Status and Trends in Streamflow and Water Chemistry

Coppermine River and Lockhart River Watersheds

Government of Northwest Territories

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SLR Project No.: 205.030233.00001

February 23, 2026

Revision: 0

Revision Record

Revision	Date	Prepared By	Checked By	Authorized By
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Executive Summary

Climate-related stresses and disturbances, along with development pressures, have the potential to substantially alter flow and surface water chemistry within northern watersheds. Because these alterations could potentially affect ecosystem function, and the social, cultural, and economic interests of northern residents, there is an interest in understanding the magnitude and extent of changes over time.

In 2025, SLR Consulting Ltd. was retained by the Government of the Northwest Territories (GNWT) to undertake an evaluation of the status and trends of streamflow and water chemistry in the Coppermine River and Lockhart River watersheds. To complete this evaluation, the existing flow and water chemistry data were obtained, analyzed, and used to characterize current conditions, assess spatial variability and autocorrelation, describe seasonal cycles, and evaluate temporal trends in river streamflow and water chemistry.

The Coppermine River is approximately 450 km in length with an estimated watershed area of 50,800 km^2. Lac du Sauvage, Northwest Territories (NT), is the headwater lake of the Coppermine River, which then flows in a generally northward direction and finally discharges into the Arctic Ocean near the community of Kugluktuk, Nunavut (NU). The Coppermine River watershed is primarily defined by two physiographic regions: the Slave Geological Province (SGP) to the south and the Bear Geological Province (BGP) to the north. The SGP is characterized by the predominance of igneous granitic rock, while the northern BGP is dominated by sedimentary rock: these differences in geology affect the chemical and physical characteristics of the water in the Coppermine River. There is also an abundance of lakes in the southern reach of the Coppermine River watershed, which regulates streamflow and attenuates seasonal cycles in streamflow by storing large volumes of water. In the northern reach there are fewer lakes, which results in more variability in the seasonal hydrological cycle and associated surface water chemistry.

At lake-affected hydrometric stations in the southern reach of the Coppermine River watershed, water levels and streamflow increased each year during spring freshet, and peak flow occurred during the summer recession, while in river-dominated stations in the northern reach of the Coppermine River, maximum water levels and streamflow occurred during spring freshet and subsided relatively rapidly during the summer recession. While the overall quantity of water within Coppermine River watershed has remained stable over time, as indicated by the absence of a trend in median annual streamflow, there have been shifts in the seasonal distribution of streamflow towards higher winter and freshet streamflow and lower streamflow during the summer.

Temporal trends analysis indicates that water chemistry in the Coppermine River has changed over the past 25 years. Increasing temporal trends of high or very high significance were identified for the cations calcium, magnesium, potassium, sodium and strontium, and for the analytes hardness and conductivity. Most of these trends occurred at the outlet of Lac de Gras at site LDGO and were attenuated moving downstream such that there were no increasing trends of high or very high significance in the Coppermine River Upstream of Copper Creek at site COR04.

Despite the temporal trends in water chemistry in the southern reach of the Coppermine River, the surface waters currently remain slightly acidic to circumneutral, very soft, dilute and oligotrophic, and in the northern reach are still slightly alkaline, soft, dilute and oligotrophic to mesotrophic. In general, water quality remains excellent, with few and only sporadic exceedances of available water quality guidelines.

The Lockhart River is approximately 400 km in length with an estimated watershed area of approximately 26,600 km^2. From the headwaters of Starfish Lake, the Lockhart River flows predominantly southeast through many lakes and finally discharges into the east arm of Great Slave Lake. In contrast to the Coppermine River watershed, the Lockhart River watershed is contained entirely within the SGP and is consistently dominated by igneous granitic rock. The Lockhart River watershed is, however, bisected by the treeline and the zone of continuous permafrost. The southern portion of the watershed contains boreal forest and discontinuous permafrost while the northern portion is characterized by tundra with continuous permafrost.

Lockhart River at Outlet of Artillery Lake, the primary hydrometric station in the lower Lockhart River watershed, exhibited a lake-dominated hydrograph, evidenced by less variability through the year, higher winter baseflows, an attenuated spring freshet, and a prolonged period of increasing streamflow through the summer recession, all regulated by storage from Artillery Lake upstream. Although there was considerable year-to-year variability in flow at this station, there were no significant temporal trends in annual or seasonal streamflow through the entire period of record (50 years) or over the past 10 years.

Temporal trends analysis indicates that water chemistry in the Lockhart River has changed over the past 25 years. Increasing temporal trends of high or very high significance were identified for the cations magnesium, potassium, sodium and strontium, and the analytes alkalinity, hardness, dissolved organic carbon, and conductivity. Most of these trends occurred in the lower reach of the Lockhart River, although there were also a number of increasing temporal trends identified across the watershed.

Despite the temporal trends in water chemistry in the Lockhart River, the surface waters remain slightly acidic to circumneutral, very soft, dilute, and oligotrophic. In general, water quality also remains excellent, with few and sporadic exceedances of available water quality guidelines.

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Glossary, Acronyms, and Abbreviations

BCWQG	British Columbia Water Quality Guidelines
BGP	Bear Geological Province
CCME	Canadian Council of Ministers for the Environment
CV	Coefficient of Variation (STD/Mean)
DOC	Dissolved Organic Carbon
DQO	Data Quality Objective
D:T Ratio	Dissolved:Total Metals Ratio
ECCC	Environment and Climate Change Canada
FDC	Flow Duration Curve
FEQG	Federal Environmental Quality Guidelines
GNWT	Government of the Northwest Territories
High	The highest value still within normal range
IQR	Interquartile Range (75^{th} percentile – 25^{th} percentile)
Julian Day	The numbered day of the year (between 1 and 365)
Low	The lowest value still within normal range
Max	The maximum value in a set of surface water data
Min	The minimum value in a set of surface water data
N	Number of samples
nND	Number of non-detect samples
NT	Northwest Territories
NU	Nunavut
POR	Period of Record
p-value	Probability value
RPD	Relative Percent Difference
SE	The standard error of the set of data (STD/√N)
SGP	Slave Geological Province
Spatial Autocorrelation	The extent to which an analyte is correlated with itself through space
STD	Standard Deviation
TDS	Total Dissolved Solids
Watershed Yield	The total volume of water that flows out of a watershed in a given year
WQG	Water Quality Guideline
WSC	Water Survey of Canada
<DL	Below Detection Limit



Km^2	Square Kilometers
NTU	Nephelometric Turbidity Units
L	Litre
µS	Micro Siemens
cm	Centimetre
mg	Milligram
mm	Millimetre
%	Percent
%ND	Percent non-detect samples
m^3	Cubic Metres
s	Second
10th	The tenth percentile of a set of surface water data
25th	The twenty-fifth percentile of a set of surface water data
75th	The seventy-fifth percentile of a set of surface water data
90th	The ninetieth percentile of a set of surface water data

1.0 Introduction

Since 1948 there has been an approximately 2.3ºC increase in air temperature in the Canadian north (Bush et al. 2019), nearly three times the mean warming rate of the planet. Identified stresses and disturbances related to climate change include permafrost thaw, increased threat of forest fires, warmer surface water temperatures, and changes to the hydrological seasons. These climate-related stresses and disturbances, along with development pressures, have the potential to substantially alter surface water flow and chemistry within northern watersheds. Because these alterations could potentially affect ecosystem function, and the social, cultural, and economic interests of northern residents, understanding the magnitude and extent of changes over time are important.

In 2025, SLR Consulting Ltd. was retained by the Government of the Northwest Territories (GNWT) to undertake an evaluation of the status and trends of streamflow and water chemistry in the Coppermine River and Lockhart River watersheds. To complete this evaluation, the existing hydrological data record from six monitoring stations, and the existing water chemistry data from 21 monitoring sites, was obtained and used to assess spatial variability and autocorrelation, describe seasonal cycles, and evaluate temporal trends in river streamflow and water chemistry.

The following report also provides an update to a previous study published in 2015 that evaluated status and trends in streamflow and water chemistry in the Coppermine River and Lockhart River watersheds (Stantec 2015).

1.1 Study Area

The Coppermine River watershed straddles the Northwest Territories (NT)/Nunavut (NU) border while the Lockhart River watershed is located entirely within the borders of the Northwest Territories (Figure 1-1). These watersheds have been identified as two of the most culturally important and biologically pristine river systems in the Canadian Central Arctic (Stantec 2015) and the Coppermine River has been designated as a Canadian Heritage River (CHRS 2025). Both watersheds are characterized by long, cold winters and short, cool summers.

1.1.1 Coppermine River

The Coppermine River is approximately 350 km in length with an estimated watershed area of 50,800 km^2 (Figure 1-1). Lac du Sauvage, NT, is the headwater lake of the Coppermine River, which then flows in a generally northward direction through Lac de Gras, Desteffany Lake, Lake Providence, Point Lake, Redrock Lake and Rocknest Lake, and finally discharges into the Arctic Ocean near the community of Kugluktuk, NU.

As discussed in Stantec (2015) and Deck (2020), the Coppermine River watershed is primarily defined by two physiographic regions: the Slave Geological Province (SGP) to the south and the Bear Geological Province (BGP) to the north (Figure 1-2). The division between the two physiographic regions occurs near Rocknest Lake. Both regions are almost entirely within the zone of continuous permafrost.

The Coppermine River watershed is characterized by the predominance of igneous granitic rock within the SGP to the south and sedimentary rock within the BGP to the north.
These differences in geology affect the chemical and physical characteristics of the water in the Coppermine River (Deck 2020).

There is also an abundance of lakes in the southern (upper) reach of the Coppermine River watershed (Figure 1-3), which naturally regulate streamflow and attenuate seasonal cycles in streamflow by storing large volumes of water. In the northern reach there are fewer lakes, which results in a relatively variable seasonal hydrological cycle and associated alterations in surface water chemistry (Stantec 2015).

There are two active diamond mines within the upper Coppermine River watershed, the Ekati diamond mine in operation since 1998 and the Diavik diamond mine in operation since 2003, both located within the Lac de Gras watershed. Other development pressures in the Coppermine River watershed include several exploration projects for diamonds and base metals and the potential for road construction in the region.

Prior to development of the mines in the upper watershed, it was determined that Lac de Gras naturally contained waters with the following characteristics (Deton' Cho Stantec 2015):

- Clear with median turbidity of 0.30 NTU;
- Slightly acidic to circumneutral with median pH of 6.7;
- Very soft with median total hardness less than 7 mg $CaCO_3$/L;
- Dilute with median specific conductivity less than 17 µS/cm; and
- Oligotrophic to ultra-oligotrophic, with median total phosphorus less than 0.010 mg/L and median total nitrogen less than 0.24 mg/L.

Following development, subsequent assessments have indicated consistent increasing temporal trends in Lac de Gras and Desteffany Lake for strontium, chloride, sulphate, sodium, pH, hardness, and conductivity, in addition to noted increases in aluminum, arsenic, calcium, iron, magnesium, molybdenum, nickel, sodium, and uranium (Deck 2020; Deton' Cho Stantec 2015; Stantec 2015).

In the northern (lower) reach of the Coppermine River, just upstream of Copper Creek and unaffected by mine development, chemistry was characterized as being different than in the southern reach (Stantec 2015), as follows:

- Median turbidity of approximately 3 NTU;
- Circumneutral to slightly alkaline with a median pH of 7.7;
- Soft with median total hardness of approximately 35 mg $CaCO_3$/L;
- Dilute with median specific conductivity of approximately 70 µS/cm; and
- Mesotrophic, with median total phosphorus of 0.020 mg/L and median total nitrogen of 0.24 mg/L.

Stantec (2015) attributed the differences in water chemistry between the southern and northern reaches to the change in geological conditions within the watershed, with igneous granitic bedrock in the southern watershed and sedimentary rock with higher amounts of weathering in the northern watershed.

1.1.2 Lockhart River

The Lockhart River is approximately 400 km in length with the headwaters near Starfish Lake, NT, and with an estimated watershed area of approximately 26,600 km^2 (Figure 1-1). From Starfish Lake, the Lockhart River flows predominantly southeast through Courageous Lake, Snake Lake, MacKay Lake, Aylmer Lake, Clinton-Colden Lake and Artillery Lake, and finally discharges into the east arm of Great Slave Lake (Figure 1-4).

As discussed in Stantec (2015), and in contrast to the Coppermine River watershed, the Lockhart River watershed is contained entirely within the SGP (Figure 1-2) and is consistently dominated by igneous granitic rock. The Lockhart River watershed is, however, bisected by the treeline and the zone of continuous permafrost. The southern portion of the watershed contains boreal forest and discontinuous permafrost while the northern portion is characterized by tundra and continuous permafrost (Figure 1-2).

There are three diamond mines within the Lockhart River watershed, the Snap Lake diamond mine located upstream of MacKay Lake in operation between 2008 and 2015, the Gahcho Kué diamond mine on Kennady Lake that began full operations in 2016, and the Kennady North diamond project which is in advanced exploration. Other notable development pressures in the Lockhart River watershed include the Courageous Lake gold project in advanced exploration, and the Salmita gold mine and Tundra gold mine both of which have been closed and remediated.

In Stantec (2015), water chemistry in the lower reach of the Lockhart River was characterized as follows:

- Clear with median turbidity of 0.37 NTU;
- Circumneutral with median pH of 7.2;
- Very soft with median total hardness less than 6 mg $CaCO_3$/L;
- Dilute with median specific conductivity less than 17 µS/cm; and
- Oligotrophic to ultra-oligotrophic, with median total phosphorus less than 0.010 mg/L and median total nitrogen less than 0.14 mg/L.

Previous assessments indicated increasing temporal trends were identified in the lower reach of the Lockhart River for pH, conductivity, total dissolved solids (TDS), hardness, calcium, total alkalinity, sulphate, and strontium (Stantec 2015).

1.2 Purpose and Objectives

Cumulative effects of diamond mining, base metal exploration, recreational use, and pressures of climate change within the Coppermine River and Lockhart River watersheds require ongoing monitoring and assessment of water quantity and water quality. The goals of the assessment were to:

- Identify seasonal, temporal, and/or spatial differences in water quantity or water chemistry;
- Support cumulative impact assessments of water quantity and water quality in the region;
- Determine if monitoring locations, sampling frequency, and analytes being monitored were sufficient to detect changes in the aquatic environment;

- Help address any concerns of communities located in the watersheds; and
- Support the development of water quality assessment tools for transboundary water management agreements.

The objectives of the work were to:

- Review historical status and trends reports, academic literature, and aquatic effects monitoring reports as provided by the GNWT;
- Review the surface water chemistry data for missing data, outliers, erroneous data, serial correlation, and step changes caused by alterations of detection limits;
- Calculate summary statistics for each analyte for each monitoring location;
- Assess water quality, primarily using CCME water quality guidelines;
- Describe seasonal cycles, spatial variability, and temporal trends in water quantity and water chemistry;
- Examine the relationship between analytes, and between water chemistry and discharge; and
- Assess the historical and existing surface water monitoring programs.



LEGEND:

- WATER QUALITY MONITORING SITE
- WSC HYDROLOGICAL STATION
- MINE
- CAPITAL CITY
- COMMUNITY
- FLOW DIRECTION
- NORTHERN EXTENT OF TREE COVER (TREELINE)
- SOUTHERN EXTENT OF CONTINUOUS PERMAFROST
- HIGHWAY
- WINTER ROAD
- COPPERMINE RIVER WATERSHED AND SUB-BASINS
- LOCKHART RIVER WATERSHED AND SUB-BASINS

MINE SITE COORDINATES

EKATI DIAMOND MINE: 64°42'49"N 110°37'10"W

DIAVIK DIAMOND MINE: 64°29'46"N 110°16'24"W

GAHCHO KUE DIAMOND MINE: 63°26'04"N 109°11'10"W

SNAP LAKE MINE: 63°36'20"N 110°52'00"W

NOTES:

1. PUBLIC BASE DATA PROVIDED BY GOVERNMENT OF NORTHWEST TERRITORIES (GNWT), NATURAL RESOURCES CANADA, THE GEOLOGICAL SURVEY OF CANADA, THE WATER SURVEY OF CANADA, AND NATURAL EARTH.
2. EXTENT OF CONTINUOUS PERMAFROST FROM CIRCUM-ARCTIC MAP OF PERMAFROST AND GROUND-ICE CONDITIONS, VERSION 2 (BROWN, ET. AL., 2002) PROVIDED BY NATIONAL SNOW AND ICE DATA CENTRE.
3. TREELINE PROVIDED BY NATURAL RESOURCES CANADA (ATLAS OF CANADA, NORTHERN CANADA GEODATABASE, 2011).
4. LOCKHART RIVER WATERSHED MODIFIED FROM PUBLIC DATASET IN AREA NEAR GAHCHO KUE DIAMOND MINE.

0 25 50 75 100 km

SCALE: 1:2,500,000

PAGE SIZE 11 x 17

NAD 1983 CSRS Northwest Territories Lambert

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GOVERNMENT OF THE NORTHWEST TERRITORIES
NORTHWEST TERRITORIES, CANADA

STATUS AND TRENDS IN WATER CHEMISTRY AND FLOW

OVERVIEW OF THE COPPERMINE AND LOCKHART RIVER WATERSHEDS

SLR

FIGURE NO: 1

DATE: January 9, 2026

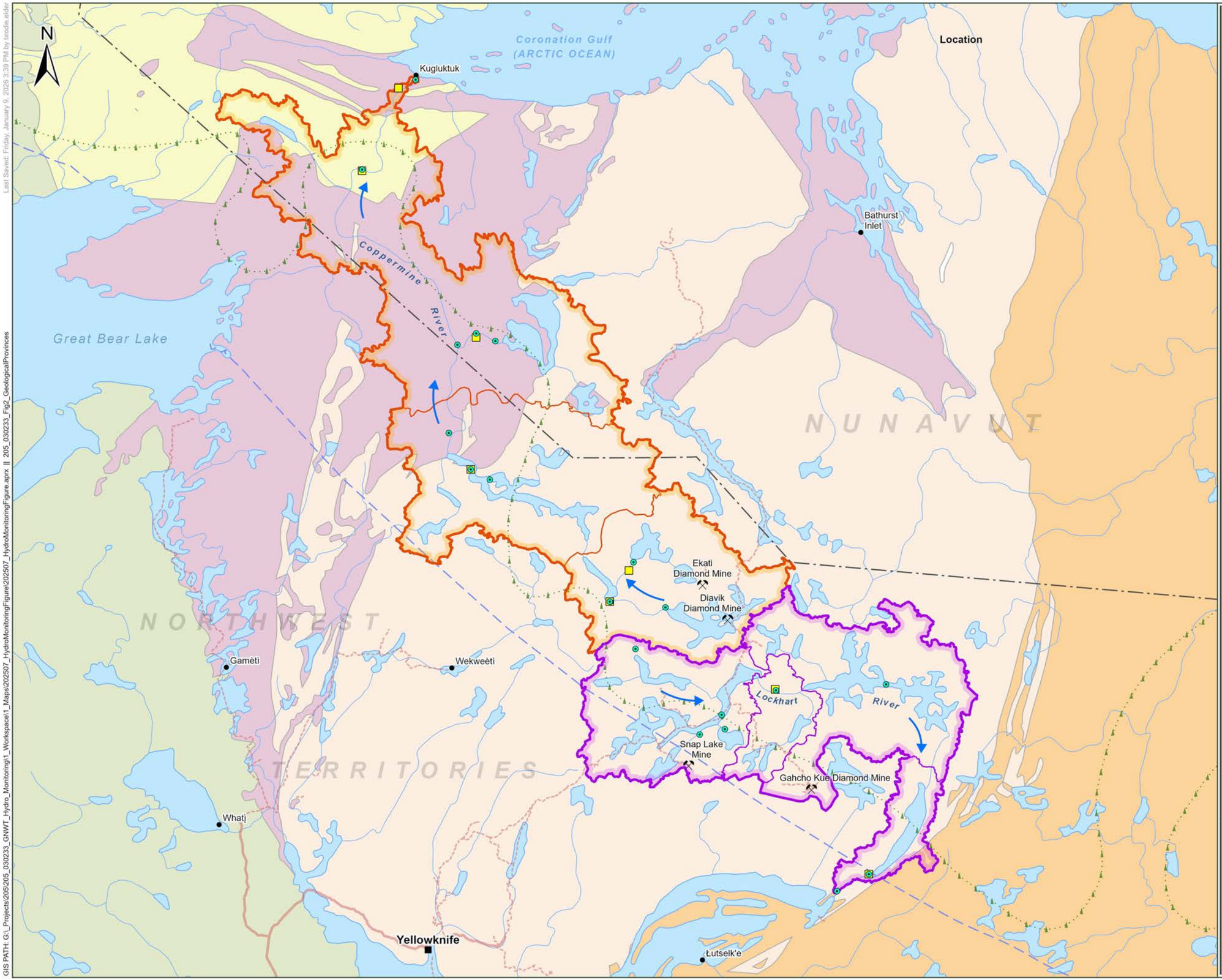
PROJECT NO: 205.030233.00001

Last Saved: Friday, January 9, 2026 3:39 PM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\1_Maps\202507_HydroMonitoringFigure\202507_HydroMonitoringFigure.aprx || 205_030233_Fig1_Overview

Last Saved: Friday, January 9, 2026 3:39 PM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\1_Maps\202507_HydroMonitoringFigure\202507_HydroMonitoringFigure.aprx || 205_030233_Fig2_GeologicalProvinces



LEGEND:

- MINE
- CAPITAL CITY
- COMMUNITY
- FLOW DIRECTION
- NORTHERN EXTENT OF TREE COVER (TREELINE)
- SOUTHERN EXTENT OF CONTINUOUS PERMAFROST
- HIGHWAY
- WINTER ROAD
- COPPERMINE RIVER WATERSHED AND SUB-BASINS
- LOCKHART RIVER WATERSHED AND SUB-BASINS

GEOLOGICAL PROVINCE

- ARCTIC PLATFORM
- BEAR PROVINCE
- CHURCHILL PROVINCE
- INTERIOR PLATFORM
- SLAVE PROVINCE

MINE SITE COORDINATES

EKATI DIAMOND MINE: 64°42'49"N 110°37'10"W

DIAVIK DIAMOND MINE: 64°29'46"N 110°16'24"W

GAHCHO KUE DIAMOND MINE: 63°26'04"N 109°11'10"W

SNAP LAKE MINE: 63°36'20"N 110°52'00"W

NOTES:

1. PUBLIC BASE DATA PROVIDED BY GOVERNMENT OF NORTHWEST TERRITORIES (GNWT), NATURAL RESOURCES CANADA, THE GEOLOGICAL SURVEY OF CANADA, THE WATER SURVEY OF CANADA, AND NATURAL EARTH.
2. EXTENT OF CONTINUOUS PERMAFROST FROM CIRCUM-ARCTIC MAP OF PERMAFROST AND GROUND-ICE CONDITIONS, VERSION 2 (BROWN, ET. AL., 2002) PROVIDED BY NATIONAL SNOW AND ICE DATA CENTRE.
3. TREELINE PROVIDED BY NATURAL RESOURCES CANADA (ATLAS OF CANADA, NORTHERN CANADA GEODATABASE, 2011).
4. LOCKHART RIVER WATERSHED MODIFIED FROM PUBLIC DATASET IN AREA NEAR GAHCHO KUE DIAMOND MINE.

0 25 50 75 100 km

SCALE: 1:2,500,000

PAGE SIZE: 11 x 17

NAD 1983 CSRS Northwest Territories Lambert

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GOVERNMENT OF THE NORTHWEST TERRITORIES
NORTHWEST TERRITORIES, CANADA

STATUS AND TRENDS IN WATER CHEMISTRY AND FLOW

GEOLOGICAL PROVINCES OF THE COPPERMINE AND LOCKHART RIVER WATERSHEDS AND SURROUNDING AREA

SLR

FIGURE NO: **2**

DATE: January 9, 2026

PROJECT NO: 205.030233.00001



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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\1_Maps\202507_HydroMonitoringFigure\202507_HydroMonitoringFigure\205_030233_Fig3_CoppermineRiver_HydroMonitoringFigure.aprx || 205_030233_Fig3_CoppermineRiver

LEGEND:

- WATER QUALITY MONITORING SITE
- WSC HYDROLOGICAL STATION
- COMMUNITY
- FLOW DIRECTION
- NORTHERN EXTENT OF TREE COVER (TREELINE)
- SOUTHERN EXTENT OF CONTINUOUS PERMAFROST
- WINTER ROAD
- COPPERMINE RIVER WATERSHED
- SUB-BASIN [2]

MINE SITE COORDINATES

EKATI DIAMOND MINE: 64°42'49"N 110°37'10"W

DIAVIK DIAMOND MINE: 64°29'46"N 110°16'24"W

NOTES:

1. PUBLIC BASE DATA PROVIDED BY GOVERNMENT OF NORTHWEST TERRITORIES (GNWT), NATURAL RESOURCES CANADA, THE GEOLOGICAL SURVEY OF CANADA, THE WATER SURVEY OF CANADA, AND NATURAL EARTH.
2. EXTENT OF CONTINUOUS PERMAFROST FROM CIRCUM-ARCTIC MAP OF PERMAFROST AND GROUND-ICE CONDITIONS, VERSION 2 (BROWN, ET. AL., 2002) PROVIDED BY NATIONAL SNOW AND ICE DATA CENTRE.
3. TREELINE PROVIDED BY NATURAL RESOURCES CANADA (ATLAS OF CANADA, NORTHERN CANADA GEODATABASE, 2011).
4. LOCKHART RIVER WATERSHED MODIFIED FROM PUBLIC DATASET IN AREA NEAR GAHCHO KUE DIAMOND MINE.

0 25 50 75 100 km

SCALE: 1:1,600,000

PAGE SIZE 11 x 17

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GOVERNMENT OF THE NORTHWEST TERRITORIES
NORTHWEST TERRITORIES, CANADA

STATUS AND TRENDS IN WATER CHEMISTRY AND FLOW

COPPERMINE RIVER WATERSHED

SLR

FIGURE NO: **3**

DATE: January 9, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\1_Maps\202507_HydroMonitoringFigure\202507_HydroMonitoringFigure.aprx || 205_030233_Fig4_LockhartRiver

N

NUNAVUT

NORTHWEST TERRITORIES

Ekati Diamond Mine

Diavik Diamond Mine

Gahcho Kue Diamond Mine

Snap Lake Mine

Thonokied Lake

Starfish Lake

Courageous Lake

Outram Lakes

Aylmer Lake

Clinton-Colden Lake

Lockhart River

MacKay Lake

Back Lake

Margaret Lake

Lake of the Enemy

King Lake

Camsell Lake

Lockhart Lake

Lac de Charloit

Ptarmigan Lake

Artillery Lake

Great Slave Lake

STL

07RB001

LOR01

CCO

MCL

LEL

KIL

LOR02

07RD001

LOR03

Location



LEGEND:

- WATER QUALITY MONITORING SITE
- WSC HYDROLOGICAL STATION
- FLOW DIRECTION
- NORTHERN EXTENT OF TREE COVER (TREELINE)
- SOUTHERN EXTENT OF CONTINUOUS PERMAFROST
- WINTER ROAD
- LOCKHART RIVER WATERSHED
- SUB-BASIN

MINE SITE COORDINATES

EKATI DIAMOND MINE: 64°42'49"N 110°37'10"W

DIAVIK DIAMOND MINE: 64°29'46"N 110°16'24"W

GAHCHO KUE DIAMOND MINE: 63°26'04"N 109°11'10"W

SNAP LAKE MINE: 63°36'20"N 110°52'00"W

NOTES:

1. PUBLIC BASE DATA PROVIDED BY GOVERNMENT OF NORTHWEST TERRITORIES (GNWT), NATURAL RESOURCES CANADA, THE GEOLOGICAL SURVEY OF CANADA, THE WATER SURVEY OF CANADA, AND NATURAL EARTH.
2. EXTENT OF CONTINUOUS PERMAFROST FROM CIRCUM-ARCTIC MAP OF PERMAFROST AND GROUND-ICE CONDITIONS, VERSION 2 (BROWN, ET. AL., 2002) PROVIDED BY NATIONAL SNOW AND ICE DATA CENTRE.
3. TREELINE PROVIDED BY NATURAL RESOURCES CANADA (ATLAS OF CANADA, NORTHERN CANADA GEODATABASE, 2011).
4. LOCKHART RIVER WATERSHED MODIFIED FROM PUBLIC DATASET IN AREA NEAR GAHCHO KUE DIAMOND MINE.

0 10 20 30 40 50 km

SCALE: 1:925,000

PAGE SIZE 11 x 17

NAD 1983 CSRS Northwest Territories Lambert

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GOVERNMENT OF THE NORTHWEST TERRITORIES
NORTHWEST TERRITORIES, CANADA

STATUS AND TRENDS IN WATER CHEMISTRY AND FLOW

LOCKHART RIVER WATERSHED

SLR

FIGURE NO: **4**

DATE: January 9, 2026

PROJECT NO: 205.030233.00001

2.0 Methods

The GNWT Water Monitoring and Stewardship Division along with the Water Survey of Canada (WSC) and Environment and Climate Change Canada (ECCC) maintain a network of surface water monitoring sites and hydrometric stations in both the Coppermine River and Lockhart River watersheds. Since 2000, seasonal surface water monitoring has been consistently carried out following the development of the Ekati and Diavik diamond mines.

2.1 Hydrology

2.1.1 Monitoring Stations

Hydrometric data collected by the WSC were available up to 2023 for a total of eight monitoring stations within the Coppermine River and Lockhart River watersheds (Table 2 1; Figure 1 1). Methods associated with the handling of missing data can be found in Section 2.1.6.

Table 2-1: Hydrometric Monitoring Stations

Station Name	Station ID	Latitude	Longitude	Period of Record	Watershed Area (km^2)
Coppermine River Watershed					
Coppermine River Downstream of Desteffany Lake (DEL)	10PA001	64º 36’ 57”	111º 57’ 17”	1994-2023	6,120
Yamba River Downstream of Daring Lake (DAL)	10PA002	64º 48’ 24”	111º 40’ 41”	2000-2023	2,010
Coppermine River at Outlet of Point Lake (COR02)	10PB001	65º 24’ 57”	114º 0’ 28 “	1965-2023	19,200
Fairy Lake River Near Outlet of Napaktulik Lake (FAR)	10PC005	66º 13’ 42”	113º 59’ 29”	1993-2023	6,440
Coppermine River Above Copper Creek (COR04)	10PC004	67º 13’ 14”	115º 53’ 3”	1987-2023	46,200
Coppermine River Upstream of Bloody Falls (COR06)	10PC003	67º 44’ 25”	115º 22’ 43”	1983-1986	50,700
Lockhart River Watershed					
Lockhart River Above Outram Lake (LOR01)	07RB001	64° 03' 24"	109°37'56"	2017-2023	9,980
Lockhart River at Outlet of Artillery Lake (LOR02)	07RD001	62º 53’ 39”	108º 27’ 58”	1944-2023	26,600
Note: Text in brackets are corresponding surface water monitoring sites (See Table 2-3).					

2.1.2 Data Management

The hydrometric data set was not complete, with periods of missing data at all stations. Stations with years of missing hydrometric data (Table 2-2) comprised the following:

- Station Coppermine River Upstream of Bloody Falls (ID 10PC003) consisted of only three years of data and was therefore removed from further analysis.
- Station Lockhart River at Outlet of Artillery Lake (ID 07RD001) was missing 12 years of consecutive data (1950 to 1962) followed by periods of intermittent missing data until 1968. Thus, only data from 1968 onwards were analyzed in detail.
- Station Lockhart River Above Outram Lake (07RB001) only had seven years of data since its installation in 2017 and thus was not included in any trend analyses. To perform a Mann-Kendall trend analysis, a minimum of ten data points is recommended, which provides 45 comparisons and a robust assessment. General summary analysis was still completed for this site.

In addition to the absence of complete years of data in the hydrometric record, periods of missing data within years also occurred (Table 2 2). Therefore, an investigation into the proportion of within-year missing data was completed for each subset of data corresponding to the chosen trend analyses (outlined in Section 2.1.5). If greater than 20% of the data were missing in the subset period relevant to each trend analysis metric within a year, then data from that year were removed from the trend analysis.

Table 2-2: Number of Missing Years by Class or Category

Class or Category	Station					
	10PA001	10PA002	10PB001	10PC005	10PC004	07RD001
	Period of Record					
	1994-2023	2000-2023	1965-2023	1993-2023	1987-2023	1968-2023
Seasonal Median Streamflow						
Winter	1	NA	1	NA	NA	NA
Spring	5	1	1	3	3	1
Summer	1	NA	NA	1	NA	NA
Freshet Day of Year	5	1	1	3	3	1
Monthly Median Streamflow						
January	6	1	1	1	2	NA
February	6	3	1	2	2	NA
March	7	2	NA	2	2	NA
April	8	2	1	2	3	NA
May	9	1	1	3	7	1
June	6	NA	1	2	6	1
July	3	NA	NA	1	1	NA
August	1	NA	NA	2	1	NA
September	1	NA	NA	1	1	NA
October	1	NA	1	NA	2	NA
November	5	NA	1	2	2	NA
December	5	NA	1	2	2	NA
30-day Low Streamflow						
Winter	4	NA	1	NA	1	NA
Summer	1	NA	NA	1	NA	NA
Annual Streamflow						
Daily Max	NA	NA	1	NA	NA	NA
Daily Min	NA	NA	1	NA	NA	NA
Median	NA	NA	1	NA	NA	NA

Note: Missing years may be completely absent from the WSC record or removed due to greater than 20% missing data for that period. NA indicates there were no years with missing data.



2.1.3 Seasonal Cycles - Annual Hydrograph

An annual hydrograph for each station was generated to characterize monthly streamflow through the period of record. The fasstr package in R was used to generate the annual hydrograph for each station (Goetz, 2024; R Core Team, 2024). The annual hydrographs comprised the following monthly streamflow statistics:

- Mean and median monthly streamflow;
- 25th and 75th percentile of monthly streamflow;
- 5th and 95th percentiles of monthly streamflow; and
- Minimum and maximum monthly streamflow.

Period of record summary statistics for each hydrometric station are located in Appendix C.1.

2.1.4 Annual Variability

To visualize the annual variability, deviation from the daily mean was plotted across the entire period of record for each site as in HDR (2015). Deviation from average conditions was calculated by subtracting the average daily flow from each daily flow value (for corresponding days), then dividing by the corresponding daily standard deviation to generate a Z-score. The Z-score was then plotted against time, with values that were higher than average corresponding to wet periods, and values that were lower than average corresponding to dry years. The 25th and 75th percentile of the entire record for all days was included in each plot to provide a visual representation of wet or dry periods that are markedly different from average.

2.1.5 Spatial Variability

To investigate the spatial variability of streamflow across the watersheds, long-term mean annual discharge at each station was calculated and plotted in R package ggplot2 (Wickham, 2016) from upstream to downstream to visualize how streamflow changed throughout the watershed.

In addition, the watershed area-adjusted metric of mean annual yield (mm/year) was also calculated and plotted for each station to account for differences in drainage area that affected streamflow magnitude.

Mean annual watershed yield is influenced by several factors such as physiography, topography, precipitation, elevation, permafrost, and vegetation. It provides insight into how effectively a watershed converts precipitation into streamflow. Higher mean annual watershed yields generally indicate wetter climatic conditions, greater snow accumulation and melt contributions, or watershed characteristics that promote runoff, such as shallow soils, steep terrain, low evapotranspiration, or limited storage. Lower yields may reflect drier climates, higher evapotranspiration, greater infiltration to groundwater, extensive wetland or lake storage, or strong regulation by permafrost and soil properties.

2.1.6 Temporal Trends Analysis

Temporal trends in streamflow were assessed in R using the Mann-Kendall test (“Kendall” package, McLeod 2005) across the entire period of record as well as in the most recent decade (2013 to 2023).



As the number of statistical tests completed increased, the probability of a Type 1 Error, or the observation of a significant result when there isn't one, increased. Therefore, consistent with Stantec (2015), the level of significance increased with a decreasing p-value as follows:

- Marginal significance at $p < 0.05$;
- Moderate significance at $p < 0.01$;
- High significance at $p < 0.001$; and
- Very high significance at $p < 0.0001$.

Temporal trends for the following hydrologic metrics were investigated:

- Seasonal median streamflow;
- Freshet day of year;
- Monthly median streamflow;
- 30-day low streamflow during both summer recession and winter baseflow;
- Annual daily maximum streamflow;
- Annual daily minimum streamflow; and
- Annual daily median streamflow.

The seasons outlined in the temporal trends analysis were defined by inspection of the annual hydrograph and were established consistent with Stantec (2015). Winter baseflow was defined as the period with extended minimum baseflow, which occurred over the winter months from November 1 to April 30 when the waterbodies were ice-covered. Spring freshet was characterized by a rapid increase in streamflow coincident with the snowmelt period from May 1 to June 30. Summer recession was characterized by the period of gradual streamflow recession following freshet, during the summer and into the cooler fall months (July 1 to October 31).

All analyses were completed in reference to the water year, which was considered to begin on October 1st of each year and end on September 30th of the subsequent year (Stantec 2015). The water year was designated by the year in which it ended (i.e. October 2024, was considered a part of the 2025 water year). The water year is useful in hydrological analyses because it considers the natural water cycle where precipitation that falls in the winter does not melt and contribute to streamflow until the subsequent spring.

A linear regression was calculated for those temporal trends of at least moderate significance. The regression was initially developed on the entire dataset, after which outliers were identified and removed from the dataset using boxplot analysis. Outliers were defined as those data with residuals greater than the 75th percentile of the residual data plus 1.5 times the interquartile range (IQR), or approximately the 99th percentile of the data assuming a normal distribution.

Time series figures are in Appendix C.2.



2.1.7 Flow Duration Curves

A flow duration curve plots streamflow against the probability that each flow is met or exceeded, providing information about the distribution of streamflow magnitudes throughout the period of interest. The flow exceedance probability is calculated by the following equation (R Core Team, 2024):

$$P = 100\ \frac{M}{(n+1)}$$

Where P is the probability that a given flow will be equalled or exceeded, M is the ranked position of the streamflow value when the dataset is arranged from low to high values, and n is the number of streamflow events for the period of record. Note that the return period is the inverse of the flow exceedance probability.

A Flow Duration Curve (FDC) of the entire hydrometric record and the most recent decade was generated for each hydrometric station. The FDC provides a visual assessment of whether the magnitude of flow for specific return periods has increased (i.e., a relative increase in streamflow) or decreased (i.e., a relative decrease in streamflow) over the past ten years in comparison with the entire period of record.

Flow duration curves are in Appendix C.3.

2.2 Water Chemistry

Surface water analytes that are monitored in the Coppermine River watershed and the Lockhart River watershed comprise routine analytes, physical attributes, major ions, nutrients, and total metals and dissolved metals.

The following subsections provide descriptions of the methods used to characterize seasonal cycles and spatial variability, to assess temporal trends, and to screen for water quality guideline exceedances.

2.2.1 Surface Water Monitoring Sites

The sites selected for analysis within this report comprise 13 sites in the Coppermine River watershed and 8 sites in the Lockhart River watershed (Table 2-3). There are four types of sites that were used in this study;

- Tributaries: Sites located on smaller tributaries to the Coppermine River;
- River: Sites located in the Coppermine River or Lockhart River mainstem;
- Lake: Sites located in separate and distinct lakes in the Coppermine River or Lockhart River watersheds; and
- *Lake: Sites called lakes but that are located in relatively wide reaches of the mainstem of the Coppermine River or Lockhart River. These are not lakes in the traditional sense, with distinct and defined inlets and outlets, and so are separately identified.

Table 2-3: Water Chemistry Monitoring Sites

Sample Site Description	Site ID	Type	Latitude (N)	Longitude (W)
Coppermine River Watershed				
Lac de Gras Outlet	LDGO	*Lake	64° 34' 40"	111° 09' 30"
Desteffany Lake (10PA001)	***DEL***	*Lake	64° 36' 51"	111° 56' 53"
Coppermine River Downstream of Desteffany Lake	COR01	River	64° 36' 56"	111° 57' 16"
Daring Lake (10PA002)	***DAL***	Tributary	64° 51' 28"	111° 36' 41"
Point Lake	POL	*Lake	65° 21' 23"	113° 43' 18"
Coppermine River at Outlet of Point Lake (10PB001)	***COR02***	River	65° 24' 57"	114° 00' 28"
Rocknest Lake	ROL	*Lake	65° 38' 06"	114° 21' 09"
Fairy Lake	FAL	Lake	66° 12' 37"	113° 41' 46"
Fairy Lake River Upstream of Coppermine River (10PC005)	***FAR***	Tributary	66° 15' 13"	113° 59' 29"
Coppermine River Downstream of Fairy Lake River	COR03	River	66° 10' 46"	114° 16' 18"
Coppermine River Upstream of Copper Creek (10PC004)	***COR04***	River	67° 13' 44"	115° 53' 17"
Coppermine River Downstream of Copper Creek	COR05	River	67° 13' 39"	115° 53' 3"
Coppermine River at the Mouth (10PC003)	***COR06***	River	67° 47' 52"	115° 6' 23"
Lockhart River Watershed				
Starfish Lake	STL	Lake	64° 19' 26"	111° 35' 26"
King Lake	KIL	Lake	63° 47' 31"	110° 42' 20"
Lake of the Enemy	LEL	Lake	63° 49' 18"	110° 21' 16"
MacKay Lake	MCL	Lake	63° 54' 38"	110° 23' 37"
Lockhart River Upstream of Outram Lakes (07RB001)	***LOR01***	River	64° 03' 22"	109° 37' 21"
Clinton-Colden Outlet	CCO	*Lake	64° 03' 49"	108° 04' 28"
Lockhart River at Outlet of Artillery Lake (07RD001)	***LOR02***	River	62° 53' 38"	108° 27' 57"
Lockhart River at the Mouth	LOR03	River	62° 48' 01"	108° 54' 20"
Notes: Bold and italicized sites are sites paired with a hydrometric station (in brackets) - see Figure 1-1 for locations, * indicates a lake site on a wide reach of the river.				

2.2.2 Data Management

2.2.2.1 Surface Water Chemistry Period of Record

The period of record was variable among the 21 sites selected for this report, with the period of record ranging from only 3 years for site Coppermine River Downstream of Copper Creek (COR05) to 56 years at site Lockhart River at Outlet of Artillery Lake (LOR02) (Table 2-4). The consistency of sample collection was also variable, with missing years within the specific period of record for each site (Table 2-4).

The analysis of surface water data focused on those sites with the longest period of record with few data gaps, and on those stations with surface water data current to 2024 or 2025. This assessment was limited to surface water data that was available through March 2025.

Table 2-4: Surface Water Chemistry Data Record

Site Description	Site ID	POR	Years	Data Gap (yr)
Coppermine River Watershed - South				
Lac de Gras Outlet	**LDGO**	2000-2025	26	0
Desteffany Lake	**DEL**	2001-2024	24	0
Coppermine River Downstream of Desteffany Lake	COR01	1995-2025	31	19
Daring Lake	**DAL**	2003-2025	23	0
Point Lake	**POL**	2001-2025	25	0
Coppermine River at Outlet of Point Lake	COR02	1972-2024	53	19
Coppermine River Watershed - North				
Rocknest Lake	**ROL**	2006-2025	20	0
Fairy Lake	FAL	2006-2009	4	0
Fairy Lake River Upstream of Coppermine River	FAR	2001-2006	6	0
Coppermine River Downstream of Fairy Lake River	COR03	2001-2006	6	0
Coppermine River Upstream of Copper Creek	**COR04**	2000-2024	25	0
Coppermine River Downstream of Copper Creek	COR05	2001-2003	3	0
Coppermine River at the Mouth	COR06	1960-2003	44	26
Lockhart River Watershed				
Starfish Lake	**STL**	2015-2025	11	0
King Lake	**KIL**	2006-2025	20	0
Lake of the Enemy	**LEL**	2006-2025	20	0
MacKay Lake	**MCL**	2006-2025	20	0
Lockhart River Upstream of Outram Lakes	**LOR01**	2015-2025	11	2
Clinton-Colden Outlet	**CCO**	2015-2024	10	1
Lockhart River at Outlet of Artillery Lake	**LOR02**	1969-2024	56	1
Lockhart River at the Mouth	LOR03	1982-2010	29	0

POR = Period of Record; Years = Number of years through POR; Data Gap = Missing years through POR - Data Gaps are the total number of missing years and could be either continuous or discontinuous through the period of record; Bold = Data record suitable for temporal trends analysis.

2.2.2.2 Data Quality Assessment

The data quality was assessed by calculation of Relative Percent Difference (RPD) on replicate samples and on calculation of the Dissolved:Total metal ratios. Travel blanks and trip blanks were also used within the monitoring programs but were not included in the scope of this report.

Relative Percent Difference

An assessment of RPD was carried out with the duplicate samples that were collected through the last five years, as follows:

$$\%\, RPD = \frac{2 * (|X_1 - X_2|)}{(X_1 + X_2)} * 100$$

Where:

X_1 = concentration of an analyte in the first sample

X_2 = concentration of the same analyte in the duplicate sample.

An RPD of less than 20% was considered an acceptable difference, whereas an RPD greater than 20% was considered as potentially the result of sampling or analytical error. An RPD analysis was only completed for those analytes where both values were greater than five times the detection limit (ENV 2020). A complete listing of RPD results is in Appendix A.1, with a summary of results in Section 3.2.1.1.

Dissolved:Total Metal Ratios

A comparison between dissolved metal and total metal concentrations was completed, as follows:

$$D{:}T\ Metal\ Ratio = \frac{dissolved\ metal\ concentration}{total\ metal\ concentration}$$

Total metal concentrations include both metals dissolved in water and metals present as particulates in water. Therefore, the total metal concentration should always be greater than or equal to the dissolved metal concentration. The analytes for which the dissolved metal concentrations exceeded the total metal concentrations by more than 20% and both concentrations were at least five times the detection limit (ENV 2020) were identified: these results were considered potentially the result of filtration or analytical error. A complete listing of the D:T ratio results from the past 20 years are in Appendix A.2, with a summary of results from the last ten years in Section 3.2.1.2.

2.2.3 Surface Water Summary Statistics

Time series of the surface water data were developed for all sites and for analytes with a consistent and current data record to provide a comprehensive time series record of water chemistry within the Coppermine River and Lockhart River watersheds. The time series data are in Appendix B.1.

The surface water data were summarized (Table 2-5) for all analytes, for all seasons, and for all sites using base R capability as well as packages dplyr, tidyr, readr, and lubridate for data manipulation (Wickham et.al, 2025a; Wickham et al. 2025b; Wickham et al. 2024; Grolemund and Wickham, 2011). Following a conservative approach, for data reported as below detection limit (<DL) a value equal to the detection limit was used to calculate summary statistics (Helsel et al. 2020; Section 12.7; Stantec 2015).



The complete summary tables are in Appendix B.2 for the Coppermine River watershed sites and in Appendix B.3 for the Lockhart River watershed sites.

Table 2-5: Summary Statistics

Parameter	Description
N	Sample size
nND	Number of samples reported as below the non-detection limit
%ND	Percentage of samples reported as below the non-detection limit
Min	The minimum recorded value in the set of data
Low	Low limit of Normal Range: The lowest recorded value in the set of data still within the 25th percentile minus 1.5XInterquartile Range (IQR)
10th	The 10th percentile of the set of data
25th	The 25th percentile of the set of data
Mean	The average value for the set of data, including outliers
Median	The 50th percentile of the set of data
75th	The 75th percentile of the set of data
90th	The 90th percentile of the set of data
High	Upper limit of Normal Range: The highest recorded value in the set of data still within the 75th percentile plus 1.5XInterquartile Range (IQR)
Max	The maximum recorded value in the set of data
STD	The standard deviation of the set of data
SE	The standard error of the set of data (STD/√N)
CV	Coefficient of variation (STD/Mean)

2.2.4 Spatial Variability

Screening and graphical representation of spatial variability was undertaken for those analytes with the following characteristics:

- Unique, as the primary analyte (the analyte with the most complete data record when there were duplicate names for the same analyte);
- Consistent, with a regular set of data with few, if any, data gaps;
- Comprehensive, with data available through entire period of record and for most sites, and;
- Current, with data available through to 2024/2025.

The boxplots were developed using base R capability as well as packages dplyr, tidyr, readr, and lubridate for data manipulation (Wickham et.al, 2025a; Wickham et al. 2025b; Wickham et al. 2024; Grolemund and Wickham, 2011). The complete graphical results for the screening of spatial variability are in Appendix B.4.

Based on the data record (Table 2-4), spatial variability from upstream to downstream was further described within the report using sites LDGO, DEL, DAL, POL, ROL and COR4 on the Coppermine River, and sites STL, KIL, LEL, MCL, LOR01, CCO and LOR02 on the Lockhart River.

The analytes selected for further discussion of spatial variability within the report was based on the results of previous work (Stantec 2015; Deton Cho Stantec 2015; Deck 2020) and comprised the following:

- Physical attributes: pH, conductivity;
- Major ions: total alkalinity, hardness, calcium, magnesium, potassium, sodium, and sulphate;
- Nutrients: total phosphorus, dissolved organic carbon, total nitrogen, and chlorophyll*a*; and
- Metals: strontium.

Data were characterized using box and whisker plots, which were used because boxplots are non-parametric and therefore make no assumptions regarding the distribution of the data, are resistant to outliers, and can accommodate up to 25% non-detect data. For each boxplot, the lower line represents the 25th percentile of the data, the middle line represents the 50th percentile of the data (i.e. median), and the upper line represents the 75th percentile of the data. The whiskers represent the normal range of the data, defined as the maximum value within the 75th percentile plus 1.5 times the IQR and as the minimum value within the 25th percentile minus 1.5 times the IQR. The maximum and minimum values approximate the 99th percentile of the data, assuming a normal distribution. However, because the distribution of surface water chemistry data is commonly lognormal, in practice the normal range as defined using boxplots typically encompassed approximately 95% of the data. Values greater than or less than the limits to normal range were considered outliers in the data. Extreme outliers greater than the 75th percentile plus 3.0 times the IQR or less than the 25th percentile minus 3.0 times the IQR were identified and removed from the data presentation. Note that outliers are not necessarily erroneous data, but are also potentially correct but unusual data within the context of the entire set of data.

2.2.4.1 Surface Water Characterization

For several of the analytes listed above, there are defined categories for characterization of the analyte. These analytes comprise pH, total alkalinity, hardness, chlorophyll*a*, and the nutrients total phosphorus and total nitrogen.

pH

The pH of surface waters can be characterized as acidic (pH<6.5), circumneutral (6.5<pH<7.5), or alkaline (pH>7.5). Acidic surface waters are often located in watersheds dominated by granitic rock or in dystrophic wetlands containing elevated concentration of humic materials. Alkaline surface waters, in contrast, are often found in watersheds dominated by sedimentary rock with a high content of calcium and magnesium carbonates.

Total Alkalinity

The alkalinity of surface waters provides the buffering capacity that stabilizes pH – the higher the total alkalinity, the lower the sensitivity of an aquatic ecosystem to acidifying emissions (Table 2-6). Ecosystems with a high sensitivity have a total alkalinity of less than 10 mg $CaCO_3$/L, while the least sensitive aquatic ecosystems have a total alkalinity of greater than 40 mg $CaCO_3$/L (Table 2-6).

Table 2-6: Sensitivity of Aquatic Ecosystems to Acidifying Emissions

Acid Sensitivity	Total Alkalinity (mg/L CaCO3)	Acid Neutralizing Capacity (µeq/L)
High	0 to 10	0 to 200
Moderate	>10 to 20	>200 to 400
Low	>20 to 40	>400 to 800
Least	>40	>800
Source; Saffron and Trew (1996)		

Hardness

Hardness is defined as the sum of all multivalent cations in surface waters, but the primary cations that produce hardness are calcium and magnesium. Hardness categories are related to aesthetic drinking water standards and range from very soft to very hard (Table 2-7). An upper range for public acceptance is often considered to be surface waters that are classified as medium hard to hard.

Table 2-7: Classification of Hardness for Drinking Water

Category	Hardness (mg $CaCO_3$/L)
Very Soft	<30
Soft	30-60
Medium Hard	60-120
Hard	120-180
Very Hard	>180
Source: Health Canada (2025)	

Trophic Status

Trophic status is the measure of the productivity of an aquatic ecosystem. The primary indicator is chlorophyll*a* concentration, because that is what defines productivity (Table 2-8).
The potential trophic status can also be determined using total nitrogen or total phosphorus (Table 2-8).

Table 2-8: Trophic Status of Flowing Surface Water

Endpoint (units)	Oligotrophic	Mesotrophic	Eutrophic
Sestonic Chlorophyll*a* (µg/L)	<10	10 to 30	>30
Total Nitrogen (mg/L)	<0.7	0.7 to 1.5	>1.5
Total Phosphorus (mg/L)	<0.025	0.025 to 0.075	>0.075
Source: Dodds (1998)			

2.2.5 Seasonal Cycles

Screening and graphical representation of seasonal variability was undertaken for analytes representative of analyte categories (metals, major ions, and physical parameters) and for all sites with boxplots developed using R package NADA2 (Julian and Helsel 2021). The complete graphical results for the screening of seasonal variability are in Appendix B.5.

For the detailed analysis and discussion of seasonal cycles, however, sites were selected with the largest dataset, comprising two upstream sites and one downstream site for the Coppermine River watershed, and one downstream site for the Lockhart River watershed, as follows:

- Coppermine River Watershed;
  - Lac de Gras Outlet (LDGO), with 102 data points collected from 2001 to 2024;
  - Desteffany Lake (DEL), with 85 data points collected from 2001 to 2024; and
  - Coppermine River Upstream of Copper Creek (COR04), with 89 data points collected from 2000 to 2024
- Lockhart River Watershed;
  - Lockhart River at Outlet of Artillery Lake (LOR02), with 191 data points collected from 1969 to 2024.

The data were organized using R package dplyr and presented using R package ggplot2. The data were presented with Julian Day (day of year) on the X-axis and the analyte on the Y-axis, separated by the three seasons defined for the watersheds, as follows

- Winter Baseflow from November 1 (Julian Day 305) to April 30 (Julian Day 120);
- Spring Freshet from May 1 (Julian Day 121) to June 30 (Julian Day 181); and
- Summer Recession from July 1 (Julian Day 182) to October 31 (Julian Day 304).

The analytes selected for detailed analysis of seasonal cycles comprised total alkalinity, pH, dissolved calcium, dissolved magnesium, dissolved strontium, and dissolved nickel. These are analytes that have a relatively complete set of data through the period of record, with data consistently above the DL and of interest within the watersheds (Stantec 2015, Deton' Cho Stantec 2015).

Values greater than the 75th percentile plus 1.5 times the IQR and less than the 25th percentile minus 1.5 times the IQR were considered outliers in the data. Extreme outliers greater than the 75th percentile plus 3.0 times the IQR or less than the 25th percentile minus 3.0 times the IQR were removed from the figures.



Within the Coppermine River and Lockhart River watersheds, most of the samples through the period of record were collected during the summer recession and the winter baseflow, with relatively few samples collected during the spring freshet. The result is that although the analysis of seasonal cycles was completed for all seasons, the relative lack of data for the spring freshet period necessarily limited the precision of the analysis.

2.2.6 Temporal Trends Analysis

A Mann-Kendall temporal trends analysis was completed using R package NADA2.
The temporal trends analysis was completed for the entire period of record and for the most recent ten years, and on a seasonal basis where there was a defined seasonal difference in surface water chemistry. The trends analysis was completed for 13 sites and 16 analytes, which were the sites and analytes with the appropriate amount of data. The complete results for the temporal trends analysis are in Appendix B.6.

For the analysis and discussion of temporal trends, only those sites with a period of record of at least 10 years and with less than 10% of missing data through the period of record were selected for temporal trends analysis. The selected sites were comparable to what was used in the 2015 report (Stantec 2015) and comprised the following:

- Coppermine River Watershed:
  - Lac de Gras Outlet (LDGO);
  - Desteffany Lake (DEL);
  - Daring Lake (DAL);
  - Point Lake (POL);
  - Rocknest Lake (ROL); and
  - Coppermine River Upstream of Copper Creek (COR04).
- Lockhart River watershed:
  - Starfish Lake (STL);
  - King Lake (KIL);
  - Lake of the Enemy (LEL);
  - MacKay Lake (MCL);
  - Lockhart River Above Outram Lakes (LOR01);
  - Clinton-Colden Outlet (CCO); and
  - Lockhart River at Outlet of Artillery Lake (LOR02).

The analysis of temporal trends was also limited to those analytes with a consistent data record and with greater than 90% of the data above the analyte-specific detection limit (Singh and Singh 2015, Section 1.11), comprising dissolved aluminum, dissolved calcium, dissolved copper, dissolved magnesium, dissolved chloride, dissolved sulphate, dissolved nickel, dissolved potassium, dissolved sodium, dissolved strontium, total alkalinity, total hardness, dissolved organic carbon, pH, specific conductivity, and total nitrogen.

The Mann-Kendall trends test requires that there is only one value per time step.
Therefore, when multiple data points existed within a specific time period, the median value of the data was calculated. This process was completed for the annual median of all data collected within a given year.

For those sites with measurable seasonal cycles and with enough data, a trends analysis was also undertaken for the following:

- Winter Baseflow: median of data collected between November 1 to April 30;
- Spring Freshet: median of data collected between May 1 to June 30; and
- Summer Recession: median of data collected between July 1 to October 31.

Because the three defined seasons are of different lengths and because the number of samples collected varied seasonally, the data record among the seasons was variable.

For data that were reported as <DL, a numerical value equal to the reported DL was substituted (Helsel et al. 2020; Section 12.7). However, where the method DL was variable within a set of data, all <DL values were substituted with the highest DL for that analyte within the data set (Helsel et al. 2020; Section 12.7). This ensured a consistent approach to the temporal trends analysis.

A p-value of 0.05 was used to indicate marginal significance. As the number of statistical tests completed increases, the probability of a Type 1 Error, or the observation of a significant result when there isn't one, also increases. Therefore, consistent with Stantec (2015), the level of significance increased with a decreasing p-value as follows:

- Marginal significance at $0.01<p<0.05$;
- Moderate significance at $0.001<p<0.01$;
- High significance at $0.0001<p<0.001$; and
- Very high significance at $p<0.0001$.

A linear regression was calculated for those temporal trends of at least high significance. The linear regression was used to provide a simple graphical representation of the temporal trend and to provide an estimate of the magnitude of change over time.

The linear regressions were initially developed on the entire dataset, after which outliers were identified and removed from the dataset using boxplot analysis. Outliers were defined as those data with residuals greater than the 75th percentile of the residual data plus 1.5 times the IQR and as the minimum value within the 25th percentile minus 1.5 times the IQR, or approximately the 99th percentile of the data assuming a normal distribution.

For those analytes with trends of high or very high significance, loading calculations at site LDGO and LOR02 were completed. The loading rates were calculated by multiplying the median annual concentration by the median flow rate for the same years. The complete results for the loading rate analyses are in Appendix B.6.2.

2.2.7 Comparison to Water Quality Guidelines

The surface water data were screened against water quality guidelines (WQG) for the protection of aquatic life from the Canadian Council of Ministers for the Environment (CCME), the Federal Environmental Quality (FEQG) Guidelines, and the British Columbia Water Quality Guidelines (BCWQG) (Table 2-9). The data were screened using R Packages dplyr (Wickham et al. 2025a) and tidyr (Wickham et al. 2025b). The complete set of WQG exceedances is in Appendix B.7.



Guidelines for some analytes are calculated values that depend on concurrently measured toxicity modifying factors (i.e., hardness, pH, temperature, and/or dissolved organic carbon). For those analytes with variable WQG values, each data point was assessed against the corresponding guideline value for that collection date. For analytes with a WQG dependent on modifying factors, Hazard Quotients (HQ) were calculated to compare measured analyte concentrations to their respective guidelines.

The HQ was calculated by dividing the measured concentration with the WQG. An HQ less than one indicated an analyte concentration below the sample-specific WQG and an HQ greater than one indicated an analyte concentration above the sample-specific WQG. An HQ was considered useful in this context because it allowed for a direct comparison of water quality amongst analytes and between sites: HQ values are also included in Appendix B.7.

Table 2-9: Long-Term Water Quality Guidelines for the Protection of Aquatic Life

Analyte	WQG	Unit	Long-Term WQG FAL	Modifying Factors
pH	CCME	----	6.5 to 9.0	----
Chloride	CCME	mg/L	120	----
Fluoride	CCME	mg/L	0.12	----
Sulphate	BCWQG	mg/L	Variable	Hardness
Ammonia-N, Total	CCME	----	Variable	Temperature, pH
Nitrate-N	CCME	mg/L	3	----
Nitrite-N	CCME	mg/L	0.060	----
Aluminium, Total	FEQG	----	Variable	DOC, Hardness, pH
Antimony, Total	BCWQG	mg/L	0.074	----
Arsenic, Total	CCME	mg/L	0.005	----
Boron, Total	CCME	mg/L	1.5	----
Cadmium, Total	CCME	----	Variable	Hardness
Cadmium, Dissolved	BCWQG	----	Variable	Hardness
Chromium, Total	CCME	mg/L	0.0089	----
Cobalt, Total	FEQG	----	Variable	Hardness
Copper, Total	CCME	----	Variable	Hardness
Copper, Dissolved	BCWQG	----	Variable	DOC, Hardness, pH
Iron, Total	CCME	mg/L	0.3	----
Lead, Total	CCME	----	Variable	Hardness
Lead, Dissolved	FEQG	----	Variable	Hardness, DOC
Manganese, Total	BCWQG	----	Variable	Hardness
Manganese, Dissolved	CCME	----	Variable	Hardness, pH
Mercury, Total	CCME	mg/L	0.000026	----
Molybdenum, Total	CCME	mg/L	0.073	----
Nickel, Total	CCME	----	Variable	Hardness
Nickel, Dissolved	BCWQG	----	Variable	Hardness, pH, DOC, Temperature
Selenium, Total	CCME	mg/L	0.001	----
Silver, Total	CCME	mg/L	0.00025	----
Strontium, Dissolved	FEQG	mg/L	2.5	----
Thallium, Total	CCME	mg/L	0.0008	----
Uranium, Total	CCME	mg/L	0.015	----
Vanadium, Total	FEQG	mg/L	0.12	----
Zinc, Dissolved	CCME	----	Variable	Hardness, pH, DOC
Water quality guideline sources: CCME WQG at, Canadian Council of Ministers of the Environment | Le Conseil canadien des ministres de l'environment; FEQ at, Federal Environmental Quality Guidelines (FEQGs) - Canada.ca; BC Water Quality Guideline at, Approved water quality guidelines - Province of British Columbia.				



2.3 Monitoring Program Evaluation

A review and assessment of the surface water monitoring programs in the Coppermine River and Lockhart River watersheds was undertaken. The objective of the review was to determine if the monitoring locations, frequency of sample collection, list of analytes, and laboratory detection limits were sufficient to characterize surface water conditions within the watersheds, and to detect natural or stressor-related cumulative effects.

3.0 Results

3.1 Hydrology

3.1.1 Seasonal Cycles - Annual Hydrograph

An annual hydrograph for a river located in a northern climate with little influence from lake storage typically shows a relatively extended period of baseflow throughout the winter with a minimum streamflow in March or April, followed by rapidly increasing streamflow toward a peak streamflow during spring freshet, and receding streamflow throughout the summer recession back into winter baseflow.

In contrast, for a river located in a northern climate with substantial lake influence, the spring freshet is muted, with variable to increasing streamflow through the summer recession and gradually decreasing streamflow to winter baseflow as the watershed transitions through fall and into the winter season.

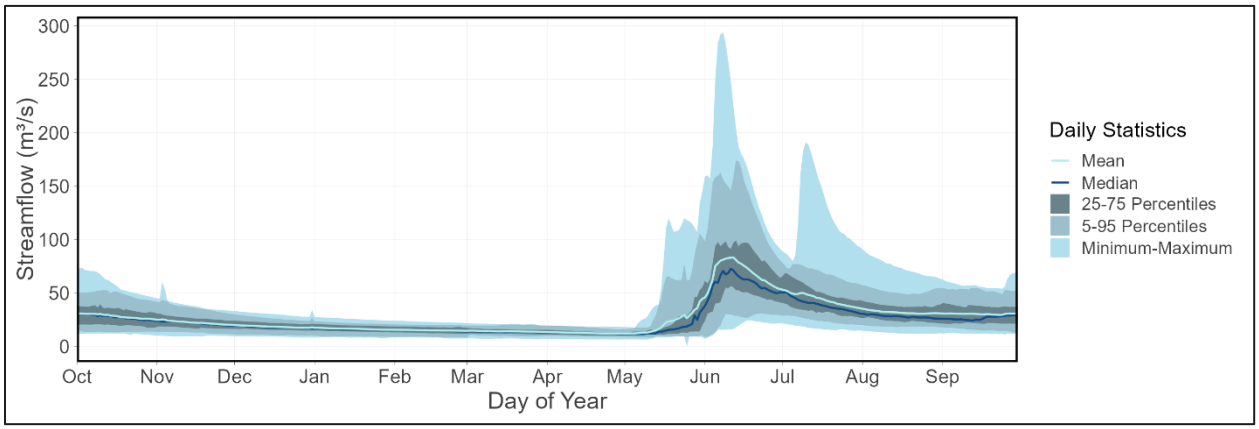
The hydrometric stations in both the Coppermine River and Lockhart River watersheds exhibit both hydrograph types, depending on each station's proximity to an upstream lake and the size of each respective lake.

3.1.1.1 Coppermine River Watershed

Coppermine River Downstream of Desteffany Lake (Station 10PA001)

The annual hydrograph at Coppermine River Downstream of Desteffany Lake (Station 10PA001) exemplifies a river hydrograph with little lake influence (Figure 3-1). For station 10PA001, median monthly streamflow during the winter baseflow period declined to less than 15 m^3/s in April and then increased to approximately 60 m^3/s in June during the spring freshet, which was an approximately 4-fold difference in median streamflow (Table 3-1, Figure 3-1). Subsequent to the spring freshet, there was a steady decline in median streamflow through the summer recession.

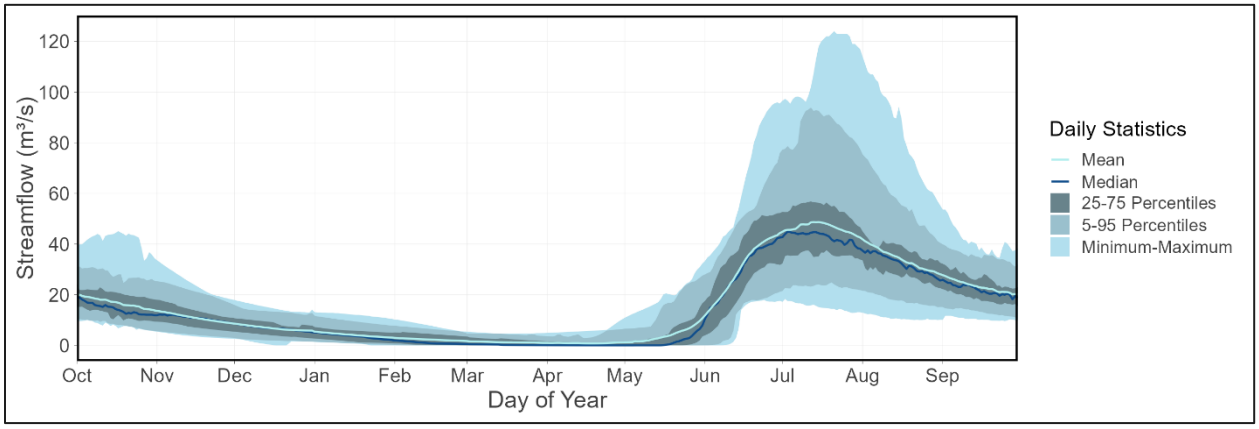
Figure 3-1: Annual Hydrograph at Coppermine River Downstream of Desteffany Lake (Station 10PA001)



Yamba River Downstream of Daring Lake (Station 10PA002)

The annual hydrograph at Yamba River below Daring Lake (Station 10PA002) was similar to the hydrograph at station 10PA001, with a relatively low winter baseflow, a peak streamflow of approximately 50 m^3/s during spring freshet and steadily declining median streamflow during the summer recession (Figure 3-2). The difference between station 10PA001 and 10PA002 was the lower absolute flow rates in the smaller Yamba River and the later development of the spring freshet in mid-July rather than mid-June (Figure 3-2).

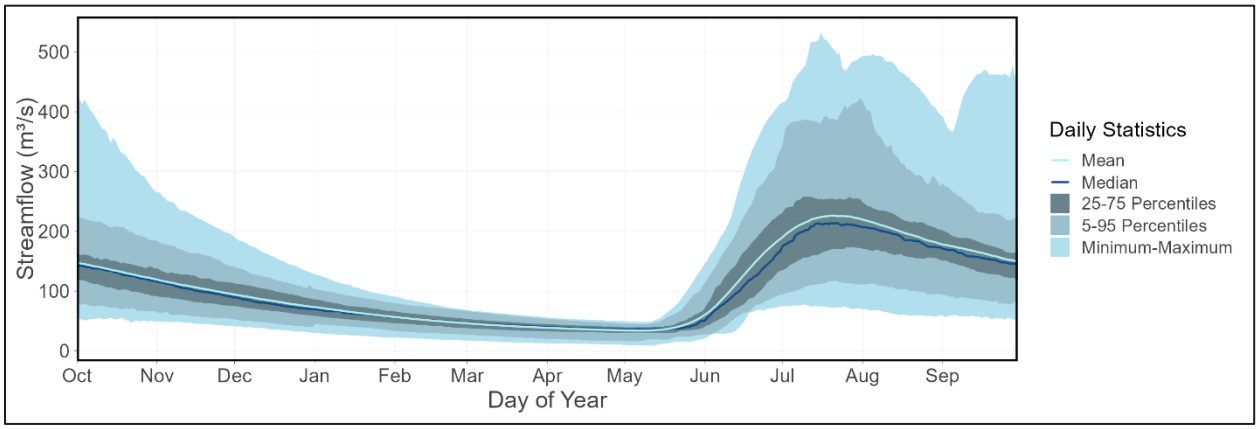
Figure 3-2: Annual Hydrograph at Yamba River Downstream of Daring Lake (Station 10PA002)



Coppermine River at Outlet of Point Lake (Station 10PB001)

The annual hydrograph at Coppermine River at Outlet of Point Lake (Station 10PB001) exemplifies a lake-affected hydrograph, where median monthly streamflow remained relatively high over the course of the winter months, reaching baseflows of approximately 60 m^3/s during April, and with a median freshet streamflow of over 200 m^3/s spanning into July and August. This was later in the year than at the river-dominated stations (Figure 3-3).

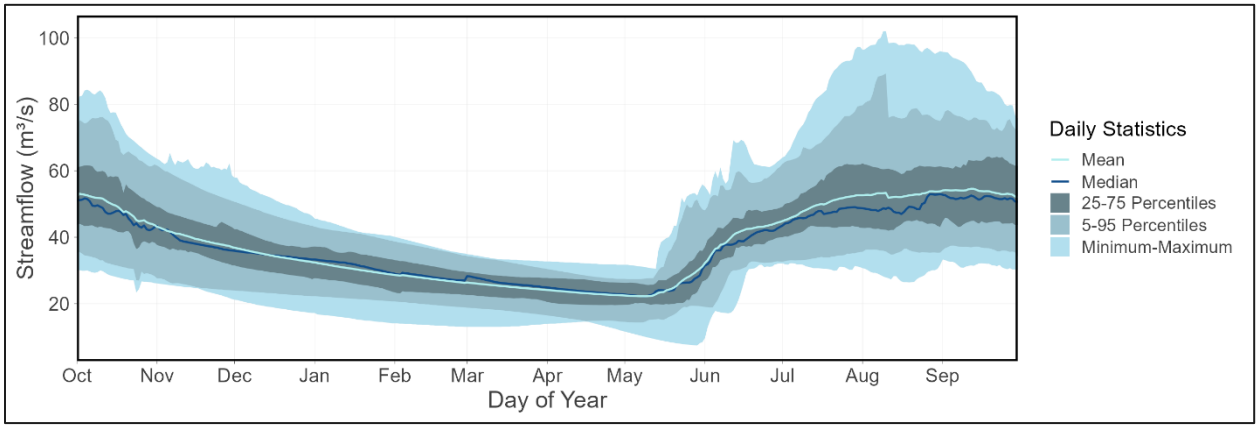
Figure 3-3: Annual Hydrograph at Coppermine River at Outlet of Point Lake (Station 10PB001)



Fairy Lake River Near Outlet of Napaktulik Lake (Station 10PC005)

The annual hydrograph at Fairy Lake River Near Outlet of Napaktulik Lake (Station 10PC005) was similar to station 10PB001 in that it exemplifies a lake-affected hydrograph. The median monthly streamflow fluctuating from approximately 25 m^3/s in April to approximately 40 m^3/s during spring freshet, and then slowly increasing to approximately 55 m^3/s to the end of summer, which was a difference of approximately 30 m^3/s through the seasonal cycle (Table 3-1, Figure 3-4).

Figure 3-4: Annual Hydrograph at Fairy Lake River Near Outlet of Napaktulik Lake (Station 10PC005)

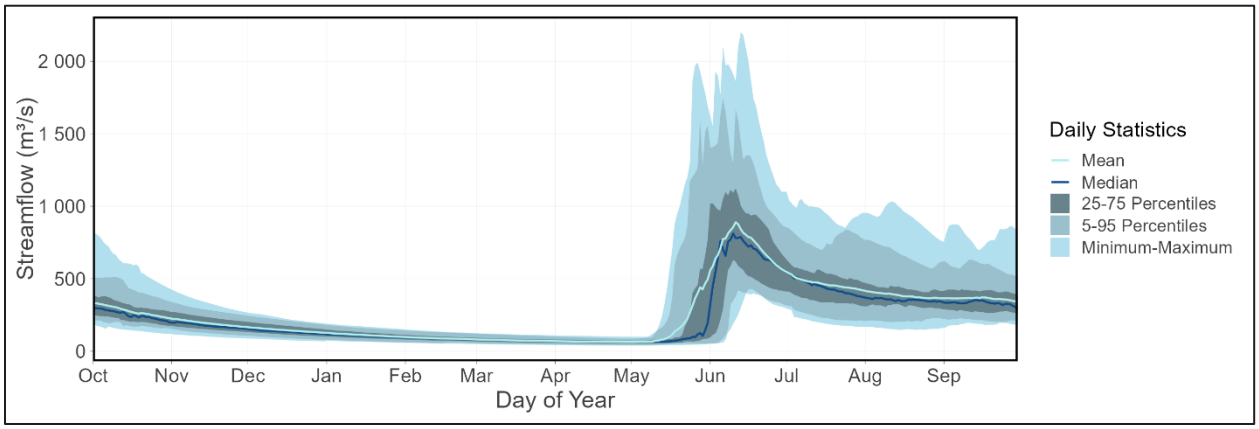


Coppermine River Above Copper Creek (Station 10PC004)

The annual hydrograph at Coppermine River Above Copper Creek (Station 10PC004) also exemplified a river hydrograph with little lake influence (Figure 3-5). For station 10PC004, median monthly streamflow during the winter baseflow period declined to less than 70 m^3/s in April and then increased to approximately 700 m^3/s in June during the spring freshet, which was more than a 10-fold difference in streamflow (Table 3-1, Figure 3-5).

The streamflow at station 10PC004 was also relatively ‘flashy’ with maximum monthly winter baseflow of approximately 100 m^3/s in April and maximum monthly streamflow during spring freshet of approximately 2000 m^3/s in June, which was an approximately 20-fold difference in maximum streamflow (Figure 3 5). After spring freshet, median streamflow steadily declined during the summer recession (Table 3-1, Figure 3-5).

Figure 3-5: Annual Hydrograph at Coppermine River Above Copper Creek (Station 10PC004)

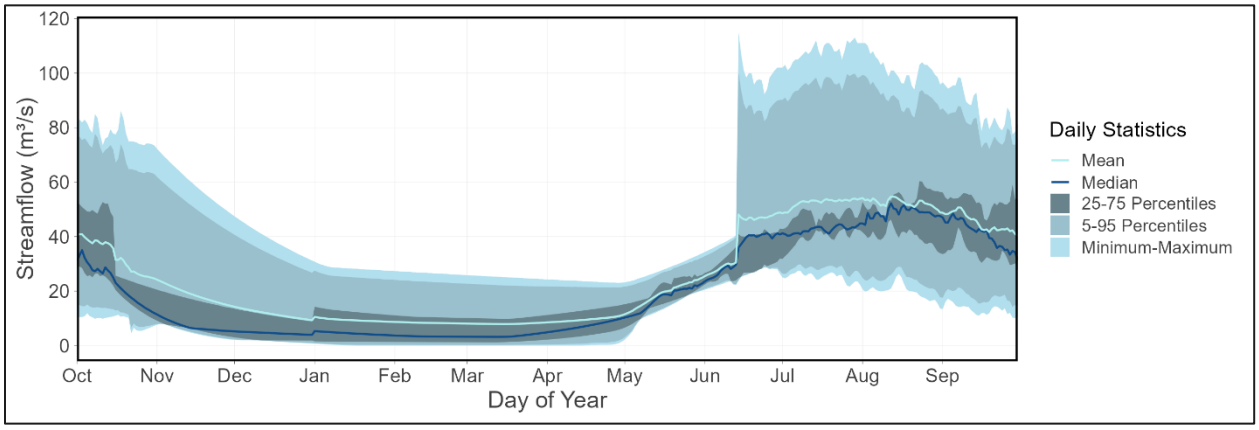


3.1.1.2 Lockhart River Watershed

Lockhart River Above Outram Lake (Station 07RB001)

At Lockhart River Upstream of Outram Lake (Station 07RB001), the hydrograph was irregular, likely due to the comparatively limited period of record at this station (Figure 3-6). There was especially low data resolution during the winter periods (November to May): however, the general trend of the hydrograph appeared to be lake influenced, consistent with the station's location within a lake-dominated watershed.

Figure 3-6: Annual Hydrograph at Lockhart River Upstream of Outram Lake (Station 07RB001)



Lockhart River at Outlet of Artillery Lake (Station 07RD001)

Similar to stations Fairy Lake River Near Outlet of Napaktulik Lake (10PC005) and Coppermine River at Outlet of Point Lake (10PB001), Lockhart River at Outlet of Artillery Lake (Station 07RD001) also exhibited a lake-dominated hydrograph. This was evidenced by less variability in the annual hydrograph, higher winter baseflows, an attenuated spring freshet, and a prolonged period of increasing streamflow through the summer recession, all regulated by storage from Artillery Lake upstream (Figure 3-7, Table 3-1).

Figure 3-7: Annual Hydrograph at Lockhart River at Outlet of Artillery Lake (Station 07RD001)

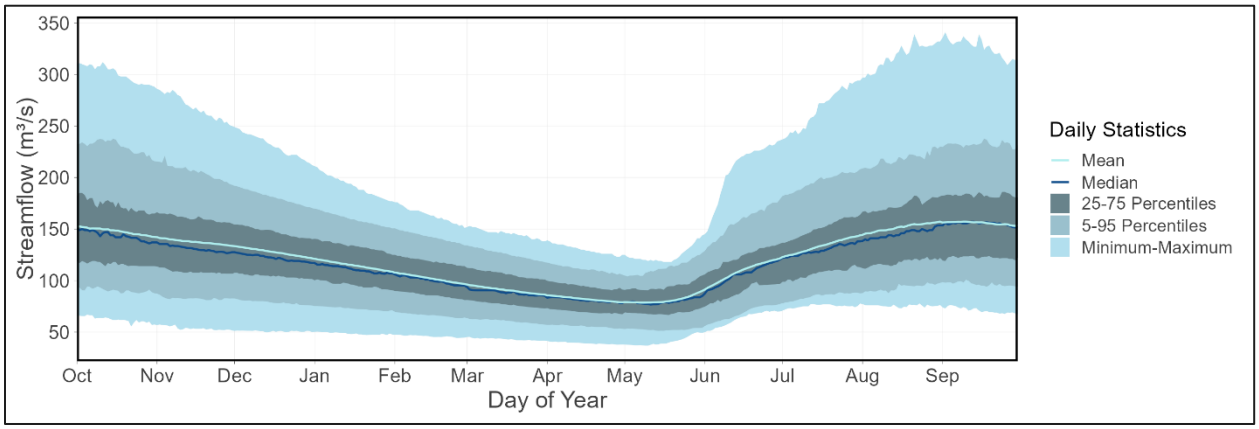


Table 3-1: Median Monthly Streamflow (m^3/s)

Month	Station						
	10PA001 Desteffany	10PA002 Yamba	10PB001 Point	10PC005 Fairy	10PC004 Copper Cr	07RB001 Outram	07RD001 Artillery
	Monthly Median Streamflow (m^3/s)						
January	16	4	62	32	105	4	111
February	15	2	51	27	87	3	101
March	13	0.4	43	26	75	4	91
April	12	0.1	38	24	66	7	82
May	19	1.9	39	25	85	17	81
June	60	28	109	39	711	35	107
July	37	43	210	47	438	41	130
August	29	33	190	50	356	50	146
September	28	22	156	52	329	41	157
October	28	14	132	46	254	24	148
November	22	10	101	38	178	6	130
December	18	7	78	35	134	5	122
Note: See Appendix C.1 for the entire annual summary of streamflow.							

3.1.2 Annual Variability

3.1.2.1 Coppermine River Watershed

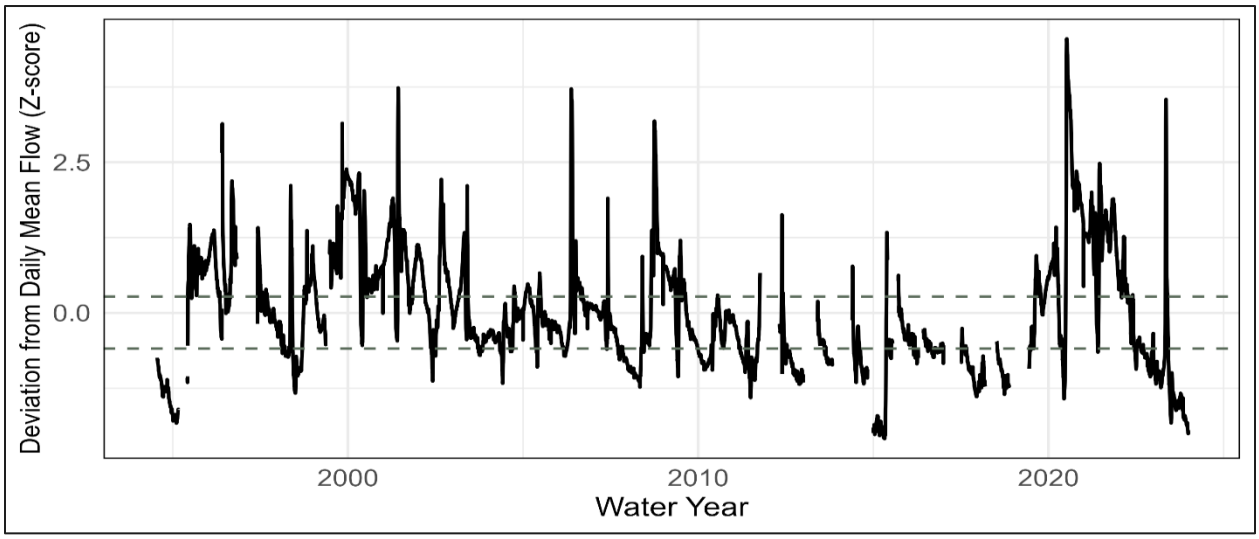
Variations in streamflow from average were measured across years at all sites in the Coppermine River watershed (Figure 3-8 to 3-12), with intermittent deviation from average towards both higher flow (i.e. wet conditions) and lower flow (dry conditions).

Coppermine River Downstream of Desteffany Lake (Station 10PA001)

At station 10PA001 in the Coppermine River watershed, streamflow was relatively flashy. However, the presence of two large lakes nearby to this station slightly attenuated streamflow across the year. Short, intermittent wet periods often approaching four standard deviations above the average streamflow and occasional dry periods in the range of one to two standard deviations below the average streamflow were commonly recorded (Figure 3-8). It appeared that intermittent wet periods were more common and of higher magnitude than dry periods throughout the record.

Despite the variability in streamflow, through the period of record there were no consistent seasonal cycles and there was no monotonic temporal trend in the streamflow.

Figure 3-8: Standardized Streamflow at Coppermine River Downstream of Desteffany Lake (Station 10PA001)



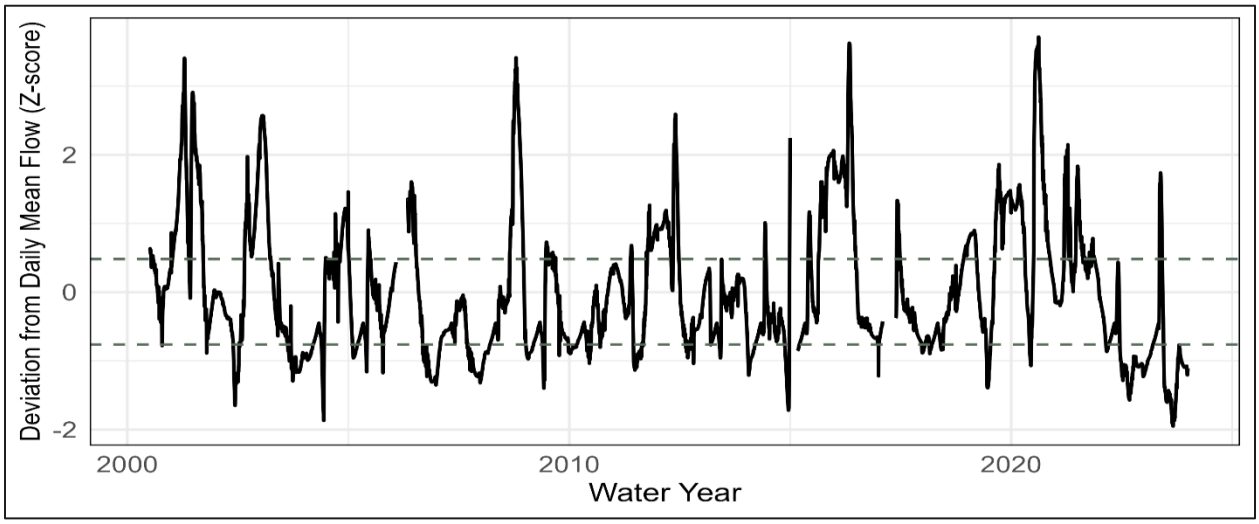
Note: Dotted lines represent 25th and 75th percentiles of entire data record.

Yamba River Downstream of Daring Lake (Station 10PA002)

Through the period of record at station 10PA002 in the Coppermine River watershed, there were numerous short, intermittent wet periods often approaching four standard deviations above the average streamflow and occasional dry periods in the range of one to two standard deviations below the average streamflow (Figure 3-9). Dry periods appeared to be less frequent and of lower magnitude than wet periods across the record.

Despite the variability in streamflow, through the period of record there were no consistent seasonal cycles and there was no monotonic temporal trend in streamflow.

Figure 3-9: Standardized Streamflow at Yamba River Downstream of Daring Lake (Station 10PA002)



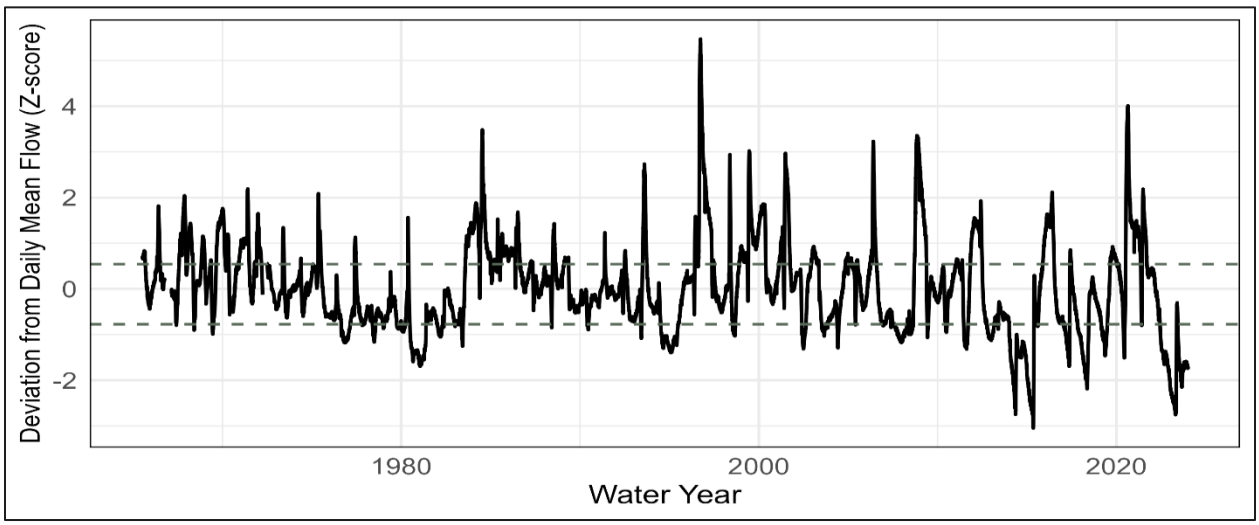
Note: Dotted lines represent 25th and 75th percentiles of entire data record.

Coppermine River at Outlet of Point Lake (Station 10PB001)

Station 10PB001 in the Coppermine River watershed exhibited variable streamflow throughout the period of record. Short, intermittent wet periods often approaching three to four standard deviations above the average streamflow were common across the record, with one wet period greater than five standard deviations above average flow (Figure 3-10). There were also occasional dry periods in the range of one to three standard deviations below the average streamflow in more recent years (Figure 3-10).

Despite the variability in streamflow, through the period of record there were no consistent seasonal cycles and there was no monotonic temporal trend in streamflow.

Figure 3-10: Standardized Streamflow at Coppermine River at Outlet of Point Lake (Station 10PB001)



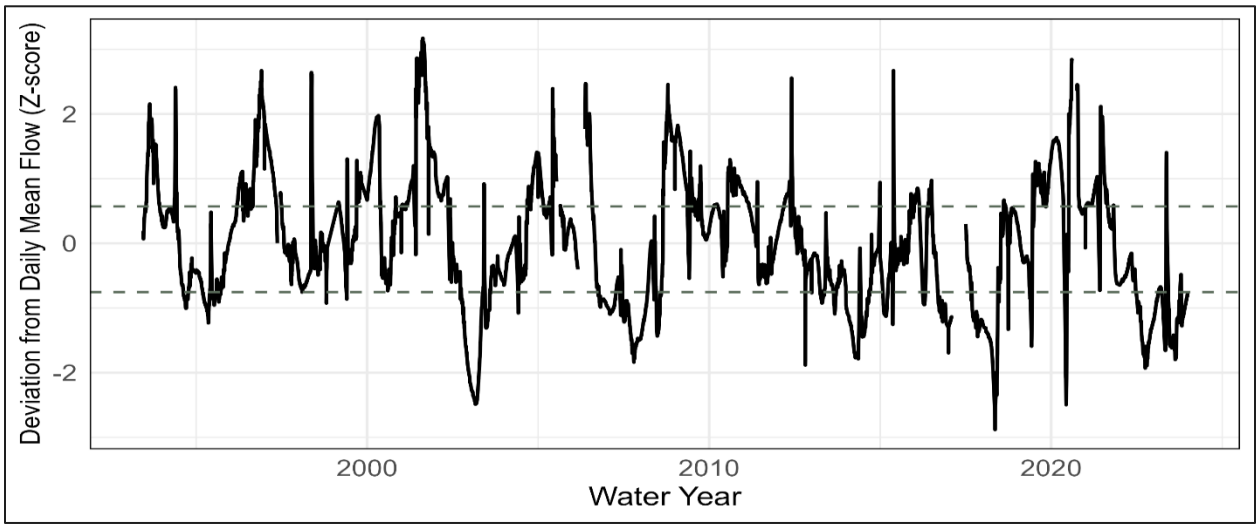
Note: Dotted lines represent 25th and 75th percentiles of entire data record.

Fairy Lake River Near Outlet of Napaktulik Lake (Station 10PC005)

Through the period of record at Station 10PC005 in the Coppermine River watershed, observations of short, intermittent wet periods often approaching three standard deviations above the average streamflow were common. Occasional dry periods in the range of one to three standard deviations below the average streamflow were also recorded (Figure 3-11). In comparison to other stations in both watersheds, dry periods seemed to occur at a similar frequency and magnitude as wet periods, especially in more recent years.

Despite the variability in streamflow, through the period of record there were no consistent seasonal cycles and there was no monotonic temporal trend in streamflow.

Figure 3-11: Standardized Streamflow at Fairy Lake River Near Outlet of Napaktulik Lake (Station 10PC005)



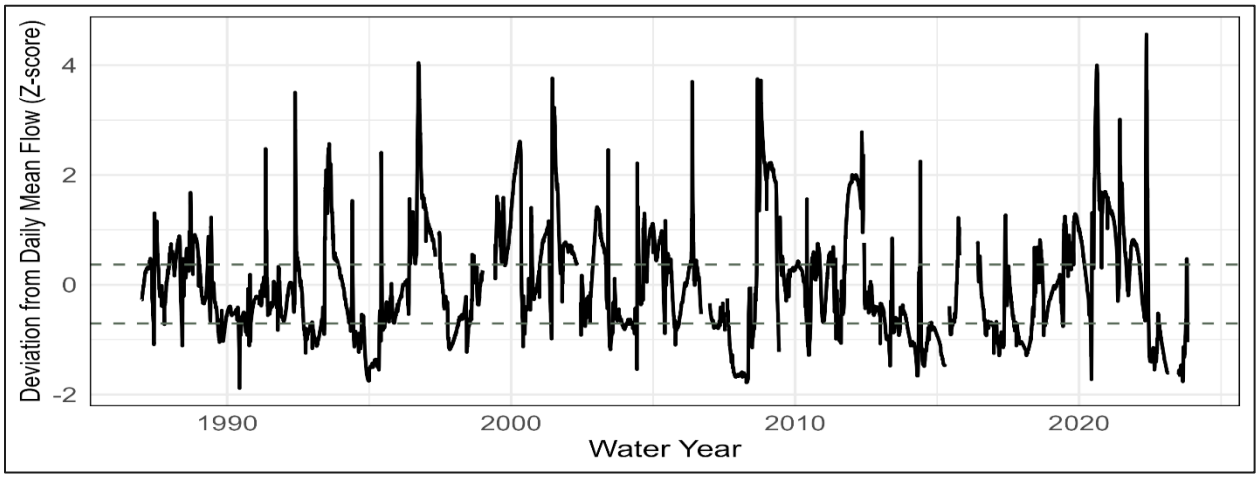
Note: Dotted lines represent 25th and 75th percentiles of entire data record.

Coppermine River Above Copper Creek (Station 10PC004)

Among all stations assessed in both watersheds, station 10PC004 in the Coppermine River watershed is most distant from any major lake, leading to a flashier hydrograph and greater seasonal variation. Through the period of record there were numerous short, intermittent wet periods often exceeding four standard deviations above the average streamflow and occasional dry periods in the range of one to two standard deviations below the average streamflow (Figure 3-12). The frequency of wet and dry periods appeared to be relatively equal, but the magnitude of wet events was higher throughout the record.

Despite the variability in streamflow, through the period of record there were no consistent seasonal cycles and there was no monotonic temporal trend in streamflow.

Figure 3-12: Standardized Streamflow at Coppermine River Above Copper Creek (Station 10PC004)



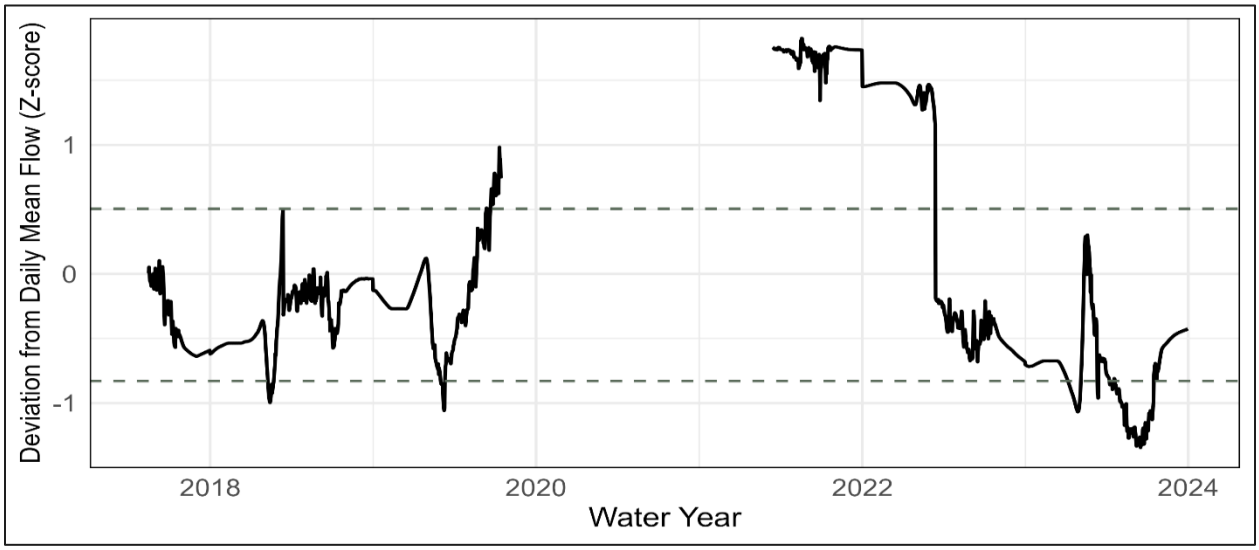
Note: Dotted lines represent 25th and 75th percentiles of entire data record.

3.1.2.2 Lockhart River Watershed

Lockhart River Above Outram Lake (Station 07RB001)

Due to the comparatively short period of record at station 07RB001, the comparison of streamflow to standardized values was less robust, and no detectable trends towards wet or dry years was visually detectable.

Figure 3-13: Standardized Streamflow at Lockhart Rivet Above Outram Lake (Station 07RB001)



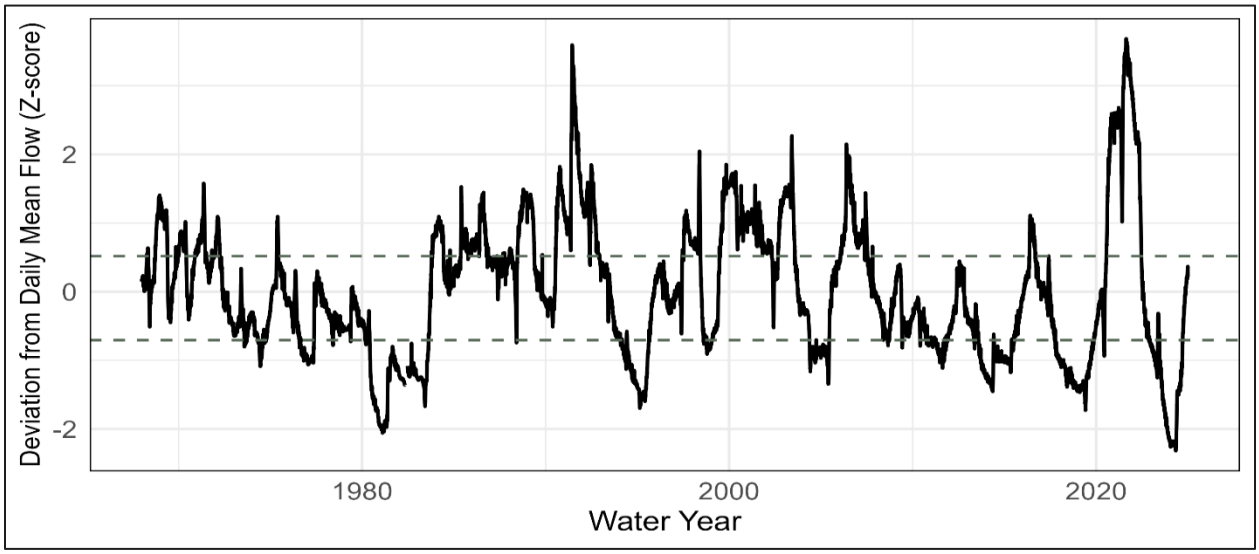
Note: Dotted lines represent 25th and 75th percentile of entire record.

Lockhart River at Outlet of Artillery Lake (Station 07RD001)

Station 07RD001 in the Lockhart River watershed exhibited variable streamflow throughout the record, with no seasonal trends visually detectable. Through the period of record, short, intermittent wet periods often approaching four standard deviations above the average streamflow and occasional dry periods in the range of one to two standard deviations below the average streamflow were recorded (Figure 3-14).

Despite the variability in streamflow through the period of record, there were no consistent seasonal cycles and there was no monotonic temporal trend in streamflow (Figure 3-14).

Figure 3-14: Standardized Streamflow at Lockhart Rivet at Outlet of Artillery Lake (Station 07RD001)



Note: Dotted lines represent 25th and 75th percentile of entire record.

3.1.3 Spatial Variability

3.1.3.1 Annual Streamflow

Coppermine River Watershed

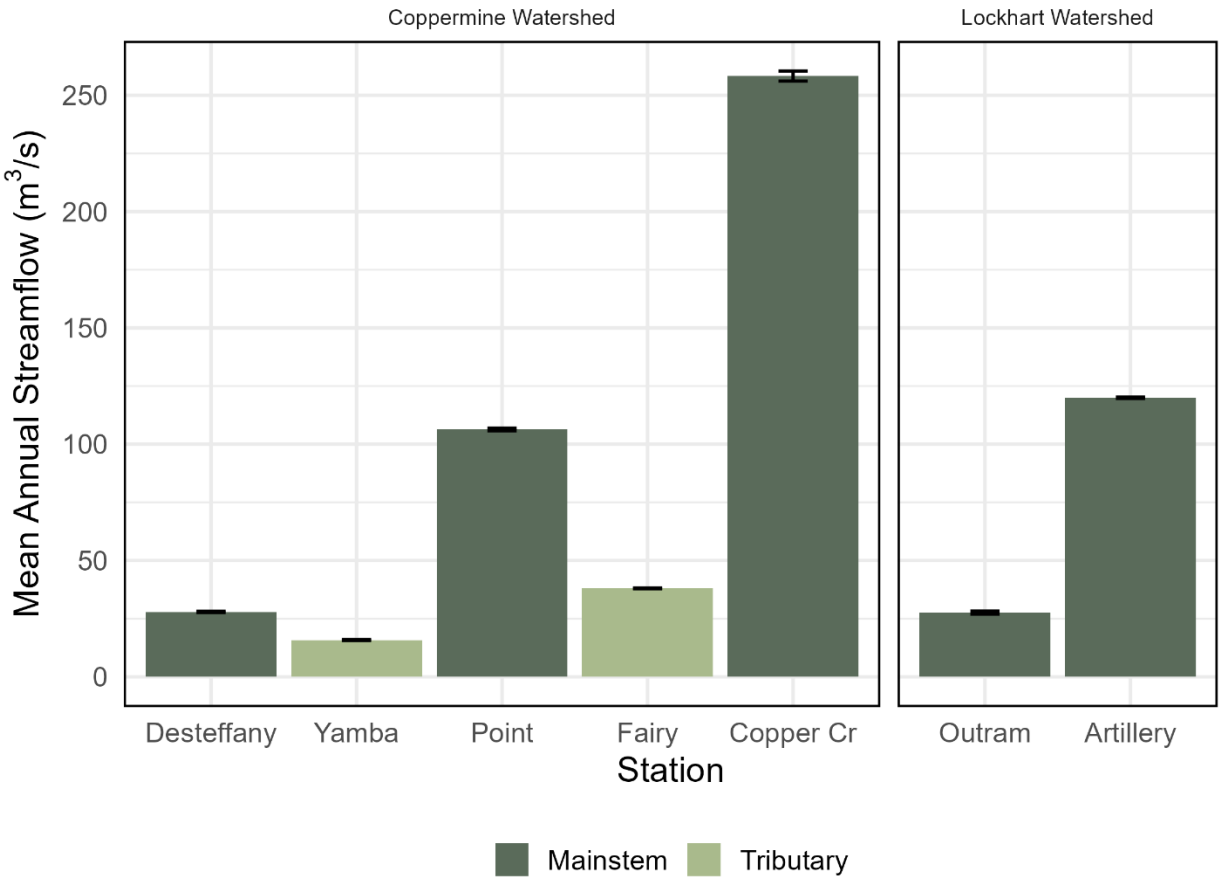
Long-term mean annual discharge (m^3/s) in the Coppermine River watershed increased moving downstream as the watershed area of each station increased, from 6,120 km^2 at station 10PA001 just downstream of Desteffany Lake, to 19,200 km^2 at station 10PB001 at the outlet of Point Lake, and finally to 46,200 km^2 at station 10PC004 just upstream of Copper Creek (Table 2-1; Figure 1-1).

The annual mean discharge was approximately 25 m^3/s at upstream station 10PA001 just downstream of Desteffany Lake, approximately 100 m^3/s further downstream at station 10PB001 at the outlet of Point Lake, and approximately 250 m^3/s at the furthest downstream station 10PC004 just upstream of Copper Creek (Figure 3-15). Discharge from the two tributary stations was considerably less, with a mean annual discharge of approximately 15 m^3/s at station 10PA002 on the Yamba River and approximately 35 m^3/s at station 10PC005 on the Fairy Lake River (Figure 3-15).

Lockhart River Watershed

In the Lockhart River watershed, the furthest upstream station, 07RB001, recorded a long-term mean annual discharge of 28 m³/s, which is comparable to upstream locations in the Coppermine River watershed. In contrast, the furthest downstream station on Lockhart River, 07RD001, had a mean annual discharge of approximately 125 m³/s—about half the streamflow recorded at the furthest downstream station in the Coppermine River, 10PC004 (Figure 3-15). This difference in streamflow reflects the larger watershed area of the Coppermine River (see Section 1.1).

Figure 3-15: Mean Annual Streamflow (m^3/s ± Standard Error) for each Hydrometric Station



Note: Station order is organized from upstream (left) to downstream (right). See Figure 1-1 for station location.

3.1.3.2 Annual Watershed Yield

Coppermine River Watershed

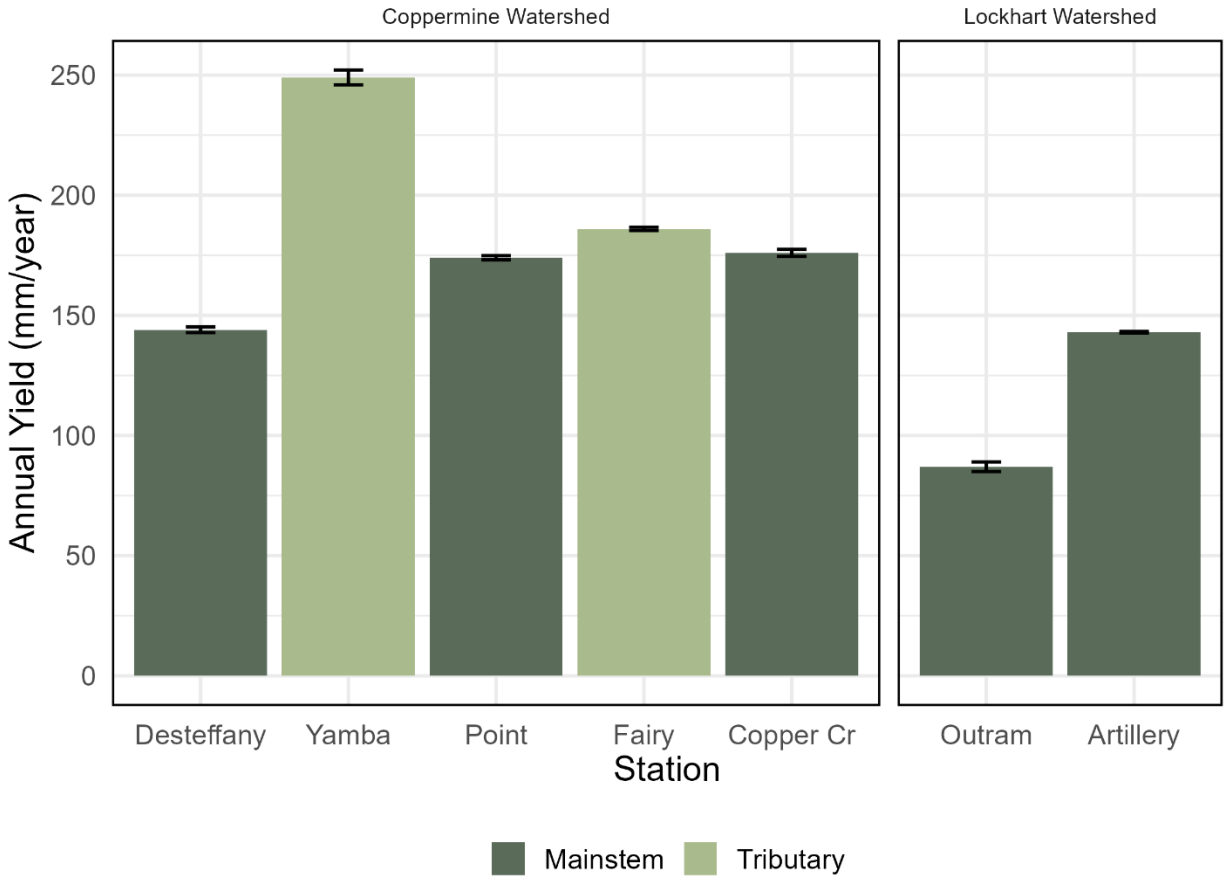
Mean annual watershed yield in the Coppermine River ranged from approximately 140 mm/yr to 180 mm/yr at all but station 10PA002 on the Yamba River, where the mean annual yield was almost 250 mm/yr (Figure 3-16).The similarity in watershed yield for most of the stations was consistent with the large scale similarities in the relevant characteristics of each station's location (see Section 1.1).

The higher annual watershed yield, as recorded at station 10PA002, could be a result of higher elevation and subsequent higher precipitation rates, or changes in topography and vegetation that contribute to greater runoff into the stream. Such characteristics could include shallow soils, low infiltration, steep terrain, lowered evapotranspiration, and limited storage.

Lockhart River Watershed

At the furthest upstream station in the Lockhart River watershed, 07RB001, annual yield was approximately 87 mm/year which was slightly less than stations in Coppermine River watershed at similar elevations and relative downstream locations. Further downstream at station 07RD001, annual yield was approximately 140 mm/year, which was comparable with the stations located in the Coppermine River (Figure 3-16).

Figure 3-16: Annual Mean Watershed Yield (mm/year ± Standard Error) for each Hydrometric Station



Note: Station order is organized from upstream (left) to downstream (right). See Figure 1-1 for station location.

