-	-	-	-	0.142
WCD C-08	Distance from shore (m)	0	0.75	1.5	2.25	3	3.75	4.5	5.25	6	6. 25	-	-

Station	Measurement	Channel Interval											Mean
		1	2	3	4	5	6	7	8	9	10	11	
	Depth (cm)	0	0.19	0.43	0.75	1.03	1	0.65	0.33	0.09	0.05	-	0.5
	Velocity (m/s)	0	0.0004	0.0412	0.0164	0.14555	0.07335	0.0029	0.0012	0.0002	0	-	0.028
WCD C-09	Distance from shore (m)	0	1	2	3	4	5	6	7	8	-	-	-
	Depth (cm)	0.03	0.31	0.36	0.37	0.29	0.36	0.31	0.2	0.02	-		0.3
	Velocity (m/s)	0	0.0164	0.0869	0.1926	0.193	0.1076	0.1117	0.0001	0	-	0	0.0708

Table A - 3: Spring, High-Flow Transect Depth and Flow Velocity Data in the West Creek Diversion Downstream of the Haul Road, May 2022

Station	Measurement	Channel Interval									
		1	2	3	4	5	6	7	8	9	Mean
WCDC-A1	Distance from shore (m)	0	0.75	1.5	2.25	3	3.75	4.5	5.25	5.35	-
	Depth (cm)	0	0.1	0.12	0.25	0.25	0.21	0.1	0.03	0.03	0.1
	Velocity (m/s)	0	0.0013	0.2233	0.1791	0.5959	0.1795	0.0253	0	0	0.1338
WCDC-A2	Distance from shore (m)	0	0.75	1.5	2.25	3	3.75	4.5	5.25	5.75	-
	Depth (cm)	0	0.04	0.33	0.56	0.82	0.56	0.26	0.11	0.03	0.3
	Velocity (m/s)	0	0.0002	0.0345	0.0639	,2063	0.2658	0.0594	0.0001	0	0.0530
WCDC-A3	Distance from shore (m)	0	0.6	1.2	1.8	2.4	3	3.3	-	-	-
	Depth (cm)	0	0.08	0.12	0.3	0.3	0.07	0.01	-	-	0.1
	Velocity (m/s)	0	-0.0001	0.0005	1.0648	0.8598	0.0004	0	-	-	0.2751
WCDC-A4	Distance from shore (m)	0	0.75	1.5	2.25	3	3.75	4.5	-	-	-
	Depth (cm)	0	0.3	0.6	0.9	0.58	0.23	0.02	-	-	0.4
	Velocity (m/s)	0	0.0134	0.3007	0.0222	0.0873	0.0003	0	-	-	0.0606
WCDC-A5	Distance from shore (m)	0	0.5	1	1.5	2	2.5	3	3.4	-	-
	Depth (cm)	0.03	0.12	0.15	0.28	0.15	0.15	0.08	0.01	-	0.1
	Velocity (m/s)	0	0.5964	0.8522	0.5684	0.1313	0.4244	0.0002	0	-	0.3216
WCDC-A6	Distance from shore (m)	0	1	2	3	4	5	6	7	8	-
	Depth (cm)	0.03	0.22	0.36	0.4	0.58	0.3	0.24	0.1	0.01	0.2
	Velocity (m/s)	0	0.0002	0.1441	0.1315	0.0002	0.1127	0.1494	0.0001	0	0.0598
WCDC-A7	Distance from shore (m)	Too Deep to Sample Safely									
	Depth (cm)										
	Velocity (m/s)										
WCDC-A8	Distance from shore (m)	0	0.2	0.4	0.6	0.8	1	1.2	1.3		-
	Depth (cm)	0.02	0.05	0.15	0.2	0.25	0.21	0.06	0		0.1

Station	Measurement	Channel Interval									
		1	2	3	4	5	6	7	8	9	Mean
	Velocity (m/s)	0	0.0366	0.0926	0.0894	0.0108	0.0012	0.003	0		0.0292
WCDC-A9	Distance from shore (m)	0	0.1	0.2	0.35	0.65	-	-	-	-	-
	Depth (cm)	0	0.05	0.09	0.13	0.09	-	-	-	-	0.1
	Velocity (m/s)	0	1.2697	1.5376	0.1594	0.0048	-	-	-	-	0.5943

Table A - 4: Summer Depth and Flow Velocity Data in the Clark Creek Pond Diversion, July 2022

Location	Flow/Velocity (30 sec average) (m/s)			Max Depth (m)	Wetted Width (m)
	1	2	3		
WCDC	0.5947	0.4887	0.6814	0.34	4.8
WCDC1	0.4014	0.1514	0.3428	0.32	9.4
WCDC10	--	--	--	0.93	5.7
WCDC2	0.6023	0.7981	0.5097	0.17	7.1
WCDC3	0.1388	0.1345	0.1308	0.71	3.3
WCDC4	0.1917	0.2671	0.2255	0.32	7.2
WCDC5	0.0859	0.108	0.0659	0.56	8.4
WCDC6	0.2	--	--	0.43	3.7
WCDC8 (pool habitat)	0.0699	0.1022	0.042	0.75	4.8
WCDCA3	0.8532	0.8504	0.8601	0.35	3.1
WCDCA4	--	--	--	--	~4.5
WCDCA5	0.8045	0.7369	0.7659	0.25	3.5
WCDCA6	0.1595	0.2335	0.1125	0.47	3.4
WCDCA7	--	--	--	1.05	7.7
WCDCA9	0.1227	0.1373	0.1385	0.6	7.9

Table A - 5: Spring, High-Flow Transect Depth and Flow Velocity Data in the Clark Creek Pond Diversion, May 2022

Station	Measurement	Channel Interval																				Mean
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
CCDC-01	Distance from shore (m)	0.6	1.6	2.6	3.6	4.6	5.6	6.6	7.6	8.6	9.4	-	-	-	-	-	-	-	-	-	-	-
	Depth (cm)	0.03	0.28	0.59	0.68	0.69	0.73	0.71	0.53	0.186	0.03	-	-	-	-	-	-	-	-	-	-	0.4
	Velocity (m/s)	0	0	0.0001	0.0335	0.0338	0.0581	0.0459	0.0461	0.0115	0	-	-	-	-	-	-	-	-	-	-	0.0229
CCDC-02	Distance from shore (m)	0.4	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8	-	-	-	-	-	-	-	-	-	-	-	-
	Depth (cm)	0.02	0.25	0.26	0.33	0.38	0.28	0.25	0.12	0	-	-	-	-	-	-	-	-	-	-	-	0.2
	Velocity (m/s)	0	0.0541	0.0001	0.0669	0.052	0.0194	0.007	0.0011	0	-	-	-	-	-	-	-	-	-	-	-	0.02229
CCDC-03	Distance from shore (m)	0.4	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	10.4	-	-	-	-	-	-	-	-	-	-
	Depth (cm)	0	0.13	0.22	0.24	0.29	0.43	0.31	0.25	0.23	0.18	0.13	-	-	-	-	-	-	-	-	-	0.2
	Velocity (m/s)	0	0.02	0.002	0.021	0.0003	0.1245	0.0145	0.0166	0.0005	0.0034	0.0001	-	-	-	-	-	-	-	-	-	0.01845
CCDC-04	Distance from shore (m)	0.6	1.6	2.6	3.6	4.6	5.6	6.6	7.6	8.6	9.6	10.6	11.4	-	-	-	-	-	-	-	-	-
	Depth (cm)	0	0.28	0.33	0.35	0.39	0.44	0.33	0.3	0.26	0.18	0.12	0.02	-	-	-	-	-	-	-	-	0.3
	Velocity (m/s)	0	0	0.0037	0.02	0.0198	0.715	0.0308	0.0027	0.0759	0.0001	0	0	-	-	-	-	-	-	-	-	0.07233
CCDC-05	Distance from shore (m)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Depth (cm)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Velocity (m/s)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CCDC-06	Distance from shore (m)	19.3	18.3	17.3	16.3	15.3	14.3	13.3	12.3	11.3	10.3	9.3	8.3	7.3	6.3	5.3	4.3	3.3	2.3	1.3	0.4	-
	Depth (cm)	0	0.13	0.07	0.05	0.08	0.18	0.3	0.38	0.38	0.42	0.41	0.4	0.47	0.43	0.42	0.43	0.35	0.23	0.16	0	0.3
	Velocity (m/s)	0	0	0	0	0	0.0001	0.0005	0.0002	0.0001	0.0001	0.0002	0.0006	0.0026	-0.0001	-0.0001	-0.0006	0.0001	0.0005	0	0	0.00021

Table A - 6: Summer Depth and Flow Velocity Data in the Clark Creek Pond Diversion, July 2022

Location	Flow/Velocity (30 sec average) (m/s)			Max Depth (m)	Wetted Width (m)
	1	2	3		
CCDC1	0.014	0.0465	0.0254	0.75	9.3
CCDC2 (flat run)	0.1896	0.0133	0.1958	0.35	8.48
CCDC3	0.0798	--	--	0.35	10.3
CCDC5	0.0004	0.0001	--	0.6	19.5

Table A - 7: Detailed Electrofishing Results, RRM – July 2022

Waterbody	GearID	Northings (NAD 83, 15U)	Eastings (NAD 83, 15U)	Set Date	Time	Effort (sec)	CPUE	Central Mudminnow	Central Mudminnow YOY	Brook Stickleback	Brook Stickleback YOY	Finescale Dace	Northern Redbelly Dace	Fathead Minnow	Fathead Minnow YOY	Creek Chub	Creek Chub YOY	Brassy Minnow	Brown Bullhead	White Sucker	Common Shiner	Pearl Dace	Golden Shiner	Johnny Darter	Blackside Darter	Northern Pike	YOY	Total Fish
Clark Creek Diversion Channel	CCDCEF1	5409838	429984	23-Jul-22	12:15	1386	1.44	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
					Total	**1386**	1.44	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
Clark Creek Pond	CCPEF-01	5410131	429594	20-Jul-22	16:12	2025	10.37	8	0	6	0	5	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	21
	CCPEF-02	5409955	429573	21-Jul-22	10:30	2025	125.43	92	0	23	0	2	0	2	0	0	0	0	0	0	0	4	0	0	0	131	254
	CCPEF-03	5409974	429635	21-Jul-22	13:35	2051	5.85	0	0	11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	CCPEF-04	5409939	429628	21-Jul-22	15:00	2008	46.81	28	0	25	0	4	1	1	0	0	0	0	0	0	0	0	0	0	0	35	94
	CCPEF-05	5410107	429601	21-Jul-22	16:30	2012	23.86	12	0	20	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	11	48
					Total	**10121**	42.39	**140**	**0**	**85**	**0**	**16**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**177**	429
Stockpile Pond Diversion Channel	SPDCEF-01	5411265	426382	20-Jul-22	7:45	528	225.38	4	0	5	0	13	44	0	0	32	0	7	4	4	0	4	0	2	0	0	0	119
	SPDCEF2US	5411358	426677	20-Jul-22	10:43	550	63.64	2	0	5	0	5	1	0	0	3	0	2	9	2	0	6	0	0	0	0	0	35
	SPDCEF3	5411366	426774	27-Jul-22	13:20	132	151.52	0	0	1	3	0	3	1	1	4	0	0	0	3	1	2	0	0	0	0	1	20
	SPDCEF4	5411361	426891	27-Jul-22	14:00	312	105.77	0	2	5	0	0	16	1	0	0	0	0	0	7	0	1	0	1	0	0	0	33
					Total	1522	136.01	**6**	**2**	**16**	**3**	**18**	**64**	**2**	**1**	**39**	**0**	**9**	**13**	**16**	**1**	**13**	**0**	**3**	**0**	**0**	**1**	**207**
West Creek Pond	WCP-EF1	5410946	425962	22-Jul-22	8:30	2511	48.98	12	0	7	0	3	6	10	0	18	0	2	0	34	0	19	0	11	1	0	0	123
	WCP-EF2	5410984	425903	22-Jul-22	14:10	2987	41.51	27	0	5	0	3	6	31	0	17	0	1	1	10	0	4	0	19	0	0	0	124
	WCP-EF3	5411054	425805	22-Jul-22	17:00	2277	16.69	6	0	9	0	0	2	0	0	8	0	0	0	0	0	1	0	10	2	0	0	38
	WCP-EF4	5411099	425745	23-Jul-22	7:45	998	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WCP-EF5	5411113	425735	23-Jul-22	9:25	1598	3.75	0	0	1	0	0	0	1	0	0	0	0	0	2	0	1	0	1	0	0	0	6
					Total	**10371**	28.06	**45**	**0**	**22**	**0**	**6**	**14**	**42**	**0**	**43**	**0**	**3**	**1**	**46**	**0**	**25**	**0**	**41**	**3**	**0**	**0**	291
West Creek Diversion Channel	WCDCEF1	5410031	422194	19-Jul-22	14:35	710	8.45	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	WCDCEF2	5410285	422668	27-Jul-22	9:40	563	7.10	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	4
					Total	**1273**	7.86	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	10

Table A - 8: Detailed Minnow Trap Data in Stream Features Results, RRM – July 2022

Waterbody	GearID	Northings (NAD 83, 15U)	Eastings (NAD 83, 15U)	Set Date	Set Time	Lift Time	Hours (hrs)	Traps (#)	CPUE	Central Mudminnow	Central Mudminnow YOY	Brook Stickleback	Brook Stickleback YOY	Finescale Dace	Northern Redbelly Dace	Fathead Minnow	Fathead Minnow YOY	Creek Chub	Creek Chub YOY	Brassy Minnow	Brown Bullhead	White Sucker	Common Shiner	Pearl Dace	Golden Shiner	Johnny Darter	Blackside Darter	Northern Pike	YOY	Total Fish
Clark Creek Diversion Channel	CCDC-MT1	5409300	429968	23-Jul-22	14:20	9:45	19.42	3	1.68	0	0	9	0	117	76	14	0	0	0	1	0	0	0	2	0	0	0	0	0	219
	CCDC-MT2	5409331	429980	23-Jul-22	14:20	11:10	20.83	3	1.81	0	0	15	0	79	64	70	0	0	0	0	0	0	0	15	0	0	0	0	0	243
	CCDC-MT3	5409353	430003	23-Jul-22	14:30	11:55	21.42	3	0.14	5	0	10	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	19
	CCDC-MT4	5409364	430014	23-Jul-22	14:30	12:35	22.08	3	1.31	2	0	8	0	0	57	74	0	0	0	39	0	0	0	1	0	0	0	0	0	181
	CCDC-MT5	5409375	430032	23-Jul-22	14:30	13:25	2.92	3	3.83	4	0	10	0	83	182	28	0	0	0	0	0	0	0	2	0	0	0	0	0	309
							Total	15	8.76	**11**	**0**	**52**	**0**	**279**	**379**	**187**	**0**	**0**	**0**	**40**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**971**
Stockpile Pond Diversion Channel	SPDCMT-01	5411336	426508	20-Jul-22	14:30	15:40	0.17	3	9.16	0	0	36	0	2	75	139	0	77	0	32	265	14	3	20	0	1	0	0	0	664
	SPDCMT-02	5411357	426621	20-Jul-22	14:35	17:15	0.17	3	0.47	0	0	2	0	1	2	0	0	0	0	0	0	0	3	26	0	0	0	0	0	34
	SPDCMT-03	5411275	426400	20-Jul-22	14:30	18:00	3.50	2	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SPDCMT-04	5411321	426476	20-Jul-22	14:35	18:45	3.17	3	0.15	1	0	5	0	1	0	0	0	0	0	2	0	0	2	0	0	1	0	0	0	12
							Total	11	9.77	**1**	**0**	**43**	**0**	**4**	**77**	**139**	**0**	**77**	**0**	**34**	**265**	**14**	**8**	**46**	**0**	**2**	**0**	**0**	**0**	**710**
West Creek Diversion Channel	WCDCMT1	5410651	422896	19-Jul-22	13:55	12:40	22.75	1	0.26	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	0	6
	WCDCMT2	5410638	422887	19-Jul-22	13:55	12:40	22.75	1	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WCDCMT3	5470633	422886	19-Jul-22	14:00	12:40	22.67	1	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WCDCMT4	5410280	422670	19-Jul-22	14:10	13:05	22.92	3	2.12	6	0	13	0	17	0	0	0	58	0	9	25	6	0	8	0	4	0	0	0	146
	WCDCMT5	5410200	422521	19-Jul-22	14:20	13:10	22.83	5	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Total	11	2.39	**6**	**0**	**13**	**0**	**17**	**0**	**0**	**0**	**58**	**0**	**9**	**30**	**6**	**0**	**8**	**0**	**4**	**0**	**1**	**0**	**152**

Table A - 9: Detailed Minnow Trap Data in Pond Features Results, RRM – July 2022

Waterbody	GearID	Northings (NAD 83, 15U)	Eastings (NAD 83, 15U)	Set Date	Set Time	Lift Time	Hours (hrs)	Traps (#)	CPUE	Central Mudminnow	Central Mudminnow YOY	Brook Stickleback	Brook Stickleback YOY	Finescale Dace	Northern Redbelly Dace	Fathead Minnow	Fathead Minnow YOY	Creek Chub	Creek Chub YOY	Brassy Minnow	Brown Bullhead	White Sucker	Common Shiner	Pearl Dace	Golden Shiner	Johnny Darter	Blackside Darter	Northern Pike	YOY	Total Fish
Clark Creek Pond	CCP-MT01	5409300	429968	22-Jul-22	8:30	7:35	23.08	4	2.93	4	0	2	0	48	110	387	0	0	0	0	0	0	0	1	0	0	0	0	0	552
	CCP-MT02	5410120	429628	22-Jul-22	8:40	7:47	23.12	4	1.15	4	0	4	0	17	191	1	0	0	0	0	0	0	0	0	0	0	0	0	0	217
	CCP-MT03	5410111	429665	22-Jul-22	8:45	8:00	23.25	4	1.57	2	0	1	0	58	140	93	0	0	0	1	0	0	0	1	0	0	0	0	0	296
	CCP-MT04	5410177	429746	22-Jul-22	8:50	9:15	0.42	4	1.70	2	0	3	0	31	290	4	0	0	0	0	0	0	0	0	0	0	0	0	0	330
	CCP-MT05	5410104	429792	22-Jul-22	8:55	9:20	0.42	4	1.35	3	0	9	0	50	198	1	0	0	0	0	0	0	0	0	0	0	0	0	0	261
	CCP-MT06	5410031	429776	22-Jul-22	9:00	9:50	0.83	4	0.65	18	0	6	0	12	90	1	0	0	0	0	0	0	0	0	0	0	0	0	0	127
	CCP-MT07	5410034	429718	22-Jul-22	9:05	10:00	0.92	4	2.35	0	0	0	0	58	382	19	0	0	0	0	0	0	0	0	0	0	0	0	0	459
	CCP-MT08	5410045	429609	22-Jul-22	8:30	16:15	7.75	4	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	CCP-MT09	5410016	429613	22-Jul-22	8:40	16:30	7.83	4	1.74	1	0	22	0	66	122	5	0	0	0	0	0	0	0	5	0	0	0	0	0	221
	CCP-MT10	5409915	429635	22-Jul-22	8:50	17:15	8.42	4	3.12	4	0	18	0	33	227	61	0	0	0	1	0	60	0	0	0	0	0	0	0	404
							Total	40	**1768.15**	**38**	**0**	**65**	**0**	**373**	**1750**	**572**	**0**	**0**	**0**	**2**	**0**	**60**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**2867**
West Creek Pond	WCPMT-01	5410971	425941	19-Jul-22	12:50	10:30	21.58	4	0.05	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10
	WCPMT-02	5410964	425950	19-Jul-22	12:50	10:30	21.58	4	0.15	1	0	1	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	28
	WCPMT-03	5410969	425957	19-Jul-22	13:00	10:40	21.17	4	0.85	0	0	1	0	0	0	1	0	0	0	0	152	0	0	0	0	0	0	0	0	154
	WCPMT-04	5410970	425966	19-Jul-22	13:05	11:45	22.83	4	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WCPMT-05	5410975	425929	19-Jul-22	13:20	14:15	0.92	4	0.01	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	WCPMT-06	5410976	425915	19-Jul-22	12:50	10:45	21.67	4	1.00	0	0	0	0	0	0	0	0	0	0	0	182	0	0	0	0	0	0	0	0	182
	WCPMT-07	5411021	425850	19-Jul-22	13:10	10:45	21.42	4	0.46	0	0	1	0	0	0	0	0	0	1	0	82	0	0	0	0	0	0	0	0	84
	WCPMT-08	5411126	425717	19-Jul-22	13:20	13:15	23.75	4	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WCPMT-09	5411140	425727	19-Jul-22	13:30	13:25	23.75	3	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Total	35	2.52	**1**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**452**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**459**

Table A - 10: Detailed Seine Data in Pond Features Results, RRM – July 2022

Waterbody	GearID	Northings (NAD 83, 15U)	Eastings (NAD 83, 15U)	Set Date	Set Time	Area (m^2)	CPUE	Central Mudminnow	Central Mudminnow YOY	Brook Stickleback	Brook Stickleback YOY	Finescale Dace	Northern Redbelly Dace	Fathead Minnow	Fathead Minnow YOY	Creek Chub	Creek Chub YOY	Brassy Minnow	Brown Bullhead	White Sucker	Common Shiner	Pearl Dace	Golden Shiner	Johnny Darter	Blackside Darter	Northern Pike	YOY	Total Fish
Clark Creek Pond	CCPSN-01	5410033	429611	22-Jul-22	10:00	120	0.84	0	0	12	0	34	0	9	0	0	0	5	0	0	0	0	0	0	0	0	41	101
	CCPSN-02	5410028	429610	22-Jul-22	10:45	70	0.76	0	0	13	0	3	0	13	0	0	0	3	0	0	0	1	0	0	0	0	20	53
	CCPSN-03	5410024	429608	22-Jul-22	11:20	108	0.62	0	0	13	0	4	0	22	0	0	0	6	0	0	0	0	0	0	0	0	22	67
	CCPSN-04	5410014	429612	22-Jul-22	11:40	96	0.01	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	CCPSN-05	5410005	429615	22-Jul-22	12:15	130	0.01	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	CCPSN-06	5409999	429617	22-Jul-22	14:30	108	0.04	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	4
	CCPSN-07	5409988	429620	22-Jul-22	15:00	144	0.58	0	0	20	0	5	0	35	0	0	0	0	0	0	0	3	0	0	0	0	21	84
	CCPSN-08	5409978	42923	22-Jul-22	15:20	96	0.93	0	0	37	0	5	0	16	0	0	0	0	0	0	0	1	0	0	0	0	30	89
	CCPSN-09	5409948	429627	22-Jul-22	15:45	72	2.71	0	0	32	0	3	0	10	0	0	0	0	0	0	0	0	0	0	0	0	150	195
	CCPSN-10	5409948	429627	22-Jul-22	16:!5	96	0.84	0	0	12	0	6	0	40	0	0	0	0	0	0	0	1	0	0	0	0	22	81
					Total	**1040**		**0**	**0**	**139**	**0**	**60**	**2**	**145**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**306**	**676**
West Creek Pond	WCPSN01	5410956	425946	23-Jul-22	7:40	180	0.53	0	0	0	0	1	3	10	0	0	0	0	0	42	0	2	0	0	0	0	38	96
	WCPSN02	5410964	425933	23-Jul-22	8:15	120	2.65	0	0	0	0	2	26	21	0	4	0	0	0	212	4	7	0	1	0	0	41	318
	WCPSN03	5410968	425928	23-Jul-22	9:40	150	1.12	0	0	0	0	0	7	24	0	0	0	0	0	80	0	2	0	0	0	0	55	168
	WCPSN04	5410971	425920	23-Jul-22	10:10	120	1.51	0	0	0	0	0	30	8	0	10	0	0	0	130	0	0	0	1	0	0	2	181
	WCPSN05	5410975	425911	23-Jul-22	10:40	90	1.38	0	0	1	0	0	6	14	0	10	0	0	0	93	0	0	0	0	0	0	0	124
	WCPSN06	5410984	425899	23-Jul-22	11:15	140	1.52	0	0	0	0	0	120	41	0	7	0	0	0	44	1	0	0	0	0	0	0	213
	WCPSN07	5410984	425899	23-Jul-22	11:53	140	1.60	0	0	0	0	0	64	11	0	1	0	0	0	145	0	3	0	0	0	0	0	224
	WCPSN08	5411000	425877	23-Jul-22	12:22	130	2.03	0	0	0	0	0	65	100	0	2	0	0	0	96	0	1	0	0	0	0	0	264
	WCPSN09	5411012	425861	23-Jul-22	12:45	104	3.26	0	0	1	0	0	214	60	0	2	0	0	0	60	0	2	0	0	0	0	0	339
	WCPSN10	5411023	425846	23-Jul-22	1320	140	2.74	0	0	0	0	1	210	70	0	12	0	0	0	91	0	0	0	0	0	0	0	384
					Total	**1314**		**0**	**0**	**2**	**0**	**4**	**745**	**359**	**0**	**48**	**0**	**0**	**0**	**993**	**5**	**17**	**0**	**2**	**0**	**0**	**136**	**2311**

Table A - 11: Detailed Fish Measurements for West Creek Diversion Channel, RRM – July 2022

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
19-Jul-22	Central Mudminnow	CMM1	10.1	-	13.5	None	R
19-Jul-22	Central Mudminnow	CMM2	9.4	-	11.3	None	R
19-Jul-22	Central Mudminnow	CMM3	10.2	-	14.4	None	R
19-Jul-22	Central Mudminnow	CMM4	7.9	-	7.7	None	R
19-Jul-22	Central Mudminnow	CMM5	5.0	-	3.3	None	R
19-Jul-22	Central Mudminnow	CMM6	2.8	-	0.5	None	R
20-Jul-22	Brown Bullhead	BB1	7.6	-	7.2	None	R
20-Jul-22	Brown Bullhead	BB2	6.9	-	4.8	None	R
20-Jul-22	Brown Bullhead	BB3	6.8	-	4.7	None	R
20-Jul-22	Brown Bullhead	BB4	7.1	-	5.4	None	R
20-Jul-22	Brown Bullhead	BB5	6.9	-	4.8	None	R
20-Jul-22	Northern Pike	NP1	17.3	16.2	28.6	None	R
20-Jul-22	Brown Bullhead	BB6	7.7	7.5	5.9	None	R
20-Jul-22	Brown Bullhead	BB7	6.7	6.5	4.4	None	R
20-Jul-22	Brown Bullhead	BB8	9.7	9.5	12.9	None	R
20-Jul-22	Brown Bullhead	BB9	6.8	6.4	4.4	None	R
20-Jul-22	Brown Bullhead	BB10	8.2	7.9	9.6	None	R
20-Jul-22	Brown Bullhead	BB11	9.7	9.4	14.3	None	R
20-Jul-22	Brown Bullhead	BB12	9.5	9.3	12.7	None	R
20-Jul-22	Brown Bullhead	BB13	8.6	8.4	10.5	None	R
20-Jul-22	Brown Bullhead	BB14	7.9	7.7	7.4	None	R
20-Jul-22	Brown Bullhead	BB15	9.0	8.8	10.8	None	R
20-Jul-22	Brown Bullhead	BB16	7.6	7.4	6.4	None	R
20-Jul-22	Brown Bullhead	BB17	7.5	7.2	6.4	None	R
20-Jul-22	Brown Bullhead	BB18	7.3	7.1	6.9	None	R
20-Jul-22	Brown Bullhead	BB19	7.9	7.7	8.4	None	R
20-Jul-22	Brown Bullhead	BB20	6.6	6.4	3.9	None	R
20-Jul-22	Brown Bullhead	BB21	7.7	7.5	6.5	None	R
20-Jul-22	Brown Bullhead	BB22	9.1	8.8	10.8	None	R
20-Jul-22	Brown Bullhead	BB23	7.1	6.9	6.5	None	R
20-Jul-22	Brown Bullhead	BB24	6.2	5.9	3.5	None	R
20-Jul-22	Brown Bullhead	BB25	6.5	6.3	3.8	None	R
20-Jul-22	Brown Bullhead	BB26	6.4	6.2	3.4	None	R
20-Jul-22	Brown Bullhead	BB27	6.5	6.3	3.9	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Brown Bullhead	BB28	6.8	6.6	4.3	None	R
20-Jul-22	Brown Bullhead	BB29	7.9	7.7	6.9	None	R
20-Jul-22	Brown Bullhead	BB30	8.6	8.4	8.3	None	R
20-Jul-22	Johnny Darter	JD3	7.2	-	5.7	None	R
27-Jul-22	Blackside Darter	BSD	8.5	8.3	6.7	None	R
27-Jul-22	Central Mudminnow	CMM	8.1	-	6.3	None	R
27-Jul-22	Creek Chub	CC	8.0	7.5	6.0	None	R
27-Jul-22	Common Shiner	CS	13.5	12.6	31.2	None	R

Table A - 12: Detailed Fish Measurements for Clark Creek Diversion Channel, RRM – July 2022

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Brassy Minnow	BM1	8.7	8.2	1.9	None	R
25-Jul-22	Brook Stickleback	BSB4	5.6	4.6	4.6	None	R
25-Jul-22	Brook Stickleback	BSB19	5.9	-	2.2	None	R
25-Jul-22	Brook Stickleback	BSB2	4.5	-	0.8	None	R
25-Jul-22	Brook Stickleback	BSB3	9.4	-	1.7	None	R
25-Jul-22	Brook Stickleback	BSB5	5.1	-	1.4	None	R
25-Jul-22	Brook Stickleback	BSB6	5.7	-	2.2	None	R
25-Jul-22	Brook Stickleback	BSB7	5.8	-	2.2	None	R
25-Jul-22	Brook Stickleback	BSB8	4.9	-	1.3	None	R
25-Jul-22	Brook Stickleback	BSB9	5.2	-	1.0	None	R
25-Jul-22	Fathead Minnow	FHM2	6.0	5.9	2.3	None	R
25-Jul-22	Fathead Minnow	FHM3	7.6	7.2	5.5	None	R
25-Jul-22	Fathead Minnow	FHM4	6.6	6.2	3.3	None	R
25-Jul-22	Fathead Minnow	FHM5	6.6	6.1	3.1	None	R
25-Jul-22	Fathead Minnow	FHM6	7.7	7.2	5.3	None	R
25-Jul-22	Fathead Minnow	FHM1	6.2	5.7	2.3	None	R
25-Jul-22	Fathead Minnow	FHM7	7.3	5.8	4.7	None	R
25-Jul-22	Fathead Minnow	FHM8	7.1	6.0	3.9	None	R
25-Jul-22	Fathead Minnow	FHM9	6.6	6.2	3.0	None	R
25-Jul-22	Fathead Minnow	FHM10	6.7	6.3	3.2	None	R
25-Jul-22	Fathead Minnow	FHM11	6.7	6.4	3.9	None	R
25-Jul-22	Fathead Minnow	FHM12	7.1	6.6	9.3	None	R
25-Jul-22	Fathead Minnow	FHM13	7.6	7.1	5.4	None	R
25-Jul-22	Fathead Minnow	FHM14	6.7	6.3	3.8	None	R
25-Jul-22	Finescale Dace	FSD7	9.8	9.2	9.1	None	R
25-Jul-22	Finescale Dace	FSD8	6.4	6.2	3.6	None	R
25-Jul-22	Finescale Dace	FSD9	6.6	6.2	3.0	None	R
25-Jul-22	Finescale Dace	FSD10	6.9	6.0	3.1	None	R
25-Jul-22	Finescale Dace	FSD11	6.6	6.2	3.1	None	R
25-Jul-22	Finescale Dace	FSD12	6.3	6.0	2.8	None	R
25-Jul-22	Finescale Dace	FSD13	7.2	6.7	4.0	None	R
25-Jul-22	Finescale Dace	FSD14	6.2	5.8	2.8	None	R
25-Jul-22	Finescale Dace	FSD15	6.5	6.1	3.2	None	R
25-Jul-22	Finescale Dace	FSD16	7.4	6.9	9.3	None	R
25-Jul-22	Finescale Dace	FSD17	6.9	6.6	3.6	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Finescale Dace	FSD18	4.9	4.6	1.1	None	R
25-Jul-22	Finescale Dace	FSD19	7.2	6.8	3.8	None	R
25-Jul-22	Finescale Dace	FSD20	6.5	6.1	2.8	None	R
25-Jul-22	Finescale Dace	FSD21	6.0	5.6	2.3	None	R
25-Jul-22	Finescale Dace	FSD22	6.6	6.2	3.1	None	R
25-Jul-22	Finescale Dace	FSD23	6.0	5.7	2.6	None	R
25-Jul-22	Finescale Dace	FSD24	6.4	6.0	2.7	None	R
25-Jul-22	Finescale Dace	FSD25	6.6	6.2	3.1	None	R
25-Jul-22	Finescale Dace	FSD26	7.5	7.1	9.8	None	R
25-Jul-22	Finescale Dace	FSD27	6.9	6.6	3.9	None	R
25-Jul-22	Finescale Dace	FSD28	6.1	5.7	2.4	None	R
25-Jul-22	Finescale Dace	FSD24	7.8	6.4	3.7	None	R
25-Jul-22	Finescale Dace	FSD1	6.0	5.7	2.3	None	R
25-Jul-22	Finescale Dace	FSD2	5.9	5.7	2.1	None	R
25-Jul-22	Finescale Dace	FSD3	6.9	5.4	3.5	None	R
25-Jul-22	Finescale Dace	FSD4	6.2	5.1	1.5	None	R
25-Jul-22	Finescale Dace	FSD5	5.4	5.1	1.5	None	R
25-Jul-22	Finescale Dace	FSD6	8.6	8.1	6.2	None	R
25-Jul-22	Finescale Dace	FSD30	6.9	6.3	2.9	None	R
25-Jul-22	Finescale Dace	FSD31	6.2	5.8	2.6	None	R
25-Jul-22	Finescale Dace	FSD32	6.6	6.2	2.8	None	R
25-Jul-22	Finescale Dace	FSD33	6.9	6.5	3.6	None	R
25-Jul-22	Finescale Dace	FSD34	6.6	6.2	2.8	None	R
25-Jul-22	Finescale Dace	FSD35	6.9	5.9	2.7	None	R
25-Jul-22	Finescale Dace	FSD36	6.5	6.1	2.9	None	R
25-Jul-22	Finescale Dace	FSD37	6.7	6.4	3.2	None	R
25-Jul-22	Finescale Dace	FSD38	6.8	6.4	3.8	None	R
25-Jul-22	Finescale Dace	FSD39	8.9	8.0	6.1	None	R
25-Jul-22	Finescale Dace	FSD40	7.2	6.8	4.1	None	R
25-Jul-22	Finescale Dace	FSD41	9.7	9.2	10.9	None	R
25-Jul-22	Finescale Dace	FSD42	9.8	9.2	10.2	None	R
25-Jul-22	Northern Redbelly Dace	NRB31	5.6	5.4	2.0	None	R
25-Jul-22	Northern Redbelly Dace	NRBD52	5.1	4.7	1.3	None	R
25-Jul-22	Northern Redbelly Dace	NRBD33	5.7	4.8	1.4	None	R
25-Jul-22	Northern Redbelly Dace	NRBD34	5.2	4.9	1.4	None	R
25-Jul-22	Northern Redbelly Dace	NRBD35	5.9	5.1	1.7	None	R
25-Jul-22	Northern Redbelly Dace	NRBD36	5.4	5.1	1.4	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Northern Redbelly Dace	NRBD37	5.5	5.2	1.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD38	6.8	6.4	2.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD39	6.2	5.9	2.4	None	R
25-Jul-22	Northern Redbelly Dace	NRBD40	6.1	5.8	2.4	None	R
25-Jul-22	Northern Redbelly Dace	NRBD41	7.8	7.4	9.8	None	R
25-Jul-22	Northern Redbelly Dace	NRBD42	6.7	6.4	2.7	None	R
25-Jul-22	Northern Redbelly Dace	NRBD1	5.5	5.2	1.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD2	5.7	5.4	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD3	5.1	4.7	1.3	None	R
25-Jul-22	Northern Redbelly Dace	NRB4	5.4	5.1	1.6	None	R
25-Jul-22	Northern Redbelly Dace	NRB5	5.2	4.9	1.6	None	R
25-Jul-22	Northern Redbelly Dace	NRB6	5.2	4.9	1.3	None	R
25-Jul-22	Northern Redbelly Dace	NRB7	5.0	4.7	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD8	5.2	4.9	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD9	5.4	5.1	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD10	5.2	4.9	1.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD11	5.1	5.1	1.3	None	R
25-Jul-22	Northern Redbelly Dace	NRBD12	5.5	4.4	1.7	None	R
25-Jul-22	Northern Redbelly Dace	NRBD13	4.7	4.4	1.1	None	R
25-Jul-22	Northern Redbelly Dace	NRBD14	5.7	5.3	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD15	5.6	4.6	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD16	4.9	4.9	1.1	None	R
25-Jul-22	Northern Redbelly Dace	NRBD17	5.2	4.8	1.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD18	5.1	4.8	1.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD19	5.9	4.6	1.0	None	R
25-Jul-22	Northern Redbelly Dace	NRBD20	4.9	4.6	1.2	None	R
25-Jul-22	Northern Redbelly Dace	NRBD21	5.9	5.4	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD22	5.6	5.3	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD23	6.7	5.4	2.1	None	R
25-Jul-22	Northern Redbelly Dace	NRBD24	9.1	4.7	1.3	None	R
25-Jul-22	Northern Redbelly Dace	NRBD25	9.7	5.9	1.7	None	R
25-Jul-22	Northern Redbelly Dace	NRBD26	5.4	5.1	1.5	None	R
25-Jul-22	Northern Redbelly Dace	NRBD27	9.3	5.0	1.7	None	R
25-Jul-22	Northern Redbelly Dace	NRBD28	6.3	6.0	2.2	None	R
25-Jul-22	Northern Redbelly Dace	NRBD29	5.6	5.3	1.9	None	R
25-Jul-22	Northern Redbelly Dace	NRBD30	9.9	9.6	1.1	None	R
25-Jul-22	Northern Redbelly Dace	NRBD43	6.8	6.5	3.1	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Pearl Dace	PD1	5.9	5.1	0.3	None	R
25-Jul-22	Pearl Dace	PD2	4.8	4.5	1.3	None	R
25-Jul-22	Brook Stickleback	BSB10	5.0	-	1.3	None	R
25-Jul-22	Brook Stickleback	BSB11	4.9	-	1.3	None	R
25-Jul-22	Brook Stickleback	BSB12	4.7	-	1.2	None	R
25-Jul-22	Brook Stickleback	BSB13	5.3	-	1.7	None	R
25-Jul-22	Brook Stickleback	BSB14	5.1	-	1.6	None	R
25-Jul-22	Brook Stickleback	BSB15	7.2	6.7	4.9	None	R
25-Jul-22	Brook Stickleback		5.7	-	1.3	None	R
25-Jul-22	Brook Stickleback		7.9	-	4.6	None	R
25-Jul-22	Brook Stickleback	BSB17	4.7	-	1.0	None	R
25-Jul-22	Brook Stickleback	BSB18	5.5	-	2.0	None	R
25-Jul-22	Brook Stickleback	BSB19	4.6	-	1.7	None	R
25-Jul-22	Brook Stickleback	BSB20	5.3	-	5.9	None	R
25-Jul-22	Brook Stickleback	BSB21	9.0	-	5.2	None	R
25-Jul-22	Brook Stickleback	BSB22	9.8	-	1.2	None	R
25-Jul-22	Fathead Minnow	FHM15	7.4	6.9	5.1	None	R
25-Jul-22	Fathead Minnow	FHM16	6.7	6.4	3.8	None	R
25-Jul-22	Fathead Minnow	FHM17	7.3	6.9	5.4	None	R
25-Jul-22	Fathead Minnow	FHM18	6.7	6.2	3.5	None	R
25-Jul-22	Fathead Minnow	FHM19	7.2	6.7	9.3	None	R
25-Jul-22	Fathead Minnow	FHM20	6.9	6.8	3.6	None	R
25-Jul-22	Fathead Minnow	FHM21	6.6	6.2	3.3	None	R
25-Jul-22	Fathead Minnow	FHM22	6.9	6.0	3.2	None	R
25-Jul-22	Fathead Minnow	FHM23	6.2	5.7	2.7	None	R
25-Jul-22	Brook Stickleback	BSB14	5.2	-	1.1	None	R
25-Jul-22	Fathead Minnow	FHM24	7.2	6.7	4.9	None	R
25-Jul-22	Fathead Minnow	FHM25	7.4	6.8	4.6	None	R
25-Jul-22	Fathead Minnow	FHM26	7.1	6.7	4.6	None	R
25-Jul-22	Fathead Minnow	FHM27	7.5	7.0	5.2	None	R
25-Jul-22	Fathead Minnow	FHM28	6.8	6.3	5.3	None	R
25-Jul-22	Fathead Minnow	FHM29	7.9	6.9	4.6	None	R
25-Jul-22	Fathead Minnow	FHM30	7.9	6.9	4.6	None	R
25-Jul-22	Fathead Minnow	FHM31	7.4	6.9	5.0	None	R
25-Jul-22	Fathead Minnow	FHM32	6.2	5.8	2.8	None	R
25-Jul-22	Fathead Minnow	FHM33	7.0	6.5	4.2	None	R
25-Jul-22	Fathead Minnow	FHM34	7.1	6.6	4.1	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Fathead Minnow	FHM35	6.8	6.3	3.3	None	R
25-Jul-22	Fathead Minnow	FHM36	7.0	6.5	3.8	None	R
25-Jul-22	Fathead Minnow	FHM37	7.3	6.9	4.7	None	R
25-Jul-22	Fathead Minnow	FHM38	6.9	6.0	1.0	None	R
25-Jul-22	Fathead Minnow	FHM39	7.6	7.2	4.4	None	R
25-Jul-22	Fathead Minnow	FHM40		6.7		None	R
25-Jul-22	Northern Redbelly Dace	NRBD44	6.6	6.2	2.6	None	R
25-Jul-22	Pearl Dace	PD3	7.7	7.2	9.2	None	R
25-Jul-22	Pearl Dace	PD4	9.8	9.2	9.1	None	R
25-Jul-22	Pearl Dace	PD5	9.5	9.0	9.4	None	R
25-Jul-22	Pearl Dace	PD6	8.5	8.0	6.3	None	R
25-Jul-22	Pearl Dace	PD7	11.1	10.4	13.5	None	R
25-Jul-22	Pearl Dace	PD8	7.9	7.4	5.1	None	R
25-Jul-22	Pearl Dace	PD9	7.9	7.4	4.9	None	R
25-Jul-22	Pearl Dace	PD10	5.2	4.9	1.1	None	R
25-Jul-22	Pearl Dace	PD11	9.4	8.9	6.1	None	R
25-Jul-22	Pearl Dace	PD12	8.8	8.3	3.5	None	R
25-Jul-22	Pearl Dace	PD13	9.4	6.9	7.9	None	R
25-Jul-22	Pearl Dace	PD14	9.6	8.8	1.2	None	R
25-Jul-22	Pearl Dace	PD15	8.1	7.6	0.7	None	R
25-Jul-22	Pearl Dace	PD16	7.9	7.6	9.7	None	R
25-Jul-22	Pearl Dace	PD17	9.8	9.2	1.2	None	R
25-Jul-22	Brook Stickleback	BSB23	4.6	-	1.1	None	R
25-Jul-22	Brook Stickleback	BSB24	5.2	-	1.2	None	R
25-Jul-22	Brook Stickleback	BSB25	4.8	-	1.0	None	R
25-Jul-22	Brook Stickleback	BSB26	5.0	-	1.4	None	R
25-Jul-22	Brook Stickleback	BSB27	5.9	-	1.5	None	R
25-Jul-22	Brook Stickleback	BSB28	5.0	-	1.4	None	R
25-Jul-22	Brook Stickleback	BSB29	5.4	-	1.5	None	R
25-Jul-22	Brook Stickleback	BSB30	4.7	-	1.1	None	R
25-Jul-22	Brook Stickleback	BSB31	5.2	-	1.6	None	R
25-Jul-22	Brook Stickleback	BSB32	6.2	-	1.6	None	R
25-Jul-22	Central Mudminnow	CMM1	7.6	-	5.8	None	R
25-Jul-22	Central Mudminnow	CMM2	9.4	-	10.1	None	R
25-Jul-22	Central Mudminnow	CMM3	5.9	-	2.9	None	R
25-Jul-22	Central Mudminnow	CMM4	5.6	-	2.0	None	R
25-Jul-22	Central Mudminnow	CMM5	7.6	-		None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Pearl Dace	PD18	8.3	7.8	5.8	None	R
25-Jul-22	Pearl Dace	PD19	7.9	7.5	5.3	None	R
25-Jul-22	Pearl Dace	PD20	7.3	6.9	3.8	None	R
25-Jul-22	Brassy Minnow	BM2	6.9	6.3	2.8	None	R
25-Jul-22	Brook Stickleback	BSB33	5.4	-	1.6	None	R
25-Jul-22	Brassy Minnow	BM3	6.8	6.2	2.9	None	R
25-Jul-22	Brook Stickleback	BSB34	5.6	-	1.6	None	R
25-Jul-22	Brook Stickleback	BSB35	5.2	-	1.6	None	R
25-Jul-22	Brassy Minnow	BM4	6.5	5.9	2.5	None	R
25-Jul-22	Brassy Minnow	BM5	6.9	6.3	3.5	None	R
25-Jul-22	Brook Stickleback	BSB36	5.2	-	1.5	None	R
25-Jul-22	Brassy Minnow	BM6	6.7	6.3	3.1	None	R
25-Jul-22	Brook Stickleback	BSB37	4.9	-	1.4	None	R
25-Jul-22	Brook Stickleback	BSB38	4.8	-	1.1	None	R
25-Jul-22	Brook Stickleback	BSB39	4.7	-	1.3	None	R
25-Jul-22	Brassy Minnow	BM7	6.8	6.3	2.7	None	R
25-Jul-22	Brook Stickleback	BSB40	5.0	-	1.7	None	R
25-Jul-22	Brassy Minnow	BM8	6.3	5.9	2.4	None	R
25-Jul-22	Brassy Minnow	BM9	7.3	6.8	3.2	None	R
25-Jul-22	Brassy Minnow	BM10	6.1	5.7	2.2	None	R
25-Jul-22	Brassy Minnow	BM11	6.7	6.3	2.9	None	R
25-Jul-22	Brassy Minnow	BM12	6.8	6.4	3.0	None	R
25-Jul-22	Brassy Minnow	BM13	6.2	5.6	2.3	None	R
25-Jul-22	Brassy Minnow	BM14	7.2	6.7	3.2	None	R
25-Jul-22	Brassy Minnow	BM15	6.7	6.3	2.9	None	R
25-Jul-22	Brassy Minnow	BM16	7.4	6.9	3.9	None	R
25-Jul-22	Brassy Minnow	BM17	6.1	5.7	2.1	None	R
25-Jul-22	Brassy Minnow	BM18	7.3	6.8	3.7	None	R
25-Jul-22	Brassy Minnow	BM19	7.9	7.3	9.9	None	R
25-Jul-22	Brassy Minnow	BM20	7.0	6.5	3.3	None	R
25-Jul-22	Brassy Minnow	BM21	6.9	5.9	2.3	None	R
25-Jul-22	Brassy Minnow	BM22	6.0	5.6	2.0	None	R
25-Jul-22	Brassy Minnow	BM23	6.6	6.6	2.4	None	R
25-Jul-22	Brassy Minnow	BM24	8.0	7.5	4.8	None	R
25-Jul-22	Brassy Minnow	BM25	6.7	6.3	2.9	None	R
25-Jul-22	Brassy Minnow	BM26	6.6	6.1	2.6	None	R
25-Jul-22	Brassy Minnow	BM27	6.6	6.1	2.9	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
25-Jul-22	Brassy Minnow	BM28	5.9	5.5	1.7	None	R
25-Jul-22	Brassy Minnow	BM29	6.2	5.8	2.3	None	R
25-Jul-22	Brassy Minnow	BM30	6.9	6.0	2.1	None	R
25-Jul-22	Brassy Minnow	BM31	6.5	6.1	2.7	None	R
25-Jul-22	Brassy Minnow	BM32	6.5	6.0	2.4	None	R
25-Jul-22	Brassy Minnow	BM33	7.5	7.0	4.1	None	R
25-Jul-22	Brassy Minnow	BM34	7.1	6.6	3.4	None	R
25-Jul-22	Brassy Minnow	BM35	6.9	5.9	2.6	None	R
25-Jul-22	Brassy Minnow	BM36	7.3	6.3	3.7	None	R
25-Jul-22	Brassy Minnow	BM37	6.2	5.8	2.5	None	R
25-Jul-22	Brassy Minnow	BM38	7.9	7.3	3.8	None	R
25-Jul-22	Brassy Minnow	BM39	8.0	7.6	4.6	None	R
25-Jul-22	Brassy Minnow	BM40	7.2	6.7	3.8	None	R
25-Jul-22	Pearl Dace	PD21	10.9	10.3	13.9	None	R
25-Jul-22	Central Mudminnow	CMM6	10.3	-	12.9	None	R
25-Jul-22	Central Mudminnow	CMM7	9.2	-	9.5	None	R
25-Jul-22	Central Mudminnow	CMM8	9.8	-		None	R
25-Jul-22	Central Mudminnow	CMM9	6.7	-	3.8	None	R
25-Jul-22	Central Mudminnow	CMM10	8.7	-	8.7	None	R
25-Jul-22	Central Mudminnow	CMM11	9.1	-	9.0	None	R
25-Jul-22	Pearl Dace	PD22	11.4	10.7	12.8	None	R
25-Jul-22	Pearl Dace	PD23	4.8	4.5	1.1	None	R