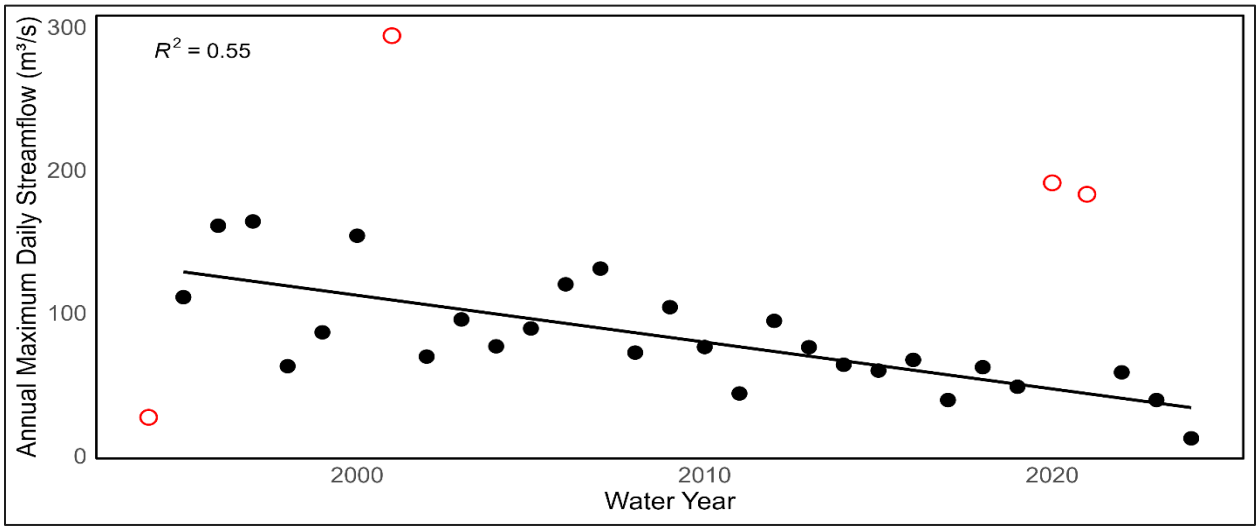
3.1.4 Temporal Trends Analysis

3.1.4.1 Coppermine River Watershed

Coppermine River Downstream of Desteffany Lake (Station 10PA001)

Significant decreasing temporal trends for a variety of streamflow parameters across all seasons occurred in the upper reaches of the Coppermine River at Coppermine River Downstream of Desteffany Lake (Station 10PA001). These trends comprised marginally significant ($0.01<p<0.05$) decreasing trends in median winter streamflow, median summer streamflow, median September streamflow, median October streamflow and summer 30-day low flows (Table 3-2), and moderately significant ($0.001<p<0.01$) decreasing trends in annual maximum daily streamflow (Figure 3-17; Table 3-2). The linear regression of this latter parameter estimated an average reduction of approximately 58 m^3/s in annual maximum daily streamflow throughout the 1994 to 2023 period of record (Figure 3-17).

Figure 3-17: Annual Maximum Daily Streamflow at Coppermine River Downstream of Desteffany Lake (Station 10PA001).



Note: Red circles are outliers removed from the linear regression.

Yamba River below Daring Lake Station (10PA002)

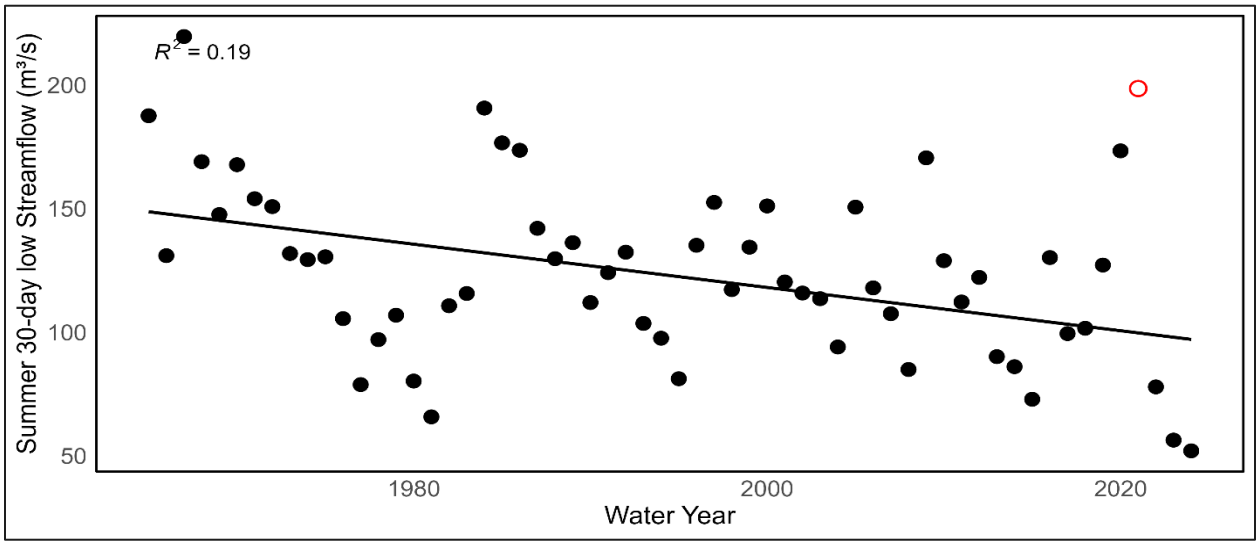
At Yamba River below Daring Lake Station (Station 10PA002), there were no significant temporal trends in flow through the period of record (Table 3-2).

Coppermine River at the Outlet of Point Lake (Station 10PB001)

Further downstream, on the Coppermine River at the Outlet of Point Lake (Station 10PB001), there was a marginally significant ($0.01<p<0.05$) decreasing temporal trend in median May streamflow and minimum daily streamflow, and a moderately significant ($0.001<p<0.01$) decreasing temporal trend in summer 30-day low streamflow (Table 3-2; Figure 3-18).

The linear regression of this latter parameter estimated an average reduction of approximately 43 m^3/s through the period of record (1965 to 2023), although the confidence in this estimate was low considering the variability in the data and the consequently low R^2 value for the regression (Figure 3-18).

Figure 3-18: Summer 30-day Low Streamflow at Coppermine River at the Outlet of Point Lake (Station 10PB001)

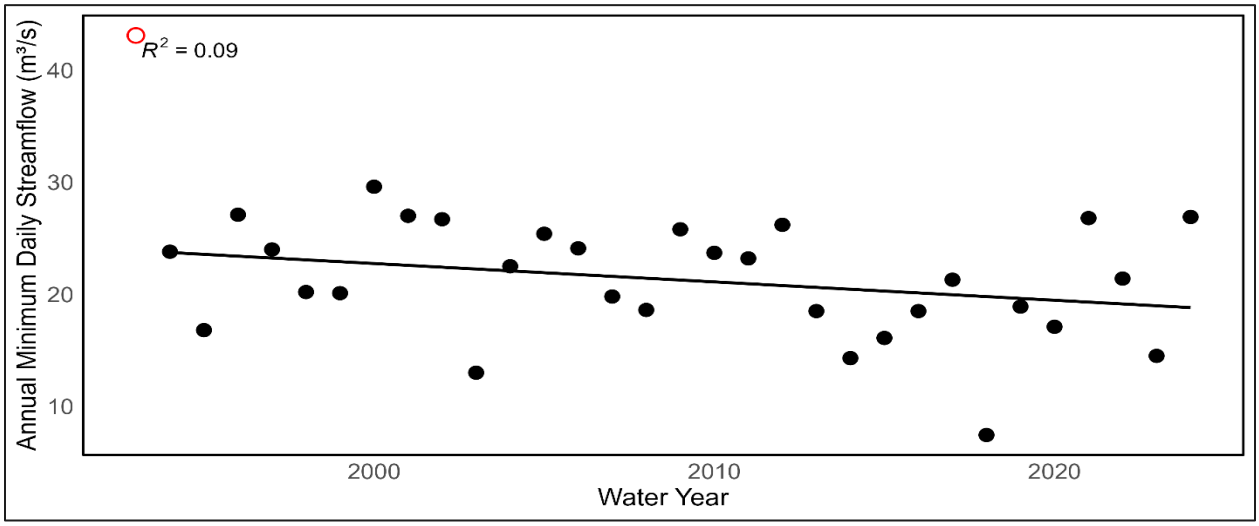


Note: Red circles are outliers removed from the linear regression.

Fairy Lake River Near the Outlet of Napaktulik Lake (Station 10PC005)

At Fairy Lake River Near the Outlet of Napaktulik Lake (Station 10PC005), there was a moderately significant (0.001<p<0.01) decreasing trend in minimum daily streamflow (Table 3-2; Figure 3-19). The linear regression of this parameter estimated an average reduction of 8.5 m^3/s throughout the period of record (1993 to 2023), although the confidence in this estimate was low considering variability in the data and the consequently low R^2 value for the regression.

Figure 3-19: Annual Minimum Daily Streamflow at Fairy Lake River near the Outlet of Napaktulik Lake (Station 10PC005)



Note: Red circles are outliers removed from the linear regression.

Coppermine River Above Copper Creek (Station 10PC004)

In the lower reaches of the Coppermine River at Coppermine River Above Copper Creek (Station 10PC004), there was a marginally significant ($0.01<p<0.05$) increasing trend in the most recent decade of winter streamflow and median April streamflow (Table 3-2).

Coppermine River Summary

Despite the localized seasonal alterations in streamflow, there were no significant trends for median annual streamflow through the entire period of record or through the past decade (Table 3-2; Appendix C). The lack of significant trends for median annual streamflow indicates that the total volume of water flowing within the Coppermine River, despite considerable annual variability, has not changed in a consistent direction over the period of record.

3.1.4.2 Lockhart River Watershed

There were no significant temporal trends in streamflow at station 07RD001 in the lower Lockhart River at the outlet of Artillery Lake through the entire period of record or the last decade (Table 3-2; Appendix C). This indicates that annual and seasonal streamflow rates within the lower Lockhart River watershed have been relatively consistent through the past 50 years and through the past 10 years. That is, although there has been year-to-year variability in flow in the Lockhart River, there has not been a significant monotonic trend in streamflow through the period of record.

Table 3-2: Results of Mann-Kendall Temporal Trends Analysis for Streamflow

Parameter	Station											
	Coppermine River Downstream of Desteffany Lake		Yamba River Downstream of Daring Lake		Coppermine River at Outlet of Point Lake		Fairy Lake River Near Outlet of Napaktulik Lake		Coppermine River Above Copper Creek		Lockhart River at Outlet of Artillery Lake	
	10PA001		10PA002		10PB001		10PC005		10PC004		07RD001	
Period	1994-2023	2013-2023	2000 - 2023	2013 - 2023	1965-2023	2013-2023	1993-2023	2013-2023	1987-2023	2013-2023	1968-2023	2013 - 2023
Seasonal Median												
Winter	↓	---	---	---	---	---	---	---	---	---	---	---
Freshet	---	---	---	---	---	---	---	---	---	---	---	---
Summer	↓	---	---	---	---	---	---	---	---	---	---	---
Freshet Day of Year	---	---	---	---	---	---	---	---	---	---	---	---
Monthly Median												
January	NA	NA	---	---	---	---	---	---	---	---	---	---
February	NA	NA	---	---	---	---	---	---	---	---	---	---
March	NA	NA	---	---	---	---	---	---	---	---	---	---
April	NA	NA	---	---	---	---	---	---	---	↑	---	---
May	NA	NA	---	---	↓	---	---	---	---	---	---	---
June	NA	NA	---	---	---	---	---	---	---	---	---	---
July	---	---	---	---	---	---	---	---	---	---	---	---
August	---	---	---	---	---	---	---	---	---	---	---	---
September	↓	---	---	---	---	---	---	---	---	---	---	---
October	↓	---	---	---	---	---	---	---	---	---	---	---
November	---	---	---	---	---	---	---	---	---	---	---	---
December	---	---	---	---	---	---	---	---	---	---	---	---
30-Day Low Flow												
Winter	---	---	---	---	---	---	---	---	---	↑	---	---
Freshet Day of Year	---	---	---	---	---	---	---	---	---	---	---	---
Summer	↓	---	---	---	↓	---	---	---	---	---	---	---
Annual Streamflow												
Daily Max	↓	---	---	---	---	---	---	---	---	---	---	---
Daily Min	---	---	---	---	↓	---	↓	---	---	---	---	---
Median	---	---	---	---	---	---	---	---	---	---	---	---

Notes: ↓ = decreasing trend; ↑ = increasing trend; --- = p>0.05, ↓↑ = 0.01<p<0.05; ↓↑ = 0.001<p<0.01; ↓↑ = 0.0001<p<0.001; ↓↑ = p<0.0001. Winter Baseflow = November 1 to April 30; Spring Freshet = May 1 to June 30; Summer Recession = July 1 to October 31; NA = data not available

3.1.5 Flow Duration Curves

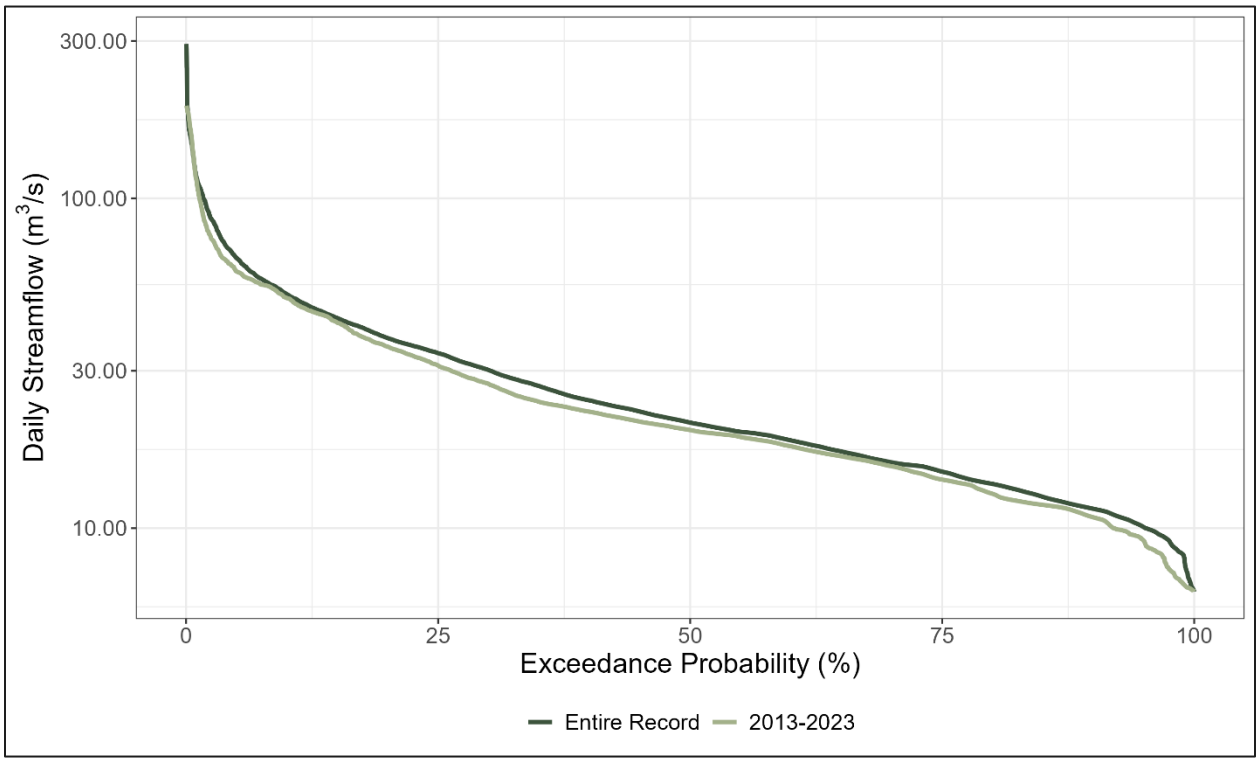
Flow duration curves were developed for each of the seven sites with an appropriate amount of data, but only one from each watershed is discussed below. These two sites have comprehensive data sets and provide a detailed level of understanding. The complete set of flow duration curves are in Appendix C.3.

3.1.5.1 Coppermine River

The flow duration curve at Coppermine River Downstream of Desteffany Lake (Station 10PA001) indicates that streamflow magnitude was lower at the same exceedance probability over the last decade in comparison with the entire period of record (Figure 3-20). For example, a streamflow magnitude of 30 m^3/s was exceeded approximately 30% of the time across the entire record and was exceeded approximately 25% of the time in the last decade, meaning that the occurrence of the same streamflow magnitude (30 m^3/s) was becoming rarer.

While the flow duration curve highlights these trends visually, these results are also consistent with the trend analysis for this station, which identified significant decreasing temporal trends for median winter and summer streamflow, summer 30-day low flows, and annual daily max and freshet max streamflow (see Section 3.1.3.1 above).

Figure 3-20: Flow Duration Curve at Coppermine River Downstream of Desteffany Lake (Station 10PA001)



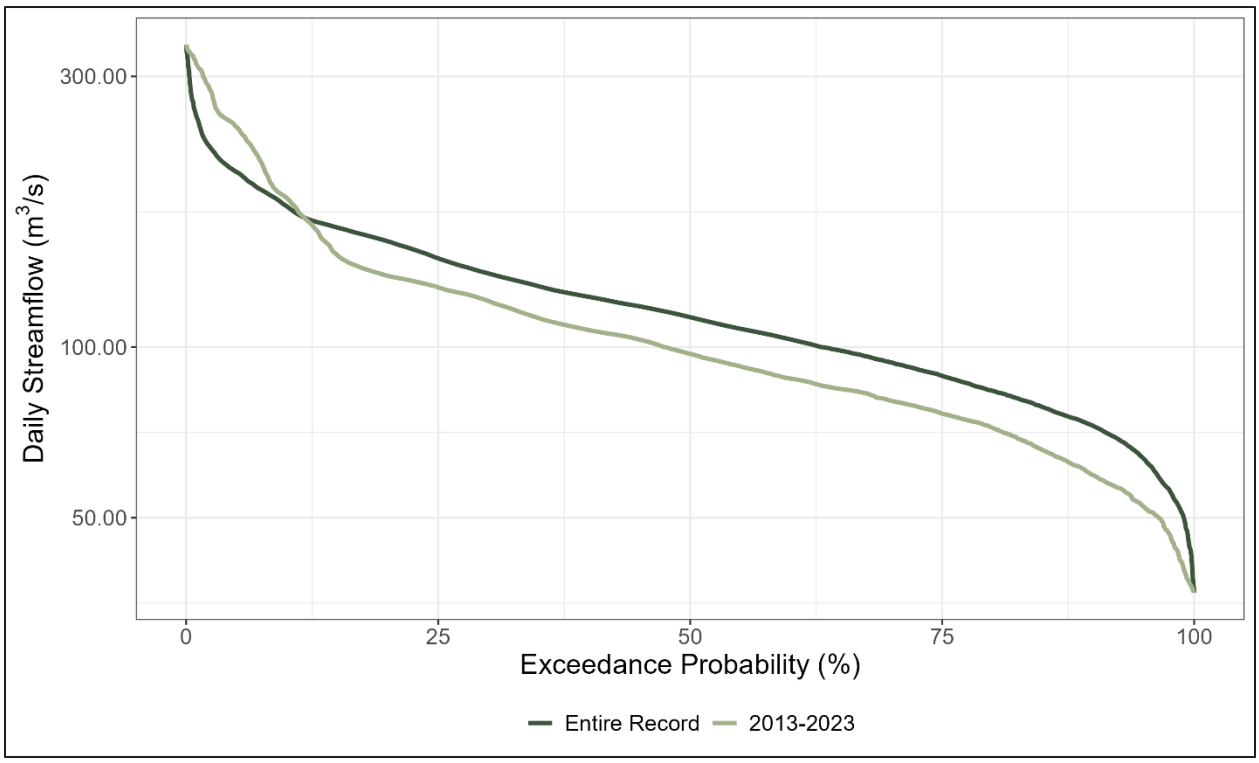
Notes: Daily streamflow is plotted on a log scale.

3.1.5.2 Lockhart River

The flow duration curve for Lockhart River at Outlet of Artillery Lake (Station 07RD001) appears to indicate decreases in the exceedance probability of streamflow in the most recent decade, compared to the entire record (Figure 3-21). Note that for lower exceedance probabilities (higher flows) the magnitude of streamflow is higher for the same exceedance probability in the more recent decade, and for higher exceedance probabilities (lower flows), the magnitude of streamflow is lower for the same exceedance probability. This indicates that high flow conditions are increasing in magnitude and low flow conditions are decreasing in magnitude (becoming more severe).

For example, the same streamflow magnitude of 50 m^3/s has a lower rate of occurrence in the more recent decade (exceeded approximately 83% of time) compared to the entire record (exceeded approximately 92% of the time). Despite this visual indication of changes in streamflow magnitude frequency between the two periods, no significant trends were detected in the trend analysis across all streamflow parameters investigated (Figure 3-21; Table 3-2).

Figure 3-21: Flow Duration Curve for Station 07RD001 on the Lockhart River at Outlet of Artillery Lake



Notes: Daily streamflow is plotted on a log scale.

3.2 Water Chemistry

3.2.1 Data Management

3.2.1.1 Relative Percent Difference

Through the last five years of surface water sampling there were 3108 paired results for all analytes with both results greater than five times the detection limit (Table 3-3). Of those, there were 42 results that exceeded the Data Quality Objective (DQO) of 20%, or approximately 5% of the analyses. These results indicate that recent lab analyses were of consistent high quality, although there was an increase in replicate data >DQO in 2023 and 2024.

Table 3-3: Summary of the Replicate Analyses (Relative Percent Difference)

Year	Number of Replicates	Total Number of Comparisons	*Total >DQO	Percent >DQO
**2025	2	148	10	7%
2024	10	740	45	6%
2023	7	518	46	9%
2022	8	592	22	4%
2021	7	518	19	4%
2020	8	592	17	3%
Total	**42**	**3108**	**159**	**5%**

Note: The Data Quality Objective is 20%
* Only included if both results were greater than 5 times detection limit. DQO = Data Quality Objective
** Not all data from 2025 were available at the time of this analysis

Dissolved:Total Metal Ratios

Through the last ten years of surface water sampling there were 2361 paired results for dissolved and total metals with both results greater than five times the detection limit (Table 3-4). Of those, there were 11 results that exceeded the DQO of 1.20 for a variety of analytes (i.e., a dissolved metal concentration 20% greater than the total metal concentration), or less than 0.5% of the analyses. These results indicate that recent lab analyses for metals were of consistent high quality.

Table 3-4: Summary of the Dissolved:Total Metal Ratios

Year	*Number of Tests	D:T Ratio>1.20	Maximum D:T Ratio
**2025	84	1	1.24
2024	328	0	----
2023	254	4	1.30
2022	343	1	1.46
2021	273	2	1.68
2020	276	0	----
2019	284	0	----
2018	296	2	1.29
2017	212	1	1.25
2016	281	0	----
Total	**2361**	**11**	**1.68**

* Only included if both results were greater than 5 times detection limit
**Not all data from 2025 were available at the time of this analysis

3.2.2 Spatial Variability

Spatial variability was characterized for select physical attributes, major ions, nutrients, and metals. The data are presented for the entire period of record, which means that for those analytes with a significant increasing temporal trend (see Section 3.2.4), the mean and median were underestimated to some extent.

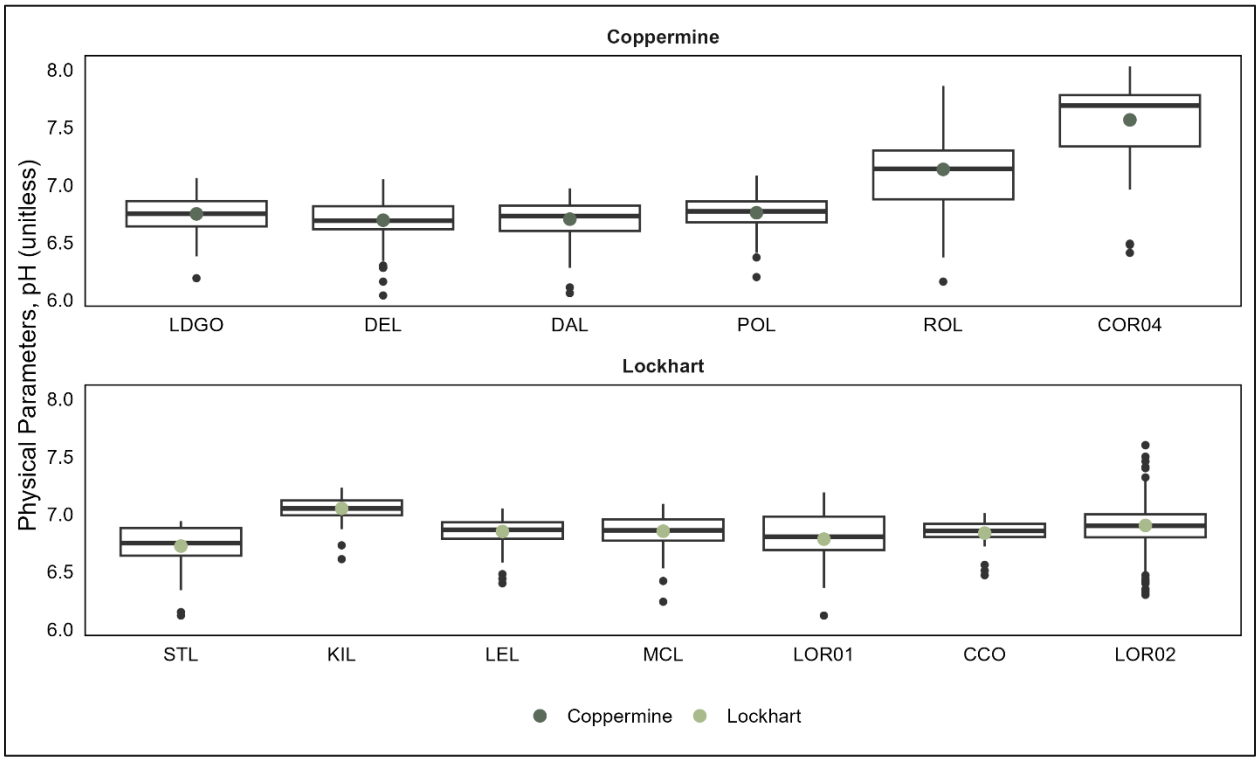
3.2.2.1 Physical Attributes

pH

The median pH in the southern reach (LDGO to POL) of the Coppermine River was circumneutral (6.5<pH<7.5) through the period of record, with median pH ranging from 6.7 to 6.8 (Figure 3-22). The pH increased downstream of site Point Lake (POL), with a median pH of 7.1 at site Rocknest Lake (ROL) and a median pH of 7.7 further downstream at site Coppermine River above Copper Creek (COR04). The Coppermine River at site COR04 was therefore characterized as alkaline (pH>7.5).

The median pH in the Lockhart River was consistently circumneutral (6.5<pH<7.5) through the period of record, with median pH ranging from 6.8 to 7.1 (Figure 3-22).

Figure 3-22: The pH in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot in the box is the mean.

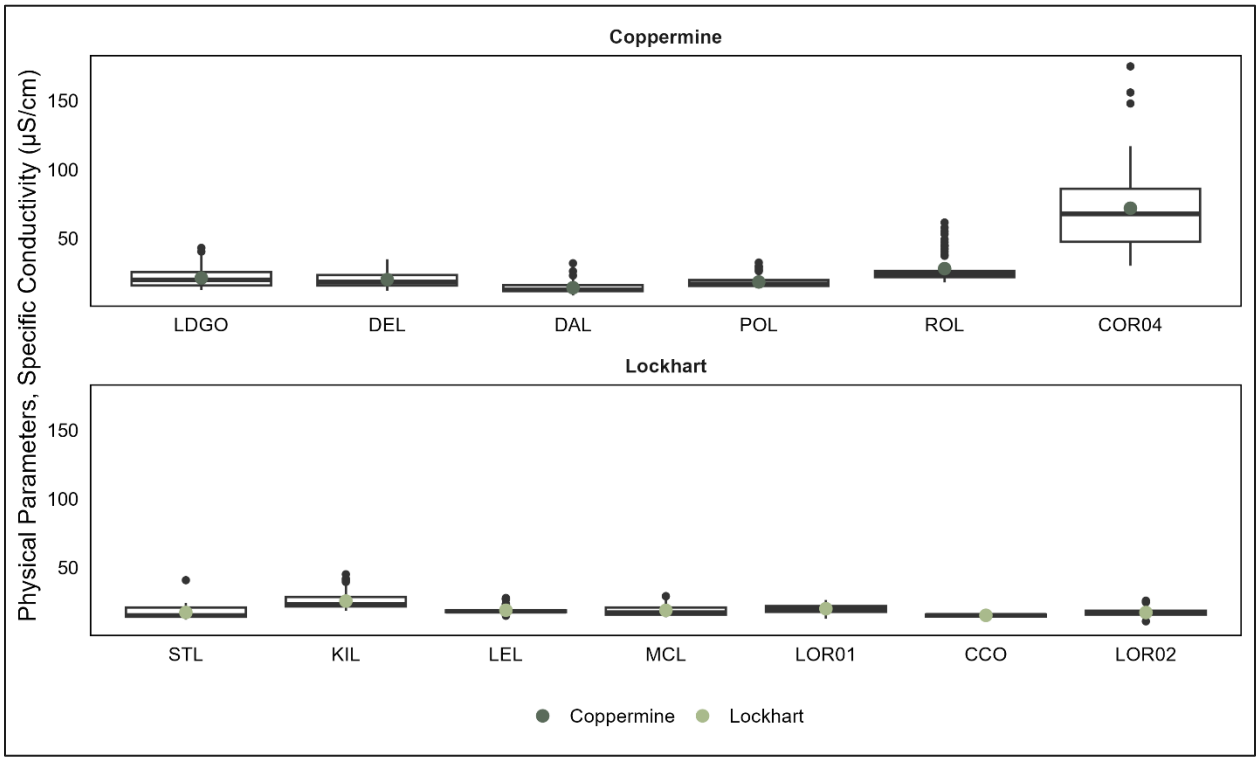
Conductivity

The median conductivity in the southern reach of the Coppermine River ranged from 17 µS/cm to 20 µS/cm (Figure 3-23). The conductivity increased downstream of site Point Lake (POL), with a median conductivity of 24 µS/cm at site Rocknest Lake (ROL) and a median conductivity of 68 µS/cm further downstream at site Coppermine River above Copper Creek (COR04).

The median conductivity in the Lockhart River was relatively consistent, with median conductivity ranging from 17 µS/cm to 23 µS/cm (Figure 3-23).

These data indicate that the Coppermine River and Lockhart River waters are dilute waters of relatively low conductivity (GNWT 2025, Datastream Initiative 2021), and with conductivity typical of flowing waters located in the area (e.g. Jones et al. 2003).

Figure 3-23: Conductivity in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

3.2.2.2 Major Ions

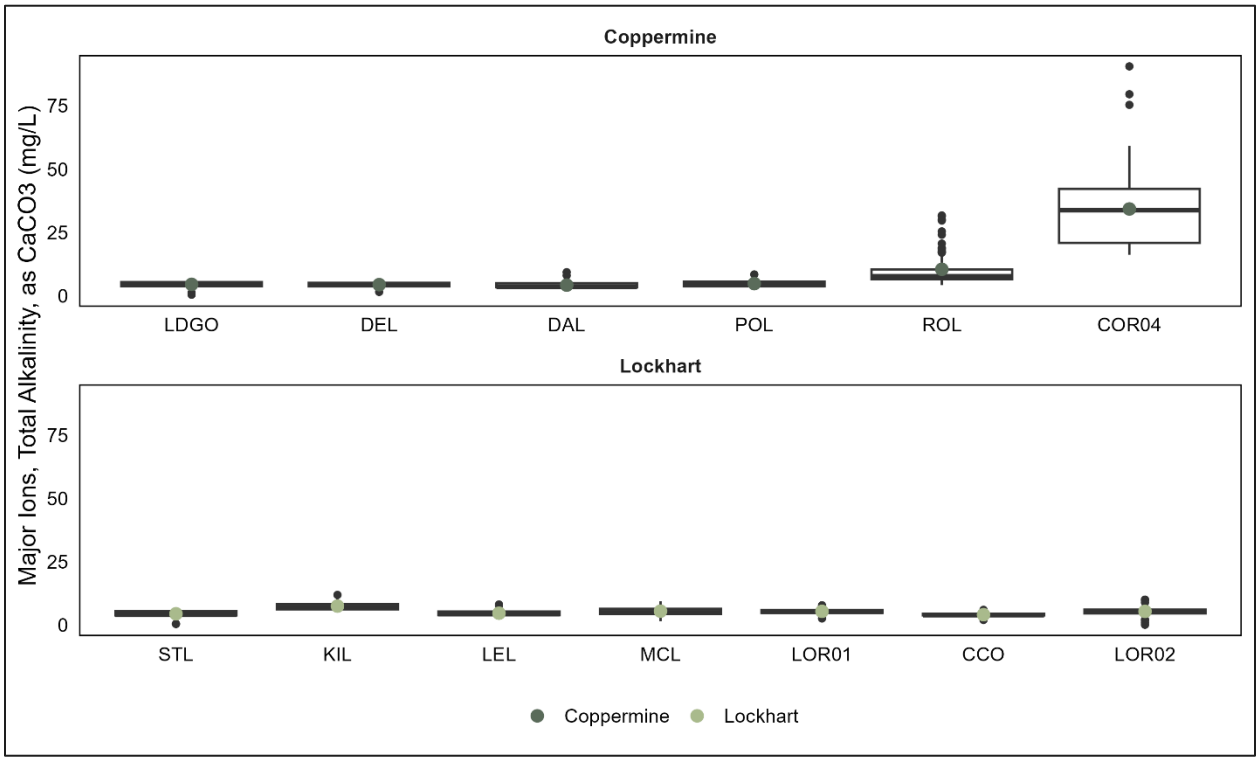
Total Alkalinity

The median total alkalinity in the southern reach of the Coppermine River ranged from 3.6 mg $CaCO_3$/L to 4.2 mg $CaCO_3$/L (Figure 3-24). The alkalinity increased downstream of site Point Lake (POL), with a median total alkalinity of 7.7 mg $CaCO_3$/L at site Rocknest Lake (ROL) and a median total alkalinity of 35 mg $CaCO_3$/L further downstream at site Coppermine River above Copper Creek (COR04).

The median total alkalinity in the Lockhart River was consistent throughout the river, with median total alkalinity ranging from 4.3 mg $CaCO_3$/L to 6.9 mg $CaCO_3$/L (Figure 3-24).

The relatively low alkalinity in the southern reach of the Coppermine River and throughout the Lockhart River means that these reaches are highly sensitive (total alkalinity <10 mg $CaCO_3$/L) to acidifying emissions or discharges (Saffran and Trew 1996).

Figure 3-24: Total Alkalinity in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

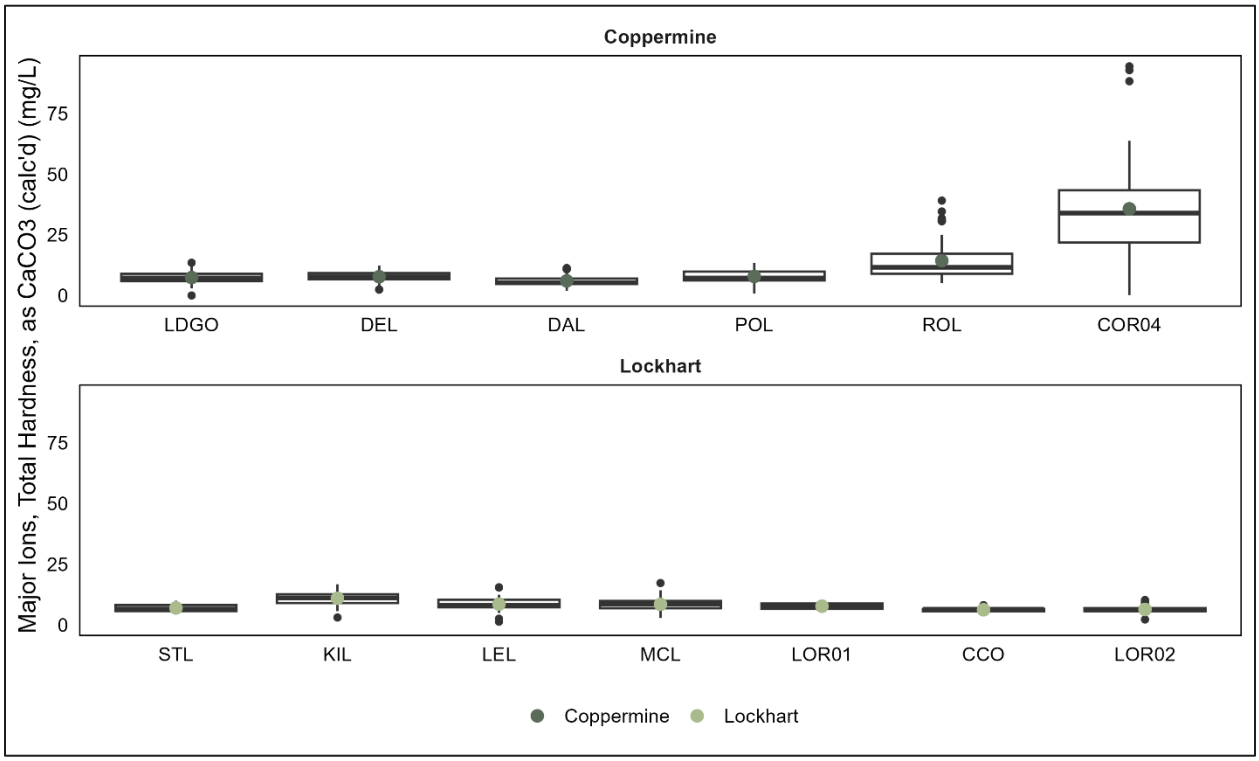
Hardness

The median hardness in the southern reach of the Coppermine River ranged from 5.4 mg $CaCO_3$/L to 7.7 mg $CaCO_3$/L (Figure 3-25). Hardness increased downstream of site Point Lake (POL), with a median hardness of 12 mg $CaCO_3$/L at site Rocknest Lake (ROL) and a median hardness of 34 mg $CaCO_3$/L further downstream at site Coppermine River above Copper Creek (COR04).

The median hardness in the Lockhart River was relatively consistent, ranging from 6.2 mg $CaCO_3$/L to 11.1 mg $CaCO_3$/L (Figure 3-25).

Based on the median hardness, the surface waters in the Coppermine River and Lockhart Rivers were characterized as very soft (<30 mg $CaCO_3$/L) to soft (30 mg $CaCO_3$/L to 60 mg $CaCO_3$/L).

Figure 3-25: Hardness in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

Calcium

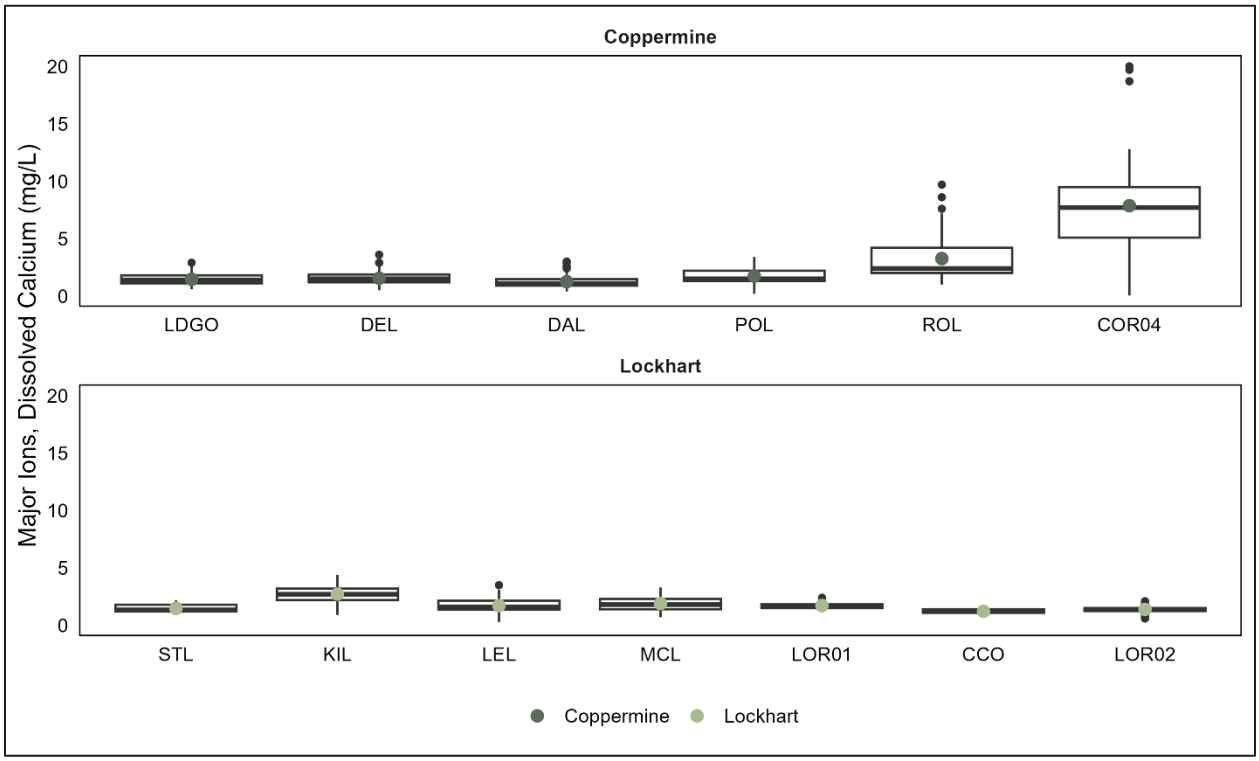
The concentration of calcium is an important factor in many of the biogeochemical processes that occur within the surface waters of aquatic ecosystems. Calcium is a key predictor of species distributions and can be used to evaluate the risk of invasive species. Calcium also affects the susceptibility of ecosystems to acidification, affects nutrient availability, and is a toxicity modifying factor for several metals. Finally, calcium is a major component of hardness and as such the concentration of calcium correlated closely with hardness.

The median dissolved calcium concentration in the southern reach of the Coppermine River ranged from 1.1 mg/L to 1.5 mg/L (Figure 3-26). The calcium concentration increased downstream of site Point Lake (POL), with a median calcium concentration of 2.4 mg/L at site Rocknest Lake (ROL) and a median calcium concentration of 7.7 mg/L further downstream at site Coppermine River above Copper Creek (COR04).

The median calcium concentration in the Lockhart River was relatively consistent, ranging from 1.4 mg/L to 2.7 mg/L, with a slight upstream to downstream gradient of decreasing concentration (Figure 3-26).

Early studies in British Columbia (Swain 1987) indicated that the calcium concentration was less than 4 mg/L in only about 15% of waterbodies in the province. More recent work (Guerin et al. 2024) indicated that large portions of North America have surface waters with calcium concentrations greater than 20 mg/L, but that areas associated with the Canadian Shield (such as the Coppermine River and Lockhart River watersheds) generally have calcium concentrations less than 5 mg/L. These reports indicate that the calcium concentrations within the southern reach of the Coppermine River and within the Lockhart River are relatively low, but within the expected range for their location. The relatively low calcium concentrations in the southern reach of the Coppermine River and throughout the Lockhart River means that these reaches are highly sensitive to acidifying emissions or discharges (Swain 1987) and restrict the biota to soft-water species.

Figure 3-26: Dissolved Calcium Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



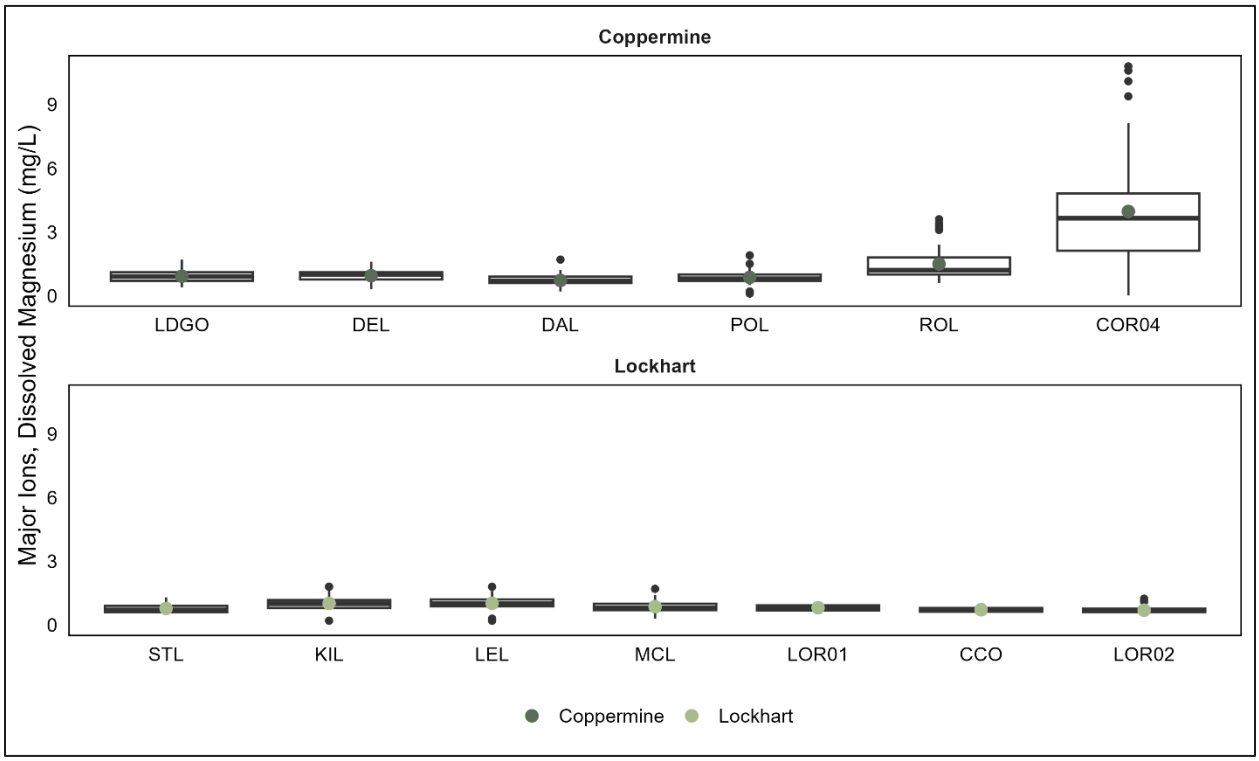
Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

Magnesium

Magnesium is the second major component of water hardness and as such follows the same spatial pattern as hardness and calcium. In the southern reach of the Coppermine River, the magnesium concentration was relatively low, with the median concentration ranging from 0.7 mg/L to 1.0 mg/L (Figure 3-27). This increased slightly to 1.2 mg/L at site Rocknest Lake (ROL) and then to 3.6 mg/L further downstream at site Coppermine River above Copper Creek (COR04).

The median magnesium concentration in the Lockhart River was relatively consistent, ranging from 0.7 mg/L to 1.0 mg/L, with a slight upstream to downstream gradient of decreasing concentration (Figure 3-27).

Figure 3-27: Dissolved Magnesium Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

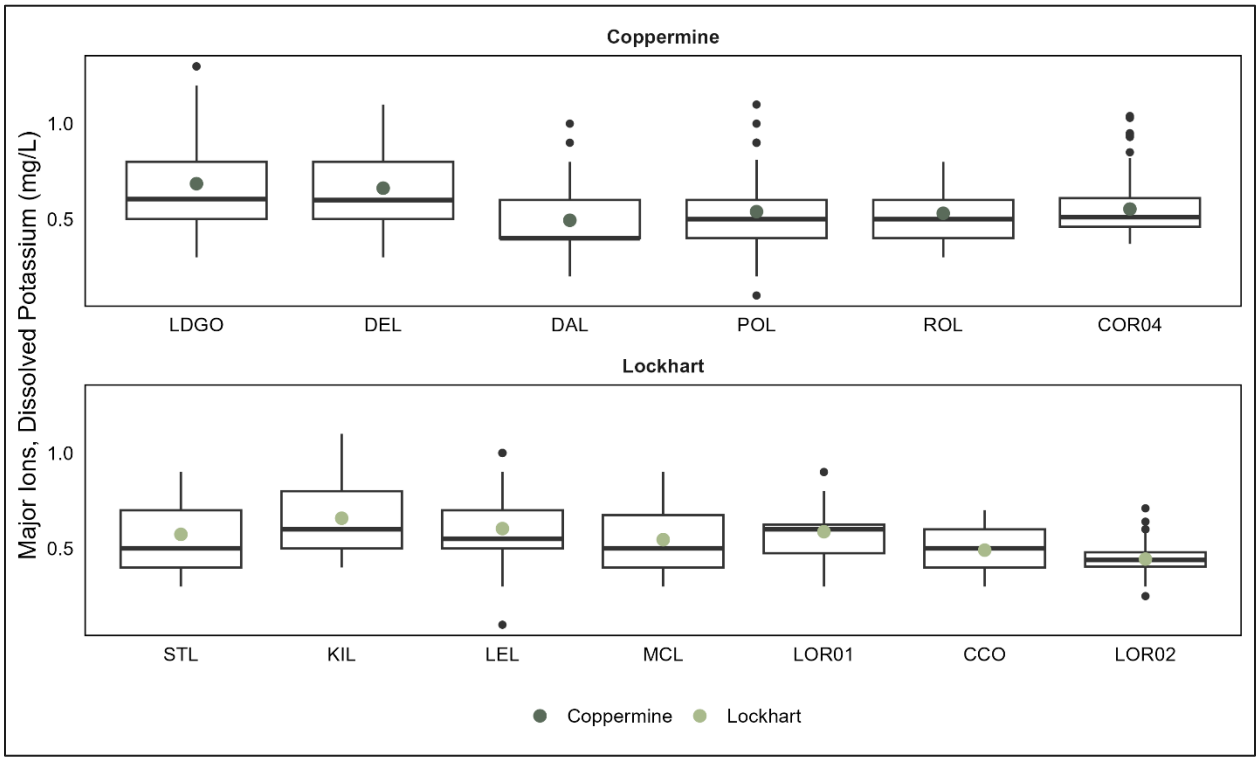
Potassium

Potassium is dissolved from minerals in soil and rocks and can occur in groundwater in elevated concentration from ancient brines and sea water. Elevated concentration of potassium therefore often indicates the upwelling or discharge of groundwater into surface waters.

Unlike calcium and magnesium, there was limited spatial variability in potassium concentration between the southern and northern reaches of the Coppermine River. Throughout the length of the river the median potassium concentration ranged from 0.5 mg/L at sites POL and ROL to 0.6 mg/L sites LDGO and DEL (Figure 3-28). The potassium concentration at sites LDGO and DEL were also relatively variable, which reflects the significant increasing trend at these two sites for this analyte (see Section 3.2.4).

The median potassium concentration in the Lockhart River was also consistent, ranging from 0.4 mg/L to 0.6 mg/L, with a slight upstream to downstream gradient of decreasing concentration (Figure 3-28).

Figure 3-28: Dissolved Potassium Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

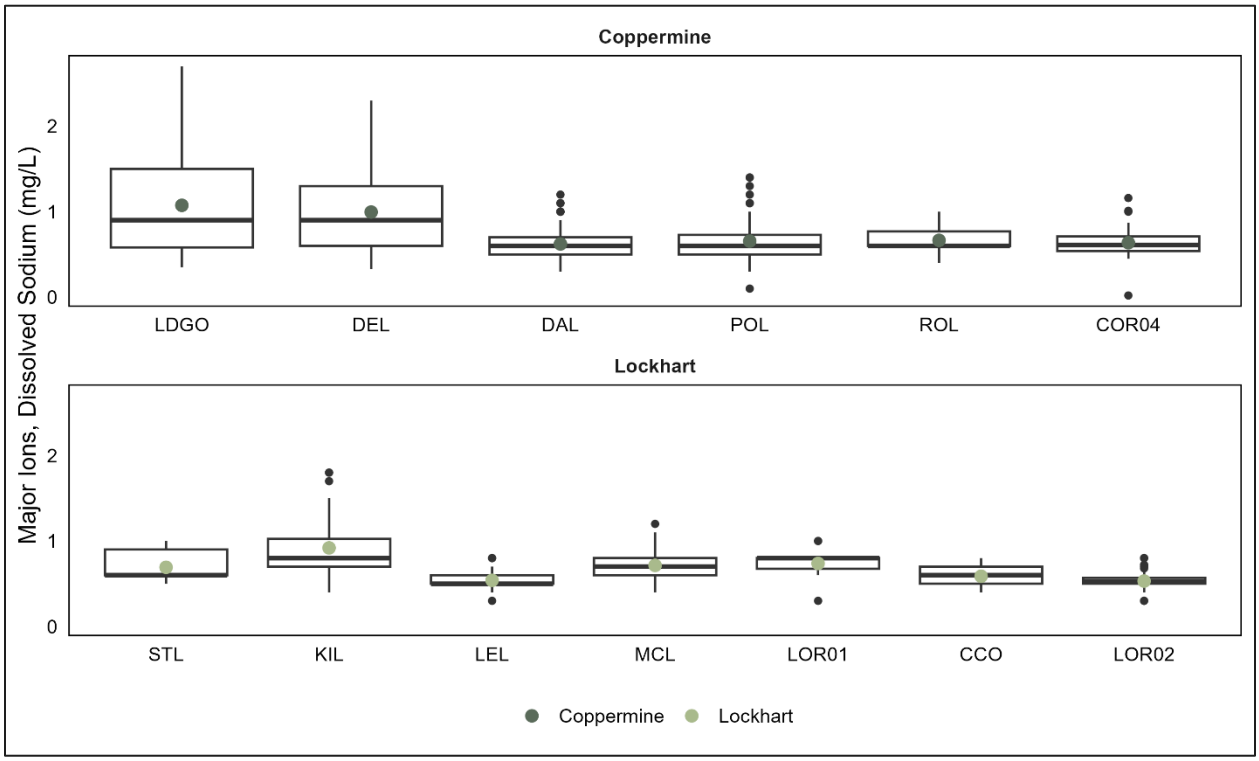
Sodium

Sodium, similar to potassium, is dissolved from minerals in soils and rocks and can occur in groundwater in elevated concentration from ancient brines and sea water. Elevated concentration of sodium therefore often indicates the upwelling or discharge of groundwater into surface waters.

Unlike calcium and magnesium, there was limited spatial variability in sodium concentration between the southern and northern reaches of the Coppermine River. Throughout the length of the river the median sodium concentration ranged from 0.6 mg/L at sites POL and ROL to 0.9 mg/L sites LDGO and DEL (Figure 3-29). The sodium concentration at sites LDGO and DEL were also relatively variable, which reflects the significant increasing trend at these two sites for this analyte (see Section 3.2.4).

The median sodium concentration in the Lockhart River was also consistent, ranging from 0.5 mg/L to 0.8 mg/L, with a slight upstream to downstream gradient of decreasing concentration (Figure 3-29).

Figure 3-29: Dissolved Sodium Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean.

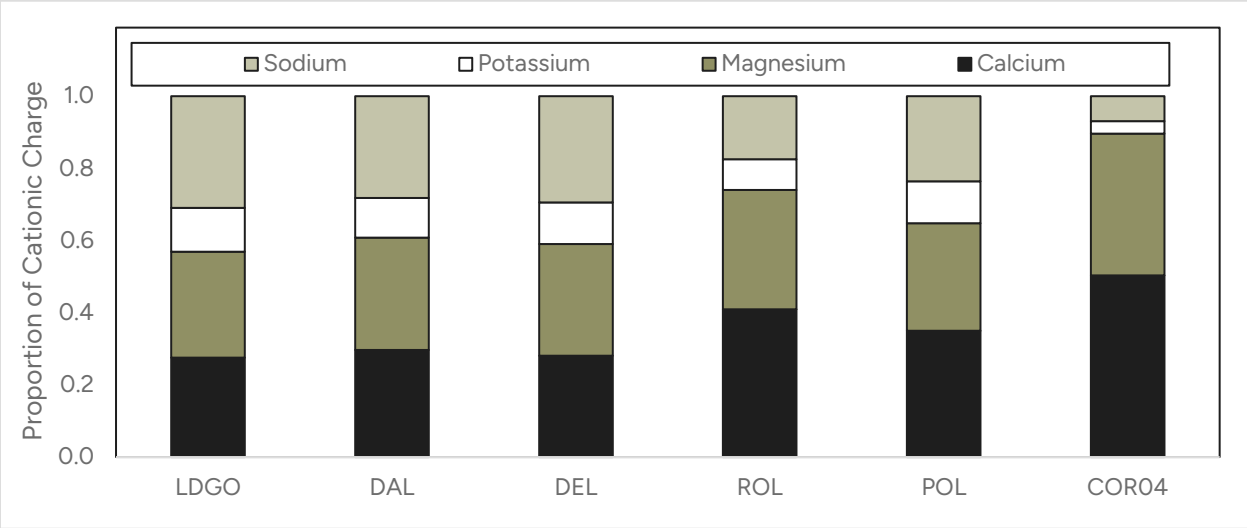
Cationic Charge

The relative contribution of the major cations (calcium, magnesium, potassium, sodium) to the cationic charge can be calculated by dividing the concentration data by the molecular weight of each of the four cations and then expressing the data as a proportion (Figure 3-30, Figure 3-31). Even though the absolute median concentrations of both divalent and monovalent cations in both the Coppermine River watershed and the Lockhart River watershed were low at all sites (Figure 3-26 to Figure 3-29), calculating the relative contribution provides information on watershed processes.

In the Coppermine River watershed, the divalent cations calcium and magnesium were co-dominant at sites in the southern reach of the Coppermine River, with calcium dominant in the northern reach of the river from Rocknest Lake (ROL) downstream (Figure 3-30). At all sites, the monovalent cations sodium, and particularly potassium, contributed less to the total cationic charge.

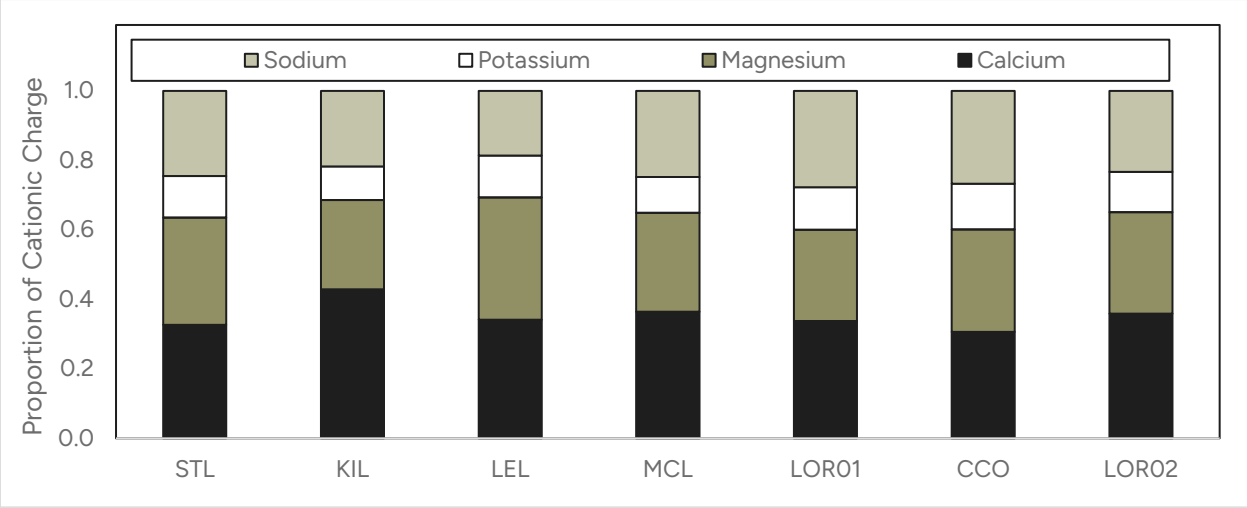
In the southern reach of the Coppermine River, the divalent cations (calcium and magnesium), contributed from 0.59 to 0.65 of the cationic charge. This increased slightly to 0.74 at site Rocknest Lake (ROL) and then to 0.90 further downstream at site Coppermine River above Copper Creek (COR04) (Figure 3-30). This increasing gradient is consistent with the source of the divalent cations, which is primarily associated with the dissolution of carbonate materials that occur in the sedimentary rock within the BGP.

Figure 3-30: Relative Contribution of the Four Major Cations to the Cationic Charge in the Coppermine River Watershed



In the Lockhart River the distribution of the cationic charge was consistent throughout the river, with the divalent cations contributing from 0.60 to 0.69 of the cationic charge, with calcium slightly dominant in comparison with magnesium (Figure 3-31). At all sites, the monovalent cations sodium, and particularly potassium, contributed less to the total cationic charge.

Figure 3-31: Relative Contribution of the Four Major Cations to the Cationic Charge in the Lockhart River Watershed



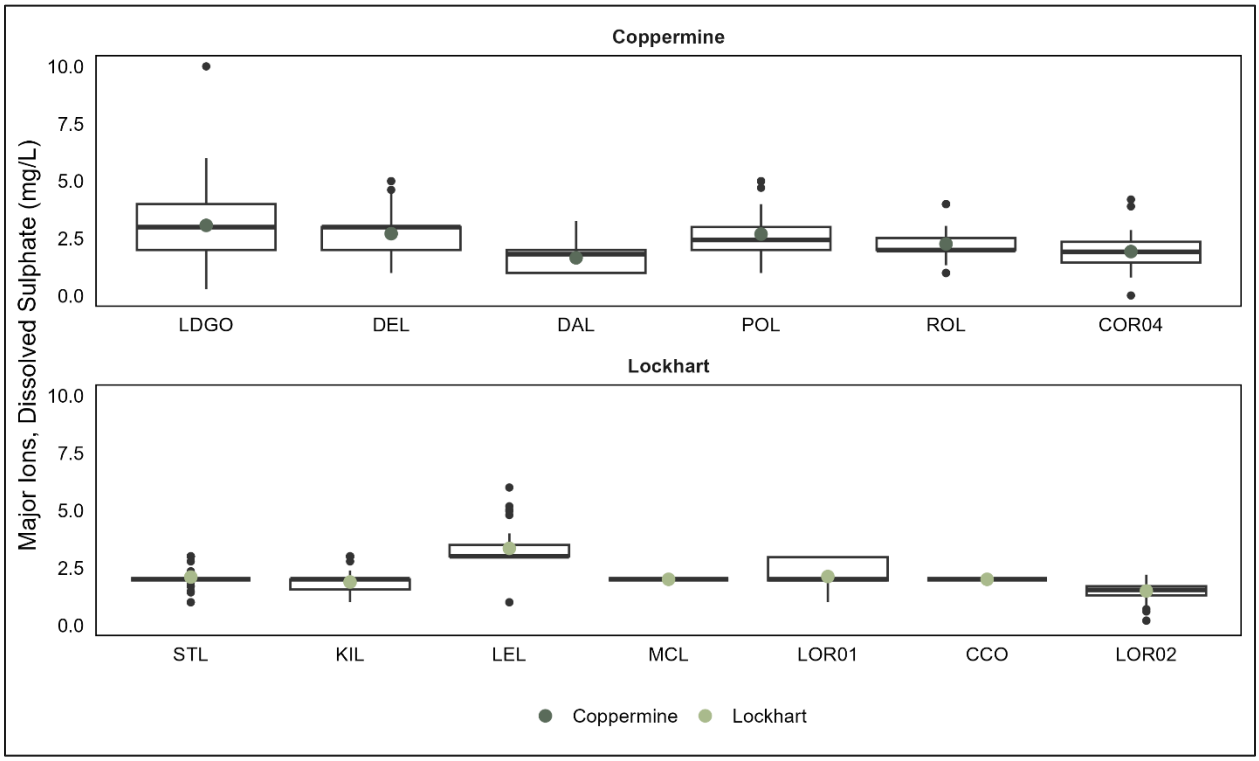
Sulphate

Sulphate in surface waters is derived from the dissolution of sulphate minerals such as gypsum and/or from oxidation of metal sulphides in mineralized watersheds.

The median sulphate concentration was consistently between 2 mg/L and 3 mg/L throughout both the Coppermine River and Lockhart River (Figure 3-32). The sulphate concentration at sites LDGO and DEL were also relatively variable, which reflects the significant increasing trend at these two sites for this analyte (see Section 3.2.4).

The sulphate concentrations measured throughout the watersheds were close to the sulphate detection limit of 1 mg/L and at all sites there was a percentage of the sulphate data below detection limit (Appendix B.2), which indicates that the sulphate concentration was low throughout the two watersheds.

Figure 3-32: Dissolved Sulphate Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean

3.2.2.3 Nutrients

The two most important essential macro-nutrients in aquatic ecosystems are nitrogen and phosphorus, one of which often limits primary productivity. The amount of nitrogen and phosphorus can define the trophic status of a watershed (See Table 2-8) and if supplied in excess can result in eutrophication of waterbodies.

The amount of dissolved organic carbon (DOC) in an aquatic system is a reflection of the primary productivity both within the waterbody (autochthonous DOC) and throughout the larger watershed (allochthonous DOC). Dissolved organic carbon also supports further biological activity (i.e. heterotrophy) and is an important modifying factor in the toxicity of metals (See Table 2-9).

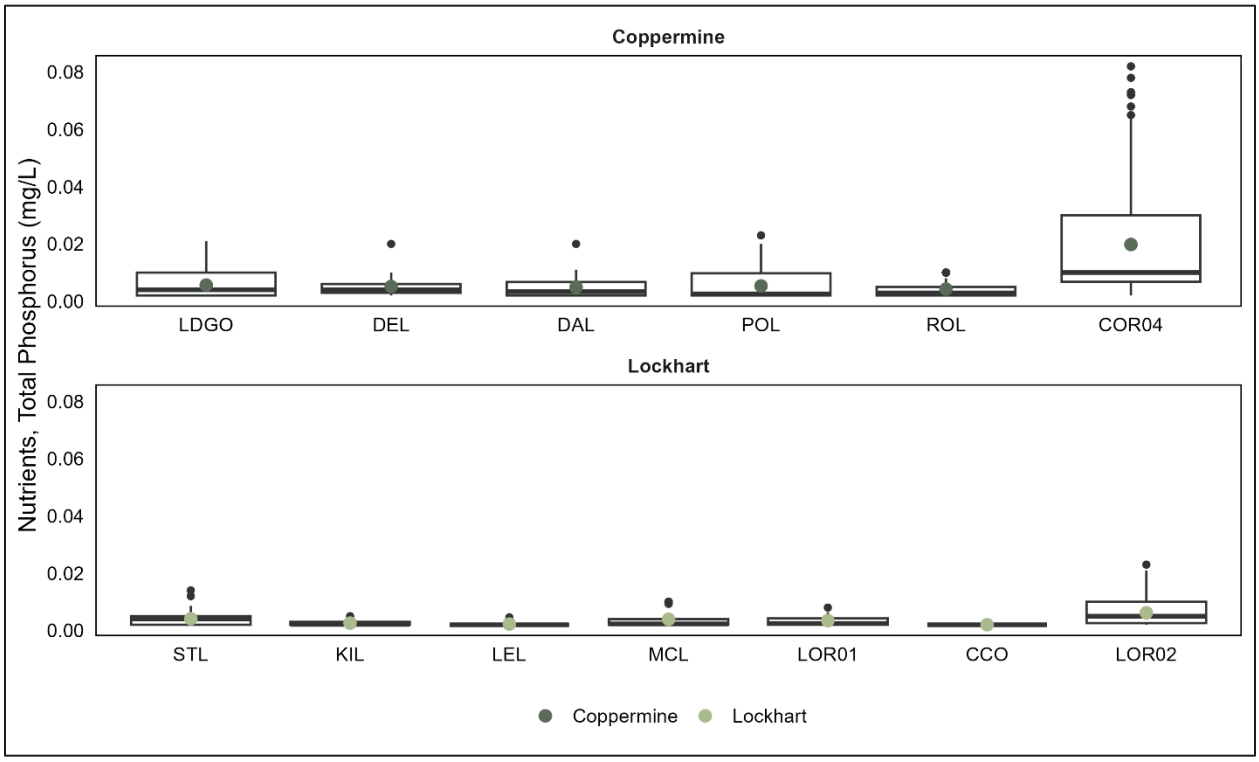
Total Phosphorus

In the southern reach of the Coppermine River, the concentration of total phosphorus was relatively low, with the median concentration less than 0.005 mg/L at sites LDGO to POL (Figure 3-33). This increased slightly to approximately 0.011 mg/L at site Coppermine River above Copper Creek (COR04). At site COR04, the variability was also considerably greater than at other sites, which could indicate seasonal cycles or a temporal trend in total phosphorus concentration.

The median total phosphorus concentration in the Lockhart River was relatively consistent, ranging from 0.002 mg/L to approximately 0.005 mg/L, with a slight downstream to upstream gradient of decreasing concentration (Figure 3-33).

For all sites except site COR04, the surface waters in the Coppermine River and Lockhart River were classified as oligotrophic based on the median total phosphorus concentration and the oligotrophic to mesotrophic boundary as defined in Dodds (1998) (c.f. Table 2-8). In contrast, at site COR04 substantially higher concentrations were recorded, with the limit of normal range close to the mesotrophic to eutrophic boundary of 0.075 mg/L (Figure 3-33).

Figure 3-33: Total Phosphorus Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



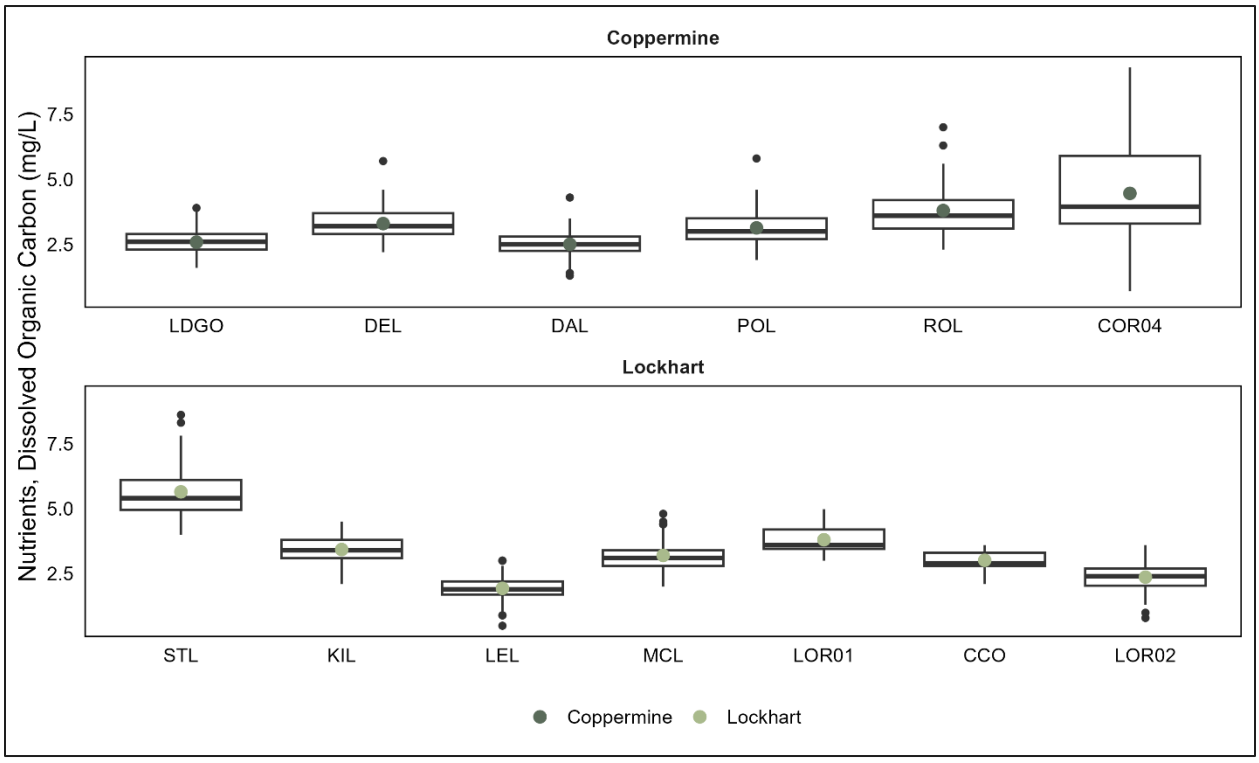
Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean

Dissolved Organic Carbon

The median DOC concentration in the southern reach of the Coppermine River ranged from 2.6 mg/L to 3.2 mg/L (Figure 3-34). The DOC concentration increased downstream of site Point Lake (POL), with a median calcium concentration of 3.6 mg/L at site Rocknest Lake (ROL) and a median DOC concentration of 4.2 mg/L further downstream at site Coppermine River above Copper Creek (COR04). The concentration of DOC at site COR04 was also relatively variable, with a limit of normal range of approximately 9 mg/L (Figure 3-34).

The median DOC concentration in the Lockhart River was variable, ranging from 1.9 mg/L to 5.4 mg/L, with the highest median concentration at site STL, and the lowest concentration at sites LEL and LOR02 (Figure 3-34).

Figure 3-34: Dissolved Organic Carbon Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean

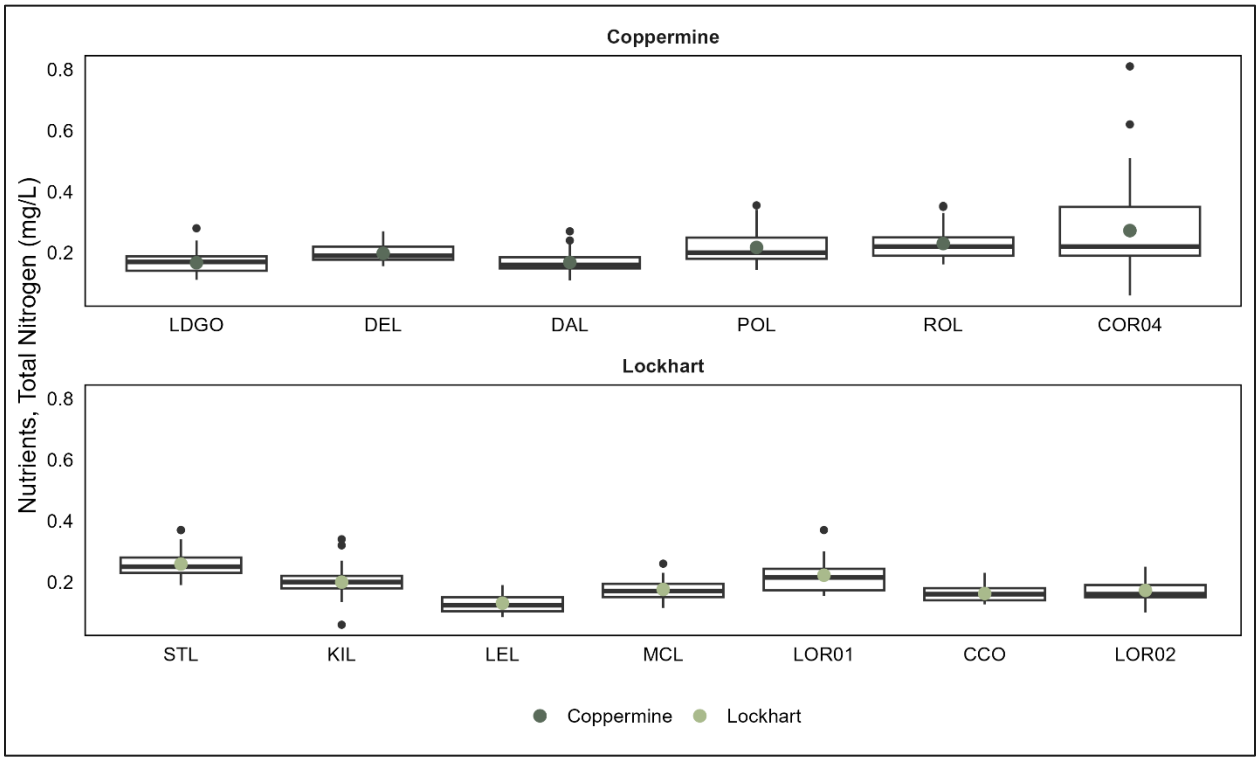
Total Nitrogen

In the southern reach of the Coppermine River, the concentration of total nitrogen was relatively low, with the median concentration less than or equal to 0.20 mg/L at sites LDGO to ROL (Figure 3-35). This increased slightly to approximately 0.22 mg/L at site Coppermine River above Copper Creek (COR04). At site COR04, the variability was also considerably greater than at other sites, which could indicate, as for phosphorus, seasonal cycles or a temporal trend in total nitrogen concentration.

The median total nitrogen concentration in the Lockhart River was relatively consistent and was less than 0.25 mg/L at all sites (Figure 3-35).

For all sites, the surface waters in the Coppermine River and Lockhart River were classified as oligotrophic based on the median total nitrogen concentration and the oligotrophic to mesotrophic boundary as defined in Dodds (1998) (c.f. Table 2-8). This assessment of trophic status is consistent with the designation based on the median total phosphorus concentration.

Figure 3-35: Total Nitrogen Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean

Chlorophyll*a*

It is not entirely accurate to discuss chlorophyll*a* in the nutrient section, but because it is associated with the nutrient status based on the total phosphorus and total nitrogen concentrations, chlorophyll*a* has been included with these two analytes.

Sestonic (in the water column) chlorophyll*a* data were available from 2015 to 2024 for eight sites in the Coppermine River watershed, and six sites in the Lockhart River watershed (Table 3-5). At all sites the median chlorophyll*a* concentrations were at or below 1.0 µg/L (Table 3-5, Appendix B.2).

The estimated oligotrophic to mesotrophic trophic boundary for sestonic chlorophyll*a* is 10 µg/L (Table 2-8), which indicates that through the period of record, both the Coppermine River and the Lockhart River were characterized as oligotrophic. This designation was consistent with the designation of trophic status based on both total phosphorus and total nitrogen.

Table 3-5: Chlorophyll*a* (µg/L) Summary Data (2015 to 2024)

Site Name	Site ID	N	Sestonic Chlorophyll*a* (µg/L)				
			25th	Median	75th	Mean	STD
Coppermine River Watershed							
Lac de Gras Outlet	LDGO	39	0.36	0.50	1.00	0.65	0.42
Daring Lake	DAL	44	0.37	0.75	1.10	0.81	0.60
Desteffany Lake	DEL	42	0.49	0.72	1.24	0.93	0.53
Coppermine River Below Desteffany Lake	COR01	17	1.00	1.00	1.40	1.64	1.73
Daring Lake	DAL	44	0.38	0.75	1.03	0.81	0.60
Point Lake	POL	40	0.49	0.65	0.92	0.75	0.46
Coppermine River at Outlet of Point Lake	COR02	10	1.00	1.00	1.83	1.33	0.47
Rocknest Lake	ROL	45	0.64	0.92	1.03	0.93	0.43
Lockhart River Watershed							
Starfish Lake	STL	42	0.68	1.00	1.31	1.00	0.45
King Lake	KIL	41	0.37	0.59	0.91	0.63	0.32
Lake of the Enemy	LEL	39	0.19	0.36	0.68	0.47	0.30
MacKay Lake	MCL	38	0.32	0.50	0.92	0.63	0.41
Lockhart River Above Outram Lakes	LOR01	16	1.00	1.00	2.00	1.34	1.29
Clinton-Colden Outlet	CCO	30	0.43	0.51	0.97	0.69	0.44

Notes: N = sample size; 25th = 25th percentile of the data; 75th = 75th percentile of the data; STD = Standard Deviation

3.2.2.4 Metals

Based on the water quality guideline screening and an assessment of the surface water database it was determined that metal concentrations were very low (<DL) for many metals and that there were few exceedances of water quality guidelines through the period of record (Appendix B).

Based on the surface water data, the only metal presented here is strontium. The metal strontium is highlighted because it is consistently >DL, it is a divalent cation that does not undergo redox reactions in oxygenated surface waters and is relatively soluble and mobile such that almost all the strontium is in the dissolved fraction. These characteristics make strontium an excellent tracer within the Coppermine River and Lockhart River watersheds.

Strontium

Strontium has a long and substantive history as a tracer of hydrologic, geologic, and ecosystem processes (Musgrove 2021) and is used here as another tool to analyze and interpret the spatial variability and temporal trends of surface water chemistry within the Coppermine River and Lockhart River watersheds.

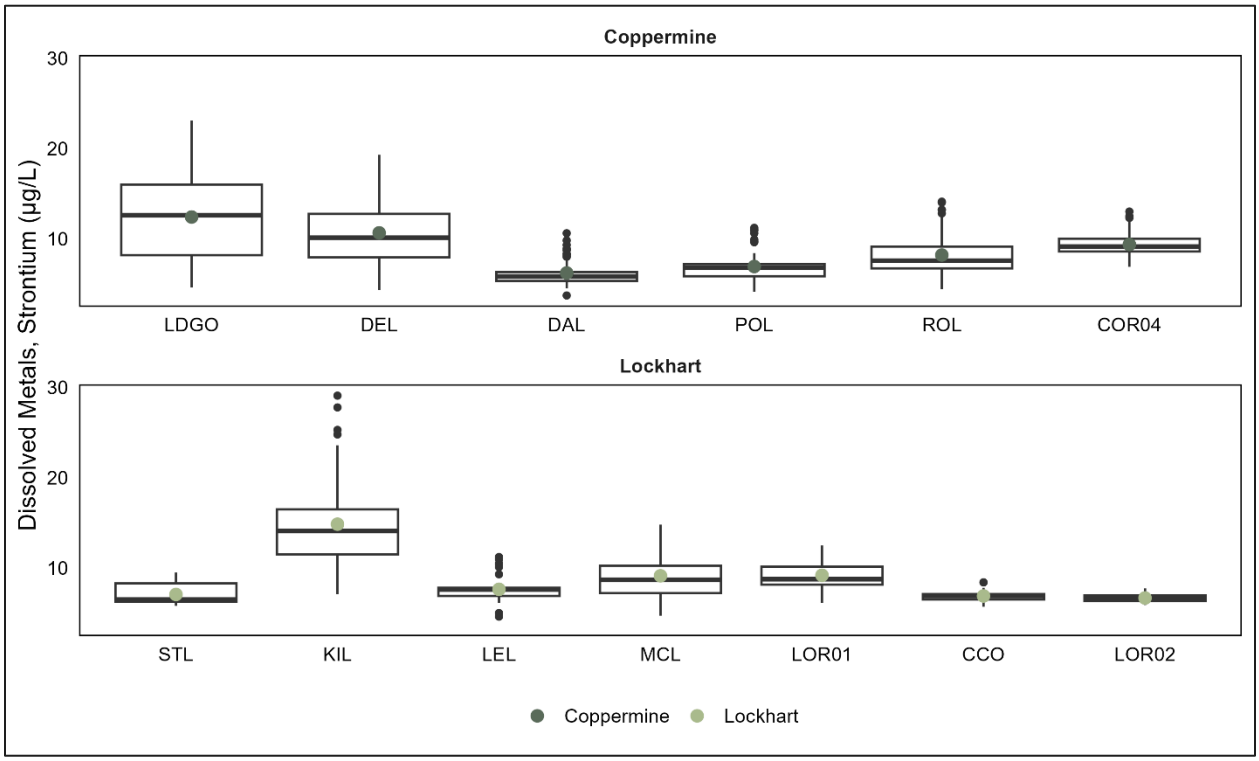
Strontium in base materials occurs primarily as strontium sulphate (celestite) and strontium carbonate (strontianite), which are both common in sedimentary materials (Musgrove 2021). Strontium is released to surface water and groundwater through dissolution of the primary minerals and is highly soluble and mobile in solution. Another potential source of strontium is from the upwelling of saline groundwater, either from ancient brines or seawater (Musgrove 2021). Elevated concentration of strontium therefore often indicates the upwelling or discharge of groundwater into surface waters.

In the southern reach of the Coppermine River, the median strontium concentration was 12.6 µg/L at site Lac de Gras Outlet (LDGO) with a limit of normal range of approximately 23 µg/L (Figure 3-36). This dropped to a median concentration of 10.8 µg/L further downstream at site Desteffany Lake (DEL) and again to 6.8 ug/L at site Point Lake (POL). The relatively elevated and variable median strontium concentration at site LDGO is consistent with the significant temporal trend in strontium at this site (Section 3.2.4.1), and points to a consistent input of strontium-laden waters into Lac de Gras (Deton' Cho Stantec 2015) with dilution downstream in the Coppermine River.

A second increase in strontium occurred in the northern reach (sites ROL and COR04) of the Coppermine River at site Rocknest Lake (ROL), where the median strontium concentration was 7.6 µg/L and then increased to 9.2 µg/L at site COR04 (Figure 3-36). Site COR04 is located in a river-dominated reach of the Coppermine River within the BGP dominated by sedimentary rock. The sedimentary rock is more susceptible to weathering than the granitic rock and therefore results in relatively increased concentration of solutes such as strontium.

The median strontium concentration in the Lockhart River was relatively elevated at upstream site KIL, with a median concentration of 14.1 µg/L (Figure 3-36). The median concentration then dropped further downstream to between 6.6 µg/L to 8.7 µg/L. As for the Coppermine River, the relatively elevated and variable median strontium concentration at site KIL is consistent with the significant temporal trend in strontium at this site (Section 3.2.4.2), and points to a consistent input of strontium-laden waters, perhaps from the now closed Snap Lake mine, into the Lockhart River with dilution downstream.

Figure 3-36: Dissolved Strontium Concentration in the Coppermine River and Lockhart River Watersheds through the Entire Period of Record



Note: The central line is the median, the lower line is the 25th percentile, the upper line is the 75th percentile and the whiskers represent the limits of normal range: data outside those limits are assessed as outliers. The dot inside the box is the mean

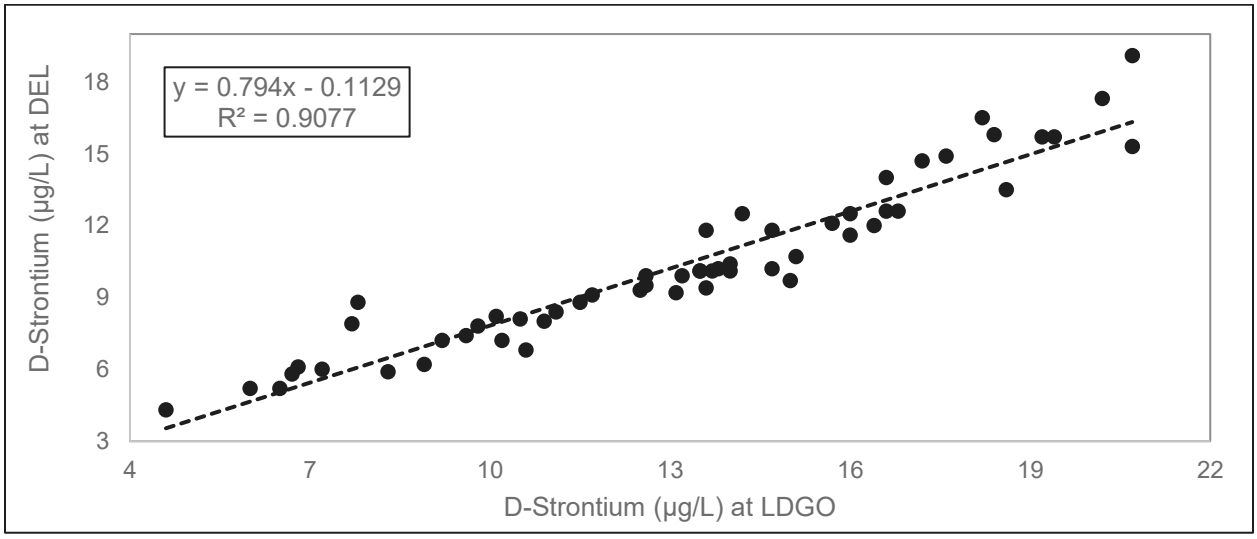
3.2.2.5 Spatial Autocorrelation

Because strontium is a conservative ion and highly mobile in oxygenated surface waters, the metal can be used as a tracer, in this case to assess the maximum spatial autocorrelation among the sites located in the Coppermine River.

Site LDGO is at the outlet of Lac de Gras and is the southern-most monitoring site on the Coppermine River. Site DEL is located approximately 40 km downstream on the Coppermine River, and with no major tributaries between the two sites. There was a consistent data record of surface water samples being collected near to the same date at the two sites, so the strontium data could be compared directly.

The results indicated that site LDGO and site DEL were highly autocorrelated, with an R^2=0.91 through the 25-year period of record (2000 to 2025) and with a slope of approximately 0.79 (Figure 3-37). This means that the water chemistry at LDGO was highly predictive of the water chemistry downstream at DEL, but that for strontium the concentration at site DEL was approximately 20% less than at site LDGO.

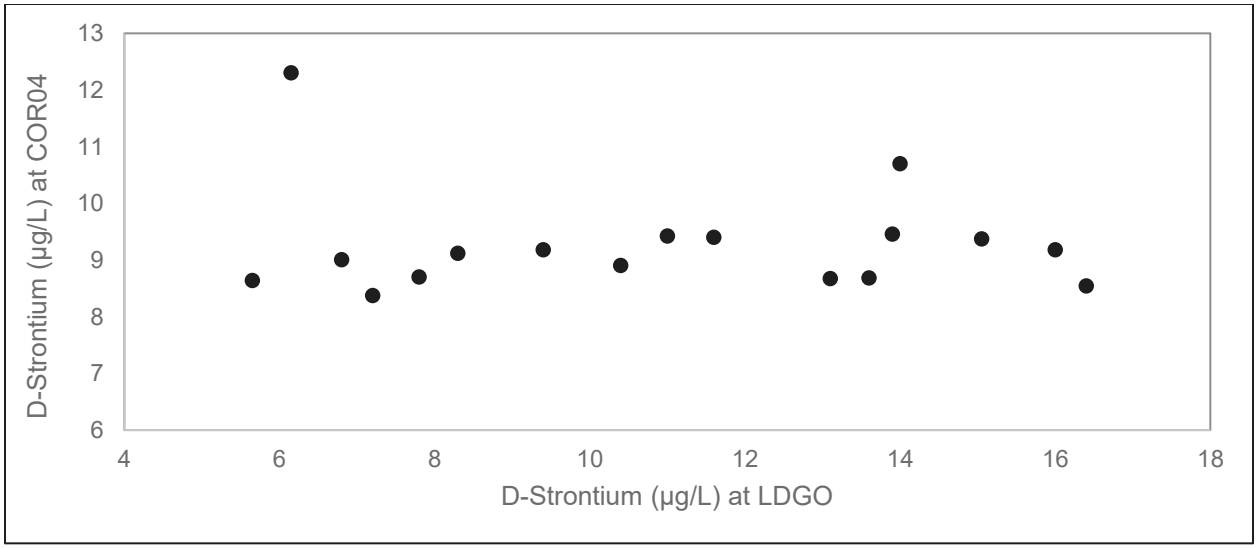
Figure 3-37: Relationship of Dissolved Strontium Concentration for Sites Lac de Gras Outlet (LDGO) and Desteffany Lake (DEL)



Further downstream, site Coppermine River above Copper Creek (COR04) is located approximately 90 km upstream of the discharge of the river into the Arctic Ocean, with many lakes and tributaries between sites LDGO and COR04. Unfortunately, there was no consistent data record of surface water samples being collected near to the same date for these two sites, so the median annual strontium concentrations were compared instead.

The results indicated that site LDGO and site COR04 were not autocorrelated (Figure 3-38), which means that the strontium concentration at LDGO was not predictive of the strontium concentration downstream at COR04.

Figure 3-38: Relationship of Dissolved Strontium Concentration for Sites Lac de Gras Outlet (LDGO) and Coppermine River above Copper Creek (COR04)



3.2.2.6 Spatial Variability Summary

As discussed in Stantec (2015), the consistent differences in surface water chemistry between the southern and northern reaches of the Coppermine River watershed are primarily due to the geology of the watersheds. The southern reach of the Coppermine River flows through a lake-affected watershed within the SGP dominated by igneous and granitic rock, while the northern reach of the Coppermine River (from site Rocknest Lake) is a river-affected watershed within the BGP dominated by sedimentary rock. The sedimentary rock is more susceptible to weathering than the granitic rock and therefore results in relatively increased concentration of solutes. The analytes that increased the most through the transition from the SGP to the BGP were pH, conductivity, hardness, magnesium, and calcium.

As discussed in Deton' Cho Stantec (2015) the differences in water chemistry, particularly between site LDGO and the rest of the southern Coppermine River watershed were likely also the result of discharges from the two diamond mines in the watershed. The analytes that were relatively elevated and displayed increased variability at site LDGO were potassium, sodium, sulphate, and strontium. The concentrations of these analytes were also elevated in comparison with site Daring Lake (DAL), which is a site separate from the main channel of the Coppermine River.

The water chemistry in the Lockhart River was relatively consistent from upstream to downstream in comparison with the water chemistry in the Coppermine River. This was likely because the entire watershed is dominated by granitic rock and with a prevalence of lakes throughout the watershed. Departures from this consistency were DOC at Starfish Lake (STL) and strontium at King Lake (KIL), both of which were relatively elevated compared with other sites in the basin.

3.2.3 Seasonal Cycles

In northern flowing waters, seasonal cycles in surface water chemistry are the result of complex season-specific alterations in watershed biogeochemical processes (Skierskan et al. 2024). During the winter baseflow period, watersheds are frozen and there is little to no runoff, with the result that groundwater upwelling can contribute a substantial portion of the baseflow of creeks and rivers. Baseflow chemistry is characterized by relatively elevated concentrations of major ions. During the spring freshet there is a rapid melt of accumulated snow and ice that then infiltrates organic surficial materials and flows relatively rapidly into the nearest creek or river. Maximum flow rates occur during the spring freshet, which results in a dilution of the baseflow and a reduction in the concentration of substances whose primary source is groundwater. Spring runoff also tends to accumulate DOC, which can result in an increase in the concentration of some substances, primarily metals, that complex with DOC. During the summer recession, precipitation infiltrates and percolates through mineral soils and an expanded active layer, with a gradual increase in various substances through the summer that eventually return to winter baseflow chemistry as flow decreases (Skierskan et al. 2024); however, with the occasional interruption of this recession caused by precipitation events.

The watershed-level biogeochemical processes that determine surface water chemistry are modified in the far north by the presence of permafrost, which limits the depth of the active layer and constrains groundwater movement through mineral soils and fractured bedrock. Seasonal cycles in water chemistry within creeks and rivers are also affected by the upstream presence of lakes, which tend to mute seasonal cycles in water chemistry.



The detailed discussion of seasonal cycles provided below comprises analytes representative of analyte categories (metals, major ions, and physical parameters) and for analytes and for sites with the largest datasets, comprising two upstream sites and one downstream site for the Coppermine River watershed, and one downstream site for the Lockhart River watershed (See Section 2.2.5).

Note that the y-axis scales are site-specific and so between-site comparisons should be made with caution.

3.2.3.1 Total Alkalinity

Total alkalinity provides buffering capacity to surface waters and so it is important to understand seasonal cycles of total alkalinity as a basis for understanding potential alterations in susceptibility to acidification.

On the upper Coppermine River at site LDGO, which is at the outlet of Lac de Gras (Figure 1-1), there were no measurable seasonal differences in total alkalinity, with concentrations essentially the same during all three seasons (Figure 3-39). Further downstream at site Desteffany Lake (DEL), there were also no seasonal differences in total alkalinity (Figure 3-39). These two sites are close to Lac de Gras and therefore lake-affected, which is the likely reason that the seasonal cycles of total alkalinity were muted.

In contrast, site Coppermine River above Copper Creek (COR04) is located downstream of an extended reach of the Coppermine River unaffected by lake discharge and has a measurable seasonal cycle for total alkalinity (Figure 3-39). Through the period of record, median total alkalinity was 20 mg $CaCO_3$/L during the winter baseflow, which increased to 43 mg $CaCO_3$/L during spring freshet, and then fell to 33 mg $CaCO_3$/L during the summer recession (Appendix B.2). The total alkalinity ratio of median spring freshet to median winter baseflow was therefore approximately 2.2 (Table 3-6). This is a surprising result because total alkalinity is an analyte that is expected to decrease during spring freshet with a maximum concentration during winter baseflow. The reason for the consistent increase in total alkalinity during spring freshet is unclear.

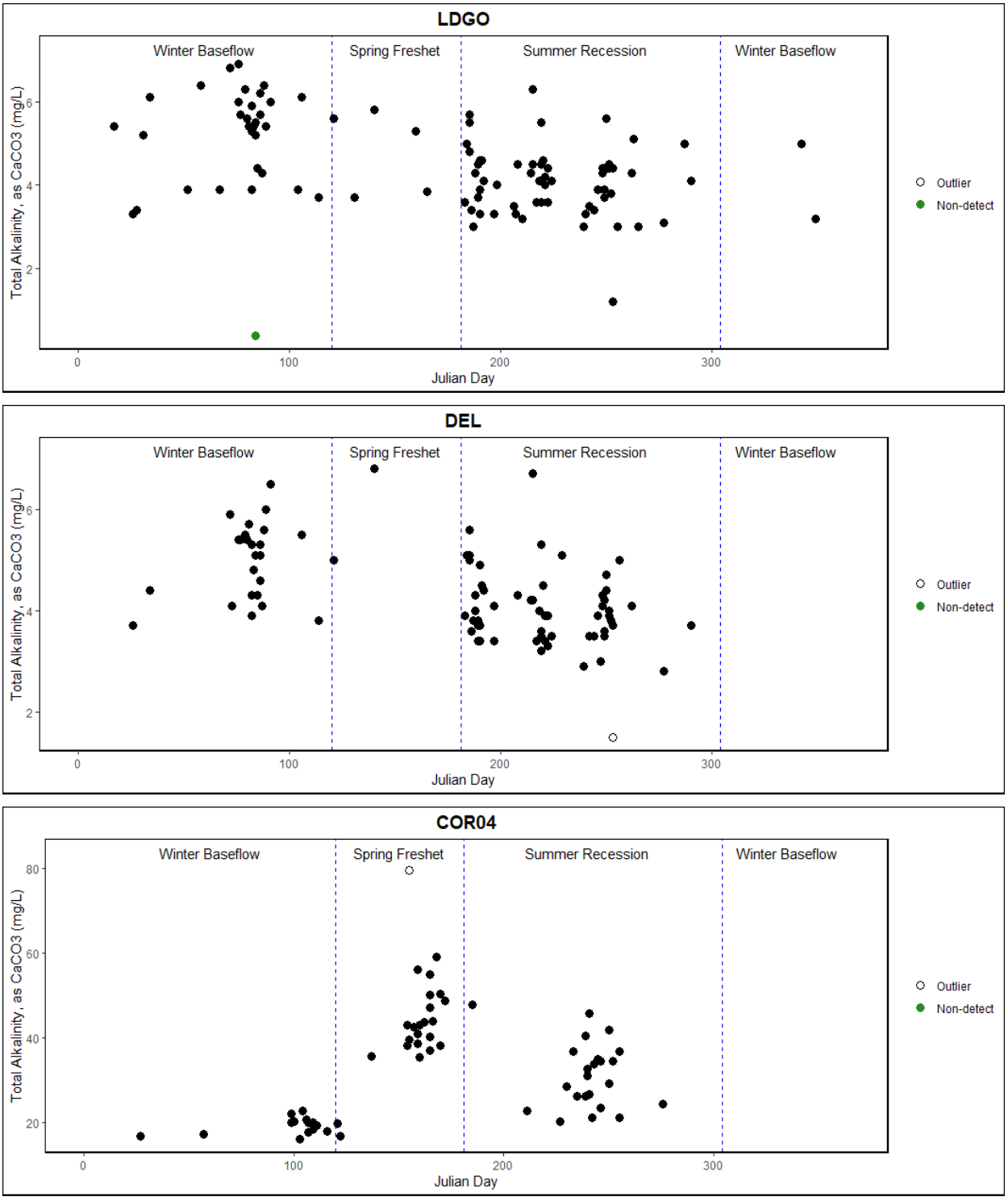
Table 3-6: Spring Freshet:Winter Baseflow Ratio based on Median Concentration

Analyte	Lac de Gras Outlet (LDGO)	Desteffany Lake (DEL)	Coppermine River Upstream of Copper Creek (COR04)	Lockhart River at Outlet of Artillery Lake (LOR02)
Total Alkalinity	1.0	N/A	2.2	1.1
pH	1.0	N/A	1.1	1.0
Dissolved Calcium	0.7	N/A	2.0	1.2
Dissolved Magnesium	0.7	N/A	2.4	1.1
Strontium	N/A	N/A	1.1	0.9
Nickel	N/A	N/A	1.3	0.9
N/A = less than 5 concentration data points through the period of record				

The total alkalinity data were also characterized by a difference in variability, depending on the season. During the winter baseflow period, total alkalinity at site COR04 was relatively consistent, with a coefficient of variation (standard deviation/mean) less than 10%.

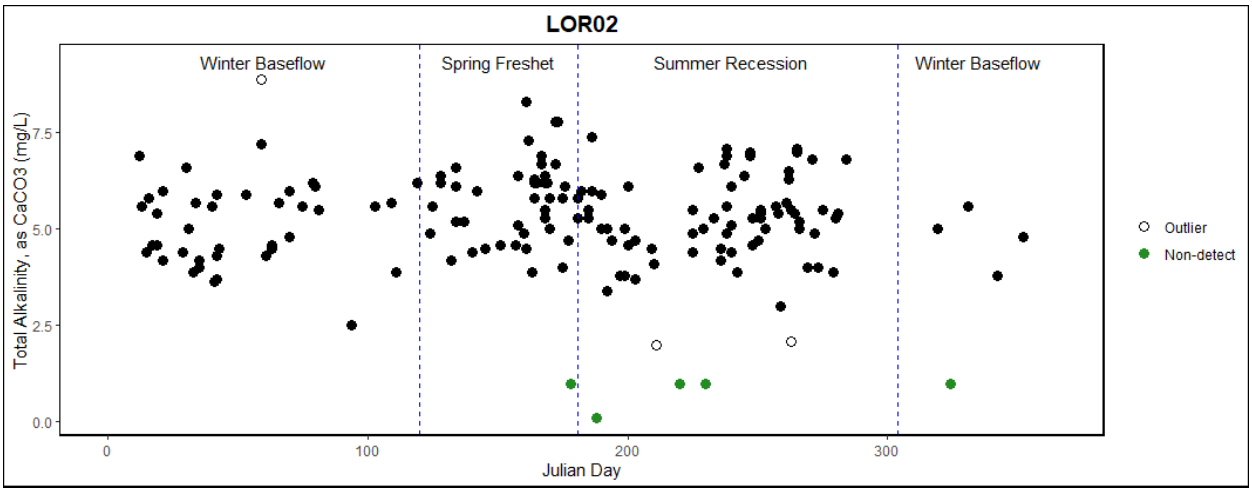
This increased to almost 30% during spring freshet and then to almost 70% during summer recession (Appendix B.2). The total alkalinity during the summer recession was relatively variable likely due to the gradual reduction of watershed runoff interspersed with high runoff events during periods of heavy precipitation.

Figure 3-39: Seasonal Cycles of Total Alkalinity in the Coppermine River Watershed



On the lower Lockhart River at site Lockhart River at Outlet of Artillery Lake (LOR02), which is a lake-affected site, there were no measurable seasonal differences in total alkalinity through the period of record, with concentrations essentially the same during all three seasons (Figure 3-40). At LOR02, median total alkalinity was 6.0 mg $CaCO_3$/L during the spring freshet, 5.2 mg $CaCO_3$/L during the summer recession, and 5.5 mg $CaCO_3$/L during the winter baseflow (Appendix B.3).

Figure 3-40: Seasonal Cycles of Total Alkalinity at Site Lockhart River at Outlet of Artillery Lake (LOR02) in the Lockhart River Watershed



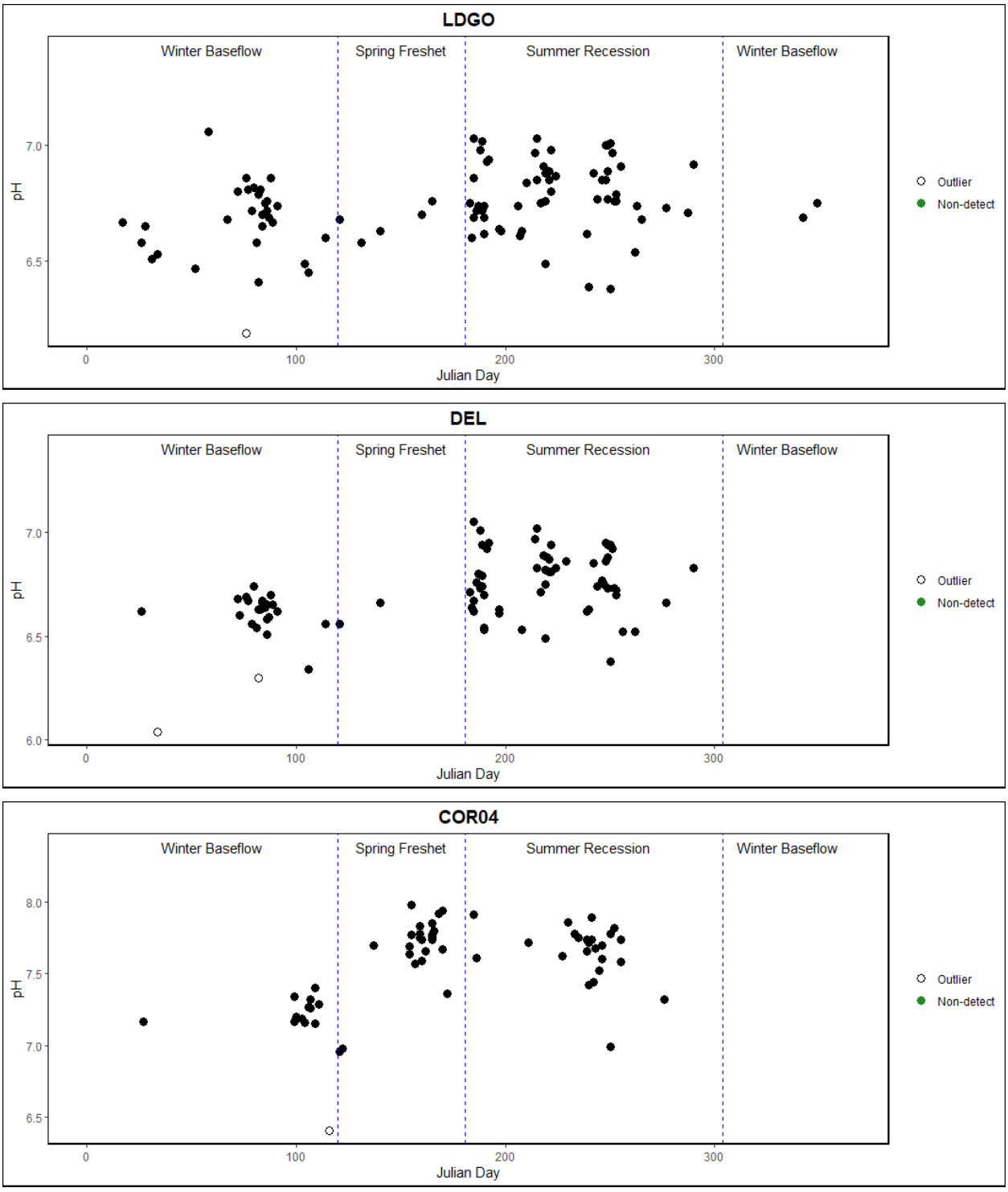
3.2.3.2 pH

The pH of surface waters modifies the potential toxicity of a number of analytes (see Table 2.6), so it is important to understand seasonal fluctuations in pH with respect to analyte-specific water quality guidelines.

On the upper Coppermine River at site LDGO, which is at the outlet of Lac de Gras (Figure 1-1), there were no measurable seasonal differences in pH, with pH essentially the same during all three seasons (Figure 3-41). Further downstream at site Desteffany Lake (DEL), there were also no seasonal differences in pH, although there were few samples collected during the spring freshet (Figure 3-41).

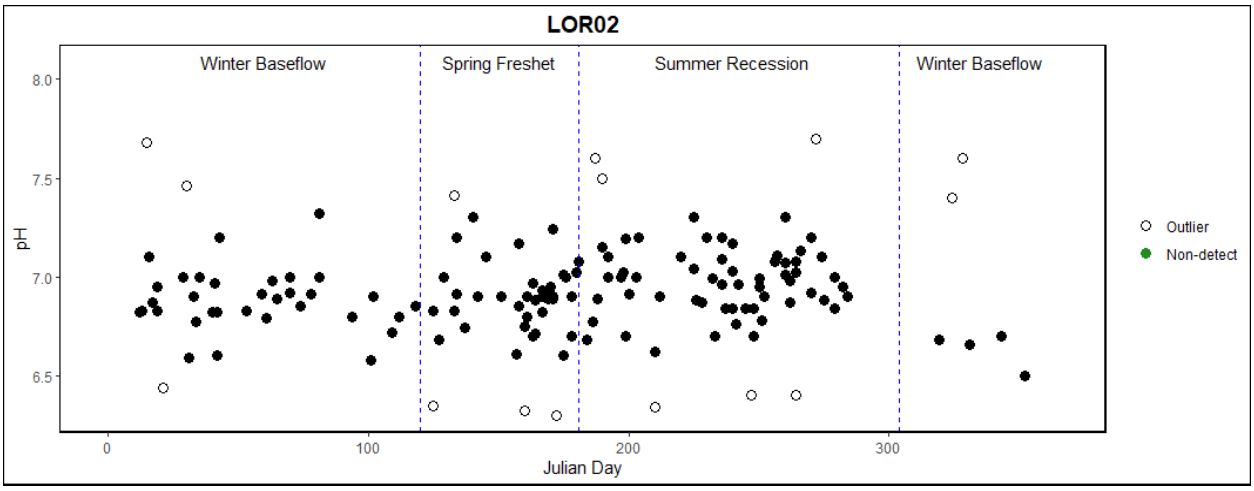
In contrast, site Coppermine River above Copper Creek (COR04) is located downstream of an extended reach of the Coppermine River unaffected by lake discharge and has a measurable seasonal cycle for pH (Figure 3-41). Through the period of record, median pH was 7.3 during the winter baseflow, which increased to 7.7 during spring freshet and summer recession (Appendix B.2). Based on these results, the pH ratio of median spring freshet to median winter baseflow was approximately 1.1 (Table 3-6).

Figure 3-41: Seasonal Cycles of pH in the Coppermine River Watershed



On the lower Lockhart River at station Lockhart River at Outlet of Artillery Lake (LOR02), which is a lake-affected site, there were no measurable seasonal differences in pH through the period of record, with pH essentially the same during all three seasons (Figure 3-42). At LOR02, median pH was 6.9 during the spring freshet, 7.0 during the summer recession, and 6.9 during the winter baseflow (Appendix B.3).