Table A - 13: Detailed Fish Measurements for Stockpile Pond Diversion Channel, RRM – July 2022

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Brassy Minnow	BM1	4.6	4.3	0.9	None	R
20-Jul-22	Brassy Minnow	BM2	5.7	5.4	1.5	None	R
20-Jul-22	Brassy Minnow	BM3	5.3	4.9	1.3	None	R
20-Jul-22	Brassy Minnow	BM4	6.1	5.7	1.6	None	R
20-Jul-22	Brassy Minnow	BM5	5.1	4.7	1.3	None	R
20-Jul-22	Brassy Minnow	BM6	4.5	4.2	0.9	None	R
20-Jul-22	Brassy Minnow	BM7	5.2	4.8	1.5	None	R
20-Jul-22	Brook Stickleback	BSB1	6.1	-	2.1	None	R
20-Jul-22	Brook Stickleback	BSB6	5.1	-	2.0	None	R
20-Jul-22	Brook Stickleback	BSB7	2.9	-	0.2	None	R
20-Jul-22	Brook Stickleback	BSB8	2.8	-	0.3	None	R
20-Jul-22	Brook Stickleback	BSB9	3.1	-	0.3	None	R
20-Jul-22	Brown Bullhead	BB2	7.1	6.9	4.8	None	R
20-Jul-22	Brown Bullhead	BB2	7.3	7.1	5.9	None	R
20-Jul-22	Brown Bullhead	BB3	7.9	7.6	4.4	None	R
20-Jul-22	Brown Bullhead	BB4	7.2	7.1	3.8	None	R
20-Jul-22	Central Mudminnow	CMM1	8.2	-	8.0	None	R
20-Jul-22	Central Mudminnow	CMM2	8.6	-	8.2	None	R
20-Jul-22	Central Mudminnow	CMM3	9.1	-	7.3	None	R
20-Jul-22	Central Mudminnow	CMM4	7.7	-	5.2	None	R
20-Jul-22	Creek Chub	CC1	5.7	5.3	1.6	None	R
20-Jul-22	Creek Chub	CC2	6.1	5.7	1.7	None	R
20-Jul-22	Creek Chub	CC3	4.8	4.5	0.5	None	R
20-Jul-22	Creek Chub	CC4	4.4	4.0	1.0	None	R
20-Jul-22	Creek Chub	CC5	4.5	4.4	1.1	None	R
20-Jul-22	Creek Chub	CC6	5.3	4.9	1.4	None	R
20-Jul-22	Creek Chub	CC7	4.6	4.2	0.6	None	R
20-Jul-22	Creek Chub	CC8	5.1	4.7	1.3	None	R
20-Jul-22	Creek Chub	CC9	5.1	4.7	1.2	None	R
20-Jul-22	Creek Chub	CC10	4.9	4.6	1.1	None	R
20-Jul-22	Creek Chub	CC11	5.1	4.7	0.9	None	R
20-Jul-22	Creek Chub	CC12	4.7	4.3	1.0	None	R
20-Jul-22	Creek Chub	CC13	4.6	4.3	1.1	None	R
20-Jul-22	Creek Chub	CC14	4.0	3.8	0.3	None	R
20-Jul-22	Creek Chub	CC15	4.4	4.0	0.8	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Creek Chub	CC16	5.1	4.7	1.1	None	R
20-Jul-22	Creek Chub	CC15	4.8	4.4	0.8	None	R
20-Jul-22	Creek Chub	CC18	5.7	5.3	1.9	None	R
20-Jul-22	Creek Chub	CC19	4.4	4.0	1.0	None	R
20-Jul-22	Creek Chub	CC20	4.8	4.4	1.2	None	R
20-Jul-22	Creek Chub	CC21	4.9	4.5	1.3	None	R
20-Jul-22	Creek Chub	CC21	4.4	4.0	0.9	None	R
20-Jul-22	Creek Chub	CC22	4.9	4.5	1.2	None	R
20-Jul-22	Creek Chub	CC23	4.7	4.3	1.0	None	R
20-Jul-22	Creek Chub	CC4	4.7	4.3	0.8	None	R
20-Jul-22	Creek Chub	CC21	4.9	4.6	1.0	None	R
20-Jul-22	Creek Chub	CC25	4.9	4.5	1.1	None	R
20-Jul-22	Creek Chub	CC26	5.1	4.7	1.1	None	R
20-Jul-22	Creek Chub	CC27	5.1	4.7	1.1	None	R
20-Jul-22	Creek Chub	CC28	5.2	4.8	1.2	None	R
20-Jul-22	Creek Chub	CC29	4.5	4.2	0.9	None	R
20-Jul-22	Creek Chub	CC30	4.3	4.3	0.9	None	R
20-Jul-22	Finescale Dace	FSD1	6.9	6.4	3.6	None	R
20-Jul-22	Finescale Dace	FSD2	7.2	6.9	4.2	None	R
20-Jul-22	Finescale Dace	FSD3	7.8	7.4	4.3	None	R
20-Jul-22	Finescale Dace	FSD4	6.9	6.4	2.6	None	R
20-Jul-22	Finescale Dace	FSD5	4.6	4.0	1.2	None	R
20-Jul-22	Finescale Dace	FSD6	4.6	4.2	0.7	None	R
20-Jul-22	Finescale Dace	FSD7	4.7	4.4	1.1	None	R
20-Jul-22	Finescale Dace	FSD8	4.9	4.2	0.7	None	R
20-Jul-22	Finescale Dace	FSD9	5.1	4.7	1.1	None	R
20-Jul-22	Finescale Dace	FSD10	4.7	4.4	0.8	None	R
20-Jul-22	Finescale Dace	FSD11	4.4	4.1	0.6	None	R
20-Jul-22	Finescale Dace	FSD12	4.8	4.4	0.7	None	R
20-Jul-22	Finescale Dace	FSD16	4.1	4.1	1.0	None	R
20-Jul-22	Johnny Darter	JD1	5.3	-	1.1	None	R
20-Jul-22	Johnny Darter	JD2	6.8	-	2.4	None	R
20-Jul-22	Northern Redbelly Dace	NRBD1	4.3	4.1	0.8	None	R
20-Jul-22	Northern Redbelly Dace	NRBD2	4.4	4.1	0.5	None	R
20-Jul-22	Northern Redbelly Dace	NRBD3	4.6	4.3	0.9	None	R
20-Jul-22	Northern Redbelly Dace	NRBD4		-		None	R
20-Jul-22	Northern Redbelly Dace	NRBD5	4.7	4.4	0.8	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Northern Redbelly Dace	NRBD6	4.6	4.3	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD7	4.6	4.3	0.9	None	R
20-Jul-22	Northern Redbelly Dace	NRBD8	4.1	3.8	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD9	4.8	4.4	0.8	None	R
20-Jul-22	Northern Redbelly Dace	NRBD10	4.5	4.2	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD11	4.3	4.1	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD12	4.2	3.9	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD11	4.5	4.1	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD12	5.1	4.7	1.2	None	R
20-Jul-22	Northern Redbelly Dace	NRBD13	4.6	4.2	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD14	4.3	3.9	1.0	None	R
20-Jul-22	Northern Redbelly Dace	NRBD15	3.9	3.6		None	R
20-Jul-22	Northern Redbelly Dace	NRBD16	4.2	3.9	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD17	4.4	4.1	0.9	None	R
20-Jul-22	Northern Redbelly Dace	NRBD 18	4.2	3.9	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD17	4.3	4.0	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD18	4.9	4.3	0.8	None	R
20-Jul-22	Northern Redbelly Dace	NRBD19	4.2	3.9	0.5	None	R
20-Jul-22	Northern Redbelly Dace	NRBD10	4.5	4.2	0.8	None	R
20-Jul-22	Northern Redbelly Dace	NRBD1	4.7	4.3	1.1	None	R
20-Jul-22	Northern Redbelly Dace	NRBD12	4.7	4.3	1.0	None	R
20-Jul-22	Northern Redbelly Dace	NRBD13	4.4	4.1	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD14	4.1	3.8	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD15	4.8	4.5	1.1	None	R
20-Jul-22	Northern Redbelly Dace	NRBD16	4.5	4.2	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD17	4.2	3.9	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD18	4.4	4.1	0.9	None	R
20-Jul-22	Northern Redbelly Dace	NRBD19	4.1	3.8	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD20	4.7	4.4	1.0	None	R
20-Jul-22	Northern Redbelly Dace	NRBD21	4.4	4.1	0.5	None	R
20-Jul-22	Northern Redbelly Dace	NRBD22	4.2	3.9	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD23	3.8	3.8	0.6	None	R
20-Jul-22	Northern Redbelly Dace	NRBD24	4.0	4.0	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD25	3.9	3.9	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD26	3.8	3.8	0.5	None	R
20-Jul-22	Northern Redbelly Dace	NRBD27	3.8	3.8	0.2	None	R
20-Jul-22	Northern Redbelly Dace	NRBD28	4.0	4.0	0.7	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Northern Redbelly Dace	NRBD29	3.9	3.9	0.5	None	R
20-Jul-22	Northern Redbelly Dace	NRBD30	4.1	4.1	0.7	None	R
20-Jul-22	Pearl Dace	PD1	8.6	8.0	6.5	None	R
20-Jul-22	Pearl Dace	PD2	7.8	7.3	4.6	None	R
20-Jul-22	Pearl Dace	PD2	8.9	8.3	6.1	None	R
20-Jul-22	Pearl Dace	PD3	4.3	4.1	0.8	None	R
20-Jul-22	White Sucker	WS1	3.5	3.1	0.3	None	R
20-Jul-22	White Sucker	WS2	2.9	2.1	0.3	None	R
20-Jul-22	White Sucker	WS7	6.4	3.4	0.5	None	R
20-Jul-22	White Sucker	WS8	3.6	3.3	0.3	None	R
20-Jul-22	Brassy Minnow	BM8	6.3	5.9	2.2	None	R
20-Jul-22	Brassy Minnow	BM9	6.2	5.8	2.0	None	R
20-Jul-22	Brook Stickleback	BSB7	3.0	-	0.3	None	R
20-Jul-22	Brook Stickleback	BSB8	4.6	-	1.2	None	R
20-Jul-22	Brook Stickleback	BSB11	5.0	-	1.1	None	R
20-Jul-22	Brook Stickleback	BSB12	4.5	-	1.1	None	R
20-Jul-22	Brook Stickleback	BSB13	3.1	-	0.3	None	R
20-Jul-22	Brown Bullhead	BB5	6.3	-	3.5	None	R
20-Jul-22	Brown Bullhead	BB6	8.1	-	6.8	None	R
20-Jul-22	Brown Bullhead	BB7	6.7	-	4.1	None	R
20-Jul-22	Brown Bullhead	BB8	8.2	-	4.6	None	R
20-Jul-22	Brown Bullhead	BB9	5.8	-	3.7	None	R
20-Jul-22	Brown Bullhead	BB10	5.9	-	3.1	None	R
20-Jul-22	Brown Bullhead	BB11	6.2	-	3.2	None	R
20-Jul-22	Brown Bullhead	BB12	6.2	-	3.6	None	R
20-Jul-22	Brown Bullhead	BB13	6.2	-	4.6	None	R
20-Jul-22	Central Mudminnow	CMM5	9.4	-	1.8	None	R
20-Jul-22	Central Mudminnow	CMM6	5.7	-	2.6	None	R
20-Jul-22	Creek Chub	CC31	11.1	-	14.6	None	R
20-Jul-22	Creek Chub	CC33	6.2	5.9	2.4	None	R
20-Jul-22	Creek Chub	CC34	15.2	14.4	33.0	None	R
20-Jul-22	Finescale Dace	FSD14	9.4	-	4.5	None	R
20-Jul-22	Finescale Dace	FSD15	6.4	-	6.8	None	R
20-Jul-22	Finescale Dace	FSD16	6.3	5.9	2.3	None	R
20-Jul-22	Finescale Dace	FSD18	6.8	6.4	3.1	None	R
20-Jul-22	Finescale Dace	FSD19	4.2	3.9	0.7	None	R
20-Jul-22	Northern Redbelly Dace	NRBD31	4.9	4.6	1.3	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Pearl Dace	PD4	11.1	10.4	13.7	None	R
20-Jul-22	Pearl Dace	PD5	9.1	8.4	7.3	None	R
20-Jul-22	Pearl Dace	PD6	8.6	8.1	6.1	None	R
20-Jul-22	Pearl Dace	PD7	9.2	8.7	10.0	None	R
20-Jul-22	Pearl Dace	PD8	8.7	8.1	7.5	None	R
20-Jul-22	Pearl Dace	PD9	8.3	4.8	5.7	None	R
20-Jul-22	White Sucker	WS5	3.1	2.8	0.3	None	R
20-Jul-22	White Sucker	WS6	3.1	2.8	0.3	None	R
21-Jul-22	Brassy Minnow	BM10	6.9	5.7	1.5	None	R
21-Jul-22	Brassy Minnow	BM10	5.5	5.0	1.4	None	R
21-Jul-22	Brassy Minnow	BM11	5.0	4.5	1.0	None	R
21-Jul-22	Brassy Minnow	BM32	5.9	5.5	2.0	None	R
21-Jul-22	Brassy Minnow	BM13	6.0	5.6	1.6	None	R
21-Jul-22	Brassy Minnow	BM14	5.7	5.2	1.1	None	R
21-Jul-22	Brassy Minnow	BM15	5.8	5.5	1.7	None	R
21-Jul-22	Brassy Minnow	BM16	5.9	5.5	1.9	None	R
21-Jul-22	Brassy Minnow	BM17	5.7	5.4	1.4	None	R
21-Jul-22	Brassy Minnow	BM18	5.8	5.5	1.6	None	R
21-Jul-22	Brook Stickleback	BSB20	4.5	-	1.1	None	R
21-Jul-22	Brook Stickleback	BSB21	6.7	-	5.7	None	R
21-Jul-22	Common Shiner	CS3	8.3	7.6	5.4	None	R
21-Jul-22	Common Shiner	CS4	10.2	9.3	11.9	None	R
21-Jul-22	Common Shiner	CS5	9.2	8.3	7.4	None	R
21-Jul-22	Finescale Dace	FSD21	7.1	6.7	3.3	None	R
21-Jul-22	Northern Redbelly Dace	NRBD42	6.4	5.9	2.4	None	R
21-Jul-22	Northern Redbelly Dace	NRBD	6.4	6.1	2.3	None	R
21-Jul-22	Pearl Dace	PD 20	9.6	9.1	9.0	None	R
21-Jul-22	Pearl Dace	PD21	8.2	7.6	4.7	None	R
21-Jul-22	Pearl Dace	PD21	7.6	7.2	4.3	None	R
21-Jul-22	Pearl Dace	PD22	9.1	8.5	8.1	None	R
21-Jul-22	Pearl Dace	PD23	44.4	10.3	13.8	None	R
21-Jul-22	Pearl Dace	PD24	9.0	8.4	7.3	None	R
21-Jul-22	Pearl Dace	PD25	9.1	8.5	7.9	None	R
21-Jul-22	Pearl Dace	PD26	9.1	8.4	6.9	None	R
21-Jul-22	Pearl Dace	PD27	6.7	6.2	2.8	None	R
21-Jul-22	Pearl Dace	PD28	9.2	8.5	6.3	None	R
21-Jul-22	Pearl Dace	PD29	9.4	8.8	7.8	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Pearl Dace	PD30	8.8	8.4	6.7	None	R
21-Jul-22	Pearl Dace	PD31	9.8	9.3	8.8	None	R
21-Jul-22	Pearl Dace	PD32	8.2	7.8	5.2	None	R
21-Jul-22	Pearl Dace	PD33	9.1	8.7	6.9	None	R
21-Jul-22	Pearl Dace	PD34	8.8	8.2	5.6	None	R
21-Jul-22	Pearl Dace	PD35	8.6	8.0	6.6	None	R
21-Jul-22	Pearl Dace	PD36	9.3	8.8	7.0	None	R
21-Jul-22	Pearl Dace	PD37	9.6	8.9	8.0	None	R
21-Jul-22	Pearl Dace	PD38	9.9	9.3	9.3	None	R
21-Jul-22	Brassy Minnow	BM19	5.1	4.7	1.2	None	R
21-Jul-22	Brassy Minnow	BM20	5.7	5.4	1.5	None	R
21-Jul-22	Brassy Minnow	BM21	6.3	5.9	1.8	None	R
21-Jul-22	Brassy Minnow	BM22	5.6	5.2	1.3	None	R
21-Jul-22	Brassy Minnow	BM23	5.6	5.2	1.4	None	R
21-Jul-22	Brassy Minnow	BM24	4.8	4.4	1.1	None	R
21-Jul-22	Brassy Minnow	BM25	6.0	5.6	1.5	None	R
21-Jul-22	Brassy Minnow	BM26	5.5	5.1	1.4	None	R
21-Jul-22	Brassy Minnow	BM27	5.1	4.7	1.4	None	R
21-Jul-22	Brassy Minnow	BM28	5.1	4.8	1.4	None	R
21-Jul-22	Brassy Minnow	BM29	5.1	4.6	1.1	None	R
21-Jul-22	Brassy Minnow	BM30	5.6	5.1	1.6	None	R
21-Jul-22	Brassy Minnow	BM31	5.4	5.0	1.4	None	R
21-Jul-22	Brassy Minnow	BM31	5.1	4.7	1.2	None	R
21-Jul-22	Brassy Minnow	BM33	5.6	5.2	1.5	None	R
21-Jul-22	Brassy Minnow	BM34	5.5	5.1	1.6	None	R
21-Jul-22	Brassy Minnow	BM35	4.7	4.3	1.1	None	R
21-Jul-22	Brassy Minnow	BM36	5.5	5.1	1.3	None	R
21-Jul-22	Brassy Minnow	BM37	5.6	5.2	1.4	None	R
21-Jul-22	Brassy Minnow	BM38	5.7	5.3		None	R
21-Jul-22	Brassy Minnow	BM39	5.8	5.0	1.6	None	R
21-Jul-22	Brassy Minnow	BM40	5.4	5.1	1.3	None	R
21-Jul-22	Brook Stickleback	BSB14	5.8	-	1.6	None	R
21-Jul-22	Brook Stickleback	BSB14	4.9	-	1.1	None	R
21-Jul-22	Brook Stickleback	BSB14	4.7	-	0.9	None	R
21-Jul-22	Brook Stickleback	BSB16	2.6	-	6.2	None	R
21-Jul-22	Brook Stickleback	BSB14	6.4	-	2.3	None	R
21-Jul-22	Brook Stickleback	BSB15	5.0	-	1.7	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Brook Stickleback	BSB16	5.7	-	2.1	None	R
21-Jul-22	Brook Stickleback	BSB17	5.7	-	1.5	None	R
21-Jul-22	Brook Stickleback	BSB18	4.6	-	0.9	None	R
21-Jul-22	Brook Stickleback	BSB19	5.7	-	1.8	None	R
21-Jul-22	Brown Bullhead	BB14	6.1	5.9	3.2	None	R
21-Jul-22	Brown Bullhead	BB15	7.3	7.1	4.4	None	R
21-Jul-22	Brown Bullhead	BB16	7.1	6.9	4.7	None	R
21-Jul-22	Brown Bullhead	BB17	6.5	6.3	3.2	None	R
21-Jul-22	Brown Bullhead	BB18	7.1	6.9	4.2	None	R
21-Jul-22	Brown Bullhead	BB19	6.1	5.9	3.3	None	R
21-Jul-22	Brown Bullhead	BB20	6.4	6.2	3.2	None	R
21-Jul-22	Brown Bullhead	BB21	7.0	6.8	3.9	None	R
21-Jul-22	Brown Bullhead	BB22	7.2	6.2	4.8	None	R
21-Jul-22	Brown Bullhead	BB23	6.4	5.2	3.1	None	R
21-Jul-22	Brown Bullhead	BB24	5.8	4.6	2.5	None	R
21-Jul-22	Brown Bullhead	BB25	7.1	6.4	4.7	None	R
21-Jul-22	Brown Bullhead	BB26	6.6	5.7	4.0	None	R
21-Jul-22	Brown Bullhead	BB27	7.5	4.2	5.6	None	R
21-Jul-22	Brown Bullhead	BB28	6.9	6.7	4.3	None	R
21-Jul-22	Brown Bullhead	BB29	7.7	7.5	5.8	None	R
21-Jul-22	Brown Bullhead	BB30	6.5	6.3	3.1	None	R
21-Jul-22	Brown Bullhead	BB31	8.7	8.4	8.5	None	R
21-Jul-22	Brown Bullhead	BB32	6.1	5.9	2.8	None	R
21-Jul-22	Brown Bullhead	BB33	6.7	6.5	4.1	None	R
21-Jul-22	Brown Bullhead	BB34	7.0	6.8	4.2	None	R
21-Jul-22	Brown Bullhead	BB35	6.6	6.4	4.0	None	R
21-Jul-22	Brown Bullhead	BB36	6.3	6.1	3.2	None	R
21-Jul-22	Brown Bullhead	BB37	7.9	7.7	6.8	None	R
21-Jul-22	Brown Bullhead	BB38	6.1	5.9	3.4	None	R
21-Jul-22	Brown Bullhead	BB39	9.7	9.4	13.6	None	R
21-Jul-22	Brown Bullhead	BB40	6.1	5.8	3.4	None	R
21-Jul-22	Common Shiner	CS1	9.6	8.8	9.9	None	R
21-Jul-22	Common Shiner	CS2	9.5	8.7	7.9	None	R
21-Jul-22	Creek Chub	CC39	5.1	4.8	1.1	None	R
21-Jul-22	Creek Chub	CC35	4.9	4.4	1.3	None	R
21-Jul-22	Creek Chub	CC36	3.9	3.4	2.1	None	R
21-Jul-22	Creek Chub	CC37	6.3	5.8	2.6	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Creek Chub	CC38	5.5	5.0	1.7	None	R
21-Jul-22	Creek Chub	CC39	5.6	5.2	1.6	None	R
21-Jul-22	Creek Chub	CC40	6.3	5.9	2.3	None	R
21-Jul-22	Fathead Minnow	FHM1	5.7	4.6	1.8	None	R
21-Jul-22	Fathead Minnow	FHM2	5.0	4.6	1.1	None	R
21-Jul-22	Fathead Minnow	FHM3	5.7	5.2	1.4	None	R
21-Jul-22	Fathead Minnow	FHM4	5.3	4.9	1.5	None	R
21-Jul-22	Fathead Minnow	FHM5	4.9	4.6	1.2	None	R
21-Jul-22	Fathead Minnow	FHM6	4.5	4.2	1.0	None	R
21-Jul-22	Fathead Minnow	FHM7	4.9	4.5	1.4	None	R
21-Jul-22	Fathead Minnow	FHM8	4.6	4.3	2.0	None	R
21-Jul-22	Fathead Minnow	FHM9	5.8	5.4	1.5	None	R
21-Jul-22	Fathead Minnow	FHM10	5.2	4.8	1.3	None	R
21-Jul-22	Fathead Minnow	FHM11	5.2	4.8	1.3	None	R
21-Jul-22	Fathead Minnow	FHM12	5.1	4.7		None	R
21-Jul-22	Fathead Minnow	FHM13	6.2	5.6	3.2	None	R
21-Jul-22	Fathead Minnow	FHM14	4.7	4.4	0.9	None	R
21-Jul-22	Fathead Minnow	FHM15	4.7	4.3	0.8	None	R
21-Jul-22	Fathead Minnow	FHM16	5.1	4.7	1.2	None	R
21-Jul-22	Fathead Minnow	FHM17	4.9	4.5	1.1	None	R
21-Jul-22	Fathead Minnow	FHM18	5.9	5.5	2.2	None	R
21-Jul-22	Fathead Minnow	FHM19	5.2	4.8	1.2	None	R
21-Jul-22	Fathead Minnow	FHM20	5.7	4.7	1.3	None	R
21-Jul-22	Fathead Minnow	FHM21	5.1	4.7	1.1	None	R
21-Jul-22	Fathead Minnow	FHM22	5.8	5.4	1.4	None	R
21-Jul-22	Fathead Minnow	FHM23	5.2	4.8	1.1	None	R
21-Jul-22	Fathead Minnow	FHM24	4.8	4.5	1.1	None	R
21-Jul-22	Fathead Minnow	FHM25	4.9	4.6	1.3	None	R
21-Jul-22	Fathead Minnow	FHM26	5.1	4.8	1.5	None	R
21-Jul-22	Fathead Minnow	FHM27	5.2	4.8	1.4	None	R
21-Jul-22	Fathead Minnow	FHM28	4.9	4.7	0.9	None	R
21-Jul-22	Fathead Minnow	FHM29	4.4	4.1	0.9	None	R
21-Jul-22	Fathead Minnow	FHM29	4.8	4.4	1.2	None	R
21-Jul-22	Fathead Minnow	FHM30	4.6	4.2	1.0	None	R
21-Jul-22	Fathead Minnow	FHM31	4.3	4.0	0.7	None	R
21-Jul-22	Fathead Minnow	FHM32	4.3	4.1	1.0	None	R
21-Jul-22	Fathead Minnow	FHM32	4.7	4.3	1.1	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Fathead Minnow	FHM33	4.7	4.4	1.1	None	R
21-Jul-22	Fathead Minnow	FHM34	5.1	4.9	1.2	None	R
21-Jul-22	Fathead Minnow	FHM35	4.1	3.8	0.9	None	R
21-Jul-22	Fathead Minnow	FHM36	4.6	4.3	1.1	None	R
21-Jul-22	Fathead Minnow	FHM37	4.9	4.6	1.2	None	R
21-Jul-22	Fathead Minnow	FHM38	4.3	3.9	1.7	None	R
21-Jul-22	Fathead Minnow	FHM39	5.1	4.7	1.1	None	R
21-Jul-22	Fathead Minnow	FHM40	5.0	4.6		None	R
21-Jul-22	Finescale Dace	FSD17	5.9	-	2.2	None	R
21-Jul-22	Finescale Dace	FSD20	6.6	6.1	3.3	None	R
21-Jul-22	Northern Redbelly Dace	NRBD32	4.9	4.2	1.1	None	R
21-Jul-22	Northern Redbelly Dace	NRBD33	5.4	5.0	1.0	None	R
21-Jul-22	Northern Redbelly Dace	NRBD34	4.6	4.2	0.8	None	R
21-Jul-22	Northern Redbelly Dace	NRBD35	4.5	4.2	1.0	None	R
21-Jul-22	Northern Redbelly Dace	NRBD36	4.9	4.5	0.8	None	R
21-Jul-22	Northern Redbelly Dace	NRBD37	5.0	4.6	0.9	None	R
21-Jul-22	Northern Redbelly Dace	NRBD38	5.1	4.7	0.9	None	R
21-Jul-22	Northern Redbelly Dace	NRBD39	4.9	4.5	0.9	None	R
21-Jul-22	Northern Redbelly Dace	NRBD40	5.2	4.8	1.2	None	R
21-Jul-22	Pearl Dace	PD10	8.9	8.3	67.0	None	R
21-Jul-22	Pearl Dace	PD11	5.0	4.7	1.1	None	R
21-Jul-22	Pearl Dace	PD12	9.2	8.8	7.3	None	R
21-Jul-22	Pearl Dace	PD13	8.0	7.4	4.3	None	R
21-Jul-22	Pearl Dace	PD14	7.5	7.0	3.3	None	R
21-Jul-22	Pearl Dace	PD15	7.2	6.7	3.0	None	R
21-Jul-22	Pearl Dace	PD16	9.3	8.8	7.3	None	R
21-Jul-22	White Sucker	WS10	2.1	1.9	1.1	None	R
21-Jul-22	White Sucker	WS11	4.1	3.8	0.5	None	R
21-Jul-22	White Sucker	WS12	4.2	4.0	0.8	None	R
21-Jul-22	White Sucker	WS13	4.2	3.9	0.7	None	R
21-Jul-22	White Sucker	WS14	4.4	4.1	0.8	None	R
21-Jul-22	White Sucker	WS15	4.4	4.1	0.8	None	R
21-Jul-22	White Sucker	WS16	4.2	3.8	0.6	None	R
21-Jul-22	White Sucker	WS17	4.8	4.5	1.2	None	R
21-Jul-22	Pearl Dace	PD39	8.0	7.4	4.4	None	R
21-Jul-22	Pearl Dace	PD17	7.9	7.5	5.9	Dead	M
21-Jul-22	Pearl Dace	PD18	8.5	8.1	5.8	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Pearl Dace	PD19	8.1	7.5	5.2	None	R
21-Jul-22	Pearl Dace	PD40	7.7	7.2	4.1	None	R
21-Jul-22	Pearl Dace	PD41		-		None	R
21-Jul-22	Brassy Minnow	BM	8.6	8.0	5.0	None	R
21-Jul-22	Brassy Minnow	BM	6.9	6.5	2.9	None	R
21-Jul-22	Brook Stickleback	BSB	5.3	-	1.8	None	R
21-Jul-22	Brook Stickleback	BSB	6.3	-	2.7	None	R
21-Jul-22	Brook Stickleback	BSB	5.8	-	1.8	None	R
21-Jul-22	Brook Stickleback	BSB	6.2	-	2.1	None	R
21-Jul-22	Brook Stickleback	BSB	4.1	-	0.7	None	R
21-Jul-22	Common Shiner	CS	9.6	-		None	R
21-Jul-22	Common Shiner	CS	8.7	7.9	6.4	None	R
21-Jul-22	Finescale Dace	FSD	8.9	8.3	2.3	None	R
21-Jul-22	Johnny Darter	JD1	5.7	-	1.5	None	R
21-Jul-22	Central Mudminnow	CMM	8.9	-	9.1	None	R

Table A - 14: Detailed Fish Measurements for West Creek Pond, RRM – July 2022

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Brown Bullhead	BB1	6.8	6.6	3.6	None	R
21-Jul-22	Brown Bullhead	BB2	6.4	6.2	3.1	None	R
21-Jul-22	Brown Bullhead	BB3	6.3	6.1	3.3	None	R
21-Jul-22	Brown Bullhead	BB4	7.1	6.9	5.4	None	R
21-Jul-22	Brown Bullhead	BB5	8.6	8.4	10.1	None	R
21-Jul-22	Brown Bullhead	BB6	6.3	6.1	3.8	None	R
21-Jul-22	Brown Bullhead	BB7	6.4	5.9	3.5	None	R
21-Jul-22	Brown Bullhead	BB8	6.0	5.8	4.0	None	R
21-Jul-22	Brown Bullhead	BB9	7.9	7.7	6.1	None	R
21-Jul-22	Brown Bullhead	BB10	5.6	5.4	2.6	None	R
21-Jul-22	Brown Bullhead	BB11	9.0	8.8	10.7	None	R
21-Jul-22	Brown Bullhead	BB12	9.1	8.9	10.3	None	R
21-Jul-22	Brown Bullhead	BB13	7.3	7.1	5.6	None	R
21-Jul-22	Brown Bullhead	BB14	9.1	8.9	10.4	None	R
21-Jul-22	Brown Bullhead	BB15	9.0	8.8	9.9	None	R
21-Jul-22	Brown Bullhead	BB16	9.3	9.1	11.5	None	R
21-Jul-22	Brown Bullhead	BB17	5.9	5.7	3.2	None	R
21-Jul-22	Brown Bullhead	BB18	8.4	8.2	8.6	None	R
21-Jul-22	Brown Bullhead	BB19	7.7	7.5	6.7	None	R
21-Jul-22	Brown Bullhead	BB20	6.7	6.5	4.1	None	R
21-Jul-22	Brown Bullhead	BB21	9.3	9.0	11.2	None	R
21-Jul-22	Brown Bullhead	BB22	8.6	8.4	9.3	None	R
21-Jul-22	Brown Bullhead	BB23	7.0	6.8	4.7	None	R
21-Jul-22	Brown Bullhead	BB24	5.6	5.4	2.5	None	R
21-Jul-22	Brown Bullhead	BB25	11.1	10.8	16.4	None	R
21-Jul-22	Brown Bullhead	BB26	8.0	7.8	6.7	None	R
21-Jul-22	Brown Bullhead	BB27	6.1	5.9	3.4	None	R
21-Jul-22	Brown Bullhead	BB28	6.6	6.4	4.4	None	R
21-Jul-22	Brown Bullhead	BB29	7.6	7.4	6.4	None	R
21-Jul-22	Brown Bullhead	BB30	6.2	6.0	4.5	None	R
21-Jul-22	Brown Bullhead	BB31	10.5	10.2	16.2	None	R
21-Jul-22	Brook Stickleback	BSB1	5.6	-	1.9	None	R
21-Jul-22	Central Mudminnow	CMM1	6.8	-	3.2	None	R
21-Jul-22	Brown Bullhead	BB32	6.6	6.4	2.7	None	R
21-Jul-22	Brown Bullhead	BB33	6.6	6.4	3.9	None	R
21-Jul-22	Brown Bullhead	BB34	5.4	5.2	1.8	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Brown Bullhead	BB35	9.5	9.2	10.0	None	R
21-Jul-22	Brown Bullhead	BB36	7.7	7.5	6.1	None	R
21-Jul-22	Brown Bullhead	BB37	7.7	7.4	7.1	None	R
21-Jul-22	Brown Bullhead	BB38	8.2	7.9	8.0	None	R
21-Jul-22	Brown Bullhead	BB39	7.5	7.3	5.2	None	R
21-Jul-22	Brown Bullhead	BB40	5.7	5.5	2.5	None	R
21-Jul-22	Fathead Minnow	FHM1	7.0	6.5	3.5	None	R
21-Jul-22	Brook Stickleback	BSB2	6.2	-	2.5	None	R
21-Jul-22	Creek Chub	CC1	6.2	6.1	0.8	None	R
21-Jul-22	Brook Stickleback	BSB3	5.8	-	2.1	None	R
22-Jul-22	Blackside Darter	BSD1	7.8	-	5.0	None	R
22-Jul-22	Brook Stickleback	BSB1	2.6	-	0.2	None	R
22-Jul-22	Brook Stickleback	BSB2	4.5	4.4	0.7	None	R
22-Jul-22	Brook Stickleback	BSB3	3.8	-	0.6	None	R
22-Jul-22	Central Mudminnow	CMM1	6.7	-	2.3	None	R
22-Jul-22	Central Mudminnow	CMM2	6.6	-	2.9	None	R
22-Jul-22	Central Mudminnow	CMM3	7.9	-	4.5	None	R
22-Jul-22	Central Mudminnow	CMM4	7.9	-	5.4	None	R
22-Jul-22	Central Mudminnow	CMM5	6.1	-	2.3	None	R
22-Jul-22	Central Mudminnow	CMM6	6.6	-	2.1	None	R
22-Jul-22	Central Mudminnow	CMM7	7.7	-	4.2	None	R
22-Jul-22	Creek Chub	CC1	4.1	4.0	0.4	None	R
22-Jul-22	Creek Chub	CC2	4.5	4.4	0.3	None	R
22-Jul-22	Creek Chub	CC3	4.0	-	0.6	None	R
22-Jul-22	Finescale Dace	FSD2	2.1	1.9	0.5	None	R
22-Jul-22	Finescale Dace	FSD3	5.1	4.9	1.4	None	R
22-Jul-22	Finescale Dace	FSD	5.5	5.3	1.5	None	R
22-Jul-22	Johnny Darter	JD1	2.7	-	0.4	None	R
22-Jul-22	Northern Redbelly Dace	NRBD5	3.5	3.3	0.5	None	R
22-Jul-22	Northern Redbelly Dace	NRBD6	2.6	2.4	0.2	None	M
22-Jul-22	Northern Redbelly Dace	NRBD	2.3	2.1	0.3	None	R
22-Jul-22	Northern Redbelly Dace	NRBD2	4.5	4.3	1.1	None	R
22-Jul-22	Northern Redbelly Dace	NRBD03	3.9	3.7	0.7	None	R
22-Jul-22	Northern Redbelly Dace	NRBD4	3.3	3.1	0.4	None	R
22-Jul-22	Pearl Dace	PD7	3.3	3.1	0.7	None	R
22-Jul-22	Pearl Dace	PD8	2.6	2.4	0.2	None	R
22-Jul-22	Pearl Dace	PD9	7.1	6.9	3.0	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Pearl Dace	PD10	3.0	2.8	0.3	None	R
22-Jul-22	Pearl Dace	PD11	3.6	3.4	0.3	None	R
22-Jul-22	Pearl Dace	PD12	5.1	4.9	1.0	None	R
22-Jul-22	Pearl Dace	PD13	3.5	3.3	0.4	None	R
22-Jul-22	Pearl Dace	PD14	7.4	7.2	3.2	None	R
22-Jul-22	Pearl Dace	PD1	7.7	7.5	4.6	None	R
22-Jul-22	Pearl Dace	PD2	7.3	7.1	3.3	None	R
22-Jul-22	Pearl Dace	PD3	4.9	4.7	1.1	None	R
22-Jul-22	Pearl Dace	PD4	7.5	7.3	2.6	None	R
22-Jul-22	Pearl Dace	PD5	3.3	3.1	0.6	None	R
22-Jul-22	Pearl Dace	PD6	3.6	3.4	0.7	None	R
22-Jul-22	White Sucker	WS3	3.2	3.0	0.4	None	R
22-Jul-22	White Sucker	WS	7.5	7.3	3.4	None	R
22-Jul-22	White Sucker	WS2	2.7	2.5	0.2	None	R
22-Jul-22	Brassy Minnow	BM1	6.3	6.0	0.9	None	R
22-Jul-22	Brassy Minnow	BM2	7.0	6.7	2.6	None	R
22-Jul-22	Brook Stickleback	BSB6	3.9	-	0.6	None	R
22-Jul-22	Brook Stickleback	BSB4	2.7	-	0.2	None	R
22-Jul-22	Brook Stickleback	BSB5	3.8	-	0.3	None	R
22-Jul-22	Brook Stickleback	BSB4	4.5	-	0.9	None	R
22-Jul-22	Central Mudminnow	CMM8	6.9	-	2.9	None	R
22-Jul-22	Central Mudminnow	CMM9	7.5	-	4.5	None	R
22-Jul-22	Central Mudminnow	CMM10	6.8	-	3.1	None	R
22-Jul-22	Central Mudminnow	CMM11	7.2	-	4.0	None	R
22-Jul-22	Central Mudminnow	CMM10	7.2	-	3.9	None	R
22-Jul-22	Creek Chub	CC15	3.5	0.2		None	R
22-Jul-22	Creek Chub	CC16	3.1	0.3		None	R
22-Jul-22	Creek Chub	CC17	3.4	0.4		None	R
22-Jul-22	Creek Chub	CC18	4.1	0.7		None	R
22-Jul-22	Creek Chub	CC8	3.9	0.7		None	R
22-Jul-22	Creek Chub	CC9	3.1	0.4		None	R
22-Jul-22	Creek Chub	CC10	3.2	0.2		None	R
22-Jul-22	Creek Chub	CC11	3.4	0.4		None	R
22-Jul-22	Creek Chub	CC12	2.9	0.7		None	R
22-Jul-22	Creek Chub	CC13	2.8	0.1		None	R
22-Jul-22	Creek Chub	CC14	3.6	0.7		None	R
22-Jul-22	Creek Chub	CC40	6.7	6.2	3.1	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Creek Chub	CC5	3.6	3.4	0.4	None	R
22-Jul-22	Creek Chub	CC6	3.5	3.2	0.3	None	R
22-Jul-22	Creek Chub	CC7	3.1	2.8	0.3	None	R
22-Jul-22	Fathead Minnow	FHM8	6.7	2.7		None	R
22-Jul-22	Fathead Minnow	FHM9	6.8	2.0		None	R
22-Jul-22	Fathead Minnow	FHM10	6.2	2.6		None	R
22-Jul-22	Fathead Minnow	FHM1	7.2	6.7	3.1	None	R
22-Jul-22	Fathead Minnow	FHM2	7.2	6.8	3.1	None	R
22-Jul-22	Fathead Minnow	FHM3	4.7	4.4		None	R
22-Jul-22	Fathead Minnow	FHM4	6.8	6.4	3.5	None	R
22-Jul-22	Fathead Minnow	FHM5	5.3	4.9	3.1	None	R
22-Jul-22	Fathead Minnow	FHM6	6.7	6.2	2.6	None	R
22-Jul-22	Fathead Minnow	FHM7	7.2	6.7	3.2	None	R
22-Jul-22	Johnny Darter	JD10	2.9	-	0.1	None	R
22-Jul-22	Johnny Darter	JD11	3.3	-	0.3	None	R
22-Jul-22	Johnny Darter	JD5	1.8	-	0.2	None	R
22-Jul-22	Johnny Darter	JD6	3.1	-	0.3	None	R
22-Jul-22	Johnny Darter	JD7	3.0	-	0.2	None	R
22-Jul-22	Johnny Darter	JD8	2.8	-	0.2	None	R
22-Jul-22	Johnny Darter	JD8	2.1	-	0.1	None	R
22-Jul-22	Johnny Darter	JD9	3.3	-	0.3	None	R
22-Jul-22	Johnny Darter	JD3	2.5	-	0.1	None	R
22-Jul-22	Johnny Darter	JD4	3.3	-	0.3	None	R
22-Jul-22	Pearl Dace	PD7	3.2	3.0	0.5	None	R
22-Jul-22	Pearl Dace	PD8	3.5	3.2	0.4	None	R
22-Jul-22	Pearl Dace	PD9	3.4	3.0	0.4	None	R
22-Jul-22	Pearl Dace	PD10	3.5	3.2	0.5	None	R
22-Jul-22	Pearl Dace	PD11	3.5	3.3	0.2	None	R
22-Jul-22	White Sucker	WS16	3.5	3.2	0.2	None	R
22-Jul-22	White Sucker	WS17	3.8	3.6	0.6	None	R
22-Jul-22	White Sucker	WS18	3.3	3.1	0.2	None	R
22-Jul-22	White Sucker	WS19	3.4	3.2	0.2	None	R
22-Jul-22	White Sucker	WS20	3.7	3.4	0.4	None	R
22-Jul-22	White Sucker	WS21	4.0	3.7	0.4	None	R
22-Jul-22	White Sucker	WS22	3.8	3.5	0.5	None	R
22-Jul-22	White Sucker	WS23	3.9	3.6	0.5	None	R
22-Jul-22	White Sucker	WS24	4.0	3.7	0.5	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	White Sucker	WS25	3.7	3.5	0.6	None	R
22-Jul-22	White Sucker	WS26	3.9	3.6	0.4	None	R
22-Jul-22	White Sucker	WS27	4.3	4.0	0.5	None	R
22-Jul-22	White Sucker	WS28	4.1	3.6	0.3	None	R
22-Jul-22	White Sucker	WS29	4.1	3.9	0.4	None	R
22-Jul-22	White Sucker	WS30	3.5	3.3	0.5	Dead	M
22-Jul-22	White Sucker	WS31	4.5	4.3	0.8	None	R
22-Jul-22	White Sucker	WS9	3.2	3.0	0.3	None	R
22-Jul-22	White Sucker	WS10	3.1	2.9	0.5	None	R
22-Jul-22	White Sucker	WS11	3.6	3.6	0.6	None	R
22-Jul-22	White Sucker	WS12	4.1	3.7	0.5	None	R
22-Jul-22	White Sucker	WS13	4.2	3.9	-	None	R
22-Jul-22	White Sucker	WS14	3.6	3.3	0.4	None	R
22-Jul-22	White Sucker	WS15	3.4	3.2	0.4	None	R
22-Jul-22	White Sucker	WS3	4.5	4.1	0.5	None	R
22-Jul-22	White Sucker	WS4	4.1	3.9	0.7	None	R
22-Jul-22	White Sucker	WS5	3.6	3.4	0.5	None	R
22-Jul-22	White Sucker	WS5	3.9	3.6	0.3	None	R
22-Jul-22	White Sucker	WS6	4.0	3.6	0.4	None	R
22-Jul-22	White Sucker	WS7	4.0	3.8	0.6	None	R
22-Jul-22	White Sucker	WS8	4.2	3.9	0.7	None	R
22-Jul-22	White Sucker	WS32	4.0	3.7	0.6	None	R
22-Jul-22	Brassy Minnow	BM	6.5	6.0	2.2	None	R
22-Jul-22	Brook Stickleback	BSB7	3.6	-	0.5	None	R
22-Jul-22	Brook Stickleback	BSB8	4.2	-	0.8	None	R
22-Jul-22	Brook Stickleback	BSB10	3.3	-	0.4	None	R
22-Jul-22	Brook Stickleback	BSB11	4.1	-	0.7	None	R
22-Jul-22	Brook Stickleback	BSB12	4.5	-		None	R
22-Jul-22	Brown Bullhead	BB41	14.2	-	43.3	None	R
22-Jul-22	Central Mudminnow	CMM13	6.3	-	2.8	None	R
22-Jul-22	Central Mudminnow	CMM14	5.5	-	2.3	None	R
22-Jul-22	Central Mudminnow	CMM15	9.4	-	8.7	None	R
22-Jul-22	Central Mudminnow	CMM16	7.2	-	4.4	None	R
22-Jul-22	Central Mudminnow	CMM17	8.7	-	7.9	None	R
22-Jul-22	Central Mudminnow	CMM18	7.2	-	4.2	None	R
22-Jul-22	Central Mudminnow	CMM19	9.1	-	9.2	None	R
22-Jul-22	Central Mudminnow	CMM20	9.2	-	9.1	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Central Mudminnow	CMM20	6.8	-	3.6	None	R
22-Jul-22	Central Mudminnow	CMM22	7.7	-	4.9	None	R
22-Jul-22	Central Mudminnow	CMM23	7.2	-	4.3	None	R
22-Jul-22	Central Mudminnow	CMM24	6.8	-	3.3	None	R
22-Jul-22	Central Mudminnow	CMM15	7.2	-	4.4	None	R
22-Jul-22	Central Mudminnow	CMM33	6.9	-	3.4	None	R
22-Jul-22	Central Mudminnow	CMM34	6.9	-	3.7	None	R
22-Jul-22	Central Mudminnow	CMM35	6.7	-	3.5	None	R
22-Jul-22	Central Mudminnow	CMM36	6.6	-	3.3	None	R
22-Jul-22	Central Mudminnow	CMM37	7.4	-	4.9	None	R
22-Jul-22	Central Mudminnow	CMM38	3.0	-	0.4	None	R
22-Jul-22	Central Mudminnow	CMM39	7.2	-	4.0	None	R