Figure 3-42: Seasonal Cycles of pH at Site Lockhart River at Outlet of Artillery Lake (LOR02) in the Lockhart River Watershed



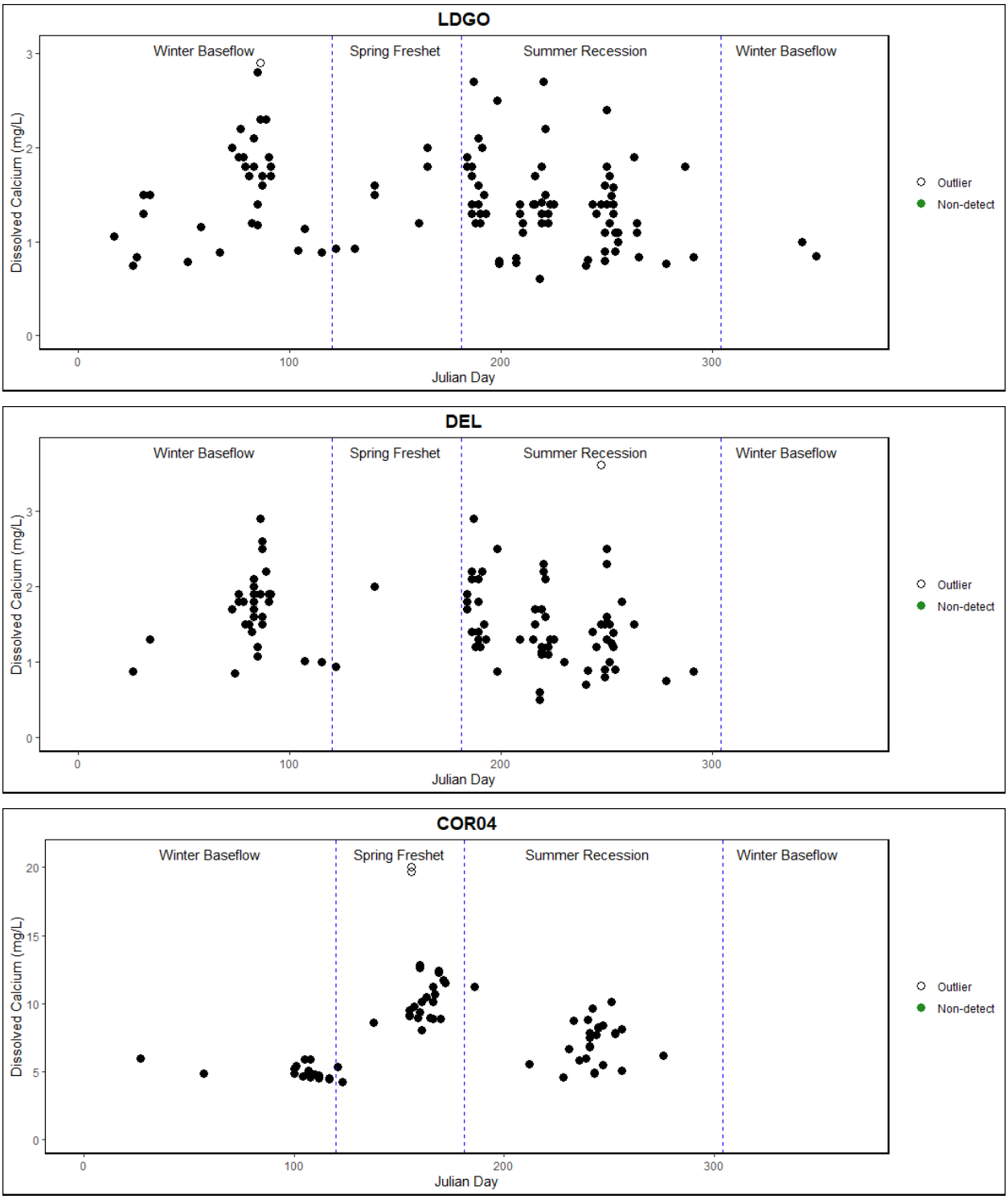
3.2.3.3 Calcium

The calcium concentration of surface waters is a component of water hardness, which is a modifier of the potential toxicity of a number of analytes (see Table 2.6), so it is important to understand seasonal fluctuations in calcium with respect to the analyte-specific water quality guideline.

On the upper Coppermine River at site LDGO, which is at the outlet of Lac de Gras (Figure 1-1), there were no measurable seasonal differences in calcium, with calcium essentially the same during all three seasons (Figure 3-43). Further downstream at site Desteffany Lake (DEL), there were also no seasonal differences in calcium, although there were only a few samples collected during the spring freshet (Figure 3-43).

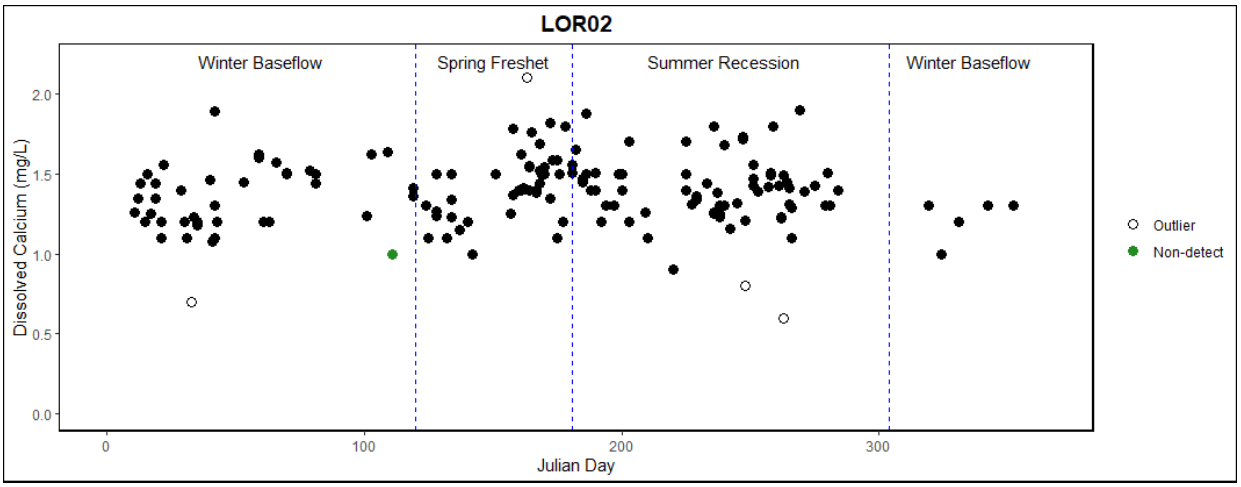
In contrast, site Coppermine River above Copper Creek (COR04) is located downstream of an extended reach of the Coppermine River unaffected by lake discharge and has a measurable seasonal cycle for calcium (Figure 3-43). Through the period of record, the median calcium concentration was 4.8 mg/L during the winter baseflow, which increased to 9.9 mg/L during spring freshet and then decreased to 7.7 mg/L during the summer recession (Appendix B.2). Based on these results, the calcium ratio of median spring freshet to median winter baseflow was approximately 2.0 (Table 3-6).

Figure 3-43: Seasonal Cycles of Dissolved Calcium in the Coppermine River Watershed



On the lower Lockhart River at site Lockhart River at Outlet of Artillery Lake (LOR02), which is a lake-affected site, there were no measurable seasonal differences in calcium through the period of record, with calcium essentially the same during all three seasons (Figure 3-44). At LOR02, the median calcium concentration was 1.5 mg/L during the spring freshet, 1.4 mg/L during the summer recession, and 1.4 during the winter baseflow (Appendix B.3).

Figure 3-44: Seasonal Cycles of Dissolved Calcium at Site Lockhart River at Outlet of Artillery Lake (LOR02) in the Lockhart River Watershed



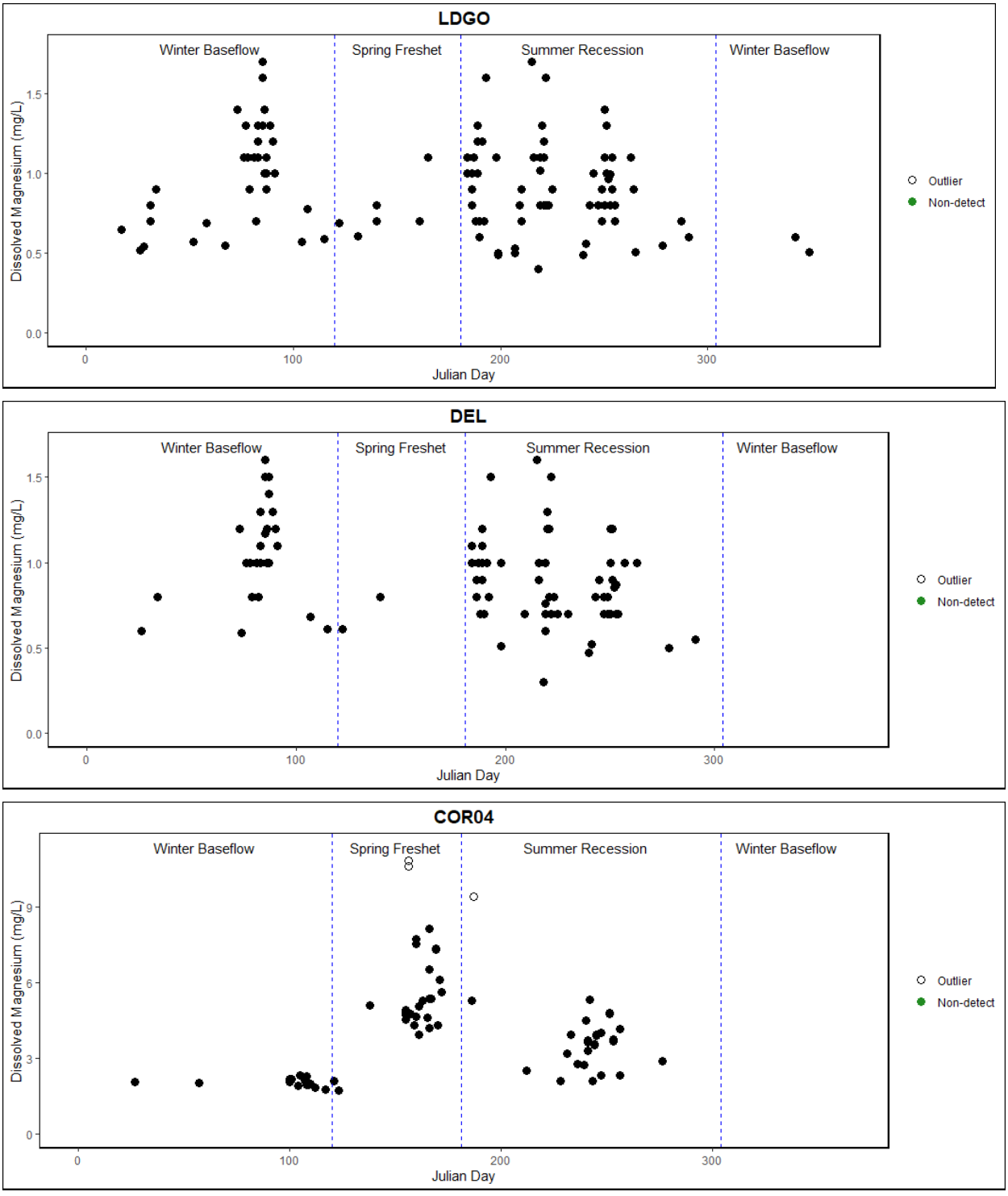
Magnesium

The magnesium concentration of surface waters is the second major component of water hardness, which is a modifier of the potential toxicity of a number of analytes (see Table 2.6), so as with calcium, it is important to understand seasonal fluctuations in magnesium with respect to the analyte-specific water quality guideline.

On the upper Coppermine River at site LDGO, which is at the outlet of Lac de Gras (Figure 1-1), there were no measurable seasonal differences in magnesium, with magnesium essentially the same during all three seasons (Figure 3-45). Further downstream at site Desteffany Lake (DEL), there were also no seasonal differences in magnesium, although there were only a few samples collected during the spring freshet (Figure 3-45).

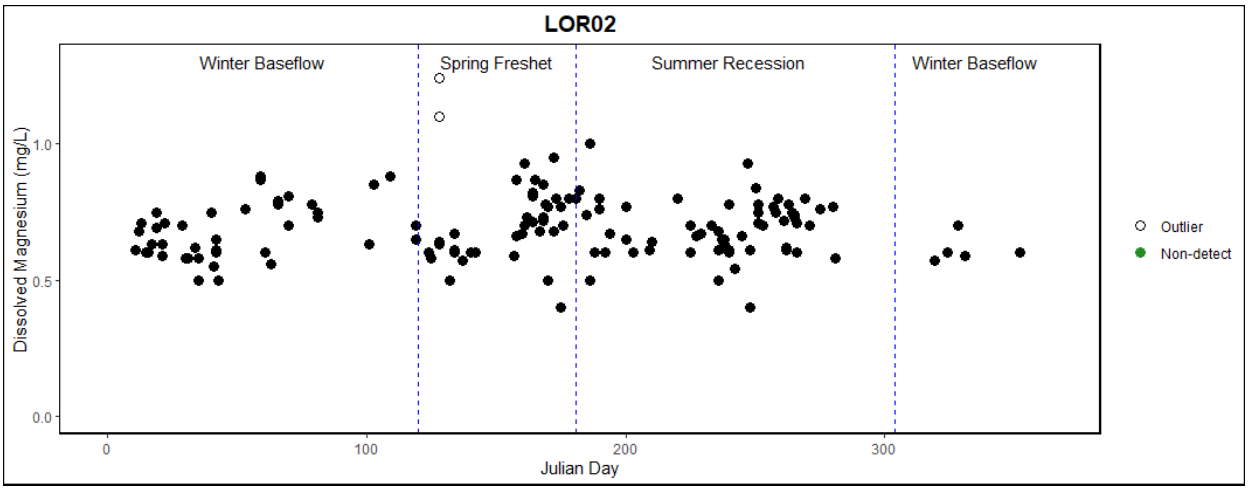
In contrast, site Coppermine River above Copper Creek (COR04) is located downstream of an extended reach of the Coppermine River unaffected by lake discharge and has a measurable seasonal cycle for magnesium (Figure 3-45). Through the period of record, the median magnesium concentration was 2.0 mg/L during the winter baseflow, which increased to 5.1 mg/L during spring freshet and then decreased to 3.6 during the summer recession (Appendix B.2). Based on these results, the magnesium ratio of median spring freshet to median baseflow was approximately 2.5 (Table 3-6).

Figure 3-45: Seasonal Cycles of Dissolved Magnesium in the Coppermine River Watershed



On the lower Lockhart River at site Lockhart River at Outlet of Artillery Lake (LOR02), which is a lake-affected site, there were no measurable seasonal differences in magnesium through the period of record, with magnesium essentially the same during all three seasons (Figure 3-46). At LOR02, the median magnesium concentration was 0.7 mg/L through all three seasons (Appendix B.3).

Figure 3-46: Seasonal Cycles of Dissolved Magnesium at Site Lockhart River at Outlet of Artillery Lake (LOR02) in the Lockhart River Watershed



3.2.3.4 Strontium

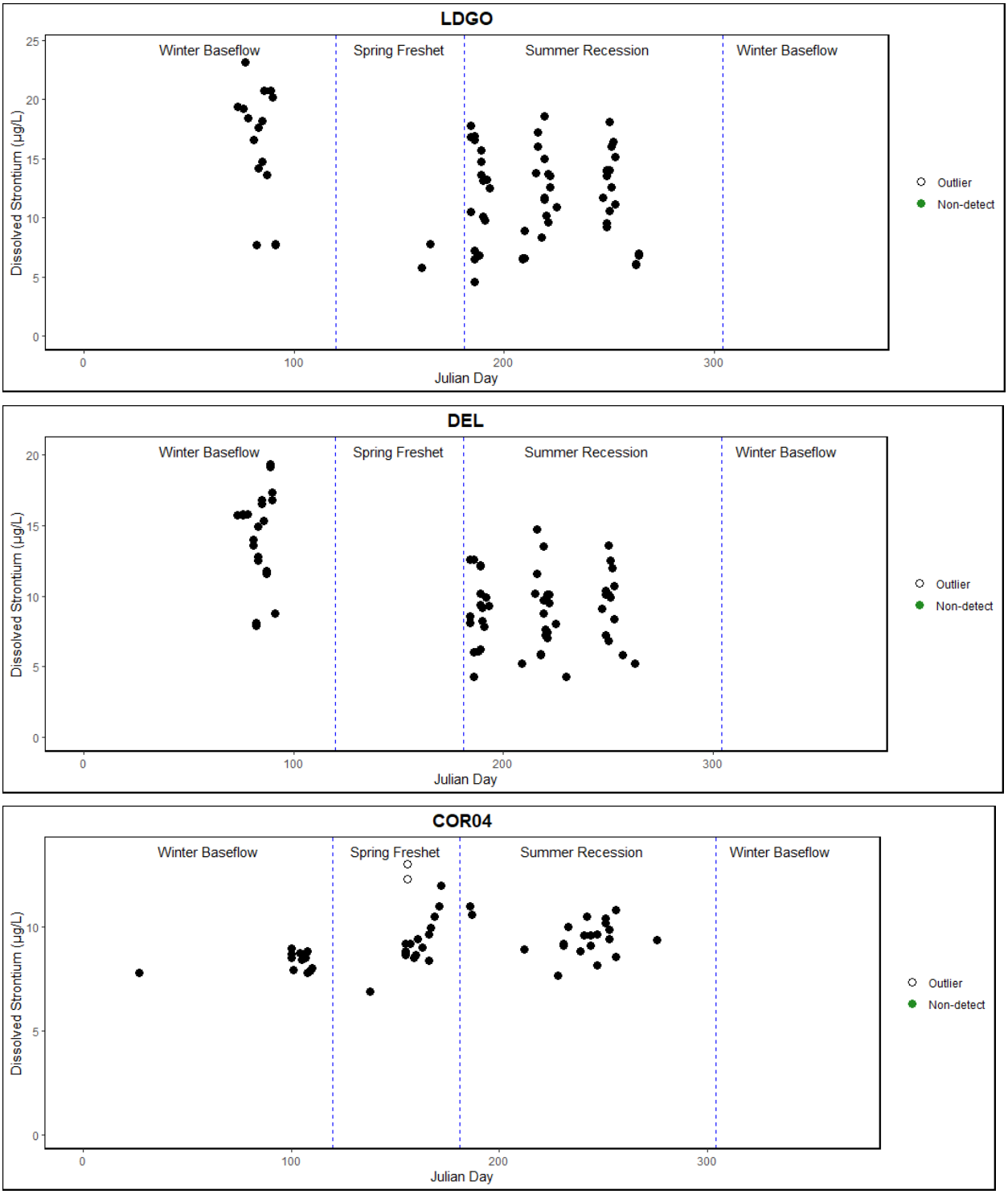
Strontium is a conservative ion that occurred primarily in the dissolved form at concentrations high enough that there were few, if any, censored data. These characteristics make the metal useful as a tracer within the watershed.

On the upper Coppermine River at site LDGO, which is at the outlet of Lac de Gras (Figure 1-1), there appeared to be a slight seasonal difference in strontium, with strontium slightly higher during the winter baseflow than during the summer recession seasons (Figure 3-47). Further downstream at site Desteffany Lake (DEL), there was also a slight seasonal difference in strontium, although there were no samples collected during the spring freshet (Figure 3-47).

There were no seasonal differences in strontium concentration at site Coppermine River above Copper Creek (COR04), which is located downstream of an extended reach of the Coppermine River unaffected by lake discharge (Figure 3-47). Through the period of record, median strontium concentration was 8.5 µg/L during the winter baseflow, which increased slightly to 9.2 µg/L during spring freshet and then 9.6 µg/L during the summer recession (Appendix B.2). Based on these results, the strontium ratio of median spring freshet to median winter baseflow was approximately 1.1 (Table 3-6).

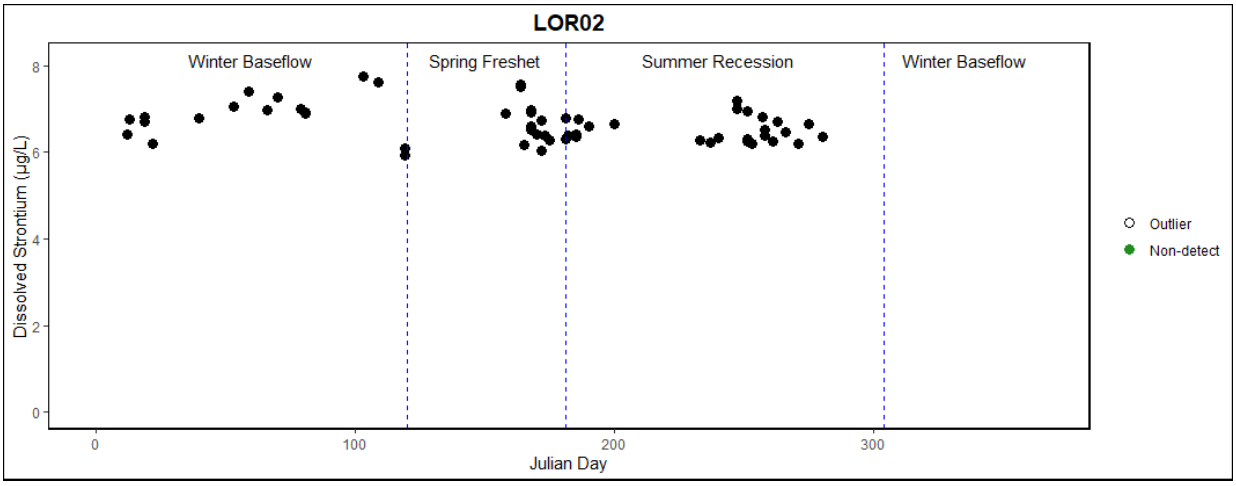
Of note regarding the strontium concentration data are the vertical distributions of the concentration data at both LDGO and DEL, suggesting a significant temporal trend in the data (see Section 3.2.4 below).

Figure 3-47: Seasonal Cycles of Dissolved Strontium in the Coppermine River Watershed



On the lower Lockhart River at site Lockhart River at Outlet of Artillery Lake (LOR02), which is a lake-affected site, there were no measurable seasonal differences in strontium through the period of record (Figure 3-48), with the median strontium concentration ranging from 6.4 µg/L to 6.6 µg/L through the three seasons (Appendix B.3).

Figure 3-48: Seasonal Cycles of Dissolved Strontium at Site Lockhart River at Outlet of Artillery Lake (LOR02) in the Lockhart River Watershed



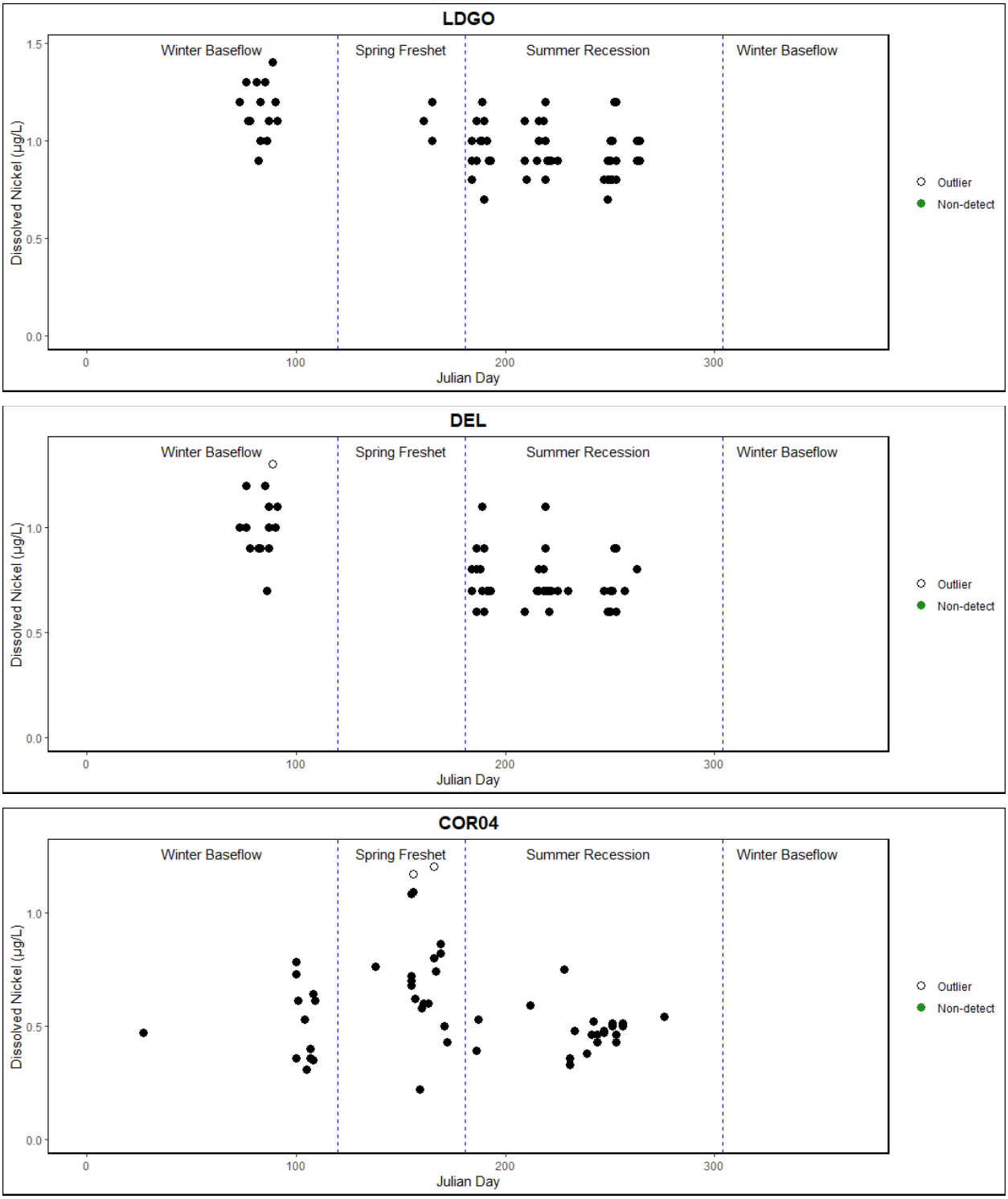
3.2.3.5 Nickel

Nickel is a metal cation that occurred primarily in the dissolved form at concentrations high enough that there were few censored data. These characteristics make the analyte useful as an example of the seasonal cycles of metals within the watersheds. Unfortunately, there were less data for nickel and the other metals, which means there was less confidence in the analysis of seasonal cycles for nickel than for the major ions.

On the upper Coppermine River at site LDGO, which is at the outlet of Lac de Gras (Figure 1-1), there were no measurable seasonal differences in nickel, with a median nickel concentration of 1.2 µg/L during the winter baseflow and 1.1 µg/L during the summer recession (Figure 3-49). Further downstream at site Desteffany Lake (DEL), there were also no seasonal differences in nickel, although there were no samples collected during the spring freshet (Figure 3-49).

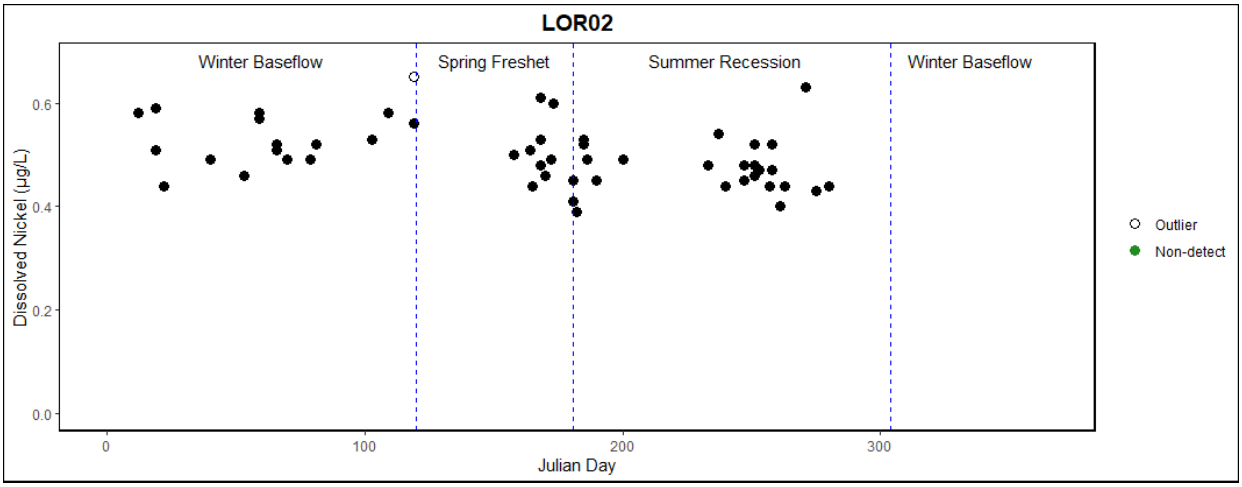
There were also no seasonal differences in nickel concentration at site Coppermine River above Copper Creek (COR04), which is located downstream of an extended reach of the Coppermine River unaffected by lake discharge (Figure 3-49). Through the period of record, the median nickel concentration was 0.53 µg/L during the winter baseflow, which increased slightly to 0.72 µg/L during spring freshet and then decreased to 0.48 µg/L during the summer recession (Appendix B.2). Based on these results, the nickel ratio of median spring freshet to median baseflow was approximately 1.4 (Table 3-6).

Figure 3-49: Seasonal Cycles of Dissolved Nickel in the Coppermine River Watershed



On the lower Lockhart River at site Lockhart River at Outlet of Artillery Lake (LOR02), which is a lake-affected site, there were no measurable seasonal differences in nickel through the period of record (Figure 3-50), with the median nickel concentration ranging from 0.47 µg/L to 0.52 µg/L through the three seasons (Appendix B.3).

Figure 3-50: Seasonal Cycles of Dissolved Nickel at Site Lockhart River at Outlet of Artillery Lake (LOR02) in the Lockhart River Watershed



3.2.3.6 Seasonal Cycles Summary

Characterizing seasonal cycles in water chemistry provides an understanding of the biogeochemical processes that occur in watershed, provides a preliminary assessment of the seasonal vulnerability of a watershed to contaminant loading, and potentially highlights temporal trends in seasonal cycles.

In the Coppermine River watershed, there were no measurable seasonal cycles in water chemistry in the southern watershed, likely due to the many lakes that tend to mute seasonal cycles. In the northern part of the watershed, seasonal cycles for several of the major analytes did occur, with the ratio between spring freshet and winter baseflow ranging from 1.1 to 2.5. For all of the highlighted analytes, however, the concentration during the spring freshet was higher than during the winter baseflow, which is unusual for the major ions (Skierskan et al. 2024). Reasons for this are unclear.

In the Lockhart River watershed, there were no measurable seasonal cycles at site LOR02 for any of the highlighted analytes, again most likely because the watershed is dominated by numerous lakes. Boxplots of seasonal data for each site and analyte can be found in Appendix B.5.

3.2.4 Temporal Trends

Based on the lack of seasonal cycles in surface water chemistry (Section 3.2.3), the primary focus of the trends analysis in the Coppermine River and Lockhart River watersheds was on the annual median concentration for those analytes with a consistent data record and with consistently less than 10% censored data (Table 3-7).

3.2.4.1 Coppermine River Watershed

For the Coppermine River watershed, six sites had an appropriate amount of data and were assessed for temporal trends for 16 analytes.

Lac de Gras Outlet (LDGO)

At site Lac de Gras Outlet (LDGO), through the 2000 to 2025 period of record there were significant increasing monotonic trends for 11 of the 16 tested analytes (Table 3-7). This included trends of very high significance ($p<0.0001$) for dissolved magnesium, dissolved potassium, dissolved sodium, dissolved strontium, dissolved hardness and conductivity, and trends of high significance ($p<0.001$) for dissolved calcium (Table 3-7).

Through the last ten years (2015 to 2025), there were also trends of very high significance for dissolved calcium, dissolved sodium and chloride, and trends of high significance for dissolved potassium, dissolved strontium and conductivity. These results indicate that water chemistry at site LDGO has changed over the past 25 years, with significant increases for many of the above noted analytes.

The increasing trends identified at LDGO are consistent with the results from two previous reports (Stantec 2015, Deton' Cho Stantec 2015), which concluded that there were significant increasing trends for pH, conductivity, total hardness, dissolved calcium, dissolved magnesium, chloride and strontium at site LDGO, and for conductivity, hardness, chloride, sulphate and total strontium within the entirety of Lac de Gras. The conclusion of Deton' Cho Stantec (2015) was that mine discharges were primarily responsible for the increasing temporal trends in water chemistry in Lac de Gras and at site LDGO.

Desteffany Lake (DEL)

Site Desteffany Lake (DEL) is approximately 40 km downstream of LDGO on the mainstem of the Coppermine River (Figure 1-1). Through the 2000 to 2025 period of record there were significant increasing trends for 10 of the 16 tested analytes (Table 3-7). This included trends of very high significance ($p<0.0001$) for dissolved potassium, dissolved sodium, dissolved strontium and conductivity, and trends of high significance ($p<0.001$) for DOC (Table 3-7). Through the last ten years (2015 to 2024), there were fewer significant temporal trends, with trends of very high significance for dissolved sodium, dissolved strontium and conductivity. These results indicate that the significant trends that were measured for many of the analytes at LDGO continued downstream to site DEL.

Daring Lake (DAL)

Site Daring Lake (DAL) is on a tributary to the Coppermine River unaffected by mine discharge from Lac de Gras. Through the entire period of record there were only three analytes with a significant temporal trend, and the only analyte with an increasing trend of high significance ($p<0.001$) was dissolved strontium (Table 3-7). Through the last ten years (2015 to 2025), however, there were an increased number of significant trends, with marginal ($p<0.05$) to moderate ($p<0.01$) trends for nine analytes (Table 3-7).



Point Lake (POL)

Site Point Lake (POL) is located on the Coppermine River approximately 160 km downstream of site LDGO. At site Point Lake (POL) through the 2000 to 2025 period of record there were significant increasing trends for only four of the 16 tested analytes, including an increasing trend of very high significance ($p<0.0001$) for dissolved strontium (Table 3-7). Through the last ten years (2015 to 2025), there were significant trends for six analytes, including an increasing trend of high significance ($p<0.001$) for dissolved strontium.

Rocknest Lake (ROL)

Site Rocknest Lake (ROL) is located on the Coppermine River approximately 210 km downstream of site LDGO. At site Rocknest Lake (ROL) through the 2000 to 2025 period of record there were significant increasing trends for only three of the 16 tested analytes, including an increasing trend of very high significance ($p<0.0001$) for dissolved potassium and dissolved sodium, and an increasing trend of high significance ($p<0.001$) for dissolved strontium (Table 3-7).

Through the last ten years (2015 to 2025), there were significant increasing trends of high significance for dissolved potassium and dissolved sodium, but only a moderate increasing trend for dissolved strontium (Table 3-7).



Table 3-7: Mann-Kendall Temporal Trends Analysis for the Coppermine River Watershed for Annual Median Data

Analyte	Station											
	Lac de Gras Outlet		Desteffany Lake		Daring Lake		Point Lake		Rocknest Lake		Coppermine River Upstream of Copper Creek	
	LDGO		DEL		DAL		POL		ROL		COR04	
Period	2000 - 2025	2015 - 2025	2001 - 2024	2014-2024	2003-2025	2015-2025	2001-2025	2015-2025	2006 - 2025	2015 - 2025	2000-2024	2014-2024
Annual												
D-Aluminum	----	----	----	----	----	----	----	----	----	----	----	----
D-Calcium	↑	↑	↑	----	----	----	----	----	----	----	----	----
D-Copper	----	----	----	↑	----	↑	----	↑	----	↑	↓	----
D-Magnesium	↑	----	↑	----	----	----	----	----	----	----	----	----
D-Nickel	----	----	----	----	----	↑	----	----	----	----	↓	----
D-Potassium	↑	↑	↑	↑	----	↑	----	↑	↑	↑	----	----
D-Sodium	↑	↑	↑	↑	----	↑	↑	↑	↑	↑	↑	----
D-Strontium	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	----	----
Chloride	NA	↑	NA	↑	NA	NA	↑	NA	NA	NA	----	----
Sulphate	NA	NA	NA	NA	NA	NA	----	----	----	----	↑	----
Total Alkalinity	↑	↑	----	↑	----	↑	----	↑	----	----	----	----
Hardness	↑	----	↑	----	----	----	----	----	----	----	----	----
DOC	↑	----	↑	----	↑	↑	----	----	----	----	----	----
pH	↑	----	↑	----	----	----	----	----	----	----	----	----
Conductivity	↑	↑	↑	↑	----	↑	↑	↑	----	----	----	----
Total Nitrogen	↑	↑	↑	↑	↑	↑	----	----	----	----	----	----

Notes: ↓ = decreasing trend; ↑ = increasing trend; --- = p>0.05, ↓↑ = Marginal (0.01<p<0.05); ↓↑ = Moderate (0.001<p<0.01); ↓↑ = High (0.0001<p<0.001); ↓↑ = Very High (p<0.0001); NA = required data not available.

Coppermine River Upstream of Copper Creek (COR04)

The furthest downstream site on the Coppermine River with an appropriate amount of data for trends analysis was located upstream of Copper Creek (COR04). At this site there were no trends of high or very high significance through the entire period of record or over the last ten years (Table 3-7). These results indicate that the cumulative effects of mine site discharge in Lac de Gras were fully attenuated downstream in the Coppermine River.

Because there were measurable seasonal cycles in water chemistry at site COR04, temporal trends were also assessed for the three defined seasons (Table 3-8). Through the 2000 to 2024 period of record there were significant temporal trends for only 4 of 14 tested analytes and the only trend of very high significance (p<0.0001) was for dissolved sodium through the summer recession (Table 3-8).

Seasonal trends testing was not undertaken for the last ten years at site COR04 because the data requirements were not met for completion of a Mann-Kendall trends test.

Table 3-8: Mann-Kendall Temporal Trends Analysis for Site Coppermine River above Copper Creek (COR04) for Seasonal Data

Season	Spring Freshet		Summer Recession		Winter Baseflow	
Parameter	**n**	**Category**	**n**	**Category**	**n**	**Category**
D-Aluminum	15	----	15	----	10	----
D-Calcium	21	----	21	----	13	----
D-Copper	15	----	15	----	10	↓
D-Magnesium	21	----	21	----	13	----
D-Nickel	15	↓	15	----	10	----
D-Potassium	21	----	21	↑	13	----
D-Sodium	21	↑	21	↑	13	----
D-Strontium	15	----	15	----	10	----
Total Alkalinity	21	----	22	----	13	----
Hardness	21	----	21	----	13	----
DOC	21	----	22	----	13	----
pH	21	----	22	----	13	----
Conductivity	21	----	22	----	13	----
Total Nitrogen	14	----	15	----	10	----

Notes: ↓ = decreasing trend; ↑ = increasing trend; --- = p>0.05, ↓↑ = Marginal (0.01<p<0.05); ↓↑ = Moderate (0.001<p<0.01); ↓↑ = High (0.0001<p<0.001); ↓↑ = Very High (p<0.0001). Winter baseflow = November 1 to April 30; Spring Freshet = May 1 to June 30; Summer recession = July 1 to October 31

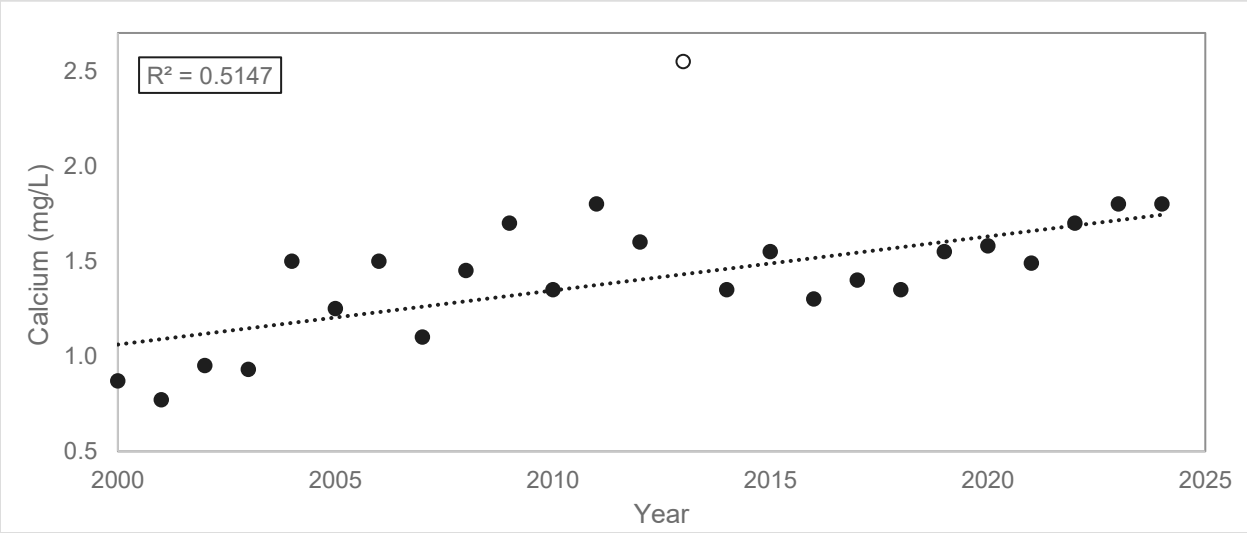
3.2.4.2 Coppermine River Site LDGO Time Series

The following are the time series of the annual median concentration at site LDGO for those analytes with a temporal trend of high (p<0.001) or very high (p<0.0001) significance (see Table 3-7). The objective of these graphs was to illustrate the temporal trend and estimate the increase in annual median concentration through the period of record.

Calcium

The median annual calcium concentration at site LDGO consistently increased through the period of record (2000 to 2024), with an R^2 = 0.51 (Figure 3-51). Based on the regression equation, the median annual calcium concentration increased from an estimated 1.1 mg/L in 2000 to 1.8 mg/L in 2024, which was an estimated 64% increase. This indicates a consistent year-over-year increase of calcium into Lac de Gras surface waters through the period of record.

Figure 3-51: Median Annual Dissolved Calcium Concentration at Site Lac de Gras Outlet (LDGO)

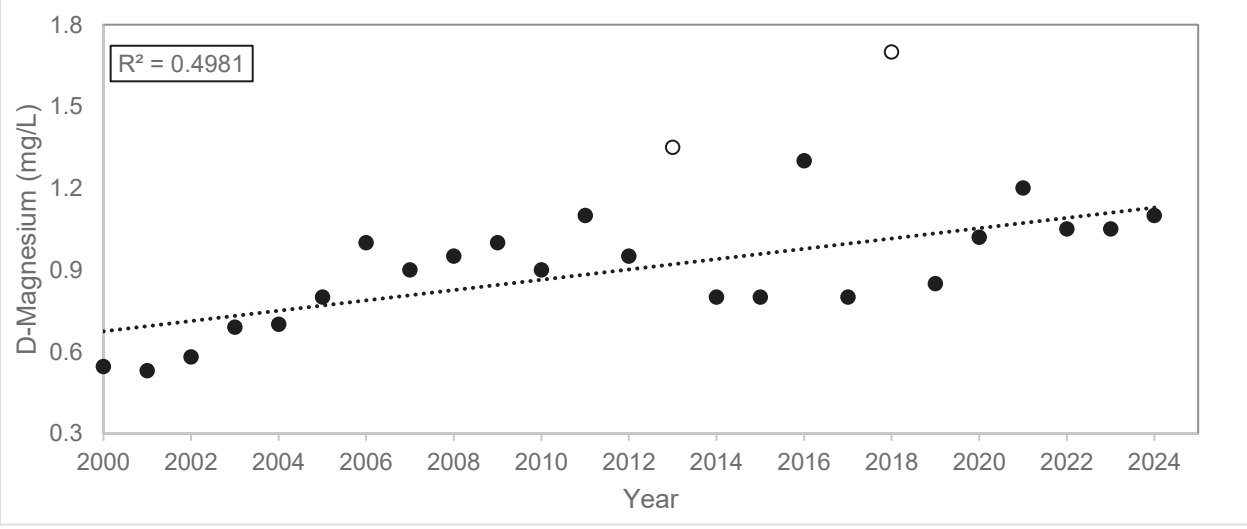


Note: Open circles are outliers

Magnesium

The median annual magnesium concentration at site LDGO consistently increased through the period of record (2000 to 2024), with an $R^2 = 0.50$ (Figure 3-52). Based on the regression equation, the median annual magnesium concentration increased from an estimated 0.64 mg/L in 2000 to 1.09 mg/L in 2024 which was an estimated 70% increase. This indicates a consistent year-over-year increase of magnesium in Lac de Gras surface waters through the period of record.

Figure 3-52: Median Annual Dissolved Magnesium Concentration at Site Lac de Gras Outlet (LDGO)

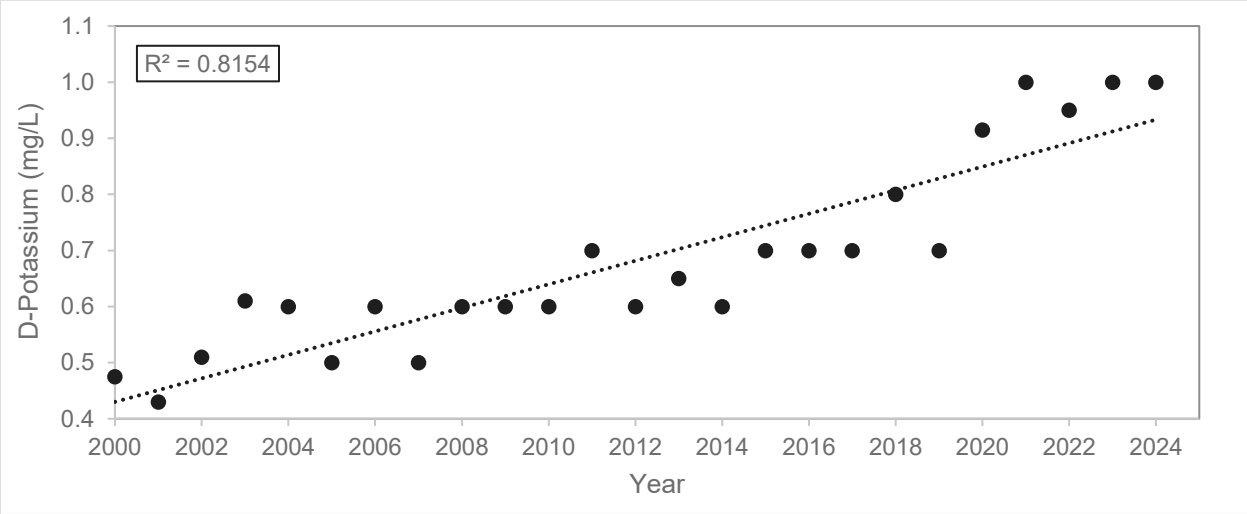


Note: Open circles are outliers

Potassium

The median annual dissolved potassium concentration at site LDGO consistently increased through the period of record (2000 to 2024), with an $R^2 = 0.82$ (Figure 3-53). Based on the regression equation, the median annual dissolved potassium concentration increased from an estimated 0.43 mg/L in 2000 to 0.93 mg/L in 2024, which was an estimated 116% increase. This indicates a consistent year-over-year increase of potassium in Lac de Gras surface waters through the period of record.

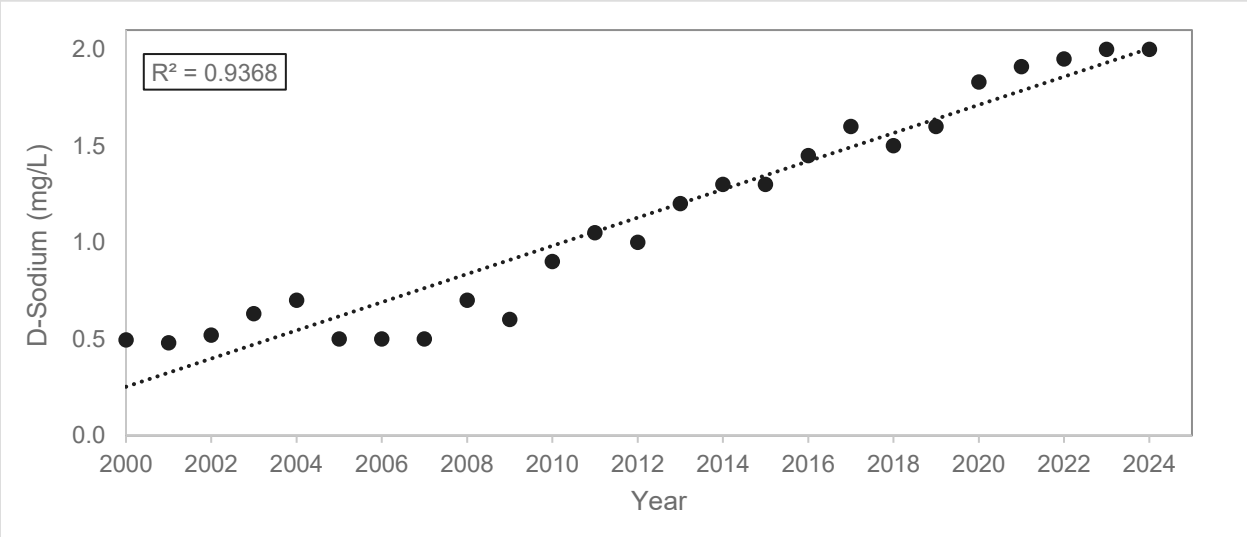
Figure 3-53: Median Annual Dissolved Potassium Concentration at Site Lac de Gras Outlet (LDGO)



Sodium

The median annual dissolved sodium concentration at site LDGO consistently increased through the period of record (2000 to 2024), with an $R^2 = 0.94$ (Figure 3-54). Based on the regression equation, the median annual dissolved sodium concentration increased from an estimated 0.27 mg/L in 2000 to 2.0 mg/L in 2024, which was an estimated 641% increase. This indicates a consistent year-over-year increase of sodium in Lac de Gras surface waters through the period of record.

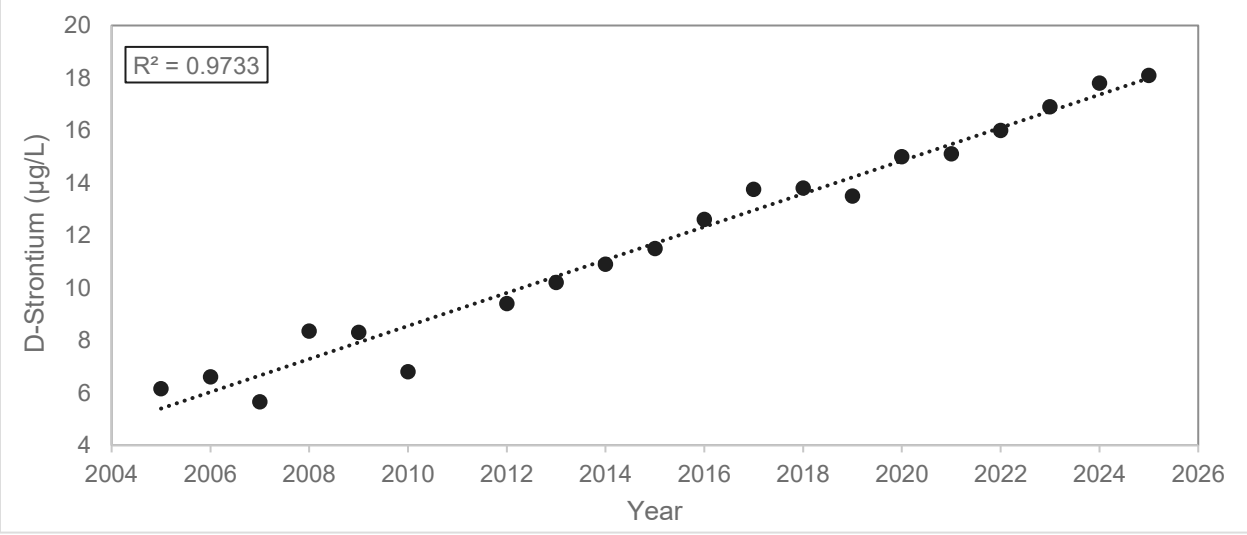
Figure 3-54: Median Annual Dissolved Sodium Concentration at Site Lac de Gras Outlet (LDGO)



Strontium

The median annual dissolved strontium concentration at site LDGO consistently increased through the period of record (2005 to 2024), with an $R^2 = 0.97$ (Figure 3-55). Based on the regression equation, the median annual dissolved strontium concentration increased from an estimated 5.4 µg/L in 2005 to 17.8 µg/L in 2024, which was an estimated 230% increase. This indicates a consistent year-over-year increase of strontium into Lac de Gras surface waters through the period of record.

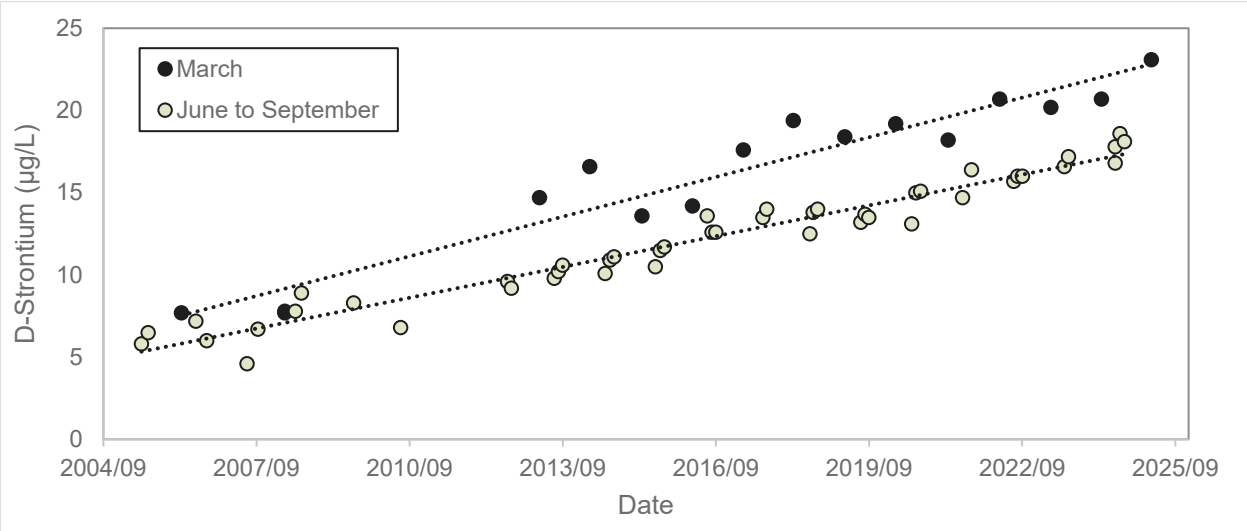
Figure 3-55: Median Annual Dissolved Strontium Concentration at Site Lac de Gras Outlet (LDGO)



Based on the differences in seasonal strontium concentration discussed in section 3.2.3.4 above, the strontium data were separated by season and reanalyzed. The results indicated that the concentration of strontium at LDGO was approximately 1.3 to 1.4 times higher during the

winter baseflow than during the summer recession, and that there has been a significant increase in strontium during both seasonal time periods (Figure 3-56).

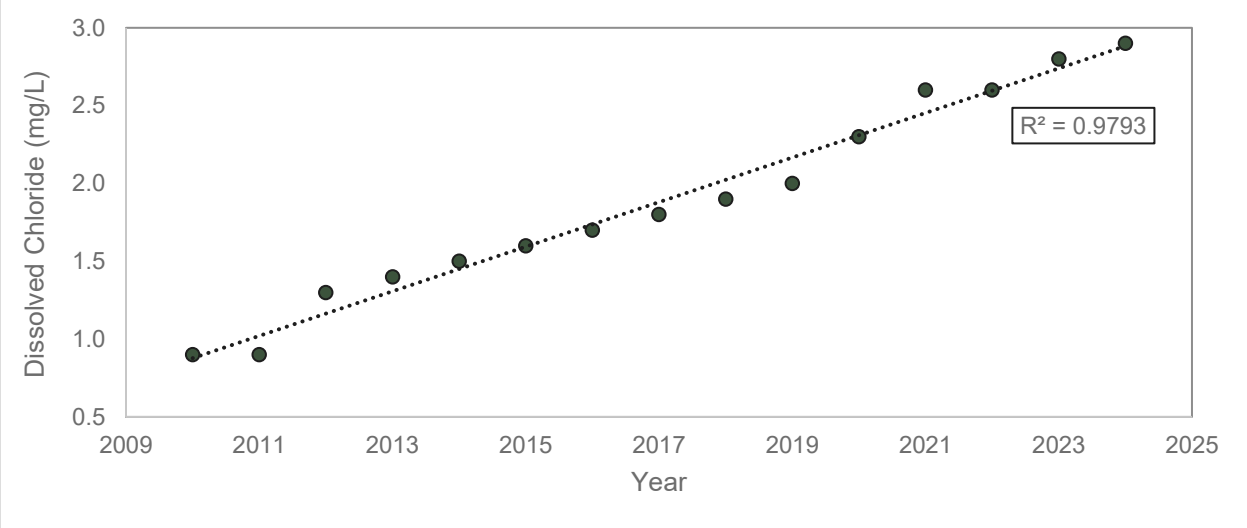
Figure 3-56: Median Seasonal Dissolved Strontium Concentration at Site Lac de Gras Outlet (LDGO)



Chloride

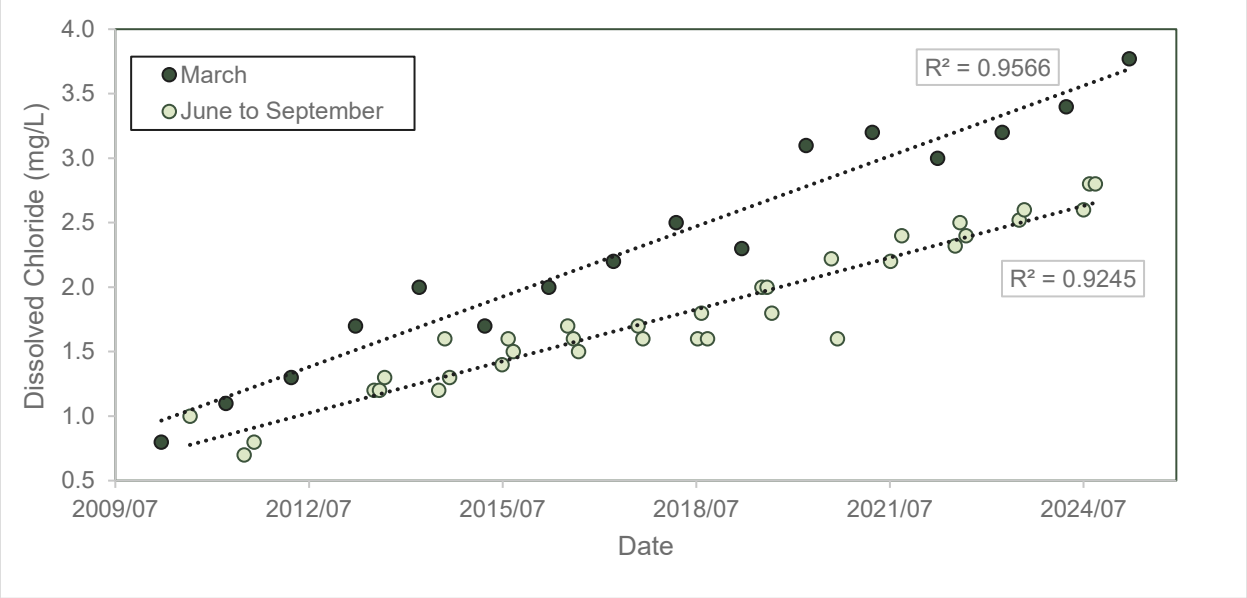
Prior to 2010, the dissolved chloride concentration at site LDGO was consistently below detection limit. From 2010 to 2024, however, the median annual dissolved chloride concentration at site LDGO consistently increased year-over-year, with an $R^2 = 0.98$ (Figure 3-57). Based on the regression equation, the median annual dissolved chloride concentration increased from an estimated 0.85 mg/L in 2010 to 2.8 mg/L in 2024, which was an estimated 235% increase. This indicates a consistent year-over-year increase of dissolved chloride into Lac de Gras surface waters between 2010 and 2024.

Figure 3-57: Median Seasonal Dissolved Chloride Concentration at Site Lac de Gras Outlet (LDGO)



Similar to strontium, the dissolved chloride data were separated by season and reanalyzed. The results indicated that the concentration of dissolved chloride at LDGO was approximately 1.3 to 1.6 times higher during the winter baseflow than during the summer recession, and that there has been a significant increase in dissolved chloride during both seasons (Figure 3-58).

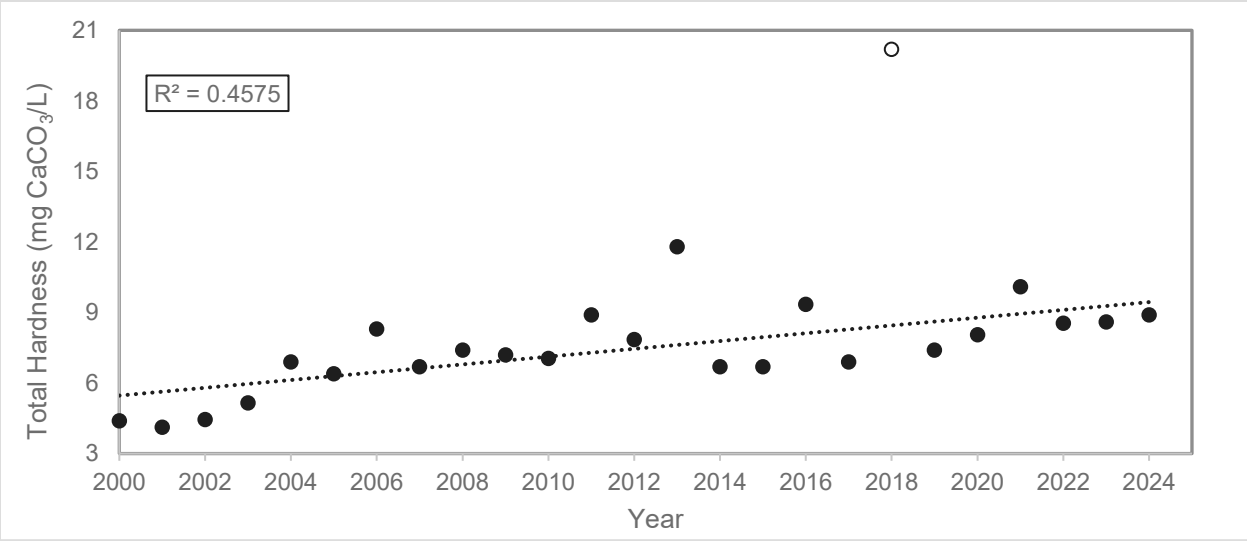
Figure 3-58: Median Seasonal Dissolved Chloride Concentration at Site Lac de Gras Outlet (LDGO)



Total Hardness

The median annual total hardness at site LDGO consistently increased through the period of record (2000 to 2024), with an $R^2 = 0.46$ (Figure 3-59). Based on the regression equation, the median annual total hardness increased from an estimated 5.5 mg $CaCO_3$/L in 2000 to 9.5 mg/L $CaCO_3$/L in 2024, which was an estimated 73% increase. This indicates a consistent year-over-year increase of total hardness in Lac de Gras surface waters through the period of record and is consistent with the temporal trends for magnesium and calcium.

Figure 3-59: Median Annual Total Hardness at Site Lac de Gras Outlet (LDGO)

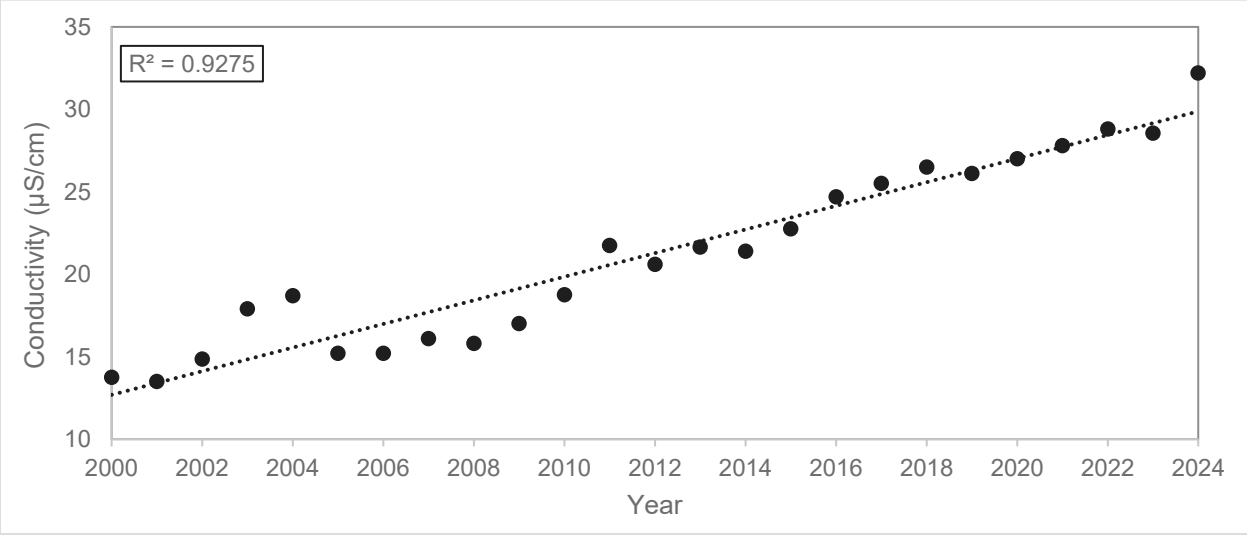


Note: Open circles are outliers

Conductivity

The median annual conductivity at site LDGO consistently increased through the period of record (2000 to 2024), with an $R^2 = 0.93$ (Figure 3-60). Based on the regression equation, the median annual conductivity increased from an estimated 13 µS/cm in 2000 to 30 µS/cm in 2024, which was an estimated 131% increase. This indicates a consistent year-over-year increase in conductivity in Lac de Gras surface waters through the period of record.

Figure 3-60: Median Annual Conductivity at Site Lac de Gras Outlet (LDGO)



3.2.4.3 Lockhart River Watershed

For the Lockhart River watershed, six sites had an appropriate amount of data and were assessed for temporal trends for 16 analytes.

Starfish Lake (STL)

Site Starfish Lake (STL) was added to the surface water monitoring program in 2015. At site Starfish Lake (STL), through the 2015 to 2025 period of record, there were significant increasing trends for 5 of the 16 tested analytes (Table 3-9). All trends were of moderate significance ($p<0.01$).

King Lake (KIL)

At site King Lake (KIL), through the 2006 to 2025 period of record there were significant increasing trends for 7 of the 16 tested analytes (Table 3-9). This included trends of very high significance ($p<0.0001$) for the annual median of dissolved potassium, dissolved sodium, dissolved strontium and conductivity, and trends of high significance ($p<0.001$) for alkalinity and DOC (Table 3-9). Through the last ten years (2015 to 2025), there were also trends of high significance ($p<0.001$) for the annual median of dissolved calcium and dissolved sodium. These results indicate that water chemistry at site KIL has changed over the past 25 years, with significant increases for many analytes.

The increasing trends identified at KIL were more extensive than those from the previous 2015 report (Stantec 2015), which concluded that there were significant increasing trends for the annual median of conductivity, chloride, sulphate, and strontium (note that temporal trends were not assessed for chloride or sulphate for this site because of the prevalence of censored data for these two analytes).

Lake of the Enemy (LEL)

At site Lake of the Enemy (LEL), through the 2006 to 2025 period of record there were significant increasing trends for 7 of the 16 tested analytes (Table 3-9). This included trends of very high significance ($p<0.0001$) for the annual median of dissolved strontium, and trends of high significance ($p<0.001$) for dissolved sodium and conductivity (Table 3-9). Through the last ten years (2015 to 2025), there were also trends of high significance ($p<0.001$) for the annual median of dissolved copper. These results indicate that water chemistry at site LEL has changed over the past 25 years, with significant increases for many analytes.

The increasing trends identified at LEL were more extensive than those from the previous 2015 report (Stantec 2015), which concluded that there were only significant increasing trends for the annual median of total strontium.

Mackay Lake (MCL)

At site Mackay Lake (MCL), through the 2006 to 2025 period of record there were significant increasing trends for 6 of the 16 tested analytes (Table 3-9). This included trends of very high significance ($p<0.0001$) for the annual median of dissolved potassium, dissolved sodium, dissolved strontium and conductivity (Table 3-9). Through the last ten years (2015 to 2025), there were also trends of high significance ($p<0.001$) for the annual median of dissolved strontium. Consistent with upstream sites KIL and LEL, these results indicate that water chemistry at site MCL has changed over the past 25 years, with significant increases for many analytes.

The increasing trends identified at MCL were more extensive than those from the previous 2015 report (Stantec 2015), which concluded that there were significant increasing trends for the annual median of total strontium.

Lockhart River Upstream of Outram Lakes (LOR01)

Site Lockhart River Upstream of Outram Lakes (LOR01) was added to the surface water monitoring program in 2015. At site LOR01 through the 2015 to 2025 period of record, there were significant increasing trends for 4 of the 16 tested analytes (Table 3-9). There were no trends of high or very high significance.

Clinton-Colden Outlet (CCO)

Site Clinton-Colden Outlet (CCO) was added to the surface water monitoring program in 2015. At site CCO through the 2015 to 2024 period of record, there were significant increasing trends for 2 of the 16 tested analytes (Table 3-9). There were no trends of high or very high significance.

Lockhart River at Outlet of Artillery Lake (LOR02)

At site Lockhart River at Outlet of Artillery Lake (LOR02), through the 1969 to 2025 period of record there were significant increasing trends for 11 of the 16 tested analytes (Table 3-9). This included trends of very high significance ($p<0.0001$) for the annual median of dissolved magnesium, dissolved potassium, dissolved sodium, dissolved strontium, sulphate, total alkalinity, hardness, DOC and conductivity (Table 3-9). Through the last ten years (2015 to 2025), there were also trends of high significance ($p<0.001$) for the annual median of dissolved magnesium.

These results indicate that water chemistry at site LOR02 has changed over the past 50 plus years, with significant increases for many analytes. Alterations in water chemistry over the past 10 years, however, have been relatively muted in comparison to the entire period of record.

The increasing trends identified at LOR02 were comparable to those from the previous 2015 report (Stantec 2015), which concluded that there were significant increasing trends for the annual median of conductivity, total hardness, dissolved magnesium, total alkalinity, sulphate, and total strontium.



Table 3-9: Results of Mann-Kendall Temporal Trends Analysis for the Lockhart River Watershed for Annual Median Data

Analyte	Station										
	Starfish Lake	King Lake		Lake of the Enemy		MacKay Lake		Lockhart River Upstream of Outram Lake	Clinton-Colden Outlet	Lockhart River at Outlet of Artillery Lake	
	STL	KIL		LEL		MCL		LOR01	CCO	LOR02	
Period	**2015-2025**	**2006-2025**	**2015-2025**	**2006-2025**	**2015-2025**	**2006-2025**	**2015-2025**	**2015-2025**	**2015-2024**	**1969-2024**	**2014-2024**
Annual											
D-Aluminum	----	----	----	----	----	↓	----	----	----	----	----
D-Calcium	↑	----	↑	----	----	----	↑	----	↑	↑	↑
D-Copper	↑	----	----	----	↑	----	----	----	↑	↓	----
D-Magnesium	----	----	----	----	----	----	----	----	----	↑	↑
D-Nickel	----	----	----	----	↑	↓	----	----	----	↓	----
D-Potassium	↑	↑	↑	↑	↑	↑	↑	↑	----	↑	↑
D-Sodium	----	↑	↑	↑	↑	↑	↑	↑	----	↑	↑
D-Strontium	----	↑	↑	↑	↑	↑	↑	----	----	↑	↑
Chloride	----	NA	NA	NA	----	NA	NA	NA	NA	NA	----
Sulphate	----	NA	NA	----	----	NA	NA	NA	----	↑	----
Total Alkalinity	----	↑	↑	↑	↑	↑	↑	----	----	↑	↑
Hardness	----	----	↑	----	----	----	----	----	----	↑	↑
DOC	↑	↑	----	↑	----	↑	----	----	----	↑	↑
pH	----	----	----	----	----	----	----	↑	----	----	----
Conductivity	----	↑	↑	↑	↑	↑	↑	----	----	↑	----
Total Nitrogen	↑	↑	↑	↑	↑	----	----	↑	----	↑	----

Notes: ↓ = decreasing trend; ↑ = increasing trend; --- = p>0.05, ↓↑ = Marginal (0.01<p<0.05); ↓↑ = Moderate (0.001<p<0.01); ↓↑ = High (0.0001<p<0.001); ↓↑ = Very High (p<0.0001); NA = required data not available.

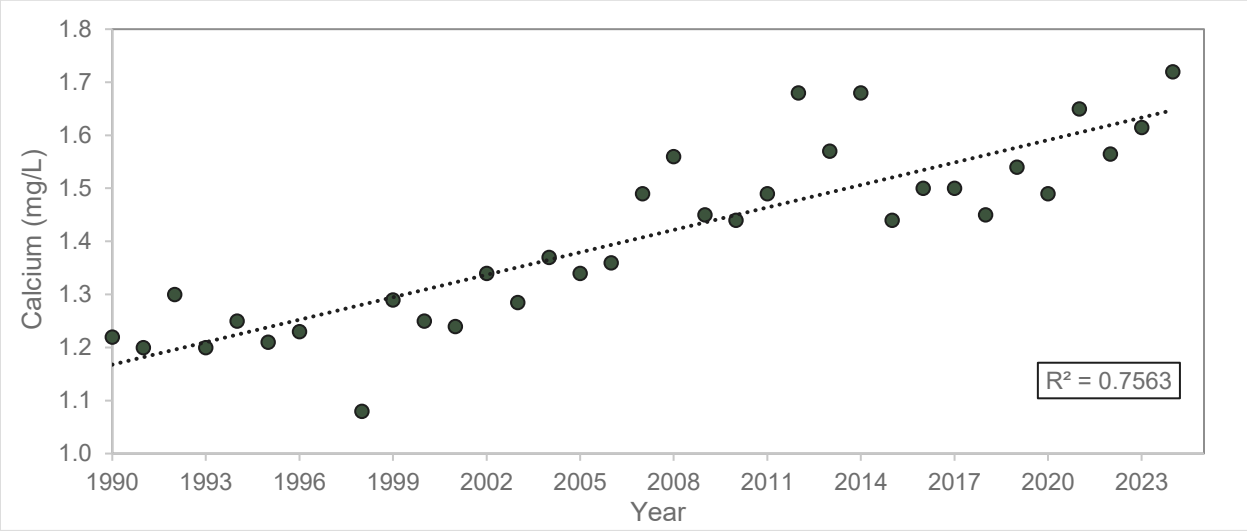
3.2.4.4 Lockhart River Watershed Site LOR02 Time Series

The following are the time series of the annual median concentration at site LOR02 for those analytes with a temporal trend of high (p<0.001) or very high (p<0.0001) significance (Table 3-9). The objective of these graphs was to illustrate the temporal trend and calculate the increase in annual median concentration through the period of record. See Appendix B.1 for the full set of time series figures.

Calcium

The median annual dissolved calcium concentration at site LOR02 consistently increased through the period of record (1990 to 2024), with an $R^2 = 0.76$ (Figure 3-61). Based on the regression equation, the median annual calcium concentration increased from an estimated 1.2 mg/L in 1990 to 1.6 mg/L in 2024, which was an estimated 33% increase. This indicates a consistent year-over-year increase of calcium in Lockhart River surface waters through the period of record.

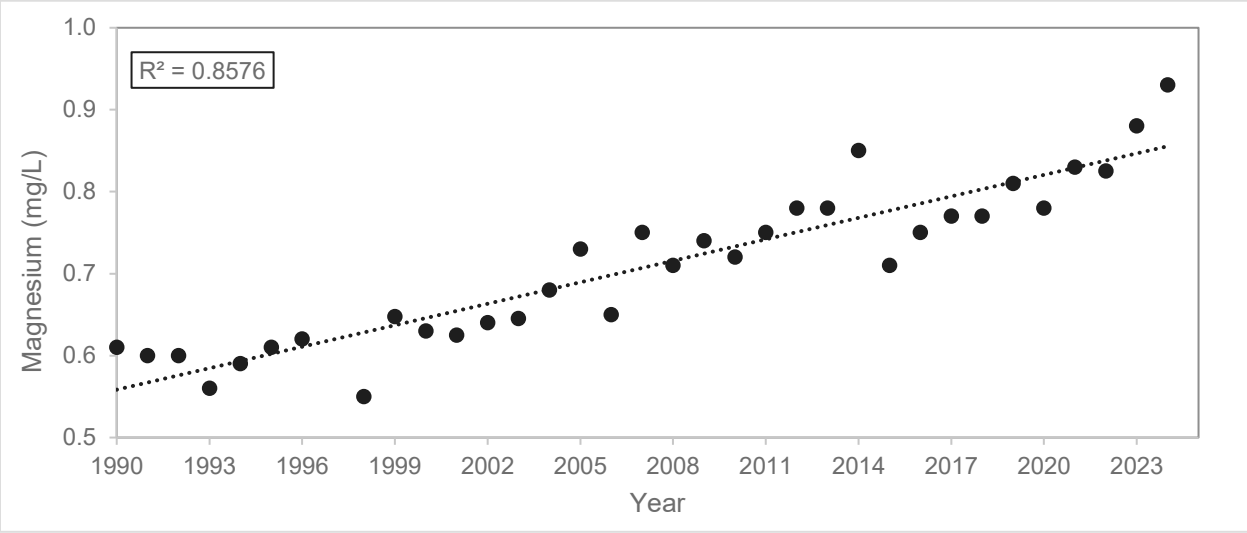
Figure 3-61: Median Annual Dissolved Calcium Concentration at Site Lockhart River at Outlet of Artillery Lake (LOR02)



Magnesium

The median annual dissolved magnesium concentration at site LOR02 consistently increased through the period of record (1990 to 2024), with an $R^2 = 0.86$ (Figure 3-62). Based on the regression equation, the median annual magnesium concentration increased from an estimated 0.56 mg/L in 1990 to 0.85 mg/L in 2024, which was an estimated 52% increase. This indicates a consistent year-over-year increase of magnesium in Lockhart River surface waters through the period of record.

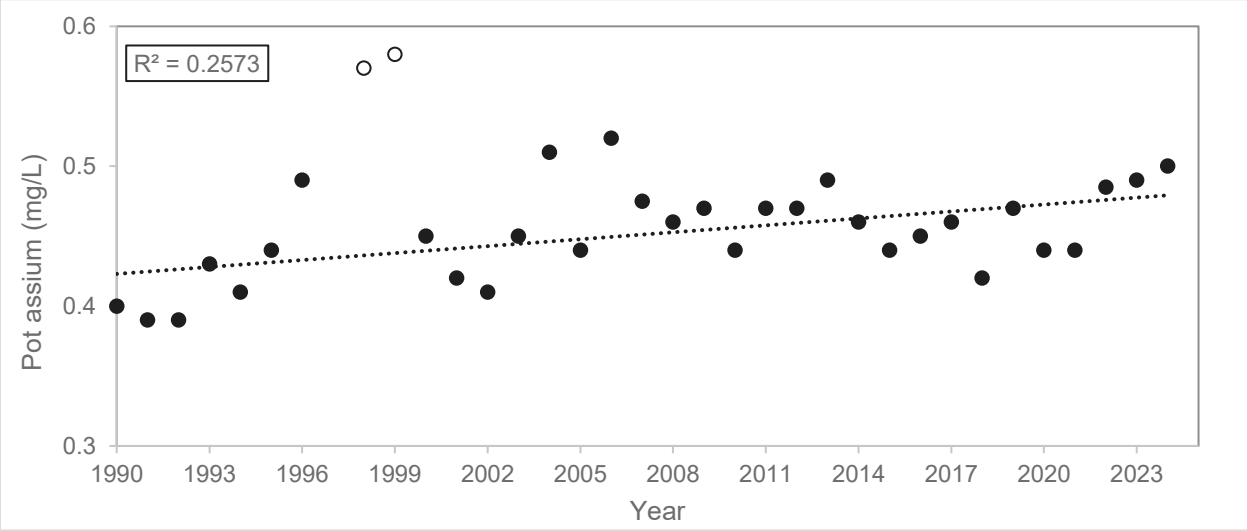
Figure 3-62: Median Annual Dissolved Magnesium Concentration at Site Lockhart River at Outlet of Artillery Lake (LOR02)



Potassium

The median annual dissolved potassium concentration at site LOR02 increased through the period of record (1990 to 2024), but with only an $R^2 = 0.26$ (Figure 3-63). Based on the regression equation, the median annual potassium concentration increased from an estimated 0.42 mg/L in 1990 to 0.48 mg/L in 2024, which was an estimated 14% increase. Given the uncertainty in this estimate, the increase in potassium through the period of record has been nominal.

Figure 3-63: Median Annual Dissolved Potassium Concentration at Site Lockhart River at Outlet of Artillery Lake (LOR02)

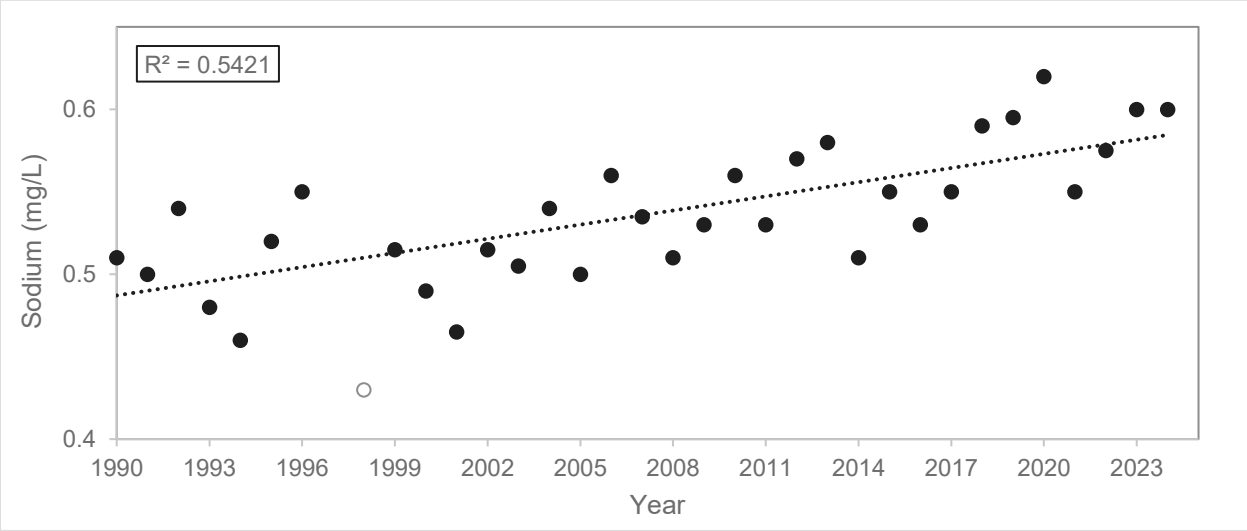


Note: Open circles are outliers.

Sodium

The median annual dissolved sodium concentration at site LOR02 consistently increased through the period of record (1990 to 2024), with an $R^2 = 0.54$ (Figure 3-64). Based on the regression equation, the median annual sodium concentration has increased from an estimated 0.49 mg/L in 1990 to 0.58 mg/L in 2024, which was an estimated 18% increase. This indicates a consistent year-over-year increase of sodium in Lockhart River surface waters through the period of record.

Figure 3-64: Median Annual Dissolved Sodium Concentration at Site Lockhart River at Outlet of Artillery Lake (LOR02)

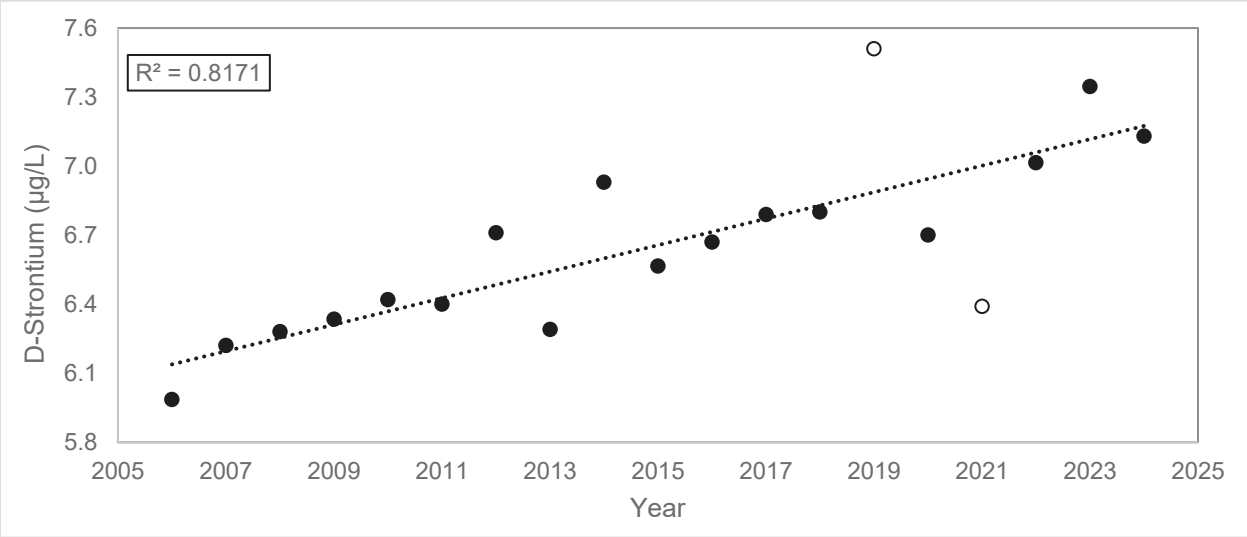


Note: Open circles are outliers

Strontium

The median annual dissolved strontium concentration at site LOR02 consistently increased through the period of record (2005 to 2024), with an $R^2 = 0.82$ (Figure 3-65). Based on the regression equation, the median annual strontium concentration increased from an estimated 6.1 µg/L in 2005 to 7.2 µg/L in 2024, which was an estimated 18% increase. This indicates a consistent year-over-year increase of strontium in Lockhart River surface waters through the period of record.

Figure 3-65: Median Annual Dissolved Strontium Concentration at Site Lockhart River at Outlet of Artillery Lake (LOR02)

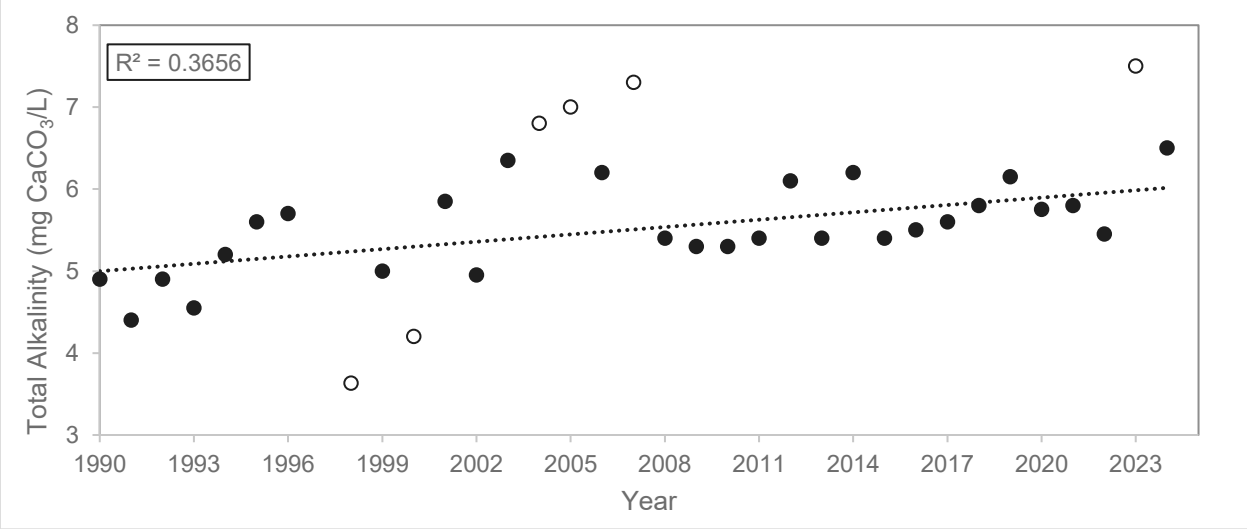


Note: Open circles are outliers.

Total Alkalinity

The median annual total alkalinity at site LOR02 increased through the period of record (1990 to 2024), but with only an $R^2 = 0.36$ (Figure 3-66). Based on the regression equation, the median annual total alkalinity increased from an estimated 5.0 mg/L in 1990 to 6.0 mg/L in 2024, which was an estimated 20% increase. Given the uncertainty in this estimate, the increase in total alkalinity through the period of record has been nominal.

Figure 3-66: Median Annual Total Alkalinity Concentration at Site Lockhart River at Outlet of Artillery Lake (LOR02)

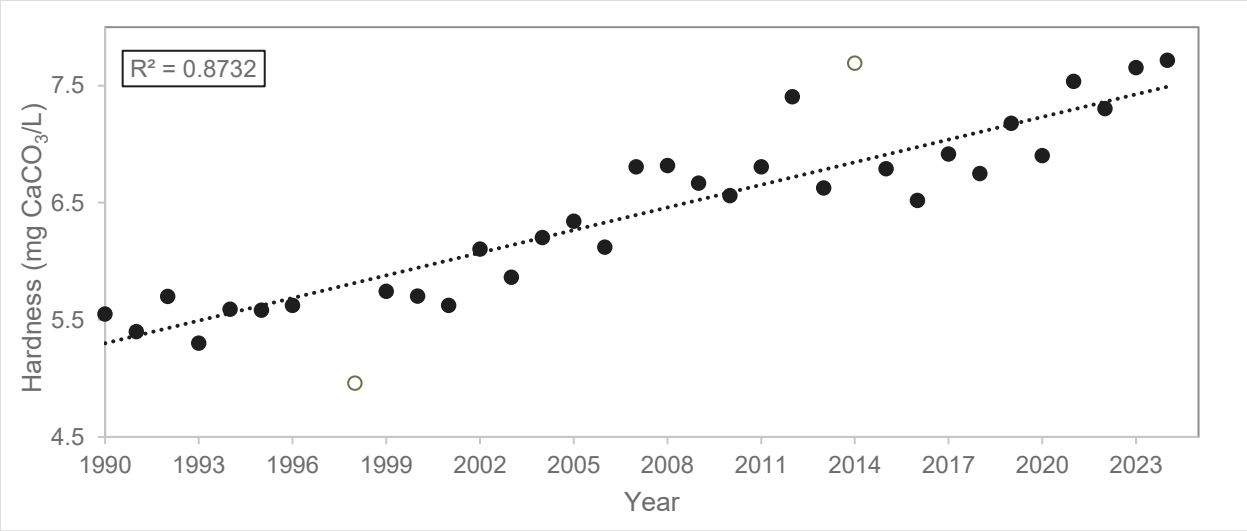


Note: Open circles are outliers.

Hardness

The median annual total hardness at site LOR02 consistently increased through the period of record (1990 to 2024), with an $R^2 = 0.87$ (Figure 3-67). Based on the regression equation, the median annual total hardness increased from an estimated 5.3 mg $CaCO_3$/L in 2005 to 7.5 mg $CaCO_3$/L in 2024, which was an estimated 42% increase. This indicates a consistent year-over-year increase of total hardness in Lockhart River surface waters through the period of record.

Figure 3-67: Median Annual Total Hardness at Site Lockhart River at Outlet of Artillery Lake (LOR02)

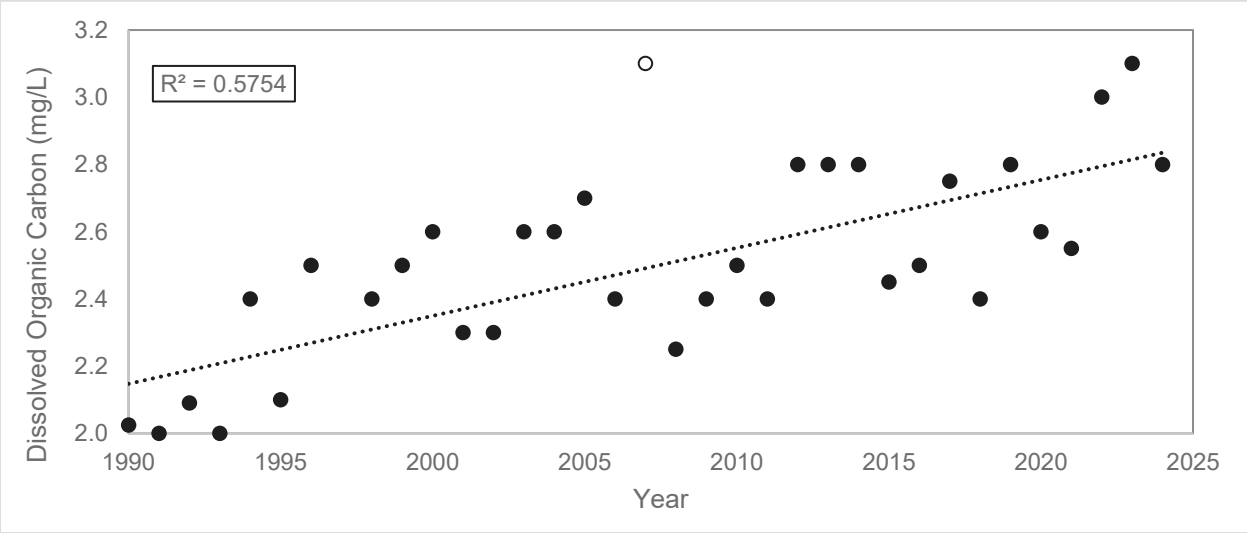


Note: Open circles are outliers.

Dissolved Organic Carbon

The median annual DOC at site LOR02 consistently increased through the period of record (1990 to 2024), with an $R^2 = 0.58$ (Figure 3-68). Based on the regression equation, the median annual total hardness increased from an estimated 2.1 mg/L in 1990 to 2.8 mg/L in 2024, which was an estimated 33% increase. This indicates a consistent year-over-year increase of dissolved organic carbon in Lockhart River surface waters through the period of record.

Figure 3-68: Median Annual Dissolved Organic Carbon at Site Lockhart River at Outlet of Artillery Lake (LOR02)

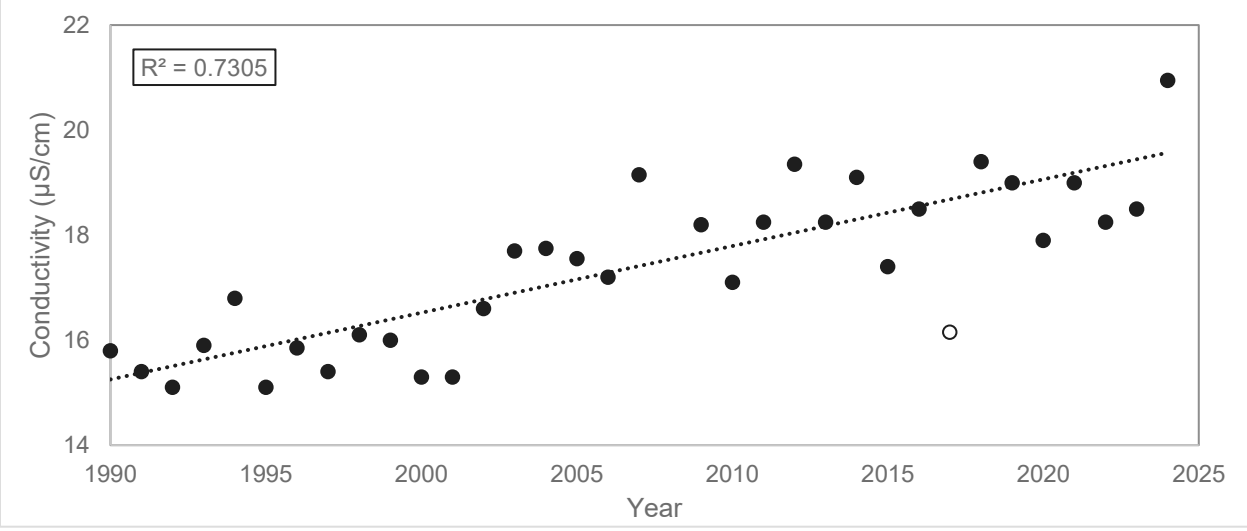


Note: Open circles are outliers.

Conductivity

The median annual conductivity at site LOR02 consistently increased through the period of record (1990 to 2024), with an $R^2 = 0.73$ (Figure 3-69). Based on the regression equation, the median annual conductivity increased from an estimated 15.1 µS/cm in 2005 to 19.5 µS/cm in 2024, which was an estimated 29% increase. This indicates a consistent year-over-year increase of conductivity in Lockhart River surface waters through the period of record.

Figure 3-69: Median Annual Conductivity at Site Lockhart River at Outlet of Artillery Lake (LOR02)



Note: Open circles are outliers.

3.2.4.5 Loading Calculations

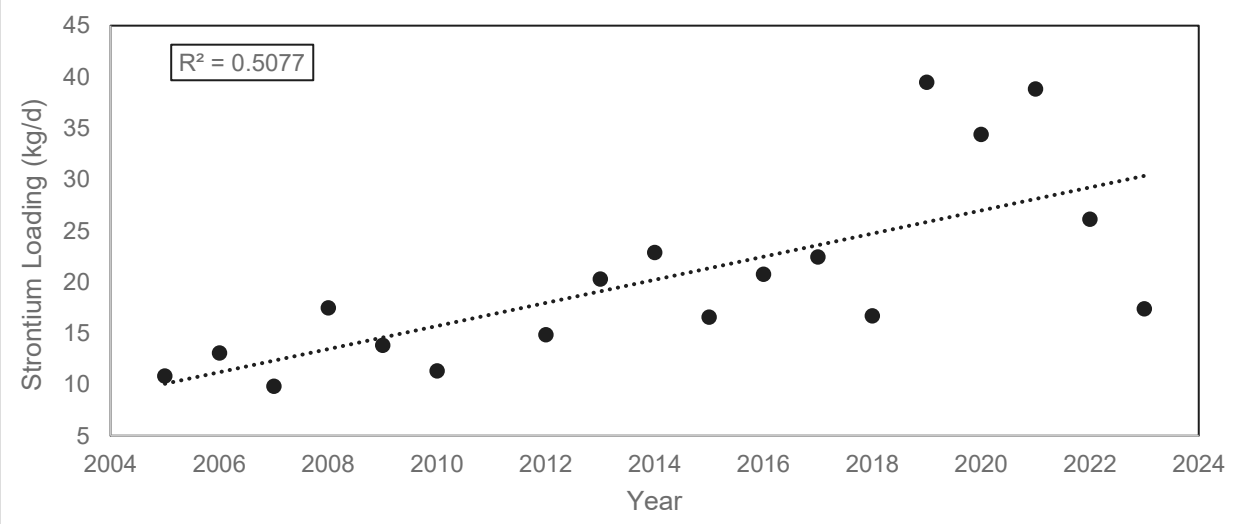
Another approach to understanding temporal trends in water chemistry, apart from using analyte concentration, is to calculate loading rates (concentration x flow). As an example of this type of analysis, the loading rates for strontium at site LDGO on the Coppermine River and LOR02 on the Lockhart River are discussed below. Loading rate figures for the other analytes with temporal trends of high or very high significance are in Appendix B.6.

Coppermine River Watershed

For strontium at site LDGO there was an increasing temporal trend in strontium concentration of very high significance ($p<0.0001$; $R^2= 0.97$), with an estimated increase in strontium concentration of 9.2% per year through the period of record (Section 3.2.4.3, Table 3-10). Transforming these data to loading rates also indicated an increasing temporal trend, but with greater variability (Figure 3-70).

Through the period of record (2005 to 2023) the linear regression indicated that the strontium loading rate increased from approximately 10 kg/d to 30 kg/d, which was an approximately 11% increase per year. This is slightly higher than the increase in concentration, but the confidence in the loading rate estimate is lower due to the relatively low R^2 value.

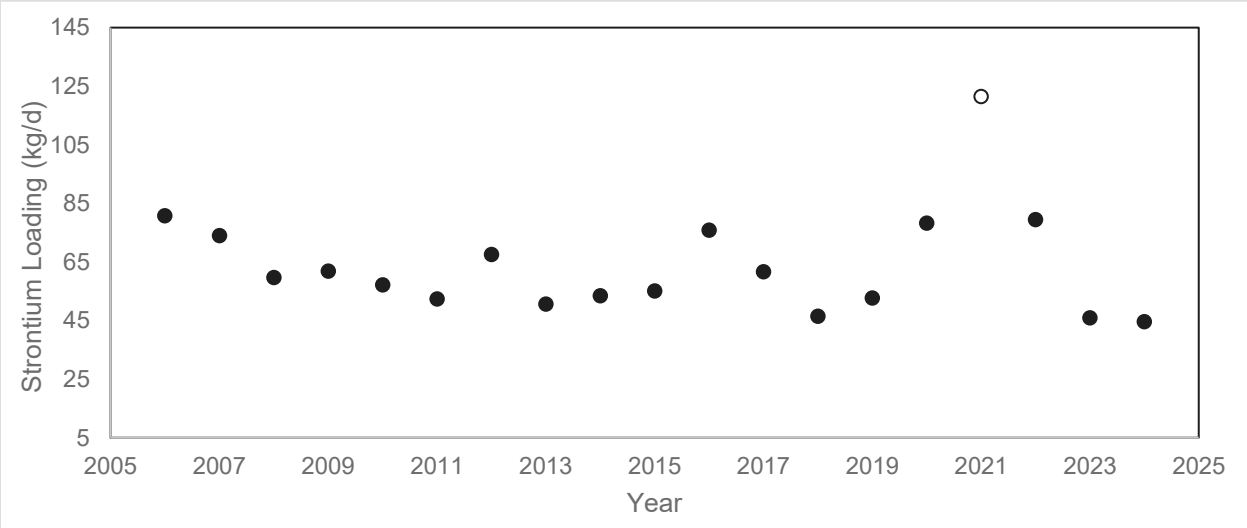
Figure 3-70: Median Daily Strontium Loading Rate at Site Lac de Gras Outlet (LDGO)



Lockhart River Watershed

For strontium at site LOR02 there was an increasing temporal trend in strontium concentration of very high significance ($p<0.0001$; $R^2= 0.82$), with an estimated increase in strontium concentration of 0.9% per year through the period of record (Section 3.2.4.4, Table 3-11). Transforming these data to loading rates, however, indicated no increasing temporal trend (Figure 3-71). The reasons for this are unclear but are likely related to the additional variability introduced into the data when both the concentration data and the flow data are combined and to the relatively small yearly increase in concentration of less than 1% per year.

Figure 3-71: Median Daily Strontium Loading Rate at Site Lockhart River at Outlet of Artillery Lake (LOR02)



Note: Open circles are outliers.

3.2.4.6 Temporal Trends Summary

Coppermine River Watershed

Increasing temporal trends of high or very high significance were identified for the cations calcium, magnesium, potassium, sodium and strontium, for the anion chloride, and for the analytes hardness and conductivity. The majority of these trends occurred at the outlet of Lac de Gras at site LDGO and were attenuated moving downstream such that there were no increasing trends of high or very high significance at the most downstream site Coppermine River Upstream of Copper Creek (COR04).

Through the period of record, the approximate percent increase in median annual concentration ranged from 64% for calcium to 641% for sodium (Table 3-10).

Table 3-10: Increase in Analyte Concentration through the Period of Record (2000 to 2024) at Site Lac de Gras Outlet (LDGO)

Analyte	Site LDGO		
	Period of Record (yrs)	Increase (%)	%/yr
Dissolved Calcium	25	64	2.6
Dissolved Magnesium	25	70	2.8
Dissolved Potassium	25	116	4.6
Dissolved Sodium	25	641	26
Dissolved Strontium	25	230	9.2
Dissolved Chloride	15	235	16
Total Alkalinity	----	----	----
Hardness	25	73	2.9
Dissolved Organic Carbon	----	----	----
Conductivity	25	131	5.2

These results are similar to those reported previously (Deton' Cho Stantec 2015, Stantec 2015) where increasing temporal trends were identified in Lac de Gras and at LDGO for the cations calcium, magnesium and total strontium, for the anions chloride and sulphate, and for the physical analytes conductivity, hardness, and pH.

Increases in soluble ions, particularly within the southern Coppermine River watershed, can be potentially attributed to the cumulative effects of the two diamond mines (Deton' Cho Stantec 2015), with contributions of increased weathering rates associated with climate change (Kokelj at al. 2013).

Lockhart River Watershed

Increasing temporal trends of high or very high significance were identified for the cations dissolved magnesium, dissolved potassium, dissolved sodium and dissolved strontium, and the analytes alkalinity, hardness, DOC, and conductivity. The majority of these trends occurred at site LOR02, although there were also a number of increasing temporal trends identified across the watershed.

Through the period of record, the percent increase in median annual concentration ranged from 14% for dissolved potassium to 52% for dissolved magnesium (Table 3-11). The increases in the Lockhart River were less than those measured in the southern Coppermine River, particularly when comparing the percent increase per year.

Table 3-11: Increase in Analyte Concentration through the Period of Record (1990 to 2024) at Site Lockhart River at Outlet of Artillery Lake

Analyte	LOR02		
	POR (yrs)	Increase (%)	%/yr
Dissolved Calcium	34	33	1.0
Dissolved Magnesium	34	52	1.5
Dissolved Potassium	34	14	0.4
Dissolved Sodium	34	18	0.5
*Dissolved Strontium	*20	18	0.9
Total Alkalinity	34	20	0.6
Hardness	34	42	1.2
Dissolved Organic Carbon	34	33	1.0
Conductivity	34	29	0.8
*Dissolved strontium added to the list of analytes in 2004			

In comparison with the results of the 2015 study (Stantec 2015), there were many more significant trends identified at King Lake (KIL), Lake of the Enemy (LEL), and Mackay Lake (MCL), likely because of the relatively extended period of record in 2025.

Increases in soluble ions within the Lockhart River watershed can be potentially attributed to increased weathering rates associated with climate change (Kokelj at al. 2013), increased groundwater flow, and perhaps mine discharges from the Snap Lake mine (Stantec 2015).

3.2.5 Comparisons to Water Quality Guidelines

A total of 33 Water Quality Guidelines (WQG) were used to assess water quality within the Coppermine River and Lockhart River watersheds (see Table 2-9). The WQG were predominantly Canadian Council of Ministers of the Environment (CCME) guidelines, with the addition of five Federal Environmental Quality Guidelines (FEQG) and six British Columbia Water Quality Guidelines (BCWQG). There were dissolved and total WQG for cadmium, copper, lead, manganese, and nickel: these were the result of recent updates of either FEQG or BCWQG.

In total, there were 761 samples collected amongst all sites between 2005 and 2025 with sufficient information to assess water quality. Data available prior to 2005 were considered inadequate for comparison with recent WQG, particularly considering the increasing use of multiple modifying factors to calculate updated WQG.

Hazard Quotients (HQ) were calculated to compare measured analyte concentrations to their respective guidelines. The HQ was calculated by dividing the measured concentration with the WQG. An HQ less than one indicated an analyte concentration below the sample-specific WQG and an HQ greater than one indicated an analyte concentration above the sample-specific WQG. An HQ was considered useful in this context because it allowed for a direct comparison of water quality amongst analytes and between sites.

3.2.5.1 Water Quality Guideline Screening by Site

There were few WQG exceedances in the Coppermine River watershed (Table 3-12). For each of the six sites summarized below, there were between four and 10 analytes per site with at least one exceedance through the period of record (Table 3-12).

For all stations there were fewer than 5 exceedances for any given analyte, with the exception of total cadmium and total iron at site COR04, and of dissolved copper at all sites assessed using the 2019 copper BCWQG (Table 3-12). This relatively new copper WQG is an ultra-low WQG, particularly in waters with low concentration of DOC. Within the Coppermine River and Lockhart River watersheds, for instance, the average dissolved copper WQG was 0.4 µg/L, with a minimum WQG of 0.2 µg/L (Appendix B.7). In contrast there were only rare exceedances of the total copper guideline (Table 3-12).

Table 3-12: Summary of Water Quality Guideline Exceedances in the Coppermine River Watershed

Analyte	Lac de Gras Outlet	Desteffany Lake	Daring Lake	Point Lake	Rocknest Lake	Coppermine River above Copper Creek
	LDGO	DEL	DAL	POL	ROL	COR04
	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0
Dissolved Chloride	0	0	0	0	0	0
Dissolved Fluoride	1	0	0	0	2	0
Sulphate	0	0	0	0	0	0
Total Ammonia-N	0	0	0	0	0	0
Nitrate-N	0	0	0	0	0	0
Nitrite-N	2	3	2	2	2	0
Total Aluminum	0	0	0	0	0	1
Total Antimony	0	0	0	0	0	0
Total Arsenic	0	0	0	0	0	0
Total Boron	0	0	0	0	0	0
Total Cadmium	0	1	1	0	2	10
Dissolved Cadmium	0	0	0	0	0	7
Total Chromium	1	1	0	0	0	0
Total Cobalt	0	0	0	0	0	0
Total Copper	1	1	0	0	0	2
Dissolved Copper	50	49	29	54	27	14
Total Iron	0	0	0	0	0	12
Total Lead	1	1	1	0	1	2
Dissolved Lead	1	1	1	0	0	1
Total Manganese	0	0	0	0	0	0
Dissolved Manganese	0	0	0	0	0	0
Total Mercury	0	0	0	0	0	0
Total Molybdenum	0	0	0	0	0	0
Total Nickel	0	0	0	0	0	0
Dissolved Nickel	0	0	0	0	0	0
Total Selenium	1	1	1	1	1	0
Total Silver	1	0	0	0	0	0
Dissolved Strontium	0	0	0	0	0	0
Total Thallium	0	0	0	0	0	0
Total Uranium	0	0	0	0	0	0
Total Vanadium	0	0	0	0	0	0
Dissolved Zinc	4	0	2	2	0	2
# Analytes >WQG	**10**	**8**	**7**	**4**	**6**	**9**

Notes: HQ = Hazard Quotient (Concentration/WQG); WQG = Water Quality Guideline

There were also few WQG exceedances in the Lockhart River watershed (Table 3-13). For each of the seven sites summarized below, there were between one and eight analytes per site with at least one exceedance through the period of record (Table 3-13).

For all stations there were fewer than 5 exceedances for any given analyte, with the exception of dissolved cadmium at site LOR02, and of dissolved copper at all sites assessed using the 2019 copper BCWQG (Table 3-13). As discussed above, the dissolved copper BCWQG is an ultra-low level WQG and an exceedance of this guideline is not an indication of compromised water quality but rather a reflection of the extreme sensitivity of the WQG itself. In contrast, there were only rare exceedances of the total copper guideline (Table 3-13).