22-Jul-22	Central Mudminnow	CMM40	7.1	-	4.2	None	R
22-Jul-22	Central Mudminnow	CMM26	6.7	-	3.3	None	R
22-Jul-22	Central Mudminnow	CMM27	7.1	-	4.1	None	R
22-Jul-22	Central Mudminnow	CMM27	7.7	-	4.7	None	R
22-Jul-22	Central Mudminnow	CMM28	6.9	-	3.8	None	R
22-Jul-22	Central Mudminnow	CMM29	6.7	-	3.5	None	R
22-Jul-22	Central Mudminnow	CMM29	9.3	-	9.7	None	R
22-Jul-22	Creek Chub	CC18	3.0	2.8	0.3	None	R
22-Jul-22	Creek Chub	CC19	4.6	4.3	1.0	None	R
22-Jul-22	Creek Chub	CC20	2.7	2.5	0.1	None	R
22-Jul-22	Creek Chub	CC21	3.5	3.1	0.4	None	R
22-Jul-22	Creek Chub	CC22	5.4	5.0		None	R
22-Jul-22	Creek Chub	CC23	3.7	3.4	0.6	None	R
22-Jul-22	Creek Chub	CC24	3.8	3.5	1.0	None	R
22-Jul-22	Creek Chub	CC05	2.7	2.7	0.2	None	R
22-Jul-22	Creek Chub	CC26	3.4	3.2	0.4	None	R
22-Jul-22	Creek Chub	CC27	3.9	3.7	0.6	None	R
22-Jul-22	Creek Chub	CC27	2.4	2.2	0.2	None	R
22-Jul-22	Creek Chub	CC28	4.1	3.8	0.6	None	R
22-Jul-22	Creek Chub	CC29	3.5	3.3	0.4	None	R
22-Jul-22	Creek Chub	CC30	2.7	2.5	0.2	None	R
22-Jul-22	Creek Chub	CC34	3.3	3.1	0.3	None	R
22-Jul-22	Creek Chub	CC31	19.3	9.8	11.4	None	R
22-Jul-22	Creek Chub	CC32	5.9	5.5	2.3	None	R
22-Jul-22	Fathead Minnow	FMH10	8.2	7.8	4.0	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Fathead Minnow	FHM11	5.7	5.2	1.8	None	R
22-Jul-22	Fathead Minnow	FHM12	5.9	5.4	2.5	None	R
22-Jul-22	Fathead Minnow	FHM13	5.1	4.7	1.3	None	R
22-Jul-22	Fathead Minnow	FHM14	7.4	7.0	4.8	None	R
22-Jul-22	Fathead Minnow	FHM15	6.6	6.1	3.2	None	R
22-Jul-22	Fathead Minnow	FHM16	5.7	5.2	2.4	None	R
22-Jul-22	Fathead Minnow	FMH17	7.2	6.8	3.4	None	R
22-Jul-22	Fathead Minnow	FMH18	7.1	6.7	3.5	None	R
22-Jul-22	Fathead Minnow	FMH19	6.6	6.1	3.2	None	R
22-Jul-22	Fathead Minnow	FMH20	8.5	7.9	7.6	None	R
22-Jul-22	Fathead Minnow	FMH21	7.0	6.5	3.4	None	R
22-Jul-22	Fathead Minnow	FHM22	5.9	5.6	2.2	None	R
22-Jul-22	Fathead Minnow	FHM23	7.2	6.8	3.2	None	R
22-Jul-22	Fathead Minnow	FHM24	5.9	5.5	2.5	None	R
22-Jul-22	Fathead Minnow	FHM25	6.0	5.6	2.4	None	R
22-Jul-22	Fathead Minnow	FHM26	5.4	5.2	4.6	None	R
22-Jul-22	Fathead Minnow	FHM27	5.7	5.2	2.7	None	R
22-Jul-22	Fathead Minnow	FHM28	6.5	6.2	2.8	None	R
22-Jul-22	Fathead Minnow	FHM29	5.2	4.8	1.3	None	R
22-Jul-22	Fathead Minnow	FHM30	5.2	4.8	1.3	None	R
22-Jul-22	Fathead Minnow	FHM31	8.1	7.4	6.1	None	R
22-Jul-22	Fathead Minnow	FHM32	6.5	6.5	2.9	None	R
22-Jul-22	Fathead Minnow	FHM33	7.0	6.5	3.2	None	R
22-Jul-22	Fathead Minnow	FHM34	6.6	6.2	3.2	None	R
22-Jul-22	Fathead Minnow	FHM35	6.7	6.4	3.1	None	R
22-Jul-22	Fathead Minnow	FHM36	6.3	5.8	2.8	None	R
22-Jul-22	Fathead Minnow	FHM37	8.1	7.6	5.1	None	R
22-Jul-22	Fathead Minnow	FHM38	7.7	7.3	7.0	None	R
22-Jul-22	Fathead Minnow	FHM39	6.2	5.8	3.1	None	R
22-Jul-22	Fathead Minnow	FHM40	7.5	7.1	4.3	None	R
22-Jul-22	Finescale Dace	FSD17	6.9	6.4	3.1	None	R
22-Jul-22	Finescale Dace	FSD20	6.8	6.3	2.9	None	R
22-Jul-22	Finescale Dace	FSD3	6.8	6.4	3.0	None	R
22-Jul-22	Johnny Darter	JD12	3.4	-	2.3	None	R
22-Jul-22	Johnny Darter	JD13	3.1	-	0.3	None	R
22-Jul-22	Johnny Darter	JD14	2.9	-	0.2	None	R
22-Jul-22	Johnny Darter	JD15	6.4	-	2.5	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Johnny Darter	JD16	3.1	-	0.3	None	R
22-Jul-22	Johnny Darter	JD26	3.4	-	0.3	None	R
22-Jul-22	Johnny Darter	JD27	2.9	-	0.4	None	R
22-Jul-22	Johnny Darter	JD28	2.6	-	0.1	None	R
22-Jul-22	Johnny Darter	JD29	3.2	-	0.6	None	R
22-Jul-22	Johnny Darter	JD30	3.2	-	0.3	None	R
22-Jul-22	Johnny Darter	JD31	3.1	-	0.2	None	R
22-Jul-22	Johnny Darter	JD32	2.7	-	0.1	None	R
22-Jul-22	Johnny Darter	JD17	2.8	-	0.2	None	R
22-Jul-22	Johnny Darter	JD18	3.0	-	0.3	None	R
22-Jul-22	Johnny Darter	JD19	3.2	-	0.3	None	R
22-Jul-22	Johnny Darter	JD20	3.1	-	0.3	None	R
22-Jul-22	Johnny Darter	JD21	3.2	-	0.4	None	R
22-Jul-22	Johnny Darter	JD22	3.1	-	0.3	None	R
22-Jul-22	Johnny Darter	JD23	3.1	-	0.2	None	R
22-Jul-22	Northern Redbelly Dace	NRBD1	4.4	4.1	0.6	None	R
22-Jul-22	Northern Redbelly Dace	NRBD3	4.7	4.4	1.0	None	R
22-Jul-22	Northern Redbelly Dace	NRBD4	4.8	4.0	1.3	None	R
22-Jul-22	Northern Redbelly Dace	NRBD	3.8	3.2	0.8	None	R
22-Jul-22	Northern Redbelly Dace	NRBD10	4.0	3.7	0.4	None	R
22-Jul-22	Northern Redbelly Dace	NRBD11	4.7	4.4	1.0	None	R
22-Jul-22	Pearl Dace	PD12	8.2	7.7	5.4	None	R
22-Jul-22	Pearl Dace	PD13	3.9	3.6	0.3	None	R
22-Jul-22	Pearl Dace	PD14	10.4	9.8	10.1	None	R
22-Jul-22	Pearl Dace	PD15	8.9	8.3	5.5	None	R
22-Jul-22	White Sucker	WS32	4.1	3.8	0.6	None	R
22-Jul-22	White Sucker	WS33	4.0	3.7	0.7	None	R
22-Jul-22	White Sucker	WS34	3.8	3.5	0.5	None	R
22-Jul-22	White Sucker	WS35	3.8	3.5	2.5	None	R
22-Jul-22	White Sucker	WS36	3.5	3.0	2.6	None	R
22-Jul-22	White Sucker	WS37	3.4	3.2	0.4	None	R
22-Jul-22	White Sucker	WS38	4.4	4.0	1.0	None	R
22-Jul-22	White Sucker	WS39	4.5	4.1	3.5	None	R
22-Jul-22	White Sucker	WS40	3.9	3.6	0.9	None	R
22-Jul-22	White Sucker	WS41	4.9	4.6	1.0	None	R
22-Jul-22	Blackside Darter	BSD1	7.6	7.4	4.9	None	R
22-Jul-22	Blackside Darter	BSD6	8.1	-	0.0	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Brook Stickleback	BSB9	4.4	-	1.0	None	R
22-Jul-22	Brook Stickleback	BSB10	4.4	-	0.7	None	R
22-Jul-22	Brook Stickleback	BSB13	4.2	-	0.9	None	R
22-Jul-22	Brook Stickleback	BSB14	3.8	-	0.6	None	R
22-Jul-22	Brook Stickleback	BSB15	3.9	-	0.8	None	R
22-Jul-22	Brook Stickleback	BSB16	3.4	-	0.4	None	R
22-Jul-22	Brook Stickleback	BSB17	4.4	-	0.9	None	R
22-Jul-22	Brook Stickleback	BSB18	3.4	-	0.5	None	R
22-Jul-22	Brook Stickleback	BSB19	4.2	-	0.9	None	R
22-Jul-22	Central Mudminnow	CMM30	7.7	-	4.6	None	R
22-Jul-22	Central Mudminnow	CMM31	7.8	-	5.4	None	R
22-Jul-22	Central Mudminnow	CMM32	6.1	-	2.8	None	R
22-Jul-22	Central Mudminnow	CMM33	6.7	-	3.6	None	R
22-Jul-22	Central Mudminnow	CMM41	2.9	-	0.1	None	R
22-Jul-22	Central Mudminnow	CMM42	12.5	-	25.3	None	R
22-Jul-22	Creek Chub	CC33	2.6	2.4	0.2	None	R
22-Jul-22	Creek Chub	CC34	3.5	3.2	0.3	None	R
22-Jul-22	Creek Chub	CC35	2.9	2.6	0.2	None	R
22-Jul-22	Creek Chub	CC36	3.1	2.9	0.3	None	R
22-Jul-22	Creek Chub	CC37	3.9	3.6	0.6	None	R
22-Jul-22	Creek Chub	CC38	2.4	2.2	0.1	None	R
22-Jul-22	Creek Chub	CC39	3.3	3.0	0.3	None	R
22-Jul-22	Creek Chub	CC40	0.6	0.3	0.5	None	R
22-Jul-22	Johnny Darter	JD24	3.2	-	0.3	None	R
22-Jul-22	Johnny Darter	JD25	3.1	-	0.2	None	R
22-Jul-22	Johnny Darter	JD33	3.7	-	0.5	None	R
22-Jul-22	Johnny Darter	JG31	2.5	-	0.1	None	R
22-Jul-22	Johnny Darter	JD35	2.9	-	0.2	None	R
22-Jul-22	Johnny Darter	JD36	2.7	-	0.2	None	R
22-Jul-22	Johnny Darter	JD37	2.3	-	0.1	None	R
22-Jul-22	Johnny Darter	JD38	2.8	-	0.3	None	R
22-Jul-22	Johnny Darter	JD39	3.2	-	0.3	None	R
22-Jul-22	Johnny Darter	JD40	3.3	-	0.4	None	R
22-Jul-22	Northern Redbelly Dace	NRBD9	4.1	3.8	0.8	None	R
22-Jul-22	Northern Redbelly Dace	NRBD5	4.8	4.5	0.8	None	R
22-Jul-22	Pearl Dace	PD16	10.4	9.4	10.8	None	R
23-Jul-22	Northern Redbelly Dace	NRBD12	3.8	3.5	0.6	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
23-Jul-22	Pearl Dace	PD26	3.5	3.2	0.7	None	R
23-Jul-22	Finescale Dace	FSD04	3.8	3.5	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD13	2.9	2.7	0.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD14	4.1	3.8	0.6	None	R
23-Jul-22	Pearl Dace	PD27	3.8	3.5	0.5	None	R
23-Jul-22	Common Shiner	CS	11.2	10.3	15.4	None	R
23-Jul-22	Common Shiner	CS	12.2	11.1	16.6	None	R
23-Jul-22	Common Shiner	CS	11.9	10.8	16.4	None	R
23-Jul-22	Common Shiner	CS	10.2	9.8	13.2	None	R
23-Jul-22	Johnny Darter	JD	3.2	-	0.1	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.9	3.1	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.9	3.6	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.3	4.0	0.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.8	3.5	0.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.7	3.4	0.3	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.2	3.9	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.3	3.9	0.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.0	3.7	0.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.5	4.1	0.8	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.3	3.9	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.9	3.6	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.9	3.6	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	3.8	3.5	0.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.3	4.0	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.0	3.7	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.3	4.0	0.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.2	3.9	0.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.8	4.4	0.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.1	3.8	0.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD	4.0	3.7	0.5	None	R
23-Jul-22	Pearl Dace	PD	3.8	3.5	0.3	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
23-Jul-22	Pearl Dace	PD	3.4	3.2	0.4	None	R
23-Jul-22	Pearl Dace	PD	3.5	3.2	0.4	None	R
23-Jul-22	Pearl Dace	PD	3.4	3.2	0.4	None	R
23-Jul-22	Pearl Dace	PD	3.9	3.8	0.5	None	R
23-Jul-22	Pearl Dace	PD	3.7	3.4	0.4	None	R
23-Jul-22	Pearl Dace	PD	3.7	3.4	0.3	None	R
23-Jul-22	Pearl Dace	PD	3.7	3.4	0.3	None	R
23-Jul-22	Pearl Dace	PD	3.4	3.1	0.2	None	R
23-Jul-22	Johnny Darter	JD	3.5	-	0.3	None	R
23-Jul-22	Brook Stickleback	BSB	4.5	-	0.8	None	R
23-Jul-22	Common Shiner	CS	11.7	10.6	18.0	None	R
23-Jul-22	Fathead Minnow	FHM	7.5	7.1	4.4	None	R
23-Jul-22	Fathead Minnow	FHM	5.5	5.1	2.0	None	R
23-Jul-22	Fathead Minnow	FHM	5.9	5.6	1.7	None	R
23-Jul-22	Pearl Dace	PD	4.2	3.9	0.8	None	R
23-Jul-22	Pearl Dace	PD	4.3	4.0	0.6	None	R
23-Jul-22	Pearl Dace	PD	3.7	3.4	0.4	None	R
23-Jul-22	Pearl Dace	PD	3.7	3.4	0.4	None	R
23-Jul-22	Pearl Dace	PD	3.8	3.5	0.5	None	R
23-Jul-22	Pearl Dace	PD	3.7	3.4	0.4	None	R
23-Jul-22	Brook Stickleback	BSB	4.3	-	0.9	None	R
23-Jul-22	Finescale Dace	FSD	4.6	4.6	0.7	None	R
23-Jul-22	Pearl Dace	PD15	10.4	9.4	10.8	None	R
23-Jul-22	Brook Stickleback	BSD6	8.7	-		None	R
23-Jul-22	Johnny Darter	JD40	3.3	-	0.4	None	R

Table A - 15: Detailed Fish Measurements for Clark Creek Pond, RRM – July 2022

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
23-Jul-22	Brassy Minnow	BM15	7.0	6.5	2.9	None	R
23-Jul-22	Finescale Dace	FSD41	7.0	6.7	3.9	None	R
23-Jul-22	Finescale Dace	FSD42	6.3	5.9	3.0	None	R
23-Jul-22	Finescale Dace	FSD43	6.9	6.3	3.7	None	R
23-Jul-22	Finescale Dace	FSD44	7.1	6.7	4.0	None	R
23-Jul-22	Finescale Dace	FSD45	7.8	7.4	5.0	None	R
23-Jul-22	Finescale Dace	FSD46	8.5	8.1	6.9	None	R
23-Jul-22	Fathead Minnow	FHM41	7.1	6.7	4.5	None	R
24-Jul-22	Pearl Dace	PD	8.3	7.9	5.9	None	R
24-Jul-22	Finescale Dace	FSD47	10.7	10.2	9.5	None	R
24-Jul-22	Brassy Minnow	BM16	7.3	6.8	3.3	None	R
24-Jul-22	Pearl Dace	PD	9.4	8.9	8.7	None	R
24-Jul-22	Fathead Minnow	FHM	6.0	5.6	2.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD1	5.1	4.7	1.1	None	R
23-Jul-22	Northern Redbelly Dace	NRBD2	4.9	4.6	0.9	None	R
23-Jul-22	Pearl Dace	PD15	6.6	6.1	2.9	None	R
23-Jul-22	Pearl Dace	PD16	8.1	7.5	4.9	None	R
23-Jul-22	Northern Redbelly Dace	NRBD3	5.9	5.6	2.1	None	R
23-Jul-22	Pearl Dace	PD17	6.8	6.4	3.2	None	R
23-Jul-22	Northern Redbelly Dace	NRBD4	5.4	5.1	1.8	None	R
23-Jul-22	Northern Redbelly Dace	NRBD5	5.7	5.3	2.0	None	R
23-Jul-22	Northern Redbelly Dace	NRBD6	5.4	5.1	1.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD7	5.5	5.1	1.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD8	5.8	5.5	1.1	None	R
23-Jul-22	Northern Redbelly Dace	NRBD9	5.0	4.8	1.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD10	5.0	4.7	1.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD11	5.6	5.2	1.8	None	R
23-Jul-22	Northern Redbelly Dace	NRBD12	5.4	5.0	1.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD13	5.6	5.2	1.9	None	R
23-Jul-22	Northern Redbelly Dace	NRBD14	5.5	5.1	1.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD15	6.0	5.6	2.0	None	R
23-Jul-22	Northern Redbelly Dace	NRBD16	5.6	5.2	1.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD17	5.2	4.8	1.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD18	5.6	5.2	1.7	None	R
23-Jul-22	Northern Redbelly Dace	NRBD19	5.3	4.9	1.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD20	6.1	5.6	1.7	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
23-Jul-22	Northern Redbelly Dace	NRBD21	5.1	4.8	1.2	None	R
23-Jul-22	Northern Redbelly Dace	NRBD22	5.0	4.6	0.9	None	R
23-Jul-22	Northern Redbelly Dace	NRBD23	5.7	5.4	1.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD24	5.4	5.0	1.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD25	4.9	4.6	1.1	None	R
23-Jul-22	Northern Redbelly Dace	NRBD26	5.4	5.0	1.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD27	6.3	5.8	2.2	None	R
23-Jul-22	Northern Redbelly Dace	NRBD28	5.3	4.9	1.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD29	4.8	4.5	1.0	None	R
23-Jul-22	Northern Redbelly Dace	NRBD30	5.3	5.0	1.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD31	5.8	5.5	1.8	None	R
23-Jul-22	Northern Redbelly Dace	NRBD32	5.3	5.0	1.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD33	5.7	5.2	1.5	None	R
23-Jul-22	Northern Redbelly Dace	NRBD34	5.7	5.4	1.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD35	5.3	4.9	1.4	None	R
23-Jul-22	Northern Redbelly Dace	NRBD36	6.8	6.3	2.6	None	R
23-Jul-22	Northern Redbelly Dace	NRBD37	6.8	6.4	3.0	None	R
23-Jul-22	Pearl Dace	PD18	4.7	4.4	1.0	None	R
23-Jul-22	Pearl Dace	PD19	4.9	4.6	1.2	None	R
23-Jul-22	Northern Redbelly Dace	NRBD38	6.8	6.4	3.1	None	R
20-Jul-22	Central Mudminnow	CMM1	8.3	-	5.7	None	R
20-Jul-22	Central Mudminnow	CMM2	7.1	-	2.9	None	R
20-Jul-22	Finescale Dace	FSD1	9.0	8.6	7.4	None	R
20-Jul-22	Finescale Dace	FSD2	8.4	7.9	6.6	None	R
20-Jul-22	Central Mudminnow	CMM3	7.3	-	4.2	None	R
20-Jul-22	Central Mudminnow	CMM4	6.9	-	3.2	None	R
20-Jul-22	Central Mudminnow	CMM5	8.0	-	5.6	None	R
20-Jul-22	Central Mudminnow	CMM6	8.1	-	5.0	None	R
20-Jul-22	Finescale Dace	FSD3	3.7	3.4	0.9	None	R
20-Jul-22	Brook Stickleback	BSB1	3.5	-	0.4	None	R
20-Jul-22	Brook Stickleback	BSB2	3.8	-	0.3	None	R
20-Jul-22	Brook Stickleback	BSB3	3.8	-	0.4	None	R
20-Jul-22	Finescale Dace	FSD4	3.7	3.5	0.5	None	R
20-Jul-22	Finescale Dace	FSD5	3.5	3.2	0.3	None	R
20-Jul-22	Pearl Dace	PD1	4.4	4.1	0.6	None	R
20-Jul-22	Brook Stickleback	BSB4	4.1	-	0.6	None	R
20-Jul-22	Brook Stickleback	BSB5	3.1	-	0.1	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
20-Jul-22	Brook Stickleback	BSB6	3.4	-	0.2	None	R
20-Jul-22	Central Mudminnow	CMM7	3.1	-	0.3	None	R
20-Jul-22	Central Mudminnow	CMM8	5.7	-	2.0	None	R
20-Jul-22	Pearl Dace	PD2	3.9	3.7	0.6	None	R
21-Jul-22	Central Mudminnow	CMM9	8.2	-	5.7	None	R
21-Jul-22	Central Mudminnow	CMM10	11.1	-	16.9	None	R
21-Jul-22	Central Mudminnow	CMM11	7.6	-	5.0	None	R
21-Jul-22	Central Mudminnow	CMM12	7.9	-	4.9	None	R
21-Jul-22	Central Mudminnow	CMM13	7.8	-	4.3	None	R
21-Jul-22	Brook Stickleback	BSB7	5.2	-	1.4	None	R
21-Jul-22	Central Mudminnow	CMM14	6.9	-	3.6	None	R
21-Jul-22	Central Mudminnow	CMM15	5.4	-	1.8	None	R
21-Jul-22	Central Mudminnow	CMM16	7.7	-	5.0	None	R
21-Jul-22	Central Mudminnow	CMM17	5.7	-	2.0	None	R
21-Jul-22	Pearl Dace	PD3	4.0	-	0.5	None	R
21-Jul-22	Brook Stickleback	BSB8	5.9	-	2.4	None	R
21-Jul-22	Pearl Dace	PD4	4.4	-	0.9	None	R
21-Jul-22	Brook Stickleback	BSB9	2.3	-	0.1	None	R
21-Jul-22	Brook Stickleback	BSB10	2.7	-	0.1	None	R
21-Jul-22	Brook Stickleback	BSB11	2.7	-	0.1	None	R
21-Jul-22	Brook Stickleback	BSB12	3.0	-	0.1	None	R
21-Jul-22	Pearl Dace	PD5	3.4	3.2	0.4	None	R
21-Jul-22	Central Mudminnow	CMM18	3.0	-	0.4	None	R
21-Jul-22	Pearl Dace	PD6	3.2	2.9	0.2	None	R
21-Jul-22	Brook Stickleback	BSB13	5.3	-	1.6	None	R
21-Jul-22	Finescale Dace	FSD6	3.4	3.2	0.4	None	R
21-Jul-22	Brook Stickleback	BSB14	4.2	-	0.8	None	R
21-Jul-22	Brook Stickleback	BSB15	5.1	-	1.4	None	R
21-Jul-22	Brook Stickleback	BSB16	4.3	-	0.8	None	R
21-Jul-22	Central Mudminnow	CMM19	7.3	-	4.7	None	R
21-Jul-22	Central Mudminnow	CMM20	7.9	-	4.7	None	R
21-Jul-22	Central Mudminnow	CMM21	6.9	-	3.7	None	R
21-Jul-22	Central Mudminnow	CMM22	5.7	-	2.3	None	R
21-Jul-22	Central Mudminnow	CMM23	8.4	-	6.8	None	R
21-Jul-22	Central Mudminnow	CMM24	5.9	-	2.6	None	R
21-Jul-22	Central Mudminnow	CMM25	5.2	-	1.5	None	R
21-Jul-22	Central Mudminnow	CMM26	8.9	-	7.6	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Central Mudminnow	CMM27	9.3	-	8.7	None	R
21-Jul-22	Central Mudminnow	CMM28	7.3	-	4.3	None	R
21-Jul-22	Central Mudminnow	CMM29	6.3	-	2.9	None	R
21-Jul-22	Central Mudminnow	CMM30	8.1	-	5.5	None	R
21-Jul-22	Central Mudminnow	CMM31	8.2	-	5.0	None	R
21-Jul-22	Central Mudminnow	CMM32	7.3	-	4.1	None	R
21-Jul-22	Central Mudminnow	CMM33	7.9	-	3.4	None	R
21-Jul-22	Central Mudminnow	CMM34	6.5	-	3.2	None	R
21-Jul-22	Brook Stickleback	BSB17	5.3	-	1.3	None	R
21-Jul-22	Central Mudminnow	CMM35	7.8	-	4.5	None	R
21-Jul-22	Fathead Minnow	FHM1	6.9	6.6	3.4	None	R
21-Jul-22	Central Mudminnow	CMM36	8.9	-	7.8	None	R
21-Jul-22	Fathead Minnow	FHM2	7.4	7.0	4.9	None	R
21-Jul-22	Central Mudminnow	CMM37	7.3	-	4.2	None	R
21-Jul-22	Central Mudminnow	CMM38	7.4	-	4.7	None	R
21-Jul-22	Central Mudminnow	CMM39	5.8	-	2.6	None	R
21-Jul-22	Central Mudminnow	CMM40	5.3	-	1.8	None	R
21-Jul-22	Brook Stickleback	BSB18	5.2	-	1.3	None	R
21-Jul-22	Brook Stickleback	BSB19	3.9	-	0.6	None	R
21-Jul-22	Brook Stickleback	BSB20	3.3	-	0.3	None	R
21-Jul-22	Brook Stickleback	BSB21	5.8	-	1.9	None	R
21-Jul-22	Brook Stickleback	BSB22	3.8	-	0.6	None	R
21-Jul-22	Finescale Dace	FSD7	5.8	5.5	2.1	None	R
21-Jul-22	Brook Stickleback	BSB23	5.1	-	1.3	None	R
21-Jul-22	Brook Stickleback	BSB24	3.7	-	0.4	None	R
21-Jul-22	Brook Stickleback	BSB25	3.4	-	0.2	None	R
21-Jul-22	Brook Stickleback	BSB26	4.6	-	0.9	None	R
21-Jul-22	Brook Stickleback	BSB27	3.4	-	0.4	None	R
21-Jul-22	Brook Stickleback	BSB28	3.5	-	0.4	None	R
21-Jul-22	Brook Stickleback	BSB29	3.4	-	0.4	None	R
21-Jul-22	Brook Stickleback	BSB30	5.6	-	1.6	None	R
21-Jul-22	Brook Stickleback	BSB31	4.0	-	0.5	None	R
21-Jul-22	Finescale Dace	FSD8	3.2	3.0	0.2	None	R
21-Jul-22	Brook Stickleback	BSB32	2.8	-	0.1	None	R
21-Jul-22	Brook Stickleback	BSB33	3.9	-	0.5	None	R
21-Jul-22	Brook Stickleback	BSB34	3.4	-	0.7	None	R
21-Jul-22	Brook Stickleback	BSB35	3.3	-	0.4	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
21-Jul-22	Brook Stickleback	BSB36	3.8	-	0.5	None	R
21-Jul-22	Brook Stickleback	BSB37	3.4	-	0.4	None	R
21-Jul-22	Brook Stickleback	BSB38	3.2	-	0.4	None	R
21-Jul-22	Brook Stickleback	BSB39	5.4	-	1.5	None	R
21-Jul-22	Brook Stickleback	BSB40	3.3	-	0.4	None	R
21-Jul-22	Finescale Dace	FSD9	6.7	6.4	3.0	None	R
21-Jul-22	Northern Redbelly Dace	NRBD1	4.7	4.4	1.0	None	R
21-Jul-22	Brook Stickleback	BSB40	4.9	-	1.2	None	R
21-Jul-22	Finescale Dace	FSD10	3.1	2.9	0.3	None	R
21-Jul-22	Finescale Dace	FSD11	2.7	2.5	0.1	None	R
21-Jul-22	Finescale Dace	FSD12	3.2	2.9	0.2	None	R
21-Jul-22	Fathead Minnow	FHM3	3.0	2.7	0.1	None	R
21-Jul-22	Finescale Dace	FSD13	6.5	6.1	2.8	None	R
21-Jul-22	Pearl Dace	PD7	4.0	3.7	0.6	None	R
21-Jul-22	Finescale Dace	FSD14	3.2	3.0	0.3	None	R
21-Jul-22	Finescale Dace	FSD15	2.8	2.6	0.1	None	R
21-Jul-22	Finescale Dace	FSD16	3.2	3.0	0.3	None	R
22-Jul-22	Finescale Dace	FSD17	3.2	3.0	0.3	None	R
22-Jul-22	Finescale Dace	FSD18	3.2	3.0	0.3	None	R
22-Jul-22	Fathead Minnow	FHM4	2.6	2.4	0.2	None	R
22-Jul-22	Fathead Minnow	FHM5	3.6	3.3	0.5	None	R
22-Jul-22	Finescale Dace	FSD19	3.2	3.0	0.2	None	R
22-Jul-22	Finescale Dace	FSD20	3.5	3.2	0.3	None	R
22-Jul-22	Fathead Minnow	FHM6	3.6	3.3	0.5	None	R
22-Jul-22	Fathead Minnow	FHM7	3.0	2.8	0.1	None	R
22-Jul-22	Finescale Dace	FSD21	3.2	3.0	0.2	None	R
22-Jul-22	Finescale Dace	FSD22	3.0	2.8	0.1	None	R
22-Jul-22	Brassy Minnow	BM1	3.1	2.8	0.2	None	R
22-Jul-22	Brassy Minnow	BM2	3.2	2.9	0.1	None	R
22-Jul-22	Fathead Minnow	FHM8	3.0	2.7	0.3	None	R
22-Jul-22	Finescale Dace	FSD23	3.0	2.8	0.2	None	R
22-Jul-22	Finescale Dace	FSD24	3.2	2.8	0.2	None	R
22-Jul-22	Finescale Dace	FSD25	2.9	2.7	0.2	None	R
22-Jul-22	Finescale Dace	FSD26	3.4	3.1	0.5	None	R
22-Jul-22	Finescale Dace	FSD27	2.9	2.7	0.2	None	R
22-Jul-22	Finescale Dace	FSD28	2.9	2.7	0.2	None	R
22-Jul-22	Fathead Minnow	FHM9	3.4	3.1	0.3	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Fathead Minnow	FHM10	3.4	3.2	0.3	None	R
22-Jul-22	Finescale Dace	FSD29	3.0	2.8	0.3	None	R
22-Jul-22	Finescale Dace	FSD30	2.9	2.7	0.2	None	R
22-Jul-22	Finescale Dace	FSD31	2.6	2.6	0.2	None	R
22-Jul-22	Finescale Dace	FSD32	2.9	2.7	0.2	None	R
22-Jul-22	Finescale Dace	FSD33	2.8	2.4	0.2	None	R
22-Jul-22	Finescale Dace	FSD34	3.4	3.2	0.4	None	R
22-Jul-22	Finescale Dace	FSD35	3.3	3.0	0.4	None	R
22-Jul-22	Finescale Dace	FSD36	2.7	2.5	0.2	None	R
22-Jul-22	Finescale Dace	FSD37	3.1	3.0	0.3	None	R
22-Jul-22	Finescale Dace	FSD38	2.9	2.7	0.1	None	R
22-Jul-22	Brassy Minnow	BM3	3.2	3.0	0.3	None	R
22-Jul-22	Finescale Dace	FSD39	2.9	2.7	0.3	None	R
22-Jul-22	Fathead Minnow	FHM11	3.5	3.2	0.4	None	R
22-Jul-22	Finescale Dace	FSD40	3.2	3.0	0.3	None	R
22-Jul-22	Brassy Minnow	BM4	3.5	3.2	0.5	None	R
22-Jul-22	Fathead Minnow	FHM12	4.0	3.8	0.6	None	R
22-Jul-22	Brassy Minnow	BM5	3.6	3.3	0.5	None	R
22-Jul-22	Fathead Minnow	FHM13	4.3	4.0	0.7	None	R
22-Jul-22	Fathead Minnow	FHM14	2.8	2.2	0.1	None	R
22-Jul-22	Brassy Minnow	BM5	2.6	2.4	0.1	None	R
22-Jul-22	Fathead Minnow	FHM15	3.0	2.8	0.1	None	R
22-Jul-22	Fathead Minnow	FHM16	2.5	2.4	0.1	None	R
22-Jul-22	Fathead Minnow	FHM17	2.9	2.7	0.2	None	R
22-Jul-22	Fathead Minnow	FHM18	2.9	2.7	0.2	None	R
22-Jul-22	Fathead Minnow	FHM19	2.9	2.5	0.2	None	R
22-Jul-22	Fathead Minnow	FHM20	3.0	2.8	0.2	None	R
22-Jul-22	Fathead Minnow	FHM21	5.6	5.1	1.9	None	R
22-Jul-22	Brassy Minnow	BM6	4.0	3.2	0.6	None	R
22-Jul-22	Fathead Minnow	FHM22	3.5	3.3	0.4	None	R
22-Jul-22	Fathead Minnow	FHM23	3.2	3.0	0.4	None	R
22-Jul-22	Fathead Minnow	FHM24	3.1	2.9	0.2	None	R
22-Jul-22	Brassy Minnow	BM7	3.2	2.9	0.2	None	R
22-Jul-22	Pearl Dace	PD8	4.1	3.8	0.7	None	R
22-Jul-22	Fathead Minnow	FHM25	3.1	2.9	0.2	None	R
22-Jul-22	Fathead Minnow	FHM26	3.0	2.8	0.2	None	R
22-Jul-22	Fathead Minnow	FHM27	3.4	3.1	0.3	None	R

Processing Date	Fish Species	Fish ID	Total Length (cm)	Fork Length (cm)	Body weight (g)	Abnormalities	Fate (R = Returned, M = Mortality)
22-Jul-22	Fathead Minnow	FHM28	3.3	3.0	0.3	None	R
22-Jul-22	Fathead Minnow	FHM29	3.3	3.1	0.3	None	R
22-Jul-22	Fathead Minnow	FHM30	2.9	2.7	0.2	None	R
22-Jul-22	Brassy Minnow	BM8	3.2	2.9	0.2	None	R
22-Jul-22	Fathead Minnow	FHM31	3.2	2.9	0.2	None	R
22-Jul-22	Fathead Minnow	FHM32	3.0	2.7	0.2	None	R
22-Jul-22	Fathead Minnow	FHM33	2.7	2.5	0.2	None	R
22-Jul-22	Fathead Minnow	FHM34	3.1	2.9	0.3	None	R
22-Jul-22	Fathead Minnow	FHM35	3.0	2.8	0.2	None	R
22-Jul-22	Fathead Minnow	FHM36	3.2	3.0	0.3	None	R
22-Jul-22	Brassy Minnow	BM9	3.1	2.8	0.3	None	R
22-Jul-22	Fathead Minnow	FHM37	3.2	2.9	0.3	None	R
22-Jul-22	Fathead Minnow	FHM38	2.8	2.6	0.2	None	R
22-Jul-22	Fathead Minnow	FHM39	2.9	2.6	0.2	None	R
22-Jul-22	Brassy Minnow	BM10	3.5	3.3	0.3	None	R
22-Jul-22	Fathead Minnow	FHM40	3.3	3.0	0.4	None	R
22-Jul-22	Brassy Minnow	BM11	3.5	3.3	0.4	None	R
22-Jul-22	Brassy Minnow	BM12	4.2	3.9	0.7	None	R
22-Jul-22	Brassy Minnow	BM13	4.1	3.8	0.7	None	R
22-Jul-22	Brassy Minnow	BM14	3.8	3.5	0.4	None	R
22-Jul-22	Northern Redbelly Dace	NRBD2	4.8	4.4	0.8	None	R
22-Jul-22	Northern Redbelly Dace	NRBD3	3.0	2.8	0.3	None	R
22-Jul-22	Pearl Dace	PD9	3.9	3.6	0.5	None	R
22-Jul-22	Pearl Dace	PD10	3.8	3.5	0.6	None	R
22-Jul-22	Pearl Dace	PD11	3.6	3.3	0.5	None	R
22-Jul-22	Pearl Dace	PD12	4.5	4.2	0.7	None	R
22-Jul-22	Pearl Dace	PD13	4.0	3.7	0.6	None	R
22-Jul-22	Pearl Dace	PD14	3.7	3.4	0.4	None	R
22-Jul-22	Pearl Dace	PD15	3.8	3.5	0.7	None	R
22-Jul-22	Pearl Dace	PD16	4.2	3.9	0.7	None	R

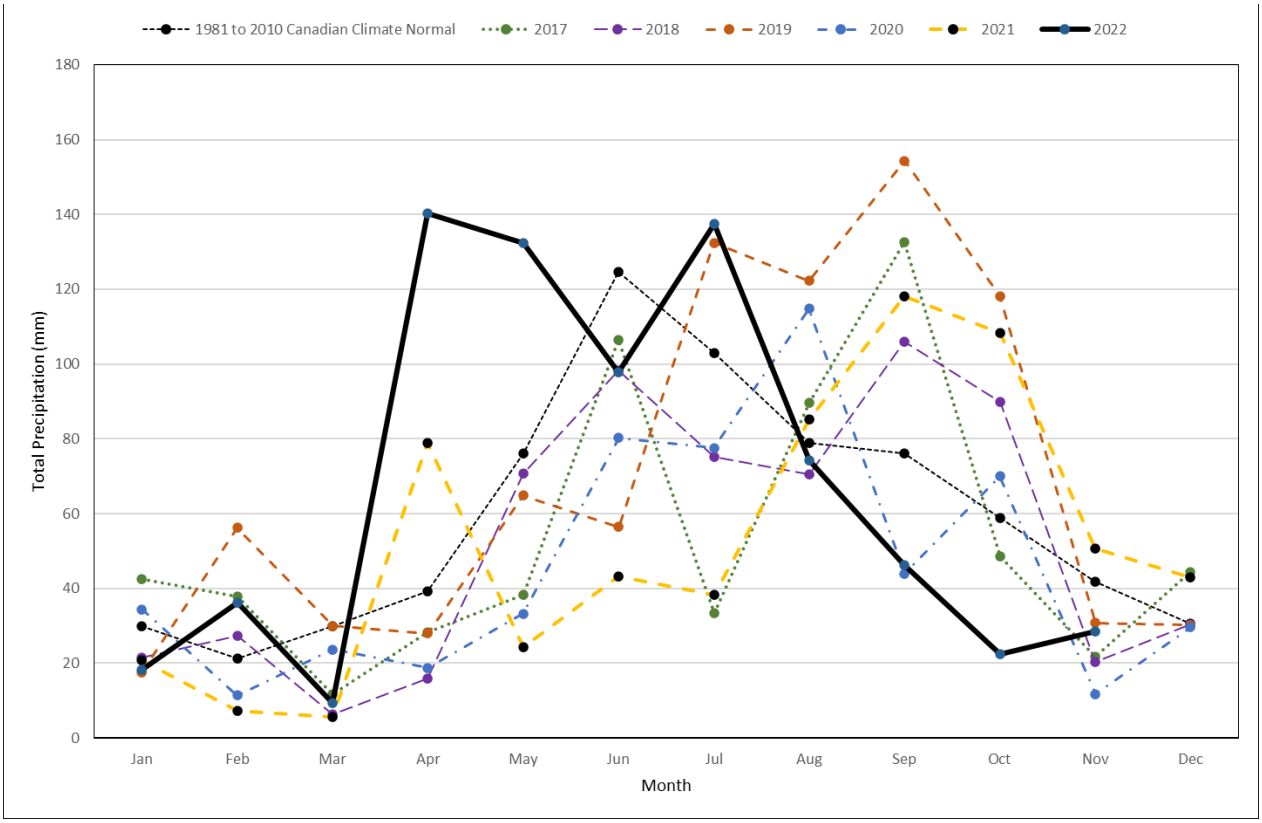


Figure A - 1: Precipitation Values Measured in the Vicinity of Rainy River Mine

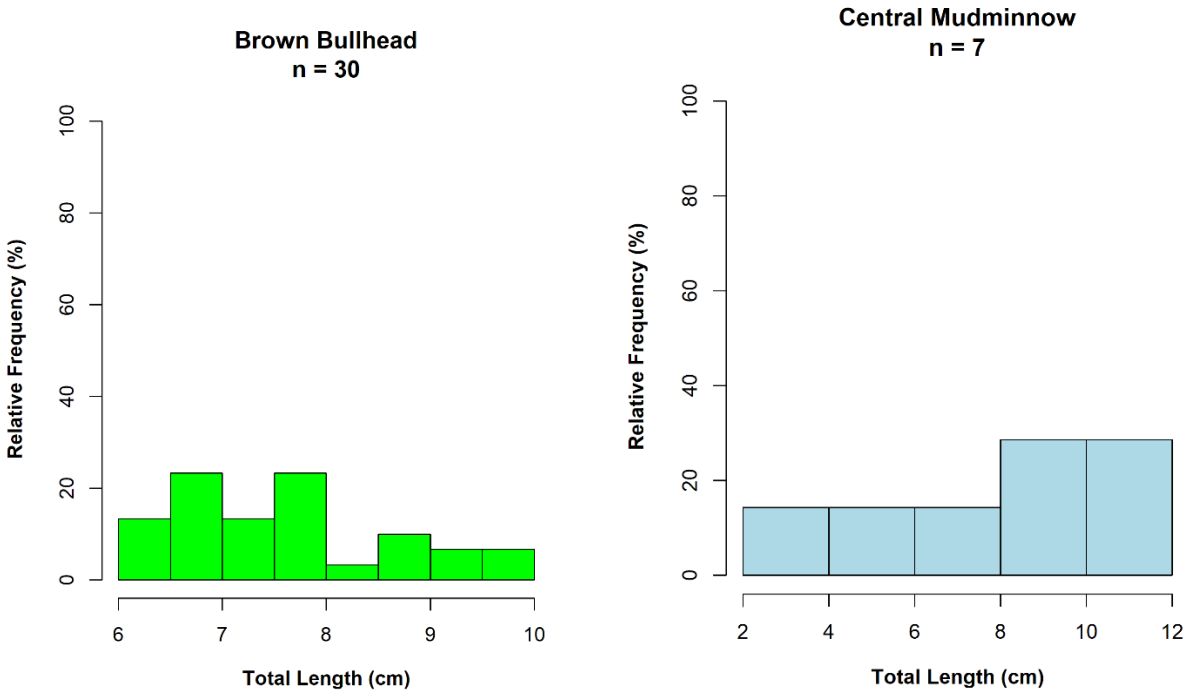


Figure A - 2: Length-frequency Distributions for Fish Collected at West Creek Diversion Channel, Rainy River Mine 2022

Note: Graphs for Blackside Darter (n=1), Common Shiner (n=1), Johnny Darter (n=1), and Northern Pike (n=1) were not displayed as capture numbers were low.