Table 3-13: Summary of Water Quality Guideline Exceedances in the Lockhart River Watershed

Analyte	Starfish Lake	King Lake	Lake of the Enemy	MacKay Lake	Lockhart River ABOVE Outram Lakes	Clinton-Colden Outlet	Lockhart River at Outlet of Artillery Lake
	STL	KIL	LEL	MCL	LOR01	CCO	LOR02
	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0	HQ>1.0
Dissolved Chloride	0	0	0	0	0	0	0
Dissolved Fluoride	0	1	0	0	1	0	0
Sulphate	0	0	0	0	0	0	0
Total Ammonia-N	0	0	0	0	0	0	0
Nitrate-N	0	0	0	0	0	0	0
Nitrite-N	0	1	2	2	0	0	1
Total Aluminum	0	0	0	0	0	0	0
Total Antimony	0	0	0	0	0	0	0
Total Arsenic	0	0	0	0	0	0	0
Total Boron	0	0	0	0	0	0	0
Total Cadmium	0	1	1	0	1	0	4
Dissolved Cadmium	0	0	0	0	0	0	8
Total Chromium	0	0	0	0	0	0	0
Total Cobalt	0	0	0	0	1	0	0
Total Copper	0	1	0	0	1	0	0
Dissolved Copper	32	24	44	33	13	16	42
Total Iron	0	0	0	0	0	0	0
Total Lead	0	2	2	1	0	0	0
Dissolved Lead	0	0	1	0	0	0	0
Total Manganese	0	0	0	0	0	0	0
Dissolved Manganese	0	0	0	0	0	0	0
Total Mercury	0	0	0	0	1	0	0
Total Molybdenum	0	0	0	0	0	0	0
Total Nickel	0	0	0	0	0	0	0
Dissolved Nickel	0	0	0	0	0	0	0
Total Selenium	0	1	1	1	0	0	0
Total Silver	0	1	0	0	0	0	0
Dissolved Strontium	0	0	0	0	0	0	0
Total Thallium	0	0	0	0	0	0	0
Total Uranium	0	0	0	0	0	0	0
Total Vanadium	0	0	0	0	0	0	0
Dissolved Zinc	1	0	0	2	1	0	1
# Analytes >WQG	**2**	**8**	**6**	**5**	**7**	**1**	**5**

Notes: HQ = Hazard Quotient; WQG = Water Quality Guideline



3.2.5.2 Water Quality Guideline Screening by Analyte

Of the 33 analytes with a WQG, there were 24 analytes with less than 10 exceedances and with most having no exceedances through the period of record (Table 3-14).

Of those analytes with greater than 10 exceedances, the analyte with by far the most exceedances was dissolved copper assessed using the 2019 BCWQG, for which there were 452 WQG exceedances through the period of record (Table 3-14). In comparison, there were only 6 exceedances for total copper using the CCME WQG of 2.0 ug/L (Table 3-14), which highlights the extreme sensitivity of the BCWQG for dissolved copper.

Table 3-14: Water Quality Guideline Screening Summary by Analyte (2005 to 2025: N=761)

Analyte	WQG	Total #Tests	%Total	#>WQG	%>WQG
pH	CCME	759	100	36	5
D-Chloride	CCME	327	43	0	----
D-Fluoride	CCME	154	20	5	3
Sulphate	BCWQG	747	98	0	----
T-Ammonia-N	CCME	229	30	0	----
Nitrate-N	CCME	369	48	0	----
Nitrite-N	CCME	30	4	19	63
T-Aluminum	FEQG	733	96	1	0.1
T-Antimony	BCWQG	135	18	0	----
T-Arsenic	CCME	219	29	0	----
T-Boron	CCME	412	54	0	----
T -Cadmium	CCME	79	10	21	27
D-Cadmium	BCWQG	91	12	15	16
T-Chromium	CCME	139	18	2	1
T-Cobalt	FEQG	105	14	2	2
T-Copper	CCME	719	94	6	0.8
D-Copper	BCWQG	599	79	452	75
T-Iron	CCME	504	66	13	3
T-Lead	CCME	134	18	11	8
D-Lead	FEQG	115	15	5	4
T-Manganese	BCWQG	738	97	0	----
D-Manganese	CCME	658	86	0	----
T-Mercury	CCME	364	48	1	0.3
T-Molybdenum	CCME	192	25	0	----
T-Nickel	CCME	736	97	0	----
*D-Nickel	BCWQG	639	84	----	----
T-Selenium	CCME	71	9	9	13
T-Silver	CCME	28	4	2	7
D-Strontium	FEQG	659	87	0	----
T-Thallium	CCME	38	5	0	----
T-Uranium	CCME	115	15	0	----
T-Vanadium	FEQG	118	16	0	----
D-Zinc	CCME	296	39	15	5

*Lack of consistent temperature data prevented calculation of the dissolved nickel BC water quality guideline.

Water quality guideline sources: CCME WQG at, Canadian Council of Ministers of the Environment | Le Conseil canadien des ministres de l'environment; FEQ at, Federal Environmental Quality Guidelines (FEQGs) - Canada.ca; BC Water Quality Guideline at, Approved water quality guidelines - Province of British Columbia.

Notes: WQG = Water Quality Guideline. T = Total; D = Dissolved. %Total = The percent of the total number of samples (761) for which there was an analyte concentration >DL and for which a WQG could be calculated.



4.0 Conclusions

4.1 Coppermine River Watershed

4.1.1 Hydrology

While the overall quantity of water within Coppermine River watershed has remained stable over time—as indicated by the absence of a trend in median annual streamflow—there have been notable shifts in the seasonal distribution of streamflow. Significant decreasing trends in seasonal parameters such as monthly median streamflow and summer 30-day low flows, suggest that the timing and delivery of water throughout the year is changing. These changes are especially pronounced at station 10PA001 on Coppermine River downstream of Desteffany Lake, where multiple seasonal streamflow metrics showed consistent decreasing trends across the entire year. Notably, there were increasing trends in both 30-day winter low flows and April streamflow at station 10PC004 on Coppermine River upstream of Copper Creek, further suggesting that the distribution of streamflow throughout the year may be changing, perhaps toward higher winter and freshet streamflow and more severe low streamflow conditions during the summer.

4.1.2 Water Chemistry

Water chemistry in the Coppermine River has changed over the past 25 years. Increasing temporal trends of high or very high significance were identified for the cations dissolved calcium, dissolved magnesium, dissolved potassium, dissolved sodium and dissolved strontium, for the anion dissolved chloride, and for the analytes hardness and conductivity. The majority of these trends occurred at the outlet of Lac de Gras at site LDGO and were attenuated moving downstream such that there were no increasing trends of high or very high significance at the most downstream site Coppermine River Upstream of Copper Creek (COR04).

Despite the temporal trends in water chemistry in the southern reach of the Coppermine River, the surface waters are still acidic to circumneutral, very soft, dilute and oligotrophic, and in the northern reach are still slightly alkaline, soft, dilute and oligotrophic to mesotrophic.

Water quality also remains excellent, with few and sporadic exceedances of water quality guidelines for most analytes. The exception was for dissolved copper, for which there were a total of 223 exceedances of the BCWQG among the six sites assessed through the period of record: this was, however, more a reflection of the ultra-low BCWQG for copper rather than a widespread issue of elevated copper concentration.

4.2 Lockhart River Watershed

4.2.1 Hydrology

No notable trends in overall streamflow quantity or seasonal streamflow distribution were identified throughout the entire period of record at stations in the Lockhart River watershed. Due to the short period of record of hydrometric data available at station 07RB001, a trend analysis was not performed. As station 07RD001 represents the only hydrological data of sufficient length that exists for this watershed, the absence of any trends may not be conclusive evidence that no changes are occurring in the overall quantity or seasonal distribution of streamflow in Lockhart River watershed.



Due to the proximity of Lockhart River watershed to Coppermine River watershed, it is likely that both are experiencing similar climatic and environmental conditions that may be driving the changes in streamflow recorded in Coppermine River watershed. The inclusion of data from station 07RB001 into a trend analysis once there is sufficient data will allow for greater confidence on the status of streamflow in Lockhart River watershed.

4.2.2 Water Chemistry

Water chemistry in the Lockhart River has changed over the past 35 years. Increasing temporal trends of high or very high significance were identified for the cations dissolved magnesium, dissolved potassium, dissolved sodium and dissolved strontium, and the analytes alkalinity, hardness, DOC, and conductivity. The majority of these trends occurred at downstream site LOR02, although there were also a number of increasing temporal trends identified across the watershed.

Despite the temporal trends in water chemistry in the Lockhart River, the surface waters are still acidic to circumneutral, very soft, dilute, and oligotrophic. Water quality also remains excellent, with few and sporadic exceedances of water quality guidelines. As in the Coppermine River watershed, the exception was for dissolved copper, for which there were a total of 452 exceedances of the BCWQG through the period of record.

Water quality also remains excellent, with few and sporadic exceedances of water quality guidelines for most analytes. The exception was for dissolved copper, for which there were a total of 204 exceedances of the BCWQG among the seven sites assessed through the period of record: this was, however, more a reflection of the ultra-low BCWQG for copper rather than a widespread issue of elevated copper concentration.



5.0 Program Recommendations

Previous recommendations outlined in Stantec (2015) included the installation of additional hydrometric stations within the Lockhart watershed. To date, one new hydrometric station has been established (07RB001). The recommendation specifically emphasized the value of expanding the monitoring network upstream of Artillery Lake, ideally near existing water chemistry monitoring sites to enable concurrent hydrologic and surface water data collection and the new station was established near water quality monitoring station LOR01.
This recommendation can be considered addressed, and more robust statistical analysis will be possible in the future as the available period of record at 07RB001 increases through time.

Over the course of the monitoring period, the quality of the hydrometric record has shown improvement, with fewer missing values recorded in more recent years. Reliable and continuous historical data are essential for robust statistical analysis and long-term hydrological assessments. As such, it is important to emphasize the continued maintenance of high-quality data collection practices to ensure the integrity and usefulness of future analyses.

Previous recommendations outlined in Stantec (2015) included the addition of one water chemistry site near the headwaters of the Lockhart River. This recommendation was addressed and there is now a monitoring site at Starfish Lake with 10 years of surface water data.

Where possible, given logistical and safety concerns, sampling programs should equally represent all seasons. For lakes, this would comprise spring freshet, spring turnover, summer stratification, fall turnover, and late winter. For rivers, this would comprise winter baseflow, spring freshet, and summer recession. There is still a lack of data from the spring freshet period, but it is recognized that this is a difficult season to safely collect water samples and flow data and it just may not be possible. To improve surface water data coverage, future spring sampling programs could be focused on stations near WSC gauges. The continuous discharge records at these gauges provide streamflow data without entering the stream, thus only water samples would need to be collected.

Previous recommendations outlined in Stantec (2015) included the monitoring of a consistent set of analytes at each station, by each agency, throughout the watershed to allow for an evaluation of spatial and temporal trends. This recommendation has been addressed and over at least the past 10 years the list of analytes appears consistent throughout the monitoring program. Note, however, that some sites are no longer monitored.

Previous recommendations outlined in Stantec (2015) included the addition of bicarbonate and nitrogen species, including total nitrogen. This recommendation has been addressed, and the most current data set reports these analytes.

Previous recommendations outlined in Stantec (2015) included the addition of chlorophyll*a* to verify trophic status estimates and monitor seasonal and annual changes. This recommendation was addressed and there are now 10 years of data at a select number of sites.

Through the period of record, detection limits have been lowered several times. Currently, the water quality guidelines for several of the metals (aluminum, copper, manganese, zinc) have been lowered and in dilute headwaters are now close to or at the standard detection limits. This should be monitored, and if required, the lowest available detection limits (i.e. ultra-low metals, low-level nutrients) should be requested, and maintained if they are currently being used.

For some analytes there are multiple names for the same analyte in the surface water database. It would be useful to standardize analyte ID’s and identify historical and/or incomplete analyte designations. This would make it easier and improve accuracy in extracting relevant data from the database.

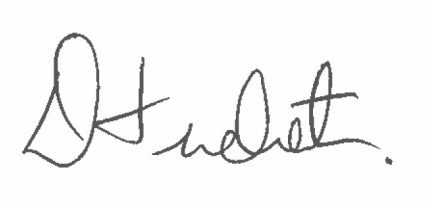


6.0 Closure

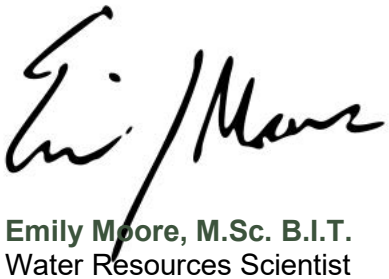
SLR appreciates the opportunity to support GNWT with evaluation of the Coppermine River and Lockhart River watersheds. If you have any questions, please contact us.

Regards,

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Appendix A Quality Assurance & Quality Control

Status and Trends in Streamflow and Water Chemistry

Coppermine River and Lockhart River Watersheds

Government of Northwest Territories

SLR Project No.: 205.030233.00001

February 23, 2026

A.1 Relative Percent Difference

Appendix A-1: Relative Percent Difference (%)

Analyte	Clinton-Colden Outlet						Coppermine River below Desteffany Lake			Daring Lake			Desteffany Lake					King Lake		Lac de Gras Outlet	
Date	2022-08-03	2022-09-07	2023-07-04	2023-08-03	2024-07-02	2024-08-06	2021-03-12	2024-04-26	2025-05-05	2021-07-07	2024-03-26	2024-08-06	2020-03-16	2021-03-25	2022-03-29	2022-07-07	2023-03-30	2020-03-16	2021-07-07	2023-07-04	2024-07-02
Aluminum_µg/L	2	0	2	9	6	2	17	16	18	6	6	2	26	11	2	0	17	0	2	17	0
Antimony_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Arsenic_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	40	0	40	#N/A	#N/A	#N/A	#N/A	40	0	40	40	#N/A	#N/A	#N/A	#N/A
Barium_µg/L	0	0	0	4	0	0	24	4	3	7	0	0	8	7	3	0	4	0	3	5	0
Beryllium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Boron_µg/L	6	5	5	45	9	8	8	9	0	#N/A	13	21	5	0	4	13	5	0	5	23	11
Cadmium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cerium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cesium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Chromium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	67	#N/A	#N/A
Cobalt_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Copper_µg/L	0	0	18	0	0	0	0	44	0	0	18	0	0	13	0	35	13	15	0	0	0
Gallium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Iron_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	6	#N/A	#N/A	0	#N/A	#N/A
Lead_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Lithium_µg/L	0	7	7	13	7	0	5	0	5	0	8	0	6	5	5	0	6	0	7	6	0
Manganese_µg/L	5	0	2	5	2	7	0	0	13	3	12	0	0	0	0	6	0	0	4	2	0
Mercury_ng/L	0	40	#N/A	46	0	29	#N/A	29	#N/A	#N/A	#N/A	#N/A	18	29	#N/A	#N/A	29	#N/A	0	#N/A	40
Molybdenum_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	0	0	#N/A	#N/A	#N/A	0	40	0	0	0	#N/A	#N/A	0	40
Nickel_µg/L	0	0	0	0	12	0	8	0	0	0	40	0	18	0	0	44	0	22	29	11	0
Rubidium_µg/L	0	0	0	7	8	0	5	4	0	8	6	0	5	0	0	0	4	0	0	0	5
Selenium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Strontium_µg/L	1	0	0	7	1	1	1	1	2	0	4	0	2	0	1	1	4	0	2	2	1
Thallium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Tin_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Tungsten_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Uranium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Vanadium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Zinc_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	57	4	5	#N/A	#N/A	#N/A	30	13	#N/A	#N/A	0	73	#N/A	#N/A	#N/A
Zirconium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Alkalinity, as CaCO3_mg/L	0	2	7	5	2	13	0	11	10	3	13	0	2	4	5	0	20	2	3	7	31
Total Hardness, as CaCO3_mg/L	2	0	6	10	2	0	4	0	13	2	10	0	6	4	1	0	2	12	2	2	2
pH_unitless	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0
Specific Conductivity_µS/cm	0	1	1	1	3	2	1	3	12	2	1	1	4	3	1	0	1	3	3	1	0
Total Phosphorus_mg/L	#N/A	#N/A	#N/A	89	6	#N/A	#N/A	67	67	29	22	26	100	#N/A	22	3	29	#N/A	#N/A	#N/A	24
Dissolved o-Phosphate, as P_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	15	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Dissolved Phosphorus_mg/L	#N/A	7	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	#N/A	#N/A	#N/A	16	0	#N/A	#N/A	#N/A	8	0
Dissolved Nitrogen_mg/L	0	17	16	38	5	0	0	21	27	7	15	0	17	0	5	7	16	0	0	0	4
Total Nitrogen_mg/L	11	15	16	24	5	6	0	26	14	6	0	3	5	9	17	0	5	12	5	11	11
Nitrate, as N_mg/L	149	3	8	#N/A	5	67	0	32	50	#N/A	9	0	#N/A	10	8	#N/A	104	#N/A	#N/A	#N/A	#N/A
Total Ammonia, as N_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	13	0	12	#N/A	36	#N/A	0	25	0	11	#N/A	44	#N/A	#N/A	#N/A
Dissolved Organic Carbon_mg/L	3	3	0	14	4	3	0	18	0	4	3	0	0	0	0	3	11	0	5	5	11
Dissolved Potassium_mg/L	0	0	0	15	0	0	0	9	8	0	0	0	0	11	0	13	0	0	0	0	0
Dissolved Sodium_mg/L	0	0	15	13	0	0	0	5	13	0	11	0	5	6	4	0	0	0	0	5	0
Dissolved Calcium_mg/L	0	0	6	9	7	0	0	0	15	0	13	0	5	0	0	0	5	10	3	0	5
Dissolved Magnesium_mg/L	13	0	0	12	0	0	0	9	15	0	12	0	0	6	0	0	0	11	0	0	0
Dissolved Chloride_mg/L	#N/A	#N/A	0	#N/A	#N/A	#N/A	5	18	22	#N/A	#N/A	#N/A	4	4	0	1	2	0	6	0	0
Dissolved Fluoride_mg/L	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	3	#N/A	#N/A	4	#N/A
Dissolved Sulphate_mg/L	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	4	0	0	0	0
Silica_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

#NA = Data not available

RPD >20%

Appendix A-1: Relative Percent Difference (%)

Analyte	Lake of the Enemy		Lockhart River at Outlet of Artillery Lake		MacKay Lake	Point Lake		Rocknest Lake						Starfish Lake						
Date	2020-09-09	2024-09-06	2023-02-28	2024-09-03	2021-09-08	2020-08-06	2022-09-07	2020-07-08	2020-09-09	2021-09-08	2022-08-03	2023-08-03	2024-09-06	2020-07-08	2020-08-06	2021-03-25	2022-03-29	2023-03-30	2024-03-26	2025-03-17
Aluminum_µg/L	11	53	42	0	2	4	1	2	2	0	4	2	1	2	5	2	1	66	19	7
Antimony_µg/L	#N/A	#N/A	0	22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Arsenic_µg/L	#N/A	#N/A	0	0	#N/A	#N/A	#N/A	40	#N/A	#N/A	0	0	0	0	0	0	0	0	0	0
Barium_µg/L	0	5	2	2	0	0	0	4	0	3	2	7	13	0	0	0	4	9	21	4
Beryllium_µg/L	#N/A	#N/A	0	67	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Boron_µg/L	3	15	4	0	5	9	7	10	18	0	0	40	#N/A	#N/A	8	6	6	0	13	13
Cadmium_µg/L	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cerium_µg/L	#N/A	#N/A	70	4	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Cesium_µg/L	#N/A	#N/A	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Chromium_µg/L	#N/A	#N/A	55	29	#N/A	#N/A	#N/A	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	0	0	67	0	#N/A	#N/A
Cobalt_µg/L	#N/A	#N/A	55	11	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Copper_µg/L	0	0	15	58	0	15	25	60	13	0	0	12	0	0	0	0	0	7	20	8
Gallium_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Iron_µg/L	#N/A	#N/A	63	0	#N/A	#N/A	#N/A	0	#N/A	7	#N/A	#N/A	21	0	2	0	0	#N/A	#N/A	#N/A
Lead_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Lithium_µg/L	7	0	2	1	7	0	11	12	11	0	0	0	0	0	0	0	5	0	13	6
Manganese_µg/L	0	0	58	1	0	0	0	0	5	0	7	5	3	1	1	0	0	5	16	0
Mercury_ng/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	18	#N/A	15	22	#N/A	0	6	9	#N/A	13	0	#N/A
Molybdenum_µg/L	#N/A	#N/A	0	22	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Nickel_µg/L	18	0	5	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	22	0
Rubidium_µg/L	0	0	1	1	0	0	7	0	0	0	0	7	7	0	0	5	5	0	11	0
Selenium_µg/L	#N/A	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Strontium_µg/L	3	0	0	3	1	1	0	1	0	1	0	9	6	0	2	1	1	5	11	1
Thallium_µg/L	#N/A	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Tin_µg/L	#N/A	#N/A	0	13	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Tungsten_µg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Uranium_µg/L	#N/A	#N/A	11	2	#N/A	#N/A	#N/A	0	#N/A	#N/A	0	0	#N/A	#N/A	0	0	67	0	#N/A	0
Vanadium_µg/L	#N/A	#N/A	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Zinc_µg/L	#N/A	#N/A	0	0	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	20	#N/A	4	#N/A	40
Zirconium_µg/L	#N/A	#N/A	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Alkalinity, as CaCO3_mg/L	7	8	21	1	0	5	14	3	1	7	1	1	#N/A	0	3	9	3	#N/A	15	2
Total Hardness, as CaCO3_mg/L	3	4	1	0	5	2	0	#N/A	6	2	2	1	#N/A	#N/A	2	#N/A	1	7	3	4
pH_unitless	1	1	0	14	0	0	0	0	0	2	0	4	2	0	0	1	0	#N/A	0	0
Specific Conductivity_µS/cm	4	0	0	1	2	1	3	1	6	2	1	6	18	1	0	1	2	58	2	6
Total Phosphorus_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	96	0	0	40	29	33	0	22	49
Dissolved o-Phosphate, as P_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	30	#N/A	#N/A	#N/A
Total Dissolved Phosphorus_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	111	11	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	0	#N/A	24	7	#N/A	4	11
Dissolved Nitrogen_mg/L	7	18	5	13	7	5	0	5	5	6	5	4	15	4	0	0	13	61	7	0
Total Nitrogen_mg/L	0	14	5	6	6	0	0	4	5	10	12	12	9	4	0	8	0	61	7	1
Nitrate, as N_mg/L	#N/A	#N/A	2	40	#N/A	3	1	1	24	2	#N/A	#N/A	#N/A	4	#N/A	9	67	25	35	18
Total Ammonia, as N_mg/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	3	4	35	11	0
Dissolved Organic Carbon_mg/L	5	0	#N/A	#N/A	3	6	0	2	3	3	9	2	6	0	2	1	4	9	2	2
Dissolved Potassium_mg/L	1	0	8	6	4	3	0	#N/A	7	0	15	0	0	#N/A	3	#N/A	0	0	0	12
Dissolved Sodium_mg/L	3	0	2	0	7	2	0	#N/A	7	1	22	0	0	#N/A	2	#N/A	0	0	0	0
Dissolved Calcium_mg/L	1	6	1	1	3	0	0	#N/A	5	3	2	0	#N/A	#N/A	2	#N/A	0	11	0	5
Dissolved Magnesium_mg/L	5	0	1	0	8	4	0	#N/A	6	1	4	3	#N/A	#N/A	3	#N/A	0	0	0	0
Dissolved Chloride_mg/L	#N/A	#N/A	0	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	17	#N/A	38	#N/A	#N/A
Dissolved Fluoride_mg/L	#N/A	#N/A	0	0	#N/A	8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	9	#N/A	#N/A	22	#N/A	#N/A
Dissolved Sulphate_mg/L	0	34	0	1	0	1	0	#N/A	0	40	0	0	79	#N/A	1	0	0	9	0	46
Silica_mg/L	#N/A	#N/A	0	0	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

#NA = Data not available

RPD >20%

A.2 Dissolved:Total Metals Ratio

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Coppermine River below Desteffany Lake	5/5/2025	Manganese	0.9	1.6	0.56
Coppermine River below Desteffany Lake	5/5/2025	Aluminum	5.1	8.6	0.59
Coppermine River below Desteffany Lake	5/5/2025	Manganese	0.9	1.4	0.64
Coppermine River below Desteffany Lake	5/5/2025	Aluminum	4.9	7.2	0.68
Coppermine River below Desteffany Lake	5/5/2025	Copper	1.2	1.4	0.86
Coppermine River below Desteffany Lake	5/5/2025	Nickel	1.0	1.1	0.91
Coppermine River below Desteffany Lake	5/5/2025	Nickel	1.0	1.1	0.91
Coppermine River below Desteffany Lake	5/5/2025	Barium	2.8	2.9	0.97
Coppermine River below Desteffany Lake	5/5/2025	Strontium	19.6	19.9	0.98
Coppermine River below Desteffany Lake	5/5/2025	Barium	3.0	3.0	1.00
Coppermine River below Desteffany Lake	5/5/2025	Copper	1.4	1.4	1.00
Coppermine River below Desteffany Lake	5/5/2025	Lithium	1.8	1.8	1.00
Coppermine River below Desteffany Lake	5/5/2025	Rubidium	2.4	2.4	1.00
Coppermine River below Desteffany Lake	5/5/2025	Rubidium	2.4	2.4	1.00
Coppermine River below Desteffany Lake	5/5/2025	Zinc	3.9	3.9	1.00
Coppermine River below Desteffany Lake	5/5/2025	Strontium	20.4	19.8	1.03
Coppermine River below Desteffany Lake	5/5/2025	Lithium	1.9	1.8	1.06
Coppermine River below Desteffany Lake	5/5/2025	Zinc	4.1	3.3	1.24
Lockhart River ABOVE Outram Lakes	4/7/2025	Aluminum	4.6	31.9	0.14
Lockhart River ABOVE Outram Lakes	4/7/2025	Manganese	0.9	2.4	0.38
Lockhart River ABOVE Outram Lakes	4/7/2025	Zinc	3.3	8.2	0.40
Lockhart River ABOVE Outram Lakes	4/7/2025	Copper	3.3	6.9	0.48
Lockhart River ABOVE Outram Lakes	4/7/2025	Nickel	1.2	1.5	0.80
Lockhart River ABOVE Outram Lakes	4/7/2025	Rubidium	1.7	2.0	0.85
Lockhart River ABOVE Outram Lakes	4/7/2025	Lithium	1.4	1.5	0.93
Lockhart River ABOVE Outram Lakes	4/7/2025	Barium	2.5	2.5	1.00
Lockhart River ABOVE Outram Lakes	4/7/2025	Strontium	11.1	11.1	1.00
Daring Lake	3/17/2025	Manganese	2.0	2.4	0.83
Daring Lake	3/17/2025	Aluminum	3.3	3.8	0.87
Daring Lake	3/17/2025	Barium	2.2	2.2	1.00
Daring Lake	3/17/2025	Lithium	1.3	1.3	1.00
Daring Lake	3/17/2025	Strontium	9.3	9.1	1.02
Daring Lake	3/17/2025	Rubidium	1.9	1.8	1.06
King Lake	3/17/2025	Barium	4.1	4.1	1.00
King Lake	3/17/2025	Nickel	0.5	0.5	1.00
King Lake	3/17/2025	Strontium	29.1	29.0	1.00
King Lake	3/17/2025	Rubidium	1.9	1.8	1.06
King Lake	3/17/2025	Lithium	1.8	1.7	1.06
Lac de Gras Outlet	3/17/2025	Manganese	0.5	1.2	0.42
Lac de Gras Outlet	3/17/2025	Barium	2.7	2.8	0.96
Lac de Gras Outlet	3/17/2025	Lithium	2.0	2.0	1.00
Lac de Gras Outlet	3/17/2025	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	3/17/2025	Rubidium	2.4	2.4	1.00
Lac de Gras Outlet	3/17/2025	Strontium	23.1	23.1	1.00
Lake of the Enemy	3/17/2025	Barium	2.6	2.7	0.96
Lake of the Enemy	3/17/2025	Strontium	11.2	11.3	0.99
Lake of the Enemy	3/17/2025	Lithium	2.0	2.0	1.00
Lake of the Enemy	3/17/2025	Nickel	0.7	0.7	1.00
Lake of the Enemy	3/17/2025	Rubidium	1.6	1.6	1.00
MacKay Lake	3/17/2025	Barium	2.7	2.7	1.00
MacKay Lake	3/17/2025	Lithium	1.7	1.7	1.00
MacKay Lake	3/17/2025	Rubidium	1.6	1.6	1.00
MacKay Lake	3/17/2025	Strontium	12.5	12.5	1.00
MacKay Lake	3/17/2025	Nickel	0.8	0.7	1.14
Point Lake	3/17/2025	Aluminum	13.9	15.8	0.88
Point Lake	3/17/2025	Copper	1.1	1.2	0.92
Point Lake	3/17/2025	Nickel	1.2	1.3	0.92
Point Lake	3/17/2025	Barium	3.6	3.7	0.97
Point Lake	3/17/2025	Strontium	12.3	12.4	0.99
Point Lake	3/17/2025	Lithium	1.6	1.6	1.00
Point Lake	3/17/2025	Rubidium	2.4	2.4	1.00
Rocknest Lake	3/17/2025	Manganese	0.7	0.9	0.78
Rocknest Lake	3/17/2025	Aluminum	10.0	10.9	0.92
Rocknest Lake	3/17/2025	Barium	2.8	2.9	0.97
Rocknest Lake	3/17/2025	Strontium	8.7	8.8	0.99
Rocknest Lake	3/17/2025	Lithium	1.0	1.0	1.00
Rocknest Lake	3/17/2025	Nickel	0.8	0.8	1.00
Rocknest Lake	3/17/2025	Rubidium	1.6	1.6	1.00
Starfish Lake	3/17/2025	Manganese	0.6	2.9	0.21
Starfish Lake	3/17/2025	Manganese	0.6	2.9	0.21
Starfish Lake	3/17/2025	Aluminum	11.0	12.4	0.89
Starfish Lake	3/17/2025	Aluminum	10.4	11.6	0.90
Starfish Lake	3/17/2025	Copper	1.1	1.2	0.92
Starfish Lake	3/17/2025	Barium	2.3	2.5	0.92

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Starfish Lake	3/17/2025	Copper	1.2	1.3	0.92
Starfish Lake	3/17/2025	Lithium	1.7	1.8	0.94
Starfish Lake	3/17/2025	Barium	2.3	2.4	0.96
Starfish Lake	3/17/2025	Strontium	8.4	8.5	0.99
Starfish Lake	3/17/2025	Lithium	1.7	1.7	1.00
Starfish Lake	3/17/2025	Nickel	0.6	0.6	1.00
Starfish Lake	3/17/2025	Nickel	0.6	0.6	1.00
Starfish Lake	3/17/2025	Rubidium	2.1	2.1	1.00
Starfish Lake	3/17/2025	Rubidium	2.1	2.1	1.00
Starfish Lake	3/17/2025	Strontium	8.4	8.4	1.00
Coppermine River below Desteffany Lake	10/2/2024	Aluminum	7.7	29.7	0.26
Coppermine River below Desteffany Lake	10/2/2024	Manganese	1.5	5.3	0.28
Coppermine River below Desteffany Lake	10/2/2024	Nickel	0.7	0.8	0.88
Coppermine River below Desteffany Lake	10/2/2024	Barium	1.9	2.1	0.90
Coppermine River below Desteffany Lake	10/2/2024	Strontium	13.1	13.2	0.99
Coppermine River below Desteffany Lake	10/2/2024	Lithium	1.5	1.5	1.00
Coppermine River below Desteffany Lake	10/2/2024	Rubidium	1.9	1.9	1.00
Coppermine River at outlet of Point Lake	9/21/2024	Aluminum	9.8	12.6	0.78
Coppermine River at outlet of Point Lake	9/21/2024	Nickel	0.7	0.8	0.88
Coppermine River at outlet of Point Lake	9/21/2024	Strontium	7.6	7.4	1.03
Coppermine River at outlet of Point Lake	9/21/2024	Rubidium	1.5	1.4	1.07
Coppermine River at outlet of Point Lake	9/21/2024	Barium	2.2	2.0	1.10
Coppermine River at outlet of Point Lake	9/21/2024	Lithium	1.1	1.0	1.10
Clinton-Colden Outlet	9/6/2024	Aluminum	3.5	5.5	0.64
Clinton-Colden Outlet	9/6/2024	Barium	1.9	2.1	0.90
Clinton-Colden Outlet	9/6/2024	Lithium	1.3	1.4	0.93
Clinton-Colden Outlet	9/6/2024	Strontium	7.0	7.3	0.96
Clinton-Colden Outlet	9/6/2024	Nickel	0.7	0.7	1.00
Clinton-Colden Outlet	9/6/2024	Rubidium	1.2	1.2	1.00
Daring Lake	9/6/2024	Manganese	1.5	4.6	0.33
Daring Lake	9/6/2024	Barium	1.2	1.3	0.92
Daring Lake	9/6/2024	Lithium	1.0	1.0	1.00
Daring Lake	9/6/2024	Rubidium	1.3	1.3	1.00
Daring Lake	9/6/2024	Strontium	6.2	6.2	1.00
Desteffany Lake	9/6/2024	Manganese	1.8	7.3	0.25
Desteffany Lake	9/6/2024	Aluminum	4.4	9.7	0.45
Desteffany Lake	9/6/2024	Barium	1.8	1.8	1.00
Desteffany Lake	9/6/2024	Nickel	0.7	0.7	1.00
Desteffany Lake	9/6/2024	Rubidium	1.9	1.9	1.00
Desteffany Lake	9/6/2024	Strontium	13.6	13.1	1.04
Desteffany Lake	9/6/2024	Lithium	1.5	1.4	1.07
King Lake	9/6/2024	Aluminum	3.1	6.0	0.52
King Lake	9/6/2024	Barium	3.6	3.7	0.97
King Lake	9/6/2024	Rubidium	1.6	1.6	1.00
King Lake	9/6/2024	Strontium	25.3	25.2	1.00
King Lake	9/6/2024	Lithium	1.5	1.4	1.07
Lac de Gras Outlet	9/6/2024	Lithium	1.6	1.7	0.94
Lac de Gras Outlet	9/6/2024	Barium	2.1	2.2	0.95
Lac de Gras Outlet	9/6/2024	Strontium	18.1	18.2	0.99
Lac de Gras Outlet	9/6/2024	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	9/6/2024	Rubidium	2.0	2.0	1.00
Lake of the Enemy	9/6/2024	Barium	1.8	1.9	0.95
Lake of the Enemy	9/6/2024	Barium	1.8	1.8	1.00
Lake of the Enemy	9/6/2024	Lithium	1.5	1.5	1.00
Lake of the Enemy	9/6/2024	Lithium	1.5	1.5	1.00
Lake of the Enemy	9/6/2024	Nickel	0.5	0.5	1.00
Lake of the Enemy	9/6/2024	Nickel	0.5	0.5	1.00
Lake of the Enemy	9/6/2024	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/6/2024	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/6/2024	Strontium	8.0	8.0	1.00
Lake of the Enemy	9/6/2024	Strontium	8.0	7.9	1.01
MacKay Lake	9/6/2024	Nickel	0.5	0.6	0.83
MacKay Lake	9/6/2024	Barium	1.9	2.1	0.90
MacKay Lake	9/6/2024	Lithium	1.3	1.3	1.00
MacKay Lake	9/6/2024	Rubidium	1.3	1.3	1.00
MacKay Lake	9/6/2024	Strontium	9.9	9.9	1.00
Point Lake	9/6/2024	Aluminum	9.2	11.7	0.79
Point Lake	9/6/2024	Nickel	0.7	0.8	0.88
Point Lake	9/6/2024	Barium	2.1	2.1	1.00
Point Lake	9/6/2024	Lithium	1.0	1.0	1.00
Point Lake	9/6/2024	Rubidium	1.4	1.4	1.00
Point Lake	9/6/2024	Strontium	7.5	7.5	1.00
Rocknest Lake	9/6/2024	Aluminum	4.9	7.7	0.64
Rocknest Lake	9/6/2024	Aluminum	5.3	7.8	0.68

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	9/6/2024	Rubidium	1.2	1.3	0.92
Rocknest Lake	9/6/2024	Barium	4.8	5.1	0.94
Rocknest Lake	9/6/2024	Strontium	10.3	10.6	0.97
Rocknest Lake	9/6/2024	Barium	4.4	4.5	0.98
Rocknest Lake	9/6/2024	Lithium	1.0	1.0	1.00
Rocknest Lake	9/6/2024	Nickel	0.5	0.5	1.00
Rocknest Lake	9/6/2024	Rubidium	1.4	1.4	1.00
Rocknest Lake	9/6/2024	Strontium	10.0	9.9	1.01
Starfish Lake	9/6/2024	Manganese	0.5	10.4	0.05
Starfish Lake	9/6/2024	Aluminum	6.0	12.8	0.47
Starfish Lake	9/6/2024	Barium	1.7	1.8	0.94
Starfish Lake	9/6/2024	Nickel	0.5	0.5	1.00
Starfish Lake	9/6/2024	Rubidium	1.7	1.7	1.00
Starfish Lake	9/6/2024	Strontium	6.6	6.6	1.00
Starfish Lake	9/6/2024	Lithium	1.5	1.4	1.07
Clinton-Colden Outlet	8/6/2024	Manganese	2.0	4.3	0.47
Clinton-Colden Outlet	8/6/2024	Manganese	1.9	4.0	0.48
Clinton-Colden Outlet	8/6/2024	Aluminum	4.1	5.3	0.77
Clinton-Colden Outlet	8/6/2024	Aluminum	4.3	5.4	0.80
Clinton-Colden Outlet	8/6/2024	Barium	2.1	2.1	1.00
Clinton-Colden Outlet	8/6/2024	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	8/6/2024	Nickel	0.7	0.7	1.00
Clinton-Colden Outlet	8/6/2024	Nickel	0.7	0.7	1.00
Clinton-Colden Outlet	8/6/2024	Nickel	0.7	0.7	1.00
Clinton-Colden Outlet	8/6/2024	Strontium	7.5	7.3	1.03
Clinton-Colden Outlet	8/6/2024	Lithium	1.4	1.3	1.08
Clinton-Colden Outlet	8/6/2024	Rubidium	1.3	1.2	1.08
Clinton-Colden Outlet	8/6/2024	Rubidium	1.3	1.2	1.08
Clinton-Colden Outlet	8/6/2024	Strontium	7.6	7.0	1.09
Clinton-Colden Outlet	8/6/2024	Barium	2.1	1.9	1.11
Daring Lake	8/6/2024	Manganese	1.0	3.0	0.33
Daring Lake	8/6/2024	Manganese	1.1	3.0	0.37
Daring Lake	8/6/2024	Aluminum	3.5	6.6	0.53
Daring Lake	8/6/2024	Aluminum	3.8	6.7	0.57
Daring Lake	8/6/2024	Barium	1.1	1.2	0.92
Daring Lake	8/6/2024	Strontium	5.9	6.3	0.94
Daring Lake	8/6/2024	Barium	1.2	1.2	1.00
Daring Lake	8/6/2024	Lithium	1.0	1.0	1.00
Daring Lake	8/6/2024	Rubidium	1.3	1.3	1.00
Daring Lake	8/6/2024	Rubidium	1.3	1.3	1.00
Daring Lake	8/6/2024	Strontium	6.3	6.2	1.02
Desteffany Lake	8/6/2024	Manganese	0.5	8.5	0.06
Desteffany Lake	8/6/2024	Aluminum	5.4	11.1	0.49
Desteffany Lake	8/6/2024	Nickel	0.7	0.8	0.88
Desteffany Lake	8/6/2024	Barium	1.8	1.9	0.95
Desteffany Lake	8/6/2024	Strontium	13.5	13.8	0.98
Desteffany Lake	8/6/2024	Lithium	1.4	1.4	1.00
Desteffany Lake	8/6/2024	Rubidium	2.0	2.0	1.00
King Lake	8/6/2024	Aluminum	4.6	7.1	0.65
King Lake	8/6/2024	Barium	3.2	3.5	0.91
King Lake	8/6/2024	Lithium	1.4	1.5	0.93
King Lake	8/6/2024	Rubidium	1.5	1.6	0.94
King Lake	8/6/2024	Strontium	19.5	20.4	0.96
Lac de Gras Outlet	8/6/2024	Manganese	1.3	5.8	0.22
Lac de Gras Outlet	8/6/2024	Barium	2.2	2.3	0.96
Lac de Gras Outlet	8/6/2024	Strontium	18.6	19.0	0.98
Lac de Gras Outlet	8/6/2024	Lithium	1.6	1.6	1.00
Lac de Gras Outlet	8/6/2024	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	8/6/2024	Rubidium	2.0	2.0	1.00
Lake of the Enemy	8/6/2024	Manganese	0.5	1.8	0.28
Lake of the Enemy	8/6/2024	Barium	1.9	2.0	0.95
Lake of the Enemy	8/6/2024	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/6/2024	Rubidium	1.1	1.1	1.00
Lake of the Enemy	8/6/2024	Strontium	8.2	8.2	1.00
Lake of the Enemy	8/6/2024	Lithium	1.5	1.4	1.07
MacKay Lake	8/6/2024	Aluminum	3.3	6.1	0.54
MacKay Lake	8/6/2024	Nickel	0.6	0.7	0.86
MacKay Lake	8/6/2024	Barium	2.1	2.2	0.95
MacKay Lake	8/6/2024	Lithium	1.3	1.3	1.00
MacKay Lake	8/6/2024	Rubidium	1.3	1.3	1.00
MacKay Lake	8/6/2024	Strontium	10.3	10.3	1.00
Point Lake	8/6/2024	Aluminum	9.9	12.0	0.83
Point Lake	8/6/2024	Barium	2.1	2.1	1.00
Point Lake	8/6/2024	Lithium	1.0	1.0	1.00
Point Lake	8/6/2024	Rubidium	1.5	1.5	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Point Lake	8/6/2024	Strontium	7.7	7.6	1.01
Point Lake	8/6/2024	Nickel	0.8	0.7	1.14
Rocknest Lake	8/6/2024	Aluminum	7.8	8.7	0.90
Rocknest Lake	8/6/2024	Barium	5.8	5.8	1.00
Rocknest Lake	8/6/2024	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/6/2024	Strontium	12.8	12.5	1.02
Rocknest Lake	8/6/2024	Lithium	1.1	1.0	1.10
Starfish Lake	8/6/2024	Manganese	0.8	12.8	0.06
Starfish Lake	8/6/2024	Aluminum	8.9	15.0	0.59
Starfish Lake	8/6/2024	Nickel	0.5	0.6	0.83
Starfish Lake	8/6/2024	Barium	1.9	2.0	0.95
Starfish Lake	8/6/2024	Copper	1.0	1.0	1.00
Starfish Lake	8/6/2024	Lithium	1.4	1.4	1.00
Starfish Lake	8/6/2024	Strontium	6.8	6.8	1.00
Starfish Lake	8/6/2024	Rubidium	1.8	1.7	1.06
Coppermine River at outlet of Point Lake	7/30/2024	Aluminum	11.4	15.2	0.75
Coppermine River at outlet of Point Lake	7/30/2024	Nickel	0.7	0.8	0.88
Coppermine River at outlet of Point Lake	7/30/2024	Lithium	1.0	1.1	0.91
Coppermine River at outlet of Point Lake	7/30/2024	Rubidium	1.5	1.6	0.94
Coppermine River at outlet of Point Lake	7/30/2024	Strontium	7.6	7.9	0.96
Coppermine River at outlet of Point Lake	7/30/2024	Barium	2.2	2.2	1.00
Coppermine River below Desteffany Lake	7/29/2024	Aluminum	5.7	33.7	0.17
Coppermine River below Desteffany Lake	7/29/2024	Barium	1.9	2.4	0.79
Coppermine River below Desteffany Lake	7/29/2024	Nickel	0.8	1.0	0.80
Coppermine River below Desteffany Lake	7/29/2024	Rubidium	2.0	2.1	0.95
Coppermine River below Desteffany Lake	7/29/2024	Strontium	13.7	14.3	0.96
Coppermine River below Desteffany Lake	7/29/2024	Lithium	1.6	1.6	1.00
Lockhart River ABOVE Outram Lakes	7/26/2024	Manganese	2.1	8.8	0.24
Lockhart River ABOVE Outram Lakes	7/26/2024	Aluminum	3.9	12.4	0.31
Lockhart River ABOVE Outram Lakes	7/26/2024	Nickel	0.8	1.1	0.73
Lockhart River ABOVE Outram Lakes	7/26/2024	Lithium	1.2	1.5	0.80
Lockhart River ABOVE Outram Lakes	7/26/2024	Barium	1.3	1.6	0.81
Lockhart River ABOVE Outram Lakes	7/26/2024	Strontium	7.9	9.4	0.84
Lockhart River ABOVE Outram Lakes	7/26/2024	Rubidium	1.2	1.4	0.86
Clinton-Colden Outlet	7/2/2024	Manganese	4.7	6.6	0.71
Clinton-Colden Outlet	7/2/2024	Aluminum	3.5	4.8	0.73
Clinton-Colden Outlet	7/2/2024	Manganese	4.9	6.7	0.73
Clinton-Colden Outlet	7/2/2024	Aluminum	3.9	4.5	0.87
Clinton-Colden Outlet	7/2/2024	Lithium	1.3	1.4	0.93
Clinton-Colden Outlet	7/2/2024	Lithium	1.4	1.5	0.93
Clinton-Colden Outlet	7/2/2024	Barium	1.9	2.0	0.95
Clinton-Colden Outlet	7/2/2024	Strontium	7.0	7.1	0.99
Clinton-Colden Outlet	7/2/2024	Barium	2.0	2.0	1.00
Clinton-Colden Outlet	7/2/2024	Nickel	0.8	0.8	1.00
Clinton-Colden Outlet	7/2/2024	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	7/2/2024	Strontium	7.2	7.2	1.00
Clinton-Colden Outlet	7/2/2024	Rubidium	1.3	1.2	1.08
Clinton-Colden Outlet	7/2/2024	Nickel	0.9	0.8	1.13
Daring Lake	7/2/2024	Manganese	1.7	3.7	0.46
Daring Lake	7/2/2024	Barium	1.1	1.3	0.85
Daring Lake	7/2/2024	Strontium	5.7	6.3	0.90
Daring Lake	7/2/2024	Rubidium	1.2	1.3	0.92
Desteffany Lake	7/2/2024	Manganese	2.4	6.9	0.35
Desteffany Lake	7/2/2024	Aluminum	10.1	17.9	0.56
Desteffany Lake	7/2/2024	Barium	2.0	2.1	0.95
Desteffany Lake	7/2/2024	Rubidium	2.0	2.1	0.95
Desteffany Lake	7/2/2024	Strontium	12.6	12.8	0.98
Desteffany Lake	7/2/2024	Lithium	1.5	1.5	1.00
Desteffany Lake	7/2/2024	Nickel	0.8	0.8	1.00
King Lake	7/2/2024	Manganese	0.5	5.4	0.09
King Lake	7/2/2024	Aluminum	4.2	7.8	0.54
King Lake	7/2/2024	Strontium	18.9	19.1	0.99
King Lake	7/2/2024	Barium	3.3	3.3	1.00
King Lake	7/2/2024	Lithium	1.5	1.5	1.00
King Lake	7/2/2024	Nickel	0.5	0.5	1.00
King Lake	7/2/2024	Rubidium	1.6	1.6	1.00
Lac de Gras Outlet	7/2/2024	Manganese	2.7	4.7	0.57
Lac de Gras Outlet	7/2/2024	Manganese	2.8	4.7	0.60
Lac de Gras Outlet	7/2/2024	Nickel	0.9	1.0	0.90
Lac de Gras Outlet	7/2/2024	Lithium	1.5	1.6	0.94
Lac de Gras Outlet	7/2/2024	Rubidium	1.9	2.0	0.95
Lac de Gras Outlet	7/2/2024	Barium	2.0	2.1	0.95
Lac de Gras Outlet	7/2/2024	Barium	2.0	2.1	0.95
Lac de Gras Outlet	7/2/2024	Strontium	16.8	17.6	0.95

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	7/2/2024	Lithium	1.6	1.6	1.00
Lac de Gras Outlet	7/2/2024	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	7/2/2024	Rubidium	1.9	1.9	1.00
Lac de Gras Outlet	7/2/2024	Strontium	17.8	17.3	1.03
Lake of the Enemy	7/2/2024	Manganese	1.2	2.2	0.55
Lake of the Enemy	7/2/2024	Barium	1.8	1.9	0.95
Lake of the Enemy	7/2/2024	Lithium	1.5	1.5	1.00
Lake of the Enemy	7/2/2024	Nickel	0.6	0.6	1.00
Lake of the Enemy	7/2/2024	Rubidium	1.1	1.1	1.00
Lake of the Enemy	7/2/2024	Strontium	8.2	8.1	1.01
MacKay Lake	7/2/2024	Manganese	0.8	2.9	0.28
MacKay Lake	7/2/2024	Aluminum	4.3	6.1	0.70
MacKay Lake	7/2/2024	Barium	2.2	2.2	1.00
MacKay Lake	7/2/2024	Lithium	1.3	1.3	1.00
MacKay Lake	7/2/2024	Nickel	0.7	0.7	1.00
MacKay Lake	7/2/2024	Rubidium	1.3	1.3	1.00
MacKay Lake	7/2/2024	Strontium	10.1	10.0	1.01
Point Lake	7/2/2024	Aluminum	7.9	9.3	0.85
Point Lake	7/2/2024	Rubidium	1.3	1.4	0.93
Point Lake	7/2/2024	Strontium	7.0	7.1	0.99
Point Lake	7/2/2024	Barium	1.9	1.9	1.00
Point Lake	7/2/2024	Nickel	0.7	0.7	1.00
Rocknest Lake	7/2/2024	Aluminum	6.9	9.2	0.75
Rocknest Lake	7/2/2024	Mercury	1.1	1.3	0.85
Rocknest Lake	7/2/2024	Barium	6.5	6.6	0.98
Rocknest Lake	7/2/2024	Strontium	14.0	14.2	0.99
Rocknest Lake	7/2/2024	Lithium	1.0	1.0	1.00
Rocknest Lake	7/2/2024	Rubidium	1.1	1.1	1.00
Starfish Lake	7/2/2024	Manganese	19.0	38.1	0.50
Starfish Lake	7/2/2024	Aluminum	18.6	26.3	0.71
Starfish Lake	7/2/2024	Barium	2.1	2.2	0.95
Starfish Lake	7/2/2024	Copper	1.0	1.0	1.00
Starfish Lake	7/2/2024	Lithium	1.4	1.4	1.00
Starfish Lake	7/2/2024	Nickel	0.7	0.7	1.00
Starfish Lake	7/2/2024	Rubidium	1.7	1.7	1.00
Starfish Lake	7/2/2024	Strontium	6.7	6.6	1.02
Coppermine River below Desteffany Lake	4/26/2024	Aluminum	3.3	6.1	0.54
Coppermine River below Desteffany Lake	4/26/2024	Aluminum	3.3	5.2	0.63
Coppermine River below Desteffany Lake	4/26/2024	Manganese	1.2	1.5	0.80
Coppermine River below Desteffany Lake	4/26/2024	Manganese	1.2	1.5	0.80
Coppermine River below Desteffany Lake	4/26/2024	Zinc	2.5	2.7	0.93
Coppermine River below Desteffany Lake	4/26/2024	Lithium	1.7	1.8	0.94
Coppermine River below Desteffany Lake	4/26/2024	Barium	2.7	2.7	1.00
Coppermine River below Desteffany Lake	4/26/2024	Nickel	0.9	0.9	1.00
Coppermine River below Desteffany Lake	4/26/2024	Rubidium	2.2	2.2	1.00
Coppermine River below Desteffany Lake	4/26/2024	Strontium	18.2	18.0	1.01
Coppermine River below Desteffany Lake	4/26/2024	Strontium	18.4	17.3	1.06
Coppermine River below Desteffany Lake	4/26/2024	Rubidium	2.3	2.1	1.10
Coppermine River below Desteffany Lake	4/26/2024	Lithium	1.8	1.6	1.13
Coppermine River below Desteffany Lake	4/26/2024	Nickel	0.9	0.8	1.13
Coppermine River below Desteffany Lake	4/26/2024	Barium	2.6	2.3	1.13
Daring Lake	3/26/2024	Manganese	0.6	0.9	0.67
Daring Lake	3/26/2024	Manganese	0.6	0.8	0.75
Daring Lake	3/26/2024	Rubidium	1.6	1.8	0.89
Daring Lake	3/26/2024	Barium	1.7	1.9	0.89
Daring Lake	3/26/2024	Strontium	7.7	8.5	0.91
Daring Lake	3/26/2024	Lithium	1.2	1.3	0.92
Daring Lake	3/26/2024	Aluminum	3.0	3.1	0.97
Daring Lake	3/26/2024	Lithium	1.2	1.2	1.00
Daring Lake	3/26/2024	Rubidium	1.7	1.7	1.00
Daring Lake	3/26/2024	Strontium	8.2	7.9	1.04
Daring Lake	3/26/2024	Barium	1.9	1.8	1.06
Desteffany Lake	3/26/2024	Manganese	0.7	1.1	0.64
Desteffany Lake	3/26/2024	Aluminum	3.8	4.4	0.86
Desteffany Lake	3/26/2024	Barium	2.0	2.0	1.00
Desteffany Lake	3/26/2024	Lithium	1.6	1.6	1.00
Desteffany Lake	3/26/2024	Nickel	0.7	0.7	1.00
Desteffany Lake	3/26/2024	Rubidium	2.0	2.0	1.00
Desteffany Lake	3/26/2024	Strontium	15.3	15.2	1.01
King Lake	3/26/2024	Lithium	1.6	1.6	1.00
King Lake	3/26/2024	Rubidium	1.7	1.7	1.00
King Lake	3/26/2024	Barium	3.8	3.7	1.03
King Lake	3/26/2024	Strontium	24.8	23.8	1.04
Lac de Gras Outlet	3/26/2024	Barium	2.5	2.5	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	3/26/2024	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	3/26/2024	Strontium	20.7	20.3	1.02
Lac de Gras Outlet	3/26/2024	Rubidium	2.3	2.2	1.05
Lac de Gras Outlet	3/26/2024	Lithium	1.9	1.8	1.06
Lake of the Enemy	3/26/2024	Barium	2.5	2.5	1.00
Lake of the Enemy	3/26/2024	Lithium	2.0	2.0	1.00
Lake of the Enemy	3/26/2024	Rubidium	1.6	1.6	1.00
Lake of the Enemy	3/26/2024	Strontium	11.0	10.8	1.02
Lake of the Enemy	3/26/2024	Nickel	0.7	0.6	1.17
MacKay Lake	3/26/2024	Manganese	0.6	2.1	0.29
MacKay Lake	3/26/2024	Nickel	0.6	0.7	0.86
MacKay Lake	3/26/2024	Barium	2.6	2.8	0.93
MacKay Lake	3/26/2024	Strontium	12.2	13.0	0.94
MacKay Lake	3/26/2024	Rubidium	1.6	1.7	0.94
MacKay Lake	3/26/2024	Lithium	1.6	1.6	1.00
Point Lake	3/26/2024	Copper	1.0	1.1	0.91
Point Lake	3/26/2024	Aluminum	14.3	14.3	1.00
Point Lake	3/26/2024	Barium	3.3	3.3	1.00
Point Lake	3/26/2024	Lithium	1.6	1.6	1.00
Point Lake	3/26/2024	Nickel	1.2	1.2	1.00
Point Lake	3/26/2024	Strontium	11.9	11.7	1.02
Point Lake	3/26/2024	Rubidium	2.4	2.3	1.04
Rocknest Lake	3/26/2024	Manganese	0.6	0.8	0.75
Rocknest Lake	3/26/2024	Aluminum	9.4	9.5	0.99
Rocknest Lake	3/26/2024	Lithium	1.1	1.1	1.00
Rocknest Lake	3/26/2024	Nickel	0.8	0.8	1.00
Rocknest Lake	3/26/2024	Barium	2.8	2.7	1.04
Rocknest Lake	3/26/2024	Strontium	8.4	8.1	1.04
Rocknest Lake	3/26/2024	Rubidium	1.6	1.5	1.07
Starfish Lake	3/26/2024	Manganese	0.5	2.0	0.25
Starfish Lake	3/26/2024	Manganese	0.5	1.7	0.29
Starfish Lake	3/26/2024	Aluminum	5.4	6.2	0.87
Starfish Lake	3/26/2024	Copper	1.0	1.1	0.91
Starfish Lake	3/26/2024	Barium	2.0	2.1	0.95
Starfish Lake	3/26/2024	Aluminum	5.0	5.1	0.98
Starfish Lake	3/26/2024	Lithium	1.7	1.7	1.00
Starfish Lake	3/26/2024	Lithium	1.5	1.5	1.00
Starfish Lake	3/26/2024	Rubidium	1.9	1.9	1.00
Starfish Lake	3/26/2024	Strontium	7.6	7.6	1.00
Starfish Lake	3/26/2024	Barium	1.7	1.6	1.06
Starfish Lake	3/26/2024	Rubidium	1.7	1.6	1.06
Starfish Lake	3/26/2024	Strontium	6.8	6.3	1.08
Clinton-Colden Outlet	8/3/2023	Manganese	2.3	4.4	0.52
Clinton-Colden Outlet	8/3/2023	Manganese	2.4	4.2	0.57
Clinton-Colden Outlet	8/3/2023	Aluminum	4.6	5.7	0.81
Clinton-Colden Outlet	8/3/2023	Nickel	0.8	0.9	0.89
Clinton-Colden Outlet	8/3/2023	Aluminum	4.7	5.2	0.90
Clinton-Colden Outlet	8/3/2023	Lithium	1.4	1.5	0.93
Clinton-Colden Outlet	8/3/2023	Barium	2.1	2.2	0.95
Clinton-Colden Outlet	8/3/2023	Rubidium	1.4	1.4	1.00
Clinton-Colden Outlet	8/3/2023	Strontium	7.8	7.8	1.00
Clinton-Colden Outlet	8/3/2023	Barium	2.3	2.1	1.10
Clinton-Colden Outlet	8/3/2023	Nickel	0.9	0.8	1.13
Clinton-Colden Outlet	8/3/2023	Strontium	8.4	7.3	1.15
Clinton-Colden Outlet	8/3/2023	Rubidium	1.5	1.3	1.15
Clinton-Colden Outlet	8/3/2023	Lithium	1.7	1.4	1.21
Daring Lake	8/3/2023	Manganese	0.6	4.0	0.15
Daring Lake	8/3/2023	Barium	1.0	1.1	0.91
Daring Lake	8/3/2023	Strontium	6.0	6.1	0.98
Daring Lake	8/3/2023	Lithium	1.0	1.0	1.00
Daring Lake	8/3/2023	Rubidium	1.4	1.4	1.00
Desteffany Lake	8/3/2023	Manganese	0.5	8.8	0.06
Desteffany Lake	8/3/2023	Aluminum	3.1	6.6	0.47
Desteffany Lake	8/3/2023	Barium	1.8	1.8	1.00
Desteffany Lake	8/3/2023	Lithium	1.5	1.5	1.00
Desteffany Lake	8/3/2023	Nickel	0.8	0.8	1.00
Desteffany Lake	8/3/2023	Strontium	14.7	13.9	1.06
Desteffany Lake	8/3/2023	Rubidium	2.2	2.0	1.10
King Lake	8/3/2023	Aluminum	4.2	6.4	0.66
King Lake	8/3/2023	Barium	3.3	3.3	1.00
King Lake	8/3/2023	Lithium	1.6	1.6	1.00
King Lake	8/3/2023	Strontium	19.6	19.2	1.02
King Lake	8/3/2023	Rubidium	1.7	1.6	1.06
Lac de Gras Outlet	8/3/2023	Manganese	1.7	4.4	0.39

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	8/3/2023	Barium	2.0	2.1	0.95
Lac de Gras Outlet	8/3/2023	Lithium	1.6	1.6	1.00
Lac de Gras Outlet	8/3/2023	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	8/3/2023	Rubidium	2.0	2.0	1.00
Lac de Gras Outlet	8/3/2023	Strontium	17.2	17.1	1.01
Lake of the Enemy	8/3/2023	Manganese	0.5	1.9	0.26
Lake of the Enemy	8/3/2023	Nickel	0.5	0.6	0.83
Lake of the Enemy	8/3/2023	Strontium	7.8	7.9	0.99
Lake of the Enemy	8/3/2023	Barium	1.8	1.8	1.00
Lake of the Enemy	8/3/2023	Rubidium	1.1	1.1	1.00
Lake of the Enemy	8/3/2023	Lithium	1.5	1.4	1.07
MacKay Lake	8/3/2023	Aluminum	3.1	4.2	0.74
MacKay Lake	8/3/2023	Barium	2.0	2.0	1.00
MacKay Lake	8/3/2023	Lithium	1.2	1.2	1.00
MacKay Lake	8/3/2023	Nickel	0.5	0.5	1.00
MacKay Lake	8/3/2023	Rubidium	1.3	1.3	1.00
MacKay Lake	8/3/2023	Strontium	10.0	10.0	1.00
Point Lake	8/3/2023	Lithium	1.0	1.2	0.83
Point Lake	8/3/2023	Nickel	0.8	0.9	0.89
Point Lake	8/3/2023	Aluminum	10.1	11.0	0.92
Point Lake	8/3/2023	Rubidium	1.5	1.6	0.94
Point Lake	8/3/2023	Strontium	7.8	7.9	0.99
Point Lake	8/3/2023	Barium	2.1	2.1	1.00
Rocknest Lake	8/3/2023	Aluminum	6.9	8.7	0.79
Rocknest Lake	8/3/2023	Aluminum	7.6	8.5	0.89
Rocknest Lake	8/3/2023	Lithium	1.0	1.1	0.91
Rocknest Lake	8/3/2023	Barium	5.4	5.6	0.96
Rocknest Lake	8/3/2023	Strontium	12.7	12.9	0.98
Rocknest Lake	8/3/2023	Nickel	0.5	0.5	1.00
Rocknest Lake	8/3/2023	Nickel	0.5	0.5	1.00
Rocknest Lake	8/3/2023	Rubidium	1.4	1.4	1.00
Rocknest Lake	8/3/2023	Barium	6.0	5.8	1.03
Rocknest Lake	8/3/2023	Strontium	14.1	13.5	1.04
Rocknest Lake	8/3/2023	Rubidium	1.5	1.4	1.07
Rocknest Lake	8/3/2023	Lithium	1.1	1.0	1.10
Starfish Lake	8/3/2023	Manganese	0.7	7.0	0.10
Starfish Lake	8/3/2023	Aluminum	5.9	10.6	0.56
Starfish Lake	8/3/2023	Lithium	1.4	1.5	0.93
Starfish Lake	8/3/2023	Barium	1.8	1.9	0.95
Starfish Lake	8/3/2023	Nickel	0.5	0.5	1.00
Starfish Lake	8/3/2023	Rubidium	1.7	1.7	1.00
Starfish Lake	8/3/2023	Strontium	6.6	6.5	1.02
Starfish Lake	8/3/2023	Copper	1.1	1.0	1.10
Coppermine River below Desteffany Lake	7/7/2023	Aluminum	4.4	9.6	0.46
Coppermine River below Desteffany Lake	7/7/2023	Nickel	0.6	0.7	0.86
Coppermine River below Desteffany Lake	7/7/2023	Barium	1.6	1.8	0.89
Coppermine River below Desteffany Lake	7/7/2023	Lithium	1.4	1.5	0.93
Coppermine River below Desteffany Lake	7/7/2023	Rubidium	1.9	2.0	0.95
Coppermine River below Desteffany Lake	7/7/2023	Strontium	13.4	13.9	0.96
Coppermine River at outlet of Point Lake	7/6/2023	Aluminum	10.4	12.8	0.81
Coppermine River at outlet of Point Lake	7/6/2023	Barium	2.0	2.0	1.00
Coppermine River at outlet of Point Lake	7/6/2023	Nickel	0.8	0.8	1.00
Coppermine River at outlet of Point Lake	7/6/2023	Strontium	8.2	7.9	1.04
Coppermine River at outlet of Point Lake	7/6/2023	Rubidium	1.6	1.5	1.07
Coppermine River at outlet of Point Lake	7/6/2023	Lithium	1.1	1.0	1.10
Clinton-Colden Outlet	7/4/2023	Manganese	1.9	4.3	0.44
Clinton-Colden Outlet	7/4/2023	Manganese	1.9	4.2	0.45
Clinton-Colden Outlet	7/4/2023	Aluminum	4.3	6.4	0.67
Clinton-Colden Outlet	7/4/2023	Aluminum	4.7	6.3	0.75
Clinton-Colden Outlet	7/4/2023	Nickel	0.7	0.8	0.88
Clinton-Colden Outlet	7/4/2023	Rubidium	1.2	1.3	0.92
Clinton-Colden Outlet	7/4/2023	Barium	1.9	1.9	1.00
Clinton-Colden Outlet	7/4/2023	Barium	1.9	1.9	1.00
Clinton-Colden Outlet	7/4/2023	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	7/4/2023	Nickel	0.8	0.8	1.00
Clinton-Colden Outlet	7/4/2023	Rubidium	1.3	1.3	1.00
Clinton-Colden Outlet	7/4/2023	Strontium	7.2	7.2	1.00
Clinton-Colden Outlet	7/4/2023	Strontium	7.2	7.2	1.00
Clinton-Colden Outlet	7/4/2023	Lithium	1.4	1.3	1.08
Daring Lake	7/4/2023	Manganese	1.1	2.3	0.48
Daring Lake	7/4/2023	Aluminum	3.4	6.8	0.50
Daring Lake	7/4/2023	Rubidium	1.2	1.2	1.00
Daring Lake	7/4/2023	Strontium	5.9	5.8	1.02
Daring Lake	7/4/2023	Barium	1.2	1.1	1.09

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Desteffany Lake	7/4/2023	Aluminum	4.8	9.8	0.49
Desteffany Lake	7/4/2023	Barium	1.7	1.7	1.00
Desteffany Lake	7/4/2023	Lithium	1.3	1.3	1.00
Desteffany Lake	7/4/2023	Nickel	0.6	0.6	1.00
Desteffany Lake	7/4/2023	Rubidium	1.8	1.8	1.00
Desteffany Lake	7/4/2023	Strontium	12.6	12.4	1.02
King Lake	7/4/2023	Aluminum	3.4	5.7	0.60
King Lake	7/4/2023	Strontium	19.1	19.2	0.99
King Lake	7/4/2023	Barium	3.1	3.1	1.00
King Lake	7/4/2023	Lithium	1.3	1.3	1.00
King Lake	7/4/2023	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	7/4/2023	Manganese	1.6	4.0	0.40
Lac de Gras Outlet	7/4/2023	Manganese	1.7	4.1	0.41
Lac de Gras Outlet	7/4/2023	Nickel	0.9	1.0	0.90
Lac de Gras Outlet	7/4/2023	Lithium	1.4	1.5	0.93
Lac de Gras Outlet	7/4/2023	Barium	2.0	2.0	1.00
Lac de Gras Outlet	7/4/2023	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	7/4/2023	Rubidium	1.9	1.9	1.00
Lac de Gras Outlet	7/4/2023	Rubidium	1.9	1.9	1.00
Lac de Gras Outlet	7/4/2023	Strontium	16.6	16.6	1.00
Lac de Gras Outlet	7/4/2023	Strontium	16.9	16.8	1.01
Lac de Gras Outlet	7/4/2023	Barium	2.1	2.0	1.05
Lac de Gras Outlet	7/4/2023	Lithium	1.6	1.5	1.07
Lake of the Enemy	7/4/2023	Manganese	0.9	1.8	0.50
Lake of the Enemy	7/4/2023	Lithium	1.3	1.4	0.93
Lake of the Enemy	7/4/2023	Strontium	7.6	7.7	0.99
Lake of the Enemy	7/4/2023	Barium	1.7	1.7	1.00
Lake of the Enemy	7/4/2023	Nickel	0.5	0.5	1.00
Lake of the Enemy	7/4/2023	Rubidium	1.0	1.0	1.00
MacKay Lake	7/4/2023	Manganese	0.5	2.4	0.21
MacKay Lake	7/4/2023	Lithium	1.1	1.3	0.85
MacKay Lake	7/4/2023	Nickel	0.7	0.7	1.00
MacKay Lake	7/4/2023	Rubidium	1.2	1.2	1.00
MacKay Lake	7/4/2023	Strontium	9.4	9.4	1.00
MacKay Lake	7/4/2023	Barium	2.4	1.9	1.26
Point Lake	7/4/2023	Aluminum	9.2	11.6	0.79
Point Lake	7/4/2023	Barium	1.9	1.9	1.00
Point Lake	7/4/2023	Nickel	0.7	0.7	1.00
Point Lake	7/4/2023	Rubidium	1.4	1.4	1.00
Point Lake	7/4/2023	Strontium	7.2	7.1	1.01
Rocknest Lake	7/4/2023	Aluminum	7.5	9.3	0.81
Rocknest Lake	7/4/2023	Barium	5.6	5.8	0.97
Rocknest Lake	7/4/2023	Rubidium	1.2	1.2	1.00
Rocknest Lake	7/4/2023	Strontium	12.0	12.0	1.00
Starfish Lake	7/4/2023	Manganese	0.6	7.6	0.08
Starfish Lake	7/4/2023	Aluminum	8.6	13.5	0.64
Starfish Lake	7/4/2023	Lithium	1.2	1.3	0.92
Starfish Lake	7/4/2023	Barium	1.7	1.7	1.00
Starfish Lake	7/4/2023	Rubidium	1.5	1.5	1.00
Starfish Lake	7/4/2023	Strontium	6.1	6.0	1.02
Coppermine River at outlet of Point Lake	4/12/2023	Aluminum	13.4	16.2	0.83
Coppermine River at outlet of Point Lake	4/12/2023	Zinc	2.5	3.0	0.83
Coppermine River at outlet of Point Lake	4/12/2023	Copper	1.1	1.2	0.92
Coppermine River at outlet of Point Lake	4/12/2023	Lithium	1.3	1.4	0.93
Coppermine River at outlet of Point Lake	4/12/2023	Barium	4.3	4.3	1.00
Coppermine River at outlet of Point Lake	4/12/2023	Manganese	0.7	0.7	1.00
Coppermine River at outlet of Point Lake	4/12/2023	Nickel	1.0	1.0	1.00
Coppermine River at outlet of Point Lake	4/12/2023	Strontium	10.2	9.9	1.03
Coppermine River at outlet of Point Lake	4/12/2023	Rubidium	2.1	2.0	1.05
Daring Lake	3/30/2023	Aluminum	3.6	5.3	0.68
Daring Lake	3/30/2023	Manganese	1.1	1.4	0.79
Daring Lake	3/30/2023	Lithium	1.7	1.8	0.94
Daring Lake	3/30/2023	Rubidium	2.5	2.5	1.00
Daring Lake	3/30/2023	Strontium	12.3	12.3	1.00
Daring Lake	3/30/2023	Barium	3.1	3.0	1.03
Desteffany Lake	3/30/2023	Manganese	0.7	0.9	0.78
Desteffany Lake	3/30/2023	Manganese	0.7	0.9	0.78
Desteffany Lake	3/30/2023	Aluminum	4.4	5.5	0.80
Desteffany Lake	3/30/2023	Lithium	1.6	1.7	0.94
Desteffany Lake	3/30/2023	Lithium	1.7	1.8	0.94
Desteffany Lake	3/30/2023	Rubidium	2.1	2.2	0.95
Desteffany Lake	3/30/2023	Rubidium	2.2	2.3	0.96
Desteffany Lake	3/30/2023	Strontium	17.3	17.8	0.97
Desteffany Lake	3/30/2023	Strontium	16.8	17.1	0.98

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Desteffany Lake	3/30/2023	Barium	2.6	2.6	1.00
Desteffany Lake	3/30/2023	Nickel	1.0	1.0	1.00
Desteffany Lake	3/30/2023	Nickel	1.0	1.0	1.00
Desteffany Lake	3/30/2023	Barium	2.7	2.4	1.13
Desteffany Lake	3/30/2023	Aluminum	6.5	5.0	1.30
King Lake	3/30/2023	Nickel	0.5	0.6	0.83
King Lake	3/30/2023	Lithium	1.7	1.8	0.94
King Lake	3/30/2023	Strontium	27.8	28.2	0.99
King Lake	3/30/2023	Rubidium	1.9	1.9	1.00
King Lake	3/30/2023	Barium	4.9	4.8	1.02
Lac de Gras Outlet	3/30/2023	Manganese	0.7	1.3	0.54
Lac de Gras Outlet	3/30/2023	Lithium	1.8	1.8	1.00
Lac de Gras Outlet	3/30/2023	Nickel	1.2	1.2	1.00
Lac de Gras Outlet	3/30/2023	Strontium	20.2	19.6	1.03
Lac de Gras Outlet	3/30/2023	Rubidium	2.3	2.2	1.05
Lac de Gras Outlet	3/30/2023	Barium	3.2	2.9	1.10
Lake of the Enemy	3/30/2023	Strontium	11.3	11.4	0.99
Lake of the Enemy	3/30/2023	Lithium	2.1	2.1	1.00
Lake of the Enemy	3/30/2023	Nickel	0.8	0.8	1.00
Lake of the Enemy	3/30/2023	Rubidium	1.6	1.6	1.00
Lake of the Enemy	3/30/2023	Barium	3.0	2.9	1.03
MacKay Lake	3/30/2023	Manganese	0.5	1.4	0.36
MacKay Lake	3/30/2023	Aluminum	3.3	3.9	0.85
MacKay Lake	3/30/2023	Barium	3.6	3.8	0.95
MacKay Lake	3/30/2023	Lithium	1.8	1.9	0.95
MacKay Lake	3/30/2023	Rubidium	1.8	1.9	0.95
MacKay Lake	3/30/2023	Strontium	14.4	14.9	0.97
MacKay Lake	3/30/2023	Nickel	0.8	0.8	1.00
Point Lake	3/30/2023	Copper	1.0	1.2	0.83
Point Lake	3/30/2023	Aluminum	17.1	20.2	0.85
Point Lake	3/30/2023	Lithium	1.4	1.6	0.88
Point Lake	3/30/2023	Barium	3.8	4.3	0.88
Point Lake	3/30/2023	Nickel	1.2	1.3	0.92
Point Lake	3/30/2023	Strontium	10.9	11.5	0.95
Point Lake	3/30/2023	Rubidium	2.2	2.3	0.96
Rocknest Lake	3/30/2023	Aluminum	9.8	13.3	0.74
Rocknest Lake	3/30/2023	Manganese	0.7	0.9	0.78
Rocknest Lake	3/30/2023	Nickel	0.8	0.9	0.89
Rocknest Lake	3/30/2023	Barium	2.7	2.9	0.93
Rocknest Lake	3/30/2023	Strontium	7.7	8.1	0.95
Rocknest Lake	3/30/2023	Lithium	1.0	1.0	1.00
Rocknest Lake	3/30/2023	Rubidium	1.5	1.5	1.00
Starfish Lake	3/30/2023	Manganese	0.9	2.0	0.45
Starfish Lake	3/30/2023	Manganese	1.0	2.1	0.48
Starfish Lake	3/30/2023	Aluminum	22.9	35.4	0.65
Starfish Lake	3/30/2023	Copper	1.4	1.5	0.93
Starfish Lake	3/30/2023	Lithium	1.8	1.9	0.95
Starfish Lake	3/30/2023	Lithium	1.8	1.9	0.95
Starfish Lake	3/30/2023	Rubidium	2.1	2.2	0.95
Starfish Lake	3/30/2023	Aluminum	17.0	17.8	0.96
Starfish Lake	3/30/2023	Copper	1.4	1.4	1.00
Starfish Lake	3/30/2023	Nickel	0.7	0.7	1.00
Starfish Lake	3/30/2023	Nickel	0.7	0.7	1.00
Starfish Lake	3/30/2023	Strontium	8.3	8.2	1.01
Starfish Lake	3/30/2023	Strontium	8.7	8.4	1.04
Starfish Lake	3/30/2023	Rubidium	2.2	2.1	1.05
Starfish Lake	3/30/2023	Barium	3.3	3.1	1.06
Starfish Lake	3/30/2023	Barium	3.6	3.3	1.09
Starfish Lake	3/30/2023	Zinc	2.8	2.4	1.17
Starfish Lake	3/30/2023	Zinc	2.7	2.2	1.23
Lockhart River ABOVE Outram Lakes	3/9/2023	Manganese	2.0	2.3	0.87
Lockhart River ABOVE Outram Lakes	3/9/2023	Aluminum	6.9	7.1	0.97
Lockhart River ABOVE Outram Lakes	3/9/2023	Strontium	12.5	11.9	1.05
Lockhart River ABOVE Outram Lakes	3/9/2023	Lithium	2.0	1.9	1.05
Lockhart River ABOVE Outram Lakes	3/9/2023	Rubidium	1.9	1.8	1.06
Lockhart River ABOVE Outram Lakes	3/9/2023	Nickel	1.6	1.5	1.07
Lockhart River ABOVE Outram Lakes	3/9/2023	Barium	3.1	2.9	1.07
Coppermine River below Desteffany Lake	3/7/2023	Manganese	1.4	1.9	0.74
Coppermine River below Desteffany Lake	3/7/2023	Lithium	1.8	2.0	0.90
Coppermine River below Desteffany Lake	3/7/2023	Aluminum	6.8	7.1	0.96
Coppermine River below Desteffany Lake	3/7/2023	Strontium	16.6	16.7	0.99
Coppermine River below Desteffany Lake	3/7/2023	Nickel	0.9	0.9	1.00
Coppermine River below Desteffany Lake	3/7/2023	Rubidium	2.2	2.2	1.00
Coppermine River below Desteffany Lake	3/7/2023	Barium	2.4	2.3	1.04

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lockhart River ABOVE Outram Lakes	10/4/2022	Manganese	0.9	4.6	0.20
Lockhart River ABOVE Outram Lakes	10/4/2022	Aluminum	3.9	16.0	0.24
Lockhart River ABOVE Outram Lakes	10/4/2022	Nickel	0.9	1.0	0.90
Lockhart River ABOVE Outram Lakes	10/4/2022	Barium	2.0	2.1	0.95
Lockhart River ABOVE Outram Lakes	10/4/2022	Lithium	1.2	1.2	1.00
Lockhart River ABOVE Outram Lakes	10/4/2022	Rubidium	1.3	1.3	1.00
Lockhart River ABOVE Outram Lakes	10/4/2022	Strontium	8.6	8.5	1.01
Coppermine River below Desteffany Lake	9/12/2022	Aluminum	6.4	11.3	0.57
Coppermine River below Desteffany Lake	9/12/2022	Nickel	0.7	0.8	0.88
Coppermine River below Desteffany Lake	9/12/2022	Barium	1.8	1.9	0.95
Coppermine River below Desteffany Lake	9/12/2022	Rubidium	1.8	1.8	1.00
Coppermine River below Desteffany Lake	9/12/2022	Strontium	12.3	12.3	1.00
Coppermine River below Desteffany Lake	9/12/2022	Lithium	1.4	1.3	1.08
Clinton-Colden Outlet	9/7/2022	Manganese	1.0	2.1	0.48
Clinton-Colden Outlet	9/7/2022	Manganese	1.0	2.1	0.48
Clinton-Colden Outlet	9/7/2022	Aluminum	5.3	7.0	0.76
Clinton-Colden Outlet	9/7/2022	Aluminum	5.3	7.0	0.76
Clinton-Colden Outlet	9/7/2022	Strontium	7.1	7.2	0.99
Clinton-Colden Outlet	9/7/2022	Strontium	7.1	7.2	0.99
Clinton-Colden Outlet	9/7/2022	Barium	2.0	2.0	1.00
Clinton-Colden Outlet	9/7/2022	Barium	2.0	2.0	1.00
Clinton-Colden Outlet	9/7/2022	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	9/7/2022	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	9/7/2022	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	9/7/2022	Nickel	0.8	0.8	1.00
Clinton-Colden Outlet	9/7/2022	Nickel	0.8	0.8	1.00
Clinton-Colden Outlet	9/7/2022	Rubidium	1.3	1.3	1.00
Clinton-Colden Outlet	9/7/2022	Rubidium	1.3	1.3	1.00
Daring Lake	9/7/2022	Manganese	0.5	1.6	0.31
Daring Lake	9/7/2022	Strontium	5.9	5.5	1.07
Daring Lake	9/7/2022	Rubidium	1.3	1.2	1.08
Daring Lake	9/7/2022	Barium	1.1	1.0	1.10
Desteffany Lake	9/7/2022	Manganese	0.7	2.2	0.32
Desteffany Lake	9/7/2022	Aluminum	3.6	5.6	0.64
Desteffany Lake	9/7/2022	Nickel	0.7	0.7	1.00
Desteffany Lake	9/7/2022	Rubidium	1.8	1.7	1.06
Desteffany Lake	9/7/2022	Barium	1.7	1.6	1.06
Desteffany Lake	9/7/2022	Lithium	1.4	1.3	1.08
Desteffany Lake	9/7/2022	Strontium	12.5	11.6	1.08
King Lake	9/7/2022	Aluminum	3.1	6.6	0.47
King Lake	9/7/2022	Lithium	1.3	1.4	0.93
King Lake	9/7/2022	Barium	3.1	3.2	0.97
King Lake	9/7/2022	Rubidium	1.5	1.5	1.00
King Lake	9/7/2022	Strontium	19.1	18.9	1.01
Lac de Gras Outlet	9/7/2022	Manganese	1.6	2.7	0.59
Lac de Gras Outlet	9/7/2022	Strontium	16.0	16.1	0.99
Lac de Gras Outlet	9/7/2022	Barium	2.1	2.1	1.00
Lac de Gras Outlet	9/7/2022	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	9/7/2022	Rubidium	1.9	1.9	1.00
Lac de Gras Outlet	9/7/2022	Lithium	1.5	1.4	1.07
Lake of the Enemy	9/7/2022	Lithium	1.4	1.4	1.00
Lake of the Enemy	9/7/2022	Nickel	0.5	0.5	1.00
Lake of the Enemy	9/7/2022	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/7/2022	Strontium	7.5	7.4	1.01
Lake of the Enemy	9/7/2022	Barium	1.8	1.7	1.06
MacKay Lake	9/7/2022	Barium	1.9	1.9	1.00
MacKay Lake	9/7/2022	Lithium	1.2	1.2	1.00
MacKay Lake	9/7/2022	Nickel	0.6	0.6	1.00
MacKay Lake	9/7/2022	Strontium	9.6	9.5	1.01
MacKay Lake	9/7/2022	Rubidium	1.3	1.2	1.08
Point Lake	9/7/2022	Aluminum	9.3	11.4	0.82
Point Lake	9/7/2022	Aluminum	9.3	11.3	0.82
Point Lake	9/7/2022	Strontium	7.2	7.3	0.99
Point Lake	9/7/2022	Barium	2.0	2.0	1.00
Point Lake	9/7/2022	Barium	2.0	2.0	1.00
Point Lake	9/7/2022	Nickel	0.8	0.8	1.00
Point Lake	9/7/2022	Nickel	0.8	0.8	1.00
Point Lake	9/7/2022	Rubidium	1.4	1.4	1.00
Point Lake	9/7/2022	Strontium	7.3	7.3	1.00
Point Lake	9/7/2022	Rubidium	1.5	1.4	1.07
Rocknest Lake	9/7/2022	Manganese	0.9	1.8	0.50
Rocknest Lake	9/7/2022	Nickel	0.6	0.7	0.86
Rocknest Lake	9/7/2022	Aluminum	9.3	10.3	0.90
Rocknest Lake	9/7/2022	Barium	2.4	2.5	0.96
Rocknest Lake	9/7/2022	Strontium	7.3	7.4	0.99

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	9/7/2022	Lithium	1.0	1.0	1.00
Rocknest Lake	9/7/2022	Rubidium	1.5	1.5	1.00
Starfish Lake	9/7/2022	Manganese	0.5	5.0	0.10
Starfish Lake	9/7/2022	Aluminum	8.3	15.7	0.53
Starfish Lake	9/7/2022	Barium	1.7	1.8	0.94
Starfish Lake	9/7/2022	Nickel	0.5	0.5	1.00
Starfish Lake	9/7/2022	Rubidium	1.5	1.5	1.00
Starfish Lake	9/7/2022	Strontium	5.8	5.8	1.00
Starfish Lake	9/7/2022	Lithium	1.3	1.2	1.08
Coppermine River at outlet of Point Lake	8/18/2022	Manganese	0.5	0.8	0.63
Coppermine River at outlet of Point Lake	8/18/2022	Aluminum	11.1	15.4	0.72
Coppermine River at outlet of Point Lake	8/18/2022	Strontium	7.1	7.2	0.99
Coppermine River at outlet of Point Lake	8/18/2022	Lithium	1.0	1.0	1.00
Coppermine River at outlet of Point Lake	8/18/2022	Nickel	0.7	0.7	1.00
Coppermine River at outlet of Point Lake	8/18/2022	Rubidium	1.4	1.4	1.00
Coppermine River at outlet of Point Lake	8/18/2022	Barium	2.3	2.2	1.05
Clinton-Colden Outlet	8/3/2022	Manganese	1.1	2.1	0.52
Clinton-Colden Outlet	8/3/2022	Manganese	1.1	2.0	0.55
Clinton-Colden Outlet	8/3/2022	Aluminum	6.5	8.2	0.79
Clinton-Colden Outlet	8/3/2022	Aluminum	6.4	8.0	0.80
Clinton-Colden Outlet	8/3/2022	Strontium	6.9	7.0	0.99
Clinton-Colden Outlet	8/3/2022	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	8/3/2022	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	8/3/2022	Nickel	0.8	0.8	1.00
Clinton-Colden Outlet	8/3/2022	Nickel	0.8	0.8	1.00
Clinton-Colden Outlet	8/3/2022	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	8/3/2022	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	8/3/2022	Strontium	6.9	6.9	1.00
Clinton-Colden Outlet	8/3/2022	Barium	2.1	2.0	1.05
Clinton-Colden Outlet	8/3/2022	Barium	2.1	2.0	1.05
Daring Lake	8/3/2022	Aluminum	3.8	6.4	0.59
Daring Lake	8/3/2022	Rubidium	1.2	1.3	0.92
Daring Lake	8/3/2022	Strontium	5.8	5.8	1.00
Daring Lake	8/3/2022	Barium	1.2	1.1	1.09
Desteffany Lake	8/3/2022	Manganese	0.5	2.3	0.22
Desteffany Lake	8/3/2022	Aluminum	7.3	11.3	0.65
Desteffany Lake	8/3/2022	Lithium	1.3	1.3	1.00
Desteffany Lake	8/3/2022	Nickel	0.7	0.7	1.00
Desteffany Lake	8/3/2022	Rubidium	1.7	1.7	1.00
Desteffany Lake	8/3/2022	Strontium	11.6	11.5	1.01
Desteffany Lake	8/3/2022	Barium	1.9	1.7	1.12
King Lake	8/3/2022	Aluminum	5.3	7.1	0.75
King Lake	8/3/2022	Strontium	14.3	14.9	0.96
King Lake	8/3/2022	Barium	3.0	3.1	0.97
King Lake	8/3/2022	Lithium	1.4	1.4	1.00
King Lake	8/3/2022	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	8/3/2022	Manganese	1.9	2.9	0.66
Lac de Gras Outlet	8/3/2022	Aluminum	3.2	3.9	0.82
Lac de Gras Outlet	8/3/2022	Strontium	16.0	16.2	0.99
Lac de Gras Outlet	8/3/2022	Barium	2.2	2.2	1.00
Lac de Gras Outlet	8/3/2022	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	8/3/2022	Rubidium	1.8	1.8	1.00
Lac de Gras Outlet	8/3/2022	Lithium	1.6	1.5	1.07
Lake of the Enemy	8/3/2022	Manganese	1.0	1.2	0.83
Lake of the Enemy	8/3/2022	Lithium	1.5	1.6	0.94
Lake of the Enemy	8/3/2022	Nickel	0.6	0.6	1.00
Lake of the Enemy	8/3/2022	Rubidium	1.0	1.0	1.00
Lake of the Enemy	8/3/2022	Strontium	7.6	7.4	1.03
Lake of the Enemy	8/3/2022	Barium	1.9	1.8	1.06
Lake of the Enemy	8/3/2022	Aluminum	5.4	3.7	1.46
MacKay Lake	8/3/2022	Manganese	0.6	1.4	0.43
MacKay Lake	8/3/2022	Aluminum	5.1	6.5	0.78
MacKay Lake	8/3/2022	Barium	2.1	2.1	1.00
MacKay Lake	8/3/2022	Lithium	1.2	1.2	1.00
MacKay Lake	8/3/2022	Nickel	0.5	0.5	1.00
MacKay Lake	8/3/2022	Rubidium	1.2	1.2	1.00
MacKay Lake	8/3/2022	Strontium	10.1	10.1	1.00
Point Lake	8/3/2022	Aluminum	10.4	12.3	0.85
Point Lake	8/3/2022	Strontium	7.1	7.2	0.99
Point Lake	8/3/2022	Lithium	1.0	1.0	1.00
Point Lake	8/3/2022	Rubidium	1.4	1.4	1.00
Point Lake	8/3/2022	Barium	2.1	2.0	1.05
Point Lake	8/3/2022	Nickel	0.8	0.7	1.14
Rocknest Lake	8/3/2022	Aluminum	8.9	10.3	0.86

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	8/3/2022	Aluminum	8.6	9.9	0.87
Rocknest Lake	8/3/2022	Strontium	9.8	9.9	0.99
Rocknest Lake	8/3/2022	Nickel	0.5	0.5	1.00
Rocknest Lake	8/3/2022	Nickel	0.5	0.5	1.00
Rocknest Lake	8/3/2022	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/3/2022	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/3/2022	Strontium	9.9	9.7	1.02
Rocknest Lake	8/3/2022	Barium	4.3	4.2	1.02
Rocknest Lake	8/3/2022	Barium	4.2	4.1	1.02
Starfish Lake	8/3/2022	Manganese	0.5	4.0	0.13
Starfish Lake	8/3/2022	Aluminum	13.3	18.1	0.73
Starfish Lake	8/3/2022	Barium	1.8	1.8	1.00
Starfish Lake	8/3/2022	Lithium	1.3	1.3	1.00
Starfish Lake	8/3/2022	Nickel	0.5	0.5	1.00
Starfish Lake	8/3/2022	Rubidium	1.4	1.4	1.00
Starfish Lake	8/3/2022	Strontium	5.9	5.9	1.00
Clinton-Colden Outlet	7/7/2022	Manganese	1.3	1.9	0.68
Clinton-Colden Outlet	7/7/2022	Aluminum	6.7	7.5	0.89
Clinton-Colden Outlet	7/7/2022	Barium	1.9	1.9	1.00
Clinton-Colden Outlet	7/7/2022	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	7/7/2022	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	7/7/2022	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	7/7/2022	Strontium	6.8	6.7	1.01
Daring Lake	7/7/2022	Aluminum	5.0	9.7	0.52
Daring Lake	7/7/2022	Manganese	1.1	1.5	0.73
Daring Lake	7/7/2022	Barium	1.2	1.2	1.00
Daring Lake	7/7/2022	Rubidium	1.2	1.2	1.00
Daring Lake	7/7/2022	Strontium	5.8	5.8	1.00
Desteffany Lake	7/7/2022	Manganese	1.0	3.3	0.30
Desteffany Lake	7/7/2022	Manganese	1.0	3.1	0.32
Desteffany Lake	7/7/2022	Nickel	0.7	1.1	0.64
Desteffany Lake	7/7/2022	Aluminum	8.3	12.7	0.65
Desteffany Lake	7/7/2022	Aluminum	8.4	12.7	0.66
Desteffany Lake	7/7/2022	Strontium	12.1	12.3	0.98
Desteffany Lake	7/7/2022	Barium	1.9	1.9	1.00
Desteffany Lake	7/7/2022	Barium	1.9	1.9	1.00
Desteffany Lake	7/7/2022	Nickel	0.7	0.7	1.00
Desteffany Lake	7/7/2022	Rubidium	1.8	1.8	1.00
Desteffany Lake	7/7/2022	Rubidium	1.8	1.8	1.00
Desteffany Lake	7/7/2022	Strontium	12.2	11.9	1.03
Desteffany Lake	7/7/2022	Lithium	1.4	1.3	1.08
Desteffany Lake	7/7/2022	Lithium	1.4	1.2	1.17
King Lake	7/7/2022	Manganese	1.5	2.6	0.58
King Lake	7/7/2022	Aluminum	6.5	8.3	0.78
King Lake	7/7/2022	Lithium	1.2	1.3	0.92
King Lake	7/7/2022	Barium	3.1	3.1	1.00
King Lake	7/7/2022	Rubidium	1.4	1.4	1.00
King Lake	7/7/2022	Strontium	15.4	15.2	1.01
Lac de Gras Outlet	7/7/2022	Aluminum	3.2	4.4	0.73
Lac de Gras Outlet	7/7/2022	Manganese	2.3	3.1	0.74
Lac de Gras Outlet	7/7/2022	Lithium	1.5	1.5	1.00
Lac de Gras Outlet	7/7/2022	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	7/7/2022	Rubidium	1.8	1.8	1.00
Lac de Gras Outlet	7/7/2022	Strontium	15.7	15.6	1.01
Lac de Gras Outlet	7/7/2022	Barium	2.1	2.0	1.05
Lake of the Enemy	7/7/2022	Manganese	0.8	1.0	0.80
Lake of the Enemy	7/7/2022	Strontium	7.7	7.8	0.99
Lake of the Enemy	7/7/2022	Barium	1.8	1.8	1.00
Lake of the Enemy	7/7/2022	Lithium	1.4	1.4	1.00
Lake of the Enemy	7/7/2022	Rubidium	1.1	1.1	1.00
MacKay Lake	7/7/2022	Manganese	0.8	1.3	0.62
MacKay Lake	7/7/2022	Aluminum	6.2	6.7	0.93
MacKay Lake	7/7/2022	Barium	2.2	2.2	1.00
MacKay Lake	7/7/2022	Lithium	1.2	1.2	1.00
MacKay Lake	7/7/2022	Rubidium	1.2	1.2	1.00
MacKay Lake	7/7/2022	Strontium	10.6	10.5	1.01
Point Lake	7/7/2022	Manganese	0.6	0.9	0.67
Point Lake	7/7/2022	Aluminum	11.8	15.6	0.76
Point Lake	7/7/2022	Strontium	7.3	7.4	0.99
Point Lake	7/7/2022	Barium	2.0	2.0	1.00
Point Lake	7/7/2022	Lithium	1.0	1.0	1.00
Point Lake	7/7/2022	Nickel	0.6	0.6	1.00
Point Lake	7/7/2022	Rubidium	1.5	1.5	1.00
Rocknest Lake	7/7/2022	Manganese	0.6	1.8	0.33

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	7/7/2022	Aluminum	11.2	16.6	0.67
Rocknest Lake	7/7/2022	Barium	2.7	2.8	0.96
Rocknest Lake	7/7/2022	Strontium	7.7	7.8	0.99
Rocknest Lake	7/7/2022	Nickel	0.6	0.6	1.00
Rocknest Lake	7/7/2022	Rubidium	1.4	1.4	1.00
Starfish Lake	7/7/2022	Manganese	4.3	6.8	0.63
Starfish Lake	7/7/2022	Aluminum	18.3	22.4	0.82
Starfish Lake	7/7/2022	Lithium	1.2	1.3	0.92
Starfish Lake	7/7/2022	Barium	2.0	2.0	1.00
Starfish Lake	7/7/2022	Copper	1.0	1.0	1.00
Starfish Lake	7/7/2022	Rubidium	1.4	1.4	1.00
Starfish Lake	7/7/2022	Strontium	6.1	6.1	1.00
Lockhart River ABOVE Outram Lakes	7/4/2022	Aluminum	6.4	12.2	0.52
Lockhart River ABOVE Outram Lakes	7/4/2022	Manganese	3.6	5.6	0.64
Lockhart River ABOVE Outram Lakes	7/4/2022	Lithium	1.2	1.3	0.92
Lockhart River ABOVE Outram Lakes	7/4/2022	Barium	1.6	1.7	0.94
Lockhart River ABOVE Outram Lakes	7/4/2022	Nickel	1.0	1.0	1.00
Lockhart River ABOVE Outram Lakes	7/4/2022	Rubidium	1.3	1.3	1.00
Lockhart River ABOVE Outram Lakes	7/4/2022	Strontium	8.7	8.5	1.02
Coppermine River below Desteffany Lake	6/30/2022	Manganese	1.6	3.0	0.53
Coppermine River below Desteffany Lake	6/30/2022	Aluminum	10.1	17.0	0.59
Coppermine River below Desteffany Lake	6/30/2022	Barium	1.9	2.0	0.95
Coppermine River below Desteffany Lake	6/30/2022	Strontium	11.7	11.9	0.98
Coppermine River below Desteffany Lake	6/30/2022	Lithium	1.4	1.4	1.00
Coppermine River below Desteffany Lake	6/30/2022	Nickel	0.7	0.7	1.00
Coppermine River below Desteffany Lake	6/30/2022	Rubidium	1.8	1.8	1.00
Lockhart River ABOVE Outram Lakes	5/19/2022	Aluminum	9.1	13.7	0.66
Lockhart River ABOVE Outram Lakes	5/19/2022	Barium	2.8	3.5	0.80
Lockhart River ABOVE Outram Lakes	5/19/2022	Zinc	3.7	3.9	0.95
Lockhart River ABOVE Outram Lakes	5/19/2022	Strontium	9.2	9.5	0.97
Lockhart River ABOVE Outram Lakes	5/19/2022	Lithium	1.4	1.4	1.00
Lockhart River ABOVE Outram Lakes	5/19/2022	Nickel	1.8	1.8	1.00
Lockhart River ABOVE Outram Lakes	5/19/2022	Rubidium	1.6	1.6	1.00
Lockhart River ABOVE Outram Lakes	5/19/2022	Manganese	11.7	11.5	1.02
Coppermine River below Desteffany Lake	4/20/2022	Aluminum	5.5	171.0	0.03
Coppermine River below Desteffany Lake	4/20/2022	Manganese	2.8	42.3	0.07
Coppermine River below Desteffany Lake	4/20/2022	Copper	1.0	1.9	0.53
Coppermine River below Desteffany Lake	4/20/2022	Zinc	4.3	7.6	0.57
Coppermine River below Desteffany Lake	4/20/2022	Barium	4.8	7.9	0.61
Coppermine River below Desteffany Lake	4/20/2022	Nickel	1.5	2.4	0.63
Coppermine River below Desteffany Lake	4/20/2022	Lithium	2.3	2.7	0.85
Coppermine River below Desteffany Lake	4/20/2022	Rubidium	2.8	3.2	0.88
Coppermine River below Desteffany Lake	4/20/2022	Strontium	22.6	23.2	0.97
Daring Lake	3/29/2022	Manganese	1.3	1.8	0.72
Daring Lake	3/29/2022	Barium	2.4	2.5	0.96
Daring Lake	3/29/2022	Lithium	1.7	1.7	1.00
Daring Lake	3/29/2022	Zinc	2.0	2.0	1.00
Daring Lake	3/29/2022	Strontium	10.6	10.4	1.02
Daring Lake	3/29/2022	Rubidium	2.3	2.2	1.05
Daring Lake	3/29/2022	Aluminum	6.4	6.0	1.07
Desteffany Lake	3/29/2022	Manganese	0.6	1.2	0.50
Desteffany Lake	3/29/2022	Manganese	0.6	1.2	0.50
Desteffany Lake	3/29/2022	Aluminum	4.4	5.7	0.77
Desteffany Lake	3/29/2022	Aluminum	4.9	5.8	0.84
Desteffany Lake	3/29/2022	Barium	2.8	2.9	0.97
Desteffany Lake	3/29/2022	Barium	2.9	3.0	0.97
Desteffany Lake	3/29/2022	Strontium	19.1	19.2	0.99
Desteffany Lake	3/29/2022	Lithium	1.9	1.9	1.00
Desteffany Lake	3/29/2022	Nickel	1.3	1.3	1.00
Desteffany Lake	3/29/2022	Nickel	1.3	1.3	1.00
Desteffany Lake	3/29/2022	Rubidium	2.4	2.4	1.00
Desteffany Lake	3/29/2022	Rubidium	2.4	2.4	1.00
Desteffany Lake	3/29/2022	Strontium	19.3	19.2	1.01
Desteffany Lake	3/29/2022	Lithium	2.0	1.9	1.05
King Lake	3/29/2022	Aluminum	6.3	8.8	0.72
King Lake	3/29/2022	Rubidium	2.3	2.4	0.96
King Lake	3/29/2022	Barium	4.8	5.0	0.96
King Lake	3/29/2022	Strontium	20.1	20.3	0.99
King Lake	3/29/2022	Lithium	2.0	2.0	1.00
King Lake	3/29/2022	Nickel	0.6	0.5	1.20
Lac de Gras Outlet	3/29/2022	Manganese	0.5	1.0	0.50
Lac de Gras Outlet	3/29/2022	Aluminum	3.2	4.5	0.71
Lac de Gras Outlet	3/29/2022	Barium	2.8	2.9	0.97
Lac de Gras Outlet	3/29/2022	Nickel	1.4	1.4	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	3/29/2022	Rubidium	2.5	2.5	1.00
Lac de Gras Outlet	3/29/2022	Strontium	20.7	20.6	1.00
Lac de Gras Outlet	3/29/2022	Lithium	2.1	2.0	1.05
Lake of the Enemy	3/29/2022	Barium	2.3	2.4	0.96
Lake of the Enemy	3/29/2022	Lithium	1.5	1.5	1.00
Lake of the Enemy	3/29/2022	Nickel	0.6	0.6	1.00
Lake of the Enemy	3/29/2022	Rubidium	1.2	1.2	1.00
Lake of the Enemy	3/29/2022	Strontium	8.3	8.2	1.01
MacKay Lake	3/29/2022	Aluminum	5.3	7.7	0.69
MacKay Lake	3/29/2022	Zinc	2.2	2.5	0.88
MacKay Lake	3/29/2022	Lithium	1.7	1.8	0.94
MacKay Lake	3/29/2022	Barium	3.3	3.4	0.97
MacKay Lake	3/29/2022	Rubidium	1.8	1.8	1.00
MacKay Lake	3/29/2022	Strontium	14.8	14.7	1.01
MacKay Lake	3/29/2022	Nickel	0.7	0.6	1.17
Point Lake	3/29/2022	Copper	1.2	1.4	0.86
Point Lake	3/29/2022	Aluminum	18.7	20.8	0.90
Point Lake	3/29/2022	Lithium	1.9	2.0	0.95
Point Lake	3/29/2022	Barium	3.9	4.0	0.98
Point Lake	3/29/2022	Manganese	0.5	0.5	1.00
Point Lake	3/29/2022	Rubidium	2.8	2.8	1.00
Point Lake	3/29/2022	Strontium	13.6	13.6	1.00
Point Lake	3/29/2022	Nickel	1.6	1.5	1.07
Point Lake	3/29/2022	Zinc	3.2	3.0	1.07
Rocknest Lake	3/29/2022	Manganese	1.0	1.2	0.83
Rocknest Lake	3/29/2022	Aluminum	12.4	13.9	0.89
Rocknest Lake	3/29/2022	Barium	3.0	3.1	0.97
Rocknest Lake	3/29/2022	Strontium	9.1	9.2	0.99
Rocknest Lake	3/29/2022	Rubidium	1.8	1.8	1.00
Rocknest Lake	3/29/2022	Lithium	1.3	1.2	1.08
Rocknest Lake	3/29/2022	Nickel	1.0	0.9	1.11
Starfish Lake	3/29/2022	Manganese	0.8	1.9	0.42
Starfish Lake	3/29/2022	Manganese	0.8	1.9	0.42
Starfish Lake	3/29/2022	Aluminum	25.6	28.0	0.91
Starfish Lake	3/29/2022	Aluminum	25.8	27.7	0.93
Starfish Lake	3/29/2022	Copper	1.4	1.5	0.93
Starfish Lake	3/29/2022	Lithium	2.0	2.1	0.95
Starfish Lake	3/29/2022	Rubidium	2.1	2.2	0.95
Starfish Lake	3/29/2022	Strontium	8.8	8.9	0.99
Starfish Lake	3/29/2022	Barium	2.6	2.6	1.00
Starfish Lake	3/29/2022	Barium	2.5	2.5	1.00
Starfish Lake	3/29/2022	Copper	1.5	1.5	1.00
Starfish Lake	3/29/2022	Lithium	2.0	2.0	1.00
Starfish Lake	3/29/2022	Nickel	0.9	0.9	1.00
Starfish Lake	3/29/2022	Rubidium	2.1	2.1	1.00
Starfish Lake	3/29/2022	Strontium	8.8	8.8	1.00
Starfish Lake	3/29/2022	Nickel	0.9	0.8	1.13
Daring Lake	9/8/2021	Strontium	6.0	6.1	0.98
Daring Lake	9/8/2021	Barium	1.2	1.2	1.00
Daring Lake	9/8/2021	Rubidium	1.2	1.2	1.00
Desteffany Lake	9/8/2021	Aluminum	9.0	16.1	0.56
Desteffany Lake	9/8/2021	Lithium	1.5	1.6	0.94
Desteffany Lake	9/8/2021	Barium	1.8	1.9	0.95
Desteffany Lake	9/8/2021	Strontium	12.0	12.1	0.99
Desteffany Lake	9/8/2021	Nickel	0.9	0.9	1.00
Desteffany Lake	9/8/2021	Rubidium	1.7	1.7	1.00
King Lake	9/8/2021	Aluminum	5.8	11.1	0.52
King Lake	9/8/2021	Barium	2.9	3.0	0.97
King Lake	9/8/2021	Strontium	14.0	14.1	0.99
King Lake	9/8/2021	Lithium	1.4	1.4	1.00
King Lake	9/8/2021	Nickel	0.5	0.5	1.00
King Lake	9/8/2021	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	9/8/2021	Barium	2.1	2.2	0.95
Lac de Gras Outlet	9/8/2021	Lithium	1.6	1.6	1.00
Lac de Gras Outlet	9/8/2021	Nickel	1.2	1.2	1.00
Lac de Gras Outlet	9/8/2021	Rubidium	1.9	1.9	1.00
Lac de Gras Outlet	9/8/2021	Strontium	16.4	16.4	1.00
Lake of the Enemy	9/8/2021	Strontium	7.8	8.0	0.98
Lake of the Enemy	9/8/2021	Barium	1.8	1.8	1.00
Lake of the Enemy	9/8/2021	Lithium	1.5	1.5	1.00
Lake of the Enemy	9/8/2021	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/8/2021	Nickel	0.7	0.6	1.17
MacKay Lake	9/8/2021	Aluminum	4.5	8.3	0.54
MacKay Lake	9/8/2021	Aluminum	4.4	8.1	0.54

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
MacKay Lake	9/8/2021	Lithium	1.2	1.3	0.92
MacKay Lake	9/8/2021	Lithium	1.3	1.4	0.93
MacKay Lake	9/8/2021	Barium	2.0	2.1	0.95
MacKay Lake	9/8/2021	Strontium	10.0	10.1	0.99
MacKay Lake	9/8/2021	Barium	2.1	2.1	1.00
MacKay Lake	9/8/2021	Nickel	0.6	0.6	1.00
MacKay Lake	9/8/2021	Nickel	0.6	0.6	1.00
MacKay Lake	9/8/2021	Rubidium	1.2	1.2	1.00
MacKay Lake	9/8/2021	Rubidium	1.2	1.2	1.00
MacKay Lake	9/8/2021	Strontium	10.0	9.9	1.01
Point Lake	9/8/2021	Aluminum	10.4	15.5	0.67
Point Lake	9/8/2021	Barium	2.0	2.1	0.95
Point Lake	9/8/2021	Strontium	7.3	7.4	0.99
Point Lake	9/8/2021	Lithium	1.1	1.1	1.00
Point Lake	9/8/2021	Nickel	0.8	0.8	1.00
Point Lake	9/8/2021	Rubidium	1.4	1.4	1.00
Rocknest Lake	9/8/2021	Manganese	0.6	2.8	0.21
Rocknest Lake	9/8/2021	Manganese	0.6	2.8	0.21
Rocknest Lake	9/8/2021	Aluminum	7.9	12.1	0.65
Rocknest Lake	9/8/2021	Aluminum	8.3	12.1	0.69
Rocknest Lake	9/8/2021	Strontium	7.9	8.0	0.99
Rocknest Lake	9/8/2021	Barium	2.9	2.9	1.00
Rocknest Lake	9/8/2021	Barium	2.9	2.9	1.00
Rocknest Lake	9/8/2021	Lithium	1.0	1.0	1.00
Rocknest Lake	9/8/2021	Rubidium	1.4	1.4	1.00
Rocknest Lake	9/8/2021	Rubidium	1.4	1.4	1.00
Rocknest Lake	9/8/2021	Strontium	7.9	7.9	1.00
Rocknest Lake	9/8/2021	Barium	3.0	2.9	1.03
Rocknest Lake	9/8/2021	Nickel	0.7	0.6	1.17
Rocknest Lake	9/8/2021	Nickel	0.7	0.6	1.17
Starfish Lake	9/8/2021	Manganese	0.8	6.6	0.12
Starfish Lake	9/8/2021	Aluminum	16.8	22.8	0.74
Starfish Lake	9/8/2021	Lithium	1.3	1.4	0.93
Starfish Lake	9/8/2021	Barium	1.8	1.9	0.95
Starfish Lake	9/8/2021	Nickel	0.6	0.6	1.00
Starfish Lake	9/8/2021	Rubidium	1.4	1.4	1.00
Starfish Lake	9/8/2021	Strontium	6.0	6.0	1.00
Clinton-Colden Outlet	7/7/2021	Manganese	9.0	11.7	0.77
Clinton-Colden Outlet	7/7/2021	Aluminum	18.4	22.3	0.83
Clinton-Colden Outlet	7/7/2021	Nickel	0.7	0.8	0.88
Clinton-Colden Outlet	7/7/2021	Barium	2.0	2.0	1.00
Clinton-Colden Outlet	7/7/2021	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	7/7/2021	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	7/7/2021	Strontium	5.7	5.7	1.00
Daring Lake	7/7/2021	Aluminum	6.3	12.3	0.51
Daring Lake	7/7/2021	Aluminum	7.1	13.1	0.54
Daring Lake	7/7/2021	Manganese	2.1	3.5	0.60
Daring Lake	7/7/2021	Manganese	2.2	3.6	0.61
Daring Lake	7/7/2021	Rubidium	1.2	1.3	0.92
Daring Lake	7/7/2021	Barium	1.4	1.5	0.93
Daring Lake	7/7/2021	Strontium	5.9	6.1	0.97
Daring Lake	7/7/2021	Strontium	6.0	6.1	0.98
Daring Lake	7/7/2021	Barium	1.4	1.4	1.00
Daring Lake	7/7/2021	Rubidium	1.2	1.2	1.00
Desteffany Lake	7/7/2021	Iron	34.0	69.0	0.49
Desteffany Lake	7/7/2021	Aluminum	22.4	39.2	0.57
Desteffany Lake	7/7/2021	Manganese	6.0	7.8	0.77
Desteffany Lake	7/7/2021	Nickel	1.1	1.2	0.92
Desteffany Lake	7/7/2021	Barium	2.3	2.5	0.92
Desteffany Lake	7/7/2021	Lithium	1.3	1.4	0.93
Desteffany Lake	7/7/2021	Strontium	10.2	10.3	0.99
Desteffany Lake	7/7/2021	Rubidium	1.7	1.7	1.00
King Lake	7/7/2021	Manganese	0.6	7.2	0.08
King Lake	7/7/2021	Manganese	0.7	6.9	0.10
King Lake	7/7/2021	Nickel	0.5	0.8	0.63
King Lake	7/7/2021	Aluminum	10.3	15.8	0.65
King Lake	7/7/2021	Aluminum	10.9	16.1	0.68
King Lake	7/7/2021	Barium	3.3	3.4	0.97
King Lake	7/7/2021	Barium	3.3	3.3	1.00
King Lake	7/7/2021	Nickel	0.6	0.6	1.00
King Lake	7/7/2021	Rubidium	1.4	1.4	1.00
King Lake	7/7/2021	Rubidium	1.4	1.4	1.00
King Lake	7/7/2021	Strontium	15.0	14.9	1.01
King Lake	7/7/2021	Strontium	14.7	14.6	1.01
King Lake	7/7/2021	Lithium	1.4	1.3	1.08