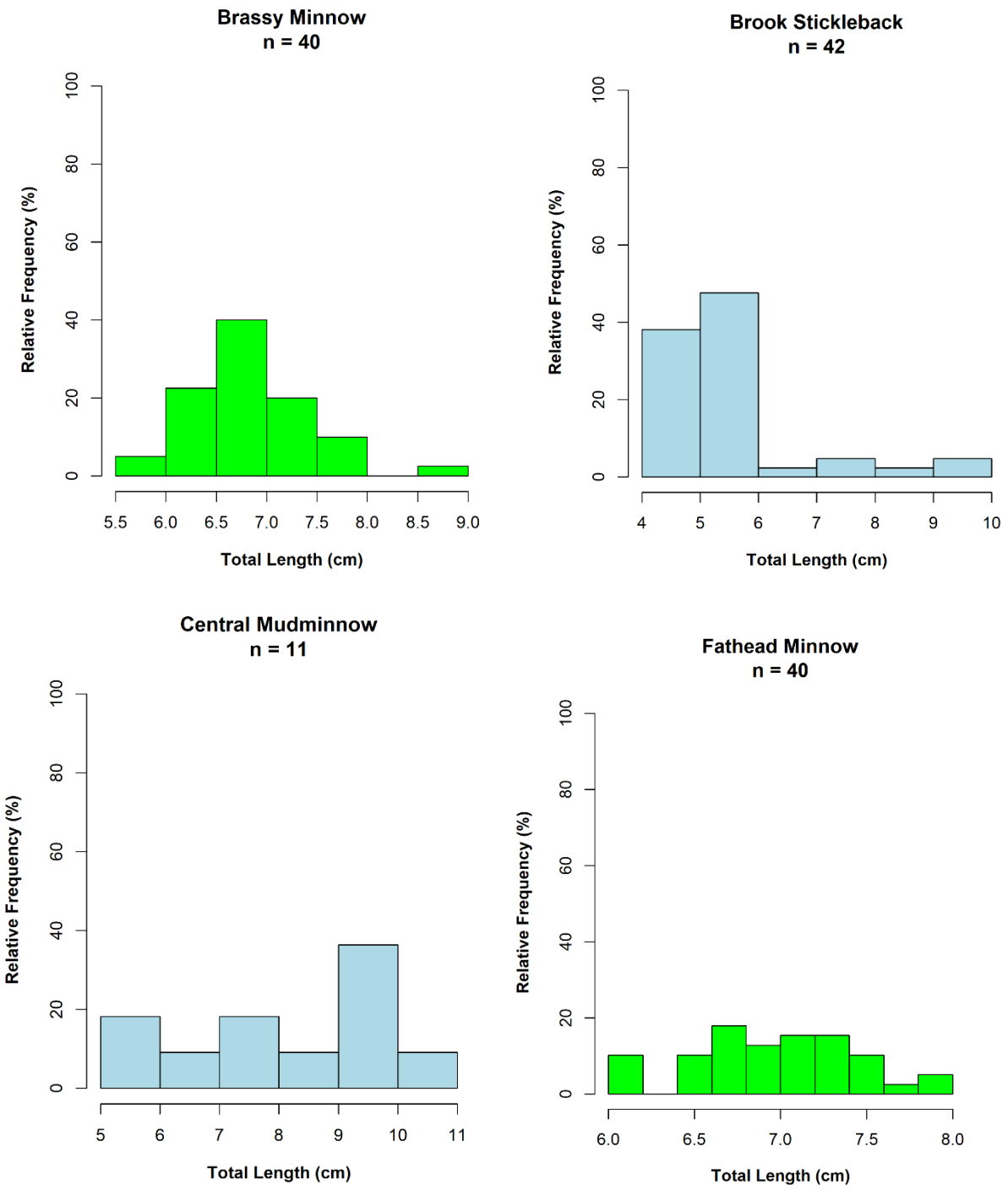


Figure A - 3: Length-frequency Distributions for Fish Collected at Clark Creek Diversion Channel, Rainy River Mine 2022

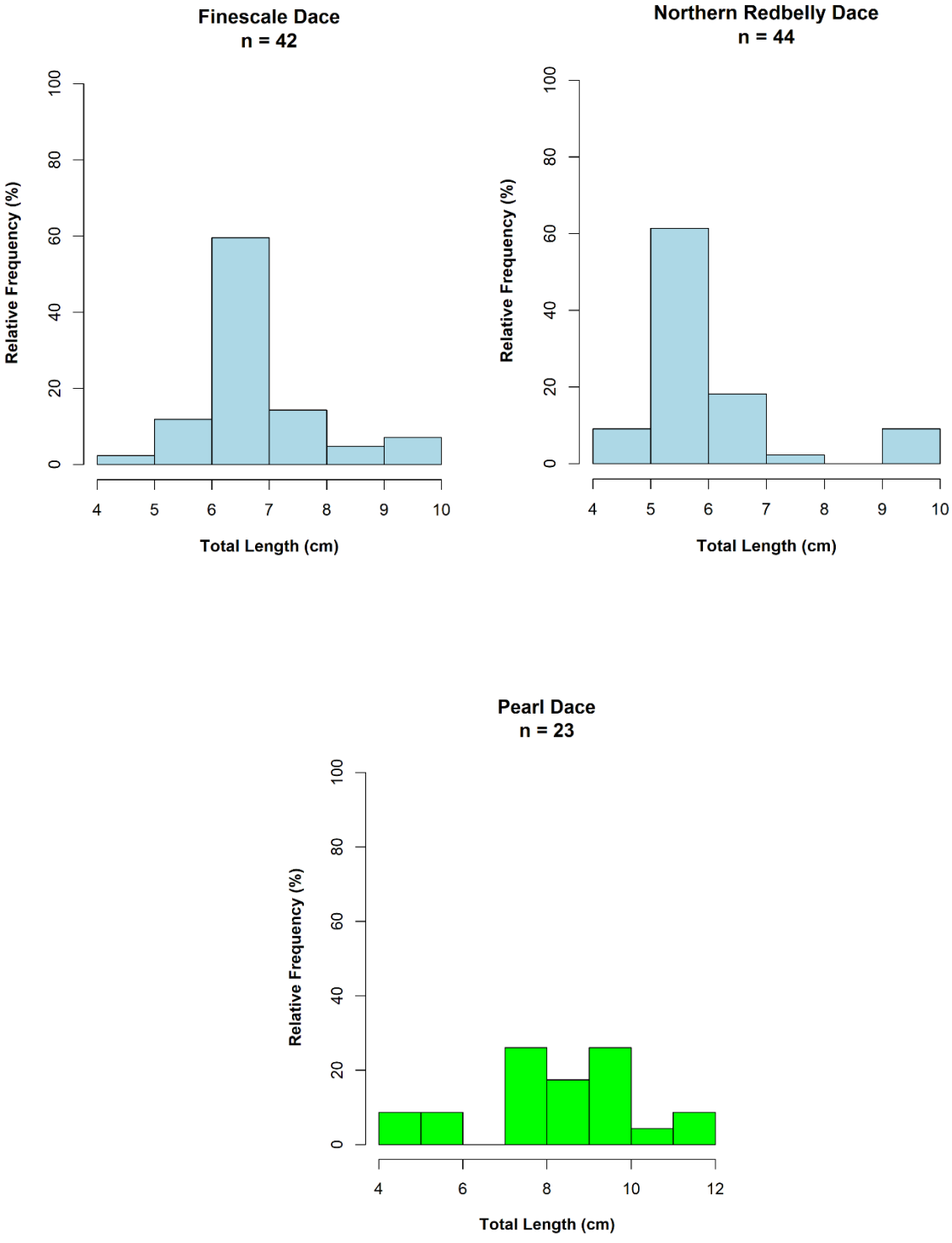


Figure A – 3: Length-frequency Distributions for Fish Collected at Clark Creek Diversion Channel, Rainy River Mine 2022

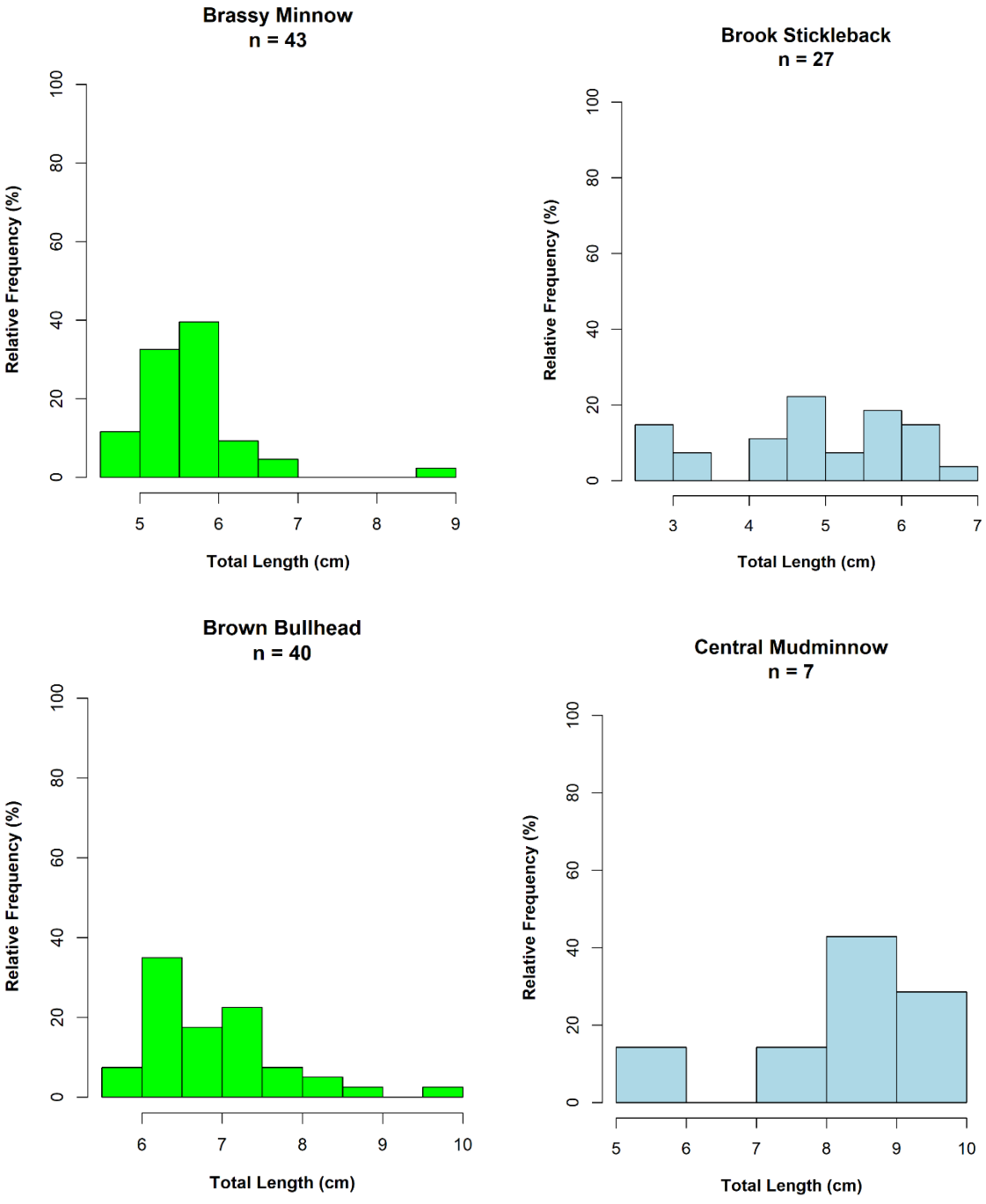


Figure A - 4: Length-frequency Distributions for Fish Collected at Stockpile Pond Diversion Channel, Rainy River Mine 2022

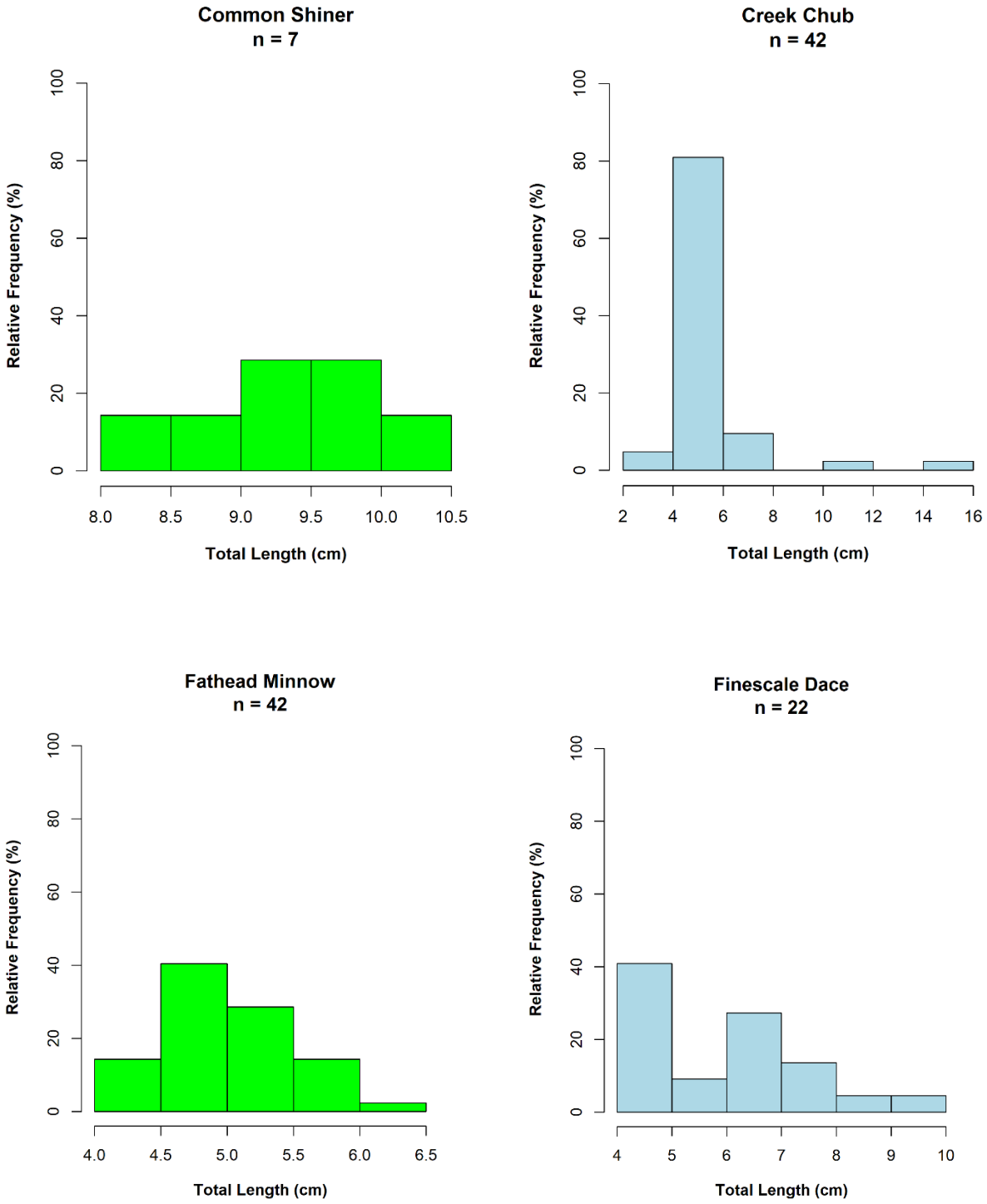


Figure A-4: Length-frequency Distributions for Fish Collected at Stockpile Pond Diversion Channel, Rainy River Mine 2022

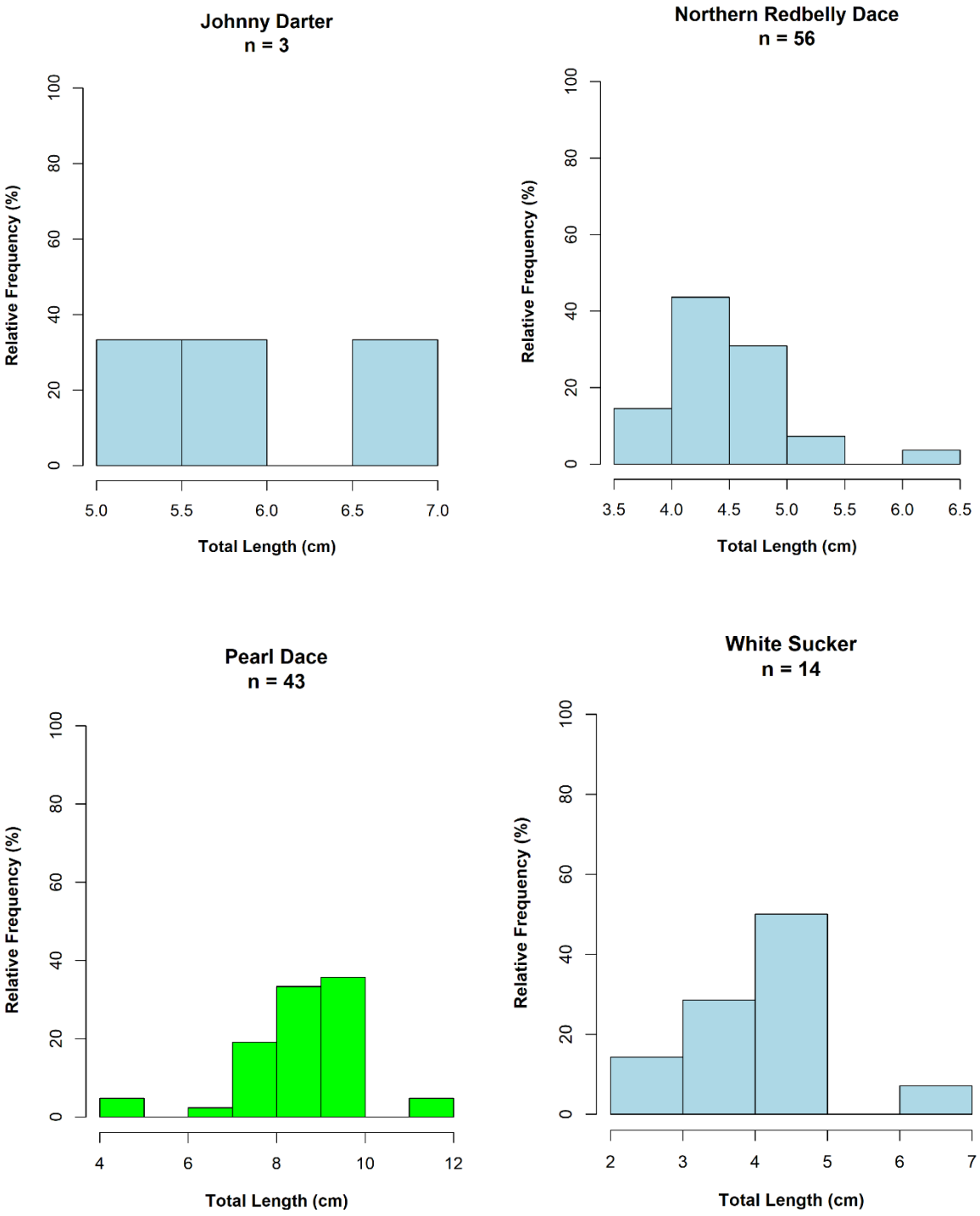


Figure A-4: Length-frequency Distributions for Fish Collected at Stockpile Pond Diversion Channel, Rainy River Mine 2022

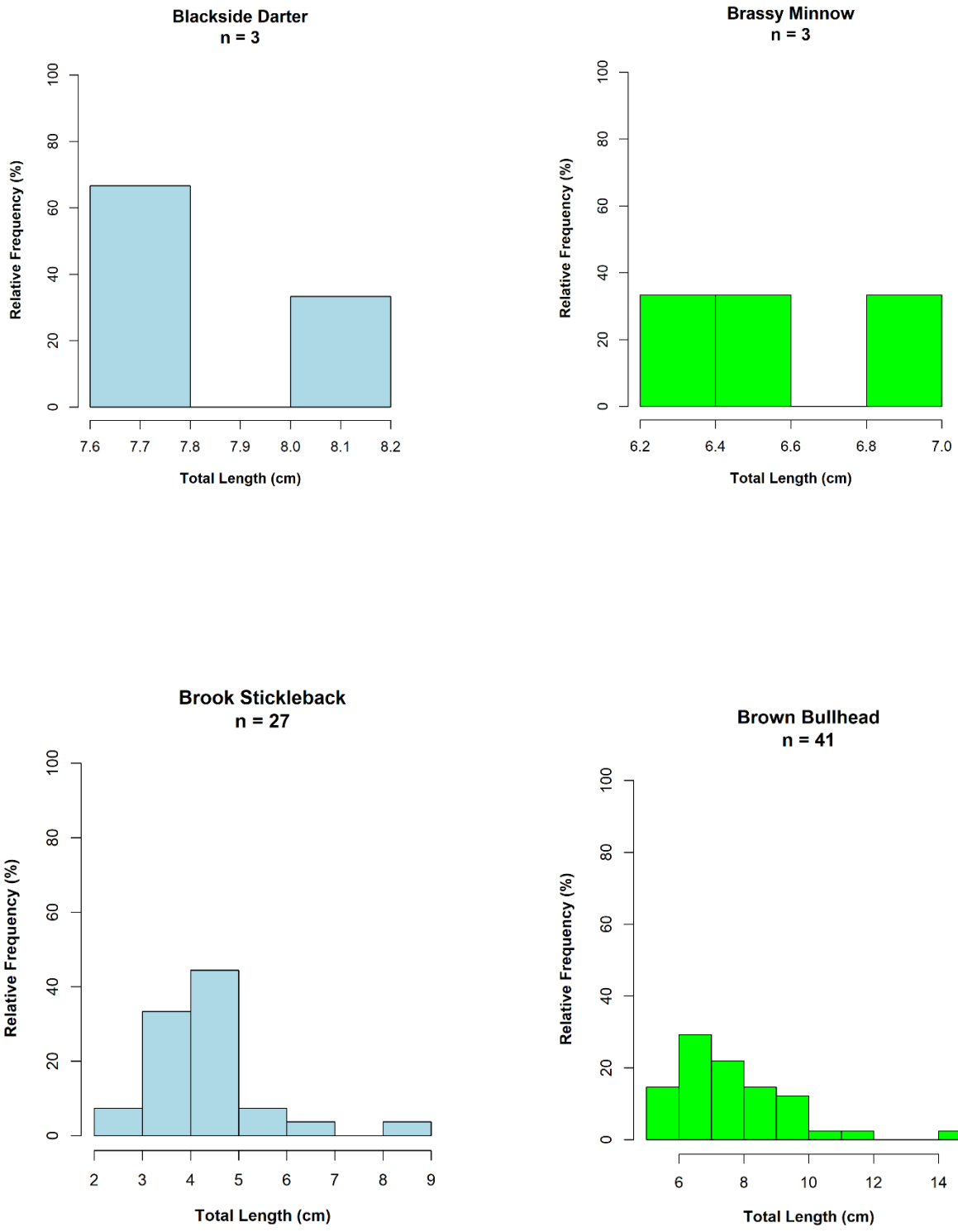


Figure A - 5: Length-frequency Distributions for Fish Collected at West Creek Pond, Rainy River Mine 2022