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
King Lake	7/7/2021	Lithium	1.3	1.2	1.08
Lac de Gras Outlet	7/7/2021	Manganese	2.0	4.8	0.42
Lac de Gras Outlet	7/7/2021	Aluminum	5.1	7.9	0.65
Lac de Gras Outlet	7/7/2021	Lithium	1.5	1.6	0.94
Lac de Gras Outlet	7/7/2021	Barium	2.1	2.2	0.95
Lac de Gras Outlet	7/7/2021	Nickel	1.2	1.2	1.00
Lac de Gras Outlet	7/7/2021	Strontium	14.7	14.7	1.00
Lac de Gras Outlet	7/7/2021	Rubidium	1.8	1.7	1.06
Lake of the Enemy	7/7/2021	Aluminum	3.2	5.0	0.64
Lake of the Enemy	7/7/2021	Manganese	1.2	1.8	0.67
Lake of the Enemy	7/7/2021	Barium	1.9	1.9	1.00
Lake of the Enemy	7/7/2021	Lithium	1.4	1.4	1.00
Lake of the Enemy	7/7/2021	Nickel	0.6	0.6	1.00
Lake of the Enemy	7/7/2021	Strontium	7.7	7.7	1.00
Lake of the Enemy	7/7/2021	Rubidium	1.1	1.0	1.10
MacKay Lake	7/7/2021	Aluminum	9.9	17.5	0.57
MacKay Lake	7/7/2021	Manganese	2.2	3.5	0.63
MacKay Lake	7/7/2021	Nickel	0.7	0.8	0.88
MacKay Lake	7/7/2021	Barium	2.2	2.3	0.96
MacKay Lake	7/7/2021	Strontium	8.7	8.8	0.99
MacKay Lake	7/7/2021	Lithium	1.2	1.2	1.00
MacKay Lake	7/7/2021	Rubidium	1.1	1.1	1.00
Point Lake	7/7/2021	Aluminum	11.3	15.2	0.74
Point Lake	7/7/2021	Nickel	0.8	0.9	0.89
Point Lake	7/7/2021	Barium	2.1	2.2	0.95
Point Lake	7/7/2021	Strontium	7.2	7.3	0.99
Point Lake	7/7/2021	Lithium	1.0	1.0	1.00
Point Lake	7/7/2021	Rubidium	1.4	1.4	1.00
Rocknest Lake	7/7/2021	Manganese	1.0	2.0	0.50
Rocknest Lake	7/7/2021	Aluminum	14.2	17.9	0.79
Rocknest Lake	7/7/2021	Barium	3.5	3.5	1.00
Rocknest Lake	7/7/2021	Nickel	0.7	0.7	1.00
Rocknest Lake	7/7/2021	Rubidium	1.4	1.4	1.00
Rocknest Lake	7/7/2021	Strontium	7.6	7.5	1.01
Starfish Lake	7/7/2021	Iron	29.0	90.0	0.32
Starfish Lake	7/7/2021	Aluminum	32.8	42.0	0.78
Starfish Lake	7/7/2021	Manganese	38.0	47.1	0.81
Starfish Lake	7/7/2021	Mercury	1.2	1.4	0.86
Starfish Lake	7/7/2021	Nickel	0.8	0.9	0.89
Starfish Lake	7/7/2021	Copper	1.0	1.1	0.91
Starfish Lake	7/7/2021	Rubidium	1.3	1.4	0.93
Starfish Lake	7/7/2021	Barium	2.3	2.4	0.96
Starfish Lake	7/7/2021	Strontium	6.0	6.2	0.97
Starfish Lake	7/7/2021	Lithium	1.2	1.2	1.00
Coppermine River at outlet of Point Lake	6/15/2021	Aluminum	22.4	26.3	0.85
Coppermine River at outlet of Point Lake	6/15/2021	Manganese	3.4	3.5	0.97
Coppermine River at outlet of Point Lake	6/15/2021	Barium	2.7	2.7	1.00
Coppermine River at outlet of Point Lake	6/15/2021	Lithium	1.0	1.0	1.00
Coppermine River at outlet of Point Lake	6/15/2021	Nickel	0.8	0.8	1.00
Coppermine River at outlet of Point Lake	6/15/2021	Rubidium	1.5	1.5	1.00
Coppermine River at outlet of Point Lake	6/15/2021	Strontium	7.4	7.2	1.03
Coppermine River below Desteffany Lake	6/14/2021	Iron	56.0	111.0	0.50
Coppermine River below Desteffany Lake	6/14/2021	Aluminum	38.2	58.8	0.65
Coppermine River below Desteffany Lake	6/14/2021	Manganese	9.9	11.5	0.86
Coppermine River below Desteffany Lake	6/14/2021	Copper	1.0	1.1	0.91
Coppermine River below Desteffany Lake	6/14/2021	Rubidium	1.7	1.8	0.94
Coppermine River below Desteffany Lake	6/14/2021	Strontium	8.3	8.5	0.98
Coppermine River below Desteffany Lake	6/14/2021	Lithium	1.1	1.1	1.00
Coppermine River below Desteffany Lake	6/14/2021	Nickel	0.9	0.9	1.00
Coppermine River below Desteffany Lake	6/14/2021	Barium	2.7	2.5	1.08
Lockhart River ABOVE Outram Lakes	6/14/2021	Iron	100.0	216.0	0.46
Lockhart River ABOVE Outram Lakes	6/14/2021	Aluminum	47.0	59.6	0.79
Lockhart River ABOVE Outram Lakes	6/14/2021	Manganese	25.0	26.2	0.95
Lockhart River ABOVE Outram Lakes	6/14/2021	Barium	2.4	2.5	0.96
Lockhart River ABOVE Outram Lakes	6/14/2021	Nickel	3.1	3.2	0.97
Lockhart River ABOVE Outram Lakes	6/14/2021	Strontium	6.1	6.2	0.98
Lockhart River ABOVE Outram Lakes	6/14/2021	Cobalt	0.6	0.6	1.00
Lockhart River ABOVE Outram Lakes	6/14/2021	Rubidium	1.5	1.5	1.00
Lockhart River ABOVE Outram Lakes	6/14/2021	Lithium	1.4	1.3	1.08
Daring Lake	3/25/2021	Aluminum	4.3	6.5	0.66
Daring Lake	3/25/2021	Manganese	1.4	1.6	0.88
Daring Lake	3/25/2021	Barium	1.8	1.9	0.95
Daring Lake	3/25/2021	Strontium	7.8	7.9	0.99
Daring Lake	3/25/2021	Lithium	1.2	1.2	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	3/25/2021	Rubidium	1.6	1.6	1.00
Desteffany Lake	3/25/2021	Manganese	0.5	1.1	0.45
Desteffany Lake	3/25/2021	Manganese	0.5	1.1	0.45
Desteffany Lake	3/25/2021	Aluminum	5.9	7.5	0.79
Desteffany Lake	3/25/2021	Aluminum	5.9	6.7	0.88
Desteffany Lake	3/25/2021	Strontium	16.5	16.8	0.98
Desteffany Lake	3/25/2021	Barium	2.6	2.6	1.00
Desteffany Lake	3/25/2021	Lithium	1.8	1.8	1.00
Desteffany Lake	3/25/2021	Nickel	1.2	1.2	1.00
Desteffany Lake	3/25/2021	Nickel	1.2	1.2	1.00
Desteffany Lake	3/25/2021	Rubidium	2.1	2.1	1.00
Desteffany Lake	3/25/2021	Rubidium	2.1	2.1	1.00
Desteffany Lake	3/25/2021	Strontium	16.8	16.8	1.00
Desteffany Lake	3/25/2021	Barium	2.8	2.7	1.04
Desteffany Lake	3/25/2021	Lithium	1.9	1.8	1.06
King Lake	3/25/2021	Aluminum	6.3	7.7	0.82
King Lake	3/25/2021	Lithium	1.7	1.8	0.94
King Lake	3/25/2021	Rubidium	1.9	1.9	1.00
King Lake	3/25/2021	Strontium	15.0	14.9	1.01
King Lake	3/25/2021	Barium	4.0	3.9	1.03
Lac de Gras Outlet	3/25/2021	Manganese	0.6	1.0	0.60
Lac de Gras Outlet	3/25/2021	Nickel	1.3	1.4	0.93
Lac de Gras Outlet	3/25/2021	Rubidium	2.2	2.3	0.96
Lac de Gras Outlet	3/25/2021	Barium	2.7	2.8	0.96
Lac de Gras Outlet	3/25/2021	Strontium	18.2	18.2	1.00
Lac de Gras Outlet	3/25/2021	Lithium	2.0	1.9	1.05
Lac de Gras Outlet	3/25/2021	Aluminum	12.3	7.3	1.68
Lake of the Enemy	3/25/2021	Nickel	0.7	0.7	1.00
Lake of the Enemy	3/25/2021	Rubidium	1.4	1.4	1.00
Lake of the Enemy	3/25/2021	Strontium	10.1	10.0	1.01
Lake of the Enemy	3/25/2021	Barium	2.4	2.3	1.04
Lake of the Enemy	3/25/2021	Lithium	1.9	1.8	1.06
MacKay Lake	3/25/2021	Aluminum	9.8	10.6	0.92
MacKay Lake	3/25/2021	Lithium	2.0	2.1	0.95
MacKay Lake	3/25/2021	Barium	3.2	3.2	1.00
MacKay Lake	3/25/2021	Nickel	1.6	1.6	1.00
MacKay Lake	3/25/2021	Rubidium	2.0	2.0	1.00
MacKay Lake	3/25/2021	Strontium	13.3	13.2	1.01
Point Lake	3/25/2021	Copper	1.0	1.1	0.91
Point Lake	3/25/2021	Aluminum	14.8	16.1	0.92
Point Lake	3/25/2021	Rubidium	2.2	2.3	0.96
Point Lake	3/25/2021	Nickel	1.2	1.2	1.00
Point Lake	3/25/2021	Strontium	11.0	11.0	1.00
Point Lake	3/25/2021	Barium	3.3	3.2	1.03
Point Lake	3/25/2021	Lithium	1.6	1.5	1.07
Rocknest Lake	3/25/2021	Manganese	1.6	1.8	0.89
Rocknest Lake	3/25/2021	Lithium	1.1	1.2	0.92
Rocknest Lake	3/25/2021	Aluminum	11.2	12.1	0.93
Rocknest Lake	3/25/2021	Strontium	8.4	8.5	0.99
Rocknest Lake	3/25/2021	Barium	3.0	3.0	1.00
Rocknest Lake	3/25/2021	Nickel	0.9	0.9	1.00
Rocknest Lake	3/25/2021	Rubidium	1.6	1.6	1.00
Starfish Lake	3/25/2021	Manganese	0.7	2.4	0.29
Starfish Lake	3/25/2021	Manganese	0.7	2.4	0.29
Starfish Lake	3/25/2021	Mercury	1.0	1.2	0.83
Starfish Lake	3/25/2021	Aluminum	34.1	38.4	0.89
Starfish Lake	3/25/2021	Aluminum	34.5	37.7	0.92
Starfish Lake	3/25/2021	Copper	1.5	1.6	0.94
Starfish Lake	3/25/2021	Copper	1.5	1.6	0.94
Starfish Lake	3/25/2021	Lithium	2.0	2.1	0.95
Starfish Lake	3/25/2021	Barium	2.7	2.7	1.00
Starfish Lake	3/25/2021	Lithium	2.1	2.1	1.00
Starfish Lake	3/25/2021	Mercury	1.1	1.1	1.00
Starfish Lake	3/25/2021	Nickel	1.0	1.0	1.00
Starfish Lake	3/25/2021	Nickel	1.0	1.0	1.00
Starfish Lake	3/25/2021	Rubidium	1.9	1.9	1.00
Starfish Lake	3/25/2021	Rubidium	1.8	1.8	1.00
Starfish Lake	3/25/2021	Strontium	9.1	9.1	1.00
Starfish Lake	3/25/2021	Strontium	9.0	9.0	1.00
Starfish Lake	3/25/2021	Barium	2.7	2.6	1.04
Lockhart River ABOVE Outram Lakes	3/16/2021	Manganese	0.8	1.9	0.42
Lockhart River ABOVE Outram Lakes	3/16/2021	Aluminum	8.7	16.3	0.53
Lockhart River ABOVE Outram Lakes	3/16/2021	Zinc	6.3	11.4	0.55
Lockhart River ABOVE Outram Lakes	3/16/2021	Barium	3.1	4.1	0.76

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lockhart River ABOVE Outram Lakes	3/16/2021	Copper	1.0	1.3	0.77
Lockhart River ABOVE Outram Lakes	3/16/2021	Lithium	1.5	1.6	0.94
Lockhart River ABOVE Outram Lakes	3/16/2021	Nickel	1.6	1.7	0.94
Lockhart River ABOVE Outram Lakes	3/16/2021	Strontium	10.6	10.7	0.99
Lockhart River ABOVE Outram Lakes	3/16/2021	Rubidium	1.6	1.6	1.00
Coppermine River below Desteffany Lake	3/12/2021	Aluminum	6.2	9.6	0.65
Coppermine River below Desteffany Lake	3/12/2021	Aluminum	6.1	8.1	0.75
Coppermine River below Desteffany Lake	3/12/2021	Lithium	1.8	1.9	0.95
Coppermine River below Desteffany Lake	3/12/2021	Strontium	16.0	16.4	0.98
Coppermine River below Desteffany Lake	3/12/2021	Lithium	1.8	1.8	1.00
Coppermine River below Desteffany Lake	3/12/2021	Nickel	1.3	1.3	1.00
Coppermine River below Desteffany Lake	3/12/2021	Nickel	1.2	1.2	1.00
Coppermine River below Desteffany Lake	3/12/2021	Rubidium	2.1	2.1	1.00
Coppermine River below Desteffany Lake	3/12/2021	Rubidium	2.0	2.0	1.00
Coppermine River below Desteffany Lake	3/12/2021	Strontium	16.6	16.6	1.00
Coppermine River below Desteffany Lake	3/12/2021	Barium	2.6	2.5	1.04
Coppermine River below Desteffany Lake	3/12/2021	Barium	3.3	2.6	1.27
Coppermine River at outlet of Point Lake	3/4/2021	Manganese	1.3	1.6	0.81
Coppermine River at outlet of Point Lake	3/4/2021	Aluminum	12.5	14.4	0.87
Coppermine River at outlet of Point Lake	3/4/2021	Barium	3.2	3.3	0.97
Coppermine River at outlet of Point Lake	3/4/2021	Strontium	8.8	9.0	0.98
Coppermine River at outlet of Point Lake	3/4/2021	Lithium	1.1	1.1	1.00
Coppermine River at outlet of Point Lake	3/4/2021	Nickel	1.0	1.0	1.00
Coppermine River at outlet of Point Lake	3/4/2021	Rubidium	1.7	1.7	1.00
Daring Lake	9/9/2020	Aluminum	3.3	9.6	0.34
Daring Lake	9/9/2020	Rubidium	1.2	1.3	0.92
Daring Lake	9/9/2020	Barium	1.2	1.2	1.00
Daring Lake	9/9/2020	Strontium	6.0	6.0	1.00
Desteffany Lake	9/9/2020	Aluminum	15.2	24.0	0.63
Desteffany Lake	9/9/2020	Barium	2.0	2.1	0.95
Desteffany Lake	9/9/2020	Strontium	10.7	10.8	0.99
Desteffany Lake	9/9/2020	Lithium	1.4	1.4	1.00
Desteffany Lake	9/9/2020	Nickel	0.9	0.9	1.00
Desteffany Lake	9/9/2020	Rubidium	1.7	1.7	1.00
King Lake	9/9/2020	Aluminum	8.3	12.8	0.65
King Lake	9/9/2020	Barium	3.0	3.1	0.97
King Lake	9/9/2020	Strontium	13.2	13.3	0.99
King Lake	9/9/2020	Lithium	1.3	1.3	1.00
King Lake	9/9/2020	Nickel	0.5	0.5	1.00
King Lake	9/9/2020	Rubidium	1.5	1.5	1.00
Lac de Gras Outlet	9/9/2020	Aluminum	3.3	6.9	0.48
Lac de Gras Outlet	9/9/2020	Nickel	1.2	1.3	0.92
Lac de Gras Outlet	9/9/2020	Barium	2.2	2.3	0.96
Lac de Gras Outlet	9/9/2020	Strontium	15.1	15.2	0.99
Lac de Gras Outlet	9/9/2020	Lithium	1.5	1.5	1.00
Lac de Gras Outlet	9/9/2020	Rubidium	1.9	1.9	1.00
Lake of the Enemy	9/9/2020	Lithium	1.3	1.4	0.93
Lake of the Enemy	9/9/2020	Barium	1.7	1.8	0.94
Lake of the Enemy	9/9/2020	Strontium	7.7	8.0	0.96
Lake of the Enemy	9/9/2020	Barium	1.8	1.8	1.00
Lake of the Enemy	9/9/2020	Lithium	1.3	1.3	1.00
Lake of the Enemy	9/9/2020	Nickel	0.5	0.5	1.00
Lake of the Enemy	9/9/2020	Nickel	0.6	0.6	1.00
Lake of the Enemy	9/9/2020	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/9/2020	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/9/2020	Strontium	7.8	7.8	1.00
MacKay Lake	9/9/2020	Aluminum	5.6	9.5	0.59
MacKay Lake	9/9/2020	Barium	2.0	2.1	0.95
MacKay Lake	9/9/2020	Strontium	9.1	9.3	0.98
MacKay Lake	9/9/2020	Lithium	1.2	1.2	1.00
MacKay Lake	9/9/2020	Nickel	0.8	0.8	1.00
MacKay Lake	9/9/2020	Rubidium	1.3	1.3	1.00
Point Lake	9/9/2020	Aluminum	9.9	17.1	0.58
Point Lake	9/9/2020	Barium	2.1	2.3	0.91
Point Lake	9/9/2020	Strontium	7.2	7.3	0.99
Point Lake	9/9/2020	Lithium	1.0	1.0	1.00
Point Lake	9/9/2020	Nickel	0.8	0.8	1.00
Point Lake	9/9/2020	Rubidium	1.4	1.4	1.00
Rocknest Lake	9/9/2020	Aluminum	9.6	15.1	0.64
Rocknest Lake	9/9/2020	Aluminum	10.2	14.8	0.69
Rocknest Lake	9/9/2020	Strontium	7.6	7.7	0.99
Rocknest Lake	9/9/2020	Strontium	7.6	7.7	0.99
Rocknest Lake	9/9/2020	Barium	2.8	2.8	1.00
Rocknest Lake	9/9/2020	Barium	2.8	2.8	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	9/9/2020	Nickel	0.7	0.7	1.00
Rocknest Lake	9/9/2020	Nickel	0.7	0.7	1.00
Rocknest Lake	9/9/2020	Rubidium	1.4	1.4	1.00
Rocknest Lake	9/9/2020	Rubidium	1.4	1.4	1.00
Starfish Lake	9/9/2020	Aluminum	24.1	34.6	0.70
Starfish Lake	9/9/2020	Barium	2.1	2.2	0.95
Starfish Lake	9/9/2020	Copper	1.1	1.1	1.00
Starfish Lake	9/9/2020	Lithium	1.4	1.4	1.00
Starfish Lake	9/9/2020	Nickel	0.8	0.8	1.00
Starfish Lake	9/9/2020	Rubidium	1.4	1.4	1.00
Starfish Lake	9/9/2020	Strontium	6.8	6.7	1.01
Daring Lake	8/6/2020	Manganese	0.8	1.8	0.44
Daring Lake	8/6/2020	Aluminum	7.2	8.0	0.90
Daring Lake	8/6/2020	Barium	1.2	1.2	1.00
Daring Lake	8/6/2020	Rubidium	1.2	1.2	1.00
Daring Lake	8/6/2020	Strontium	5.8	5.8	1.00
Desteffany Lake	8/6/2020	Iron	25.0	49.0	0.51
Desteffany Lake	8/6/2020	Manganese	2.2	4.3	0.51
Desteffany Lake	8/6/2020	Aluminum	23.3	30.7	0.76
Desteffany Lake	8/6/2020	Barium	2.1	2.2	0.95
Desteffany Lake	8/6/2020	Strontium	9.7	9.9	0.98
Desteffany Lake	8/6/2020	Nickel	0.9	0.9	1.00
Desteffany Lake	8/6/2020	Rubidium	1.6	1.6	1.00
Desteffany Lake	8/6/2020	Lithium	1.5	1.4	1.07
King Lake	8/6/2020	Aluminum	13.5	16.7	0.81
King Lake	8/6/2020	Barium	3.1	3.1	1.00
King Lake	8/6/2020	Lithium	1.4	1.4	1.00
King Lake	8/6/2020	Nickel	0.5	0.5	1.00
King Lake	8/6/2020	Rubidium	1.4	1.4	1.00
King Lake	8/6/2020	Strontium	12.7	12.6	1.01
Lac de Gras Outlet	8/6/2020	Manganese	0.6	3.0	0.20
Lac de Gras Outlet	8/6/2020	Aluminum	5.9	7.9	0.75
Lac de Gras Outlet	8/6/2020	Barium	2.2	2.2	1.00
Lac de Gras Outlet	8/6/2020	Lithium	1.5	1.5	1.00
Lac de Gras Outlet	8/6/2020	Nickel	1.2	1.2	1.00
Lac de Gras Outlet	8/6/2020	Rubidium	1.8	1.8	1.00
Lac de Gras Outlet	8/6/2020	Strontium	15.0	14.9	1.01
Lake of the Enemy	8/6/2020	Manganese	0.6	1.5	0.40
Lake of the Enemy	8/6/2020	Rubidium	1.0	1.1	0.91
Lake of the Enemy	8/6/2020	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/6/2020	Strontium	7.5	7.5	1.00
Lake of the Enemy	8/6/2020	Barium	1.8	1.7	1.06
Lake of the Enemy	8/6/2020	Lithium	1.4	1.3	1.08
MacKay Lake	8/6/2020	Manganese	0.5	1.7	0.29
MacKay Lake	8/6/2020	Aluminum	9.3	11.7	0.79
MacKay Lake	8/6/2020	Nickel	0.7	0.8	0.88
MacKay Lake	8/6/2020	Barium	2.1	2.2	0.95
MacKay Lake	8/6/2020	Strontium	8.9	9.1	0.98
MacKay Lake	8/6/2020	Lithium	1.2	1.2	1.00
MacKay Lake	8/6/2020	Rubidium	1.2	1.2	1.00
Point Lake	8/6/2020	Manganese	0.5	1.0	0.50
Point Lake	8/6/2020	Aluminum	12.3	16.7	0.74
Point Lake	8/6/2020	Aluminum	13.6	17.3	0.79
Point Lake	8/6/2020	Barium	2.0	2.1	0.95
Point Lake	8/6/2020	Barium	2.1	2.1	1.00
Point Lake	8/6/2020	Lithium	1.0	1.0	1.00
Point Lake	8/6/2020	Nickel	0.7	0.7	1.00
Point Lake	8/6/2020	Nickel	0.7	0.7	1.00
Point Lake	8/6/2020	Rubidium	1.4	1.4	1.00
Point Lake	8/6/2020	Strontium	6.8	6.8	1.00
Point Lake	8/6/2020	Strontium	6.9	6.8	1.01
Point Lake	8/6/2020	Rubidium	1.4	1.3	1.08
Rocknest Lake	8/6/2020	Manganese	0.9	2.2	0.41
Rocknest Lake	8/6/2020	Nickel	0.6	0.7	0.86
Rocknest Lake	8/6/2020	Barium	3.3	3.3	1.00
Rocknest Lake	8/6/2020	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/6/2020	Strontium	7.2	7.1	1.01
Rocknest Lake	8/6/2020	Aluminum	18.6	17.5	1.06
Starfish Lake	8/6/2020	Manganese	0.5	6.7	0.07
Starfish Lake	8/6/2020	Aluminum	28.3	39.0	0.73
Starfish Lake	8/6/2020	Mercury	1.1	1.5	0.73
Starfish Lake	8/6/2020	Aluminum	27.9	37.2	0.75
Starfish Lake	8/6/2020	Nickel	0.7	0.8	0.88
Starfish Lake	8/6/2020	Nickel	0.7	0.8	0.88

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Starfish Lake	8/6/2020	Barium	2.2	2.3	0.96
Starfish Lake	8/6/2020	Barium	2.2	2.3	0.96
Starfish Lake	8/6/2020	Strontium	6.4	6.5	0.98
Starfish Lake	8/6/2020	Lithium	1.4	1.4	1.00
Starfish Lake	8/6/2020	Rubidium	1.3	1.3	1.00
Starfish Lake	8/6/2020	Rubidium	1.3	1.3	1.00
Starfish Lake	8/6/2020	Strontium	6.4	6.4	1.00
Starfish Lake	8/6/2020	Lithium	1.4	1.3	1.08
Coppermine River below Desteffany Lake	7/18/2020	Manganese	1.9	4.7	0.40
Coppermine River below Desteffany Lake	7/18/2020	Aluminum	27.7	41.2	0.67
Coppermine River below Desteffany Lake	7/18/2020	Barium	2.2	2.4	0.92
Coppermine River below Desteffany Lake	7/18/2020	Rubidium	1.6	1.7	0.94
Coppermine River below Desteffany Lake	7/18/2020	Strontium	9.8	10.0	0.98
Coppermine River below Desteffany Lake	7/18/2020	Lithium	1.3	1.3	1.00
Coppermine River below Desteffany Lake	7/18/2020	Nickel	0.9	0.9	1.00
Daring Lake	7/8/2020	Aluminum	6.7	16.4	0.41
Daring Lake	7/8/2020	Manganese	2.8	4.7	0.60
Daring Lake	7/8/2020	Barium	1.3	1.4	0.93
Daring Lake	7/8/2020	Strontium	5.5	5.6	0.98
Daring Lake	7/8/2020	Rubidium	1.2	1.2	1.00
Desteffany Lake	7/8/2020	Iron	58.0	129.0	0.45
Desteffany Lake	7/8/2020	Aluminum	40.2	71.9	0.56
Desteffany Lake	7/8/2020	Manganese	8.7	10.6	0.82
Desteffany Lake	7/8/2020	Nickel	0.9	1.0	0.90
Desteffany Lake	7/8/2020	Barium	2.5	2.7	0.93
Desteffany Lake	7/8/2020	Lithium	1.3	1.4	0.93
Desteffany Lake	7/8/2020	Rubidium	1.6	1.6	1.00
Desteffany Lake	7/8/2020	Strontium	9.2	9.2	1.00
King Lake	7/8/2020	Manganese	1.0	5.3	0.19
King Lake	7/8/2020	Aluminum	8.5	13.1	0.65
King Lake	7/8/2020	Barium	3.1	3.2	0.97
King Lake	7/8/2020	Rubidium	1.4	1.4	1.00
King Lake	7/8/2020	Strontium	12.8	12.8	1.00
King Lake	7/8/2020	Lithium	1.3	1.2	1.08
Lac de Gras Outlet	7/8/2020	Aluminum	16.7	25.0	0.67
Lac de Gras Outlet	7/8/2020	Manganese	2.9	4.0	0.73
Lac de Gras Outlet	7/8/2020	Barium	2.2	2.4	0.92
Lac de Gras Outlet	7/8/2020	Lithium	1.4	1.4	1.00
Lac de Gras Outlet	7/8/2020	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	7/8/2020	Rubidium	1.6	1.6	1.00
Lac de Gras Outlet	7/8/2020	Strontium	13.1	13.1	1.00
Lake of the Enemy	7/8/2020	Manganese	1.3	1.9	0.68
Lake of the Enemy	7/8/2020	Barium	1.8	1.8	1.00
Lake of the Enemy	7/8/2020	Lithium	1.3	1.3	1.00
Lake of the Enemy	7/8/2020	Nickel	0.5	0.5	1.00
Lake of the Enemy	7/8/2020	Rubidium	1.0	1.0	1.00
Lake of the Enemy	7/8/2020	Strontium	7.7	7.7	1.00
MacKay Lake	7/8/2020	Manganese	1.7	3.0	0.57
MacKay Lake	7/8/2020	Aluminum	6.5	8.2	0.79
MacKay Lake	7/8/2020	Strontium	8.8	8.9	0.99
MacKay Lake	7/8/2020	Barium	2.3	2.3	1.00
MacKay Lake	7/8/2020	Nickel	0.7	0.7	1.00
MacKay Lake	7/8/2020	Rubidium	1.2	1.2	1.00
MacKay Lake	7/8/2020	Lithium	1.2	1.1	1.09
Point Lake	7/8/2020	Aluminum	10.0	11.2	0.89
Point Lake	7/8/2020	Barium	2.1	2.1	1.00
Point Lake	7/8/2020	Strontium	7.0	7.0	1.00
Point Lake	7/8/2020	Rubidium	1.4	1.3	1.08
Point Lake	7/8/2020	Nickel	0.8	0.7	1.14
Rocknest Lake	7/8/2020	Manganese	0.7	2.4	0.29
Rocknest Lake	7/8/2020	Manganese	0.7	2.4	0.29
Rocknest Lake	7/8/2020	Aluminum	9.6	16.0	0.60
Rocknest Lake	7/8/2020	Aluminum	10.0	16.3	0.61
Rocknest Lake	7/8/2020	Barium	4.6	4.7	0.98
Rocknest Lake	7/8/2020	Barium	4.5	4.5	1.00
Rocknest Lake	7/8/2020	Nickel	0.5	0.5	1.00
Rocknest Lake	7/8/2020	Nickel	0.5	0.5	1.00
Rocknest Lake	7/8/2020	Rubidium	1.2	1.2	1.00
Rocknest Lake	7/8/2020	Rubidium	1.2	1.2	1.00
Rocknest Lake	7/8/2020	Strontium	9.3	9.3	1.00
Rocknest Lake	7/8/2020	Strontium	9.2	9.2	1.00
Starfish Lake	7/8/2020	Manganese	14.6	21.0	0.70
Starfish Lake	7/8/2020	Manganese	14.4	20.7	0.70
Starfish Lake	7/8/2020	Aluminum	27.1	34.8	0.78

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Starfish Lake	7/8/2020	Aluminum	26.9	34.0	0.79
Starfish Lake	7/8/2020	Nickel	0.7	0.8	0.88
Starfish Lake	7/8/2020	Nickel	0.7	0.8	0.88
Starfish Lake	7/8/2020	Barium	2.3	2.4	0.96
Starfish Lake	7/8/2020	Barium	2.3	2.4	0.96
Starfish Lake	7/8/2020	Strontium	6.4	6.5	0.98
Starfish Lake	7/8/2020	Strontium	6.4	6.5	0.98
Starfish Lake	7/8/2020	Copper	1.0	1.0	1.00
Starfish Lake	7/8/2020	Rubidium	1.4	1.4	1.00
Starfish Lake	7/8/2020	Rubidium	1.4	1.4	1.00
Starfish Lake	7/8/2020	Lithium	1.3	1.2	1.08
Starfish Lake	7/8/2020	Lithium	1.3	1.2	1.08
Daring Lake	3/16/2020	Manganese	0.5	0.8	0.63
Daring Lake	3/16/2020	Lithium	1.0	1.1	0.91
Daring Lake	3/16/2020	Barium	1.5	1.6	0.94
Daring Lake	3/16/2020	Strontium	6.9	7.1	0.97
Daring Lake	3/16/2020	Rubidium	1.4	1.4	1.00
Desteffany Lake	3/16/2020	Aluminum	4.9	9.6	0.51
Desteffany Lake	3/16/2020	Manganese	0.5	0.9	0.56
Desteffany Lake	3/16/2020	Manganese	0.5	0.9	0.56
Desteffany Lake	3/16/2020	Aluminum	4.8	7.4	0.65
Desteffany Lake	3/16/2020	Barium	2.5	2.7	0.93
Desteffany Lake	3/16/2020	Lithium	1.7	1.8	0.94
Desteffany Lake	3/16/2020	Strontium	15.8	16.0	0.99
Desteffany Lake	3/16/2020	Barium	2.5	2.5	1.00
Desteffany Lake	3/16/2020	Lithium	1.7	1.7	1.00
Desteffany Lake	3/16/2020	Nickel	1.0	1.0	1.00
Desteffany Lake	3/16/2020	Rubidium	2.0	2.0	1.00
Desteffany Lake	3/16/2020	Rubidium	2.1	2.1	1.00
Desteffany Lake	3/16/2020	Strontium	15.7	15.6	1.01
Desteffany Lake	3/16/2020	Nickel	1.2	1.0	1.20
King Lake	3/16/2020	Aluminum	4.7	7.4	0.64
King Lake	3/16/2020	Aluminum	4.8	7.4	0.65
King Lake	3/16/2020	Barium	3.5	3.6	0.97
King Lake	3/16/2020	Barium	3.5	3.6	0.97
King Lake	3/16/2020	Strontium	16.4	16.5	0.99
King Lake	3/16/2020	Rubidium	1.7	1.7	1.00
King Lake	3/16/2020	Rubidium	1.7	1.7	1.00
King Lake	3/16/2020	Strontium	16.5	16.4	1.01
King Lake	3/16/2020	Lithium	1.6	1.5	1.07
King Lake	3/16/2020	Lithium	1.6	1.5	1.07
Lac de Gras Outlet	3/16/2020	Barium	2.9	2.9	1.00
Lac de Gras Outlet	3/16/2020	Lithium	2.0	2.0	1.00
Lac de Gras Outlet	3/16/2020	Nickel	1.3	1.3	1.00
Lac de Gras Outlet	3/16/2020	Strontium	19.2	18.9	1.02
Lac de Gras Outlet	3/16/2020	Rubidium	2.4	2.3	1.04
Lake of the Enemy	3/16/2020	Barium	2.5	2.5	1.00
Lake of the Enemy	3/16/2020	Nickel	0.7	0.7	1.00
Lake of the Enemy	3/16/2020	Rubidium	1.6	1.6	1.00
Lake of the Enemy	3/16/2020	Strontium	11.0	11.0	1.00
Lake of the Enemy	3/16/2020	Lithium	2.0	1.9	1.05
MacKay Lake	3/16/2020	Aluminum	3.8	6.7	0.57
MacKay Lake	3/16/2020	Nickel	0.6	0.7	0.86
MacKay Lake	3/16/2020	Barium	2.9	3.2	0.91
MacKay Lake	3/16/2020	Lithium	1.6	1.7	0.94
MacKay Lake	3/16/2020	Strontium	12.5	13.1	0.95
MacKay Lake	3/16/2020	Rubidium	1.7	1.7	1.00
Point Lake	3/16/2020	Aluminum	12.7	15.0	0.85
Point Lake	3/16/2020	Nickel	1.1	1.2	0.92
Point Lake	3/16/2020	Strontium	10.6	10.7	0.99
Point Lake	3/16/2020	Barium	3.2	3.2	1.00
Point Lake	3/16/2020	Lithium	1.4	1.4	1.00
Point Lake	3/16/2020	Rubidium	2.1	2.1	1.00
Rocknest Lake	3/16/2020	Aluminum	9.1	12.0	0.76
Rocknest Lake	3/16/2020	Manganese	1.1	1.3	0.85
Rocknest Lake	3/16/2020	Rubidium	1.4	1.5	0.93
Rocknest Lake	3/16/2020	Barium	2.7	2.8	0.96
Rocknest Lake	3/16/2020	Lithium	1.0	1.0	1.00
Rocknest Lake	3/16/2020	Nickel	0.8	0.8	1.00
Rocknest Lake	3/16/2020	Strontium	7.9	7.9	1.00
Starfish Lake	3/16/2020	Aluminum	23.8	26.9	0.88
Starfish Lake	3/16/2020	Barium	2.7	2.9	0.93
Starfish Lake	3/16/2020	Copper	1.4	1.5	0.93
Starfish Lake	3/16/2020	Lithium	2.0	2.0	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Starfish Lake	3/16/2020	Nickel	0.8	0.8	1.00
Starfish Lake	3/16/2020	Rubidium	2.0	2.0	1.00
Starfish Lake	3/16/2020	Strontium	9.5	9.5	1.00
Starfish Lake	3/16/2020	Zinc	2.3	2.2	1.05
Lockhart River ABOVE Outram Lakes	10/28/2019	Manganese	0.6	2.5	0.24
Lockhart River ABOVE Outram Lakes	10/28/2019	Aluminum	4.4	6.1	0.72
Lockhart River ABOVE Outram Lakes	10/28/2019	Lithium	1.4	1.6	0.88
Lockhart River ABOVE Outram Lakes	10/28/2019	Barium	1.9	2.0	0.95
Lockhart River ABOVE Outram Lakes	10/28/2019	Strontium	8.5	8.6	0.99
Lockhart River ABOVE Outram Lakes	10/28/2019	Nickel	1.1	1.1	1.00
Lockhart River ABOVE Outram Lakes	10/28/2019	Rubidium	1.3	1.3	1.00
Clinton-Colden Outlet	9/5/2019	Aluminum	3.6	5.7	0.63
Clinton-Colden Outlet	9/5/2019	Barium	1.9	1.9	1.00
Clinton-Colden Outlet	9/5/2019	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	9/5/2019	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	9/5/2019	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	9/5/2019	Strontium	6.7	6.6	1.02
Daring Lake	9/5/2019	Aluminum	4.8	7.8	0.62
Daring Lake	9/5/2019	Aluminum	4.4	7.1	0.62
Daring Lake	9/5/2019	Barium	1.1	1.2	0.92
Daring Lake	9/5/2019	Strontium	5.7	5.8	0.98
Daring Lake	9/5/2019	Barium	1.1	1.1	1.00
Daring Lake	9/5/2019	Rubidium	1.2	1.2	1.00
Daring Lake	9/5/2019	Rubidium	1.2	1.2	1.00
Daring Lake	9/5/2019	Strontium	5.7	5.7	1.00
Desteffany Lake	9/5/2019	Aluminum	9.1	13.5	0.67
Desteffany Lake	9/5/2019	Nickel	0.6	0.7	0.86
Desteffany Lake	9/5/2019	Barium	1.7	1.8	0.94
Desteffany Lake	9/5/2019	Strontium	10.1	10.2	0.99
Desteffany Lake	9/5/2019	Lithium	1.4	1.4	1.00
Desteffany Lake	9/5/2019	Rubidium	1.7	1.7	1.00
King Lake	9/5/2019	Aluminum	5.0	9.6	0.52
King Lake	9/5/2019	Aluminum	5.2	9.1	0.57
King Lake	9/5/2019	Lithium	1.3	1.4	0.93
King Lake	9/5/2019	Barium	3.0	3.2	0.94
King Lake	9/5/2019	Barium	3.1	3.2	0.97
King Lake	9/5/2019	Strontium	16.4	16.5	0.99
King Lake	9/5/2019	Rubidium	1.4	1.4	1.00
King Lake	9/5/2019	Rubidium	1.4	1.4	1.00
King Lake	9/5/2019	Strontium	16.1	16.1	1.00
King Lake	9/5/2019	Lithium	1.4	1.3	1.08
Lac de Gras Outlet	9/5/2019	Manganese	1.1	2.0	0.55
Lac de Gras Outlet	9/5/2019	Barium	1.9	2.0	0.95
Lac de Gras Outlet	9/5/2019	Strontium	13.5	13.7	0.99
Lac de Gras Outlet	9/5/2019	Lithium	1.5	1.5	1.00
Lac de Gras Outlet	9/5/2019	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	9/5/2019	Rubidium	1.7	1.7	1.00
Lake of the Enemy	9/5/2019	Lithium	1.4	1.5	0.93
Lake of the Enemy	9/5/2019	Barium	1.6	1.6	1.00
Lake of the Enemy	9/5/2019	Strontium	7.4	7.4	1.00
Lake of the Enemy	9/5/2019	Rubidium	1.1	1.0	1.10
MacKay Lake	9/5/2019	Aluminum	3.8	6.2	0.61
MacKay Lake	9/5/2019	Strontium	8.3	8.4	0.99
MacKay Lake	9/5/2019	Barium	1.8	1.8	1.00
MacKay Lake	9/5/2019	Lithium	1.3	1.3	1.00
MacKay Lake	9/5/2019	Nickel	0.8	0.8	1.00
MacKay Lake	9/5/2019	Rubidium	1.3	1.3	1.00
Point Lake	9/5/2019	Aluminum	8.5	11.1	0.77
Point Lake	9/5/2019	Barium	2.0	2.0	1.00
Point Lake	9/5/2019	Lithium	1.0	1.0	1.00
Point Lake	9/5/2019	Nickel	0.7	0.7	1.00
Point Lake	9/5/2019	Rubidium	1.3	1.3	1.00
Point Lake	9/5/2019	Strontium	6.7	6.6	1.02
Rocknest Lake	9/5/2019	Aluminum	8.3	11.4	0.73
Rocknest Lake	9/5/2019	Barium	3.1	3.3	0.94
Rocknest Lake	9/5/2019	Strontium	7.5	7.7	0.97
Rocknest Lake	9/5/2019	Rubidium	1.3	1.3	1.00
Rocknest Lake	9/5/2019	Nickel	0.6	0.5	1.20
Starfish Lake	9/5/2019	Aluminum	10.4	16.7	0.62
Starfish Lake	9/5/2019	Barium	1.7	1.7	1.00
Starfish Lake	9/5/2019	Lithium	1.5	1.5	1.00
Starfish Lake	9/5/2019	Nickel	0.5	0.5	1.00
Starfish Lake	9/5/2019	Rubidium	1.5	1.5	1.00
Starfish Lake	9/5/2019	Strontium	6.5	6.5	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	8/8/2019	Aluminum	4.0	7.3	0.55
Daring Lake	8/8/2019	Barium	1.2	1.2	1.00
Daring Lake	8/8/2019	Rubidium	1.2	1.2	1.00
Daring Lake	8/8/2019	Strontium	5.6	5.6	1.00
Desteffany Lake	8/8/2019	Aluminum	8.4	14.4	0.58
Desteffany Lake	8/8/2019	Nickel	0.6	0.7	0.86
Desteffany Lake	8/8/2019	Strontium	10.1	10.2	0.99
Desteffany Lake	8/8/2019	Barium	1.8	1.8	1.00
Desteffany Lake	8/8/2019	Rubidium	1.7	1.7	1.00
Desteffany Lake	8/8/2019	Lithium	1.5	1.4	1.07
King Lake	8/8/2019	Aluminum	5.0	7.9	0.63
King Lake	8/8/2019	Strontium	15.2	15.4	0.99
King Lake	8/8/2019	Barium	3.0	3.0	1.00
King Lake	8/8/2019	Lithium	1.3	1.3	1.00
King Lake	8/8/2019	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	8/8/2019	Manganese	1.5	2.3	0.65
Lac de Gras Outlet	8/8/2019	Barium	2.0	2.0	1.00
Lac de Gras Outlet	8/8/2019	Lithium	1.5	1.5	1.00
Lac de Gras Outlet	8/8/2019	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	8/8/2019	Rubidium	1.8	1.8	1.00
Lac de Gras Outlet	8/8/2019	Strontium	13.7	13.7	1.00
Lake of the Enemy	8/8/2019	Manganese	0.8	1.8	0.44
Lake of the Enemy	8/8/2019	Rubidium	1.0	1.1	0.91
Lake of the Enemy	8/8/2019	Barium	1.6	1.7	0.94
Lake of the Enemy	8/8/2019	Lithium	1.4	1.4	1.00
Lake of the Enemy	8/8/2019	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/8/2019	Strontium	7.4	7.4	1.00
MacKay Lake	8/8/2019	Manganese	0.5	2.0	0.25
MacKay Lake	8/8/2019	Aluminum	5.4	7.6	0.71
MacKay Lake	8/8/2019	Barium	1.9	2.0	0.95
MacKay Lake	8/8/2019	Strontium	8.4	8.5	0.99
MacKay Lake	8/8/2019	Lithium	1.3	1.3	1.00
MacKay Lake	8/8/2019	Nickel	0.5	0.5	1.00
MacKay Lake	8/8/2019	Rubidium	1.2	1.2	1.00
Point Lake	8/8/2019	Aluminum	9.7	11.0	0.88
Point Lake	8/8/2019	Rubidium	1.3	1.4	0.93
Point Lake	8/8/2019	Barium	2.0	2.0	1.00
Point Lake	8/8/2019	Lithium	1.0	1.0	1.00
Point Lake	8/8/2019	Nickel	0.7	0.7	1.00
Point Lake	8/8/2019	Strontium	6.7	6.7	1.00
Rocknest Lake	8/8/2019	Manganese	0.8	2.0	0.40
Rocknest Lake	8/8/2019	Aluminum	9.3	11.1	0.84
Rocknest Lake	8/8/2019	Aluminum	11.6	13.2	0.88
Rocknest Lake	8/8/2019	Barium	5.0	5.0	1.00
Rocknest Lake	8/8/2019	Barium	5.1	5.1	1.00
Rocknest Lake	8/8/2019	Nickel	0.5	0.5	1.00
Rocknest Lake	8/8/2019	Rubidium	1.2	1.2	1.00
Rocknest Lake	8/8/2019	Rubidium	1.2	1.2	1.00
Rocknest Lake	8/8/2019	Strontium	10.1	10.1	1.00
Rocknest Lake	8/8/2019	Strontium	10.5	10.4	1.01
Starfish Lake	8/8/2019	Aluminum	10.2	15.5	0.66
Starfish Lake	8/8/2019	Aluminum	10.1	15.3	0.66
Starfish Lake	8/8/2019	Nickel	0.5	0.6	0.83
Starfish Lake	8/8/2019	Nickel	0.5	0.6	0.83
Starfish Lake	8/8/2019	Barium	1.6	1.7	0.94
Starfish Lake	8/8/2019	Barium	1.6	1.7	0.94
Starfish Lake	8/8/2019	Strontium	6.3	6.4	0.98
Starfish Lake	8/8/2019	Lithium	1.4	1.4	1.00
Starfish Lake	8/8/2019	Lithium	1.4	1.4	1.00
Starfish Lake	8/8/2019	Rubidium	1.5	1.5	1.00
Starfish Lake	8/8/2019	Rubidium	1.5	1.5	1.00
Starfish Lake	8/8/2019	Strontium	6.4	6.4	1.00
Clinton-Colden Outlet	7/10/2019	Manganese	1.6	2.4	0.67
Clinton-Colden Outlet	7/10/2019	Aluminum	4.4	5.4	0.81
Clinton-Colden Outlet	7/10/2019	Lithium	1.3	1.4	0.93
Clinton-Colden Outlet	7/10/2019	Barium	1.8	1.8	1.00
Clinton-Colden Outlet	7/10/2019	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	7/10/2019	Rubidium	1.1	1.1	1.00
Clinton-Colden Outlet	7/10/2019	Strontium	6.4	6.4	1.00
Daring Lake	7/10/2019	Manganese	1.5	3.1	0.48
Daring Lake	7/10/2019	Aluminum	4.9	9.1	0.54
Daring Lake	7/10/2019	Barium	1.2	1.3	0.92
Daring Lake	7/10/2019	Strontium	5.6	5.7	0.98
Daring Lake	7/10/2019	Rubidium	1.2	1.2	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Desteffany Lake	7/10/2019	Manganese	3.0	6.8	0.44
Desteffany Lake	7/10/2019	Aluminum	12.2	21.7	0.56
Desteffany Lake	7/10/2019	Barium	1.8	2.0	0.90
Desteffany Lake	7/10/2019	Strontium	9.9	10.2	0.97
Desteffany Lake	7/10/2019	Lithium	1.5	1.5	1.00
Desteffany Lake	7/10/2019	Nickel	0.7	0.7	1.00
Desteffany Lake	7/10/2019	Rubidium	1.7	1.7	1.00
King Lake	7/10/2019	Manganese	0.6	6.0	0.10
King Lake	7/10/2019	Aluminum	4.7	7.7	0.61
King Lake	7/10/2019	Barium	2.8	2.9	0.97
King Lake	7/10/2019	Strontium	12.9	13.0	0.99
King Lake	7/10/2019	Rubidium	1.4	1.4	1.00
King Lake	7/10/2019	Lithium	1.4	1.3	1.08
Lac de Gras Outlet	7/10/2019	Aluminum	3.4	4.9	0.69
Lac de Gras Outlet	7/10/2019	Manganese	2.1	2.7	0.78
Lac de Gras Outlet	7/10/2019	Barium	1.9	1.9	1.00
Lac de Gras Outlet	7/10/2019	Lithium	1.6	1.6	1.00
Lac de Gras Outlet	7/10/2019	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	7/10/2019	Rubidium	1.7	1.7	1.00
Lac de Gras Outlet	7/10/2019	Strontium	13.2	13.2	1.00
Lake of the Enemy	7/10/2019	Manganese	1.4	2.0	0.70
Lake of the Enemy	7/10/2019	Rubidium	1.0	1.1	0.91
Lake of the Enemy	7/10/2019	Barium	1.6	1.7	0.94
Lake of the Enemy	7/10/2019	Strontium	7.5	7.6	0.99
Lake of the Enemy	7/10/2019	Nickel	0.5	0.5	1.00
Lake of the Enemy	7/10/2019	Lithium	1.5	1.4	1.07
MacKay Lake	7/10/2019	Aluminum	3.6	5.7	0.63
MacKay Lake	7/10/2019	Aluminum	3.5	4.8	0.73
MacKay Lake	7/10/2019	Manganese	5.9	7.5	0.79
MacKay Lake	7/10/2019	Manganese	6.0	7.5	0.80
MacKay Lake	7/10/2019	Barium	2.0	2.1	0.95
MacKay Lake	7/10/2019	Barium	2.0	2.1	0.95
MacKay Lake	7/10/2019	Strontium	8.7	8.8	0.99
MacKay Lake	7/10/2019	Strontium	8.7	8.8	0.99
MacKay Lake	7/10/2019	Lithium	1.3	1.3	1.00
MacKay Lake	7/10/2019	Lithium	1.3	1.3	1.00
MacKay Lake	7/10/2019	Nickel	0.8	0.8	1.00
MacKay Lake	7/10/2019	Nickel	0.7	0.7	1.00
MacKay Lake	7/10/2019	Rubidium	1.2	1.2	1.00
MacKay Lake	7/10/2019	Rubidium	1.2	1.2	1.00
Point Lake	7/10/2019	Manganese	1.2	2.3	0.52
Point Lake	7/10/2019	Manganese	1.2	2.3	0.52
Point Lake	7/10/2019	Aluminum	13.5	17.4	0.78
Point Lake	7/10/2019	Aluminum	13.6	17.2	0.79
Point Lake	7/10/2019	Rubidium	1.4	1.5	0.93
Point Lake	7/10/2019	Barium	2.0	2.1	0.95
Point Lake	7/10/2019	Strontium	6.8	6.9	0.99
Point Lake	7/10/2019	Strontium	6.8	6.9	0.99
Point Lake	7/10/2019	Barium	2.1	2.1	1.00
Point Lake	7/10/2019	Lithium	1.0	1.0	1.00
Point Lake	7/10/2019	Nickel	0.7	0.7	1.00
Point Lake	7/10/2019	Nickel	0.7	0.7	1.00
Point Lake	7/10/2019	Rubidium	1.4	1.4	1.00
Rocknest Lake	7/10/2019	Manganese	0.8	7.0	0.11
Rocknest Lake	7/10/2019	Iron	30.0	65.0	0.46
Rocknest Lake	7/10/2019	Mercury	1.3	1.8	0.72
Rocknest Lake	7/10/2019	Aluminum	8.4	10.8	0.78
Rocknest Lake	7/10/2019	Barium	7.0	7.2	0.97
Rocknest Lake	7/10/2019	Strontium	13.2	13.4	0.99
Rocknest Lake	7/10/2019	Rubidium	1.1	1.1	1.00
Starfish Lake	7/10/2019	Aluminum	20.3	28.5	0.71
Starfish Lake	7/10/2019	Manganese	14.8	19.0	0.78
Starfish Lake	7/10/2019	Nickel	0.6	0.7	0.86
Starfish Lake	7/10/2019	Lithium	1.4	1.5	0.93
Starfish Lake	7/10/2019	Barium	1.9	2.0	0.95
Starfish Lake	7/10/2019	Strontium	6.4	6.5	0.98
Starfish Lake	7/10/2019	Copper	1.0	1.0	1.00
Starfish Lake	7/10/2019	Rubidium	1.4	1.4	1.00
King Lake	3/19/2019	Manganese	0.5	1.4	0.36
King Lake	3/19/2019	Manganese	0.5	1.3	0.38
King Lake	3/19/2019	Aluminum	3.4	7.6	0.45
King Lake	3/19/2019	Lithium	1.8	1.9	0.95
King Lake	3/19/2019	Strontium	19.5	19.7	0.99
King Lake	3/19/2019	Strontium	19.5	19.6	0.99

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
King Lake	3/19/2019	Barium	3.9	3.9	1.00
King Lake	3/19/2019	Lithium	1.9	1.9	1.00
King Lake	3/19/2019	Nickel	0.5	0.5	1.00
King Lake	3/19/2019	Nickel	0.5	0.5	1.00
King Lake	3/19/2019	Rubidium	2.1	2.1	1.00
King Lake	3/19/2019	Rubidium	2.1	2.1	1.00
King Lake	3/19/2019	Barium	4.0	3.9	1.03
Lake of the Enemy	3/19/2019	Nickel	0.6	0.7	0.86
Lake of the Enemy	3/19/2019	Strontium	12.1	12.2	0.99
Lake of the Enemy	3/19/2019	Barium	2.5	2.5	1.00
Lake of the Enemy	3/19/2019	Rubidium	1.7	1.7	1.00
Lake of the Enemy	3/19/2019	Lithium	2.2	2.1	1.05
MacKay Lake	3/19/2019	Nickel	1.3	1.4	0.93
MacKay Lake	3/19/2019	Barium	3.0	3.1	0.97
MacKay Lake	3/19/2019	Strontium	11.8	12.1	0.98
MacKay Lake	3/19/2019	Lithium	1.7	1.7	1.00
MacKay Lake	3/19/2019	Rubidium	1.8	1.8	1.00
Daring Lake	3/18/2019	Manganese	0.8	1.0	0.80
Daring Lake	3/18/2019	Strontium	8.7	8.8	0.99
Daring Lake	3/18/2019	Barium	1.9	1.9	1.00
Daring Lake	3/18/2019	Lithium	1.3	1.3	1.00
Daring Lake	3/18/2019	Rubidium	1.8	1.8	1.00
Desteffany Lake	3/18/2019	Manganese	0.6	0.8	0.75
Desteffany Lake	3/18/2019	Aluminum	3.4	4.1	0.83
Desteffany Lake	3/18/2019	Barium	2.6	2.7	0.96
Desteffany Lake	3/18/2019	Nickel	0.9	0.9	1.00
Desteffany Lake	3/18/2019	Strontium	15.8	15.5	1.02
Desteffany Lake	3/18/2019	Rubidium	2.2	2.1	1.05
Desteffany Lake	3/18/2019	Lithium	1.8	1.7	1.06
Lac de Gras Outlet	3/18/2019	Barium	2.6	2.7	0.96
Lac de Gras Outlet	3/18/2019	Lithium	1.9	1.9	1.00
Lac de Gras Outlet	3/18/2019	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	3/18/2019	Strontium	18.4	18.3	1.01
Lac de Gras Outlet	3/18/2019	Rubidium	2.4	2.3	1.04
Point Lake	3/18/2019	Barium	2.7	2.8	0.96
Point Lake	3/18/2019	Barium	2.8	2.9	0.97
Point Lake	3/18/2019	Aluminum	10.6	10.8	0.98
Point Lake	3/18/2019	Aluminum	10.7	10.9	0.98
Point Lake	3/18/2019	Lithium	1.3	1.3	1.00
Point Lake	3/18/2019	Nickel	1.0	1.0	1.00
Point Lake	3/18/2019	Nickel	1.0	1.0	1.00
Point Lake	3/18/2019	Rubidium	1.9	1.9	1.00
Point Lake	3/18/2019	Rubidium	1.9	1.9	1.00
Point Lake	3/18/2019	Strontium	9.6	9.6	1.00
Point Lake	3/18/2019	Strontium	9.7	9.6	1.01
Point Lake	3/18/2019	Lithium	1.4	1.3	1.08
Rocknest Lake	3/18/2019	Manganese	0.7	1.0	0.70
Rocknest Lake	3/18/2019	Aluminum	8.6	10.0	0.86
Rocknest Lake	3/18/2019	Barium	3.1	3.5	0.89
Rocknest Lake	3/18/2019	Lithium	1.1	1.1	1.00
Rocknest Lake	3/18/2019	Nickel	0.8	0.8	1.00
Rocknest Lake	3/18/2019	Rubidium	1.6	1.6	1.00
Rocknest Lake	3/18/2019	Strontium	8.3	8.3	1.00
Starfish Lake	3/18/2019	Manganese	0.6	1.3	0.46
Starfish Lake	3/18/2019	Copper	1.0	1.2	0.83
Starfish Lake	3/18/2019	Aluminum	8.5	9.4	0.90
Starfish Lake	3/18/2019	Barium	1.9	1.9	1.00
Starfish Lake	3/18/2019	Lithium	1.8	1.8	1.00
Starfish Lake	3/18/2019	Nickel	0.6	0.6	1.00
Starfish Lake	3/18/2019	Rubidium	2.0	2.0	1.00
Starfish Lake	3/18/2019	Strontium	8.4	8.4	1.00
Lockhart River ABOVE Outram Lakes	3/5/2019	Manganese	0.8	1.2	0.67
Lockhart River ABOVE Outram Lakes	3/5/2019	Barium	2.6	2.8	0.93
Lockhart River ABOVE Outram Lakes	3/5/2019	Rubidium	1.6	1.6	1.00
Lockhart River ABOVE Outram Lakes	3/5/2019	Strontium	10.0	10.0	1.00
Lockhart River ABOVE Outram Lakes	3/5/2019	Lithium	1.8	1.7	1.06
Lockhart River ABOVE Outram Lakes	3/5/2019	Nickel	1.2	1.1	1.09
Lockhart River ABOVE Outram Lakes	9/27/2018	Manganese	0.5	6.0	0.08
Lockhart River ABOVE Outram Lakes	9/27/2018	Barium	1.8	2.2	0.82
Lockhart River ABOVE Outram Lakes	9/27/2018	Nickel	0.9	1.0	0.90
Lockhart River ABOVE Outram Lakes	9/27/2018	Lithium	1.4	1.4	1.00
Lockhart River ABOVE Outram Lakes	9/27/2018	Rubidium	1.4	1.4	1.00
Lockhart River ABOVE Outram Lakes	9/27/2018	Strontium	8.8	8.8	1.00
Clinton-Colden Outlet	9/5/2018	Manganese	0.6	1.4	0.43

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Clinton-Colden Outlet	9/5/2018	Aluminum	3.9	5.4	0.72
Clinton-Colden Outlet	9/5/2018	Strontium	6.8	6.9	0.99
Clinton-Colden Outlet	9/5/2018	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	9/5/2018	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	9/5/2018	Barium	2.0	1.9	1.05
Clinton-Colden Outlet	9/5/2018	Nickel	0.7	0.6	1.17
Daring Lake	9/5/2018	Aluminum	6.6	7.5	0.88
Daring Lake	9/5/2018	Rubidium	1.2	1.3	0.92
Daring Lake	9/5/2018	Strontium	5.9	6.0	0.98
Daring Lake	9/5/2018	Barium	1.3	1.1	1.18
Desteffany Lake	9/5/2018	Aluminum	7.6	15.1	0.50
Desteffany Lake	9/5/2018	Nickel	0.6	0.7	0.86
Desteffany Lake	9/5/2018	Strontium	10.4	10.6	0.98
Desteffany Lake	9/5/2018	Barium	1.8	1.8	1.00
Desteffany Lake	9/5/2018	Lithium	1.4	1.4	1.00
Desteffany Lake	9/5/2018	Rubidium	1.7	1.7	1.00
King Lake	9/5/2018	Aluminum	3.2	8.4	0.38
King Lake	9/5/2018	Aluminum	3.3	7.2	0.46
King Lake	9/5/2018	Strontium	16.0	16.4	0.98
King Lake	9/5/2018	Barium	3.1	3.1	1.00
King Lake	9/5/2018	Lithium	1.4	1.4	1.00
King Lake	9/5/2018	Rubidium	1.4	1.4	1.00
King Lake	9/5/2018	Strontium	16.8	16.4	1.02
King Lake	9/5/2018	Barium	3.3	3.1	1.06
King Lake	9/5/2018	Lithium	1.5	1.4	1.07
King Lake	9/5/2018	Rubidium	1.5	1.4	1.07
Lac de Gras Outlet	9/5/2018	Nickel	0.9	1.0	0.90
Lac de Gras Outlet	9/5/2018	Lithium	1.5	1.6	0.94
Lac de Gras Outlet	9/5/2018	Strontium	13.9	14.0	0.99
Lac de Gras Outlet	9/5/2018	Barium	2.1	2.1	1.00
Lac de Gras Outlet	9/5/2018	Lithium	1.5	1.5	1.00
Lac de Gras Outlet	9/5/2018	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	9/5/2018	Rubidium	1.8	1.8	1.00
Lac de Gras Outlet	9/5/2018	Strontium	14.0	14.0	1.00
Lac de Gras Outlet	9/5/2018	Rubidium	1.8	1.7	1.06
Lac de Gras Outlet	9/5/2018	Barium	2.2	2.0	1.10
Lac de Gras Outlet	9/5/2018	Aluminum	4.0	3.1	1.29
Lake of the Enemy	9/5/2018	Nickel	0.5	0.5	1.00
Lake of the Enemy	9/5/2018	Strontium	7.7	7.5	1.03
Lake of the Enemy	9/5/2018	Barium	1.8	1.7	1.06
Lake of the Enemy	9/5/2018	Lithium	1.5	1.4	1.07
Lake of the Enemy	9/5/2018	Rubidium	1.1	1.0	1.10
MacKay Lake	9/5/2018	Nickel	0.7	0.8	0.88
MacKay Lake	9/5/2018	Strontium	8.4	8.6	0.98
MacKay Lake	9/5/2018	Barium	1.8	1.8	1.00
MacKay Lake	9/5/2018	Lithium	1.3	1.3	1.00
MacKay Lake	9/5/2018	Rubidium	1.3	1.3	1.00
Point Lake	9/5/2018	Barium	2.0	2.1	0.95
Point Lake	9/5/2018	Lithium	1.0	1.0	1.00
Point Lake	9/5/2018	Nickel	0.8	0.8	1.00
Point Lake	9/5/2018	Rubidium	1.3	1.3	1.00
Point Lake	9/5/2018	Strontium	6.9	6.8	1.01
Point Lake	9/5/2018	Aluminum	14.7	11.4	1.29
Rocknest Lake	9/5/2018	Aluminum	12.9	17.2	0.75
Rocknest Lake	9/5/2018	Barium	2.7	2.7	1.00
Rocknest Lake	9/5/2018	Nickel	0.6	0.6	1.00
Rocknest Lake	9/5/2018	Rubidium	1.3	1.3	1.00
Rocknest Lake	9/5/2018	Strontium	7.4	7.3	1.01
Starfish Lake	9/5/2018	Manganese	0.6	5.7	0.11
Starfish Lake	9/5/2018	Aluminum	7.3	13.8	0.53
Starfish Lake	9/5/2018	Barium	1.6	1.7	0.94
Starfish Lake	9/5/2018	Strontium	6.4	6.6	0.97
Starfish Lake	9/5/2018	Lithium	1.5	1.5	1.00
Starfish Lake	9/5/2018	Rubidium	1.5	1.5	1.00
Clinton-Colden Outlet	8/2/2018	Manganese	0.7	1.3	0.54
Clinton-Colden Outlet	8/2/2018	Aluminum	4.7	5.7	0.82
Clinton-Colden Outlet	8/2/2018	Rubidium	1.2	1.3	0.92
Clinton-Colden Outlet	8/2/2018	Barium	1.9	2.0	0.95
Clinton-Colden Outlet	8/2/2018	Strontium	6.6	6.8	0.97
Clinton-Colden Outlet	8/2/2018	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	8/2/2018	Nickel	0.7	0.6	1.17
Daring Lake	8/2/2018	Manganese	0.5	1.6	0.31
Daring Lake	8/2/2018	Manganese	0.6	1.7	0.35
Daring Lake	8/2/2018	Aluminum	3.0	6.8	0.44

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	8/2/2018	Barium	1.2	1.2	1.00
Daring Lake	8/2/2018	Barium	1.2	1.2	1.00
Daring Lake	8/2/2018	Rubidium	1.3	1.3	1.00
Daring Lake	8/2/2018	Strontium	6.0	5.8	1.03
Daring Lake	8/2/2018	Strontium	6.2	5.8	1.07
Daring Lake	8/2/2018	Rubidium	1.4	1.3	1.08
Desteffany Lake	8/2/2018	Aluminum	7.0	15.9	0.44
Desteffany Lake	8/2/2018	Lithium	1.3	1.4	0.93
Desteffany Lake	8/2/2018	Barium	1.7	1.8	0.94
Desteffany Lake	8/2/2018	Rubidium	1.7	1.8	0.94
Desteffany Lake	8/2/2018	Strontium	10.2	10.5	0.97
Desteffany Lake	8/2/2018	Nickel	0.7	0.7	1.00
King Lake	8/2/2018	Aluminum	4.2	7.2	0.58
King Lake	8/2/2018	Rubidium	1.4	1.5	0.93
King Lake	8/2/2018	Barium	3.3	3.5	0.94
King Lake	8/2/2018	Strontium	15.6	16.0	0.98
King Lake	8/2/2018	Lithium	1.4	1.4	1.00
King Lake	8/2/2018	Nickel	0.5	0.5	1.00
Lac de Gras Outlet	8/2/2018	Manganese	0.7	2.5	0.28
Lac de Gras Outlet	8/2/2018	Nickel	0.9	1.0	0.90
Lac de Gras Outlet	8/2/2018	Rubidium	1.8	1.9	0.95
Lac de Gras Outlet	8/2/2018	Barium	2.1	2.2	0.95
Lac de Gras Outlet	8/2/2018	Strontium	13.8	14.2	0.97
Lac de Gras Outlet	8/2/2018	Lithium	1.5	1.5	1.00
Lake of the Enemy	8/2/2018	Manganese	0.7	1.4	0.50
Lake of the Enemy	8/2/2018	Manganese	0.7	1.3	0.54
Lake of the Enemy	8/2/2018	Strontium	7.6	7.8	0.97
Lake of the Enemy	8/2/2018	Barium	1.8	1.8	1.00
Lake of the Enemy	8/2/2018	Barium	1.8	1.8	1.00
Lake of the Enemy	8/2/2018	Lithium	1.4	1.4	1.00
Lake of the Enemy	8/2/2018	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/2/2018	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/2/2018	Rubidium	1.1	1.1	1.00
Lake of the Enemy	8/2/2018	Rubidium	1.1	1.1	1.00
Lake of the Enemy	8/2/2018	Strontium	7.8	7.7	1.01
Lake of the Enemy	8/2/2018	Lithium	1.5	1.4	1.07
MacKay Lake	8/2/2018	Aluminum	4.2	6.2	0.68
MacKay Lake	8/2/2018	Lithium	1.3	1.3	1.00
MacKay Lake	8/2/2018	Nickel	0.7	0.7	1.00
MacKay Lake	8/2/2018	Rubidium	1.3	1.3	1.00
MacKay Lake	8/2/2018	Strontium	8.6	8.5	1.01
MacKay Lake	8/2/2018	Barium	2.1	2.0	1.05
Point Lake	8/2/2018	Aluminum	9.1	12.8	0.71
Point Lake	8/2/2018	Nickel	0.7	0.8	0.88
Point Lake	8/2/2018	Barium	2.1	2.1	1.00
Point Lake	8/2/2018	Lithium	1.0	1.0	1.00
Point Lake	8/2/2018	Strontium	6.7	6.7	1.00
Point Lake	8/2/2018	Rubidium	1.4	1.3	1.08
Rocknest Lake	8/2/2018	Manganese	0.6	1.6	0.38
Rocknest Lake	8/2/2018	Aluminum	9.4	12.8	0.73
Rocknest Lake	8/2/2018	Barium	2.9	2.9	1.00
Rocknest Lake	8/2/2018	Nickel	0.6	0.6	1.00
Rocknest Lake	8/2/2018	Strontium	7.1	7.1	1.00
Rocknest Lake	8/2/2018	Rubidium	1.4	1.3	1.08
Starfish Lake	8/2/2018	Aluminum	10.7	16.4	0.65
Starfish Lake	8/2/2018	Nickel	0.5	0.6	0.83
Starfish Lake	8/2/2018	Rubidium	1.5	1.6	0.94
Starfish Lake	8/2/2018	Strontium	6.5	6.6	0.98
Starfish Lake	8/2/2018	Barium	1.8	1.8	1.00
Starfish Lake	8/2/2018	Lithium	1.4	1.4	1.00
Clinton-Colden Outlet	7/11/2018	Manganese	1.1	1.6	0.69
Clinton-Colden Outlet	7/11/2018	Manganese	1.1	1.6	0.69
Clinton-Colden Outlet	7/11/2018	Aluminum	5.3	6.7	0.79
Clinton-Colden Outlet	7/11/2018	Lithium	1.2	1.2	1.00
Clinton-Colden Outlet	7/11/2018	Lithium	1.2	1.2	1.00
Clinton-Colden Outlet	7/11/2018	Nickel	0.7	0.7	1.00
Clinton-Colden Outlet	7/11/2018	Nickel	0.7	0.7	1.00
Clinton-Colden Outlet	7/11/2018	Rubidium	1.1	1.1	1.00
Clinton-Colden Outlet	7/11/2018	Strontium	6.1	6.1	1.00
Clinton-Colden Outlet	7/11/2018	Strontium	6.2	6.1	1.02
Clinton-Colden Outlet	7/11/2018	Barium	2.0	1.9	1.05
Clinton-Colden Outlet	7/11/2018	Barium	2.0	1.9	1.05
Clinton-Colden Outlet	7/11/2018	Rubidium	1.2	1.1	1.09
Clinton-Colden Outlet	7/11/2018	Aluminum	7.4	6.4	1.16

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	7/11/2018	Manganese	1.1	2.2	0.50
Daring Lake	7/11/2018	Aluminum	4.7	9.1	0.52
Daring Lake	7/11/2018	Barium	1.2	1.3	0.92
Daring Lake	7/11/2018	Rubidium	1.2	1.3	0.92
Daring Lake	7/11/2018	Strontium	5.5	5.5	1.00
Desteffany Lake	7/11/2018	Manganese	1.7	5.3	0.32
Desteffany Lake	7/11/2018	Aluminum	11.9	20.2	0.59
Desteffany Lake	7/11/2018	Nickel	0.7	0.8	0.88
Desteffany Lake	7/11/2018	Barium	1.9	2.0	0.95
Desteffany Lake	7/11/2018	Strontium	9.3	9.4	0.99
Desteffany Lake	7/11/2018	Lithium	1.3	1.3	1.00
Desteffany Lake	7/11/2018	Rubidium	1.7	1.7	1.00
King Lake	7/11/2018	Manganese	1.1	5.2	0.21
King Lake	7/11/2018	Aluminum	4.7	7.7	0.61
King Lake	7/11/2018	Lithium	1.3	1.3	1.00
King Lake	7/11/2018	Nickel	0.5	0.5	1.00
King Lake	7/11/2018	Rubidium	1.4	1.4	1.00
King Lake	7/11/2018	Strontium	13.4	13.3	1.01
King Lake	7/11/2018	Barium	3.3	3.2	1.03
Lac de Gras Outlet	7/11/2018	Manganese	1.6	2.4	0.67
Lac de Gras Outlet	7/11/2018	Aluminum	3.1	4.6	0.67
Lac de Gras Outlet	7/11/2018	Lithium	1.4	1.4	1.00
Lac de Gras Outlet	7/11/2018	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	7/11/2018	Rubidium	1.7	1.7	1.00
Lac de Gras Outlet	7/11/2018	Strontium	12.5	12.5	1.00
Lac de Gras Outlet	7/11/2018	Barium	2.1	2.0	1.05
Lake of the Enemy	7/11/2018	Manganese	0.9	1.3	0.69
Lake of the Enemy	7/11/2018	Barium	1.8	1.8	1.00
Lake of the Enemy	7/11/2018	Lithium	1.3	1.3	1.00
Lake of the Enemy	7/11/2018	Nickel	0.6	0.6	1.00
Lake of the Enemy	7/11/2018	Strontium	7.3	7.3	1.00
Lake of the Enemy	7/11/2018	Rubidium	1.1	1.0	1.10
MacKay Lake	7/11/2018	Manganese	0.9	2.3	0.39
MacKay Lake	7/11/2018	Aluminum	4.5	6.1	0.74
MacKay Lake	7/11/2018	Barium	2.1	2.1	1.00
MacKay Lake	7/11/2018	Lithium	1.2	1.2	1.00
MacKay Lake	7/11/2018	Nickel	0.8	0.8	1.00
MacKay Lake	7/11/2018	Rubidium	1.3	1.3	1.00
MacKay Lake	7/11/2018	Strontium	8.3	8.3	1.00
Point Lake	7/11/2018	Manganese	0.5	0.7	0.71
Point Lake	7/11/2018	Manganese	0.5	0.7	0.71
Point Lake	7/11/2018	Aluminum	9.5	11.8	0.81
Point Lake	7/11/2018	Aluminum	9.3	11.4	0.82
Point Lake	7/11/2018	Nickel	0.7	0.8	0.88
Point Lake	7/11/2018	Strontium	6.4	6.5	0.98
Point Lake	7/11/2018	Barium	2.1	2.1	1.00
Point Lake	7/11/2018	Nickel	0.7	0.7	1.00
Point Lake	7/11/2018	Rubidium	1.4	1.4	1.00
Point Lake	7/11/2018	Strontium	6.4	6.4	1.00
Point Lake	7/11/2018	Barium	2.1	2.0	1.05
Point Lake	7/11/2018	Rubidium	1.4	1.3	1.08
Rocknest Lake	7/11/2018	Manganese	0.5	1.9	0.26
Rocknest Lake	7/11/2018	Aluminum	11.2	14.8	0.76
Rocknest Lake	7/11/2018	Strontium	7.0	7.1	0.99
Rocknest Lake	7/11/2018	Barium	3.3	3.3	1.00
Rocknest Lake	7/11/2018	Nickel	0.6	0.6	1.00
Rocknest Lake	7/11/2018	Rubidium	1.3	1.3	1.00
Starfish Lake	7/11/2018	Manganese	10.5	15.6	0.67
Starfish Lake	7/11/2018	Aluminum	17.5	20.3	0.86
Starfish Lake	7/11/2018	Barium	2.0	2.0	1.00
Starfish Lake	7/11/2018	Lithium	1.3	1.3	1.00
Starfish Lake	7/11/2018	Nickel	0.7	0.7	1.00
Starfish Lake	7/11/2018	Strontium	6.4	6.3	1.02
Starfish Lake	7/11/2018	Rubidium	1.5	1.4	1.07
Lockhart River ABOVE Outram Lakes	4/23/2018	Aluminum	3.8	8.3	0.46
Lockhart River ABOVE Outram Lakes	4/23/2018	Manganese	1.5	2.1	0.71
Lockhart River ABOVE Outram Lakes	4/23/2018	Barium	3.2	4.0	0.80
Lockhart River ABOVE Outram Lakes	4/23/2018	Copper	1.9	2.2	0.86
Lockhart River ABOVE Outram Lakes	4/23/2018	Zinc	3.9	4.5	0.87
Lockhart River ABOVE Outram Lakes	4/23/2018	Nickel	1.5	1.6	0.94
Lockhart River ABOVE Outram Lakes	4/23/2018	Rubidium	1.9	1.9	1.00
Lockhart River ABOVE Outram Lakes	4/23/2018	Strontium	11.9	11.9	1.00
Lockhart River ABOVE Outram Lakes	4/23/2018	Lithium	2.1	2.0	1.05
Daring Lake	3/13/2018	Manganese	0.8	1.2	0.67

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	3/13/2018	Barium	2.5	2.6	0.96
Daring Lake	3/13/2018	Lithium	1.5	1.5	1.00
Daring Lake	3/13/2018	Rubidium	2.1	2.1	1.00
Daring Lake	3/13/2018	Strontium	9.8	9.8	1.00
Desteffany Lake	3/13/2018	Manganese	0.6	1.2	0.50
Desteffany Lake	3/13/2018	Manganese	0.6	0.9	0.67
Desteffany Lake	3/13/2018	Aluminum	3.5	5.0	0.70
Desteffany Lake	3/13/2018	Aluminum	3.2	4.2	0.76
Desteffany Lake	3/13/2018	Barium	3.0	3.5	0.86
Desteffany Lake	3/13/2018	Nickel	1.0	1.1	0.91
Desteffany Lake	3/13/2018	Barium	2.8	2.9	0.97
Desteffany Lake	3/13/2018	Strontium	15.7	15.8	0.99
Desteffany Lake	3/13/2018	Lithium	1.9	1.9	1.00
Desteffany Lake	3/13/2018	Nickel	1.0	1.0	1.00
Desteffany Lake	3/13/2018	Rubidium	2.2	2.2	1.00
Desteffany Lake	3/13/2018	Rubidium	2.2	2.2	1.00
Desteffany Lake	3/13/2018	Strontium	15.7	15.7	1.00
Desteffany Lake	3/13/2018	Lithium	2.0	1.9	1.05
King Lake	3/13/2018	Manganese	0.5	1.6	0.31
King Lake	3/13/2018	Barium	5.4	5.6	0.96
King Lake	3/13/2018	Lithium	2.2	2.2	1.00
King Lake	3/13/2018	Nickel	0.6	0.6	1.00
King Lake	3/13/2018	Strontium	23.6	23.4	1.01
King Lake	3/13/2018	Rubidium	2.3	2.2	1.05
Lac de Gras Outlet	3/13/2018	Nickel	1.2	1.3	0.92
Lac de Gras Outlet	3/13/2018	Barium	3.4	3.6	0.94
Lac de Gras Outlet	3/13/2018	Lithium	2.3	2.3	1.00
Lac de Gras Outlet	3/13/2018	Rubidium	2.5	2.5	1.00
Lac de Gras Outlet	3/13/2018	Strontium	19.4	19.3	1.01
Lake of the Enemy	3/13/2018	Nickel	0.6	0.6	1.00
Lake of the Enemy	3/13/2018	Rubidium	1.3	1.3	1.00
Lake of the Enemy	3/13/2018	Strontium	9.3	9.3	1.00
Lake of the Enemy	3/13/2018	Barium	2.4	2.3	1.04
Lake of the Enemy	3/13/2018	Lithium	1.9	1.8	1.06
MacKay Lake	3/13/2018	Barium	3.4	3.9	0.87
MacKay Lake	3/13/2018	Lithium	2.0	2.1	0.95
MacKay Lake	3/13/2018	Strontium	13.6	13.7	0.99
MacKay Lake	3/13/2018	Lithium	2.1	2.1	1.00
MacKay Lake	3/13/2018	Nickel	0.8	0.8	1.00
MacKay Lake	3/13/2018	Nickel	0.8	0.8	1.00
MacKay Lake	3/13/2018	Rubidium	1.9	1.9	1.00
MacKay Lake	3/13/2018	Rubidium	1.9	1.9	1.00
MacKay Lake	3/13/2018	Strontium	13.4	13.4	1.00
MacKay Lake	3/13/2018	Barium	4.0	3.8	1.05
Point Lake	3/13/2018	Zinc	2.6	2.9	0.90
Point Lake	3/13/2018	Aluminum	13.5	14.9	0.91
Point Lake	3/13/2018	Barium	3.8	3.9	0.97
Point Lake	3/13/2018	Copper	1.3	1.3	1.00
Point Lake	3/13/2018	Lithium	1.7	1.7	1.00
Point Lake	3/13/2018	Rubidium	2.3	2.3	1.00
Point Lake	3/13/2018	Strontium	11.2	11.2	1.00
Point Lake	3/13/2018	Nickel	1.3	1.2	1.08
Rocknest Lake	3/13/2018	Manganese	0.5	0.8	0.63
Rocknest Lake	3/13/2018	Aluminum	7.8	9.6	0.81
Rocknest Lake	3/13/2018	Nickel	0.7	0.8	0.88
Rocknest Lake	3/13/2018	Barium	2.7	2.7	1.00
Rocknest Lake	3/13/2018	Lithium	1.1	1.1	1.00
Rocknest Lake	3/13/2018	Rubidium	1.5	1.5	1.00
Rocknest Lake	3/13/2018	Strontium	7.8	7.8	1.00
Starfish Lake	3/13/2018	Manganese	0.9	1.8	0.50
Starfish Lake	3/13/2018	Aluminum	8.7	11.0	0.79
Starfish Lake	3/13/2018	Barium	2.7	3.0	0.90
Starfish Lake	3/13/2018	Copper	1.1	1.2	0.92
Starfish Lake	3/13/2018	Lithium	2.1	2.1	1.00
Starfish Lake	3/13/2018	Nickel	0.7	0.7	1.00
Starfish Lake	3/13/2018	Strontium	9.1	9.1	1.00
Starfish Lake	3/13/2018	Rubidium	2.2	2.1	1.05
Lockhart River ABOVE Outram Lakes	10/5/2017	Manganese	0.8	3.2	0.25
Lockhart River ABOVE Outram Lakes	10/5/2017	Barium	1.7	1.7	1.00
Lockhart River ABOVE Outram Lakes	10/5/2017	Lithium	1.1	1.1	1.00
Lockhart River ABOVE Outram Lakes	10/5/2017	Rubidium	1.2	1.2	1.00
Lockhart River ABOVE Outram Lakes	10/5/2017	Strontium	8.0	8.0	1.00
Lockhart River ABOVE Outram Lakes	10/5/2017	Nickel	1.0	0.9	1.11
Clinton-Colden Outlet	9/6/2017	Aluminum	4.0	6.2	0.65

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Clinton-Colden Outlet	9/6/2017	Lithium	1.3	1.4	0.93
Clinton-Colden Outlet	9/6/2017	Strontium	6.9	7.1	0.97
Clinton-Colden Outlet	9/6/2017	Barium	2.1	2.1	1.00
Clinton-Colden Outlet	9/6/2017	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	9/6/2017	Rubidium	1.2	1.2	1.00
Daring Lake	9/6/2017	Manganese	0.7	2.0	0.35
Daring Lake	9/6/2017	Strontium	5.9	6.0	0.98
Daring Lake	9/6/2017	Barium	1.2	1.2	1.00
Daring Lake	9/6/2017	Rubidium	1.3	1.3	1.00
Desteffany Lake	9/6/2017	Aluminum	4.6	8.8	0.52
Desteffany Lake	9/6/2017	Manganese	2.0	3.4	0.59
Desteffany Lake	9/6/2017	Lithium	1.4	1.5	0.93
Desteffany Lake	9/6/2017	Barium	1.7	1.8	0.94
Desteffany Lake	9/6/2017	Strontium	10.1	10.2	0.99
Desteffany Lake	9/6/2017	Nickel	0.6	0.6	1.00
Desteffany Lake	9/6/2017	Rubidium	1.7	1.7	1.00
King Lake	9/6/2017	Aluminum	3.3	7.7	0.43
King Lake	9/6/2017	Barium	3.1	3.3	0.94
King Lake	9/6/2017	Strontium	15.1	15.4	0.98
King Lake	9/6/2017	Rubidium	1.5	1.5	1.00
King Lake	9/6/2017	Lithium	1.5	1.4	1.07
Lac de Gras Outlet	9/6/2017	Nickel	0.8	1.0	0.80
Lac de Gras Outlet	9/6/2017	Strontium	14.0	16.0	0.88
Lac de Gras Outlet	9/6/2017	Barium	2.1	2.4	0.88
Lac de Gras Outlet	9/6/2017	Lithium	1.6	1.8	0.89
Lac de Gras Outlet	9/6/2017	Rubidium	1.9	2.1	0.90
Lake of the Enemy	9/6/2017	Barium	1.6	1.7	0.94
Lake of the Enemy	9/6/2017	Strontium	7.7	8.1	0.95
Lake of the Enemy	9/6/2017	Strontium	7.6	7.7	0.99
Lake of the Enemy	9/6/2017	Barium	1.7	1.7	1.00
Lake of the Enemy	9/6/2017	Lithium	1.5	1.5	1.00
Lake of the Enemy	9/6/2017	Lithium	1.5	1.5	1.00
Lake of the Enemy	9/6/2017	Nickel	0.5	0.5	1.00
Lake of the Enemy	9/6/2017	Rubidium	1.1	1.1	1.00
Lake of the Enemy	9/6/2017	Rubidium	1.1	1.1	1.00
MacKay Lake	9/6/2017	Barium	2.0	2.0	1.00
MacKay Lake	9/6/2017	Lithium	1.3	1.3	1.00
MacKay Lake	9/6/2017	Nickel	0.5	0.5	1.00
MacKay Lake	9/6/2017	Rubidium	1.3	1.3	1.00
MacKay Lake	9/6/2017	Strontium	8.8	8.8	1.00
Point Lake	9/6/2017	Aluminum	7.6	11.1	0.68
Point Lake	9/6/2017	Barium	2.0	2.0	1.00
Point Lake	9/6/2017	Nickel	0.7	0.7	1.00
Point Lake	9/6/2017	Rubidium	1.4	1.4	1.00
Point Lake	9/6/2017	Strontium	6.8	6.8	1.00
Point Lake	9/6/2017	Lithium	1.1	1.0	1.10
Rocknest Lake	9/6/2017	Manganese	0.9	2.0	0.45
Rocknest Lake	9/6/2017	Manganese	0.9	1.9	0.47
Rocknest Lake	9/6/2017	Aluminum	6.8	10.4	0.65
Rocknest Lake	9/6/2017	Aluminum	7.2	10.5	0.69
Rocknest Lake	9/6/2017	Barium	2.8	2.9	0.97
Rocknest Lake	9/6/2017	Strontium	7.4	7.6	0.97
Rocknest Lake	9/6/2017	Strontium	7.2	7.3	0.99
Rocknest Lake	9/6/2017	Barium	2.7	2.7	1.00
Rocknest Lake	9/6/2017	Lithium	1.0	1.0	1.00
Rocknest Lake	9/6/2017	Lithium	1.0	1.0	1.00
Rocknest Lake	9/6/2017	Nickel	0.6	0.6	1.00
Rocknest Lake	9/6/2017	Nickel	0.6	0.6	1.00
Rocknest Lake	9/6/2017	Rubidium	1.3	1.3	1.00
Rocknest Lake	9/6/2017	Rubidium	1.4	1.4	1.00
Starfish Lake	9/6/2017	Manganese	0.5	7.1	0.07
Starfish Lake	9/6/2017	Aluminum	6.2	12.1	0.51
Starfish Lake	9/6/2017	Lithium	1.4	1.5	0.93
Starfish Lake	9/6/2017	Barium	1.7	1.8	0.94
Starfish Lake	9/6/2017	Rubidium	1.5	1.5	1.00
Starfish Lake	9/6/2017	Strontium	6.4	6.4	1.00
Lockhart River ABOVE Outram Lakes	8/16/2017	Manganese	2.6	7.0	0.37
Lockhart River ABOVE Outram Lakes	8/16/2017	Aluminum	5.3	9.9	0.54
Lockhart River ABOVE Outram Lakes	8/16/2017	Barium	1.7	1.8	0.94
Lockhart River ABOVE Outram Lakes	8/16/2017	Strontium	8.2	8.3	0.99
Lockhart River ABOVE Outram Lakes	8/16/2017	Lithium	1.3	1.3	1.00
Lockhart River ABOVE Outram Lakes	8/16/2017	Nickel	0.9	0.9	1.00
Lockhart River ABOVE Outram Lakes	8/16/2017	Rubidium	1.3	1.3	1.00
Clinton-Colden Outlet	8/9/2017	Manganese	0.5	1.5	0.33

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Clinton-Colden Outlet	8/9/2017	Manganese	0.5	1.5	0.33
Clinton-Colden Outlet	8/9/2017	Aluminum	5.6	6.4	0.88
Clinton-Colden Outlet	8/9/2017	Lithium	1.3	1.4	0.93
Clinton-Colden Outlet	8/9/2017	Barium	2.0	2.1	0.95
Clinton-Colden Outlet	8/9/2017	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	8/9/2017	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	8/9/2017	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	8/9/2017	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	8/9/2017	Rubidium	1.2	1.2	1.00
Clinton-Colden Outlet	8/9/2017	Strontium	6.9	6.9	1.00
Clinton-Colden Outlet	8/9/2017	Strontium	7.0	7.0	1.00
Clinton-Colden Outlet	8/9/2017	Aluminum	6.8	6.7	1.01
Clinton-Colden Outlet	8/9/2017	Barium	2.1	2.0	1.05
Daring Lake	8/9/2017	Manganese	0.5	1.6	0.31
Daring Lake	8/9/2017	Manganese	0.5	1.6	0.31
Daring Lake	8/9/2017	Rubidium	1.2	1.3	0.92
Daring Lake	8/9/2017	Aluminum	6.8	7.3	0.93
Daring Lake	8/9/2017	Aluminum	7.1	7.4	0.96
Daring Lake	8/9/2017	Strontium	5.8	6.0	0.97
Daring Lake	8/9/2017	Strontium	6.0	6.2	0.97
Daring Lake	8/9/2017	Barium	1.3	1.3	1.00
Daring Lake	8/9/2017	Barium	1.2	1.2	1.00
Daring Lake	8/9/2017	Rubidium	1.3	1.3	1.00
Desteffany Lake	8/9/2017	Aluminum	10.8	12.0	0.90
Desteffany Lake	8/9/2017	Barium	1.8	1.9	0.95
Desteffany Lake	8/9/2017	Lithium	1.3	1.3	1.00
Desteffany Lake	8/9/2017	Nickel	0.7	0.7	1.00
Desteffany Lake	8/9/2017	Rubidium	1.7	1.7	1.00
Desteffany Lake	8/9/2017	Strontium	10.1	10.1	1.00
King Lake	8/9/2017	Aluminum	8.2	8.7	0.94
King Lake	8/9/2017	Barium	3.2	3.2	1.00
King Lake	8/9/2017	Lithium	1.4	1.4	1.00
King Lake	8/9/2017	Rubidium	1.4	1.4	1.00
King Lake	8/9/2017	Strontium	14.7	14.5	1.01
Lac de Gras Outlet	8/9/2017	Manganese	0.7	2.6	0.27
Lac de Gras Outlet	8/9/2017	Aluminum	3.3	3.7	0.89
Lac de Gras Outlet	8/9/2017	Lithium	1.5	1.6	0.94
Lac de Gras Outlet	8/9/2017	Strontium	13.5	13.7	0.99
Lac de Gras Outlet	8/9/2017	Barium	2.1	2.1	1.00
Lac de Gras Outlet	8/9/2017	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	8/9/2017	Rubidium	1.8	1.8	1.00
Lake of the Enemy	8/9/2017	Barium	1.7	1.8	0.94
Lake of the Enemy	8/9/2017	Lithium	1.4	1.4	1.00
Lake of the Enemy	8/9/2017	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/9/2017	Rubidium	1.1	1.1	1.00
Lake of the Enemy	8/9/2017	Strontium	7.7	7.7	1.00
MacKay Lake	8/9/2017	Aluminum	5.6	6.2	0.90
MacKay Lake	8/9/2017	Rubidium	1.2	1.3	0.92
MacKay Lake	8/9/2017	Barium	2.0	2.0	1.00
MacKay Lake	8/9/2017	Lithium	1.2	1.2	1.00
MacKay Lake	8/9/2017	Strontium	8.7	8.7	1.00
Point Lake	8/9/2017	Nickel	0.8	0.8	1.00
Point Lake	8/9/2017	Rubidium	1.4	1.4	1.00
Point Lake	8/9/2017	Strontium	6.9	6.8	1.01
Point Lake	8/9/2017	Aluminum	10.8	10.5	1.03
Point Lake	8/9/2017	Barium	2.2	2.1	1.05
Rocknest Lake	8/9/2017	Aluminum	10.3	12.9	0.80
Rocknest Lake	8/9/2017	Nickel	0.6	0.6	1.00
Rocknest Lake	8/9/2017	Rubidium	1.4	1.4	1.00
Rocknest Lake	8/9/2017	Strontium	7.4	7.2	1.03
Rocknest Lake	8/9/2017	Barium	2.8	2.7	1.04
Starfish Lake	8/9/2017	Aluminum	12.9	16.2	0.80
Starfish Lake	8/9/2017	Lithium	1.4	1.5	0.93
Starfish Lake	8/9/2017	Barium	1.8	1.9	0.95
Starfish Lake	8/9/2017	Strontium	6.4	6.6	0.97
Starfish Lake	8/9/2017	Nickel	0.5	0.5	1.00
Starfish Lake	8/9/2017	Rubidium	1.5	1.5	1.00
Clinton-Colden Outlet	3/23/2017	Aluminum	5.4	6.3	0.86
Clinton-Colden Outlet	3/23/2017	Nickel	0.8	0.9	0.89
Clinton-Colden Outlet	3/23/2017	Barium	2.5	2.7	0.93
Clinton-Colden Outlet	3/23/2017	Strontium	8.4	8.5	0.99
Clinton-Colden Outlet	3/23/2017	Lithium	1.5	1.5	1.00
Clinton-Colden Outlet	3/23/2017	Rubidium	1.4	1.4	1.00
Daring Lake	3/23/2017	Manganese	1.2	1.5	0.80

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	3/23/2017	Manganese	1.2	1.5	0.80
Daring Lake	3/23/2017	Lithium	1.3	1.4	0.93
Daring Lake	3/23/2017	Barium	2.0	2.1	0.95
Daring Lake	3/23/2017	Strontium	8.8	9.0	0.98
Daring Lake	3/23/2017	Barium	2.1	2.1	1.00
Daring Lake	3/23/2017	Lithium	1.3	1.3	1.00
Daring Lake	3/23/2017	Rubidium	1.8	1.8	1.00
Daring Lake	3/23/2017	Rubidium	1.8	1.8	1.00
Daring Lake	3/23/2017	Strontium	8.9	8.9	1.00
Desteffany Lake	3/23/2017	Aluminum	3.6	4.4	0.82
Desteffany Lake	3/23/2017	Strontium	14.9	15.5	0.96
Desteffany Lake	3/23/2017	Nickel	0.9	0.9	1.00
Desteffany Lake	3/23/2017	Rubidium	2.0	2.0	1.00
Desteffany Lake	3/23/2017	Lithium	1.8	1.7	1.06
Desteffany Lake	3/23/2017	Barium	2.9	2.7	1.07
Lac de Gras Outlet	3/23/2017	Barium	3.0	3.5	0.86
Lac de Gras Outlet	3/23/2017	Rubidium	2.3	2.4	0.96
Lac de Gras Outlet	3/23/2017	Strontium	17.6	18.1	0.97
Lac de Gras Outlet	3/23/2017	Nickel	1.2	1.2	1.00
Lac de Gras Outlet	3/23/2017	Lithium	2.0	1.9	1.05
MacKay Lake	3/23/2017	Manganese	0.5	1.2	0.42
MacKay Lake	3/23/2017	Aluminum	4.5	5.7	0.79
MacKay Lake	3/23/2017	Barium	3.4	3.5	0.97
MacKay Lake	3/23/2017	Nickel	1.2	1.2	1.00
MacKay Lake	3/23/2017	Rubidium	2.1	2.1	1.00
MacKay Lake	3/23/2017	Strontium	14.5	14.3	1.01
MacKay Lake	3/23/2017	Lithium	2.1	2.0	1.05
Point Lake	3/23/2017	Aluminum	14.1	15.4	0.92
Point Lake	3/23/2017	Nickel	1.3	1.4	0.93
Point Lake	3/23/2017	Barium	3.9	4.1	0.95
Point Lake	3/23/2017	Strontium	12.4	12.5	0.99
Point Lake	3/23/2017	Lithium	1.8	1.8	1.00
Point Lake	3/23/2017	Rubidium	2.5	2.4	1.04
Point Lake	3/23/2017	Copper	1.5	1.2	1.25
Rocknest Lake	3/23/2017	Manganese	0.5	0.6	0.83
Rocknest Lake	3/23/2017	Aluminum	8.4	9.6	0.88
Rocknest Lake	3/23/2017	Barium	2.4	2.5	0.96
Rocknest Lake	3/23/2017	Strontium	7.3	7.5	0.97
Rocknest Lake	3/23/2017	Lithium	1.0	1.0	1.00
Rocknest Lake	3/23/2017	Nickel	0.8	0.8	1.00
Rocknest Lake	3/23/2017	Rubidium	1.4	1.4	1.00
Starfish Lake	3/23/2017	Manganese	0.7	2.1	0.33
Starfish Lake	3/23/2017	Aluminum	11.5	13.4	0.86
Starfish Lake	3/23/2017	Copper	1.0	1.1	0.91
Starfish Lake	3/23/2017	Barium	2.5	2.6	0.96
Starfish Lake	3/23/2017	Strontium	9.2	9.4	0.98
Starfish Lake	3/23/2017	Lithium	1.9	1.9	1.00
Starfish Lake	3/23/2017	Nickel	0.7	0.7	1.00
Starfish Lake	3/23/2017	Rubidium	2.1	2.1	1.00
Lockhart River ABOVE Outram Lakes	3/8/2017	Manganese	0.7	1.4	0.50
Lockhart River ABOVE Outram Lakes	3/8/2017	Aluminum	4.3	8.3	0.52
Lockhart River ABOVE Outram Lakes	3/8/2017	Nickel	1.3	1.4	0.93
Lockhart River ABOVE Outram Lakes	3/8/2017	Lithium	1.5	1.6	0.94
Lockhart River ABOVE Outram Lakes	3/8/2017	Rubidium	1.6	1.7	0.94
Lockhart River ABOVE Outram Lakes	3/8/2017	Strontium	9.9	10.2	0.97
Lockhart River ABOVE Outram Lakes	3/8/2017	Copper	1.2	1.2	1.00
Lockhart River ABOVE Outram Lakes	3/8/2017	Barium	2.8	2.7	1.04
Coppermine River at outlet of Point Lake	9/22/2016	Manganese	0.6	1.1	0.55
Coppermine River at outlet of Point Lake	9/22/2016	Manganese	0.6	1.0	0.60
Coppermine River at outlet of Point Lake	9/22/2016	Aluminum	10.5	16.0	0.66
Coppermine River at outlet of Point Lake	9/22/2016	Aluminum	10.7	14.4	0.74
Coppermine River at outlet of Point Lake	9/22/2016	Nickel	0.7	0.8	0.88
Coppermine River at outlet of Point Lake	9/22/2016	Rubidium	1.2	1.3	0.92
Coppermine River at outlet of Point Lake	9/22/2016	Barium	2.1	2.2	0.95
Coppermine River at outlet of Point Lake	9/22/2016	Strontium	6.5	6.7	0.97
Coppermine River at outlet of Point Lake	9/22/2016	Strontium	6.5	6.6	0.98
Coppermine River at outlet of Point Lake	9/22/2016	Nickel	0.8	0.8	1.00
Coppermine River below Desteffany Lake	9/15/2016	Manganese	0.7	3.0	0.23
Coppermine River below Desteffany Lake	9/15/2016	Aluminum	6.2	13.1	0.47
Coppermine River below Desteffany Lake	9/15/2016	Barium	1.7	1.8	0.94
Coppermine River below Desteffany Lake	9/15/2016	Strontium	9.6	9.9	0.97
Coppermine River below Desteffany Lake	9/15/2016	Lithium	1.3	1.3	1.00
Coppermine River below Desteffany Lake	9/15/2016	Nickel	0.7	0.7	1.00
Coppermine River below Desteffany Lake	9/15/2016	Rubidium	1.6	1.6	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Clinton-Colden Outlet	9/7/2016	Aluminum	6.1	6.2	0.98
Clinton-Colden Outlet	9/7/2016	Lithium	1.2	1.2	1.00
Clinton-Colden Outlet	9/7/2016	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	9/7/2016	Rubidium	1.1	1.1	1.00
Clinton-Colden Outlet	9/7/2016	Strontium	6.7	6.4	1.05
Clinton-Colden Outlet	9/7/2016	Barium	2.1	2.0	1.05
Daring Lake	9/7/2016	Aluminum	3.0	6.6	0.45
Daring Lake	9/7/2016	Strontium	5.4	6.0	0.90
Daring Lake	9/7/2016	Barium	1.1	1.2	0.92
Daring Lake	9/7/2016	Barium	1.1	1.2	0.92
Daring Lake	9/7/2016	Rubidium	1.1	1.2	0.92
Daring Lake	9/7/2016	Strontium	6.3	5.9	1.07
Daring Lake	9/7/2016	Rubidium	1.4	1.2	1.17
Desteffany Lake	9/7/2016	Manganese	0.7	3.1	0.23
Desteffany Lake	9/7/2016	Aluminum	5.6	9.2	0.61
Desteffany Lake	9/7/2016	Barium	1.7	1.8	0.94
Desteffany Lake	9/7/2016	Strontium	9.9	10.0	0.99
Desteffany Lake	9/7/2016	Lithium	1.3	1.3	1.00
Desteffany Lake	9/7/2016	Nickel	0.7	0.7	1.00
Desteffany Lake	9/7/2016	Rubidium	1.7	1.6	1.06
King Lake	9/7/2016	Aluminum	4.1	9.0	0.46
King Lake	9/7/2016	Aluminum	4.0	8.2	0.49
King Lake	9/7/2016	Lithium	1.2	1.3	0.92
King Lake	9/7/2016	Rubidium	1.3	1.4	0.93
King Lake	9/7/2016	Barium	3.2	3.4	0.94
King Lake	9/7/2016	Strontium	14.1	14.5	0.97
King Lake	9/7/2016	Strontium	14.0	14.1	0.99
King Lake	9/7/2016	Barium	3.2	3.2	1.00
King Lake	9/7/2016	Lithium	1.3	1.3	1.00
King Lake	9/7/2016	Nickel	0.5	0.5	1.00
King Lake	9/7/2016	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	9/7/2016	Barium	2.0	2.0	1.00
Lac de Gras Outlet	9/7/2016	Lithium	1.3	1.3	1.00
Lac de Gras Outlet	9/7/2016	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	9/7/2016	Rubidium	1.7	1.7	1.00
Lac de Gras Outlet	9/7/2016	Strontium	12.6	12.5	1.01
Lake of the Enemy	9/7/2016	Lithium	1.3	1.3	1.00
Lake of the Enemy	9/7/2016	Rubidium	1.0	1.0	1.00
Lake of the Enemy	9/7/2016	Strontium	7.5	7.2	1.04
Lake of the Enemy	9/7/2016	Barium	1.7	1.6	1.06
MacKay Lake	9/7/2016	Aluminum	3.1	5.7	0.54
MacKay Lake	9/7/2016	Strontium	7.7	8.3	0.93
MacKay Lake	9/7/2016	Barium	1.8	1.9	0.95
MacKay Lake	9/7/2016	Lithium	1.1	1.1	1.00
MacKay Lake	9/7/2016	Rubidium	1.1	1.1	1.00
Point Lake	9/7/2016	Aluminum	8.0	9.9	0.81
Point Lake	9/7/2016	Barium	2.0	2.0	1.00
Point Lake	9/7/2016	Nickel	0.7	0.7	1.00
Point Lake	9/7/2016	Strontium	6.7	6.5	1.03
Point Lake	9/7/2016	Rubidium	1.4	1.3	1.08
Rocknest Lake	9/7/2016	Manganese	0.7	1.6	0.44
Rocknest Lake	9/7/2016	Aluminum	6.8	10.9	0.62
Rocknest Lake	9/7/2016	Strontium	6.6	6.7	0.99
Rocknest Lake	9/7/2016	Barium	2.4	2.4	1.00
Rocknest Lake	9/7/2016	Nickel	0.6	0.6	1.00
Rocknest Lake	9/7/2016	Rubidium	1.3	1.3	1.00
Starfish Lake	9/7/2016	Manganese	0.5	7.0	0.07
Starfish Lake	9/7/2016	Aluminum	8.2	13.2	0.62
Starfish Lake	9/7/2016	Strontium	6.2	6.3	0.98
Starfish Lake	9/7/2016	Barium	1.8	1.8	1.00
Starfish Lake	9/7/2016	Lithium	1.3	1.3	1.00
Starfish Lake	9/7/2016	Nickel	0.5	0.5	1.00
Starfish Lake	9/7/2016	Rubidium	1.4	1.4	1.00
Clinton-Colden Outlet	8/9/2016	Aluminum	5.9	7.3	0.81
Clinton-Colden Outlet	8/9/2016	Barium	2.0	2.0	1.00
Clinton-Colden Outlet	8/9/2016	Lithium	1.0	1.0	1.00
Clinton-Colden Outlet	8/9/2016	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	8/9/2016	Rubidium	1.1	1.1	1.00
Clinton-Colden Outlet	8/9/2016	Strontium	6.9	6.9	1.00
Daring Lake	8/9/2016	Aluminum	3.9	9.1	0.43
Daring Lake	8/9/2016	Aluminum	3.7	8.2	0.45
Daring Lake	8/9/2016	Barium	1.1	1.2	0.92
Daring Lake	8/9/2016	Strontium	5.7	5.8	0.98
Daring Lake	8/9/2016	Strontium	5.8	5.9	0.98

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Daring Lake	8/9/2016	Barium	1.2	1.2	1.00
Daring Lake	8/9/2016	Rubidium	1.2	1.2	1.00
Daring Lake	8/9/2016	Rubidium	1.2	1.2	1.00
Desteffany Lake	8/9/2016	Aluminum	6.8	10.7	0.64
Desteffany Lake	8/9/2016	Barium	1.7	1.8	0.94
Desteffany Lake	8/9/2016	Lithium	1.1	1.1	1.00
Desteffany Lake	8/9/2016	Nickel	0.7	0.7	1.00
Desteffany Lake	8/9/2016	Rubidium	1.5	1.5	1.00
Desteffany Lake	8/9/2016	Strontium	9.5	9.4	1.01
King Lake	8/9/2016	Aluminum	5.8	11.0	0.53
King Lake	8/9/2016	Barium	3.1	3.1	1.00
King Lake	8/9/2016	Lithium	1.1	1.1	1.00
King Lake	8/9/2016	Nickel	0.5	0.5	1.00
King Lake	8/9/2016	Rubidium	1.3	1.3	1.00
King Lake	8/9/2016	Strontium	14.1	14.1	1.00
Lac de Gras Outlet	8/9/2016	Barium	1.9	2.0	0.95
Lac de Gras Outlet	8/9/2016	Strontium	12.6	12.8	0.98
Lac de Gras Outlet	8/9/2016	Lithium	1.2	1.2	1.00
Lac de Gras Outlet	8/9/2016	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	8/9/2016	Rubidium	1.8	1.6	1.13
Lake of the Enemy	8/9/2016	Strontium	7.6	7.8	0.97
Lake of the Enemy	8/9/2016	Barium	1.7	1.7	1.00
Lake of the Enemy	8/9/2016	Lithium	1.2	1.2	1.00
Lake of the Enemy	8/9/2016	Lithium	1.1	1.1	1.00
Lake of the Enemy	8/9/2016	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/9/2016	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/9/2016	Rubidium	1.0	1.0	1.00
Lake of the Enemy	8/9/2016	Rubidium	1.0	1.0	1.00
Lake of the Enemy	8/9/2016	Strontium	7.8	7.8	1.00
Lake of the Enemy	8/9/2016	Barium	1.7	1.6	1.06
MacKay Lake	8/9/2016	Aluminum	4.3	7.7	0.56
MacKay Lake	8/9/2016	Nickel	1.0	1.1	0.91
MacKay Lake	8/9/2016	Barium	1.8	1.8	1.00
MacKay Lake	8/9/2016	Lithium	1.0	1.0	1.00
MacKay Lake	8/9/2016	Rubidium	1.2	1.2	1.00
MacKay Lake	8/9/2016	Strontium	7.8	7.7	1.01
Point Lake	8/9/2016	Aluminum	8.7	11.4	0.76
Point Lake	8/9/2016	Strontium	6.6	6.8	0.97
Point Lake	8/9/2016	Barium	2.1	2.1	1.00
Point Lake	8/9/2016	Nickel	0.7	0.7	1.00
Point Lake	8/9/2016	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/9/2016	Aluminum	9.0	13.9	0.65
Rocknest Lake	8/9/2016	Barium	2.6	2.7	0.96
Rocknest Lake	8/9/2016	Nickel	0.6	0.6	1.00
Rocknest Lake	8/9/2016	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/9/2016	Strontium	6.7	6.7	1.00
Starfish Lake	8/9/2016	Aluminum	10.9	17.3	0.63
Starfish Lake	8/9/2016	Barium	1.8	2.0	0.90
Starfish Lake	8/9/2016	Lithium	1.1	1.1	1.00
Starfish Lake	8/9/2016	Nickel	0.5	0.5	1.00
Starfish Lake	8/9/2016	Strontium	6.6	6.3	1.05
Starfish Lake	8/9/2016	Rubidium	1.5	1.4	1.07
Clinton-Colden Outlet	7/7/2016	Manganese	0.7	1.8	0.39
Clinton-Colden Outlet	7/7/2016	Manganese	0.7	1.7	0.41
Clinton-Colden Outlet	7/7/2016	Aluminum	6.1	9.4	0.65
Clinton-Colden Outlet	7/7/2016	Aluminum	6.0	7.8	0.77
Clinton-Colden Outlet	7/7/2016	Lithium	1.1	1.2	0.92
Clinton-Colden Outlet	7/7/2016	Lithium	1.2	1.3	0.92
Clinton-Colden Outlet	7/7/2016	Barium	2.0	2.0	1.00
Clinton-Colden Outlet	7/7/2016	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	7/7/2016	Nickel	0.6	0.6	1.00
Clinton-Colden Outlet	7/7/2016	Rubidium	1.1	1.1	1.00
Clinton-Colden Outlet	7/7/2016	Rubidium	1.1	1.1	1.00
Clinton-Colden Outlet	7/7/2016	Strontium	6.4	6.4	1.00
Clinton-Colden Outlet	7/7/2016	Strontium	6.5	6.3	1.03
Clinton-Colden Outlet	7/7/2016	Barium	2.0	1.9	1.05
Daring Lake	7/7/2016	Aluminum	4.4	9.4	0.47
Daring Lake	7/7/2016	Manganese	1.0	2.1	0.48
Daring Lake	7/7/2016	Strontium	5.5	5.6	0.98
Daring Lake	7/7/2016	Barium	1.3	1.3	1.00
Daring Lake	7/7/2016	Rubidium	1.1	1.1	1.00
Desteffany Lake	7/7/2016	Manganese	0.9	4.8	0.19
Desteffany Lake	7/7/2016	Aluminum	11.7	20.3	0.58
Desteffany Lake	7/7/2016	Nickel	0.7	0.8	0.88

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Desteffany Lake	7/7/2016	Rubidium	1.5	1.6	0.94
Desteffany Lake	7/7/2016	Lithium	1.4	1.4	1.00
Desteffany Lake	7/7/2016	Strontium	9.4	9.2	1.02
Desteffany Lake	7/7/2016	Barium	2.0	1.9	1.05
King Lake	7/7/2016	Aluminum	8.6	15.8	0.54
King Lake	7/7/2016	Barium	3.0	3.1	0.97
King Lake	7/7/2016	Rubidium	1.3	1.3	1.00
King Lake	7/7/2016	Strontium	12.0	11.8	1.02
King Lake	7/7/2016	Lithium	1.5	1.4	1.07
Lac de Gras Outlet	7/7/2016	Manganese	1.2	2.9	0.41
Lac de Gras Outlet	7/7/2016	Aluminum	4.5	7.9	0.57
Lac de Gras Outlet	7/7/2016	Lithium	1.3	1.5	0.87
Lac de Gras Outlet	7/7/2016	Barium	2.1	2.2	0.95
Lac de Gras Outlet	7/7/2016	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	7/7/2016	Rubidium	1.7	1.7	1.00
Lac de Gras Outlet	7/7/2016	Strontium	13.6	13.1	1.04
Lake of the Enemy	7/7/2016	Manganese	1.1	2.3	0.48
Lake of the Enemy	7/7/2016	Barium	1.8	1.8	1.00
Lake of the Enemy	7/7/2016	Nickel	0.6	0.6	1.00
Lake of the Enemy	7/7/2016	Rubidium	1.0	1.0	1.00
Lake of the Enemy	7/7/2016	Strontium	7.6	7.5	1.01
Lake of the Enemy	7/7/2016	Lithium	1.3	1.2	1.08
MacKay Lake	7/7/2016	Manganese	1.0	9.4	0.11
MacKay Lake	7/7/2016	Aluminum	6.2	10.6	0.58
MacKay Lake	7/7/2016	Lithium	1.2	1.3	0.92
MacKay Lake	7/7/2016	Barium	2.0	2.0	1.00
MacKay Lake	7/7/2016	Nickel	1.3	1.3	1.00
MacKay Lake	7/7/2016	Rubidium	1.2	1.2	1.00
MacKay Lake	7/7/2016	Strontium	7.8	7.8	1.00
Point Lake	7/7/2016	Manganese	0.5	1.0	0.50
Point Lake	7/7/2016	Aluminum	10.9	14.9	0.73
Point Lake	7/7/2016	Barium	2.0	2.0	1.00
Point Lake	7/7/2016	Nickel	0.8	0.8	1.00
Point Lake	7/7/2016	Strontium	6.4	6.3	1.02
Point Lake	7/7/2016	Rubidium	1.3	1.2	1.08
Rocknest Lake	7/7/2016	Manganese	0.8	2.4	0.33
Rocknest Lake	7/7/2016	Manganese	0.8	2.2	0.36
Rocknest Lake	7/7/2016	Aluminum	12.4	23.9	0.52
Rocknest Lake	7/7/2016	Aluminum	11.6	18.0	0.64
Rocknest Lake	7/7/2016	Rubidium	1.2	1.3	0.92
Rocknest Lake	7/7/2016	Barium	3.0	3.1	0.97
Rocknest Lake	7/7/2016	Nickel	0.6	0.6	1.00
Rocknest Lake	7/7/2016	Nickel	0.6	0.6	1.00
Rocknest Lake	7/7/2016	Rubidium	1.3	1.3	1.00
Rocknest Lake	7/7/2016	Strontium	6.9	6.8	1.01
Rocknest Lake	7/7/2016	Strontium	6.7	6.5	1.03
Rocknest Lake	7/7/2016	Barium	3.2	3.0	1.07
Starfish Lake	7/7/2016	Manganese	0.8	14.0	0.06
Starfish Lake	7/7/2016	Aluminum	17.6	27.2	0.65
Starfish Lake	7/7/2016	Nickel	0.6	0.7	0.86
Starfish Lake	7/7/2016	Barium	2.1	2.1	1.00
Starfish Lake	7/7/2016	Lithium	1.3	1.3	1.00
Starfish Lake	7/7/2016	Strontium	6.2	6.2	1.00
Starfish Lake	7/7/2016	Rubidium	1.4	1.3	1.08
Daring Lake	3/23/2016	Manganese	1.3	1.5	0.87
Daring Lake	3/23/2016	Barium	1.7	1.7	1.00
Daring Lake	3/23/2016	Strontium	7.2	7.0	1.03
Daring Lake	3/23/2016	Rubidium	1.5	1.4	1.07
Daring Lake	3/23/2016	Lithium	1.1	1.0	1.10
Desteffany Lake	3/23/2016	Aluminum	5.1	9.4	0.54
Desteffany Lake	3/23/2016	Aluminum	6.6	7.6	0.87
Desteffany Lake	3/23/2016	Lithium	1.5	1.7	0.88
Desteffany Lake	3/23/2016	Rubidium	1.8	1.9	0.95
Desteffany Lake	3/23/2016	Barium	2.4	2.5	0.96
Desteffany Lake	3/23/2016	Strontium	12.5	13.0	0.96
Desteffany Lake	3/23/2016	Barium	2.4	2.4	1.00
Desteffany Lake	3/23/2016	Lithium	1.6	1.6	1.00
Desteffany Lake	3/23/2016	Nickel	0.9	0.9	1.00
Desteffany Lake	3/23/2016	Nickel	0.9	0.9	1.00
Desteffany Lake	3/23/2016	Rubidium	1.9	1.9	1.00
Desteffany Lake	3/23/2016	Strontium	12.8	12.8	1.00
King Lake	3/23/2016	Aluminum	4.2	7.3	0.58
King Lake	3/23/2016	Barium	4.1	4.4	0.93
King Lake	3/23/2016	Lithium	1.6	1.7	0.94

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
King Lake	3/23/2016	Rubidium	1.8	1.9	0.95
King Lake	3/23/2016	Strontium	15.1	15.6	0.97
Lac de Gras Outlet	3/23/2016	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	3/23/2016	Lithium	1.7	1.6	1.06
Lac de Gras Outlet	3/23/2016	Strontium	14.2	13.3	1.07
Lac de Gras Outlet	3/23/2016	Barium	2.4	2.2	1.09
Lac de Gras Outlet	3/23/2016	Rubidium	2.0	1.8	1.11
Lake of the Enemy	3/23/2016	Barium	2.5	2.5	1.00
Lake of the Enemy	3/23/2016	Strontium	11.2	10.9	1.03
Lake of the Enemy	3/23/2016	Lithium	2.0	1.9	1.05
Lake of the Enemy	3/23/2016	Rubidium	1.6	1.5	1.07
Lake of the Enemy	3/23/2016	Nickel	0.7	0.6	1.17
MacKay Lake	3/23/2016	Nickel	1.1	1.2	0.92
MacKay Lake	3/23/2016	Aluminum	4.9	5.3	0.92
MacKay Lake	3/23/2016	Barium	2.5	2.7	0.93
MacKay Lake	3/23/2016	Strontium	10.1	10.3	0.98
MacKay Lake	3/23/2016	Rubidium	1.7	1.7	1.00
MacKay Lake	3/23/2016	Lithium	1.6	1.4	1.14
Point Lake	3/23/2016	Aluminum	11.4	13.9	0.82
Point Lake	3/23/2016	Strontium	9.9	9.5	1.04
Point Lake	3/23/2016	Rubidium	2.1	2.0	1.05
Point Lake	3/23/2016	Lithium	1.4	1.3	1.08
Point Lake	3/23/2016	Nickel	1.2	1.1	1.09
Point Lake	3/23/2016	Barium	3.5	3.0	1.17
Rocknest Lake	3/23/2016	Aluminum	8.0	12.6	0.63
Rocknest Lake	3/23/2016	Manganese	0.5	0.7	0.71
Rocknest Lake	3/23/2016	Rubidium	1.3	1.5	0.87
Rocknest Lake	3/23/2016	Barium	2.4	2.7	0.89
Rocknest Lake	3/23/2016	Strontium	6.7	7.4	0.91
Rocknest Lake	3/23/2016	Nickel	0.7	0.7	1.00
Starfish Lake	3/23/2016	Aluminum	11.9	15.4	0.77
Starfish Lake	3/23/2016	Aluminum	12.3	14.3	0.86
Starfish Lake	3/23/2016	Barium	2.3	2.4	0.96
Starfish Lake	3/23/2016	Barium	2.3	2.4	0.96
Starfish Lake	3/23/2016	Strontium	8.2	8.3	0.99
Starfish Lake	3/23/2016	Lithium	1.7	1.7	1.00
Starfish Lake	3/23/2016	Lithium	1.7	1.7	1.00
Starfish Lake	3/23/2016	Nickel	0.6	0.6	1.00
Starfish Lake	3/23/2016	Nickel	0.6	0.6	1.00
Starfish Lake	3/23/2016	Rubidium	2.0	2.0	1.00
Starfish Lake	3/23/2016	Rubidium	2.0	2.0	1.00
Starfish Lake	3/23/2016	Strontium	8.3	8.3	1.00
Clinton-Colden Outlet	9/3/2015	Barium	1.8	2.0	0.90
Clinton-Colden Outlet	9/3/2015	Barium	1.8	1.9	0.95
Clinton-Colden Outlet	9/3/2015	Nickel	0.5	0.5	1.00
Clinton-Colden Outlet	9/3/2015	Strontium	6.5	6.4	1.02
Clinton-Colden Outlet	9/3/2015	Strontium	6.6	6.4	1.03
Clinton-Colden Outlet	9/3/2015	Lithium	1.3	1.2	1.08
Clinton-Colden Outlet	9/3/2015	Lithium	1.3	1.2	1.08
Clinton-Colden Outlet	9/3/2015	Rubidium	1.2	1.1	1.09
Clinton-Colden Outlet	9/3/2015	Rubidium	1.2	1.1	1.09
Clinton-Colden Outlet	9/3/2015	Nickel	0.6	0.5	1.20
Daring Lake	9/3/2015	Manganese	0.5	2.0	0.25
Daring Lake	9/3/2015	Aluminum	6.1	18.9	0.32
Daring Lake	9/3/2015	Barium	1.3	1.4	0.93
Daring Lake	9/3/2015	Strontium	5.7	5.7	1.00
Daring Lake	9/3/2015	Rubidium	1.3	1.2	1.08
Daring Lake	9/3/2015	Lithium	1.1	1.0	1.10
Desteffany Lake	9/3/2015	Manganese	1.1	4.0	0.28
Desteffany Lake	9/3/2015	Aluminum	9.2	18.2	0.51
Desteffany Lake	9/3/2015	Barium	1.7	1.9	0.89
Desteffany Lake	9/3/2015	Nickel	0.7	0.7	1.00
Desteffany Lake	9/3/2015	Strontium	9.1	8.9	1.02
Desteffany Lake	9/3/2015	Rubidium	1.6	1.5	1.07
Desteffany Lake	9/3/2015	Lithium	1.4	1.3	1.08
King Lake	9/3/2015	Barium	2.6	2.9	0.90
King Lake	9/3/2015	Lithium	1.3	1.3	1.00
King Lake	9/3/2015	Rubidium	1.4	1.4	1.00
King Lake	9/3/2015	Strontium	11.8	11.6	1.02
Lac de Gras Outlet	9/3/2015	Manganese	0.7	2.2	0.32
Lac de Gras Outlet	9/3/2015	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	9/3/2015	Barium	1.9	1.8	1.06
Lac de Gras Outlet	9/3/2015	Strontium	11.7	10.8	1.08
Lac de Gras Outlet	9/3/2015	Rubidium	1.7	1.5	1.13

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	9/3/2015	Lithium	1.6	1.3	1.23
Lake of the Enemy	9/3/2015	Barium	1.5	1.6	0.94
Lake of the Enemy	9/3/2015	Strontium	7.3	7.2	1.01
Lake of the Enemy	9/3/2015	Lithium	1.5	1.4	1.07
Lake of the Enemy	9/3/2015	Rubidium	1.1	1.0	1.10
MacKay Lake	9/3/2015	Nickel	0.9	1.0	0.90
MacKay Lake	9/3/2015	Barium	1.7	1.8	0.94
MacKay Lake	9/3/2015	Lithium	1.3	1.3	1.00
MacKay Lake	9/3/2015	Strontium	7.4	7.4	1.00
MacKay Lake	9/3/2015	Rubidium	1.3	1.2	1.08
Point Lake	9/3/2015	Aluminum	6.4	12.9	0.50
Point Lake	9/3/2015	Barium	1.8	1.9	0.95
Point Lake	9/3/2015	Lithium	1.0	1.0	1.00
Point Lake	9/3/2015	Nickel	0.7	0.7	1.00
Point Lake	9/3/2015	Strontium	6.4	6.3	1.02
Point Lake	9/3/2015	Rubidium	1.4	1.3	1.08
Rocknest Lake	9/3/2015	Aluminum	3.1	9.3	0.33
Rocknest Lake	9/3/2015	Aluminum	3.5	9.3	0.38
Rocknest Lake	9/3/2015	Barium	4.3	4.6	0.93
Rocknest Lake	9/3/2015	Barium	4.4	4.5	0.98
Rocknest Lake	9/3/2015	Lithium	1.0	1.0	1.00
Rocknest Lake	9/3/2015	Strontium	9.8	9.8	1.00
Rocknest Lake	9/3/2015	Strontium	10.1	9.7	1.04
Rocknest Lake	9/3/2015	Rubidium	1.3	1.2	1.08
Rocknest Lake	9/3/2015	Rubidium	1.3	1.2	1.08
Starfish Lake	9/3/2015	Aluminum	6.5	15.0	0.43
Starfish Lake	9/3/2015	Barium	1.6	1.8	0.89
Starfish Lake	9/3/2015	Strontium	6.1	6.0	1.02
Starfish Lake	9/3/2015	Rubidium	1.5	1.4	1.07
Starfish Lake	9/3/2015	Lithium	1.5	1.3	1.15
Lockhart River ABOVE Outram Lakes	8/25/2015	Manganese	0.7	4.0	0.18
Lockhart River ABOVE Outram Lakes	8/25/2015	Strontium	7.0	8.4	0.83
Lockhart River ABOVE Outram Lakes	8/25/2015	Barium	1.7	1.9	0.89
Lockhart River ABOVE Outram Lakes	8/25/2015	Lithium	1.2	1.3	0.92
Lockhart River ABOVE Outram Lakes	8/25/2015	Nickel	0.8	0.8	1.00
Lockhart River ABOVE Outram Lakes	8/25/2015	Rubidium	1.3	1.3	1.00
Clinton-Colden Outlet	8/6/2015	Manganese	0.7	2.4	0.29
Clinton-Colden Outlet	8/6/2015	Strontium	6.2	8.8	0.70
Clinton-Colden Outlet	8/6/2015	Nickel	0.5	0.6	0.83
Clinton-Colden Outlet	8/6/2015	Barium	1.7	2.0	0.85
Clinton-Colden Outlet	8/6/2015	Lithium	1.3	1.3	1.00
Clinton-Colden Outlet	8/6/2015	Rubidium	1.1	1.1	1.00
Daring Lake	8/6/2015	Manganese	0.6	1.9	0.32
Daring Lake	8/6/2015	Barium	1.0	1.1	0.91
Daring Lake	8/6/2015	Strontium	5.5	5.9	0.93
Daring Lake	8/6/2015	Rubidium	1.3	1.2	1.08
Desteffany Lake	8/6/2015	Manganese	0.7	3.9	0.18
Desteffany Lake	8/6/2015	Aluminum	4.2	11.1	0.38
Desteffany Lake	8/6/2015	Barium	1.5	1.6	0.94
Desteffany Lake	8/6/2015	Strontium	8.8	9.0	0.98
Desteffany Lake	8/6/2015	Rubidium	1.6	1.6	1.00
Desteffany Lake	8/6/2015	Lithium	1.4	1.3	1.08
Desteffany Lake	8/6/2015	Nickel	1.1	0.7	1.57
King Lake	8/6/2015	Rubidium	1.3	1.4	0.93
King Lake	8/6/2015	Strontium	11.1	11.5	0.97
King Lake	8/6/2015	Barium	2.5	2.5	1.00
King Lake	8/6/2015	Lithium	1.3	1.3	1.00
King Lake	8/6/2015	Rubidium	1.4	1.4	1.00
King Lake	8/6/2015	Strontium	11.2	11.2	1.00
King Lake	8/6/2015	Barium	2.6	2.5	1.04
King Lake	8/6/2015	Lithium	1.3	1.2	1.08
Lac de Gras Outlet	8/6/2015	Aluminum	3.1	5.0	0.62
Lac de Gras Outlet	8/6/2015	Manganese	2.3	3.6	0.64
Lac de Gras Outlet	8/6/2015	Manganese	2.4	3.7	0.65
Lac de Gras Outlet	8/6/2015	Barium	1.7	1.8	0.94
Lac de Gras Outlet	8/6/2015	Barium	1.7	1.8	0.94
Lac de Gras Outlet	8/6/2015	Strontium	11.5	12.1	0.95
Lac de Gras Outlet	8/6/2015	Strontium	11.7	12.0	0.98
Lac de Gras Outlet	8/6/2015	Lithium	1.4	1.4	1.00
Lac de Gras Outlet	8/6/2015	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	8/6/2015	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	8/6/2015	Rubidium	1.6	1.6	1.00
Lac de Gras Outlet	8/6/2015	Rubidium	1.7	1.7	1.00
Lac de Gras Outlet	8/6/2015	Lithium	1.5	1.4	1.07

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lake of the Enemy	8/6/2015	Manganese	0.8	1.3	0.62
Lake of the Enemy	8/6/2015	Strontium	7.1	8.0	0.89
Lake of the Enemy	8/6/2015	Barium	1.4	1.5	0.93
Lake of the Enemy	8/6/2015	Lithium	1.4	1.4	1.00
Lake of the Enemy	8/6/2015	Rubidium	1.1	1.1	1.00
MacKay Lake	8/6/2015	Manganese	0.5	3.8	0.13
MacKay Lake	8/6/2015	Barium	1.7	1.8	0.94
MacKay Lake	8/6/2015	Strontium	7.1	7.3	0.97
MacKay Lake	8/6/2015	Lithium	1.2	1.2	1.00
MacKay Lake	8/6/2015	Nickel	1.0	1.0	1.00
MacKay Lake	8/6/2015	Rubidium	1.3	1.3	1.00
Point Lake	8/6/2015	Aluminum	5.5	31.7	0.17
Point Lake	8/6/2015	Strontium	5.9	6.7	0.88
Point Lake	8/6/2015	Barium	1.7	1.8	0.94
Point Lake	8/6/2015	Nickel	0.7	0.7	1.00
Point Lake	8/6/2015	Rubidium	1.3	1.3	1.00
Rocknest Lake	8/6/2015	Aluminum	3.0	79.5	0.04
Rocknest Lake	8/6/2015	Manganese	0.8	2.9	0.28
Rocknest Lake	8/6/2015	Strontium	6.6	8.6	0.77
Rocknest Lake	8/6/2015	Rubidium	1.2	1.4	0.86
Rocknest Lake	8/6/2015	Barium	2.5	2.8	0.89
Rocknest Lake	8/6/2015	Nickel	0.5	0.5	1.00
Starfish Lake	8/6/2015	Aluminum	7.7	14.5	0.53
Starfish Lake	8/6/2015	Aluminum	8.3	15.5	0.54
Starfish Lake	8/6/2015	Barium	1.4	1.6	0.88
Starfish Lake	8/6/2015	Rubidium	1.4	1.5	0.93
Starfish Lake	8/6/2015	Strontium	5.8	6.0	0.97
Starfish Lake	8/6/2015	Strontium	5.8	5.9	0.98
Starfish Lake	8/6/2015	Barium	1.6	1.6	1.00
Starfish Lake	8/6/2015	Nickel	0.5	0.5	1.00
Starfish Lake	8/6/2015	Rubidium	1.4	1.4	1.00
Starfish Lake	8/6/2015	Lithium	1.4	1.3	1.08
Starfish Lake	8/6/2015	Lithium	1.4	1.3	1.08
Clinton-Colden Outlet	7/2/2015	Manganese	1.0	1.7	0.59
Clinton-Colden Outlet	7/2/2015	Aluminum	4.0	6.6	0.61
Clinton-Colden Outlet	7/2/2015	Lithium	1.2	1.3	0.92
Clinton-Colden Outlet	7/2/2015	Rubidium	1.2	1.3	0.92
Clinton-Colden Outlet	7/2/2015	Barium	1.9	2.0	0.95
Clinton-Colden Outlet	7/2/2015	Strontium	6.3	6.6	0.95
Clinton-Colden Outlet	7/2/2015	Nickel	0.6	0.6	1.00
Daring Lake	7/2/2015	Manganese	1.3	2.1	0.62
Daring Lake	7/2/2015	Barium	1.1	1.2	0.92
Daring Lake	7/2/2015	Rubidium	1.2	1.3	0.92
Daring Lake	7/2/2015	Strontium	5.3	5.7	0.93
Desteffany Lake	7/2/2015	Manganese	2.5	5.6	0.45
Desteffany Lake	7/2/2015	Manganese	2.6	5.7	0.46
Desteffany Lake	7/2/2015	Aluminum	9.3	18.5	0.50
Desteffany Lake	7/2/2015	Aluminum	10.1	17.6	0.57
Desteffany Lake	7/2/2015	Rubidium	1.6	2.0	0.80
Desteffany Lake	7/2/2015	Nickel	0.7	0.8	0.88
Desteffany Lake	7/2/2015	Strontium	8.1	9.0	0.90
Desteffany Lake	7/2/2015	Barium	1.8	2.0	0.90
Desteffany Lake	7/2/2015	Barium	1.9	2.1	0.90
Desteffany Lake	7/2/2015	Lithium	1.2	1.3	0.92
Desteffany Lake	7/2/2015	Rubidium	1.8	1.9	0.95
Desteffany Lake	7/2/2015	Strontium	8.6	8.9	0.97
Desteffany Lake	7/2/2015	Lithium	1.3	1.3	1.00
Desteffany Lake	7/2/2015	Nickel	0.7	0.7	1.00
King Lake	7/2/2015	Manganese	0.6	2.4	0.25
King Lake	7/2/2015	Manganese	0.6	2.2	0.27
King Lake	7/2/2015	Aluminum	4.4	13.2	0.33
King Lake	7/2/2015	Aluminum	4.1	11.0	0.37
King Lake	7/2/2015	Lithium	1.1	1.2	0.92
King Lake	7/2/2015	Barium	3.1	3.3	0.94
King Lake	7/2/2015	Strontium	12.8	13.3	0.96
King Lake	7/2/2015	Barium	3.1	3.2	0.97
King Lake	7/2/2015	Lithium	1.2	1.2	1.00
King Lake	7/2/2015	Nickel	0.5	0.5	1.00
King Lake	7/2/2015	Nickel	0.5	0.5	1.00
King Lake	7/2/2015	Rubidium	1.3	1.3	1.00
King Lake	7/2/2015	Rubidium	1.3	1.3	1.00
King Lake	7/2/2015	Strontium	13.0	13.0	1.00
Lac de Gras Outlet	7/2/2015	Manganese	4.6	6.6	0.70
Lac de Gras Outlet	7/2/2015	Rubidium	1.6	1.7	0.94

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	7/2/2015	Barium	1.8	1.9	0.95
Lac de Gras Outlet	7/2/2015	Strontium	10.5	11.0	0.95
Lac de Gras Outlet	7/2/2015	Lithium	1.3	1.3	1.00
Lac de Gras Outlet	7/2/2015	Nickel	0.8	0.8	1.00
Lake of the Enemy	7/2/2015	Manganese	0.8	1.3	0.62
Lake of the Enemy	7/2/2015	Rubidium	1.0	1.1	0.91
Lake of the Enemy	7/2/2015	Strontium	7.0	7.2	0.97
Lake of the Enemy	7/2/2015	Barium	1.6	1.6	1.00
Lake of the Enemy	7/2/2015	Lithium	1.3	1.3	1.00
Lake of the Enemy	7/2/2015	Nickel	0.5	0.5	1.00
MacKay Lake	7/2/2015	Aluminum	5.7	12.1	0.47
MacKay Lake	7/2/2015	Manganese	0.8	1.5	0.53
MacKay Lake	7/2/2015	Strontium	6.4	7.7	0.83
MacKay Lake	7/2/2015	Lithium	1.0	1.2	0.83
MacKay Lake	7/2/2015	Barium	1.8	2.1	0.86
MacKay Lake	7/2/2015	Rubidium	1.1	1.2	0.92
MacKay Lake	7/2/2015	Nickel	0.9	0.6	1.50
Point Lake	7/2/2015	Aluminum	7.6	16.5	0.46
Point Lake	7/2/2015	Rubidium	1.3	1.4	0.93
Point Lake	7/2/2015	Strontium	6.1	6.5	0.94
Point Lake	7/2/2015	Barium	1.8	1.9	0.95
Point Lake	7/2/2015	Nickel	0.7	0.7	1.00
Rocknest Lake	7/2/2015	Manganese	0.7	1.6	0.44
Rocknest Lake	7/2/2015	Aluminum	5.6	12.2	0.46
Rocknest Lake	7/2/2015	Barium	3.1	3.2	0.97
Rocknest Lake	7/2/2015	Rubidium	1.4	1.4	1.00
Rocknest Lake	7/2/2015	Strontium	6.9	6.8	1.01
Rocknest Lake	7/2/2015	Nickel	0.6	0.5	1.20
Starfish Lake	7/2/2015	Aluminum	14.3	20.5	0.70
Starfish Lake	7/2/2015	Manganese	8.5	11.3	0.75
Starfish Lake	7/2/2015	Rubidium	1.3	1.4	0.93
Starfish Lake	7/2/2015	Barium	2.0	2.1	0.95
Starfish Lake	7/2/2015	Strontium	5.8	5.9	0.98
Starfish Lake	7/2/2015	Lithium	1.2	1.2	1.00
Starfish Lake	7/2/2015	Nickel	0.6	0.6	1.00
Daring Lake	3/27/2015	Aluminum	5.0	12.3	0.41
Daring Lake	3/27/2015	Manganese	14.4	22.2	0.65
Daring Lake	3/27/2015	Rubidium	6.2	6.3	0.98
Daring Lake	3/27/2015	Barium	13.9	14.0	0.99
Daring Lake	3/27/2015	Strontium	38.9	38.9	1.00
Daring Lake	3/27/2015	Lithium	4.7	4.6	1.02
Daring Lake	3/27/2015	Nickel	1.6	1.5	1.07
Desteffany Lake	3/27/2015	Aluminum	4.8	10.1	0.48
Desteffany Lake	3/27/2015	Manganese	0.6	1.2	0.50
Desteffany Lake	3/27/2015	Aluminum	4.9	9.0	0.54
Desteffany Lake	3/27/2015	Manganese	0.6	1.1	0.55
Desteffany Lake	3/27/2015	Nickel	0.9	1.0	0.90
Desteffany Lake	3/27/2015	Strontium	11.6	12.3	0.94
Desteffany Lake	3/27/2015	Lithium	1.9	2.0	0.95
Desteffany Lake	3/27/2015	Rubidium	1.9	2.0	0.95
Desteffany Lake	3/27/2015	Barium	2.1	2.2	0.95
Desteffany Lake	3/27/2015	Strontium	11.8	12.2	0.97
Desteffany Lake	3/27/2015	Barium	2.2	2.2	1.00
Desteffany Lake	3/27/2015	Nickel	1.0	1.0	1.00
Desteffany Lake	3/27/2015	Rubidium	1.9	1.9	1.00
Desteffany Lake	3/27/2015	Lithium	2.0	1.9	1.05
King Lake	3/27/2015	Lithium	1.9	2.3	0.83
King Lake	3/27/2015	Strontium	16.5	18.0	0.92
King Lake	3/27/2015	Barium	3.8	4.1	0.93
King Lake	3/27/2015	Rubidium	2.0	2.1	0.95
Lac de Gras Outlet	3/27/2015	Manganese	0.6	1.2	0.50
Lac de Gras Outlet	3/27/2015	Barium	2.4	3.1	0.77
Lac de Gras Outlet	3/27/2015	Strontium	13.6	15.0	0.91
Lac de Gras Outlet	3/27/2015	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	3/27/2015	Rubidium	2.1	2.1	1.00
Lac de Gras Outlet	3/27/2015	Lithium	2.2	2.1	1.05
Lake of the Enemy	3/27/2015	Nickel	0.6	0.8	0.75
Lake of the Enemy	3/27/2015	Lithium	2.7	3.0	0.90
Lake of the Enemy	3/27/2015	Rubidium	1.8	2.0	0.90
Lake of the Enemy	3/27/2015	Strontium	12.0	13.2	0.91
Lake of the Enemy	3/27/2015	Barium	2.6	2.8	0.93
MacKay Lake	3/27/2015	Manganese	0.7	2.1	0.33
MacKay Lake	3/27/2015	Manganese	0.7	1.5	0.47
MacKay Lake	3/27/2015	Aluminum	3.9	6.6	0.59

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
MacKay Lake	3/27/2015	Strontium	10.8	11.9	0.91
MacKay Lake	3/27/2015	Nickel	1.3	1.4	0.93
MacKay Lake	3/27/2015	Nickel	1.3	1.4	0.93
MacKay Lake	3/27/2015	Barium	2.8	3.0	0.93
MacKay Lake	3/27/2015	Barium	2.8	3.0	0.93
MacKay Lake	3/27/2015	Lithium	2.0	2.1	0.95
MacKay Lake	3/27/2015	Lithium	2.1	2.1	1.00
MacKay Lake	3/27/2015	Rubidium	1.8	1.8	1.00
MacKay Lake	3/27/2015	Rubidium	1.8	1.8	1.00
MacKay Lake	3/27/2015	Strontium	11.0	10.8	1.02
Point Lake	3/27/2015	Aluminum	11.3	15.6	0.72
Point Lake	3/27/2015	Nickel	1.0	1.1	0.91
Point Lake	3/27/2015	Barium	2.5	2.7	0.93
Point Lake	3/27/2015	Rubidium	1.7	1.8	0.94
Point Lake	3/27/2015	Strontium	8.1	8.3	0.98
Point Lake	3/27/2015	Lithium	1.6	1.5	1.07
Rocknest Lake	3/27/2015	Aluminum	9.6	13.0	0.74
Rocknest Lake	3/27/2015	Manganese	0.6	0.8	0.75
Rocknest Lake	3/27/2015	Barium	2.4	2.5	0.96
Rocknest Lake	3/27/2015	Lithium	1.2	1.2	1.00
Rocknest Lake	3/27/2015	Strontium	7.2	7.2	1.00
Rocknest Lake	3/27/2015	Rubidium	1.6	1.5	1.07
Rocknest Lake	3/27/2015	Nickel	0.9	0.8	1.13
Daring Lake	9/9/2014	Barium	1.0	1.1	0.91
Daring Lake	9/9/2014	Strontium	5.3	5.6	0.95
Daring Lake	9/9/2014	Rubidium	1.2	1.2	1.00
Desteffany Lake	9/9/2014	Aluminum	5.4	21.9	0.25
Desteffany Lake	9/9/2014	Nickel	0.6	0.7	0.86
Desteffany Lake	9/9/2014	Lithium	1.2	1.3	0.92
Desteffany Lake	9/9/2014	Barium	1.5	1.5	1.00
Desteffany Lake	9/9/2014	Rubidium	1.5	1.5	1.00
Desteffany Lake	9/9/2014	Strontium	8.4	8.3	1.01
King Lake	9/9/2014	Barium	2.6	2.9	0.90
King Lake	9/9/2014	Lithium	1.2	1.3	0.92
King Lake	9/9/2014	Rubidium	1.3	1.4	0.93
King Lake	9/9/2014	Strontium	12.1	12.5	0.97
Lac de Gras Outlet	9/9/2014	Manganese	0.6	1.7	0.35
Lac de Gras Outlet	9/9/2014	Manganese	0.5	1.3	0.38
Lac de Gras Outlet	9/9/2014	Lithium	1.2	1.4	0.86
Lac de Gras Outlet	9/9/2014	Lithium	1.2	1.3	0.92
Lac de Gras Outlet	9/9/2014	Strontium	11.1	11.6	0.96
Lac de Gras Outlet	9/9/2014	Barium	1.8	1.8	1.00
Lac de Gras Outlet	9/9/2014	Barium	1.7	1.7	1.00
Lac de Gras Outlet	9/9/2014	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	9/9/2014	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	9/9/2014	Rubidium	1.6	1.6	1.00
Lac de Gras Outlet	9/9/2014	Strontium	11.1	10.7	1.04
Lac de Gras Outlet	9/9/2014	Rubidium	1.6	1.5	1.07
Lake of the Enemy	9/9/2014	Strontium	7.0	7.1	0.99
Lake of the Enemy	9/9/2014	Barium	1.4	1.4	1.00
Lake of the Enemy	9/9/2014	Rubidium	1.0	1.0	1.00
Lake of the Enemy	9/9/2014	Lithium	1.4	1.3	1.08
MacKay Lake	9/9/2014	Manganese	0.5	2.8	0.18
MacKay Lake	9/9/2014	Manganese	0.6	2.3	0.26
MacKay Lake	9/9/2014	Lithium	1.1	1.2	0.92
MacKay Lake	9/9/2014	Rubidium	1.2	1.3	0.92
MacKay Lake	9/9/2014	Barium	1.6	1.7	0.94
MacKay Lake	9/9/2014	Strontium	7.1	7.4	0.96
MacKay Lake	9/9/2014	Barium	1.7	1.7	1.00
MacKay Lake	9/9/2014	Nickel	0.9	0.9	1.00
MacKay Lake	9/9/2014	Rubidium	1.2	1.2	1.00
MacKay Lake	9/9/2014	Strontium	7.2	7.0	1.03
MacKay Lake	9/9/2014	Lithium	1.2	1.1	1.09
MacKay Lake	9/9/2014	Nickel	1.0	0.9	1.11
Point Lake	9/9/2014	Aluminum	8.0	13.3	0.60
Point Lake	9/9/2014	Nickel	0.7	1.0	0.70
Point Lake	9/9/2014	Strontium	6.1	6.4	0.95
Point Lake	9/9/2014	Barium	1.9	1.9	1.00
Point Lake	9/9/2014	Rubidium	1.3	1.3	1.00
Rocknest Lake	9/9/2014	Manganese	0.5	1.4	0.36
Rocknest Lake	9/9/2014	Aluminum	4.6	12.3	0.37
Rocknest Lake	9/9/2014	Nickel	0.5	0.7	0.71
Rocknest Lake	9/9/2014	Barium	2.3	2.5	0.92
Rocknest Lake	9/9/2014	Strontium	6.5	6.7	0.97

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	9/9/2014	Rubidium	1.3	1.3	1.00
Daring Lake	8/12/2014	Rubidium	1.1	1.2	0.92
Daring Lake	8/12/2014	Strontium	5.2	5.5	0.95
Daring Lake	8/12/2014	Barium	1.2	1.2	1.00
Desteffany Lake	8/12/2014	Aluminum	4.9	12.6	0.39
Desteffany Lake	8/12/2014	Barium	1.6	1.8	0.89
Desteffany Lake	8/12/2014	Lithium	1.2	1.3	0.92
Desteffany Lake	8/12/2014	Strontium	8.0	8.5	0.94
Desteffany Lake	8/12/2014	Nickel	0.7	0.7	1.00
Desteffany Lake	8/12/2014	Rubidium	1.5	1.5	1.00
King Lake	8/12/2014	Strontium	11.4	11.9	0.96
King Lake	8/12/2014	Barium	2.8	2.9	0.97
King Lake	8/12/2014	Lithium	1.3	1.3	1.00
King Lake	8/12/2014	Rubidium	1.3	1.3	1.00
Lac de Gras Outlet	8/12/2014	Manganese	0.8	1.7	0.47
Lac de Gras Outlet	8/12/2014	Lithium	1.2	1.3	0.92
Lac de Gras Outlet	8/12/2014	Barium	1.9	2.0	0.95
Lac de Gras Outlet	8/12/2014	Strontium	10.9	11.3	0.96
Lac de Gras Outlet	8/12/2014	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	8/12/2014	Rubidium	1.6	1.6	1.00
Lake of the Enemy	8/12/2014	Barium	1.6	1.6	1.00
Lake of the Enemy	8/12/2014	Lithium	1.4	1.4	1.00
Lake of the Enemy	8/12/2014	Rubidium	1.0	1.0	1.00
Lake of the Enemy	8/12/2014	Strontium	7.0	7.0	1.00
MacKay Lake	8/12/2014	Nickel	0.9	1.0	0.90
MacKay Lake	8/12/2014	Barium	1.7	1.8	0.94
MacKay Lake	8/12/2014	Strontium	6.9	7.1	0.97
MacKay Lake	8/12/2014	Lithium	1.2	1.2	1.00
MacKay Lake	8/12/2014	Rubidium	1.2	1.2	1.00
Point Lake	8/12/2014	Aluminum	5.6	11.3	0.50
Point Lake	8/12/2014	Aluminum	5.9	11.2	0.53
Point Lake	8/12/2014	Nickel	0.7	0.8	0.88
Point Lake	8/12/2014	Barium	1.8	2.0	0.90
Point Lake	8/12/2014	Strontium	5.8	6.0	0.97
Point Lake	8/12/2014	Strontium	6.0	6.1	0.98
Point Lake	8/12/2014	Barium	1.9	1.9	1.00
Point Lake	8/12/2014	Nickel	0.7	0.7	1.00
Point Lake	8/12/2014	Rubidium	1.3	1.3	1.00
Point Lake	8/12/2014	Rubidium	1.3	1.3	1.00
Point Lake	8/12/2014	Zinc	3.8	3.5	1.09
Rocknest Lake	8/12/2014	Aluminum	4.3	68.8	0.06
Rocknest Lake	8/12/2014	Manganese	0.6	1.4	0.43
Rocknest Lake	8/12/2014	Barium	2.3	2.8	0.82
Rocknest Lake	8/12/2014	Strontium	6.2	7.0	0.89
Rocknest Lake	8/12/2014	Nickel	0.6	0.6	1.00
Rocknest Lake	8/12/2014	Rubidium	1.2	1.2	1.00
Daring Lake	7/8/2014	Manganese	0.7	1.2	0.58
Daring Lake	7/8/2014	Manganese	0.8	1.3	0.62
Daring Lake	7/8/2014	Barium	1.1	1.2	0.92
Daring Lake	7/8/2014	Rubidium	1.1	1.2	0.92
Daring Lake	7/8/2014	Strontium	5.0	5.3	0.94
Daring Lake	7/8/2014	Strontium	5.0	5.3	0.94
Daring Lake	7/8/2014	Rubidium	1.1	1.1	1.00
Daring Lake	7/8/2014	Barium	1.2	1.1	1.09
Desteffany Lake	7/8/2014	Manganese	1.3	3.0	0.43
Desteffany Lake	7/8/2014	Aluminum	6.9	13.4	0.51
Desteffany Lake	7/8/2014	Lithium	1.3	1.4	0.93
Desteffany Lake	7/8/2014	Strontium	8.2	8.6	0.95
Desteffany Lake	7/8/2014	Nickel	0.6	0.6	1.00
Desteffany Lake	7/8/2014	Rubidium	1.6	1.6	1.00
Desteffany Lake	7/8/2014	Barium	1.9	1.8	1.06
King Lake	7/8/2014	Manganese	0.7	2.4	0.29
King Lake	7/8/2014	Manganese	0.8	2.4	0.33
King Lake	7/8/2014	Aluminum	4.0	10.9	0.37
King Lake	7/8/2014	Aluminum	4.2	10.7	0.39
King Lake	7/8/2014	Lithium	1.1	1.2	0.92
King Lake	7/8/2014	Rubidium	1.2	1.3	0.92
King Lake	7/8/2014	Strontium	11.4	12.2	0.93
King Lake	7/8/2014	Strontium	11.6	12.1	0.96
King Lake	7/8/2014	Barium	2.9	3.0	0.97
King Lake	7/8/2014	Barium	2.9	3.0	0.97
King Lake	7/8/2014	Rubidium	1.3	1.3	1.00
King Lake	7/8/2014	Lithium	1.2	1.1	1.09
Lac de Gras Outlet	7/8/2014	Manganese	1.1	1.7	0.65

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	7/8/2014	Lithium	1.2	1.3	0.92
Lac de Gras Outlet	7/8/2014	Strontium	10.1	10.4	0.97
Lac de Gras Outlet	7/8/2014	Nickel	0.7	0.7	1.00
Lac de Gras Outlet	7/8/2014	Rubidium	1.5	1.5	1.00
Lac de Gras Outlet	7/8/2014	Barium	1.9	1.7	1.12
Lake of the Enemy	7/8/2014	Manganese	0.9	1.5	0.60
Lake of the Enemy	7/8/2014	Lithium	1.3	1.4	0.93
Lake of the Enemy	7/8/2014	Barium	1.5	1.6	0.94
Lake of the Enemy	7/8/2014	Strontium	6.8	7.0	0.97
Lake of the Enemy	7/8/2014	Rubidium	1.0	1.0	1.00
MacKay Lake	7/8/2014	Manganese	1.2	2.3	0.52
MacKay Lake	7/8/2014	Aluminum	3.4	6.5	0.52
MacKay Lake	7/8/2014	Strontium	7.5	7.8	0.96
MacKay Lake	7/8/2014	Barium	2.1	2.1	1.00
MacKay Lake	7/8/2014	Lithium	1.2	1.2	1.00
MacKay Lake	7/8/2014	Rubidium	1.2	1.2	1.00
MacKay Lake	7/8/2014	Nickel	1.0	0.9	1.11
Point Lake	7/8/2014	Aluminum	7.6	10.0	0.76
Point Lake	7/8/2014	Rubidium	1.1	1.3	0.85
Point Lake	7/8/2014	Strontium	5.5	6.1	0.90
Point Lake	7/8/2014	Barium	1.8	1.9	0.95
Point Lake	7/8/2014	Nickel	0.6	0.6	1.00
Rocknest Lake	7/8/2014	Manganese	1.0	2.7	0.37
Rocknest Lake	7/8/2014	Aluminum	5.4	12.2	0.44
Rocknest Lake	7/8/2014	Rubidium	1.2	1.3	0.92
Rocknest Lake	7/8/2014	Strontium	6.9	7.3	0.95
Rocknest Lake	7/8/2014	Nickel	0.5	0.5	1.00
Rocknest Lake	7/8/2014	Barium	3.0	2.8	1.07
Daring Lake	3/21/2014	Aluminum	3.0	4.4	0.68
Daring Lake	3/21/2014	Barium	1.6	1.7	0.94
Daring Lake	3/21/2014	Rubidium	1.7	1.8	0.94
Daring Lake	3/21/2014	Strontium	8.3	8.5	0.98
Daring Lake	3/21/2014	Lithium	1.3	1.3	1.00
Desteffany Lake	3/21/2014	Aluminum	4.3	6.8	0.63
Desteffany Lake	3/21/2014	Aluminum	4.6	6.4	0.72
Desteffany Lake	3/21/2014	Lithium	1.7	1.8	0.94
Desteffany Lake	3/21/2014	Rubidium	2.1	2.2	0.95
Desteffany Lake	3/21/2014	Barium	2.2	2.3	0.96
Desteffany Lake	3/21/2014	Barium	2.2	2.3	0.96
Desteffany Lake	3/21/2014	Strontium	13.6	14.0	0.97
Desteffany Lake	3/21/2014	Lithium	1.7	1.7	1.00
Desteffany Lake	3/21/2014	Rubidium	2.2	2.2	1.00
Desteffany Lake	3/21/2014	Strontium	14.0	13.7	1.02
Desteffany Lake	3/21/2014	Nickel	1.9	1.1	1.73
Desteffany Lake	3/21/2014	Nickel	2.2	1.1	2.00
King Lake	3/21/2014	Aluminum	3.9	5.5	0.71
King Lake	3/21/2014	Barium	3.7	3.8	0.97
King Lake	3/21/2014	Lithium	1.9	1.9	1.00
King Lake	3/21/2014	Nickel	0.6	0.6	1.00
King Lake	3/21/2014	Rubidium	2.3	2.3	1.00
King Lake	3/21/2014	Strontium	18.9	18.3	1.03
Lac de Gras Outlet	3/21/2014	Lithium	1.9	2.0	0.95
Lac de Gras Outlet	3/21/2014	Barium	2.4	2.5	0.96
Lac de Gras Outlet	3/21/2014	Strontium	16.6	16.7	0.99
Lac de Gras Outlet	3/21/2014	Nickel	1.3	1.3	1.00
Lac de Gras Outlet	3/21/2014	Rubidium	2.4	2.4	1.00
Lake of the Enemy	3/21/2014	Nickel	0.6	0.7	0.86
Lake of the Enemy	3/21/2014	Nickel	0.6	0.7	0.86
Lake of the Enemy	3/21/2014	Lithium	1.8	1.9	0.95
Lake of the Enemy	3/21/2014	Barium	1.9	2.0	0.95
Lake of the Enemy	3/21/2014	Barium	1.9	2.0	0.95
Lake of the Enemy	3/21/2014	Strontium	10.4	10.9	0.95
Lake of the Enemy	3/21/2014	Lithium	1.8	1.8	1.00
Lake of the Enemy	3/21/2014	Rubidium	1.5	1.5	1.00
Lake of the Enemy	3/21/2014	Rubidium	1.5	1.5	1.00
Lake of the Enemy	3/21/2014	Strontium	10.5	10.5	1.00
MacKay Lake	3/21/2014	Manganese	0.6	1.3	0.46
MacKay Lake	3/21/2014	Aluminum	3.7	5.8	0.64
MacKay Lake	3/21/2014	Nickel	1.5	1.7	0.88
MacKay Lake	3/21/2014	Rubidium	2.1	2.2	0.95
MacKay Lake	3/21/2014	Strontium	12.6	12.8	0.98
MacKay Lake	3/21/2014	Barium	2.6	2.6	1.00
MacKay Lake	3/21/2014	Lithium	2.0	2.0	1.00
Point Lake	3/21/2014	Nickel	1.5	1.6	0.94

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Point Lake	3/21/2014	Barium	3.3	3.4	0.97
Point Lake	3/21/2014	Aluminum	16.7	16.9	0.99
Point Lake	3/21/2014	Lithium	1.7	1.7	1.00
Point Lake	3/21/2014	Strontium	12.4	12.4	1.00
Point Lake	3/21/2014	Rubidium	2.7	2.6	1.04
Point Lake	3/21/2014	Copper	1.4	1.3	1.08
Rocknest Lake	3/21/2014	Aluminum	9.5	11.5	0.83
Rocknest Lake	3/21/2014	Manganese	2.2	2.6	0.85
Rocknest Lake	3/21/2014	Rubidium	1.6	1.7	0.94
Rocknest Lake	3/21/2014	Barium	2.9	3.0	0.97
Rocknest Lake	3/21/2014	Strontium	8.3	8.5	0.98
Rocknest Lake	3/21/2014	Lithium	1.1	1.1	1.00
Rocknest Lake	3/21/2014	Nickel	1.0	1.0	1.00
Daring Lake	9/6/2013	Barium	1.0	1.1	0.91
Daring Lake	9/6/2013	Rubidium	1.1	1.2	0.92
Daring Lake	9/6/2013	Strontium	5.0	5.4	0.93
Desteffany Lake	9/6/2013	Aluminum	4.6	11.1	0.41
Desteffany Lake	9/6/2013	Aluminum	4.8	11.0	0.44
Desteffany Lake	9/6/2013	Nickel	0.6	0.8	0.75
Desteffany Lake	9/6/2013	Barium	1.3	1.6	0.81
Desteffany Lake	9/6/2013	Lithium	1.0	1.2	0.83
Desteffany Lake	9/6/2013	Strontium	6.8	8.1	0.84
Desteffany Lake	9/6/2013	Strontium	6.8	8.1	0.84
Desteffany Lake	9/6/2013	Strontium	6.8	8.1	0.84
Desteffany Lake	9/6/2013	Nickel	0.6	0.7	0.86
Desteffany Lake	9/6/2013	Barium	1.3	1.5	0.87
Desteffany Lake	9/6/2013	Rubidium	1.3	1.5	0.87
Desteffany Lake	9/6/2013	Rubidium	1.3	1.5	0.87
Desteffany Lake	9/6/2013	Lithium	1.1	1.2	0.92
King Lake	9/6/2013	Barium	2.5	3.0	0.83
King Lake	9/6/2013	Lithium	1.2	1.4	0.86
King Lake	9/6/2013	Rubidium	1.3	1.5	0.87
King Lake	9/6/2013	Strontium	11.5	12.9	0.89
Lac de Gras Outlet	9/6/2013	Barium	1.7	1.9	0.89
Lac de Gras Outlet	9/6/2013	Nickel	0.9	1.0	0.90
Lac de Gras Outlet	9/6/2013	Strontium	10.6	10.8	0.98
Lac de Gras Outlet	9/6/2013	Lithium	1.3	1.3	1.00
Lac de Gras Outlet	9/6/2013	Rubidium	1.7	1.5	1.13
Lake of the Enemy	9/6/2013	Barium	1.2	1.7	0.71
Lake of the Enemy	9/6/2013	Lithium	1.1	1.4	0.79
Lake of the Enemy	9/6/2013	Rubidium	0.8	1.0	0.80
Lake of the Enemy	9/6/2013	Rubidium	0.8	1.0	0.80
Lake of the Enemy	9/6/2013	Strontium	6.1	7.3	0.84
Lake of the Enemy	9/6/2013	Barium	1.3	1.5	0.87
Lake of the Enemy	9/6/2013	Strontium	6.1	7.0	0.87
Lake of the Enemy	9/6/2013	Lithium	1.2	1.3	0.92
MacKay Lake	9/6/2013	Nickel	0.7	0.9	0.78
MacKay Lake	9/6/2013	Barium	1.6	2.0	0.80
MacKay Lake	9/6/2013	Lithium	1.0	1.2	0.83
MacKay Lake	9/6/2013	Strontium	6.5	7.7	0.84
MacKay Lake	9/6/2013	Rubidium	1.1	1.2	0.92
Point Lake	9/6/2013	Aluminum	7.4	11.6	0.64
Point Lake	9/6/2013	Barium	1.6	1.9	0.84
Point Lake	9/6/2013	Nickel	0.7	0.8	0.88
Point Lake	9/6/2013	Strontium	5.5	6.0	0.92
Point Lake	9/6/2013	Rubidium	1.2	1.2	1.00
Rocknest Lake	9/6/2013	Aluminum	5.8	11.6	0.50
Rocknest Lake	9/6/2013	Strontium	5.8	6.2	0.94
Rocknest Lake	9/6/2013	Barium	2.1	2.2	0.95
Rocknest Lake	9/6/2013	Rubidium	1.2	1.2	1.00
Rocknest Lake	9/6/2013	Nickel	0.8	0.7	1.14
Daring Lake	8/7/2013	Aluminum	3.2	5.6	0.57
Daring Lake	8/7/2013	Manganese	0.6	1.0	0.60
Daring Lake	8/7/2013	Barium	0.9	1.0	0.90
Daring Lake	8/7/2013	Strontium	4.8	5.2	0.92
Daring Lake	8/7/2013	Rubidium	1.1	1.1	1.00
Desteffany Lake	8/7/2013	Manganese	0.6	2.6	0.23
Desteffany Lake	8/7/2013	Manganese	0.8	2.6	0.31
Desteffany Lake	8/7/2013	Aluminum	7.3	13.7	0.53
Desteffany Lake	8/7/2013	Aluminum	7.9	11.8	0.67
Desteffany Lake	8/7/2013	Barium	1.4	1.8	0.78
Desteffany Lake	8/7/2013	Lithium	1.1	1.2	0.92
Desteffany Lake	8/7/2013	Strontium	7.2	7.8	0.92
Desteffany Lake	8/7/2013	Rubidium	1.4	1.5	0.93
Desteffany Lake	8/7/2013	Barium	1.5	1.5	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Desteffany Lake	8/7/2013	Lithium	1.2	1.2	1.00
Desteffany Lake	8/7/2013	Nickel	0.7	0.7	1.00
Desteffany Lake	8/7/2013	Nickel	0.7	0.7	1.00
Desteffany Lake	8/7/2013	Strontium	7.6	7.6	1.00
Desteffany Lake	8/7/2013	Rubidium	1.5	1.4	1.07
King Lake	8/7/2013	Aluminum	4.4	10.8	0.41
King Lake	8/7/2013	Barium	2.4	4.7	0.51
King Lake	8/7/2013	Rubidium	1.2	1.3	0.92
King Lake	8/7/2013	Strontium	10.5	11.3	0.93
King Lake	8/7/2013	Lithium	1.1	1.1	1.00
Lac de Gras Outlet	8/7/2013	Manganese	1.2	2.2	0.55
Lac de Gras Outlet	8/7/2013	Barium	1.7	2.4	0.71
Lac de Gras Outlet	8/7/2013	Lithium	1.2	1.4	0.86
Lac de Gras Outlet	8/7/2013	Rubidium	1.4	1.5	0.93
Lac de Gras Outlet	8/7/2013	Strontium	10.2	10.8	0.94
Lac de Gras Outlet	8/7/2013	Nickel	0.9	0.9	1.00
Lake of the Enemy	8/7/2013	Manganese	0.9	1.8	0.50
Lake of the Enemy	8/7/2013	Manganese	0.9	1.5	0.60
Lake of the Enemy	8/7/2013	Barium	1.4	1.9	0.74
Lake of the Enemy	8/7/2013	Barium	1.4	1.8	0.78
Lake of the Enemy	8/7/2013	Rubidium	0.9	1.0	0.90
Lake of the Enemy	8/7/2013	Lithium	1.2	1.3	0.92
Lake of the Enemy	8/7/2013	Strontium	6.6	6.8	0.97
Lake of the Enemy	8/7/2013	Lithium	1.2	1.2	1.00
Lake of the Enemy	8/7/2013	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/7/2013	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/7/2013	Rubidium	0.9	0.9	1.00
Lake of the Enemy	8/7/2013	Strontium	6.7	6.3	1.06
MacKay Lake	8/7/2013	Aluminum	4.1	7.3	0.56
MacKay Lake	8/7/2013	Barium	1.8	2.1	0.86
MacKay Lake	8/7/2013	Nickel	0.5	0.5	1.00
MacKay Lake	8/7/2013	Rubidium	1.1	1.1	1.00
MacKay Lake	8/7/2013	Strontium	7.2	7.2	1.00
MacKay Lake	8/7/2013	Lithium	1.2	1.1	1.09
Point Lake	8/7/2013	Manganese	0.5	0.7	0.71
Point Lake	8/7/2013	Aluminum	9.2	11.6	0.79
Point Lake	8/7/2013	Strontium	5.7	5.9	0.97
Point Lake	8/7/2013	Barium	1.7	1.7	1.00
Point Lake	8/7/2013	Nickel	0.7	0.7	1.00
Point Lake	8/7/2013	Rubidium	1.2	1.2	1.00
Rocknest Lake	8/7/2013	Manganese	0.5	1.2	0.42
Rocknest Lake	8/7/2013	Aluminum	9.1	11.8	0.77
Rocknest Lake	8/7/2013	Barium	2.3	2.4	0.96
Rocknest Lake	8/7/2013	Nickel	0.6	0.6	1.00
Rocknest Lake	8/7/2013	Rubidium	1.2	1.2	1.00
Rocknest Lake	8/7/2013	Strontium	6.1	6.1	1.00
Daring Lake	7/9/2013	Manganese	0.9	1.6	0.56
Daring Lake	7/9/2013	Aluminum	4.7	8.3	0.57
Daring Lake	7/9/2013	Barium	1.1	1.2	0.92
Daring Lake	7/9/2013	Strontium	4.9	5.3	0.92
Daring Lake	7/9/2013	Rubidium	1.1	1.1	1.00
Desteffany Lake	7/9/2013	Manganese	1.6	4.4	0.36
Desteffany Lake	7/9/2013	Aluminum	12.0	19.6	0.61
Desteffany Lake	7/9/2013	Lithium	1.2	1.3	0.92
Desteffany Lake	7/9/2013	Barium	1.8	1.9	0.95
Desteffany Lake	7/9/2013	Nickel	0.7	0.7	1.00
Desteffany Lake	7/9/2013	Rubidium	1.5	1.5	1.00
Desteffany Lake	7/9/2013	Strontium	7.8	7.8	1.00
King Lake	7/9/2013	Manganese	0.7	2.5	0.28
King Lake	7/9/2013	Manganese	0.7	2.1	0.33
King Lake	7/9/2013	Aluminum	6.4	9.0	0.71
King Lake	7/9/2013	Aluminum	6.9	8.7	0.79
King Lake	7/9/2013	Barium	2.8	2.9	0.97
King Lake	7/9/2013	Lithium	1.2	1.2	1.00
King Lake	7/9/2013	Nickel	0.5	0.5	1.00
King Lake	7/9/2013	Nickel	0.5	0.5	1.00
King Lake	7/9/2013	Rubidium	1.2	1.2	1.00
King Lake	7/9/2013	Strontium	11.4	11.3	1.01
King Lake	7/9/2013	Strontium	11.8	11.5	1.03
King Lake	7/9/2013	Barium	2.9	2.8	1.04
King Lake	7/9/2013	Rubidium	1.3	1.2	1.08
King Lake	7/9/2013	Lithium	1.1	1.0	1.10
Lac de Gras Outlet	7/9/2013	Manganese	1.9	2.4	0.79
Lac de Gras Outlet	7/9/2013	Barium	1.8	1.7	1.06

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	7/9/2013	Rubidium	1.4	1.3	1.08
Lac de Gras Outlet	7/9/2013	Lithium	1.3	1.2	1.08
Lac de Gras Outlet	7/9/2013	Strontium	9.8	9.0	1.09
Lac de Gras Outlet	7/9/2013	Nickel	1.0	0.8	1.25
Lake of the Enemy	7/9/2013	Manganese	2.4	3.1	0.77
Lake of the Enemy	7/9/2013	Lithium	1.1	1.1	1.00
Lake of the Enemy	7/9/2013	Strontium	6.9	6.5	1.06
Lake of the Enemy	7/9/2013	Barium	1.6	1.5	1.07
Lake of the Enemy	7/9/2013	Rubidium	1.0	0.9	1.11
Lake of the Enemy	7/9/2013	Nickel	0.7	0.5	1.40
MacKay Lake	7/9/2013	Manganese	1.4	2.1	0.67
MacKay Lake	7/9/2013	Aluminum	4.9	6.5	0.75
MacKay Lake	7/9/2013	Barium	2.0	2.1	0.95
MacKay Lake	7/9/2013	Strontium	7.4	7.5	0.99
MacKay Lake	7/9/2013	Lithium	1.2	1.2	1.00
MacKay Lake	7/9/2013	Rubidium	1.2	1.1	1.09
MacKay Lake	7/9/2013	Nickel	0.9	0.8	1.13
Point Lake	7/9/2013	Manganese	0.5	0.6	0.83
Point Lake	7/9/2013	Aluminum	10.6	11.7	0.91
Point Lake	7/9/2013	Aluminum	10.1	11.0	0.92
Point Lake	7/9/2013	Rubidium	1.2	1.3	0.92
Point Lake	7/9/2013	Barium	1.8	1.9	0.95
Point Lake	7/9/2013	Strontium	5.8	6.0	0.97
Point Lake	7/9/2013	Barium	1.8	1.8	1.00
Point Lake	7/9/2013	Manganese	0.5	0.5	1.00
Point Lake	7/9/2013	Nickel	0.7	0.7	1.00
Point Lake	7/9/2013	Nickel	0.7	0.7	1.00
Point Lake	7/9/2013	Strontium	6.0	5.8	1.03
Point Lake	7/9/2013	Rubidium	1.3	1.2	1.08
Rocknest Lake	7/9/2013	Manganese	0.8	1.9	0.42
Rocknest Lake	7/9/2013	Aluminum	11.8	14.6	0.81
Rocknest Lake	7/9/2013	Barium	2.8	2.9	0.97
Rocknest Lake	7/9/2013	Strontium	6.4	6.6	0.97
Rocknest Lake	7/9/2013	Nickel	0.6	0.6	1.00
Rocknest Lake	7/9/2013	Rubidium	1.2	1.2	1.00
Daring Lake	3/27/2013	Manganese	0.5	0.9	0.56
Daring Lake	3/27/2013	Barium	1.7	1.8	0.94
Daring Lake	3/27/2013	Lithium	1.2	1.2	1.00
Daring Lake	3/27/2013	Rubidium	1.8	1.8	1.00
Daring Lake	3/27/2013	Strontium	8.3	8.3	1.00
Desteffany Lake	3/27/2013	Manganese	0.5	0.9	0.56
Desteffany Lake	3/27/2013	Manganese	0.5	0.9	0.56
Desteffany Lake	3/27/2013	Aluminum	3.4	4.0	0.85
Desteffany Lake	3/27/2013	Lithium	1.6	1.8	0.89
Desteffany Lake	3/27/2013	Aluminum	3.9	4.3	0.91
Desteffany Lake	3/27/2013	Rubidium	1.8	1.9	0.95
Desteffany Lake	3/27/2013	Barium	2.3	2.4	0.96
Desteffany Lake	3/27/2013	Barium	2.3	2.3	1.00
Desteffany Lake	3/27/2013	Nickel	1.0	1.0	1.00
Desteffany Lake	3/27/2013	Rubidium	1.8	1.8	1.00
Desteffany Lake	3/27/2013	Strontium	11.8	11.8	1.00
Desteffany Lake	3/27/2013	Strontium	11.8	11.8	1.00
Desteffany Lake	3/27/2013	Lithium	1.8	1.7	1.06
Desteffany Lake	3/27/2013	Nickel	1.1	1.0	1.10
King Lake	3/27/2013	Aluminum	3.1	3.7	0.84
King Lake	3/27/2013	Barium	3.6	3.6	1.00
King Lake	3/27/2013	Lithium	1.8	1.8	1.00
King Lake	3/27/2013	Nickel	0.5	0.5	1.00
King Lake	3/27/2013	Rubidium	1.9	1.9	1.00
King Lake	3/27/2013	Strontium	16.0	15.7	1.02
Lake of the Enemy	3/27/2013	Strontium	12.3	12.4	0.99
Lake of the Enemy	3/27/2013	Barium	2.7	2.7	1.00
Lake of the Enemy	3/27/2013	Nickel	0.8	0.8	1.00
Lake of the Enemy	3/27/2013	Lithium	2.4	2.3	1.04
Lake of the Enemy	3/27/2013	Rubidium	1.8	1.7	1.06
MacKay Lake	3/27/2013	Manganese	0.9	1.3	0.69
MacKay Lake	3/27/2013	Aluminum	4.4	5.0	0.88
MacKay Lake	3/27/2013	Barium	2.7	2.8	0.96
MacKay Lake	3/27/2013	Lithium	1.7	1.7	1.00
MacKay Lake	3/27/2013	Nickel	1.5	1.5	1.00
MacKay Lake	3/27/2013	Rubidium	1.9	1.9	1.00
MacKay Lake	3/27/2013	Strontium	11.4	11.1	1.03
Point Lake	3/27/2013	Barium	2.3	2.5	0.92
Point Lake	3/27/2013	Aluminum	11.7	12.4	0.94

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Point Lake	3/27/2013	Strontium	7.1	7.3	0.97
Point Lake	3/27/2013	Lithium	1.1	1.1	1.00
Point Lake	3/27/2013	Nickel	0.9	0.9	1.00
Point Lake	3/27/2013	Rubidium	1.5	1.5	1.00
Rocknest Lake	3/27/2013	Manganese	0.6	0.9	0.67
Rocknest Lake	3/27/2013	Barium	2.5	2.6	0.96
Rocknest Lake	3/27/2013	Strontium	7.3	7.4	0.99
Rocknest Lake	3/27/2013	Aluminum	10.7	10.8	0.99
Rocknest Lake	3/27/2013	Lithium	1.1	1.1	1.00
Rocknest Lake	3/27/2013	Nickel	0.9	0.9	1.00
Rocknest Lake	3/27/2013	Rubidium	1.5	1.5	1.00
Lac de Gras Outlet	3/25/2013	Barium	2.6	2.8	0.93
Lac de Gras Outlet	3/25/2013	Nickel	1.3	1.4	0.93
Lac de Gras Outlet	3/25/2013	Lithium	1.9	2.0	0.95
Lac de Gras Outlet	3/25/2013	Strontium	14.7	14.8	0.99
Lac de Gras Outlet	3/25/2013	Rubidium	2.2	2.2	1.00
Lake of the Enemy	3/25/2013	Barium	2.7	3.9	0.69
Lake of the Enemy	3/25/2013	Strontium	11.6	12.3	0.94
Lake of the Enemy	3/25/2013	Rubidium	1.7	1.8	0.94
Lake of the Enemy	3/25/2013	Nickel	0.7	0.7	1.00
Lake of the Enemy	3/25/2013	Lithium	2.3	2.2	1.05
Daring Lake	9/5/2012	Manganese	0.7	1.8	0.39
Daring Lake	9/5/2012	Manganese	0.7	1.5	0.47
Daring Lake	9/5/2012	Aluminum	5.7	6.1	0.93
Daring Lake	9/5/2012	Aluminum	5.9	6.0	0.98
Daring Lake	9/5/2012	Barium	1.1	1.1	1.00
Daring Lake	9/5/2012	Barium	1.1	1.1	1.00
Daring Lake	9/5/2012	Rubidium	1.2	1.2	1.00
Daring Lake	9/5/2012	Rubidium	1.2	1.2	1.00
Daring Lake	9/5/2012	Strontium	5.1	5.1	1.00
Daring Lake	9/5/2012	Strontium	5.3	5.3	1.00
Desteffany Lake	9/5/2012	Manganese	0.5	2.4	0.21
Desteffany Lake	9/5/2012	Aluminum	6.9	10.0	0.69
Desteffany Lake	9/5/2012	Lithium	1.0	1.3	0.77
Desteffany Lake	9/5/2012	Barium	1.4	1.6	0.88
Desteffany Lake	9/5/2012	Rubidium	1.4	1.5	0.93
Desteffany Lake	9/5/2012	Strontium	7.2	7.6	0.95
Desteffany Lake	9/5/2012	Nickel	0.6	0.6	1.00
King Lake	9/5/2012	Aluminum	5.9	8.4	0.70
King Lake	9/5/2012	Barium	2.4	2.6	0.92
King Lake	9/5/2012	Strontium	10.7	11.1	0.96
King Lake	9/5/2012	Lithium	1.1	1.1	1.00
King Lake	9/5/2012	Rubidium	1.3	1.3	1.00
Lac de Gras Outlet	9/5/2012	Aluminum	3.5	6.9	0.51
Lac de Gras Outlet	9/5/2012	Lithium	1.1	1.3	0.85
Lac de Gras Outlet	9/5/2012	Nickel	0.7	0.8	0.88
Lac de Gras Outlet	9/5/2012	Barium	1.6	1.8	0.89
Lac de Gras Outlet	9/5/2012	Strontium	9.2	9.9	0.93
Lac de Gras Outlet	9/5/2012	Barium	1.6	1.6	1.00
Lac de Gras Outlet	9/5/2012	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	9/5/2012	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	9/5/2012	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	9/5/2012	Aluminum	4.5	4.4	1.02
Lac de Gras Outlet	9/5/2012	Strontium	9.5	9.1	1.04
Lac de Gras Outlet	9/5/2012	Lithium	1.2	1.1	1.09
Lake of the Enemy	9/5/2012	Rubidium	0.9	1.0	0.90
Lake of the Enemy	9/5/2012	Strontium	6.4	6.9	0.93
Lake of the Enemy	9/5/2012	Barium	1.4	1.5	0.93
Lake of the Enemy	9/5/2012	Barium	1.4	1.5	0.93
Lake of the Enemy	9/5/2012	Lithium	1.4	1.5	0.93
Lake of the Enemy	9/5/2012	Aluminum	3.1	3.3	0.94
Lake of the Enemy	9/5/2012	Strontium	6.7	6.9	0.97
Lake of the Enemy	9/5/2012	Lithium	1.3	1.3	1.00
Lake of the Enemy	9/5/2012	Rubidium	1.0	1.0	1.00
MacKay Lake	9/5/2012	Aluminum	5.0	7.1	0.70
MacKay Lake	9/5/2012	Barium	1.6	1.7	0.94
MacKay Lake	9/5/2012	Strontium	7.0	7.2	0.97
MacKay Lake	9/5/2012	Rubidium	1.1	1.1	1.00
MacKay Lake	9/5/2012	Lithium	1.2	1.0	1.20
Point Lake	9/5/2012	Nickel	0.6	0.7	0.86
Point Lake	9/5/2012	Aluminum	10.3	11.5	0.90
Point Lake	9/5/2012	Rubidium	1.2	1.3	0.92
Point Lake	9/5/2012	Barium	1.8	1.9	0.95
Point Lake	9/5/2012	Strontium	5.8	5.9	0.98

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Rocknest Lake	9/5/2012	Manganese	0.7	1.7	0.41
Rocknest Lake	9/5/2012	Aluminum	11.4	13.1	0.87
Rocknest Lake	9/5/2012	Rubidium	1.2	1.3	0.92
Rocknest Lake	9/5/2012	Barium	2.2	2.3	0.96
Rocknest Lake	9/5/2012	Strontium	6.1	6.3	0.97
Rocknest Lake	9/5/2012	Nickel	0.6	0.6	1.00
Daring Lake	8/8/2012	Manganese	0.5	1.7	0.29
Daring Lake	8/8/2012	Aluminum	4.9	8.7	0.56
Daring Lake	8/8/2012	Barium	1.0	1.2	0.83
Daring Lake	8/8/2012	Rubidium	1.1	1.2	0.92
Daring Lake	8/8/2012	Strontium	4.9	5.3	0.92
Desteffany Lake	8/8/2012	Aluminum	6.5	12.3	0.53
Desteffany Lake	8/8/2012	Aluminum	6.7	11.5	0.58
Desteffany Lake	8/8/2012	Rubidium	1.3	1.5	0.87
Desteffany Lake	8/8/2012	Barium	1.4	1.6	0.88
Desteffany Lake	8/8/2012	Barium	1.4	1.6	0.88
Desteffany Lake	8/8/2012	Strontium	7.0	7.9	0.89
Desteffany Lake	8/8/2012	Lithium	1.1	1.2	0.92
Desteffany Lake	8/8/2012	Lithium	1.2	1.3	0.92
Desteffany Lake	8/8/2012	Strontium	7.4	7.9	0.94
Desteffany Lake	8/8/2012	Nickel	0.7	0.7	1.00
Desteffany Lake	8/8/2012	Nickel	0.7	0.7	1.00
Desteffany Lake	8/8/2012	Rubidium	1.5	1.5	1.00
King Lake	8/8/2012	Aluminum	6.8	10.3	0.66
King Lake	8/8/2012	Barium	2.6	3.0	0.87
King Lake	8/8/2012	Lithium	1.1	1.2	0.92
King Lake	8/8/2012	Strontium	10.9	11.8	0.92
King Lake	8/8/2012	Rubidium	1.3	1.3	1.00
Lac de Gras Outlet	8/8/2012	Aluminum	3.3	5.7	0.58
Lac de Gras Outlet	8/8/2012	Rubidium	1.4	1.6	0.88
Lac de Gras Outlet	8/8/2012	Barium	1.6	1.8	0.89
Lac de Gras Outlet	8/8/2012	Lithium	1.2	1.3	0.92
Lac de Gras Outlet	8/8/2012	Rubidium	1.4	1.5	0.93
Lac de Gras Outlet	8/8/2012	Strontium	9.6	10.2	0.94
Lac de Gras Outlet	8/8/2012	Strontium	9.6	10.2	0.94
Lac de Gras Outlet	8/8/2012	Barium	1.6	1.7	0.94
Lac de Gras Outlet	8/8/2012	Lithium	1.2	1.2	1.00
Lac de Gras Outlet	8/8/2012	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	8/8/2012	Nickel	0.9	0.9	1.00
Lake of the Enemy	8/8/2012	Rubidium	0.9	1.1	0.82
Lake of the Enemy	8/8/2012	Barium	1.5	1.8	0.83
Lake of the Enemy	8/8/2012	Barium	1.5	1.8	0.83
Lake of the Enemy	8/8/2012	Lithium	1.3	1.5	0.87
Lake of the Enemy	8/8/2012	Lithium	1.3	1.5	0.87
Lake of the Enemy	8/8/2012	Strontium	6.5	7.2	0.90
Lake of the Enemy	8/8/2012	Strontium	7.0	7.5	0.93
Lake of the Enemy	8/8/2012	Rubidium	1.0	1.0	1.00
MacKay Lake	8/8/2012	Aluminum	5.6	8.5	0.66
MacKay Lake	8/8/2012	Barium	1.6	1.8	0.89
MacKay Lake	8/8/2012	Nickel	0.9	1.0	0.90
MacKay Lake	8/8/2012	Strontium	6.8	7.2	0.94
MacKay Lake	8/8/2012	Lithium	1.1	1.1	1.00
MacKay Lake	8/8/2012	Rubidium	1.2	1.2	1.00
Point Lake	8/8/2012	Aluminum	9.7	12.8	0.76
Point Lake	8/8/2012	Strontium	5.7	6.2	0.92
Point Lake	8/8/2012	Rubidium	1.2	1.3	0.92
Point Lake	8/8/2012	Barium	1.7	1.8	0.94
Point Lake	8/8/2012	Nickel	0.7	0.7	1.00
Rocknest Lake	8/8/2012	Manganese	0.6	2.5	0.24
Rocknest Lake	8/8/2012	Aluminum	8.3	13.4	0.62
Rocknest Lake	8/8/2012	Barium	2.1	2.5	0.84
Rocknest Lake	8/8/2012	Rubidium	1.2	1.4	0.86
Rocknest Lake	8/8/2012	Strontium	6.0	6.5	0.92
Rocknest Lake	8/8/2012	Nickel	0.6	0.6	1.00
Daring Lake	7/6/2010	Manganese	1.1	2.7	0.41
Daring Lake	7/6/2010	Aluminum	5.5	9.6	0.57
Daring Lake	7/6/2010	Barium	1.1	1.3	0.85
Daring Lake	7/6/2010	Strontium	4.5	5.0	0.90
Daring Lake	7/6/2010	Rubidium	1.0	1.1	0.91
Desteffany Lake	7/6/2010	Manganese	1.7	3.3	0.52
Desteffany Lake	7/6/2010	Aluminum	11.0	16.6	0.66
Desteffany Lake	7/6/2010	Nickel	0.8	0.9	0.89
Desteffany Lake	7/6/2010	Lithium	1.1	1.2	0.92
Desteffany Lake	7/6/2010	Strontium	6.1	6.6	0.92

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Desteffany Lake	7/6/2010	Barium	1.6	1.7	0.94
Desteffany Lake	7/6/2010	Rubidium	1.3	1.3	1.00
King Lake	7/6/2010	Aluminum	4.7	9.1	0.52
King Lake	7/6/2010	Barium	2.4	2.7	0.89
King Lake	7/6/2010	Rubidium	1.1	1.2	0.92
King Lake	7/6/2010	Strontium	9.2	9.8	0.94
King Lake	7/6/2010	Lithium	1.3	1.3	1.00
Lac de Gras Outlet	7/6/2010	Manganese	3.0	6.5	0.46
Lac de Gras Outlet	7/6/2010	Barium	1.5	1.8	0.83
Lac de Gras Outlet	7/6/2010	Strontium	6.8	7.7	0.88
Lac de Gras Outlet	7/6/2010	Nickel	1.0	1.1	0.91
Lac de Gras Outlet	7/6/2010	Rubidium	1.2	1.3	0.92
Lac de Gras Outlet	7/6/2010	Aluminum	6.0	5.5	1.09
Lac de Gras Outlet	7/6/2010	Lithium	1.3	1.0	1.30
Lake of the Enemy	7/6/2010	Manganese	0.6	1.0	0.60
Lake of the Enemy	7/6/2010	Rubidium	0.8	0.9	0.89
Lake of the Enemy	7/6/2010	Strontium	6.1	6.8	0.90
Lake of the Enemy	7/6/2010	Barium	1.6	1.7	0.94
Lake of the Enemy	7/6/2010	Lithium	1.4	1.2	1.17
Lake of the Enemy	7/6/2010	Nickel	0.6	0.5	1.20
MacKay Lake	7/6/2010	Manganese	6.9	10.9	0.63
MacKay Lake	7/6/2010	Aluminum	9.0	10.6	0.85
MacKay Lake	7/6/2010	Barium	1.9	2.2	0.86
MacKay Lake	7/6/2010	Nickel	1.3	1.3	1.00
MacKay Lake	7/6/2010	Rubidium	1.1	1.1	1.00
MacKay Lake	7/6/2010	Strontium	6.7	6.7	1.00
Point Lake	7/6/2010	Aluminum	11.0	13.6	0.81
Point Lake	7/6/2010	Barium	1.7	1.9	0.89
Point Lake	7/6/2010	Strontium	5.2	5.7	0.91
Point Lake	7/6/2010	Rubidium	1.1	1.2	0.92
Point Lake	7/6/2010	Nickel	0.8	0.8	1.00
Rocknest Lake	7/6/2010	Manganese	0.7	2.3	0.30
Rocknest Lake	7/6/2010	Aluminum	9.8	14.9	0.66
Rocknest Lake	7/6/2010	Rubidium	1.0	1.2	0.83
Rocknest Lake	7/6/2010	Barium	2.5	2.8	0.89
Rocknest Lake	7/6/2010	Strontium	6.1	6.8	0.90
Rocknest Lake	7/6/2010	Nickel	0.6	0.6	1.00
Daring Lake	8/5/2009	Manganese	0.5	1.3	0.38
Daring Lake	8/5/2009	Aluminum	3.5	5.5	0.64
Daring Lake	8/5/2009	Barium	1.1	1.2	0.92
Daring Lake	8/5/2009	Rubidium	1.1	1.1	1.00
Daring Lake	8/5/2009	Strontium	4.8	4.8	1.00
Desteffany Lake	8/5/2009	Manganese	1.1	2.5	0.44
Desteffany Lake	8/5/2009	Manganese	1.2	2.5	0.48
Desteffany Lake	8/5/2009	Aluminum	12.0	16.0	0.75
Desteffany Lake	8/5/2009	Aluminum	12.3	15.5	0.79
Desteffany Lake	8/5/2009	Nickel	0.7	0.8	0.88
Desteffany Lake	8/5/2009	Barium	1.6	1.7	0.94
Desteffany Lake	8/5/2009	Barium	1.6	1.7	0.94
Desteffany Lake	8/5/2009	Strontium	5.8	5.9	0.98
Desteffany Lake	8/5/2009	Lithium	1.2	1.2	1.00
Desteffany Lake	8/5/2009	Lithium	1.2	1.2	1.00
Desteffany Lake	8/5/2009	Nickel	0.8	0.8	1.00
Desteffany Lake	8/5/2009	Rubidium	1.3	1.3	1.00
Desteffany Lake	8/5/2009	Rubidium	1.3	1.3	1.00
Desteffany Lake	8/5/2009	Strontium	5.9	5.9	1.00
Fairy Lake	8/5/2009	Manganese	1.2	1.8	0.67
Fairy Lake	8/5/2009	Barium	9.5	10.0	0.95
Fairy Lake	8/5/2009	Strontium	8.1	8.1	1.00
Fairy Lake	8/5/2009	Zinc	2.9	2.7	1.07
King Lake	8/5/2009	Aluminum	7.3	10.0	0.73
King Lake	8/5/2009	Lithium	1.1	1.2	0.92
King Lake	8/5/2009	Barium	2.7	2.8	0.96
King Lake	8/5/2009	Rubidium	1.1	1.1	1.00
King Lake	8/5/2009	Strontium	9.3	9.3	1.00
Lac de Gras Outlet	8/5/2009	Manganese	1.7	5.1	0.33
Lac de Gras Outlet	8/5/2009	Aluminum	3.3	5.0	0.66
Lac de Gras Outlet	8/5/2009	Barium	1.9	1.9	1.00
Lac de Gras Outlet	8/5/2009	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	8/5/2009	Rubidium	1.4	1.4	1.00
Lac de Gras Outlet	8/5/2009	Strontium	8.3	8.3	1.00
Lac de Gras Outlet	8/5/2009	Lithium	1.3	1.2	1.08
Lake of the Enemy	8/5/2009	Manganese	0.8	1.3	0.62
Lake of the Enemy	8/5/2009	Barium	1.7	1.7	1.00

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lake of the Enemy	8/5/2009	Lithium	1.3	1.3	1.00
Lake of the Enemy	8/5/2009	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/5/2009	Rubidium	0.9	0.9	1.00
Lake of the Enemy	8/5/2009	Strontium	6.3	6.3	1.00
MacKay Lake	8/5/2009	Manganese	1.7	4.4	0.39
MacKay Lake	8/5/2009	Aluminum	5.8	8.0	0.73
MacKay Lake	8/5/2009	Barium	1.8	1.9	0.95
MacKay Lake	8/5/2009	Strontium	6.5	6.6	0.98
MacKay Lake	8/5/2009	Nickel	1.1	1.1	1.00
MacKay Lake	8/5/2009	Lithium	1.2	1.1	1.09
MacKay Lake	8/5/2009	Rubidium	1.2	1.1	1.09
Point Lake	8/5/2009	Manganese	0.5	0.6	0.83
Point Lake	8/5/2009	Aluminum	11.9	12.8	0.93
Point Lake	8/5/2009	Nickel	0.7	0.7	1.00
Point Lake	8/5/2009	Rubidium	1.2	1.2	1.00
Point Lake	8/5/2009	Strontium	5.3	5.3	1.00
Point Lake	8/5/2009	Barium	2.1	1.9	1.11
Rocknest Lake	8/5/2009	Aluminum	10.0	11.9	0.84
Rocknest Lake	8/5/2009	Rubidium	1.1	1.2	0.92
Rocknest Lake	8/5/2009	Barium	3.6	3.7	0.97
Rocknest Lake	8/5/2009	Strontium	7.2	7.3	0.99
Rocknest Lake	8/5/2009	Nickel	0.5	0.5	1.00
Lac de Gras Outlet	7/28/2008	Barium	1.6	3.3	0.48
Lac de Gras Outlet	7/28/2008	Manganese	1.9	3.1	0.61
Lac de Gras Outlet	7/28/2008	Manganese	1.9	3.0	0.63
Lac de Gras Outlet	7/28/2008	Nickel	0.8	0.9	0.89
Lac de Gras Outlet	7/28/2008	Lithium	1.2	1.2	1.00
Lac de Gras Outlet	7/28/2008	Nickel	0.8	0.8	1.00
Lac de Gras Outlet	7/28/2008	Rubidium	1.2	1.2	1.00
Lac de Gras Outlet	7/28/2008	Strontium	6.6	6.5	1.02
Lac de Gras Outlet	7/28/2008	Strontium	8.9	6.5	1.37
Lac de Gras Outlet	7/28/2008	Rubidium	2.0	1.3	1.54
Lac de Gras Outlet	7/28/2008	Lithium	1.9	1.2	1.58
Lac de Gras Outlet	7/28/2008	Barium	6.8	2.1	3.24
Daring Lake	7/7/2008	Manganese	0.9	1.4	0.64
Daring Lake	7/7/2008	Rubidium	1.1	1.2	0.92
Daring Lake	7/7/2008	Lithium	3.2	3.3	0.97
Daring Lake	7/7/2008	Strontium	5.2	5.2	1.00
Daring Lake	7/7/2008	Barium	3.6	1.5	2.40
Desteffany Lake	7/7/2008	Aluminum	7.7	17.2	0.45
Desteffany Lake	7/7/2008	Manganese	2.0	3.3	0.61
Desteffany Lake	7/7/2008	Lithium	4.5	4.5	1.00
Desteffany Lake	7/7/2008	Nickel	0.7	0.7	1.00
Desteffany Lake	7/7/2008	Rubidium	1.4	1.4	1.00
Desteffany Lake	7/7/2008	Strontium	6.2	6.1	1.02
Desteffany Lake	7/7/2008	Barium	2.6	2.1	1.24
Fairy Lake	7/7/2008	Manganese	0.9	2.0	0.45
Fairy Lake	7/7/2008	Strontium	7.9	8.0	0.99
Fairy Lake	7/7/2008	Barium	10.7	10.8	0.99
King Lake	7/7/2008	Manganese	1.0	2.6	0.38
King Lake	7/7/2008	Aluminum	4.1	7.6	0.54
King Lake	7/7/2008	Strontium	9.9	10.1	0.98
King Lake	7/7/2008	Nickel	0.5	0.5	1.00
King Lake	7/7/2008	Rubidium	1.2	1.2	1.00
King Lake	7/7/2008	Lithium	4.3	4.2	1.02
King Lake	7/7/2008	Barium	3.7	3.4	1.09
Lake of the Enemy	7/7/2008	Manganese	1.0	1.2	0.83
Lake of the Enemy	7/7/2008	Strontium	6.2	6.4	0.97
Lake of the Enemy	7/7/2008	Lithium	4.7	4.7	1.00
Lake of the Enemy	7/7/2008	Nickel	0.5	0.5	1.00
Lake of the Enemy	7/7/2008	Rubidium	0.9	0.9	1.00
Lake of the Enemy	7/7/2008	Barium	3.1	2.3	1.35
MacKay Lake	7/7/2008	Manganese	1.9	2.4	0.79
MacKay Lake	7/7/2008	Strontium	6.5	6.6	0.98
MacKay Lake	7/7/2008	Lithium	4.1	4.1	1.00
MacKay Lake	7/7/2008	Nickel	0.9	0.9	1.00
MacKay Lake	7/7/2008	Rubidium	1.1	1.1	1.00
MacKay Lake	7/7/2008	Barium	2.4	2.2	1.09
MacKay Lake	7/7/2008	Aluminum	7.6	3.9	1.95
Point Lake	7/7/2008	Aluminum	7.5	19.1	0.39
Point Lake	7/7/2008	Barium	2.3	2.5	0.92
Point Lake	7/7/2008	Nickel	0.7	0.7	1.00
Point Lake	7/7/2008	Strontium	5.7	5.6	1.02
Point Lake	7/7/2008	Lithium	3.5	3.4	1.03

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Point Lake	7/7/2008	Rubidium	1.3	1.2	1.08
Point Lake	7/7/2008	Manganese	0.6	0.5	1.20
Rocknest Lake	7/7/2008	Manganese	0.7	1.8	0.39
Rocknest Lake	7/7/2008	Manganese	0.8	1.8	0.44
Rocknest Lake	7/7/2008	Aluminum	10.4	14.0	0.74
Rocknest Lake	7/7/2008	Aluminum	10.3	12.9	0.80
Rocknest Lake	7/7/2008	Rubidium	1.2	1.3	0.92
Rocknest Lake	7/7/2008	Strontium	6.6	6.7	0.99
Rocknest Lake	7/7/2008	Strontium	6.6	6.7	0.99
Rocknest Lake	7/7/2008	Lithium	3.0	3.0	1.00
Rocknest Lake	7/7/2008	Lithium	3.0	3.0	1.00
Rocknest Lake	7/7/2008	Nickel	0.5	0.5	1.00
Rocknest Lake	7/7/2008	Nickel	0.5	0.5	1.00
Rocknest Lake	7/7/2008	Rubidium	1.2	1.2	1.00
Rocknest Lake	7/7/2008	Barium	3.4	3.2	1.06
Rocknest Lake	7/7/2008	Barium	4.2	3.2	1.31
Lac de Gras Outlet	6/13/2008	Barium	1.7	3.2	0.53
Lac de Gras Outlet	6/13/2008	Manganese	1.3	2.2	0.59
Lac de Gras Outlet	6/13/2008	Manganese	1.4	2.3	0.61
Lac de Gras Outlet	6/13/2008	Barium	1.9	2.7	0.70
Lac de Gras Outlet	6/13/2008	Rubidium	1.0	1.2	0.83
Lac de Gras Outlet	6/13/2008	Lithium	1.1	1.2	0.92
Lac de Gras Outlet	6/13/2008	Lithium	1.1	1.2	0.92
Lac de Gras Outlet	6/13/2008	Aluminum	5.3	5.5	0.96
Lac de Gras Outlet	6/13/2008	Strontium	7.8	7.9	0.99
Lac de Gras Outlet	6/13/2008	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	6/13/2008	Rubidium	1.2	1.2	1.00
Lac de Gras Outlet	6/13/2008	Strontium	7.8	7.8	1.00
Lac de Gras Outlet	6/13/2008	Nickel	1.2	1.1	1.09
Lac de Gras Outlet	6/13/2008	Aluminum	7.4	5.9	1.25
Daring Lake	3/31/2008	Zinc	5.4	6.1	0.89
Daring Lake	3/31/2008	Aluminum	3.2	3.6	0.89
Daring Lake	3/31/2008	Strontium	7.6	7.7	0.99
Daring Lake	3/31/2008	Rubidium	1.6	1.6	1.00
Daring Lake	3/31/2008	Barium	2.1	1.8	1.17
Desteffany Lake	3/31/2008	Manganese	0.5	0.8	0.63
Desteffany Lake	3/31/2008	Zinc	3.0	4.4	0.68
Desteffany Lake	3/31/2008	Barium	2.3	2.8	0.82
Desteffany Lake	3/31/2008	Aluminum	4.9	5.9	0.83
Desteffany Lake	3/31/2008	Strontium	8.8	9.0	0.98
Desteffany Lake	3/31/2008	Lithium	1.1	1.1	1.00
Desteffany Lake	3/31/2008	Nickel	1.1	1.1	1.00
Desteffany Lake	3/31/2008	Rubidium	1.7	1.7	1.00
Lac de Gras Outlet	3/31/2008	Rubidium	1.4	1.5	0.93
Lac de Gras Outlet	3/31/2008	Strontium	7.8	8.0	0.98
Lac de Gras Outlet	3/31/2008	Strontium	7.7	7.8	0.99
Lac de Gras Outlet	3/31/2008	Lithium	1.1	1.1	1.00
Lac de Gras Outlet	3/31/2008	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	3/31/2008	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	3/31/2008	Rubidium	1.5	1.5	1.00
Lac de Gras Outlet	3/31/2008	Aluminum	3.2	3.1	1.03
Lac de Gras Outlet	3/31/2008	Barium	2.2	1.8	1.22
Lac de Gras Outlet	3/31/2008	Barium	2.6	2.0	1.30
MacKay Lake	3/31/2008	Manganese	0.5	0.9	0.56
MacKay Lake	3/31/2008	Zinc	3.5	3.9	0.90
MacKay Lake	3/31/2008	Aluminum	7.0	7.1	0.99
MacKay Lake	3/31/2008	Rubidium	1.5	1.5	1.00
MacKay Lake	3/31/2008	Strontium	7.5	7.5	1.00
MacKay Lake	3/31/2008	Barium	2.4	2.3	1.04
MacKay Lake	3/31/2008	Nickel	0.8	0.6	1.33
Point Lake	3/31/2008	Zinc	2.0	2.9	0.69
Point Lake	3/31/2008	Aluminum	12.7	13.5	0.94
Point Lake	3/31/2008	Strontium	7.2	7.5	0.96
Point Lake	3/31/2008	Rubidium	1.6	1.6	1.00
Point Lake	3/31/2008	Nickel	1.1	1.0	1.10
Point Lake	3/31/2008	Barium	2.9	2.6	1.12
Rocknest Lake	3/31/2008	Zinc	5.8	6.7	0.87
Rocknest Lake	3/31/2008	Manganese	0.9	1.0	0.90
Rocknest Lake	3/31/2008	Lithium	1.0	1.1	0.91
Rocknest Lake	3/31/2008	Rubidium	1.7	1.8	0.94
Rocknest Lake	3/31/2008	Aluminum	13.8	13.9	0.99
Rocknest Lake	3/31/2008	Nickel	1.1	1.1	1.00
Rocknest Lake	3/31/2008	Strontium	8.4	8.4	1.00
Rocknest Lake	3/31/2008	Barium	3.1	3.0	1.03

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	9/20/2007	Manganese	0.7	1.7	0.41
Lac de Gras Outlet	9/20/2007	Aluminum	3.9	5.1	0.76
Lac de Gras Outlet	9/20/2007	Rubidium	1.3	1.4	0.93
Lac de Gras Outlet	9/20/2007	Strontium	6.8	7.0	0.97
Lac de Gras Outlet	9/20/2007	Barium	1.5	1.5	1.00
Lac de Gras Outlet	9/20/2007	Barium	1.5	1.5	1.00
Lac de Gras Outlet	9/20/2007	Lithium	1.1	1.1	1.00
Lac de Gras Outlet	9/20/2007	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	9/20/2007	Strontium	7.0	6.9	1.01
Lac de Gras Outlet	9/20/2007	Rubidium	1.4	1.3	1.08
Lac de Gras Outlet	9/20/2007	Lithium	1.2	1.1	1.09
Lac de Gras Outlet	9/20/2007	Nickel	1.0	0.9	1.11
Daring Lake	9/13/2007	Barium	1.1	1.5	0.73
Daring Lake	9/13/2007	Aluminum	4.1	4.8	0.85
Daring Lake	9/13/2007	Strontium	5.2	5.0	1.04
Daring Lake	9/13/2007	Rubidium	1.2	1.1	1.09
Desteffany Lake	9/13/2007	Manganese	0.5	1.2	0.42
Desteffany Lake	9/13/2007	Barium	1.3	1.9	0.68
Desteffany Lake	9/13/2007	Aluminum	8.7	9.2	0.95
Desteffany Lake	9/13/2007	Nickel	0.7	0.7	1.00
Desteffany Lake	9/13/2007	Rubidium	1.3	1.3	1.00
Desteffany Lake	9/13/2007	Strontium	5.8	5.5	1.05
Fairy Lake	9/13/2007	Strontium	7.3	7.3	1.00
Fairy Lake	9/13/2007	Strontium	7.3	7.2	1.01
Fairy Lake	9/13/2007	Barium	9.9	9.6	1.03
Fairy Lake	9/13/2007	Barium	10.2	9.8	1.04
King Lake	9/13/2007	Aluminum	6.8	9.8	0.69
King Lake	9/13/2007	Barium	2.5	3.2	0.78
King Lake	9/13/2007	Strontium	9.8	10.0	0.98
King Lake	9/13/2007	Rubidium	1.3	1.3	1.00
Lake of the Enemy	9/13/2007	Barium	1.7	2.3	0.74
Lake of the Enemy	9/13/2007	Nickel	0.5	0.6	0.83
Lake of the Enemy	9/13/2007	Rubidium	1.0	1.0	1.00
Lake of the Enemy	9/13/2007	Strontium	6.9	6.9	1.00
MacKay Lake	9/13/2007	Barium	1.8	2.5	0.72
MacKay Lake	9/13/2007	Aluminum	5.0	6.3	0.79
MacKay Lake	9/13/2007	Rubidium	1.2	1.3	0.92
MacKay Lake	9/13/2007	Strontium	6.8	6.9	0.99
MacKay Lake	9/13/2007	Nickel	1.0	0.9	1.11
Point Lake	9/13/2007	Aluminum	10.1	11.0	0.92
Point Lake	9/13/2007	Strontium	5.6	5.8	0.97
Point Lake	9/13/2007	Rubidium	1.3	1.3	1.00
Point Lake	9/13/2007	Nickel	0.9	0.8	1.13
Point Lake	9/13/2007	Barium	3.0	2.4	1.25
Rocknest Lake	9/13/2007	Manganese	0.5	1.3	0.38
Rocknest Lake	9/13/2007	Aluminum	9.4	10.9	0.86
Rocknest Lake	9/13/2007	Barium	3.1	3.4	0.91
Rocknest Lake	9/13/2007	Rubidium	1.3	1.3	1.00
Rocknest Lake	9/13/2007	Strontium	6.4	6.4	1.00
Rocknest Lake	9/13/2007	Nickel	0.7	0.6	1.17
Daring Lake	8/17/2007	Rubidium	0.8	0.9	0.89
Daring Lake	8/17/2007	Barium	1.1	1.2	0.92
Daring Lake	8/17/2007	Strontium	3.7	3.8	0.97
Desteffany Lake	8/17/2007	Aluminum	7.0	11.7	0.60
Desteffany Lake	8/17/2007	Barium	1.5	1.5	1.00
Desteffany Lake	8/17/2007	Nickel	0.7	0.7	1.00
Desteffany Lake	8/17/2007	Rubidium	1.0	1.0	1.00
Desteffany Lake	8/17/2007	Strontium	4.3	4.3	1.00
Fairy Lake	8/17/2007	Strontium	5.3	5.4	0.98
Fairy Lake	8/17/2007	Barium	10.9	10.0	1.09
King Lake	8/17/2007	Aluminum	5.6	8.4	0.67
King Lake	8/17/2007	Barium	2.6	2.6	1.00
King Lake	8/17/2007	Rubidium	0.9	0.9	1.00
King Lake	8/17/2007	Strontium	7.1	7.1	1.00
Lake of the Enemy	8/17/2007	Barium	1.7	1.7	1.00
Lake of the Enemy	8/17/2007	Nickel	0.5	0.5	1.00
Lake of the Enemy	8/17/2007	Rubidium	0.7	0.7	1.00
Lake of the Enemy	8/17/2007	Strontium	5.0	5.0	1.00
MacKay Lake	8/17/2007	Aluminum	4.4	5.4	0.81
MacKay Lake	8/17/2007	Strontium	5.0	5.1	0.98
MacKay Lake	8/17/2007	Nickel	1.0	1.0	1.00
MacKay Lake	8/17/2007	Rubidium	0.9	0.9	1.00
MacKay Lake	8/17/2007	Barium	1.9	1.8	1.06
Point Lake	8/17/2007	Aluminum	8.3	8.9	0.93

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Point Lake	8/17/2007	Aluminum	8.9	9.1	0.98
Point Lake	8/17/2007	Barium	1.8	1.8	1.00
Point Lake	8/17/2007	Barium	1.8	1.8	1.00
Point Lake	8/17/2007	Nickel	0.7	0.7	1.00
Point Lake	8/17/2007	Nickel	0.7	0.7	1.00
Point Lake	8/17/2007	Rubidium	0.9	0.9	1.00
Point Lake	8/17/2007	Rubidium	0.9	0.9	1.00
Point Lake	8/17/2007	Strontium	4.1	4.1	1.00
Point Lake	8/17/2007	Strontium	4.1	4.1	1.00
Rocknest Lake	8/17/2007	Aluminum	8.7	12.5	0.70
Rocknest Lake	8/17/2007	Barium	2.3	2.6	0.88
Rocknest Lake	8/17/2007	Strontium	4.4	4.5	0.98
Rocknest Lake	8/17/2007	Nickel	0.6	0.6	1.00
Rocknest Lake	8/17/2007	Rubidium	0.9	0.9	1.00
Daring Lake	7/6/2007	Manganese	2.3	2.6	0.88
Daring Lake	7/6/2007	Aluminum	12.9	13.2	0.98
Daring Lake	7/6/2007	Rubidium	0.9	0.9	1.00
Daring Lake	7/6/2007	Selenium	1.8	1.8	1.00
Daring Lake	7/6/2007	Barium	1.4	1.3	1.08
Daring Lake	7/6/2007	Strontium	8.0	4.0	2.00
Fairy Lake	7/6/2007	Barium	9.2	9.3	0.99
Fairy Lake	7/6/2007	Manganese	2.0	2.0	1.00
Fairy Lake	7/6/2007	Strontium	12.0	8.0	1.50
King Lake	7/6/2007	Manganese	0.6	2.2	0.27
King Lake	7/6/2007	Aluminum	8.1	12.3	0.66
King Lake	7/6/2007	Selenium	2.3	2.4	0.96
King Lake	7/6/2007	Barium	2.4	2.5	0.96
King Lake	7/6/2007	Rubidium	0.9	0.9	1.00
King Lake	7/6/2007	Strontium	9.3	9.2	1.01
Lake of the Enemy	7/6/2007	Manganese	0.6	0.9	0.67
Lake of the Enemy	7/6/2007	Strontium	4.6	6.3	0.73
Lake of the Enemy	7/6/2007	Barium	1.3	1.5	0.87
Lake of the Enemy	7/6/2007	Nickel	0.5	0.5	1.00
Lake of the Enemy	7/6/2007	Rubidium	0.7	0.7	1.00
Lake of the Enemy	7/6/2007	Selenium	1.8	1.8	1.00
MacKay Lake	7/6/2007	Aluminum	7.8	10.9	0.72
MacKay Lake	7/6/2007	Manganese	2.0	2.7	0.74
MacKay Lake	7/6/2007	Barium	1.6	1.7	0.94
MacKay Lake	7/6/2007	Nickel	1.4	1.4	1.00
MacKay Lake	7/6/2007	Rubidium	0.8	0.8	1.00
MacKay Lake	7/6/2007	Strontium	4.7	4.7	1.00
MacKay Lake	7/6/2007	Selenium	1.8	1.7	1.06
Point Lake	7/6/2007	Selenium	1.6	1.7	0.94
Point Lake	7/6/2007	Rubidium	1.0	0.9	1.11
Point Lake	7/6/2007	Nickel	0.8	0.7	1.14
Point Lake	7/6/2007	Barium	1.9	1.6	1.19
Point Lake	7/6/2007	Aluminum	16.2	11.6	1.40
Point Lake	7/6/2007	Strontium	8.4	4.2	2.00
Rocknest Lake	7/6/2007	Manganese	0.9	2.4	0.38
Rocknest Lake	7/6/2007	Aluminum	13.6	15.1	0.90
Rocknest Lake	7/6/2007	Barium	3.8	3.9	0.97
Rocknest Lake	7/6/2007	Strontium	8.2	8.4	0.98
Rocknest Lake	7/6/2007	Manganese	2.4	2.4	1.00
Rocknest Lake	7/6/2007	Nickel	0.5	0.5	1.00
Rocknest Lake	7/6/2007	Rubidium	0.8	0.8	1.00
Rocknest Lake	7/6/2007	Selenium	1.8	1.8	1.00
Rocknest Lake	7/6/2007	Selenium	1.8	1.7	1.06
Rocknest Lake	7/6/2007	Barium	4.2	3.9	1.08
Rocknest Lake	7/6/2007	Rubidium	0.9	0.8	1.13
Rocknest Lake	7/6/2007	Nickel	0.6	0.5	1.20
Rocknest Lake	7/6/2007	Aluminum	21.4	15.6	1.37
Rocknest Lake	7/6/2007	Strontium	13.2	8.4	1.57
Desteffany Lake	7/4/2007	Aluminum	12.8	20.1	0.64
Desteffany Lake	7/4/2007	Manganese	2.6	3.7	0.70
Desteffany Lake	7/4/2007	Barium	1.6	1.7	0.94
Desteffany Lake	7/4/2007	Strontium	4.3	4.4	0.98
Desteffany Lake	7/4/2007	Nickel	0.8	0.8	1.00
Desteffany Lake	7/4/2007	Rubidium	1.0	1.0	1.00
Desteffany Lake	7/4/2007	Selenium	1.7	1.7	1.00
Lac de Gras Outlet	7/4/2007	Manganese	1.3	1.8	0.72
Lac de Gras Outlet	7/4/2007	Manganese	1.3	1.8	0.72
Lac de Gras Outlet	7/4/2007	Aluminum	3.2	3.9	0.82
Lac de Gras Outlet	7/4/2007	Aluminum	3.5	4.1	0.85
Lac de Gras Outlet	7/4/2007	Selenium	2.0	2.2	0.91

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	7/4/2007	Selenium	2.0	2.1	0.95
Lac de Gras Outlet	7/4/2007	Barium	1.4	1.4	1.00
Lac de Gras Outlet	7/4/2007	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	7/4/2007	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	7/4/2007	Rubidium	0.9	0.9	1.00
Lac de Gras Outlet	7/4/2007	Rubidium	0.9	0.9	1.00
Lac de Gras Outlet	7/4/2007	Strontium	4.6	4.6	1.00
Lac de Gras Outlet	7/4/2007	Strontium	4.6	4.6	1.00
Lac de Gras Outlet	7/4/2007	Barium	1.7	1.5	1.13
Daring Lake	9/19/2006	Manganese	0.5	1.3	0.38
Daring Lake	9/19/2006	Strontium	5.0	5.1	0.98
Daring Lake	9/19/2006	Barium	1.3	1.3	1.00
Daring Lake	9/19/2006	Rubidium	1.1	1.1	1.00
Daring Lake	9/19/2006	Aluminum	8.0	7.3	1.10
Desteffany Lake	9/19/2006	Manganese	0.8	2.1	0.38
Desteffany Lake	9/19/2006	Aluminum	9.6	13.3	0.72
Desteffany Lake	9/19/2006	Barium	1.5	1.6	0.94
Desteffany Lake	9/19/2006	Strontium	5.2	5.3	0.98
Desteffany Lake	9/19/2006	Lithium	1.1	1.1	1.00
Desteffany Lake	9/19/2006	Rubidium	1.2	1.2	1.00
Desteffany Lake	9/19/2006	Nickel	0.8	0.7	1.14
Fairy Lake	9/19/2006	Barium	9.6	10.2	0.94
Fairy Lake	9/19/2006	Strontium	7.0	7.0	1.00
King Lake	9/19/2006	Aluminum	5.7	10.3	0.55
King Lake	9/19/2006	Barium	2.5	2.8	0.89
King Lake	9/19/2006	Strontium	9.2	9.5	0.97
King Lake	9/19/2006	Lithium	1.2	1.2	1.00
King Lake	9/19/2006	Nickel	0.5	0.5	1.00
King Lake	9/19/2006	Rubidium	1.2	1.2	1.00
Lac de Gras Outlet	9/19/2006	Manganese	0.8	2.3	0.35
Lac de Gras Outlet	9/19/2006	Manganese	0.9	2.3	0.39
Lac de Gras Outlet	9/19/2006	Aluminum	3.5	5.1	0.69
Lac de Gras Outlet	9/19/2006	Aluminum	3.9	5.6	0.70
Lac de Gras Outlet	9/19/2006	Barium	1.6	1.7	0.94
Lac de Gras Outlet	9/19/2006	Strontium	6.0	6.2	0.97
Lac de Gras Outlet	9/19/2006	Strontium	6.1	6.2	0.98
Lac de Gras Outlet	9/19/2006	Barium	1.8	1.8	1.00
Lac de Gras Outlet	9/19/2006	Lithium	1.2	1.2	1.00
Lac de Gras Outlet	9/19/2006	Lithium	1.2	1.2	1.00
Lac de Gras Outlet	9/19/2006	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	9/19/2006	Nickel	1.0	1.0	1.00
Lac de Gras Outlet	9/19/2006	Rubidium	1.2	1.2	1.00
Lac de Gras Outlet	9/19/2006	Rubidium	1.2	1.2	1.00
Lake of the Enemy	9/19/2006	Barium	1.7	1.7	1.00
Lake of the Enemy	9/19/2006	Lithium	1.3	1.3	1.00
Lake of the Enemy	9/19/2006	Rubidium	0.9	0.9	1.00
Lake of the Enemy	9/19/2006	Strontium	6.5	6.5	1.00
Lake of the Enemy	9/19/2006	Nickel	0.6	0.5	1.20
MacKay Lake	9/19/2006	Manganese	0.5	2.5	0.20
MacKay Lake	9/19/2006	Aluminum	5.4	7.6	0.71
MacKay Lake	9/19/2006	Barium	1.9	1.9	1.00
MacKay Lake	9/19/2006	Lithium	1.2	1.2	1.00
MacKay Lake	9/19/2006	Nickel	1.0	1.0	1.00
MacKay Lake	9/19/2006	Rubidium	1.2	1.2	1.00
MacKay Lake	9/19/2006	Strontium	6.6	6.6	1.00
Point Lake	9/19/2006	Aluminum	10.5	13.1	0.80
Point Lake	9/19/2006	Nickel	0.8	0.8	1.00
Point Lake	9/19/2006	Rubidium	1.2	1.2	1.00
Point Lake	9/19/2006	Strontium	5.5	5.5	1.00
Point Lake	9/19/2006	Barium	2.1	2.0	1.05
Rocknest Lake	9/19/2006	Manganese	0.7	2.2	0.32
Rocknest Lake	9/19/2006	Aluminum	9.6	13.6	0.71
Rocknest Lake	9/19/2006	Barium	2.8	3.0	0.93
Rocknest Lake	9/19/2006	Strontium	6.2	6.3	0.98
Rocknest Lake	9/19/2006	Rubidium	1.2	1.2	1.00
Rocknest Lake	9/19/2006	Nickel	0.7	0.6	1.17
Daring Lake	7/26/2006	Chromium	1.7	3.6	0.47
Daring Lake	7/26/2006	Lead	8.5	17.2	0.49
Daring Lake	7/26/2006	Manganese	1.0	1.6	0.63
Daring Lake	7/26/2006	Aluminum	7.0	11.1	0.63
Daring Lake	7/26/2006	Barium	2.5	3.5	0.71
Daring Lake	7/26/2006	Strontium	5.0	5.1	0.98
Daring Lake	7/26/2006	Rubidium	1.1	1.1	1.00
Fairy Lake	7/26/2006	Aluminum	3.2	3.9	0.82