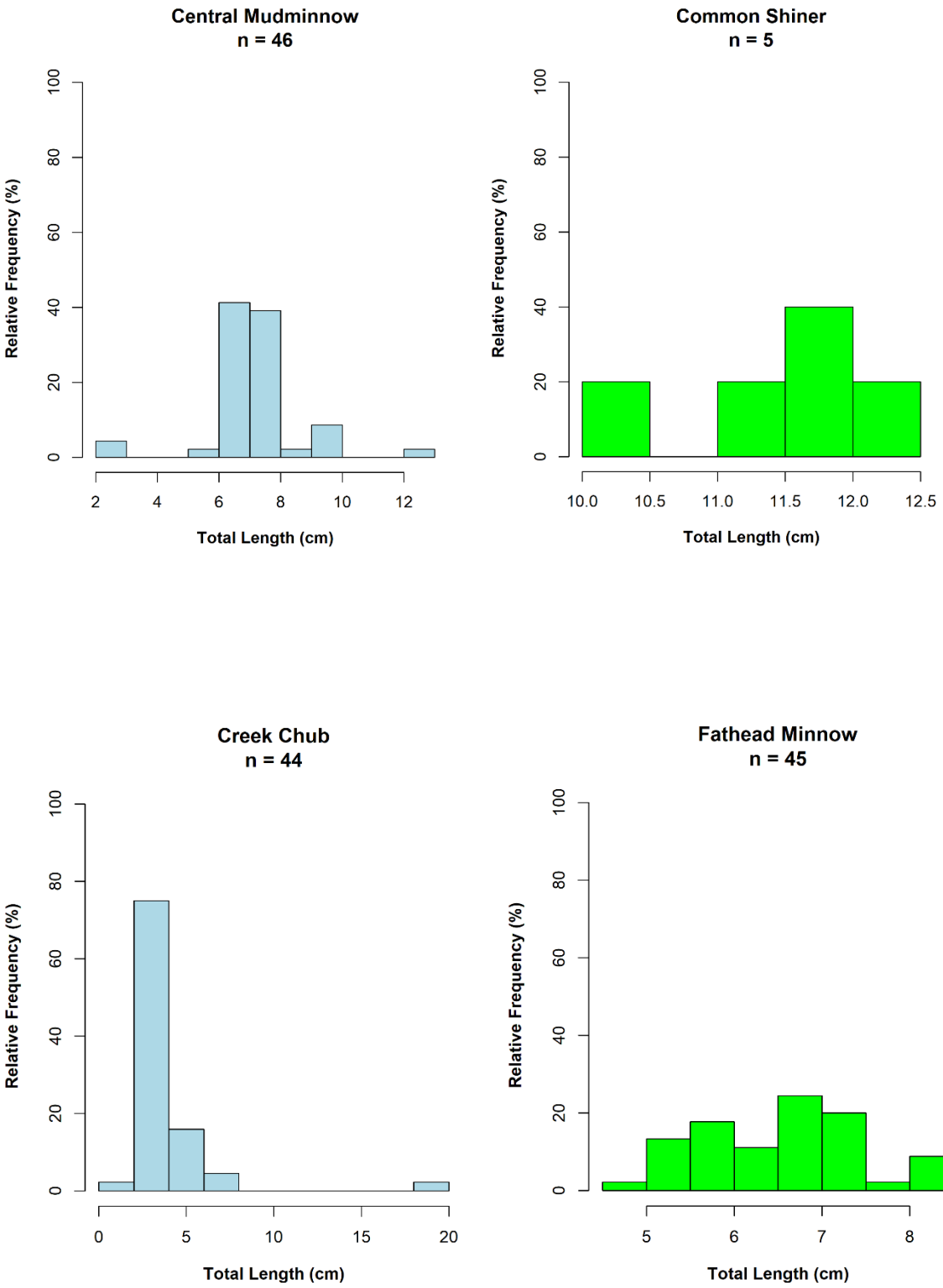


Figure A-5: Length-frequency Distributions for Fish Collected at West Creek Pond, Rainy River Mine 2022

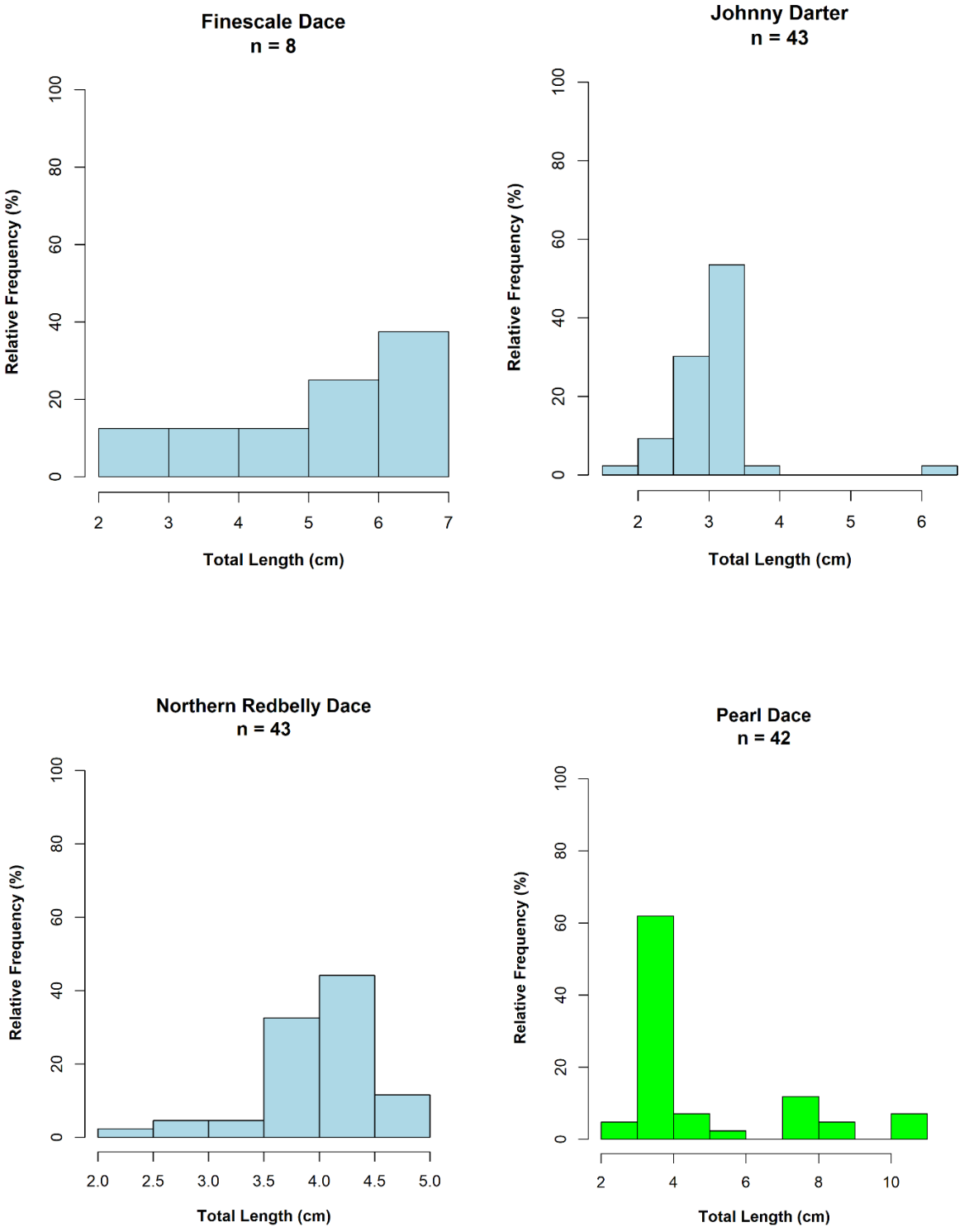


Figure A-5: Length-frequency Distributions for Fish Collected at West Creek Pond, Rainy River Mine 2022

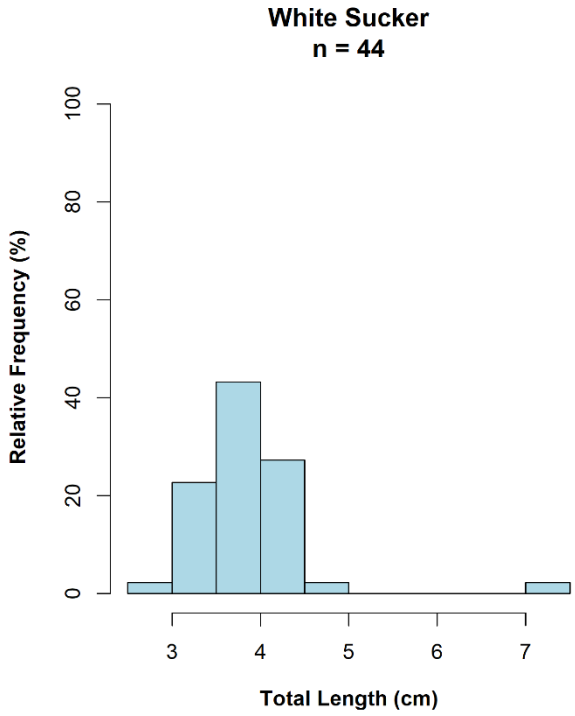


Figure A-5: Length-frequency Distributions for Fish Collected at West Creek Pond, Rainy River Mine 2022

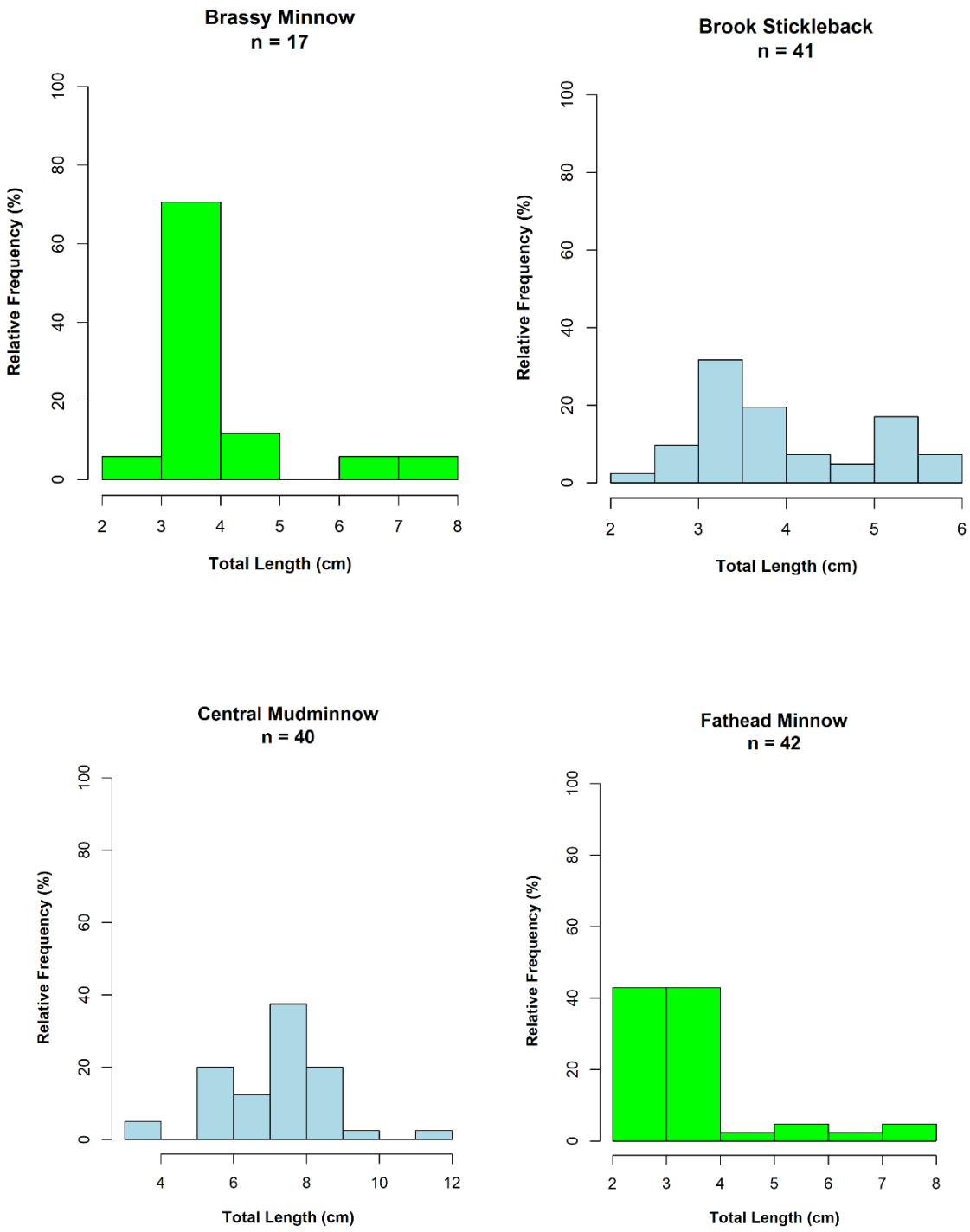


Figure A - 6: Length-frequency Distributions for Fish Collected at Clark Creek Pond, Rainy River Mine 2022

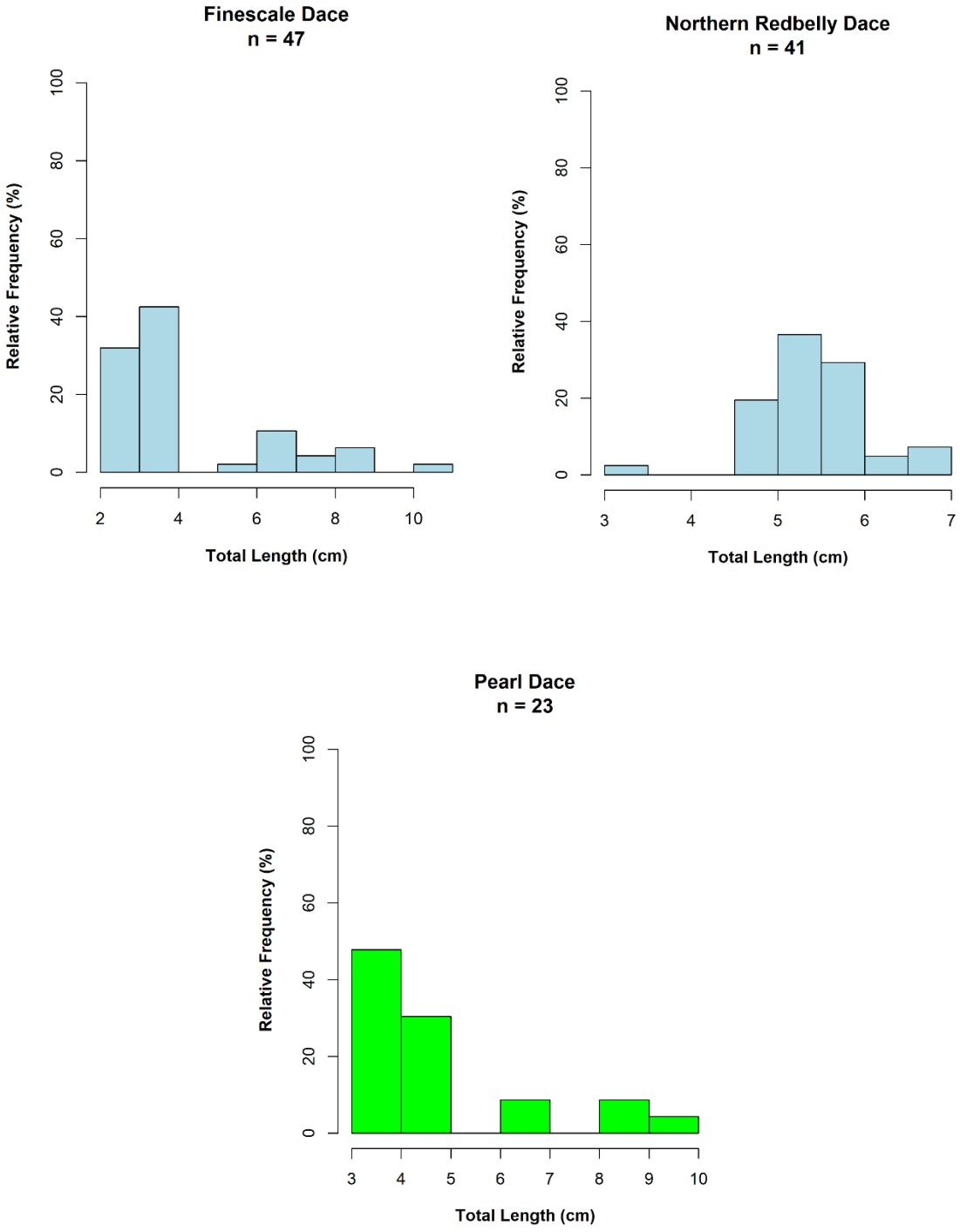


Figure A-6: Length-frequency Distributions for Fish Collected at Clark Creek Pond, Rainy River Mine 2022

Appendix B Photos

Figure B - 1: Stockpile Pond Diversion Channel Habitat, May 2022

Stockpile Pond Diversion Channel May 2022 (SPDC-2)	Stockpile Pond Diversion Channel May 2022 (outlet of Stockpile Pond)
	
Stockpile Pond Diversion Channel May 2022 (SPDC-1)	**Stockpile Pond Diversion Channel May 2022 (SPDC-3)**
	

Figure B - 2: Stockpile Pond Diversion Channel Habitat, July 2022

Stockpile Pond Diversion Channel (at outlet for Stockpile Pond- SPDC-5) – July 2022	Stockpile Pond Diversion Channel (SPDC-4) – July 2022
	

Figure B - 3: West Creek Diversion Channel (upstream of haul road), May 2022

West Creek Diversion Channel – May 2022 (WCDC-1)	West Creek Diversion Channel – May 2022 (WCDC-5)
	
West Creek Diversion Channel – May 2022 (WCDC-6)	**West Creek Diversion Channel – May 2022 (WCDC-8)**
	

Figure B - 4: West Creek Diversion Channel (downstream of haul road), May 2022

West Creek Diversion Channel – May 2022 (WCDC-A1)	West Creek Diversion Channel – May 2022 (WCDC-A5)
	
West Creek Diversion Channel – May 2022 (WCDC-A6)	**West Creek Diversion Channel – May 2022 (WCDC-A7)**
	

Figure B - 5: West Creek Diversion Channel (upstream of haul road), July 2022

West Creek Diversion Channel – July 2022 (WCDC-1)	West Creek Diversion Channel – July 2022 (WCDC-5)
	
West Creek Diversion Channel – July 2022 (WCDC-6)	**West Creek Diversion Channel – July 2022 (WCDC-8)**
	

Figure B - 6: West Creek Diversion Channel (downstream of haul road), July 2022

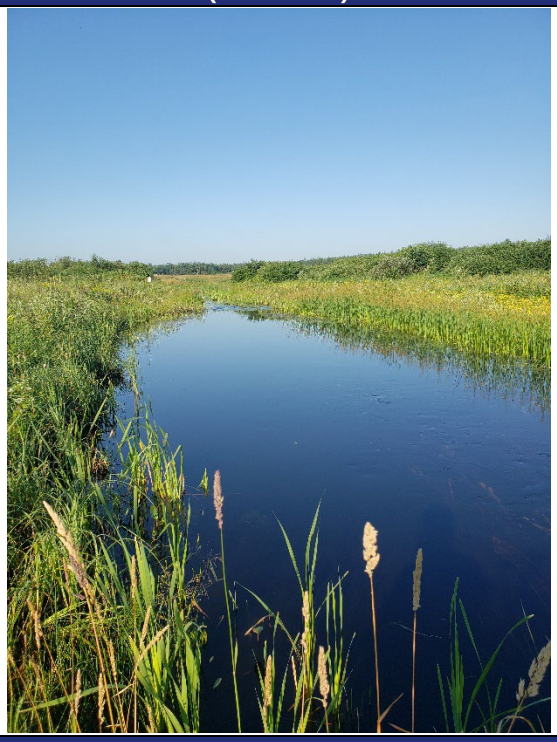
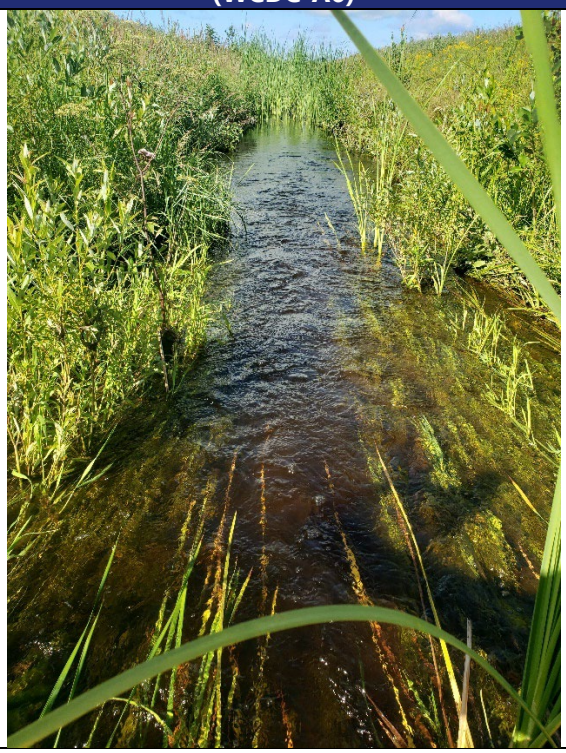
West Creek Diversion Channel – July 2022 (WCDC-A1)	West Creek Diversion Channel – July 2022 (WCDC-A5)
	
West Creek Diversion Channel – July 2022 (WCDC-A6)	**West Creek Diversion Channel – July 2022 (WCDC-A7)**
	

Figure B - 7: Clark Creek Diversion Channel Habitat, May 2022

Clark Creek Diversion Channel – May 2022 (CCDC-1)	Clark Creek Diversion Channel – May 2022 (CCDC-3)
	
Clark Creek Diversion Channel – May 2022 (CCDC-5)	**Clark Creek Diversion Channel – May 2022 (CCDC-6)**
	

Figure B - 8: Clark Creek Diversion Channel Habitat, July 2022

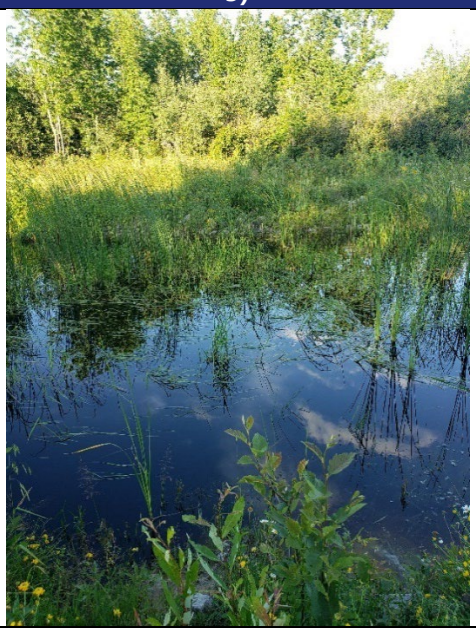
Clark Creek Diversion Channel – July 2022	Clark Creek Diversion Channel – July 2022 (CCDC-3)
	
Clark Creek Diversion Channel – July 2022 (CCDC-5)	**Clark Creek Diversion Channel – July 2022 (CCDC-6)**
	

Figure B - 9: West Creek Pond Habitat, July 2022

West Creek Pond Habitat – July 2022	West Creek Pond Habitat – July 2022
	
West Creek Pond Habitat – July 2022	
	

Figure B - 10: Clark Creek Pond Habitat, July 2022

Clark Creek Pond Habitat – July 2022	Clark Creek Pond Habitat – July 2022
	
Clark Creek Pond Habitat – July 2022	**Clark Creek Pond Habitat – July 2022**