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Fairy Lake	7/26/2006	Strontium	7.1	7.1	1.00
Fairy Lake	7/26/2006	Barium	9.5	9.2	1.03
King Lake	7/26/2006	Manganese	1.3	3.5	0.37
King Lake	7/26/2006	Aluminum	8.1	12.8	0.63
King Lake	7/26/2006	Strontium	9.5	9.8	0.97
King Lake	7/26/2006	Barium	3.1	3.1	1.00
King Lake	7/26/2006	Nickel	0.5	0.5	1.00
King Lake	7/26/2006	Rubidium	1.1	1.1	1.00
King Lake	7/26/2006	Chromium	0.7	0.6	1.17
King Lake	7/26/2006	Lead	3.2	2.5	1.28
Lake of the Enemy	7/26/2006	Manganese	0.6	1.0	0.60
Lake of the Enemy	7/26/2006	Nickel	0.5	0.6	0.83
Lake of the Enemy	7/26/2006	Strontium	6.4	6.5	0.98
Lake of the Enemy	7/26/2006	Aluminum	4.4	4.4	1.00
Lake of the Enemy	7/26/2006	Rubidium	0.9	0.9	1.00
Lake of the Enemy	7/26/2006	Barium	2.3	1.8	1.28
MacKay Lake	7/26/2006	Manganese	0.7	2.8	0.25
MacKay Lake	7/26/2006	Aluminum	7.5	10.5	0.71
MacKay Lake	7/26/2006	Nickel	1.0	1.1	0.91
MacKay Lake	7/26/2006	Rubidium	1.1	1.1	1.00
MacKay Lake	7/26/2006	Strontium	6.5	6.4	1.02
MacKay Lake	7/26/2006	Barium	2.1	1.9	1.11
Point Lake	7/26/2006	Aluminum	11.9	14.7	0.81
Point Lake	7/26/2006	Strontium	5.4	5.5	0.98
Point Lake	7/26/2006	Barium	1.8	1.8	1.00
Point Lake	7/26/2006	Rubidium	1.2	1.2	1.00
Point Lake	7/26/2006	Nickel	0.8	0.7	1.14
Desteffany Lake	7/4/2006	Titanium	1.1	1.8	0.61
Desteffany Lake	7/4/2006	Copper	2.4	3.0	0.80
Desteffany Lake	7/4/2006	Molybdenum	1.0	1.2	0.83
Desteffany Lake	7/4/2006	Barium	5.7	6.7	0.85
Desteffany Lake	7/4/2006	Antimony	0.6	0.7	0.86
Desteffany Lake	7/4/2006	Strontium	6.0	6.7	0.90
Desteffany Lake	7/4/2006	Rubidium	1.1	1.2	0.92
Desteffany Lake	7/4/2006	Lead	51.9	53.1	0.98
Desteffany Lake	7/4/2006	Nickel	0.9	0.9	1.00
Desteffany Lake	7/4/2006	Chromium	15.0	12.7	1.18
Lac de Gras Outlet	7/4/2006	Molybdenum	0.7	1.0	0.70
Lac de Gras Outlet	7/4/2006	Titanium	0.5	0.7	0.71
Lac de Gras Outlet	7/4/2006	Barium	3.8	5.1	0.75
Lac de Gras Outlet	7/4/2006	Lead	28.5	36.9	0.77
Lac de Gras Outlet	7/4/2006	Copper	1.8	2.0	0.90
Lac de Gras Outlet	7/4/2006	Rubidium	1.1	1.2	0.92
Lac de Gras Outlet	7/4/2006	Rubidium	1.1	1.2	0.92
Lac de Gras Outlet	7/4/2006	Strontium	6.5	6.9	0.94
Lac de Gras Outlet	7/4/2006	Chromium	7.5	7.9	0.95
Lac de Gras Outlet	7/4/2006	Strontium	7.2	7.5	0.96
Lac de Gras Outlet	7/4/2006	Barium	7.1	7.2	0.99
Lac de Gras Outlet	7/4/2006	Antimony	0.8	0.8	1.00
Lac de Gras Outlet	7/4/2006	Molybdenum	1.5	1.5	1.00
Lac de Gras Outlet	7/4/2006	Lead	65.3	62.6	1.04
Lac de Gras Outlet	7/4/2006	Nickel	1.1	1.0	1.10
Lac de Gras Outlet	7/4/2006	Nickel	1.1	1.0	1.10
Lac de Gras Outlet	7/4/2006	Titanium	1.1	1.0	1.10
Lac de Gras Outlet	7/4/2006	Copper	2.8	2.5	1.12
Lac de Gras Outlet	7/4/2006	Chromium	17.4	15.2	1.14
Coppermine River Downstream of Fairy Lake F	3/22/2006	Barium	8.2	8.3	0.99
Coppermine River Downstream of Fairy Lake F	3/22/2006	Strontium	8.2	7.5	1.09
Coppermine River Downstream of Fairy Lake F	3/22/2006	Rubidium	0.8	0.7	1.14
Daring Lake	3/22/2006	Barium	1.5	1.6	0.94
Daring Lake	3/22/2006	Strontium	8.0	7.1	1.13
Daring Lake	3/22/2006	Rubidium	1.7	1.5	1.13
Desteffany Lake	3/22/2006	Barium	1.7	2.2	0.77
Desteffany Lake	3/22/2006	Barium	1.8	2.1	0.86
Desteffany Lake	3/22/2006	Nickel	0.9	1.0	0.90
Desteffany Lake	3/22/2006	Lithium	1.5	1.5	1.00
Desteffany Lake	3/22/2006	Nickel	0.9	0.9	1.00
Desteffany Lake	3/22/2006	Rubidium	1.7	1.6	1.06
Desteffany Lake	3/22/2006	Strontium	8.1	7.6	1.07
Desteffany Lake	3/22/2006	Strontium	7.9	7.4	1.07
Desteffany Lake	3/22/2006	Rubidium	1.7	1.5	1.13
Fairy Lake River Upstream of Coppermine Riv	3/22/2006	Barium	10.2	10.3	0.99
Fairy Lake River Upstream of Coppermine Riv	3/22/2006	Rubidium	0.5	0.5	1.00
Fairy Lake River Upstream of Coppermine Riv	3/22/2006	Strontium	8.4	7.7	1.09

Table A.2: Dissolved:Total Metal Ratios

Site	Date	Analyte	D (µg/L)	T (µg/L)	D:T Ratio
Lac de Gras Outlet	3/22/2006	Barium	1.5	2.2	0.68
Lac de Gras Outlet	3/22/2006	Lithium	1.4	1.5	0.93
Lac de Gras Outlet	3/22/2006	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	3/22/2006	Rubidium	1.5	1.4	1.07
Lac de Gras Outlet	3/22/2006	Strontium	7.7	7.1	1.08
Point Lake	3/22/2006	Barium	2.0	2.0	1.00
Point Lake	3/22/2006	Nickel	0.8	0.8	1.00
Point Lake	3/22/2006	Strontium	7.0	6.3	1.11
Point Lake	3/22/2006	Rubidium	1.5	1.3	1.15
Coppermine River Downstream of Fairy Lake F	7/27/2005	Manganese	1.6	2.7	0.59
Coppermine River Downstream of Fairy Lake F	7/27/2005	Aluminum	8.3	12.2	0.68
Coppermine River Downstream of Fairy Lake F	7/27/2005	Rubidium	1.1	1.2	0.92
Coppermine River Downstream of Fairy Lake F	7/27/2005	Barium	4.2	4.3	0.98
Coppermine River Downstream of Fairy Lake F	7/27/2005	Strontium	7.2	7.3	0.99
Coppermine River Downstream of Fairy Lake F	7/27/2005	Nickel	0.5	0.5	1.00
Coppermine River Downstream of Fairy Lake F	7/27/2005	Zinc	3.0	2.2	1.36
Daring Lake	7/27/2005	Barium	1.0	1.6	0.63
Daring Lake	7/27/2005	Aluminum	4.8	6.4	0.75
Daring Lake	7/27/2005	Rubidium	1.1	1.2	0.92
Daring Lake	7/27/2005	Strontium	5.4	5.4	1.00
Daring Lake	7/27/2005	Manganese	1.3	1.2	1.08
Daring Lake	7/27/2005	Zinc	3.5	2.6	1.35
Desteffany Lake	7/27/2005	Manganese	1.2	3.2	0.38
Desteffany Lake	7/27/2005	Aluminum	12.1	16.4	0.74
Desteffany Lake	7/27/2005	Zinc	2.6	3.1	0.84
Desteffany Lake	7/27/2005	Nickel	0.6	0.7	0.86
Desteffany Lake	7/27/2005	Rubidium	1.2	1.4	0.86
Desteffany Lake	7/27/2005	Barium	1.3	1.5	0.87
Desteffany Lake	7/27/2005	Strontium	5.2	5.8	0.90
Fairy Lake River Upstream of Coppermine Riv	7/27/2005	Barium	9.1	9.7	0.94
Fairy Lake River Upstream of Coppermine Riv	7/27/2005	Strontium	7.9	8.3	0.95
Fairy Lake River Upstream of Coppermine Riv	7/27/2005	Zinc	4.4	2.5	1.76
Lac de Gras Outlet	7/27/2005	Aluminum	3.7	23.9	0.15
Lac de Gras Outlet	7/27/2005	Barium	1.4	4.8	0.29
Lac de Gras Outlet	7/27/2005	Manganese	1.8	4.1	0.44
Lac de Gras Outlet	7/27/2005	Manganese	1.8	3.8	0.47
Lac de Gras Outlet	7/27/2005	Zinc	3.7	6.3	0.59
Lac de Gras Outlet	7/27/2005	Barium	1.4	1.7	0.82
Lac de Gras Outlet	7/27/2005	Rubidium	1.3	1.4	0.93
Lac de Gras Outlet	7/27/2005	Strontium	6.6	7.1	0.93
Lac de Gras Outlet	7/27/2005	Strontium	6.5	6.9	0.94
Lac de Gras Outlet	7/27/2005	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	7/27/2005	Nickel	0.9	0.9	1.00
Lac de Gras Outlet	7/27/2005	Rubidium	1.3	1.3	1.00
Lac de Gras Outlet	7/27/2005	Zinc	4.3	2.4	1.79
Point Lake	7/27/2005	Rubidium	1.1	1.3	0.85
Point Lake	7/27/2005	Aluminum	10.8	12.4	0.87
Point Lake	7/27/2005	Barium	1.6	1.8	0.89
Point Lake	7/27/2005	Strontium	5.3	5.9	0.90
Point Lake	7/27/2005	Nickel	0.7	0.7	1.00
Point Lake	7/27/2005	Zinc	4.7	2.5	1.88
Lac de Gras Outlet	6/9/2005	Aluminum	5.2	5.9	0.88
Lac de Gras Outlet	6/9/2005	Manganese	2.0	2.2	0.91
Lac de Gras Outlet	6/9/2005	Lithium	1.0	1.0	1.00
Lac de Gras Outlet	6/9/2005	Nickel	1.1	1.1	1.00
Lac de Gras Outlet	6/9/2005	Rubidium	1.1	1.1	1.00
Lac de Gras Outlet	6/9/2005	Strontium	5.8	5.6	1.04
Lac de Gras Outlet	6/9/2005	Barium	1.7	1.6	1.06
Lac de Gras Outlet	6/9/2005	Zinc	7.3	2.8	2.61

Appendix B Surface Water Chemistry

Status and Trends in Streamflow and Water Chemistry

Coppermine River and Lockhart River Watersheds

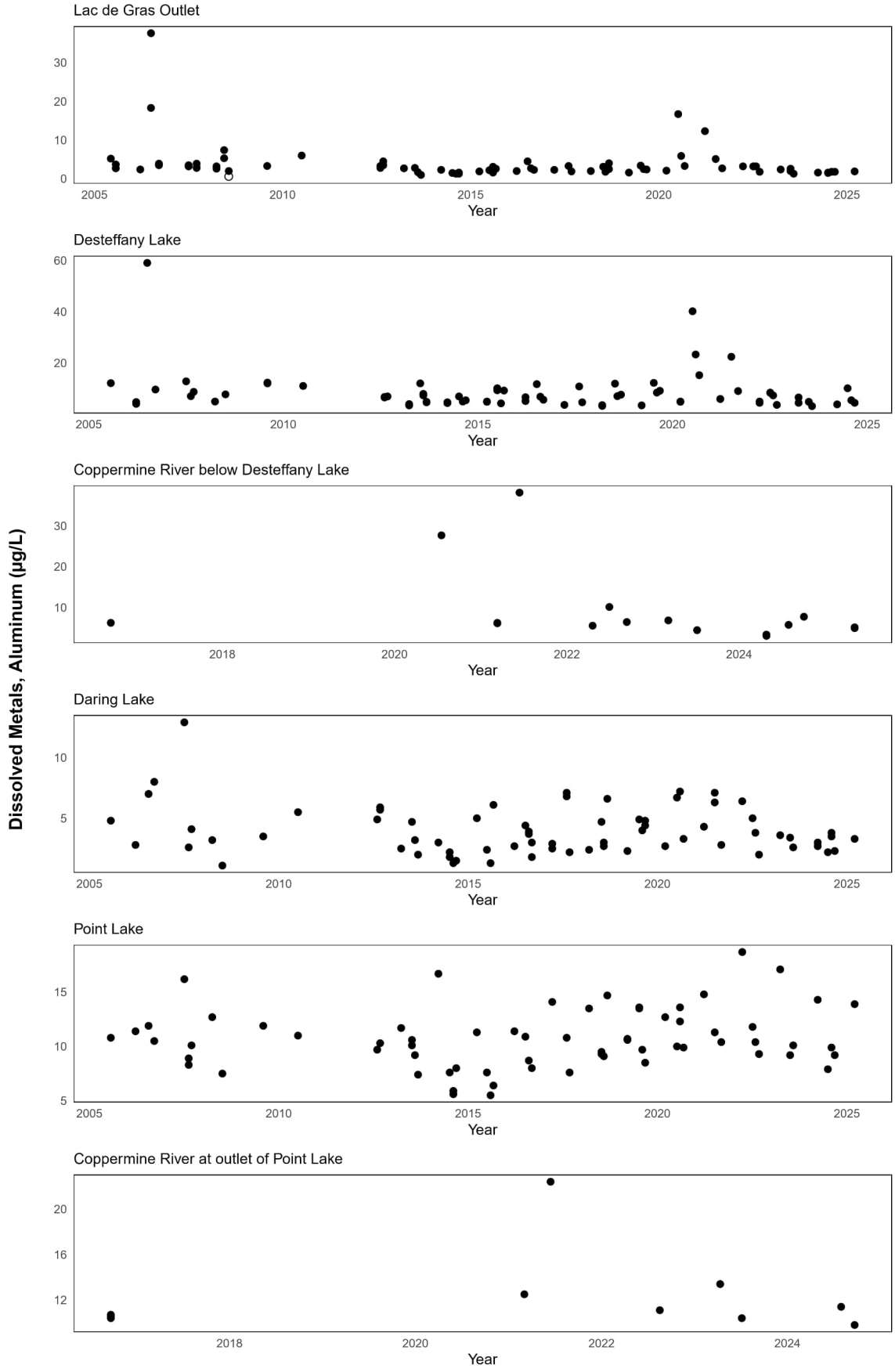
Government of Northwest Territories

SLR Project No.: 205.030233.00001

February 23, 2026

B.1 Time Series

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Water Quality and Quantity Status and Trends

TITLE
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○ **Non-detect**

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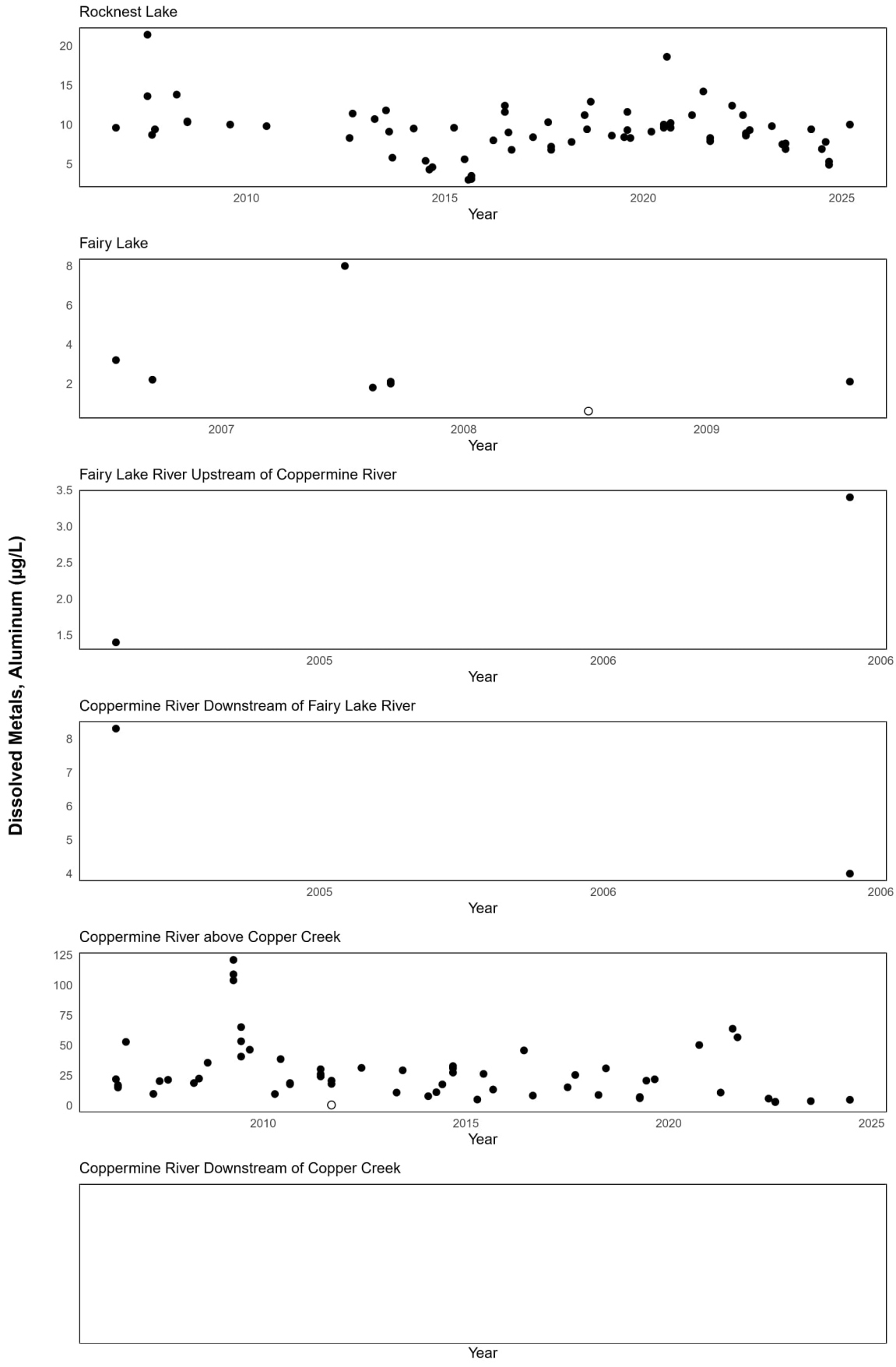
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

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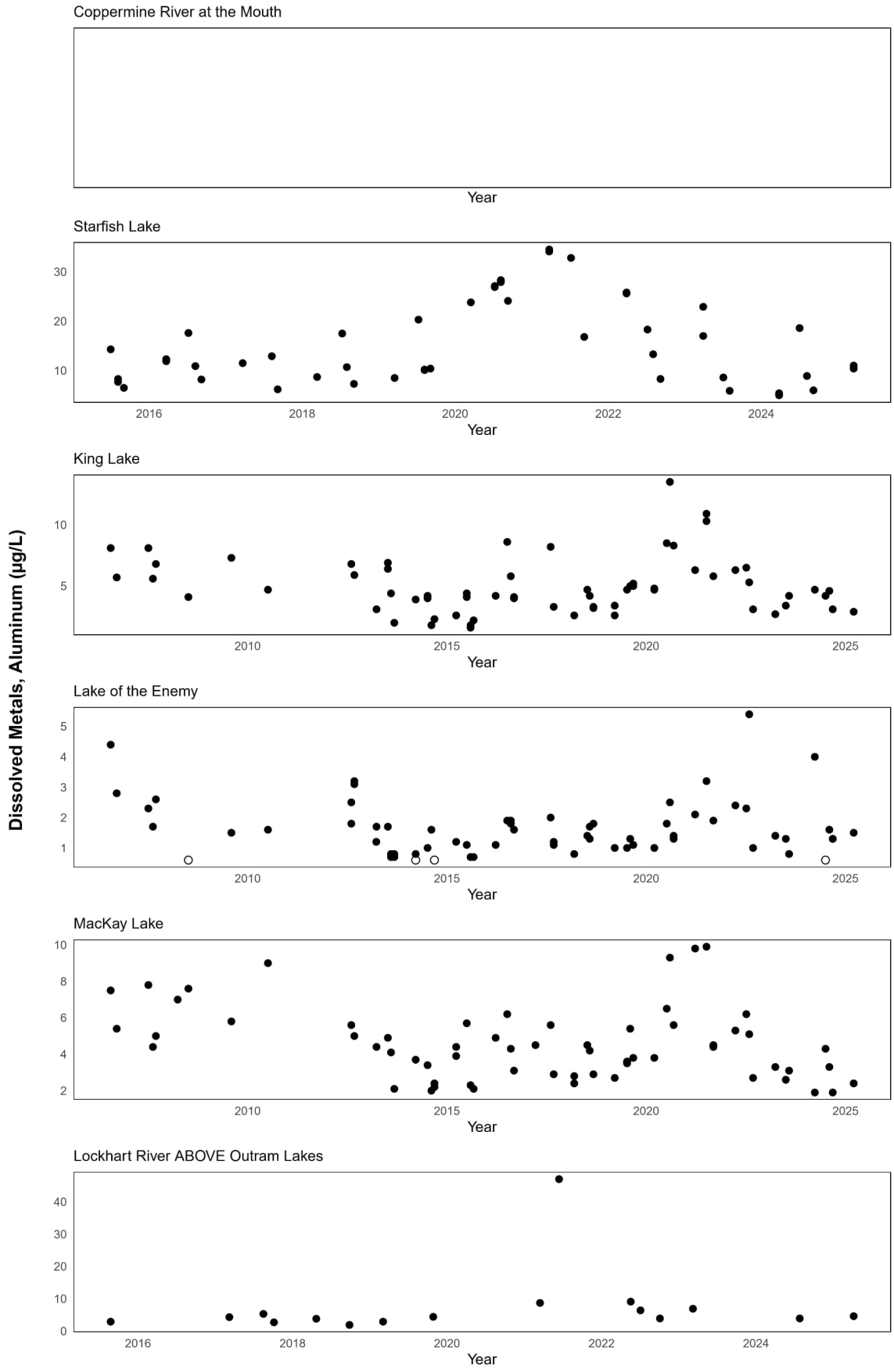
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FIGURE NO: **B.1.2**

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LEGEND
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○ **Non-detect**

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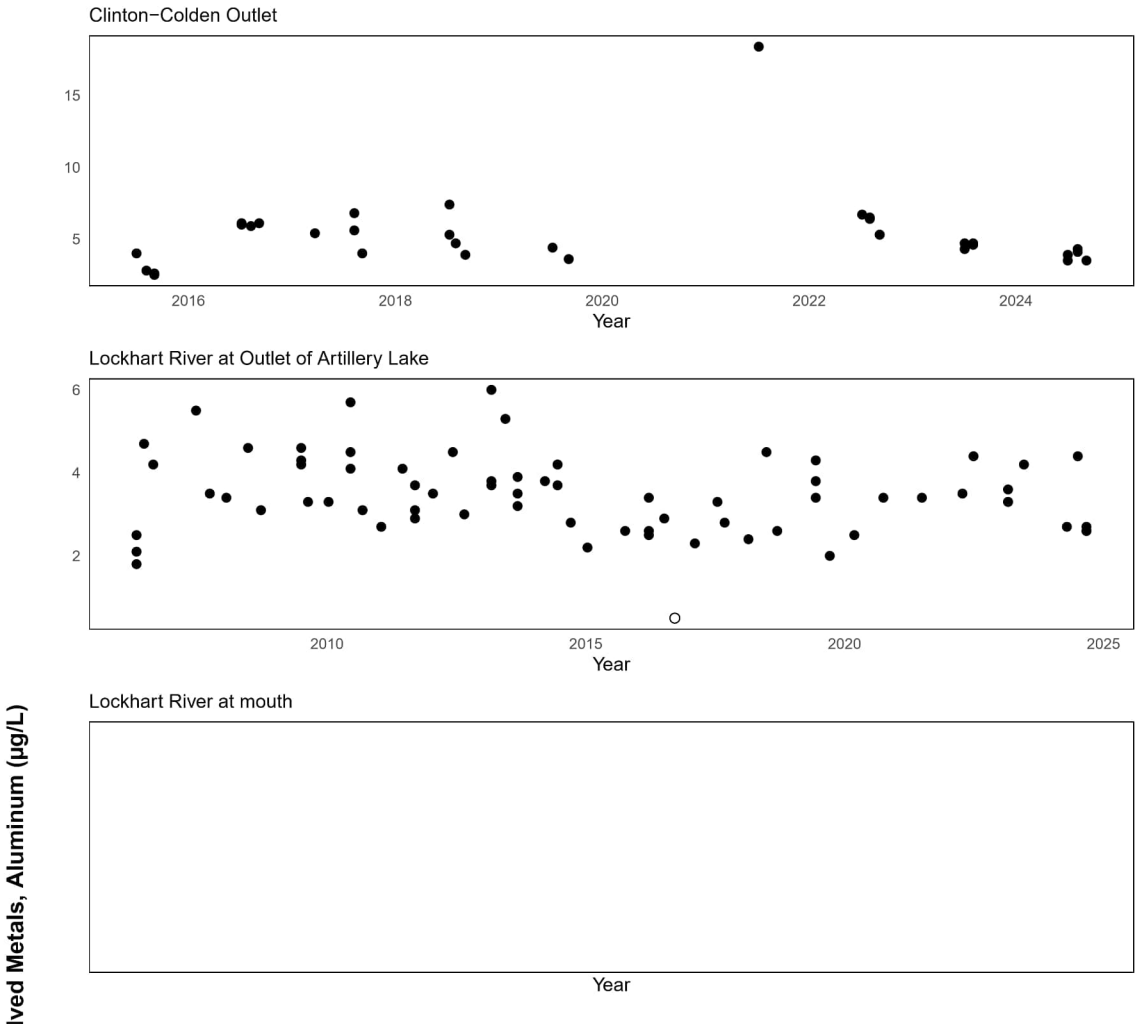
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PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

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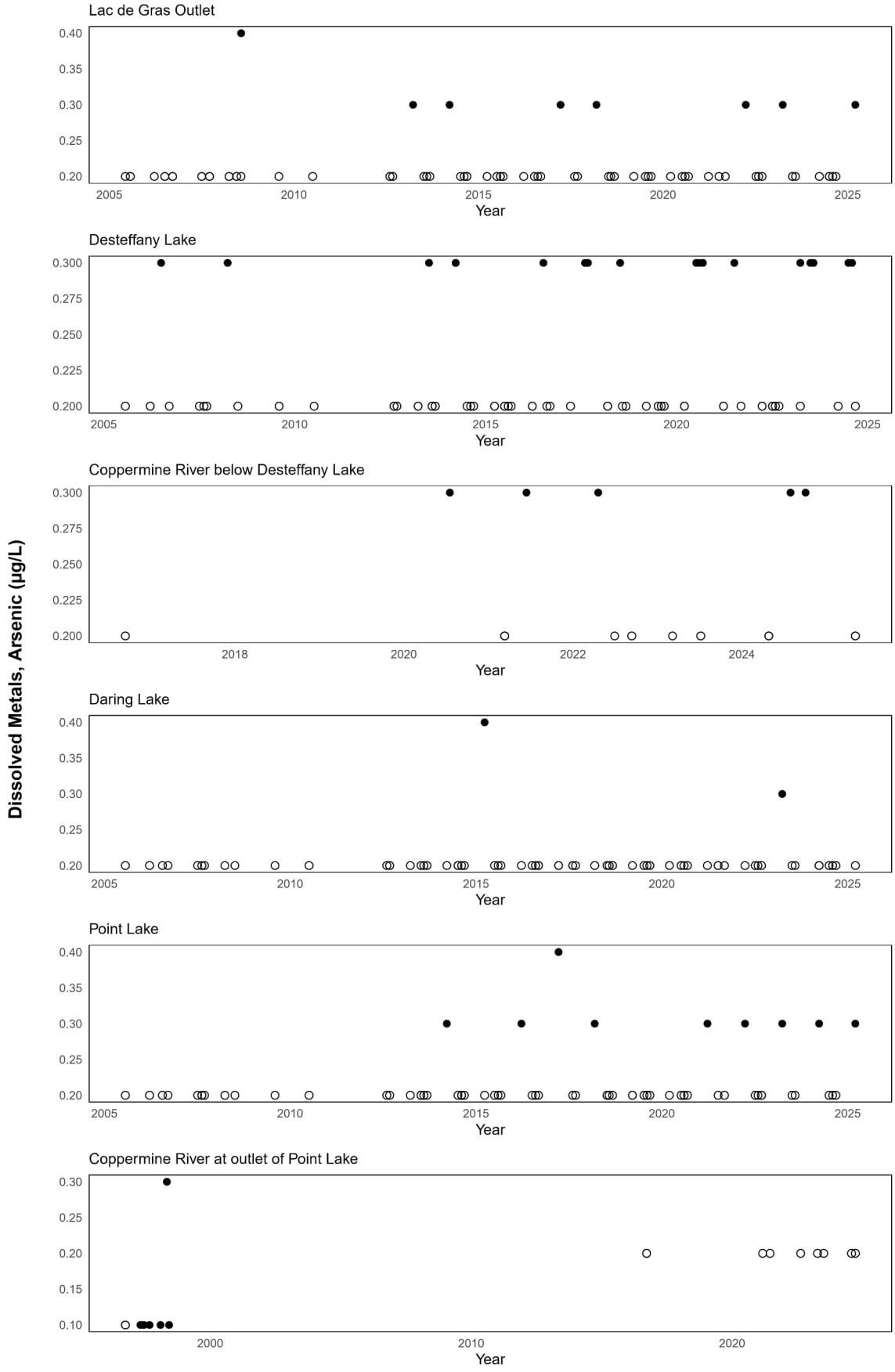
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FIGURE NO:
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DATE: February 11, 2026

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TITLE
Water Quality Data

LEGEND
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SLR

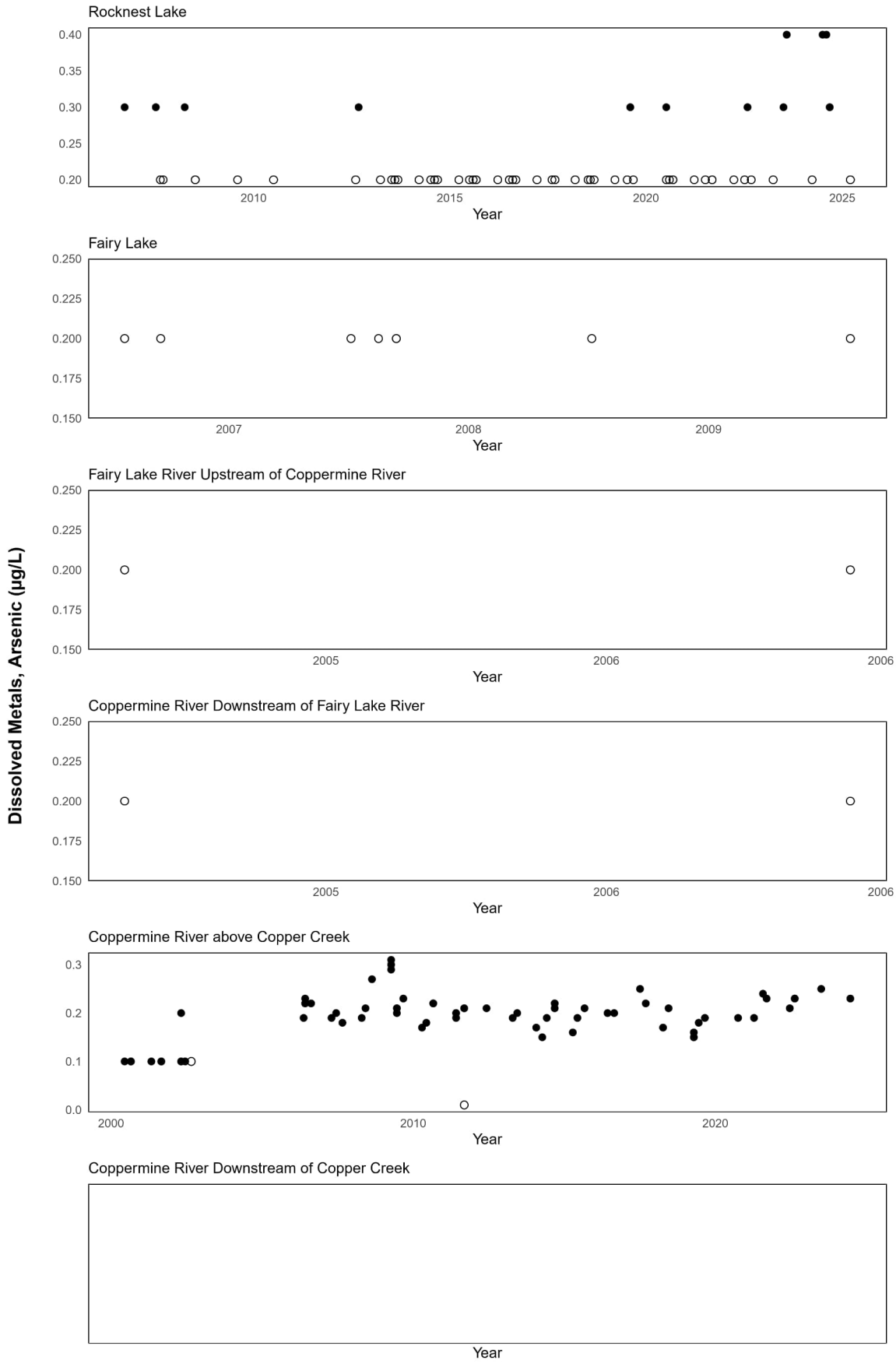
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

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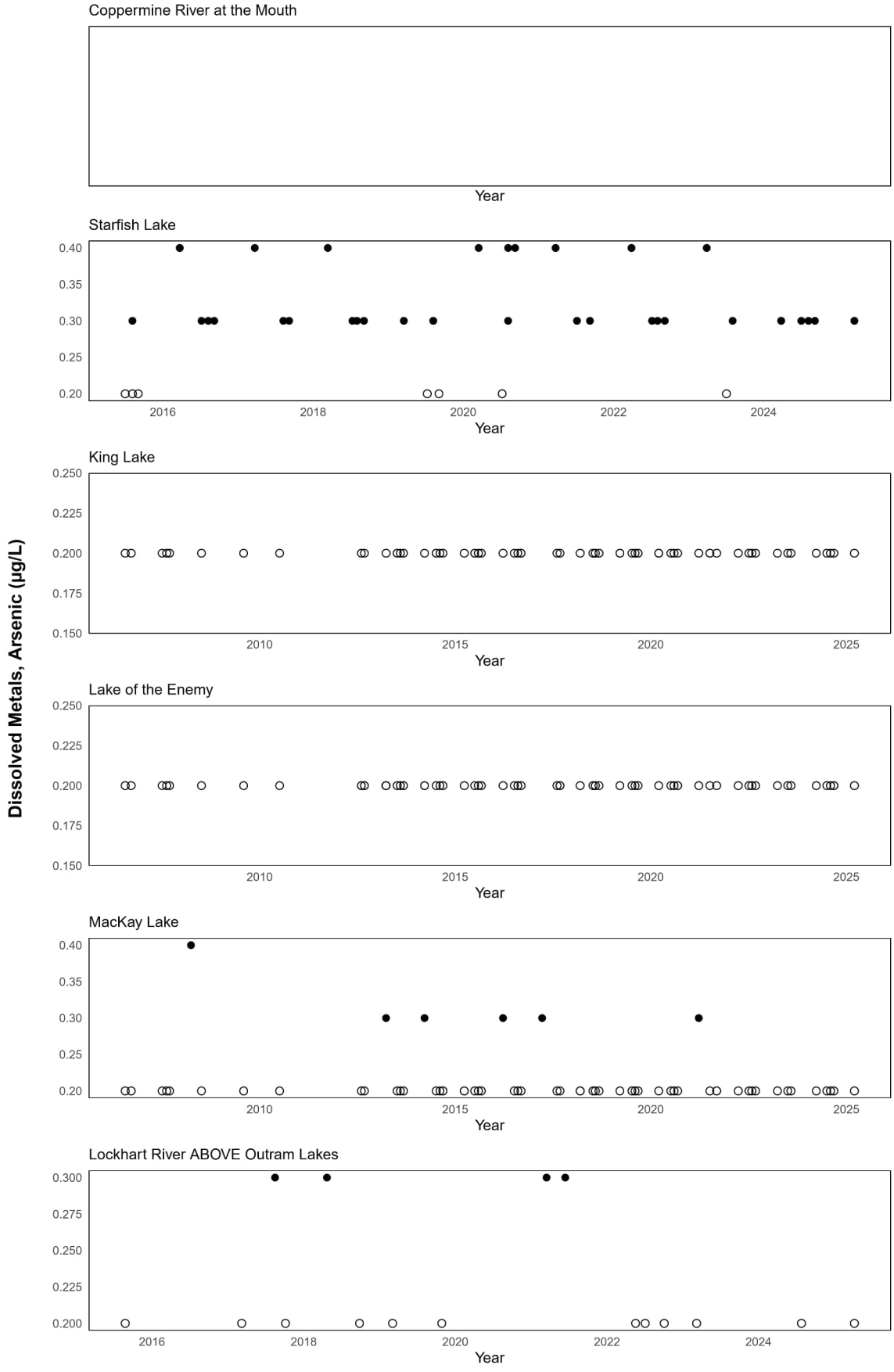
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FIGURE NO: **B.1.6**

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SLR

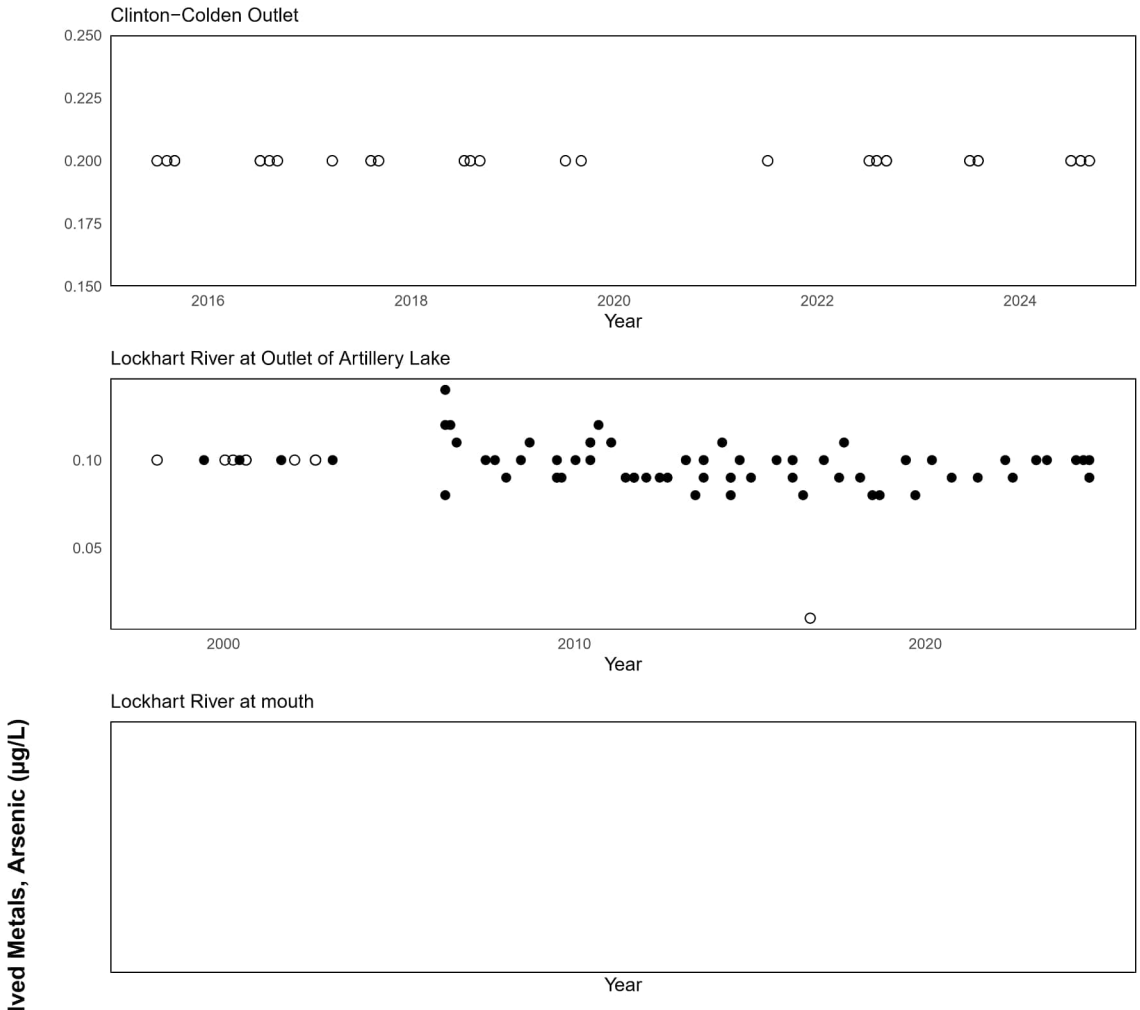
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TITLE
Water Quality Data

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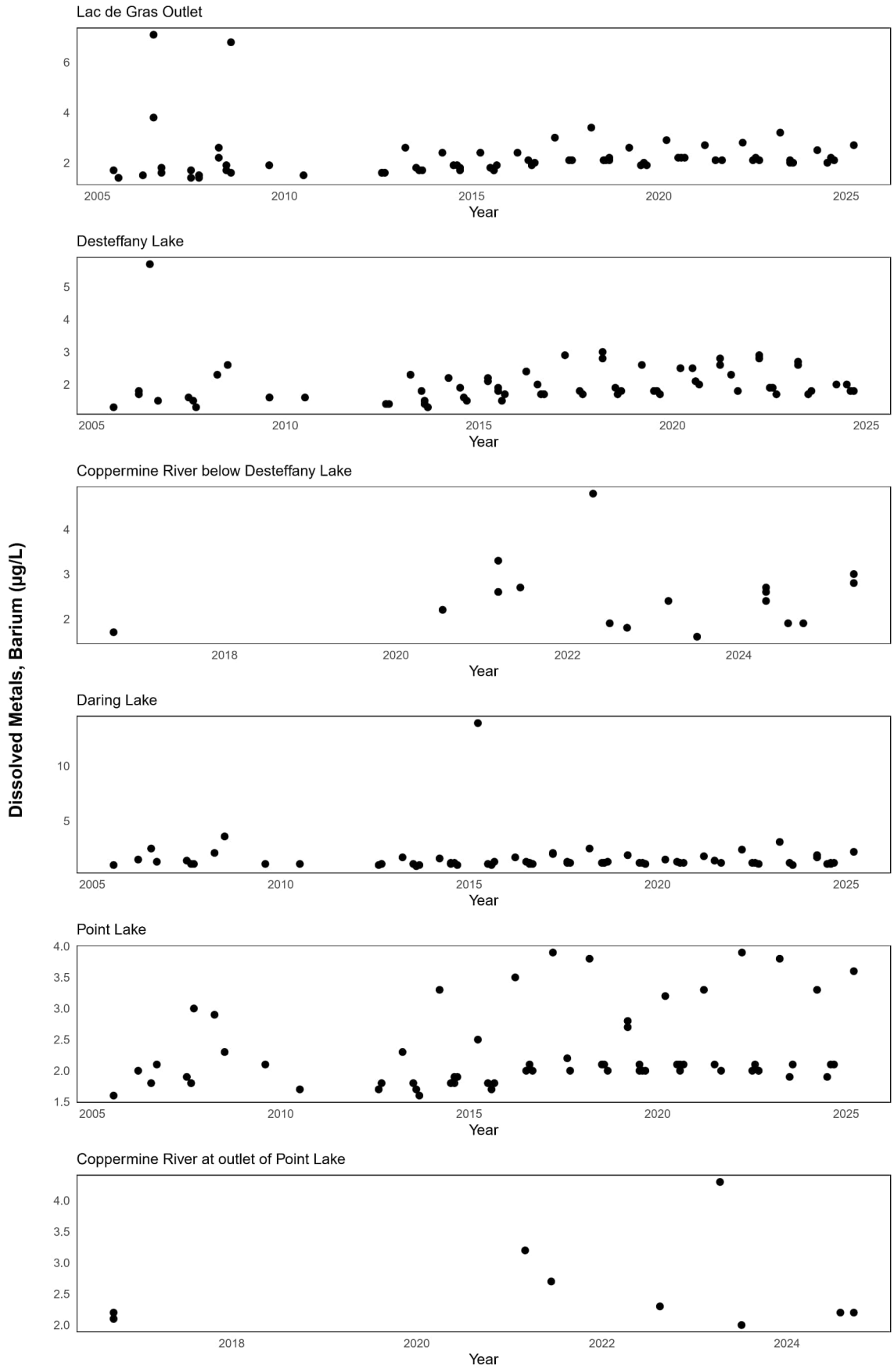
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FIGURE NO:
B.1.8

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LEGEND
● **Detect**
○ **Non-detect**

SLR

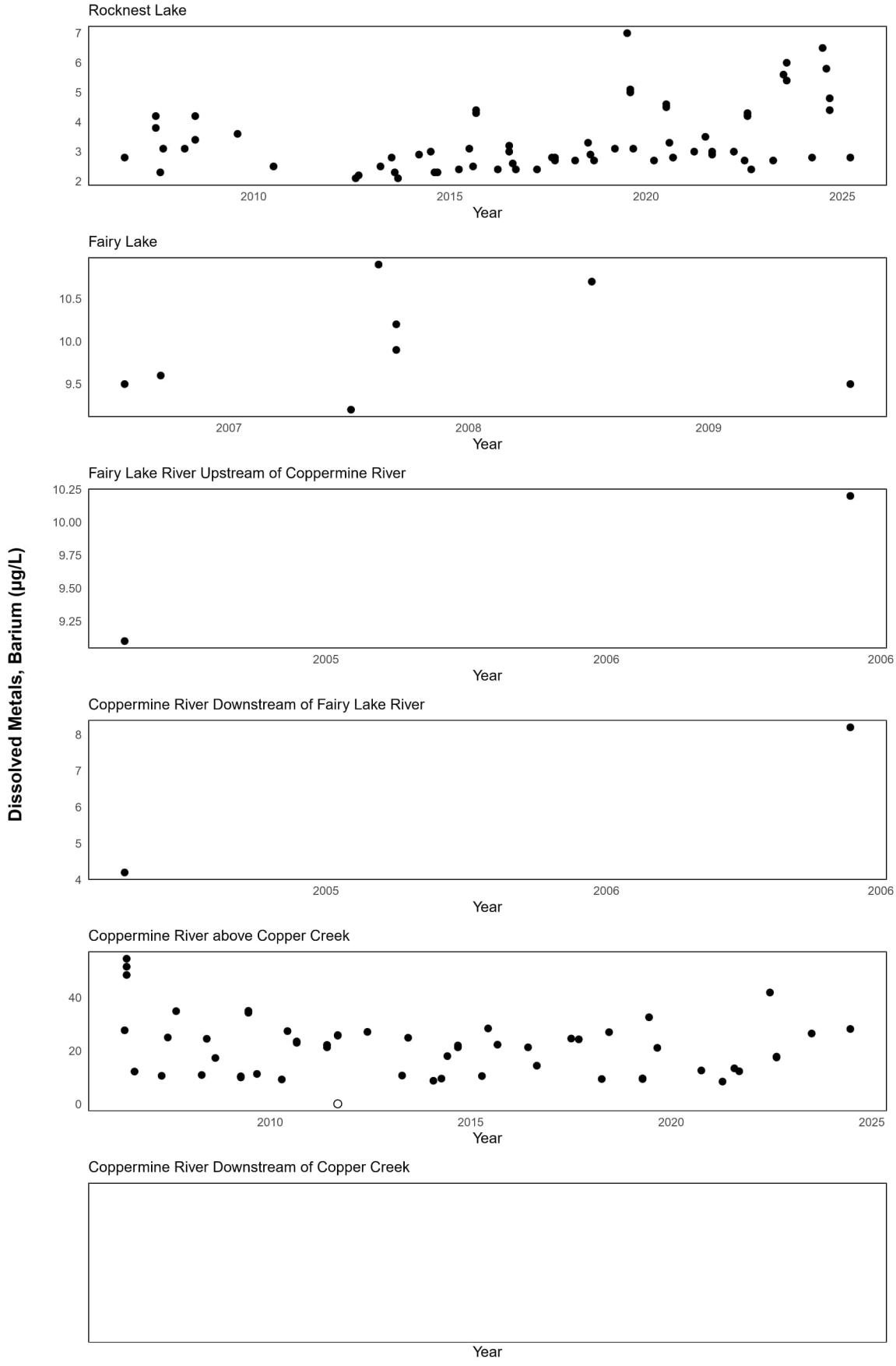
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DATE: February 11, 2026

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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
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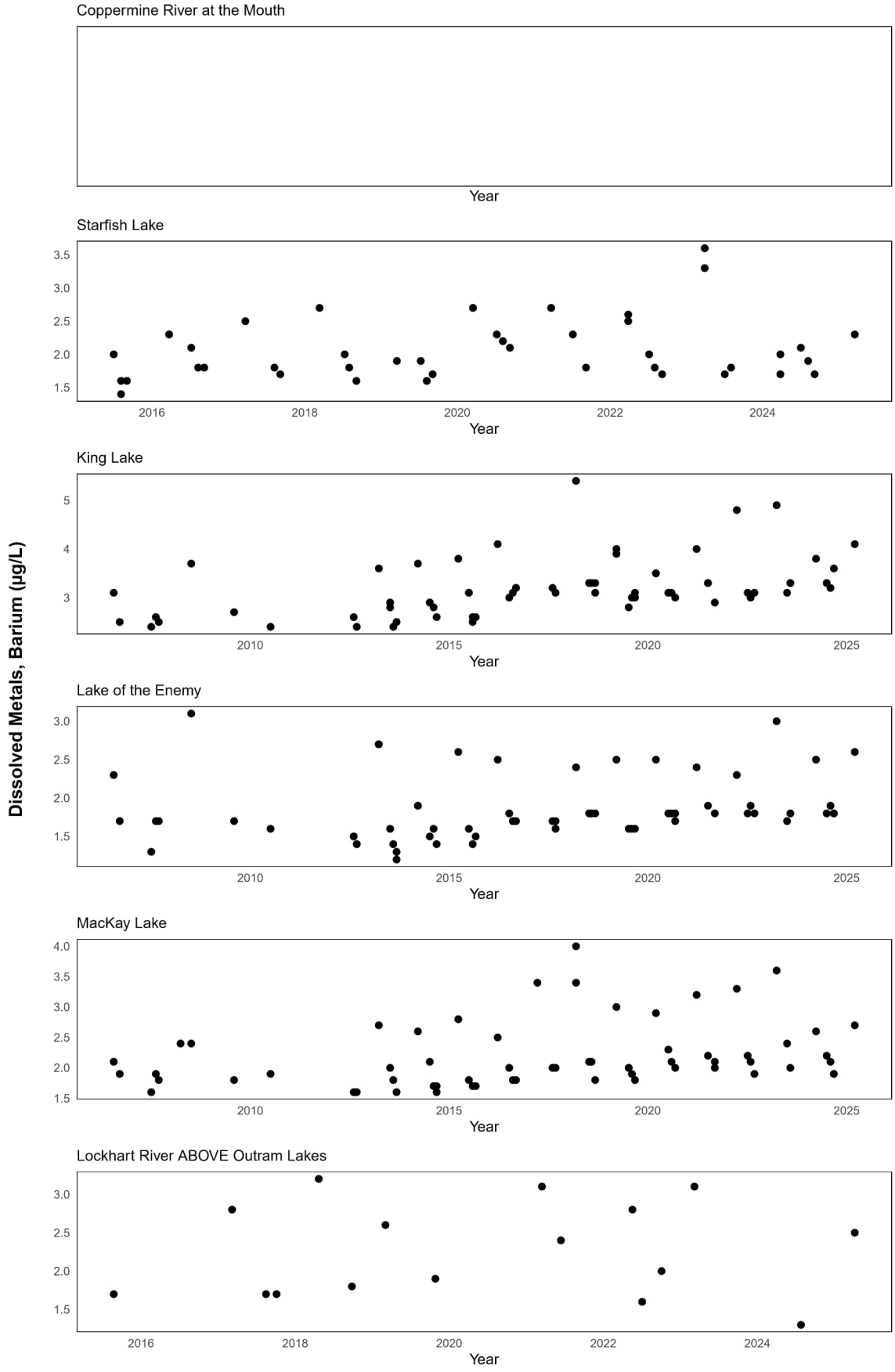
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FIGURE NO: **B.1.10**

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LEGEND
● **Detect**
○ **Non-detect**

SLR

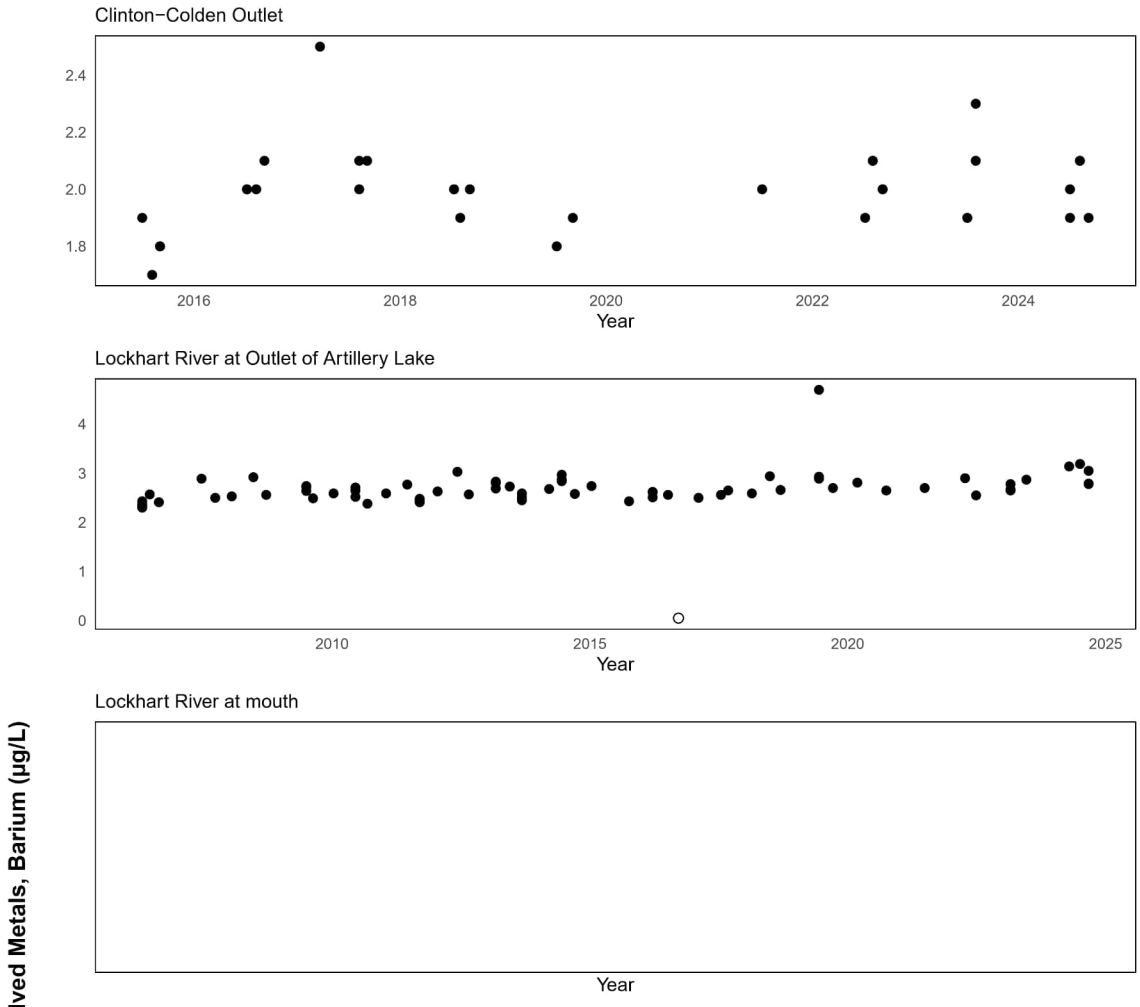
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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
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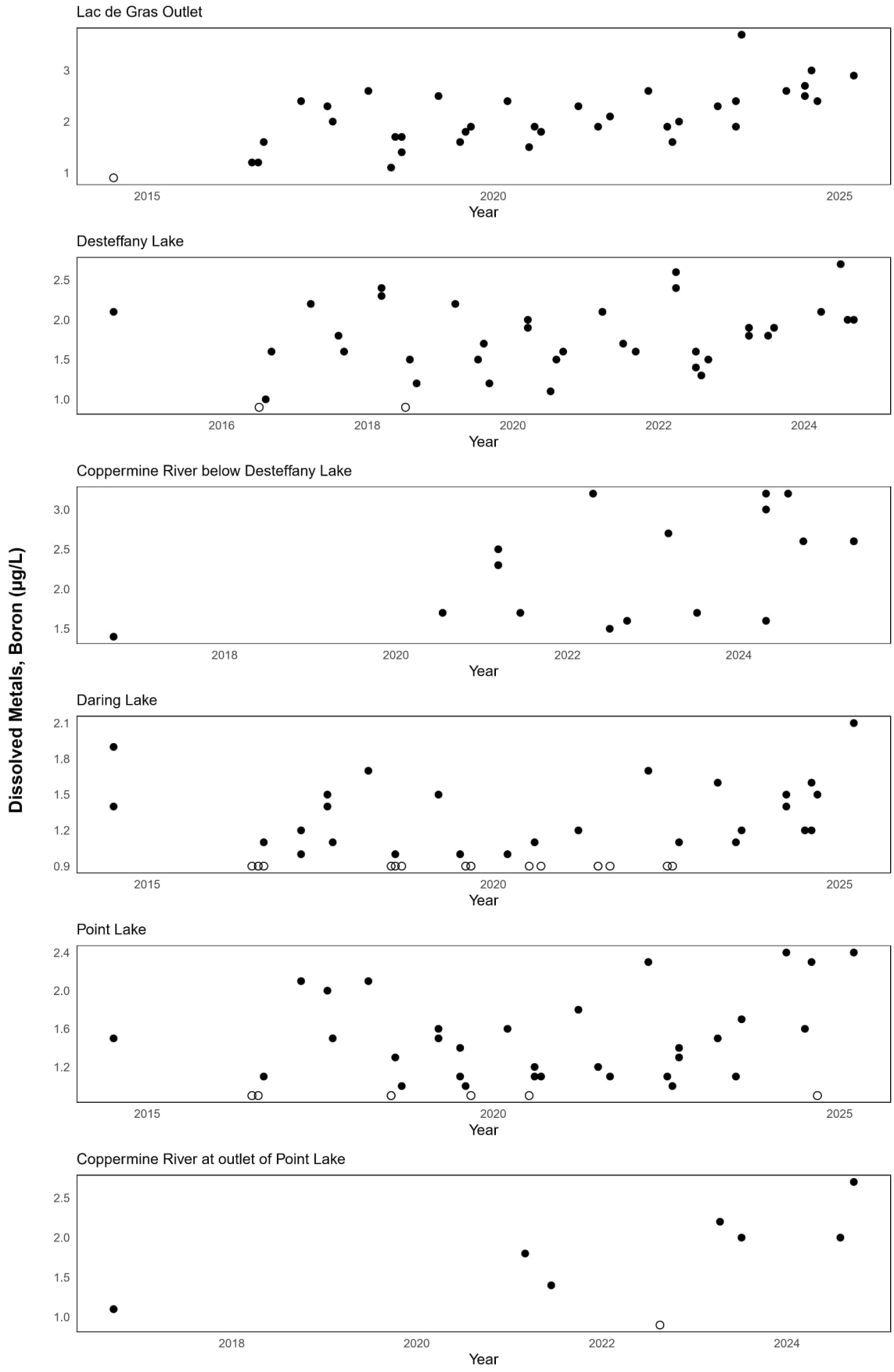
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FIGURE NO:
B.1.12

DATE: February 11, 2026

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TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

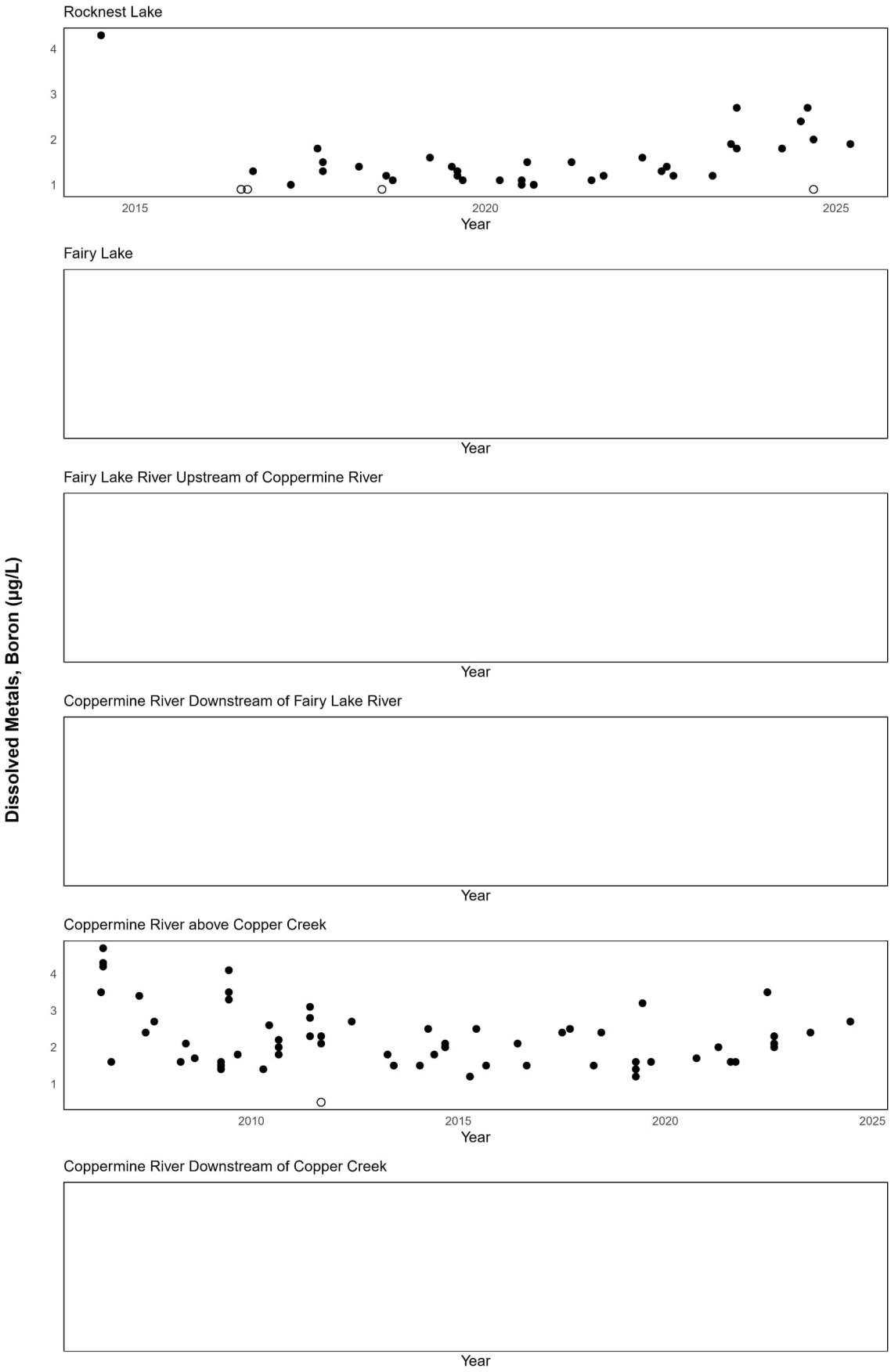
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LEGEND
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○ **Non-detect**

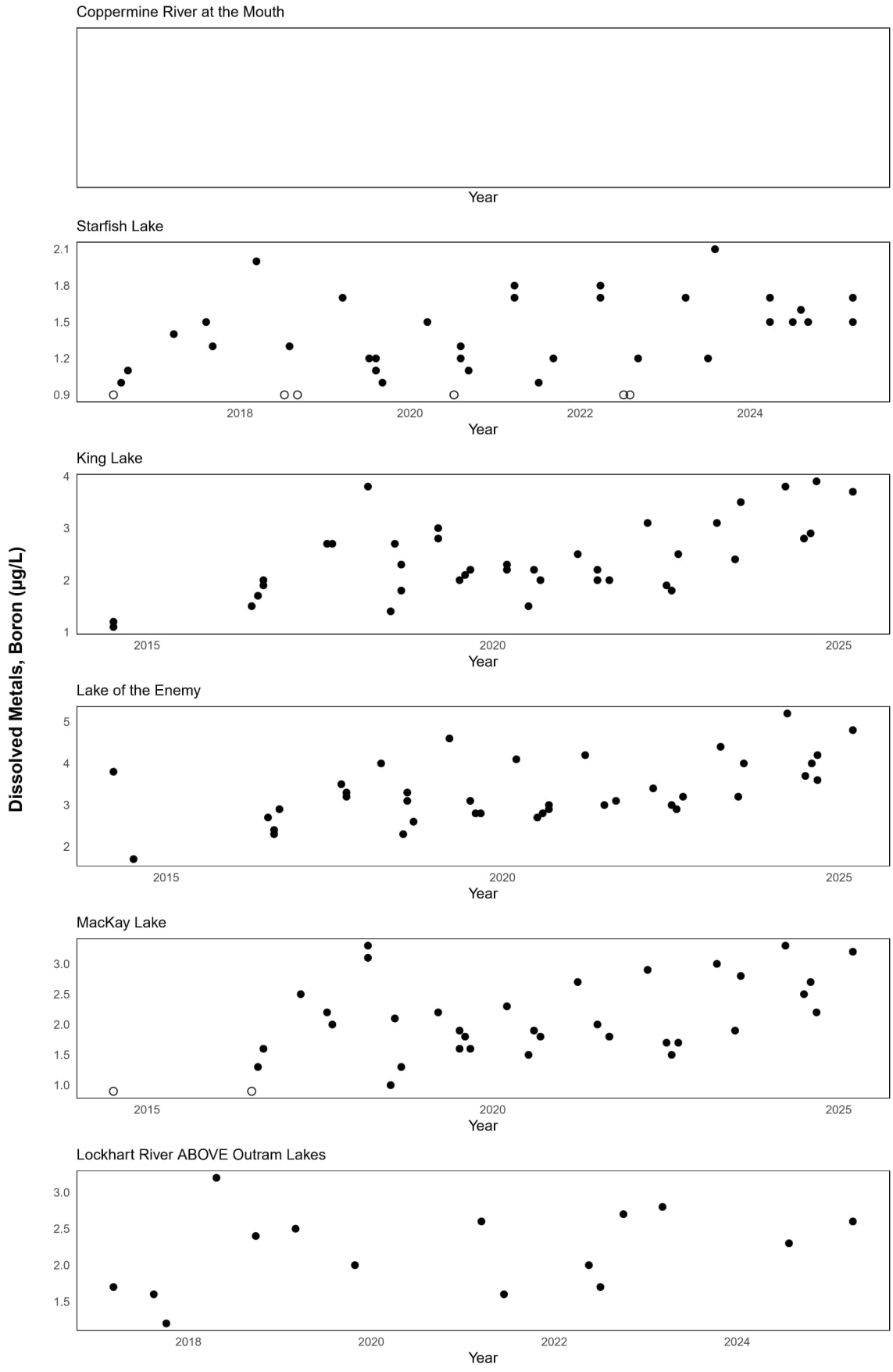
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FIGURE NO:
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LEGEND
- ● **Detect**
- ○ **Non-detect**

SLR

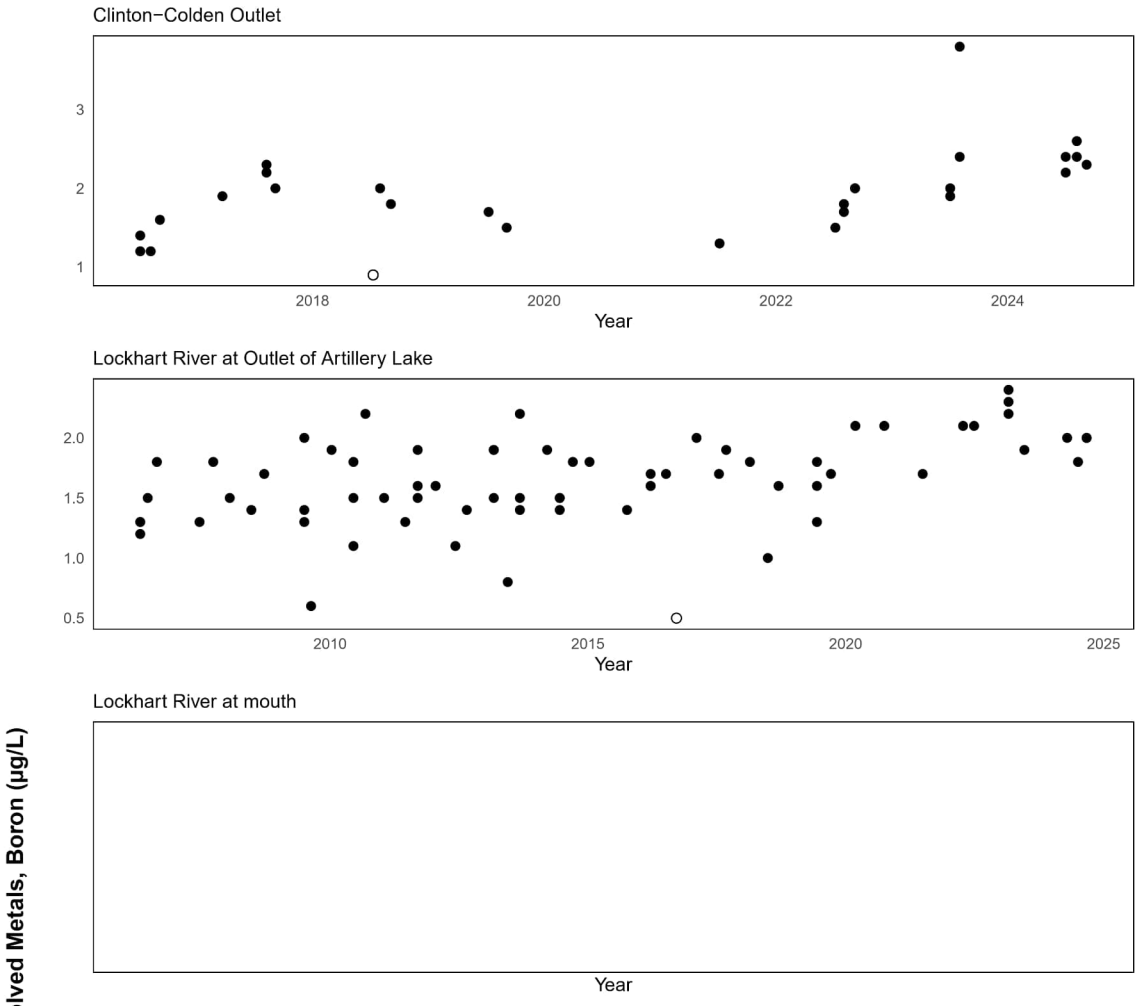
FIGURE NO:
B.1.15

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

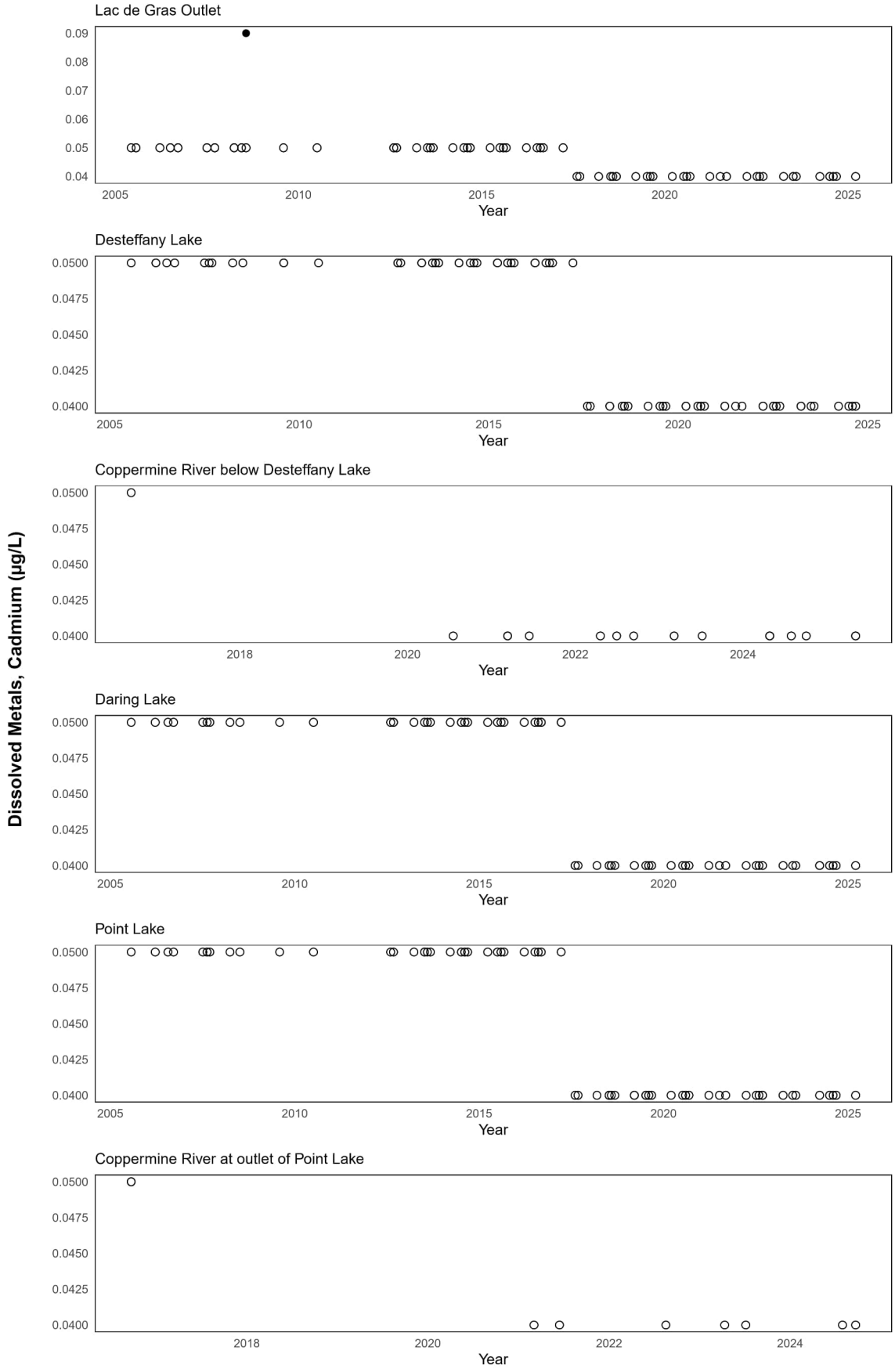
SLR

FIGURE NO:
B.1.16

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

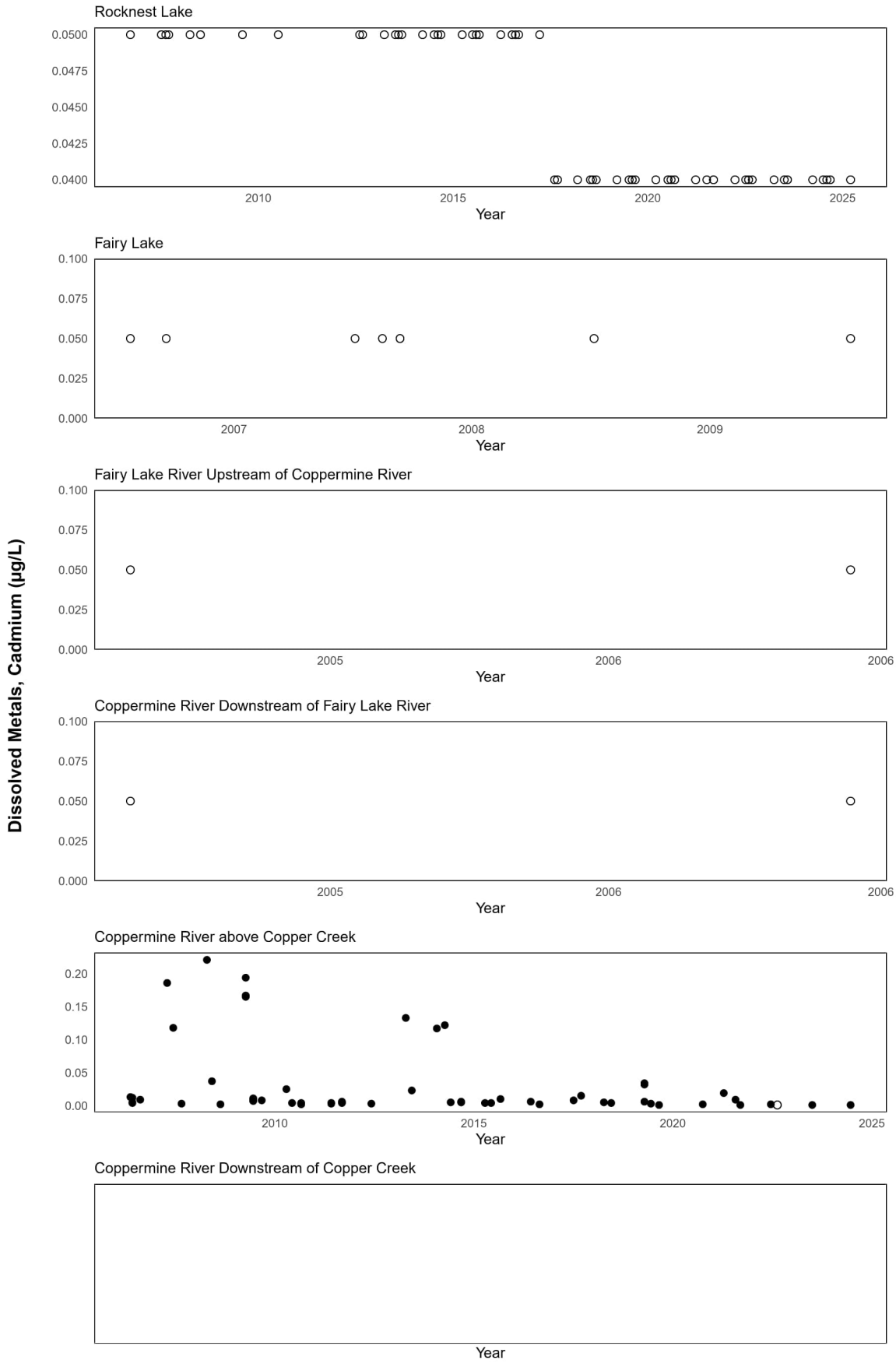
FIGURE NO:
B.1.17

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

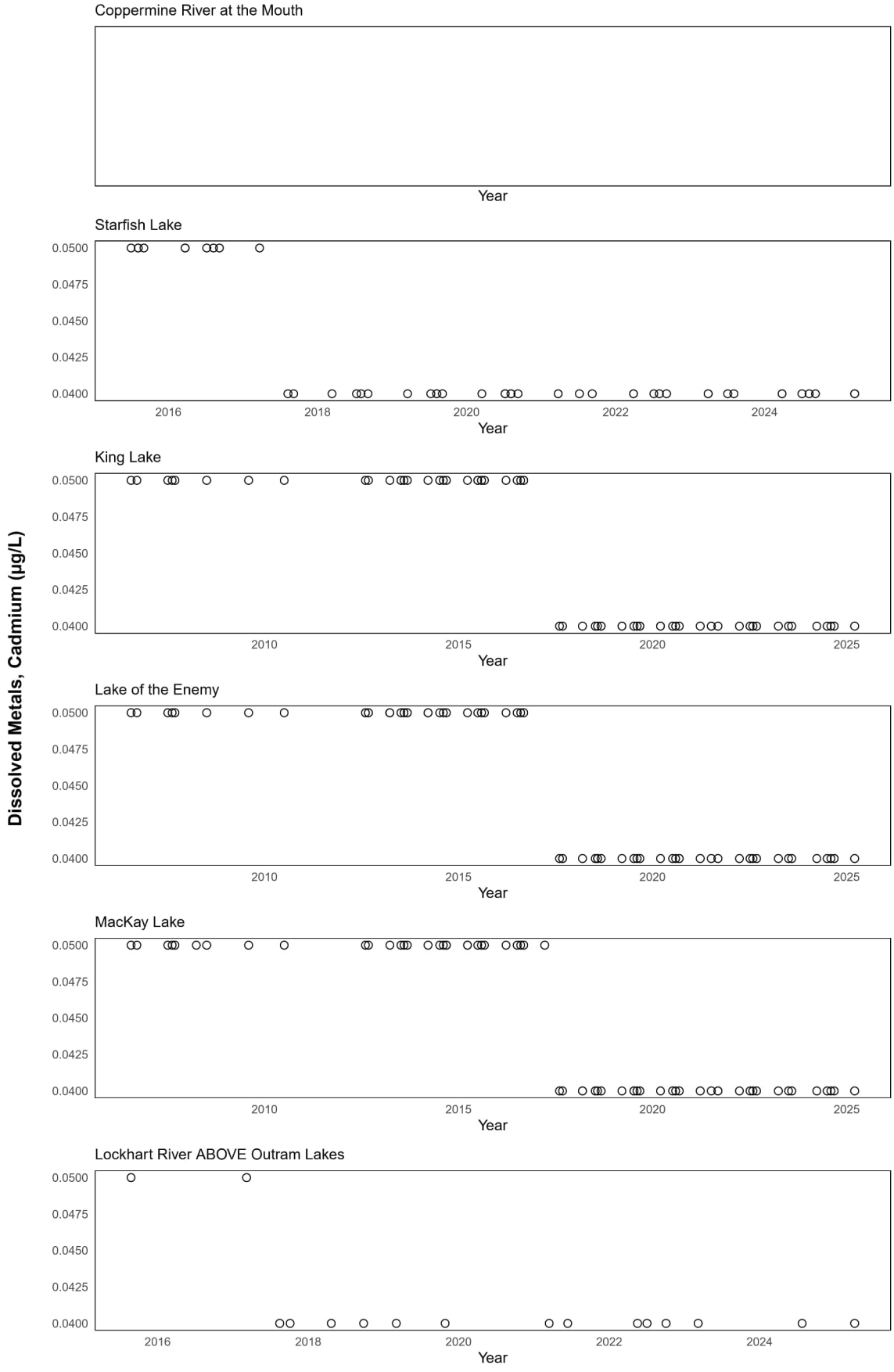
FIGURE NO:
B.1.18

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_portrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

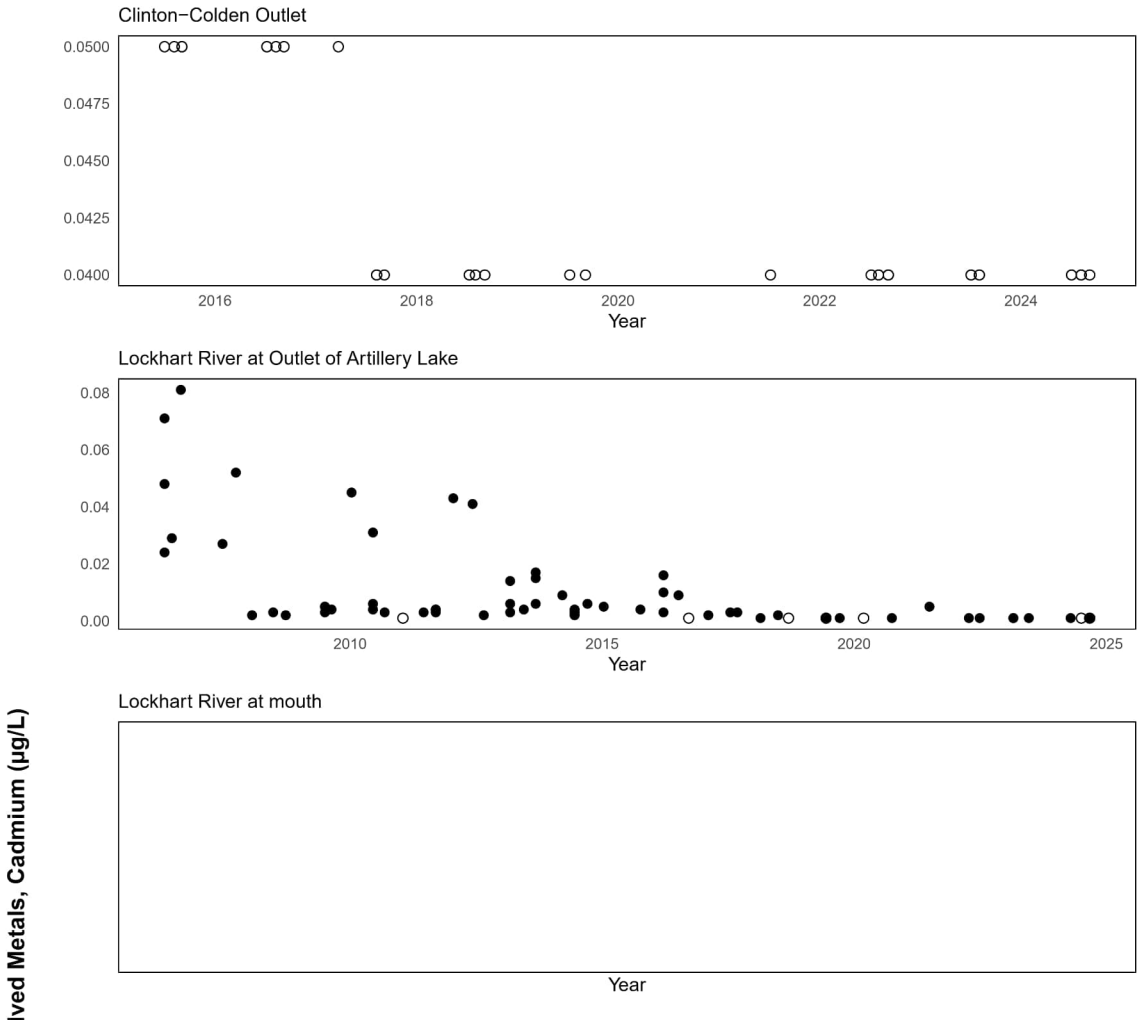
SLR

FIGURE NO: **B.1.19**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

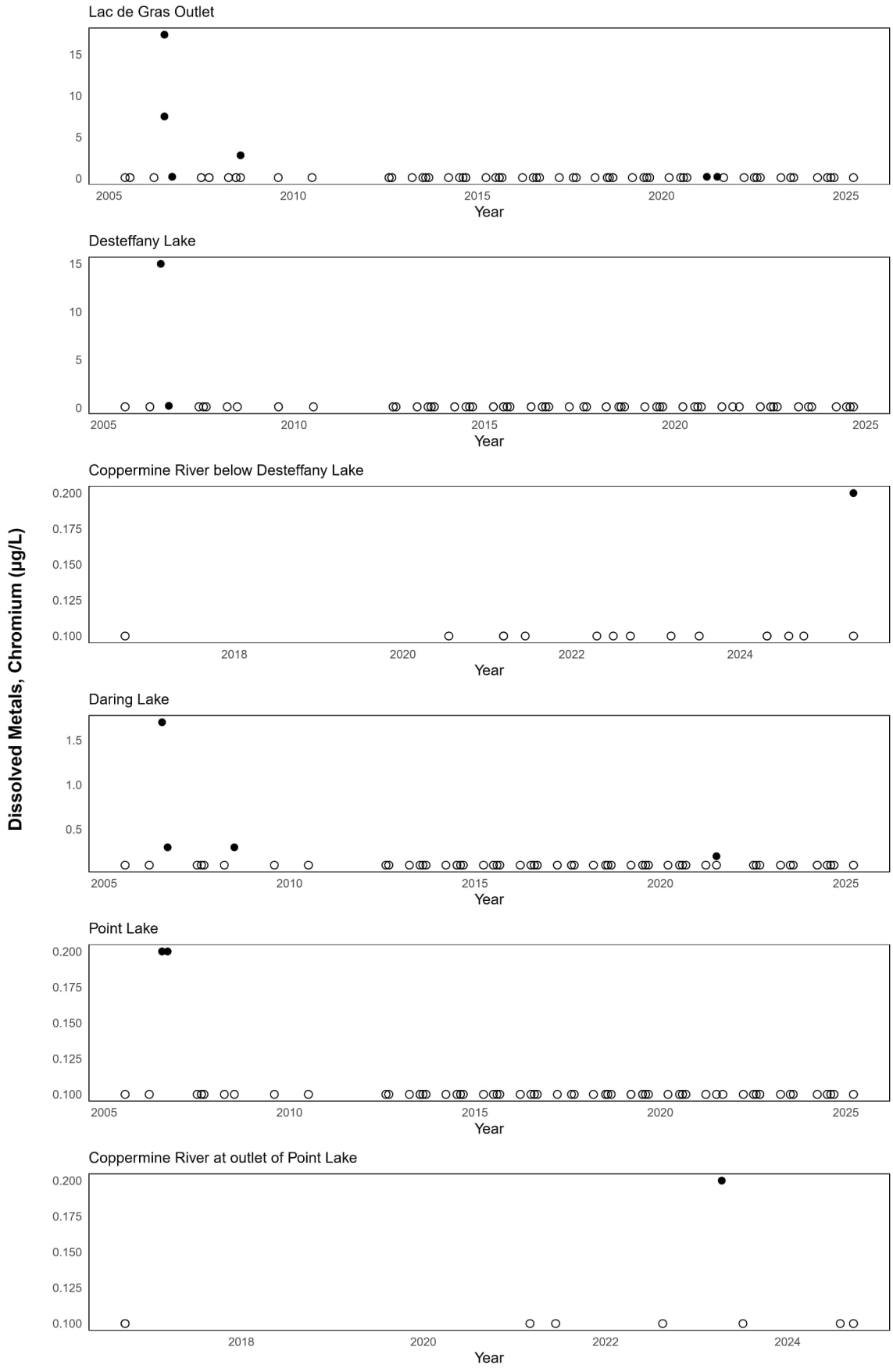
SLR

FIGURE NO:
B.1.20

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

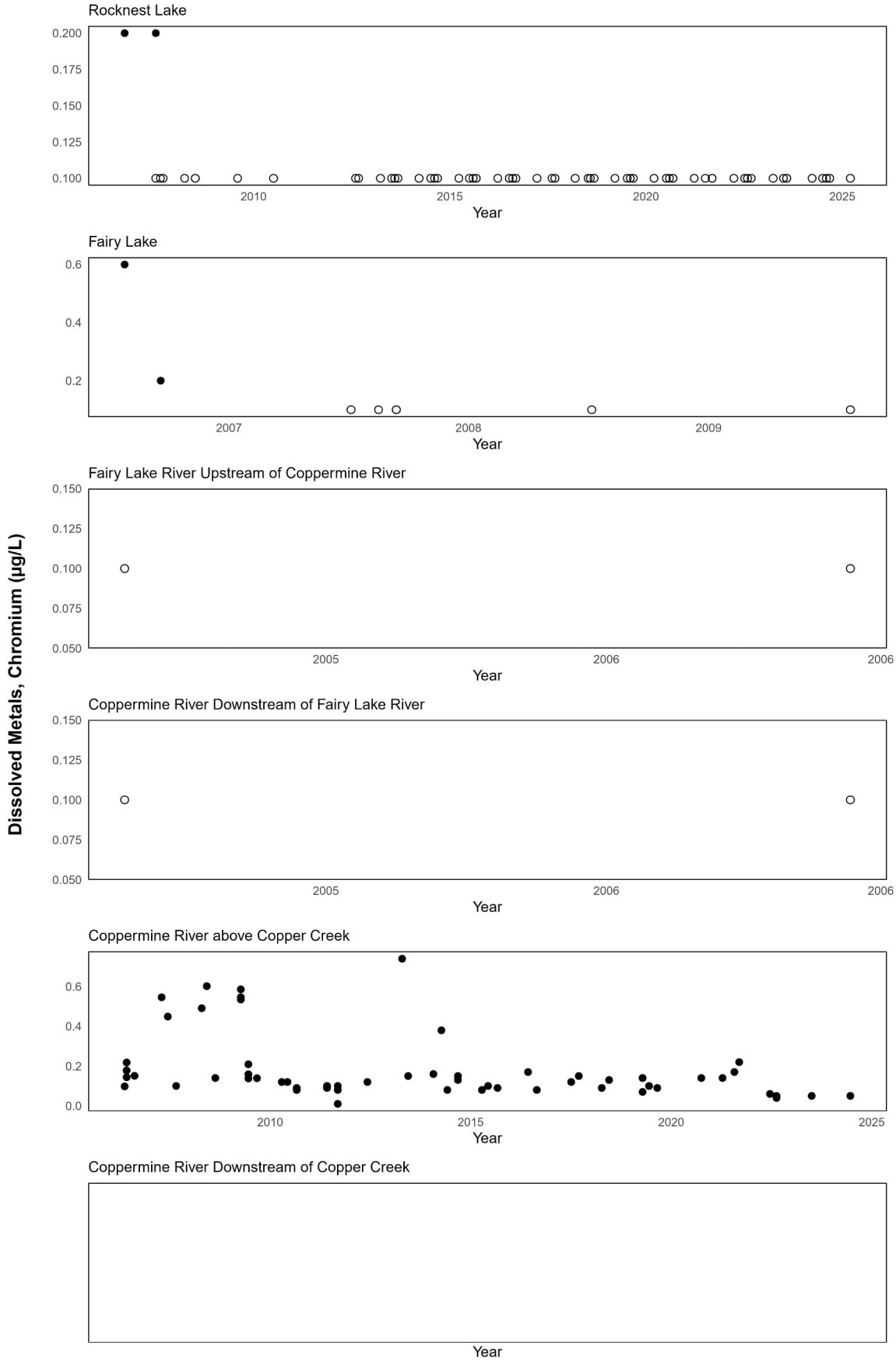
FIGURE NO:
B.1.21

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● **Detect**
- ○ **Non-detect**

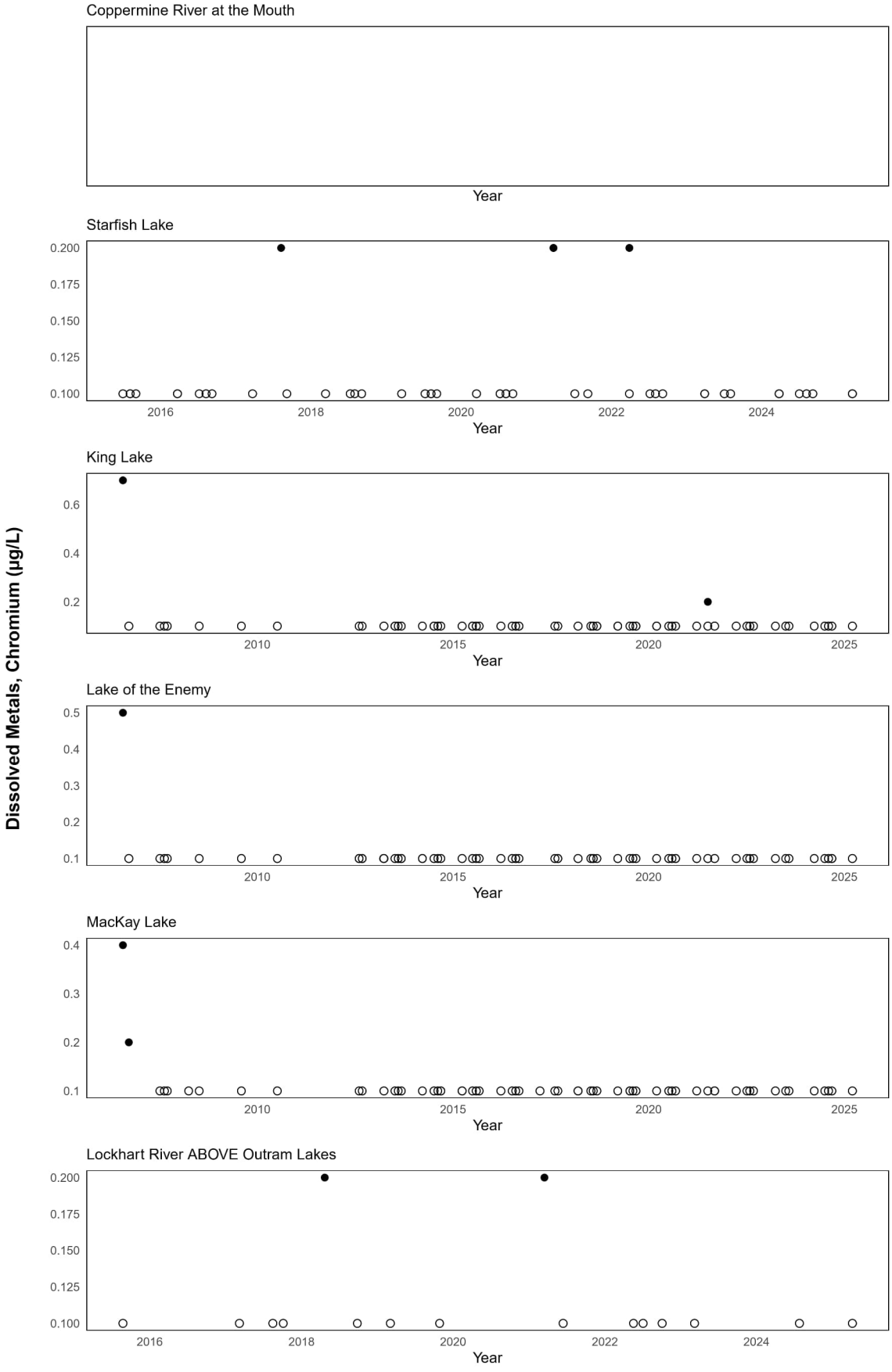
SLR

FIGURE NO: **B.1.22**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- ● **Detect**
- ○ **Non-detect**

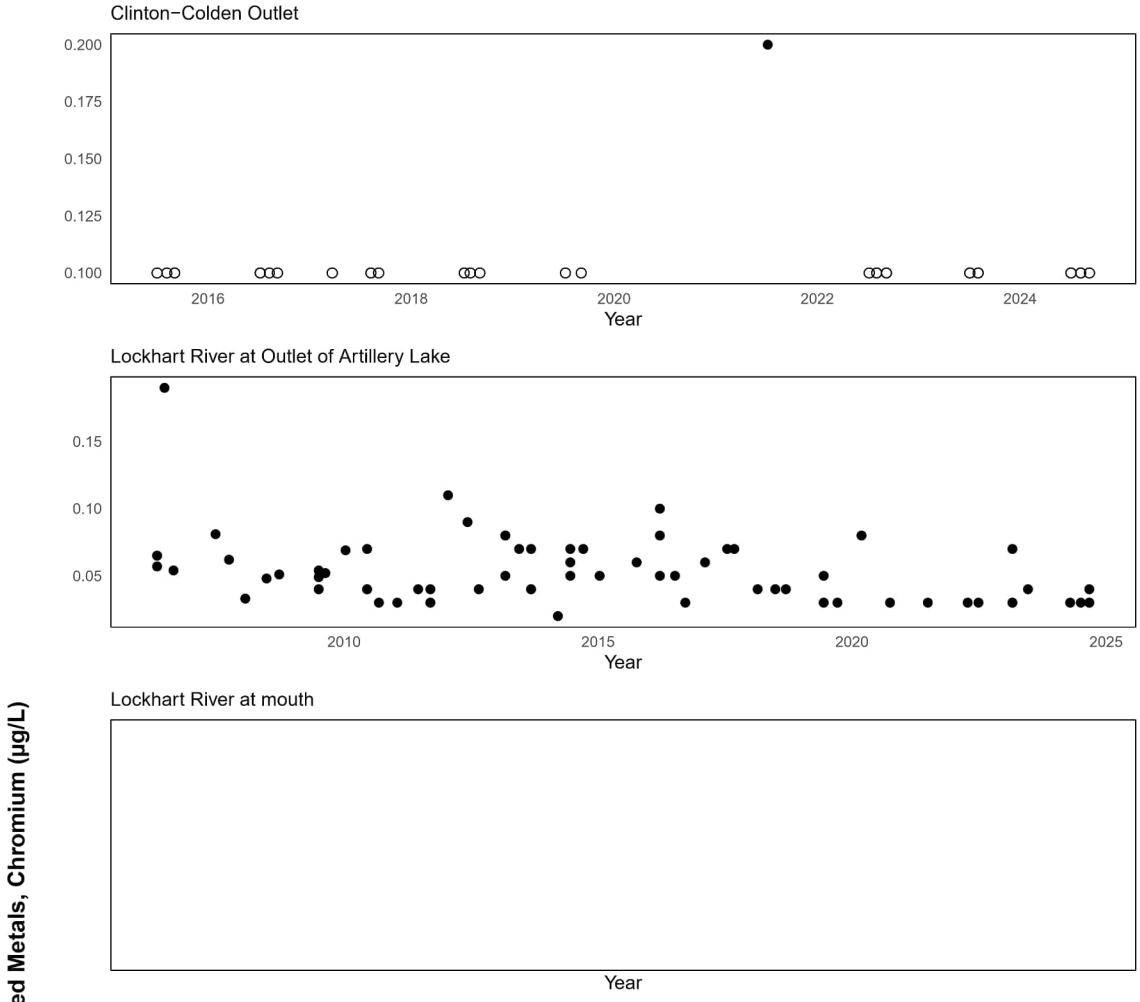
SLR

FIGURE NO:
B.1.23

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

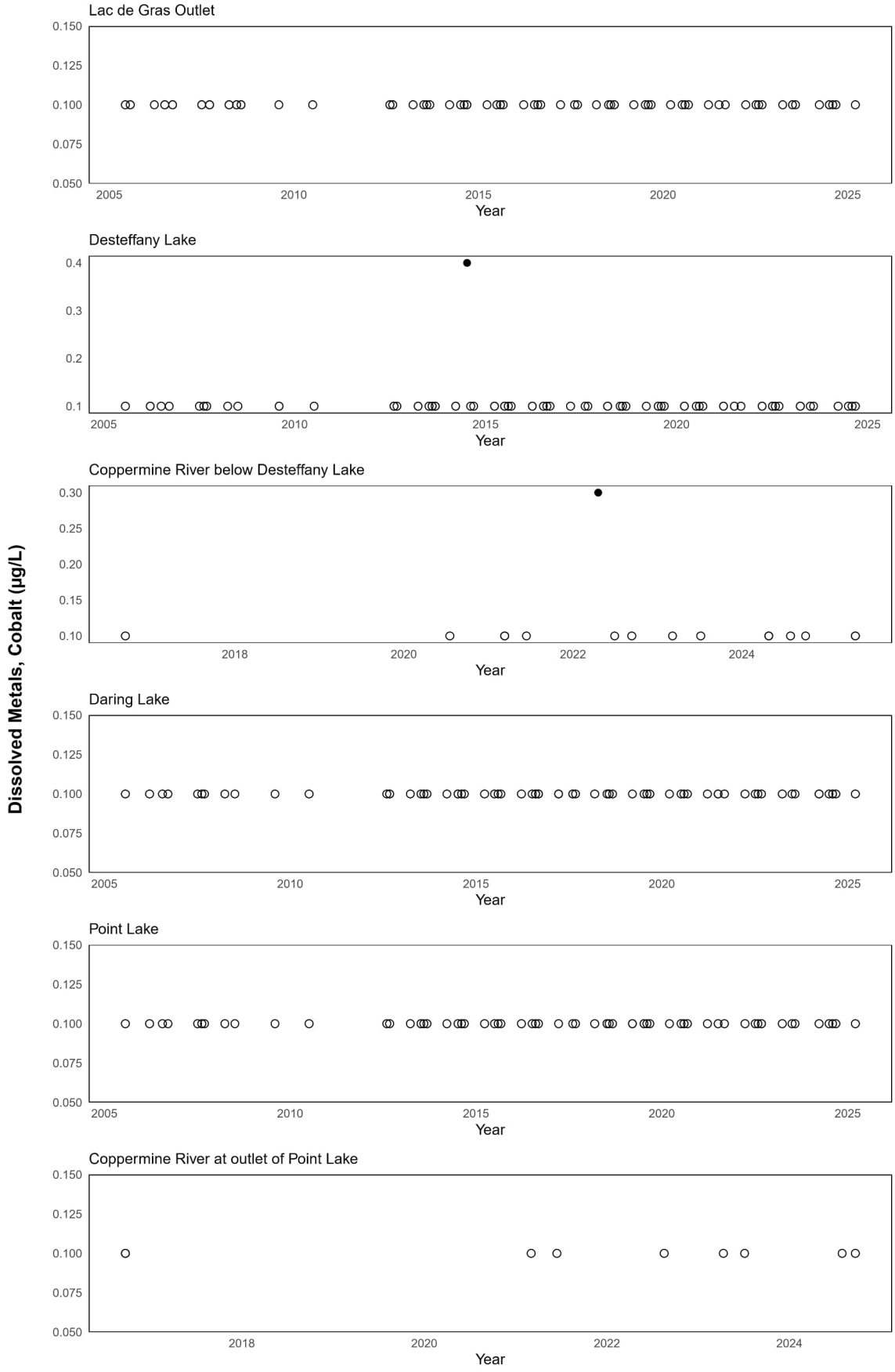
SLR

FIGURE NO:
B.1.24

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

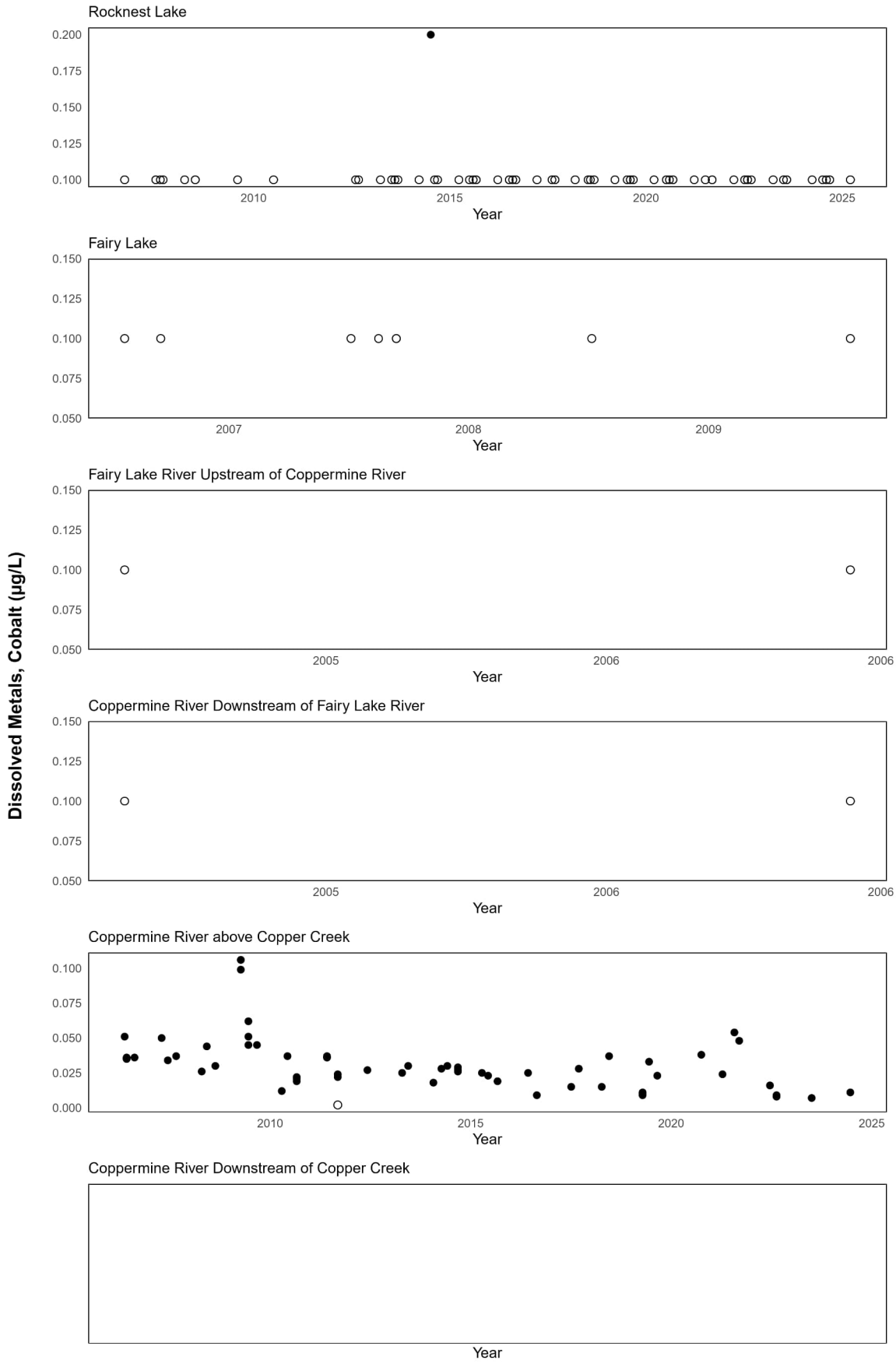
FIGURE NO:
B.1.25

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

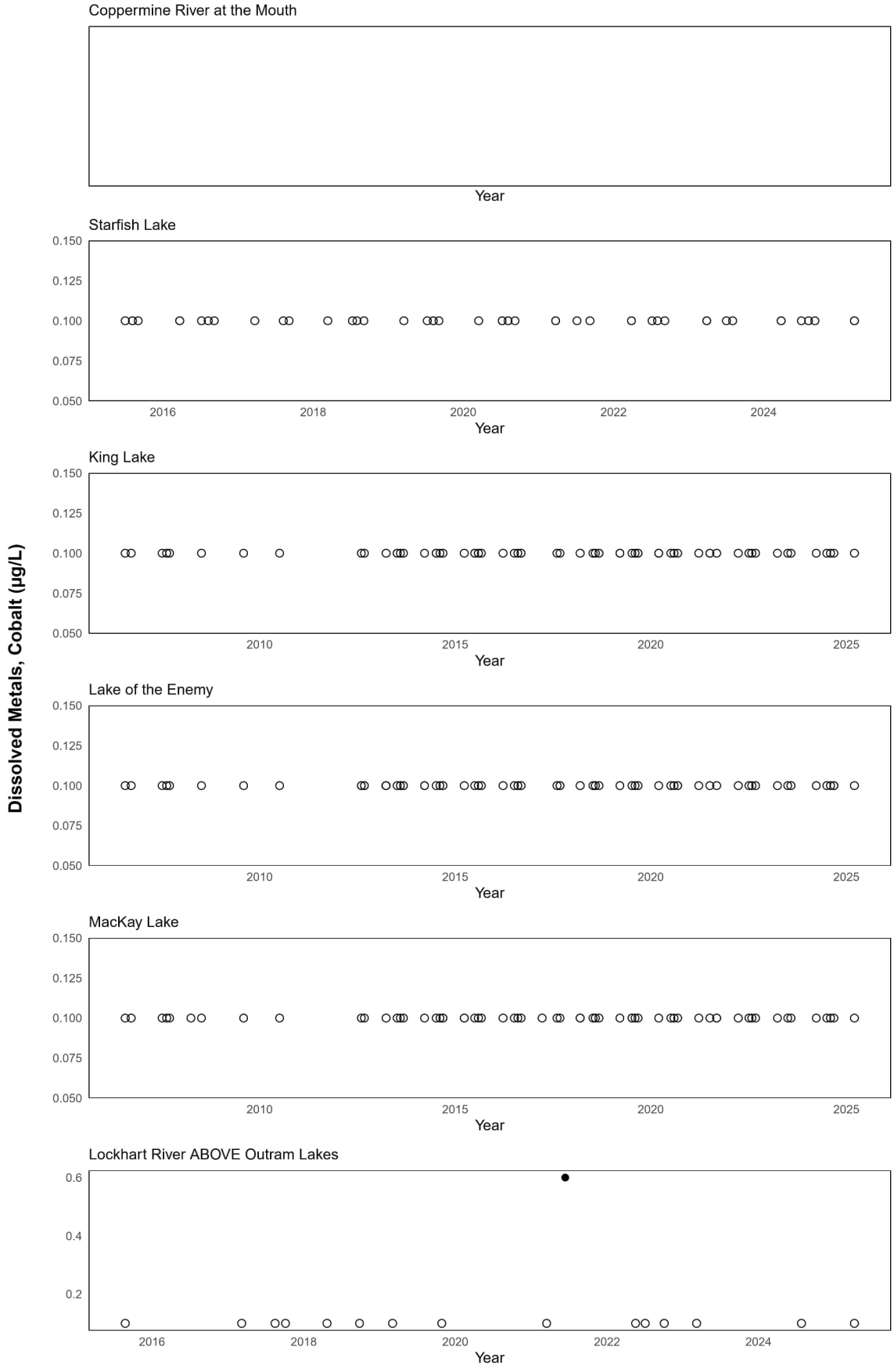
SLR

FIGURE NO: **B.1.26**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

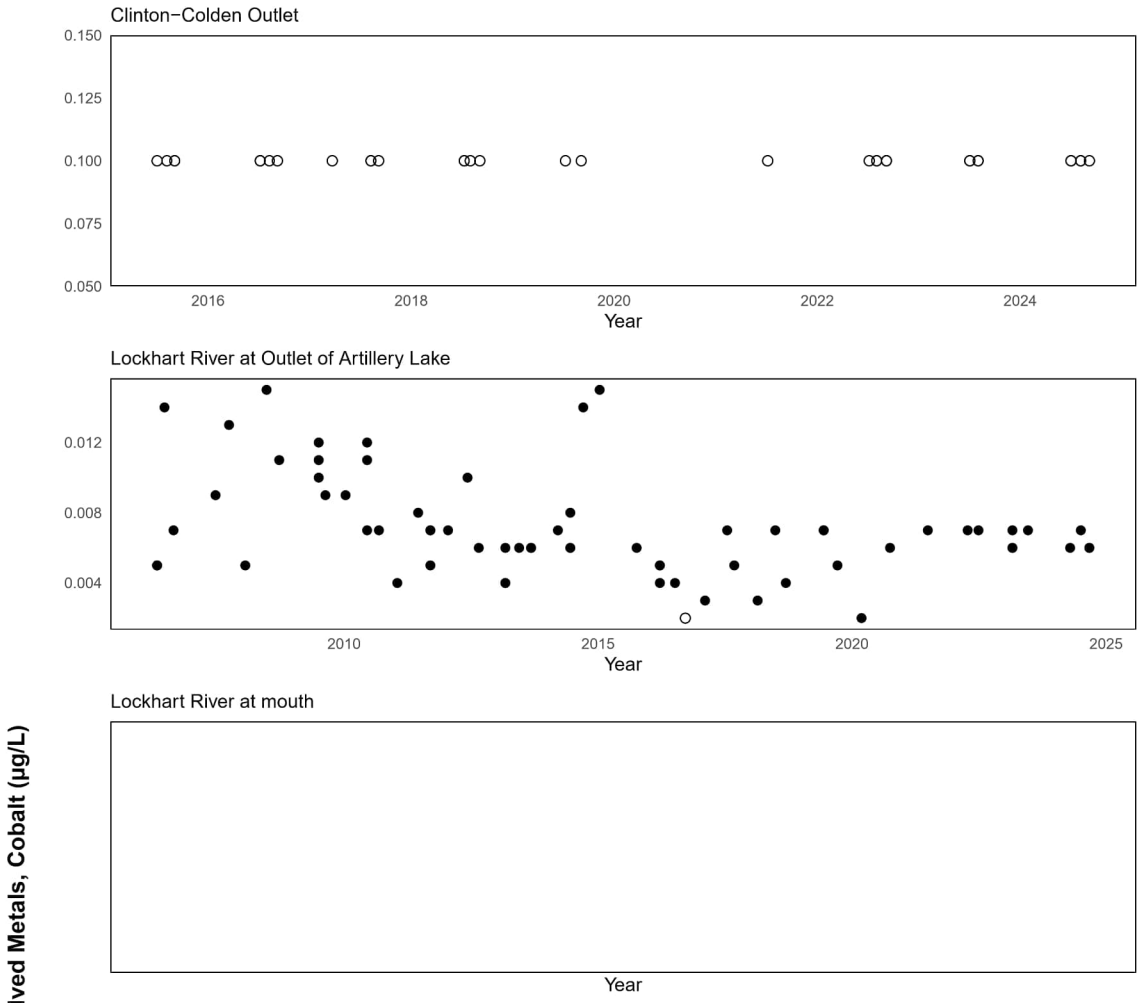
SLR

FIGURE NO: **B.1.27**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

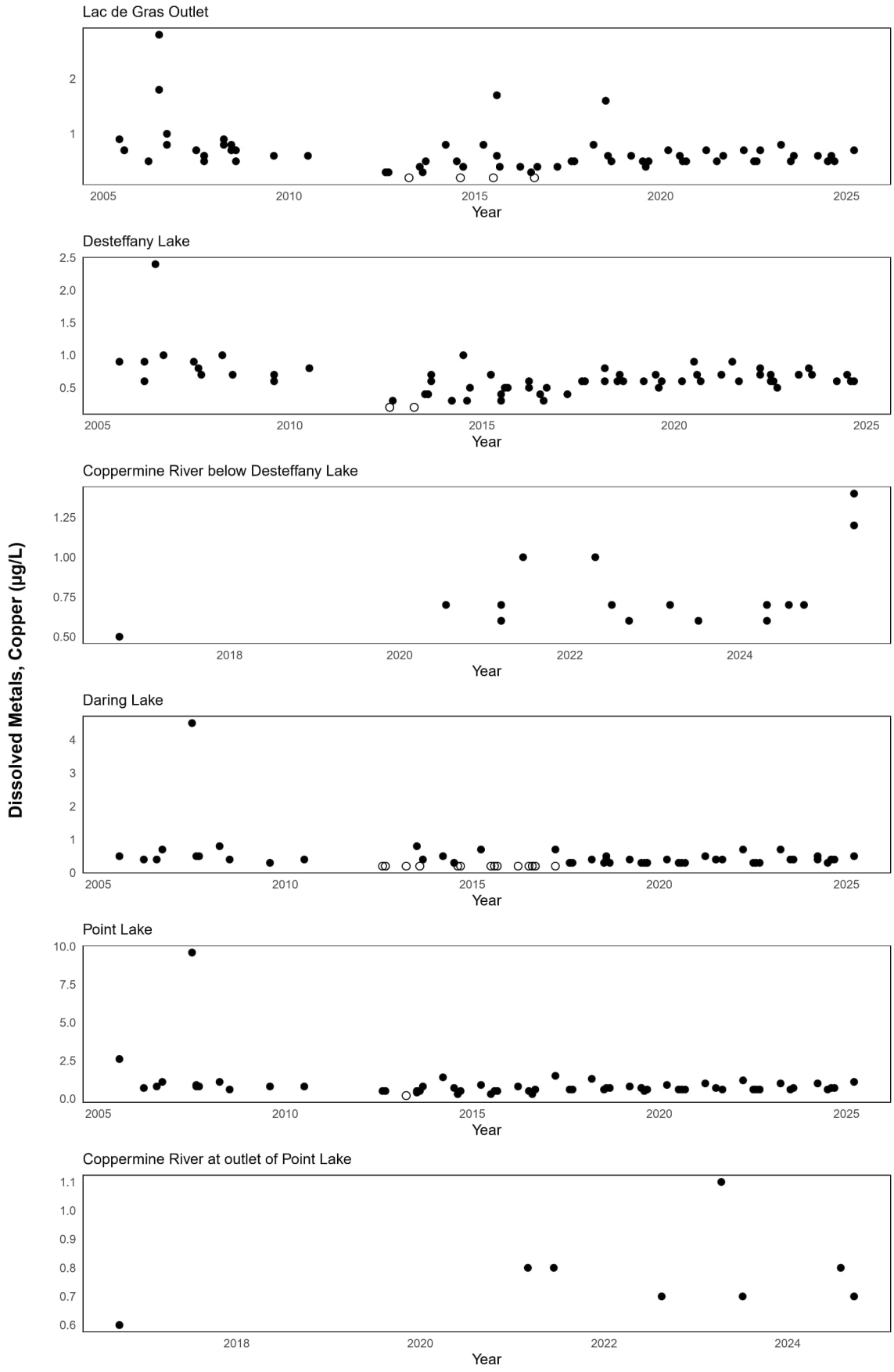
SLR

FIGURE NO:
B.1.28

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

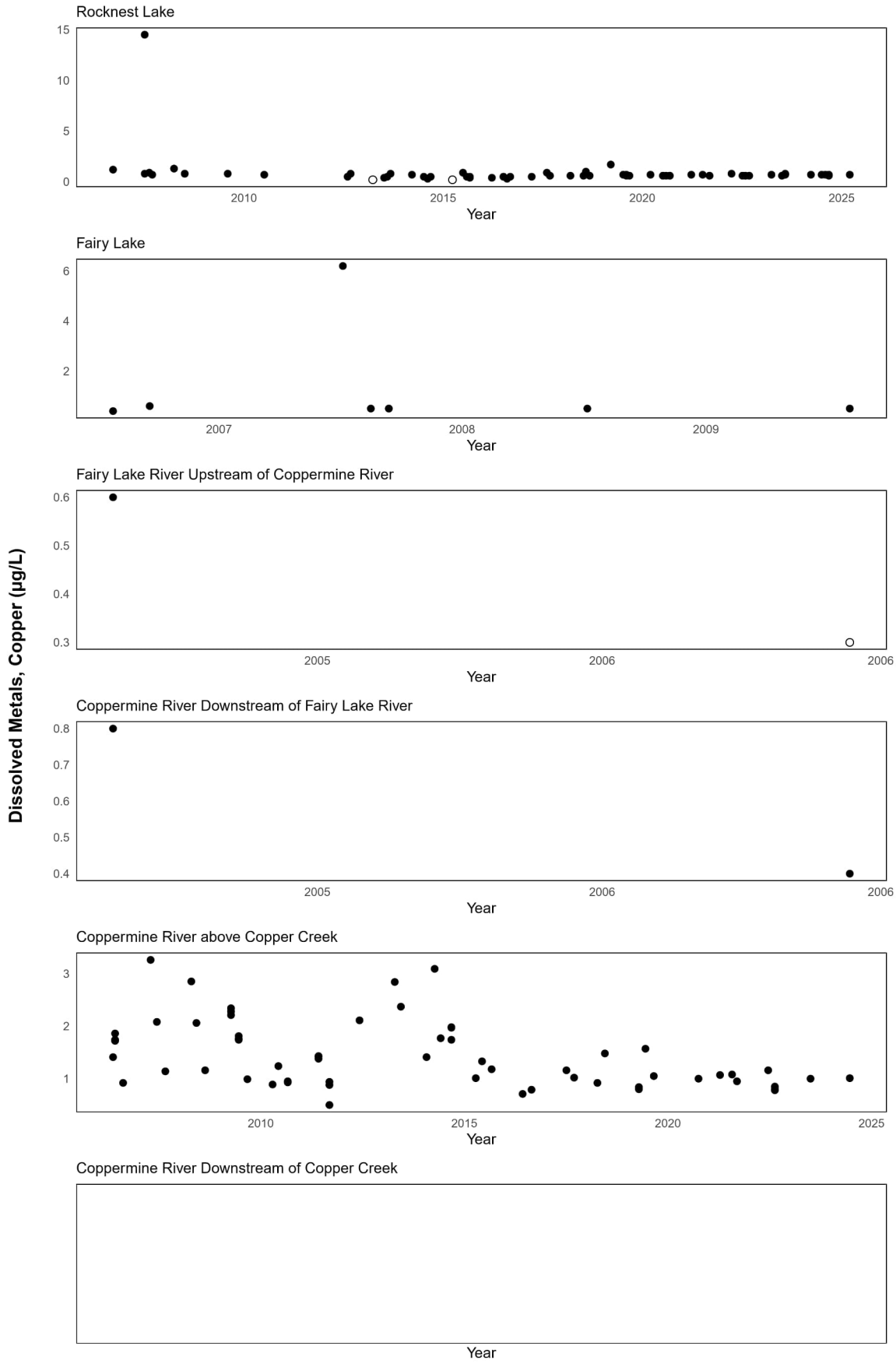
FIGURE NO:
B.1.29

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● Detect
- ○ Non-detect

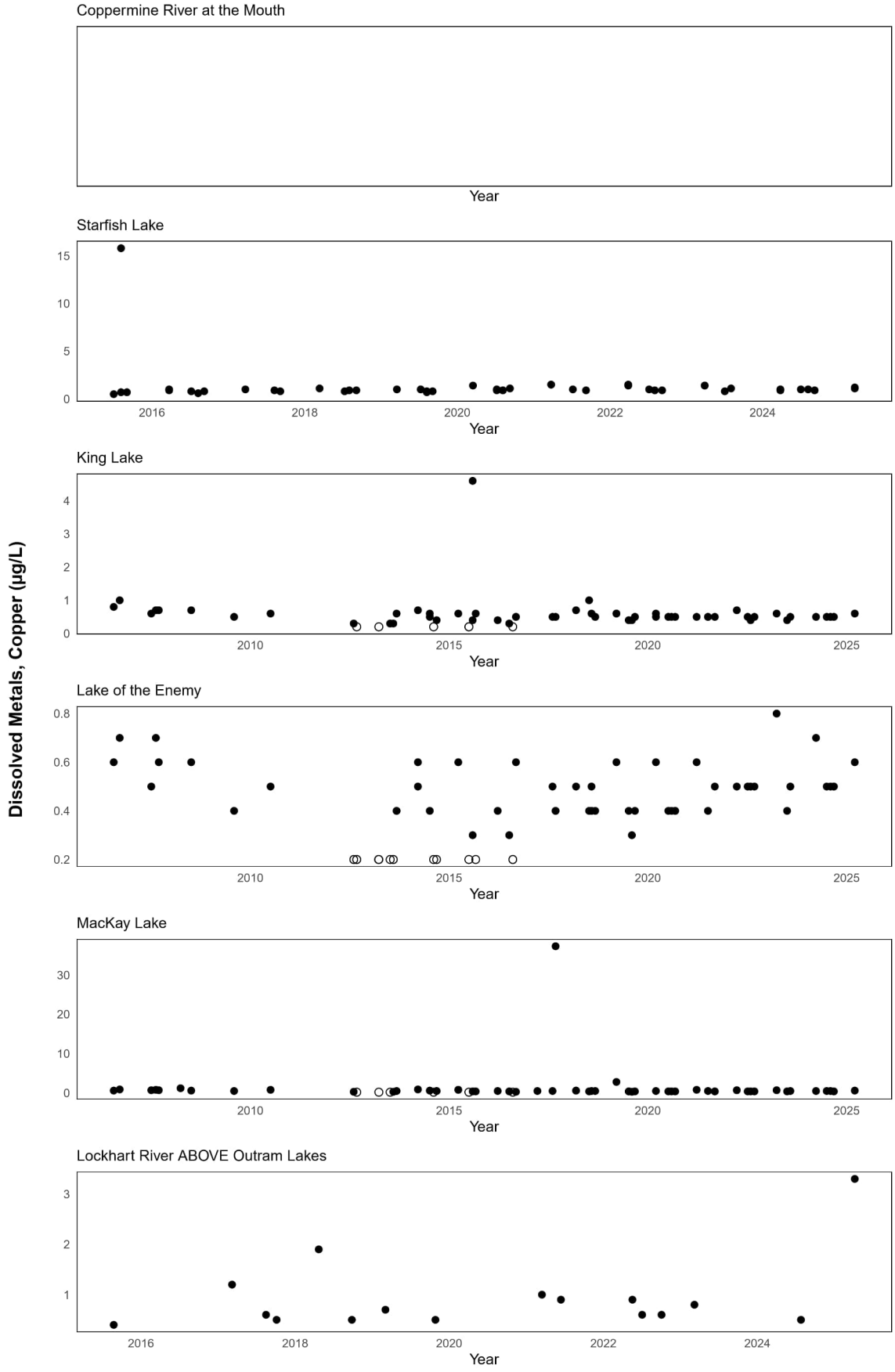
SLR

FIGURE NO: **B.1.30**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

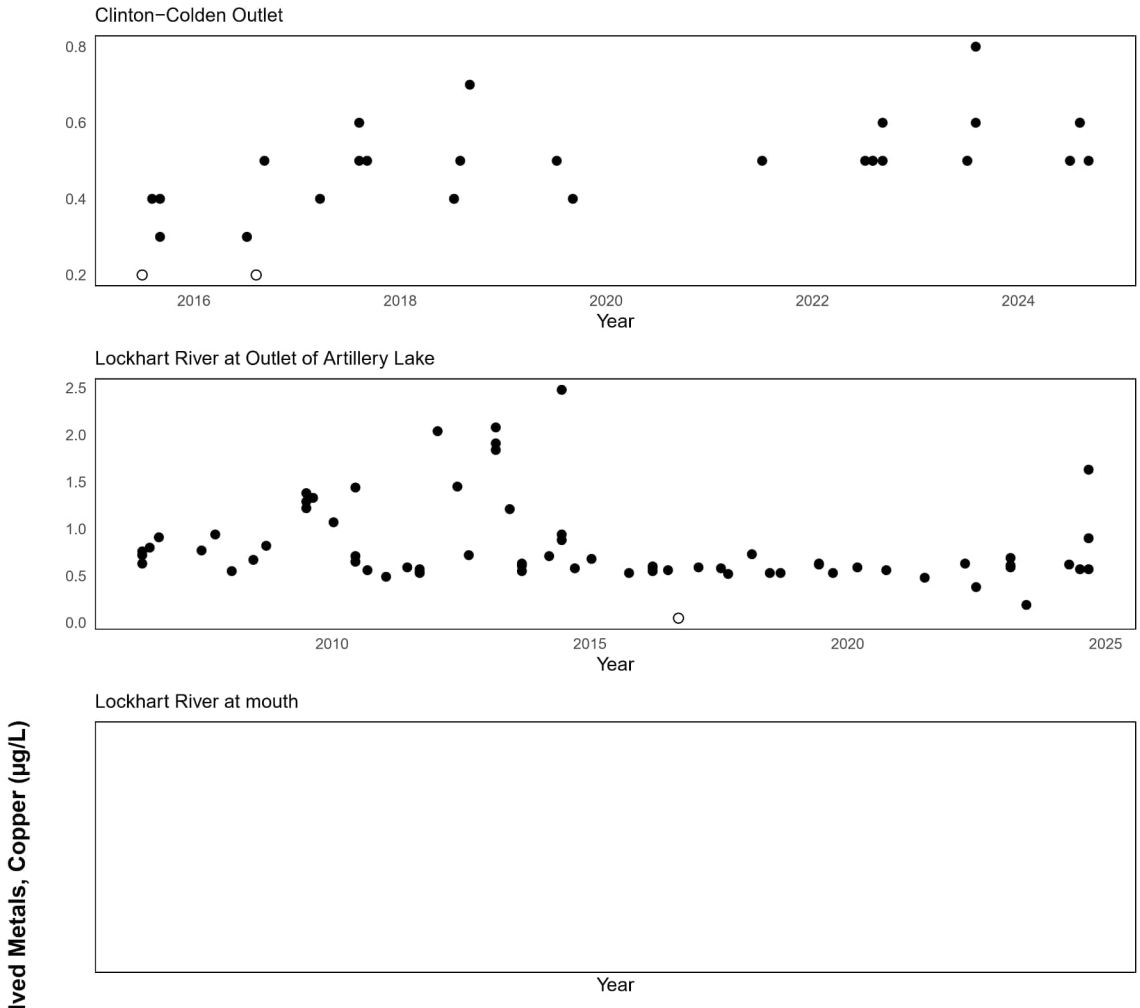
FIGURE NO:
B.1.31

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

SLR

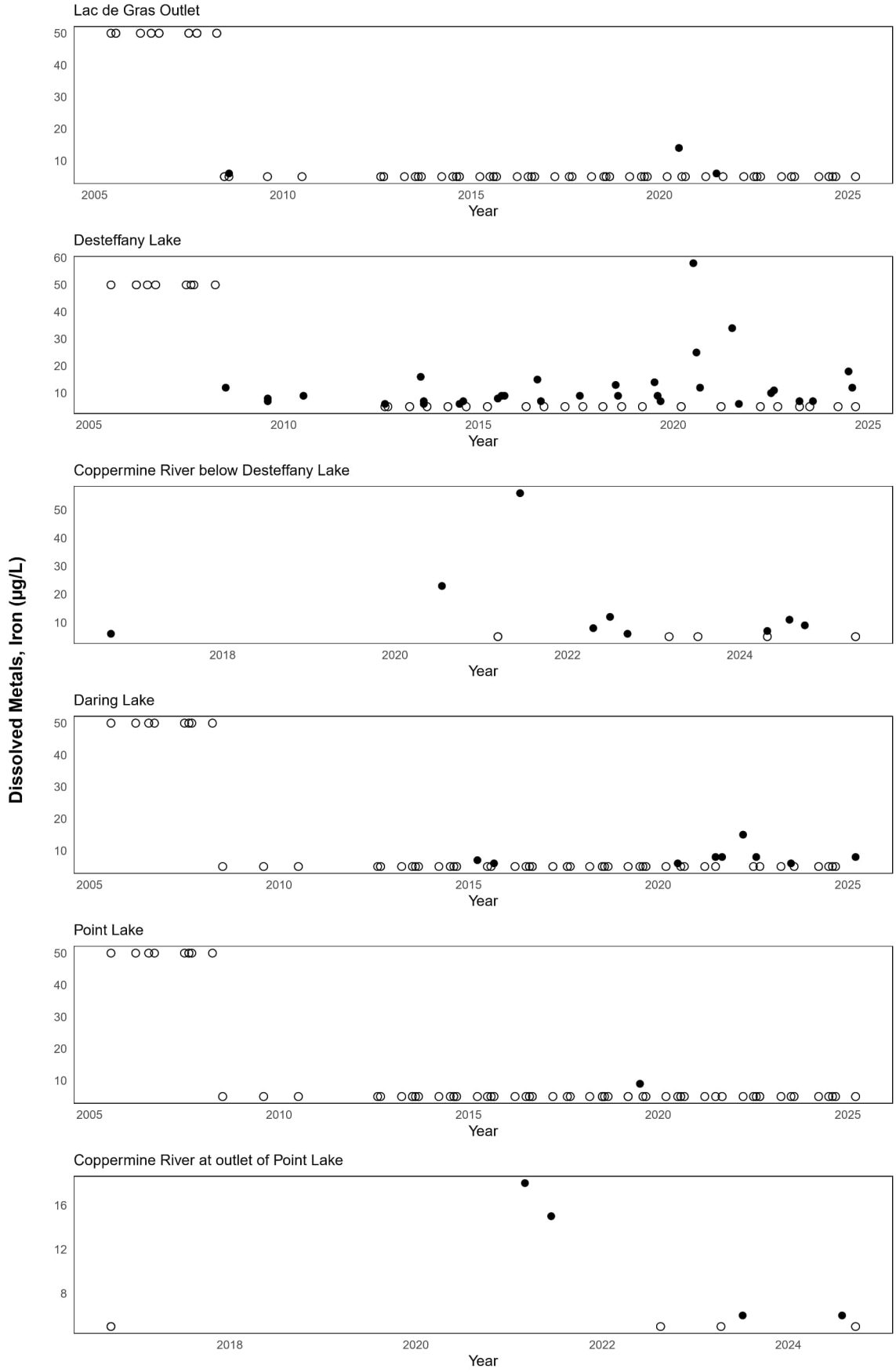
FIGURE NO:

B.1.32

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

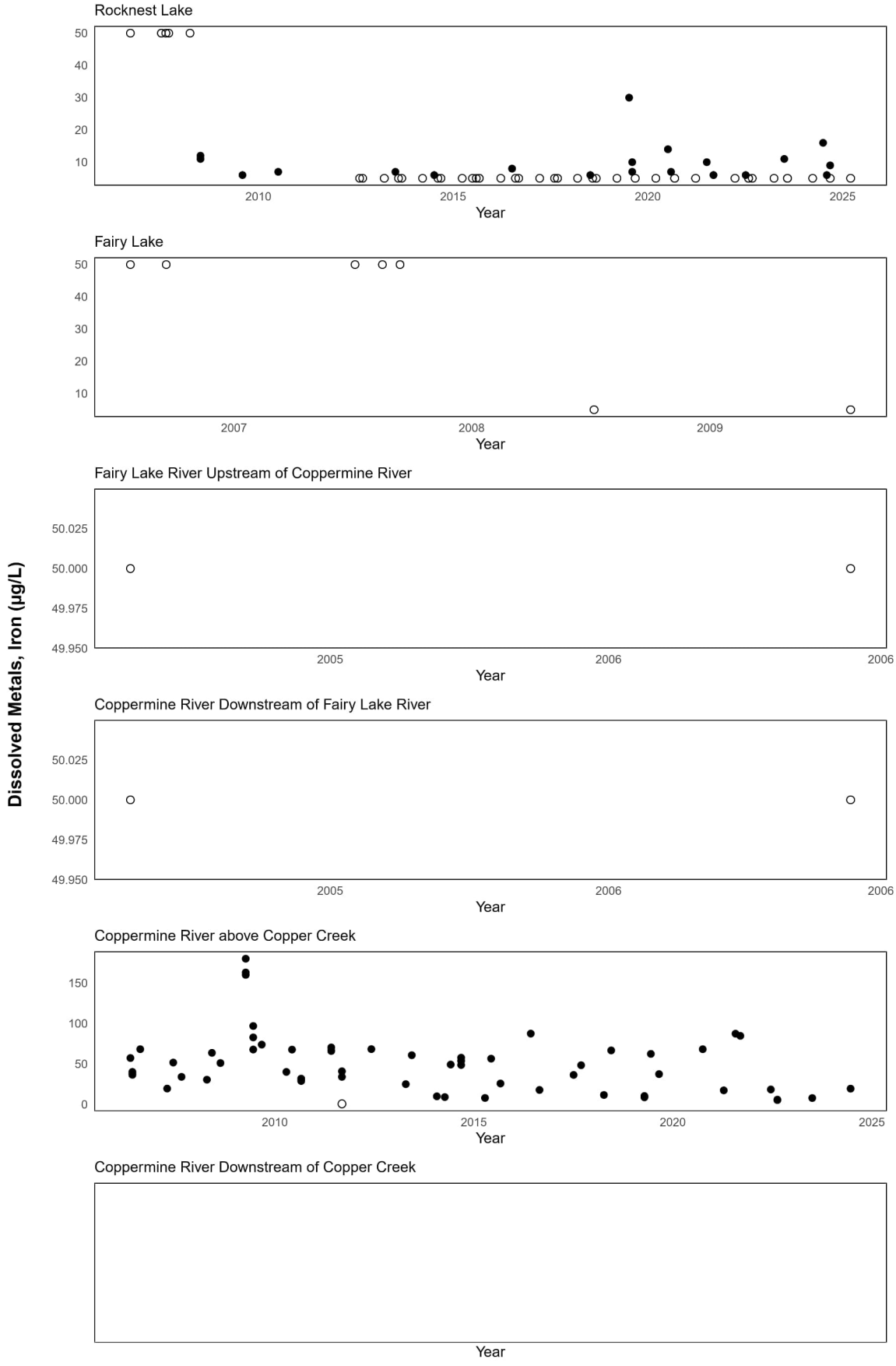
FIGURE NO:
B.1.33

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

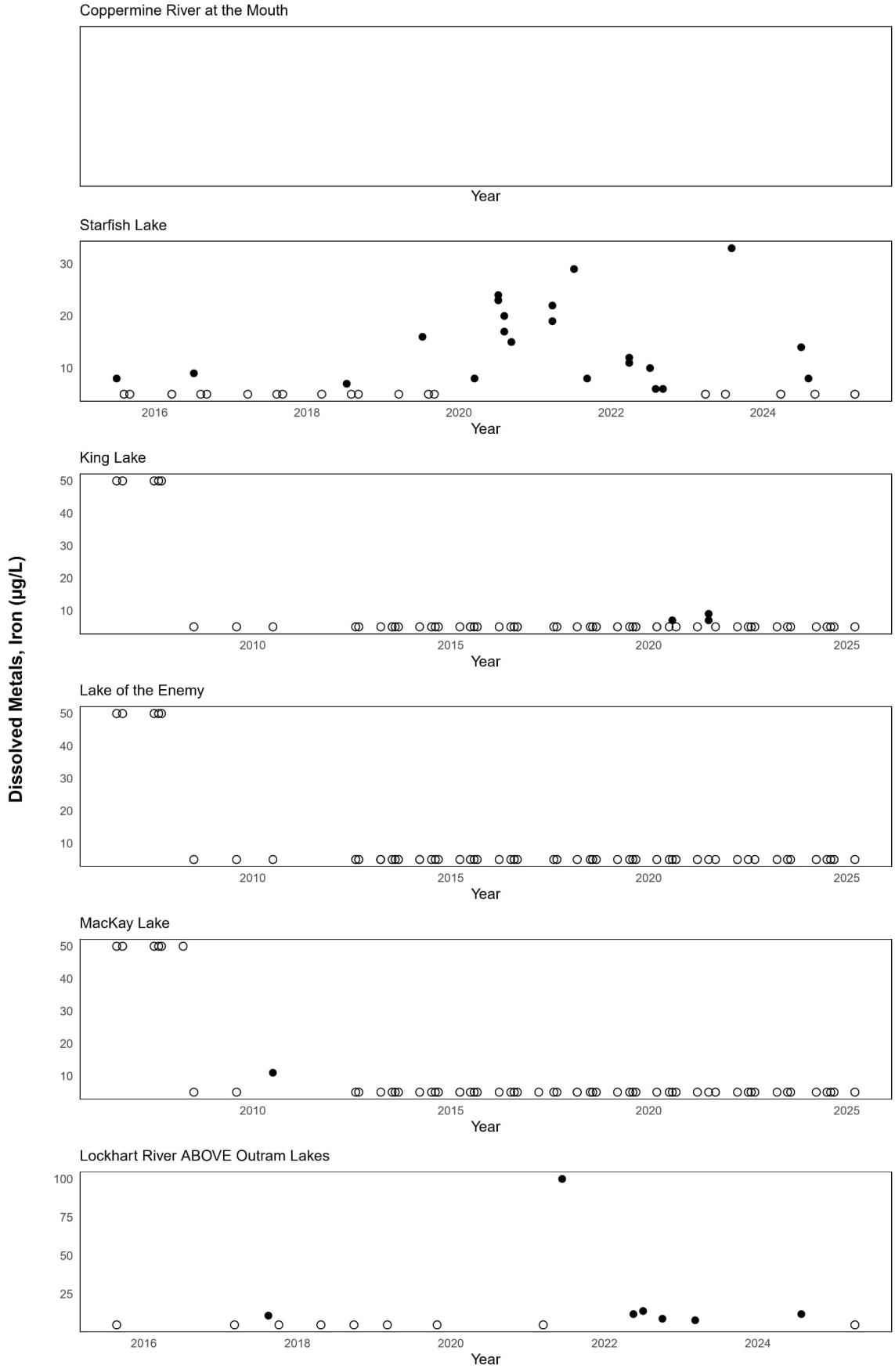
FIGURE NO:
B.1.34

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- ● **Detect**
- ○ **Non-detect**

SLR

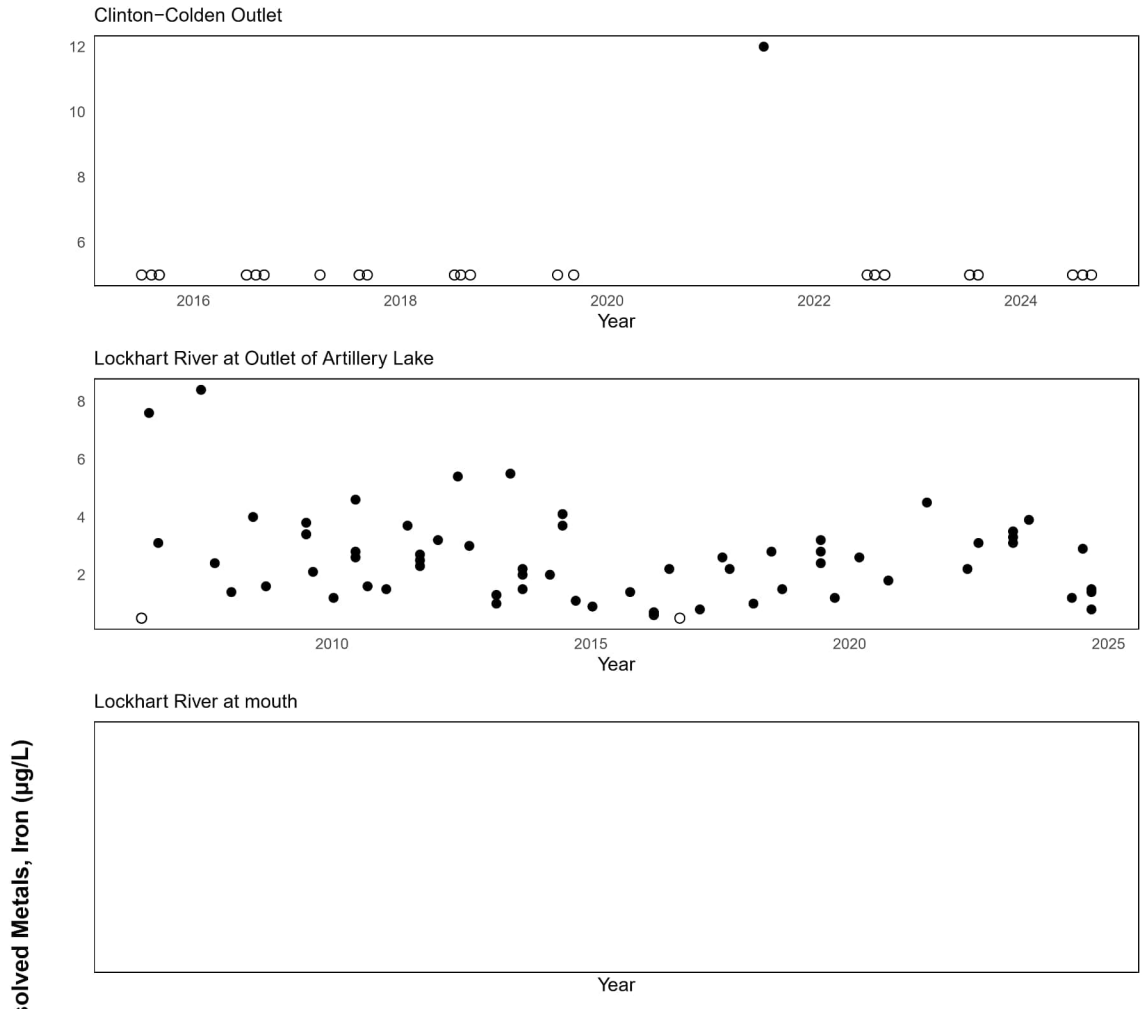
FIGURE NO:
B.1.35

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

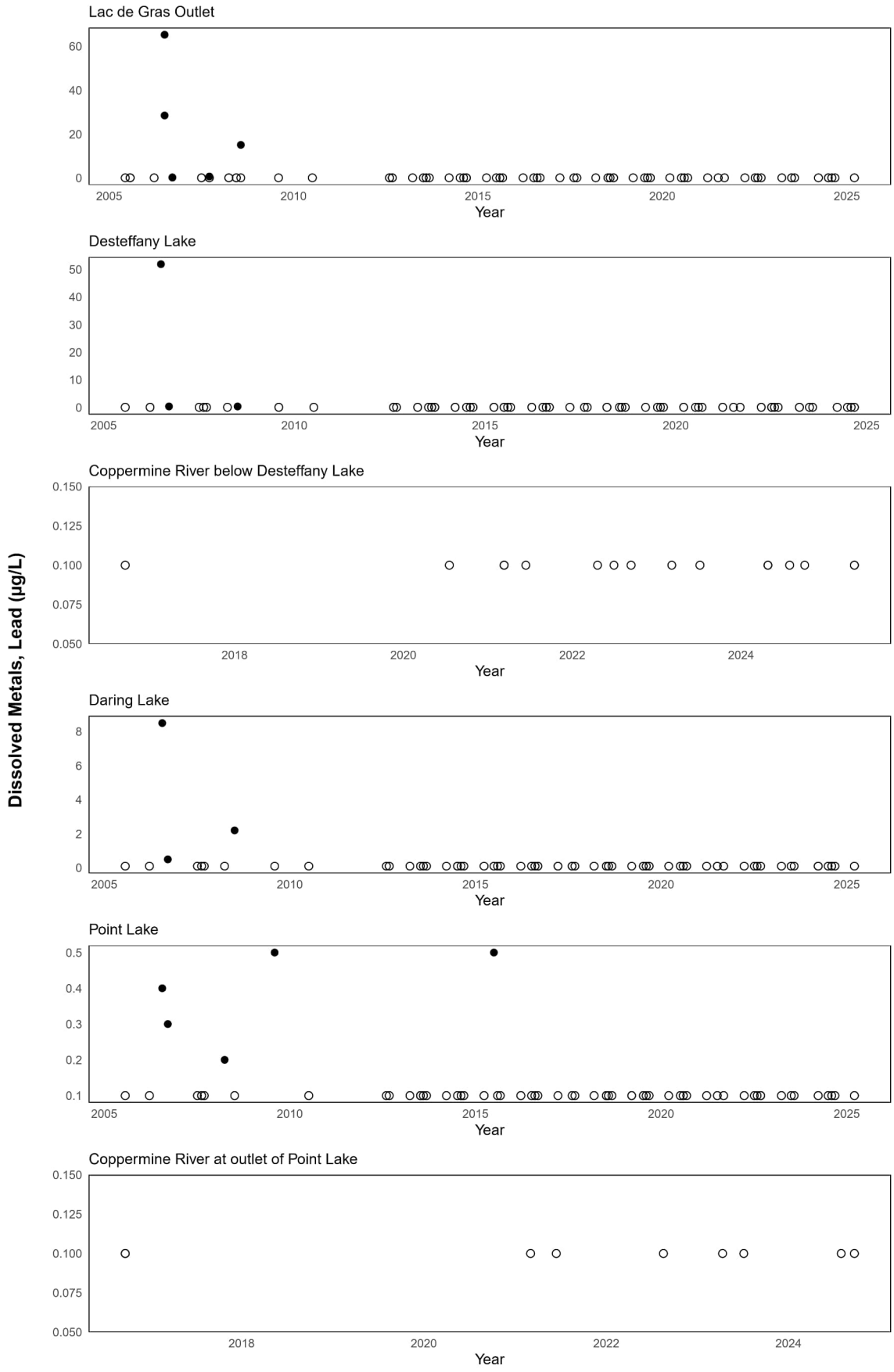
SLR

FIGURE NO:
B.1.36

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

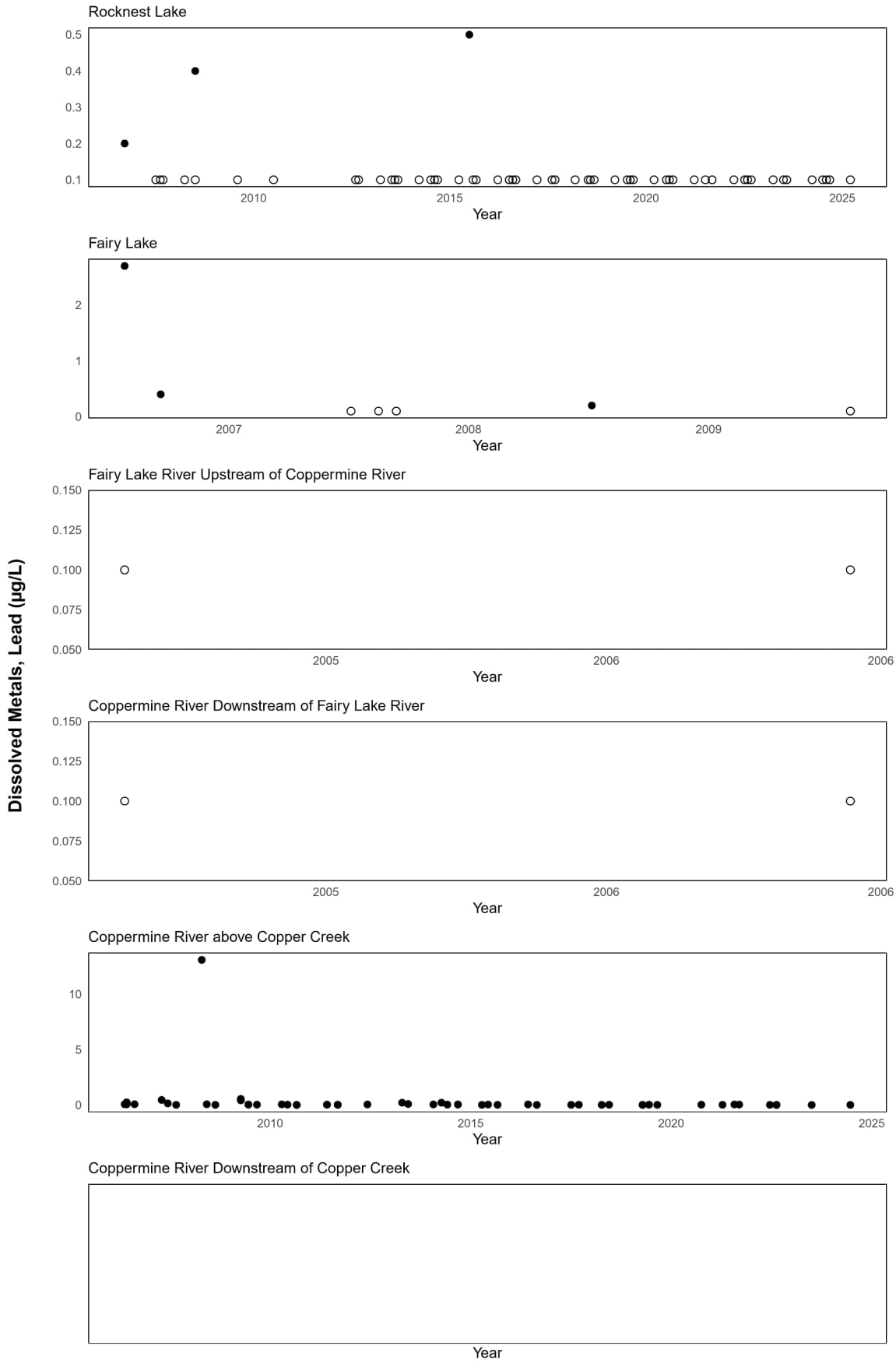
FIGURE NO:
B.1.37

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

SLR

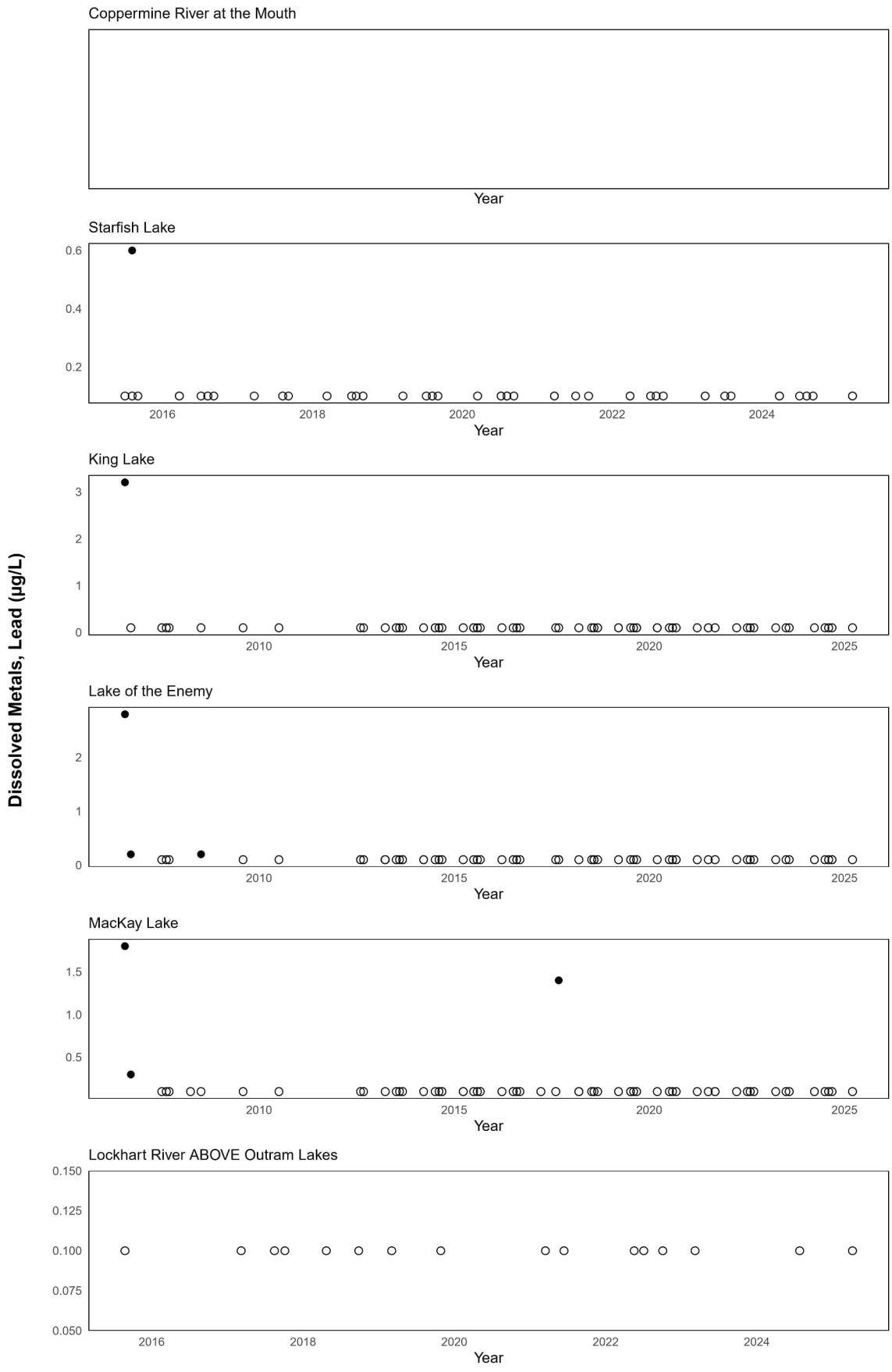
FIGURE NO: **B.1.38**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

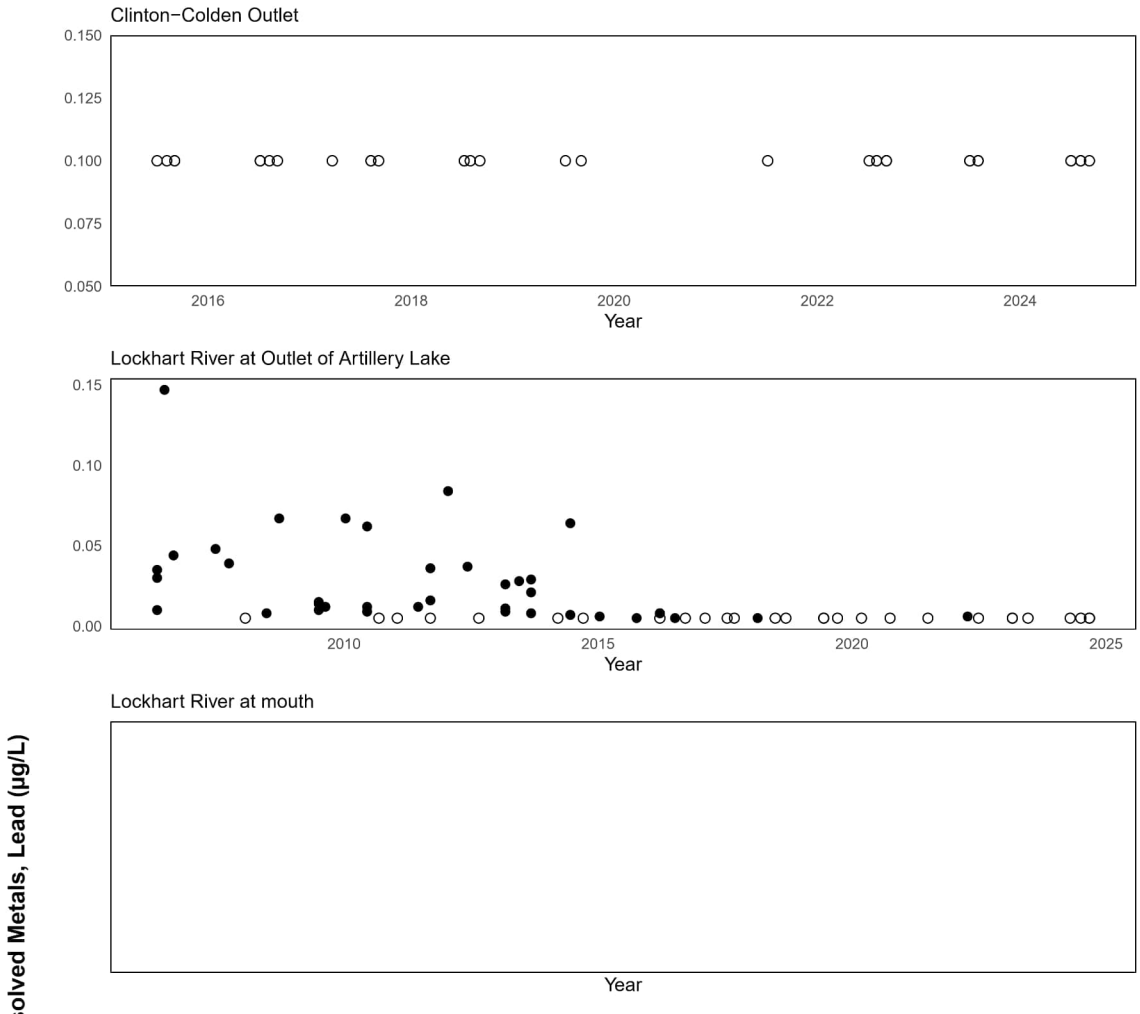
SLR

FIGURE NO:
B.1.39

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

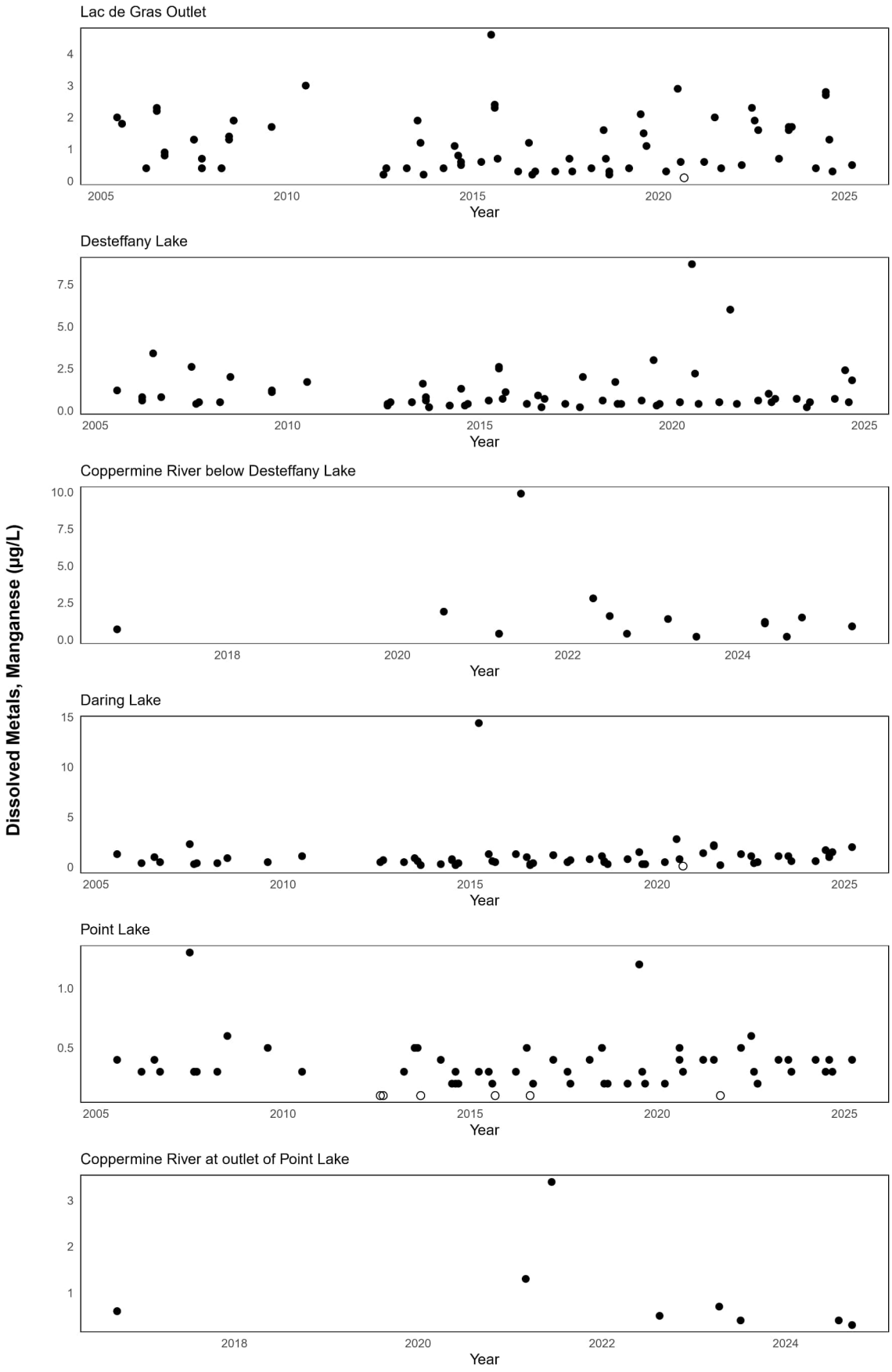
SLR

FIGURE NO:
B.1.40

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

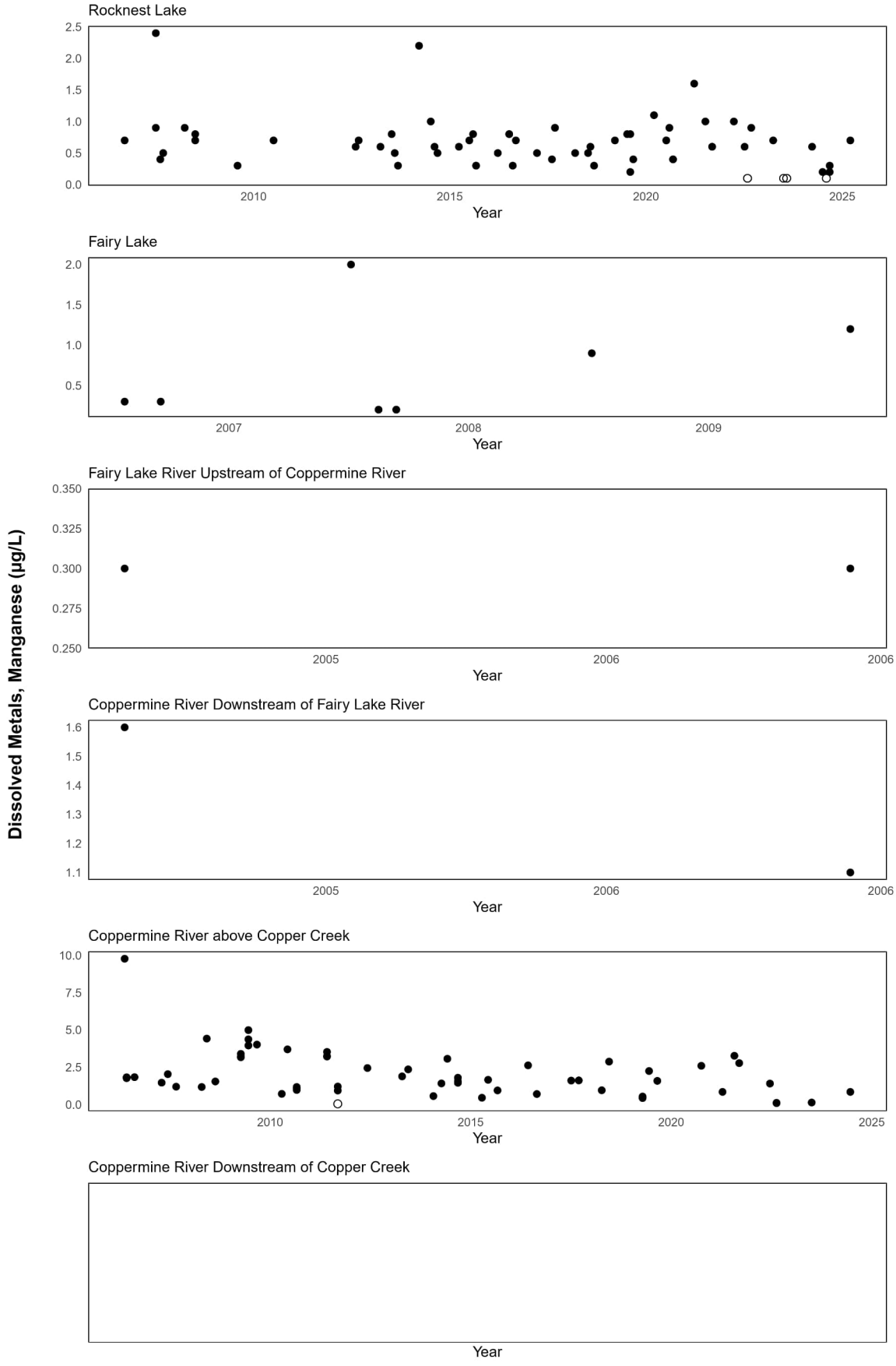
FIGURE NO:
B.1.41

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● Detect
- ○ Non-detect

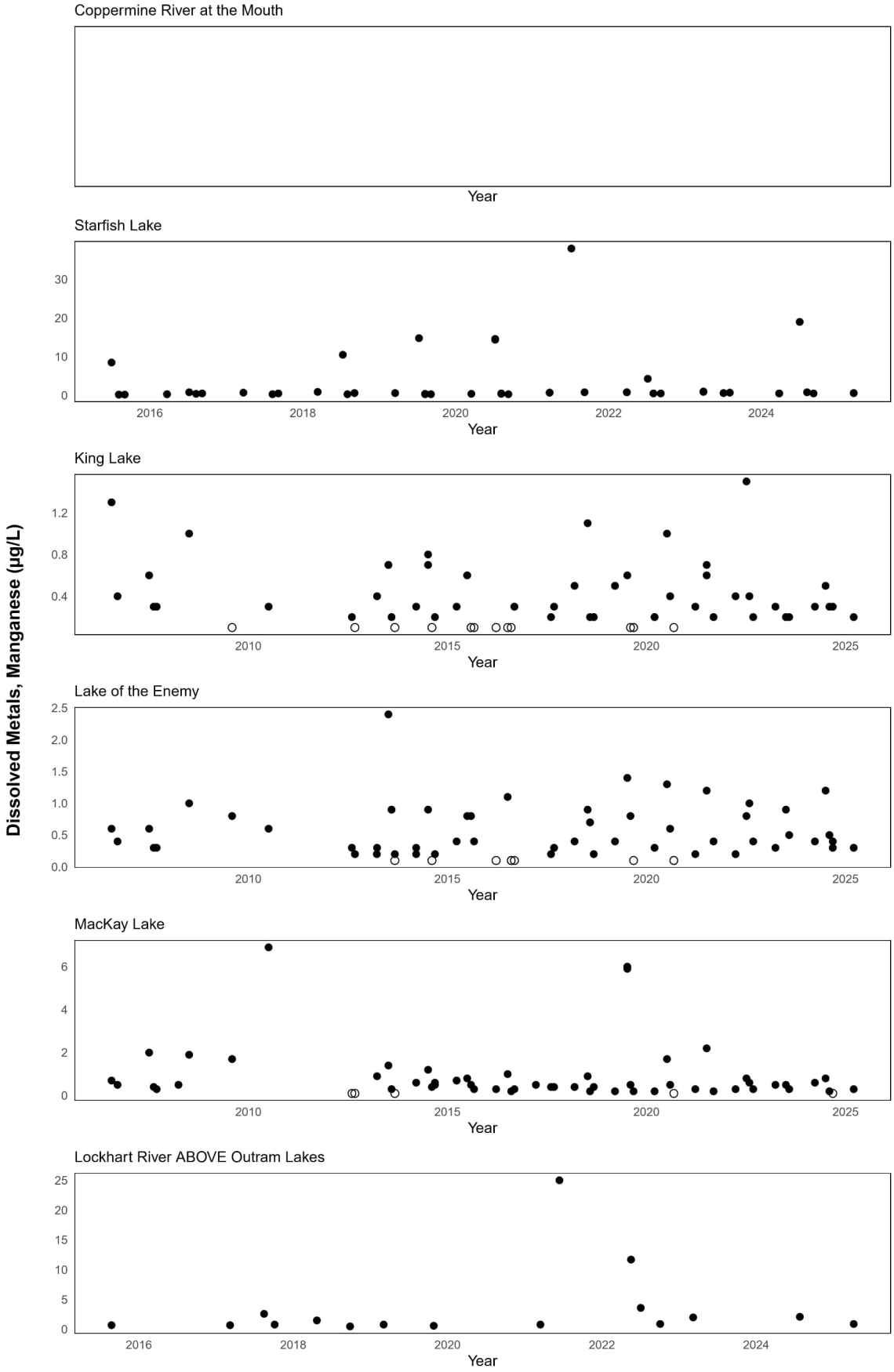
SLR

FIGURE NO: **B.1.42**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- ● **Detect**
- ○ **Non-detect**

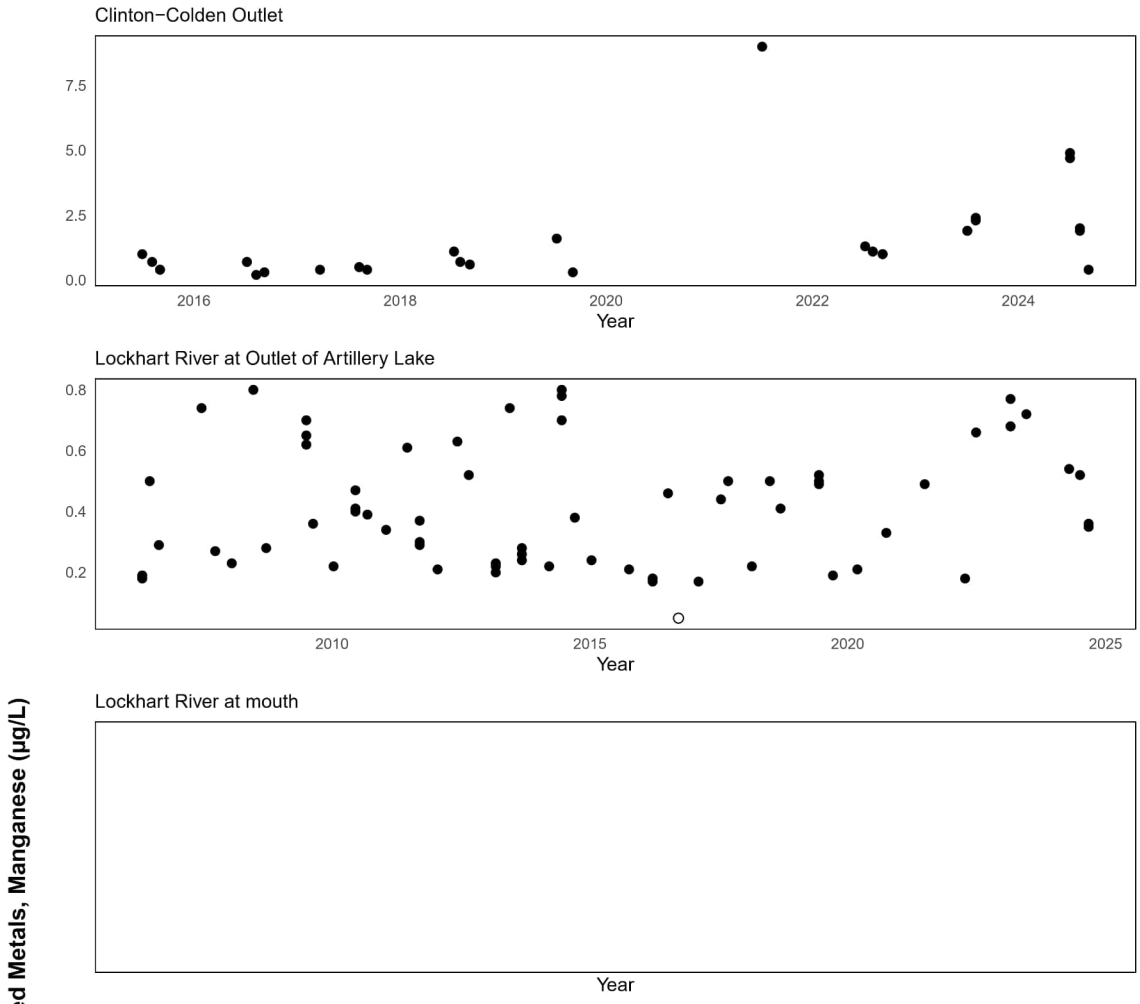
SLR

FIGURE NO:
B.1.43

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

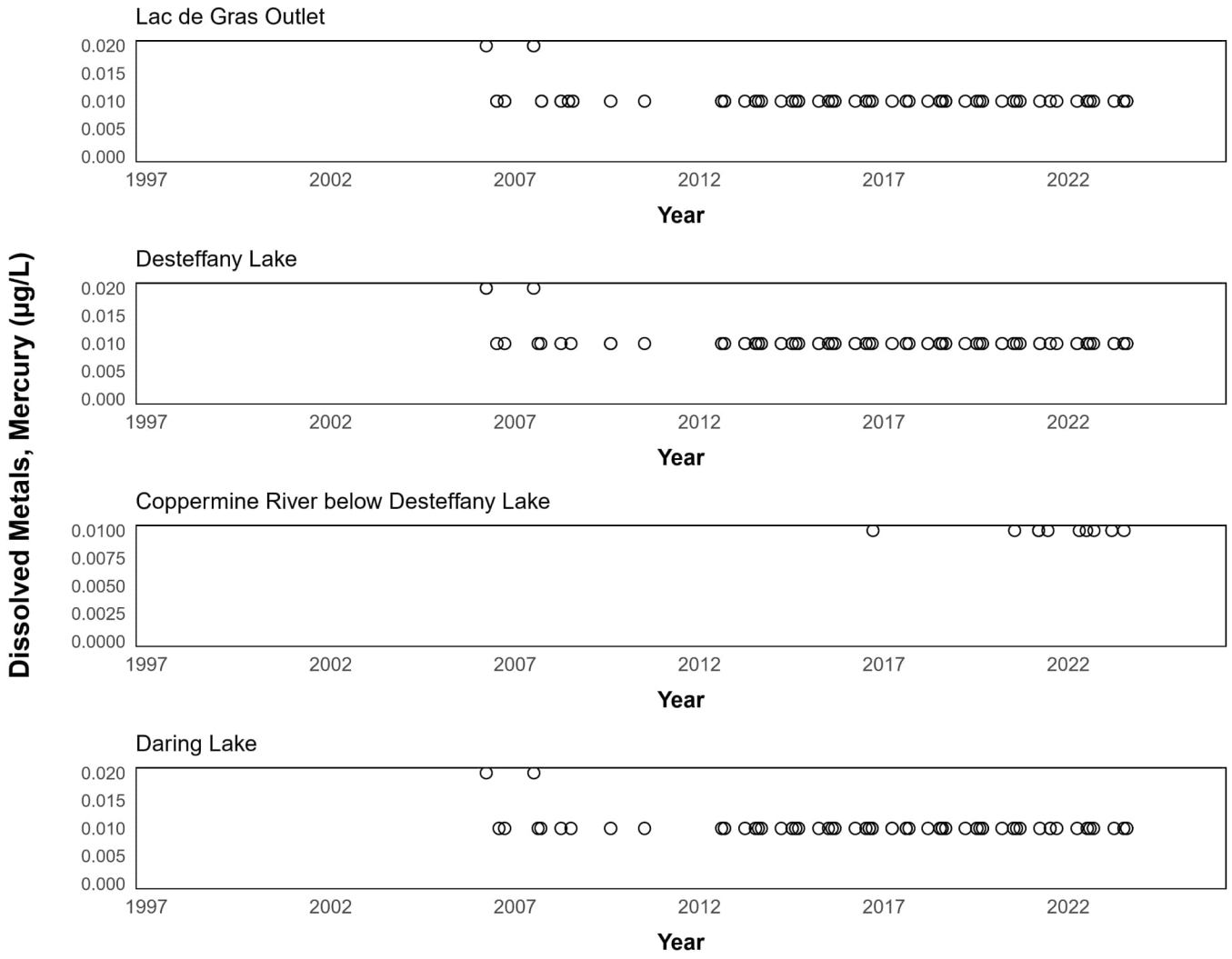
SLR

FIGURE NO:
B.1.44

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

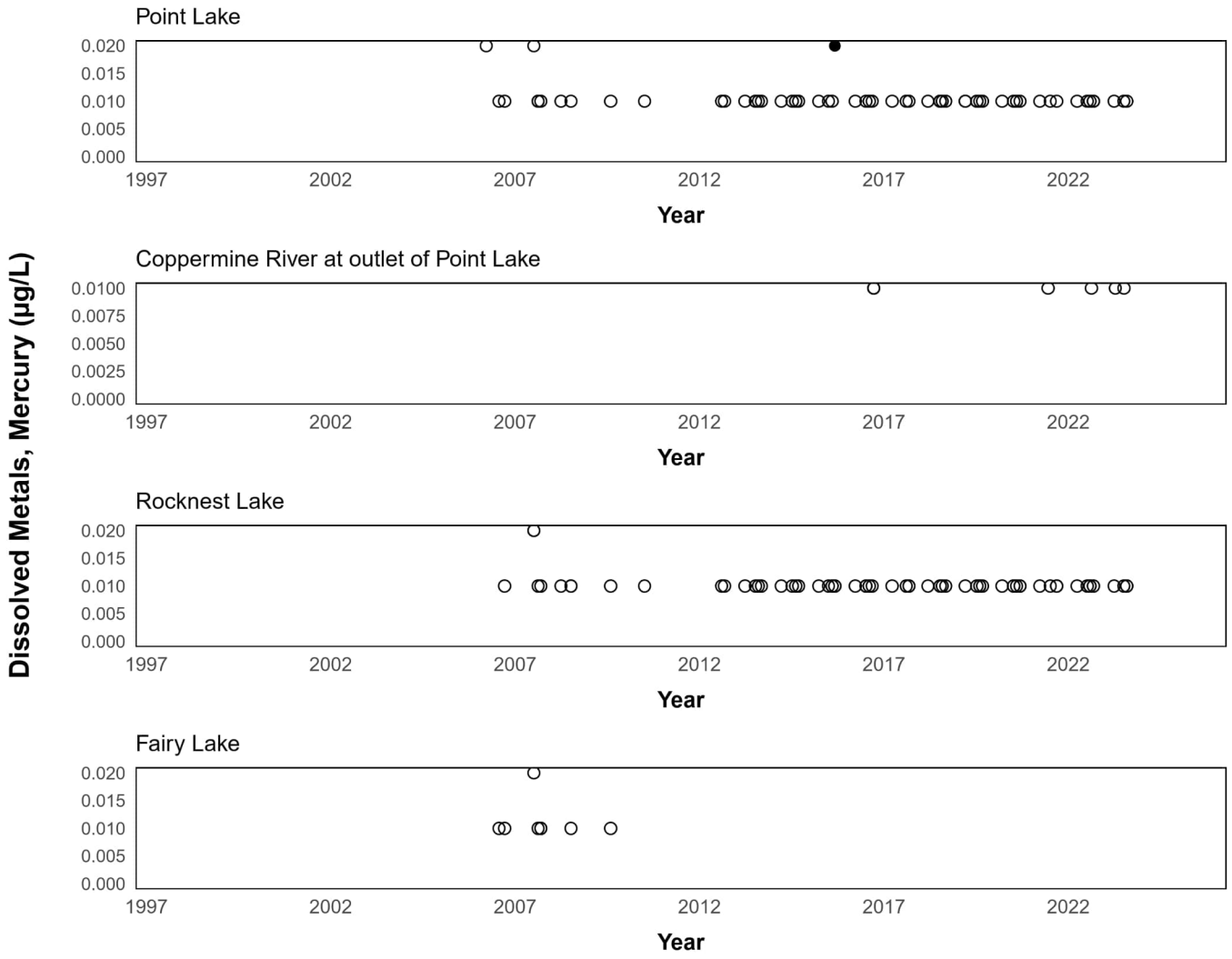
FIGURE NO:
B.1.45

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait_Hg

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

FIGURE NO:
B.1.46

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

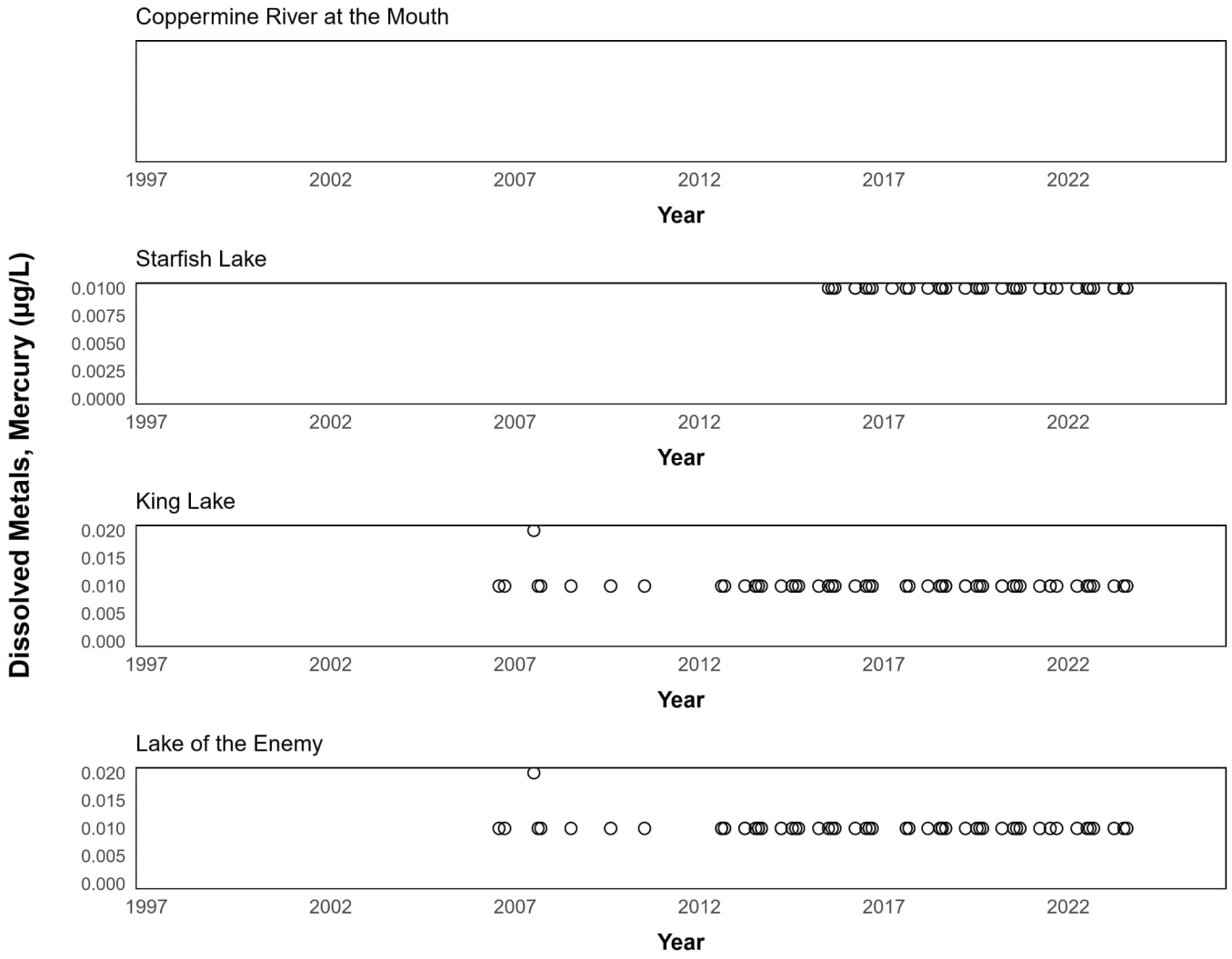
SLR

FIGURE NO: **B.1.47**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait_Hg

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

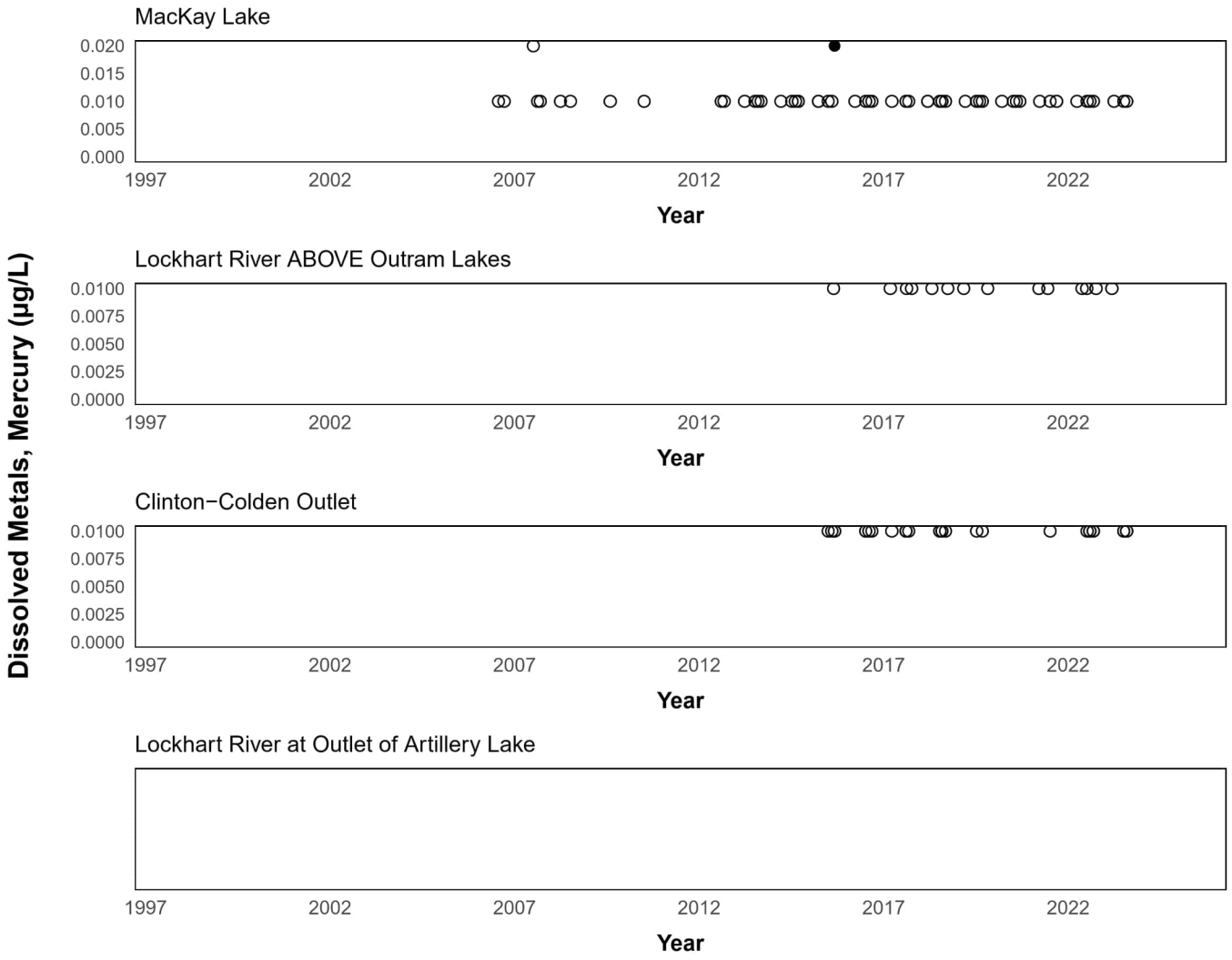
SLR

FIGURE NO: **B.1.48**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● **Detect**
- ○ **Non-detect**

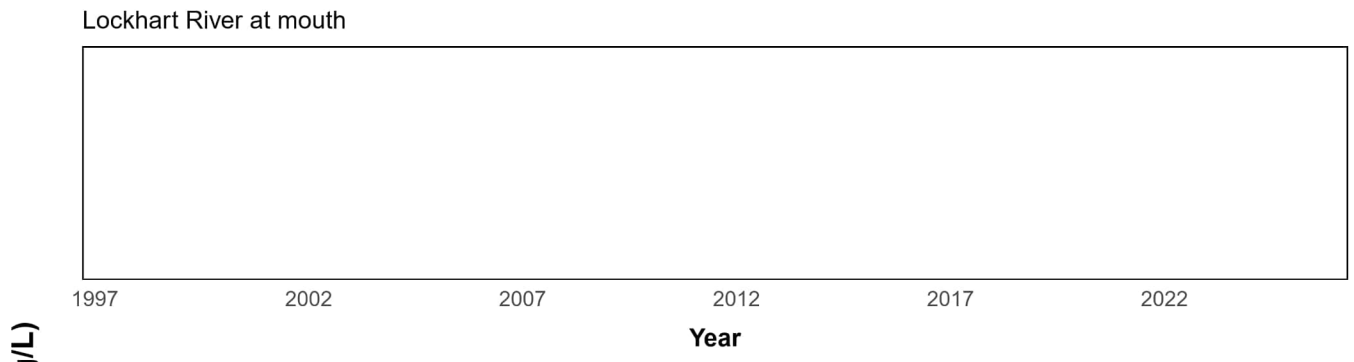
SLR

FIGURE NO: **B.1.49**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



Dissolved Metals, Mercury (µg/L)

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

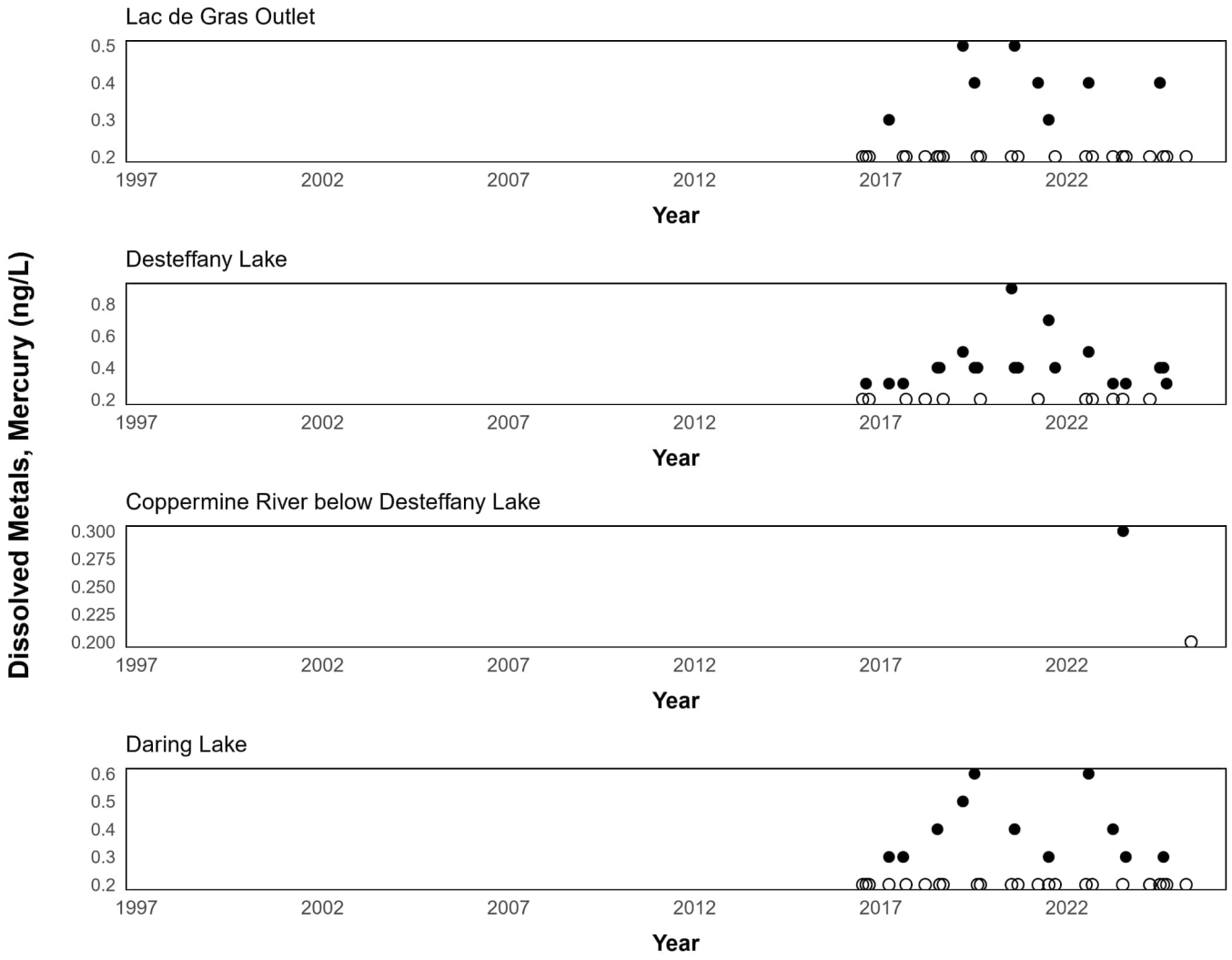
SLR

FIGURE NO: **B.1.50**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

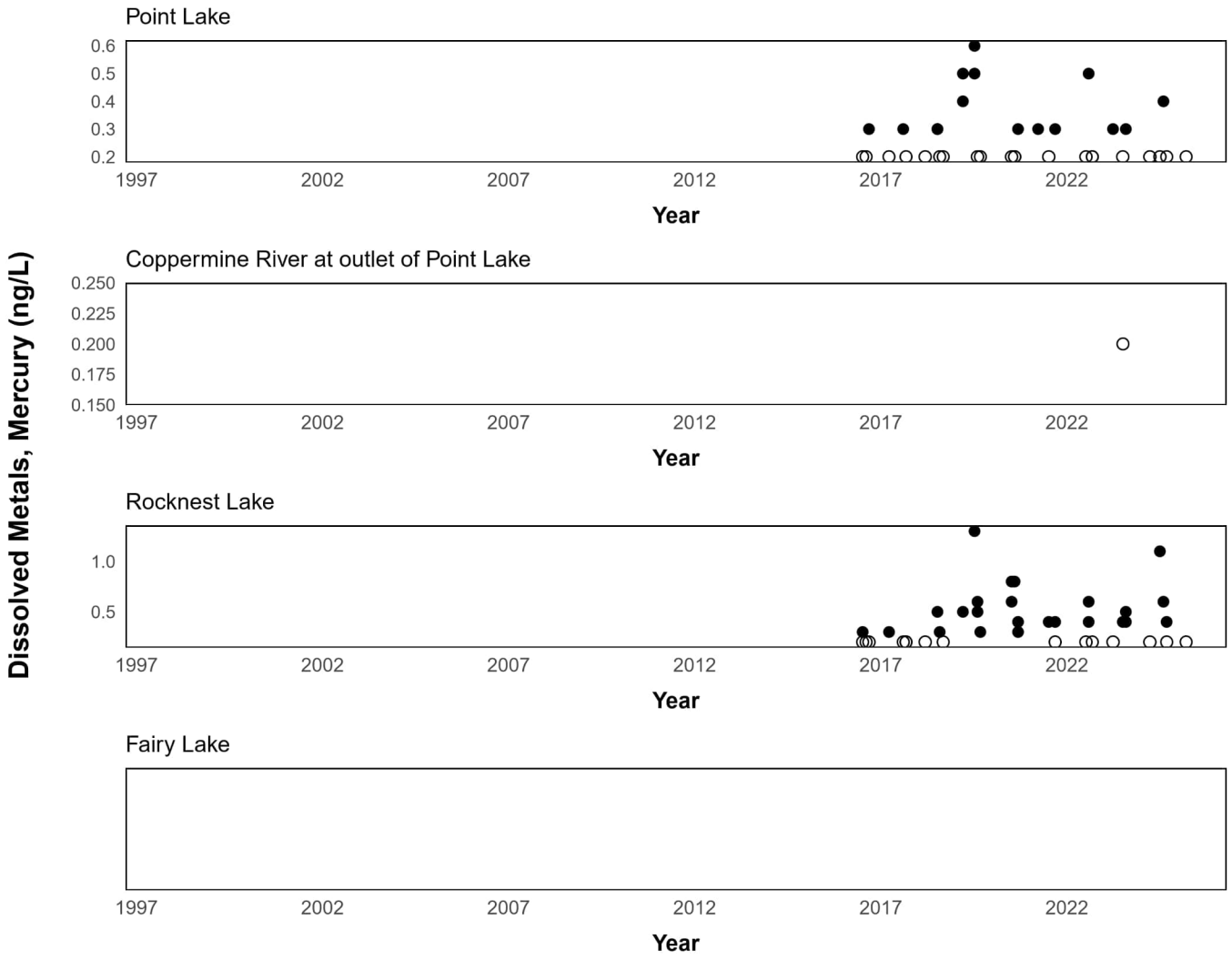
SLR

FIGURE NO: **B.1.51**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

FIGURE NO:
B.1.52

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait_Hg



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

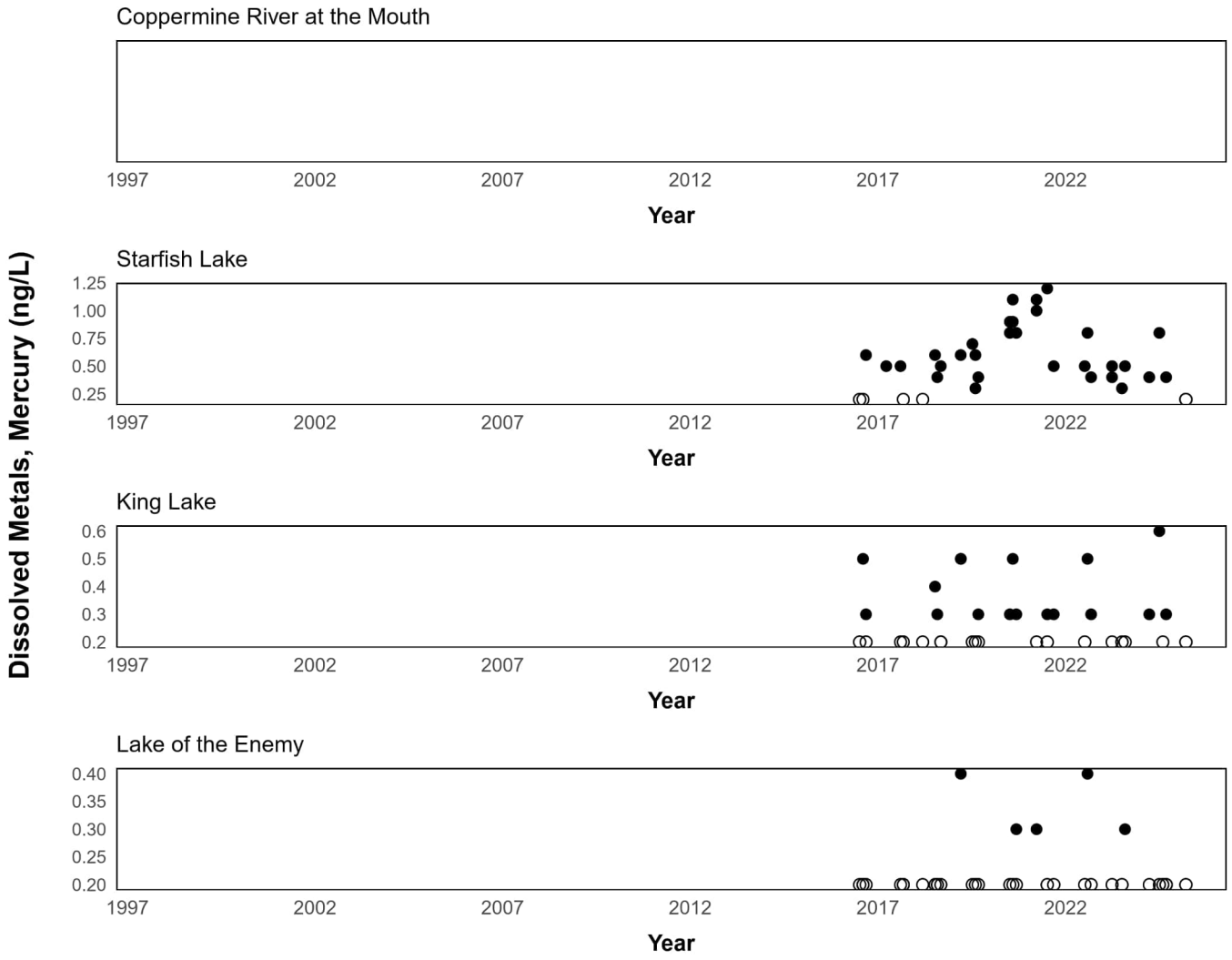
SLR

FIGURE NO: **B.1.53**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

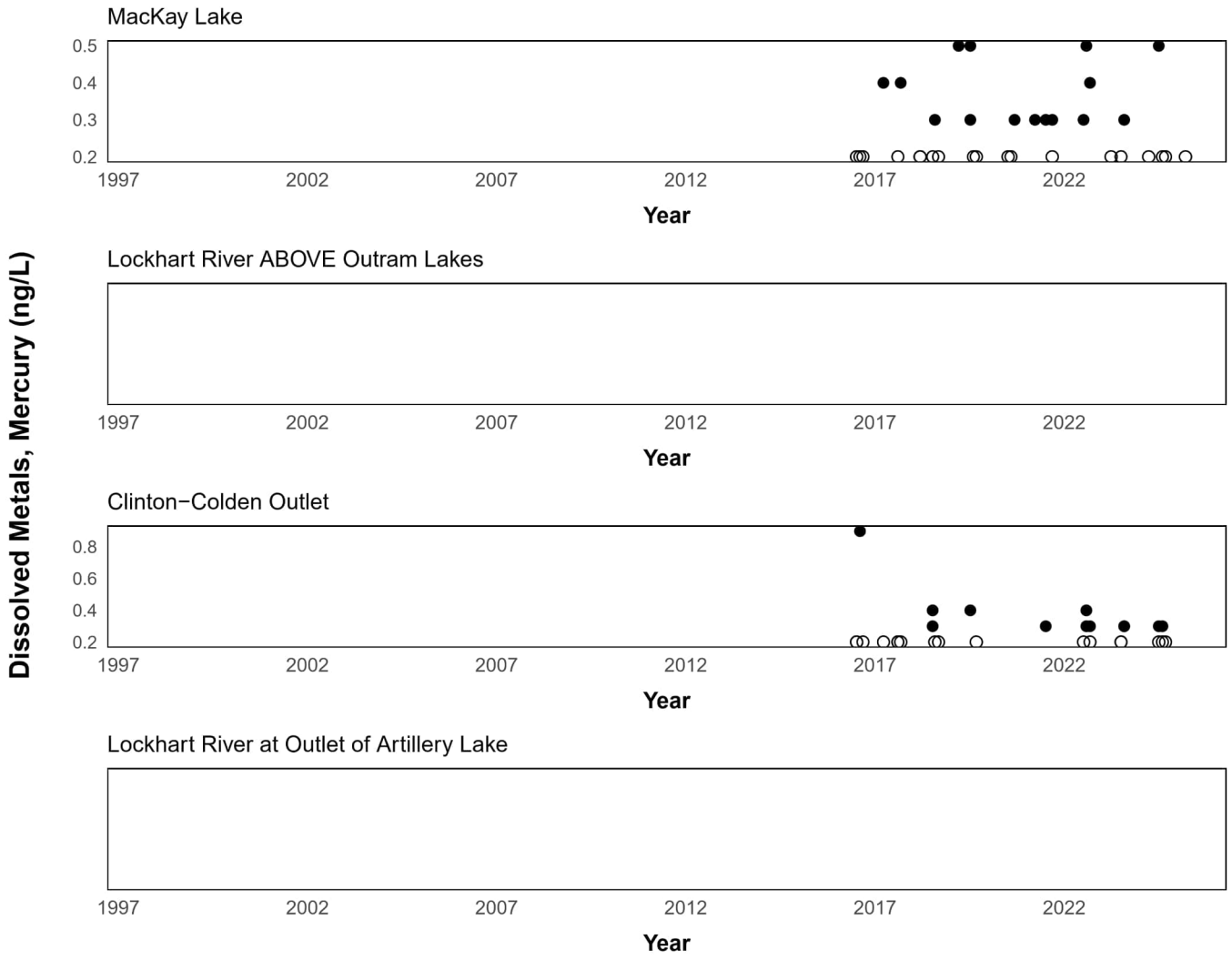
SLR

FIGURE NO:
B.1.54

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait_Hg

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● **Detect**
- ○ **Non-detect**

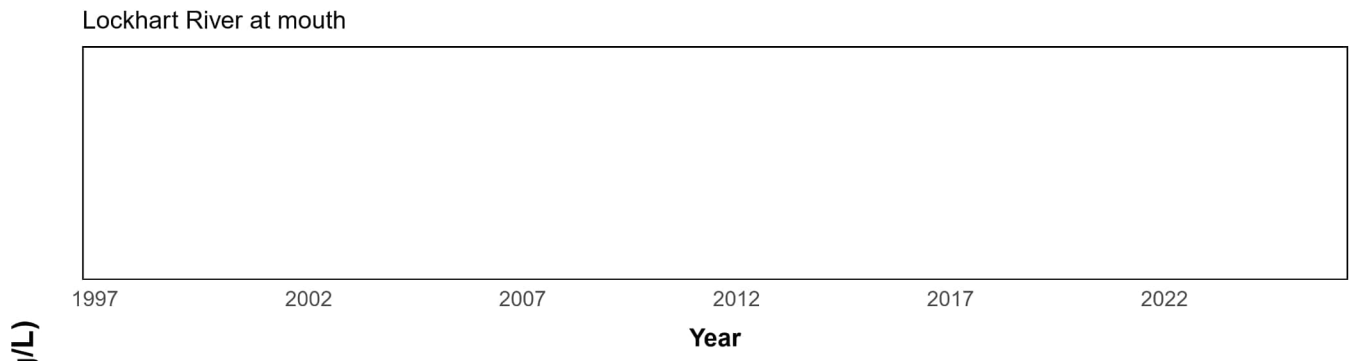
SLR

FIGURE NO: **B.1.55**

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Thursday, February 12, 2026 10:13 AM by brodie.elder



Dissolved Metals, Mercury (ng/L)

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait_Hg

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

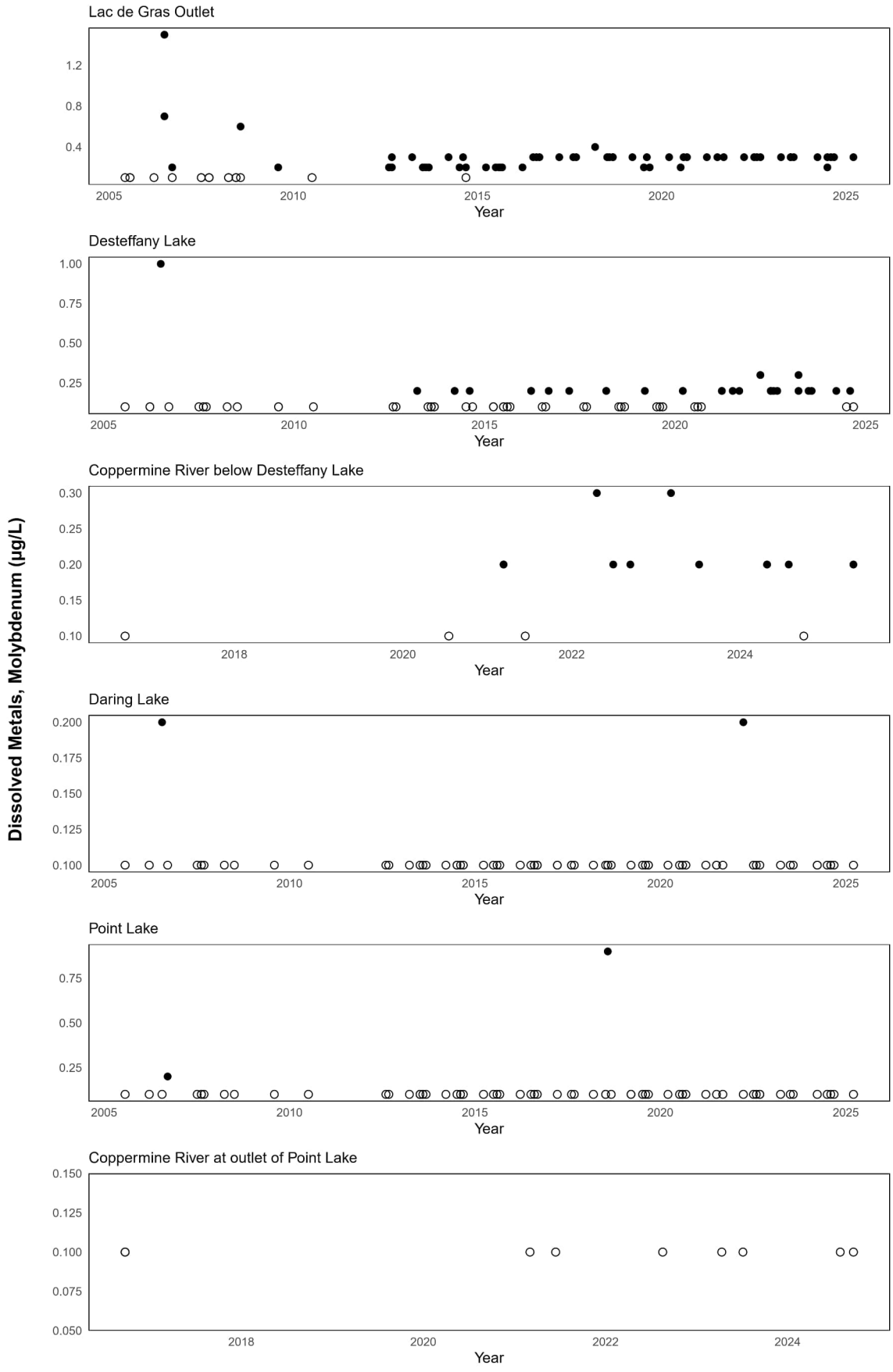
SLR

FIGURE NO:
B.1.56

DATE: February 12, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

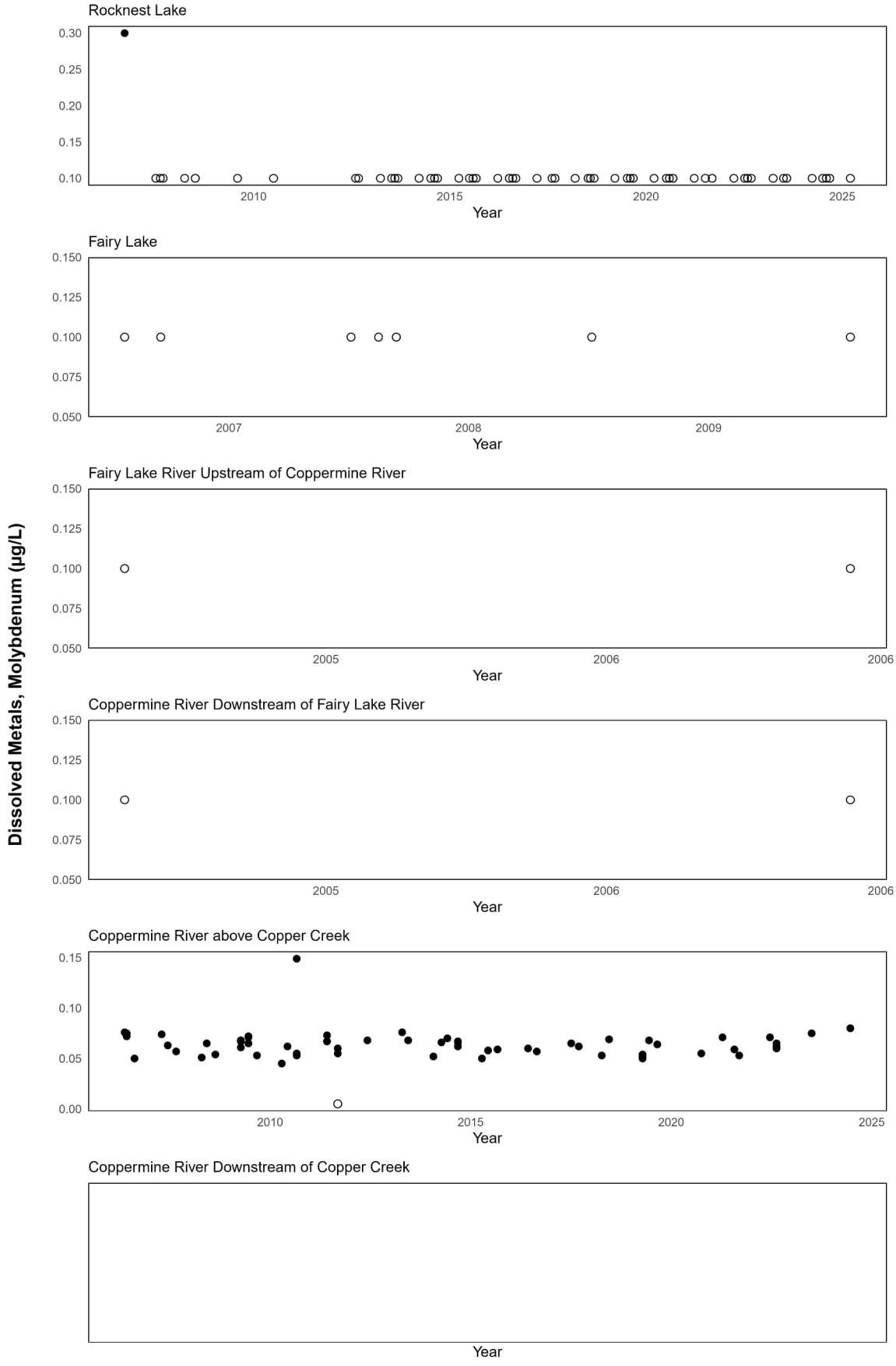
FIGURE NO:
B.1.57

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● **Detect** ○ **Non-detect**

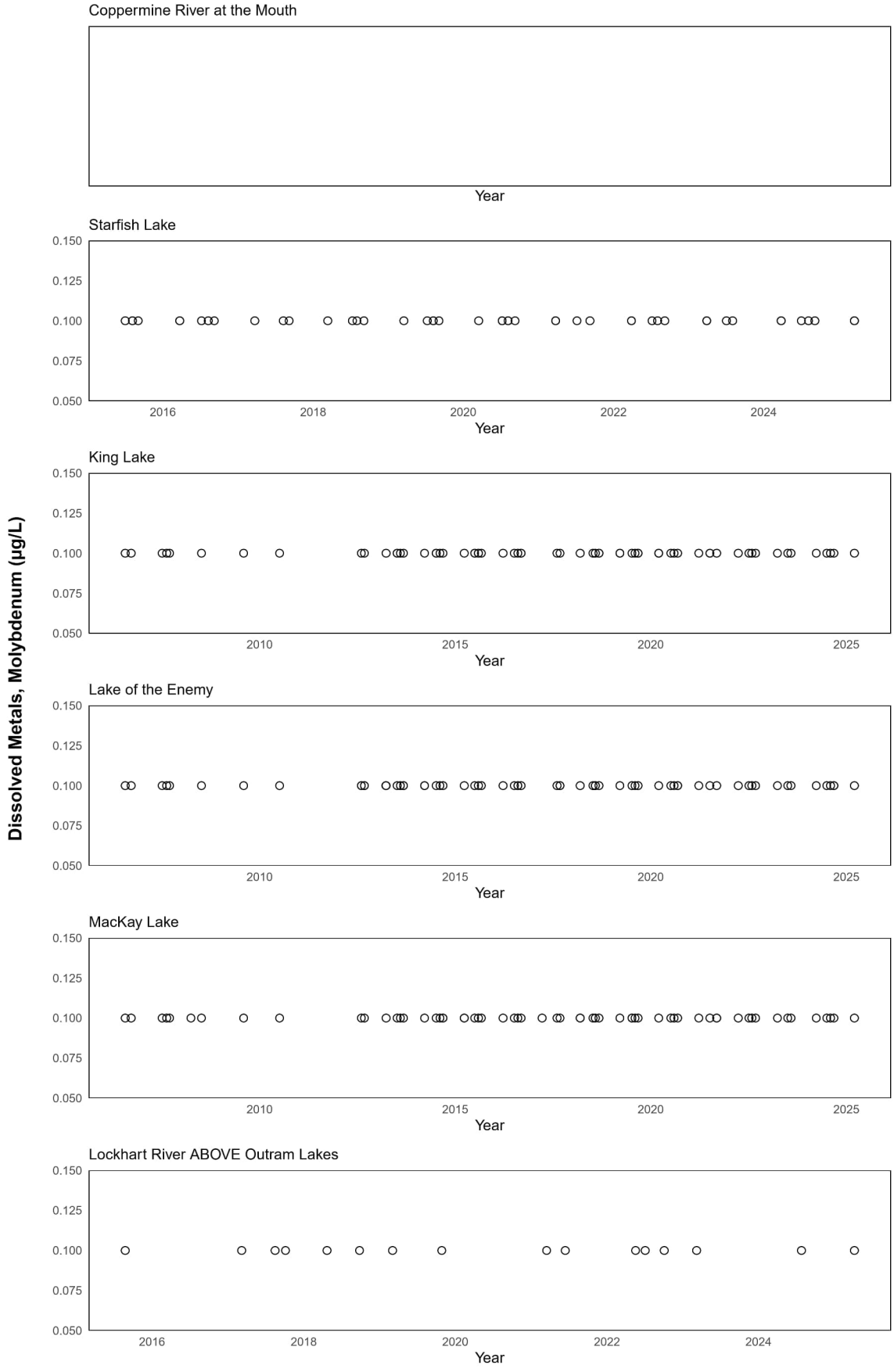
SLR

FIGURE NO: **B.1.58**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

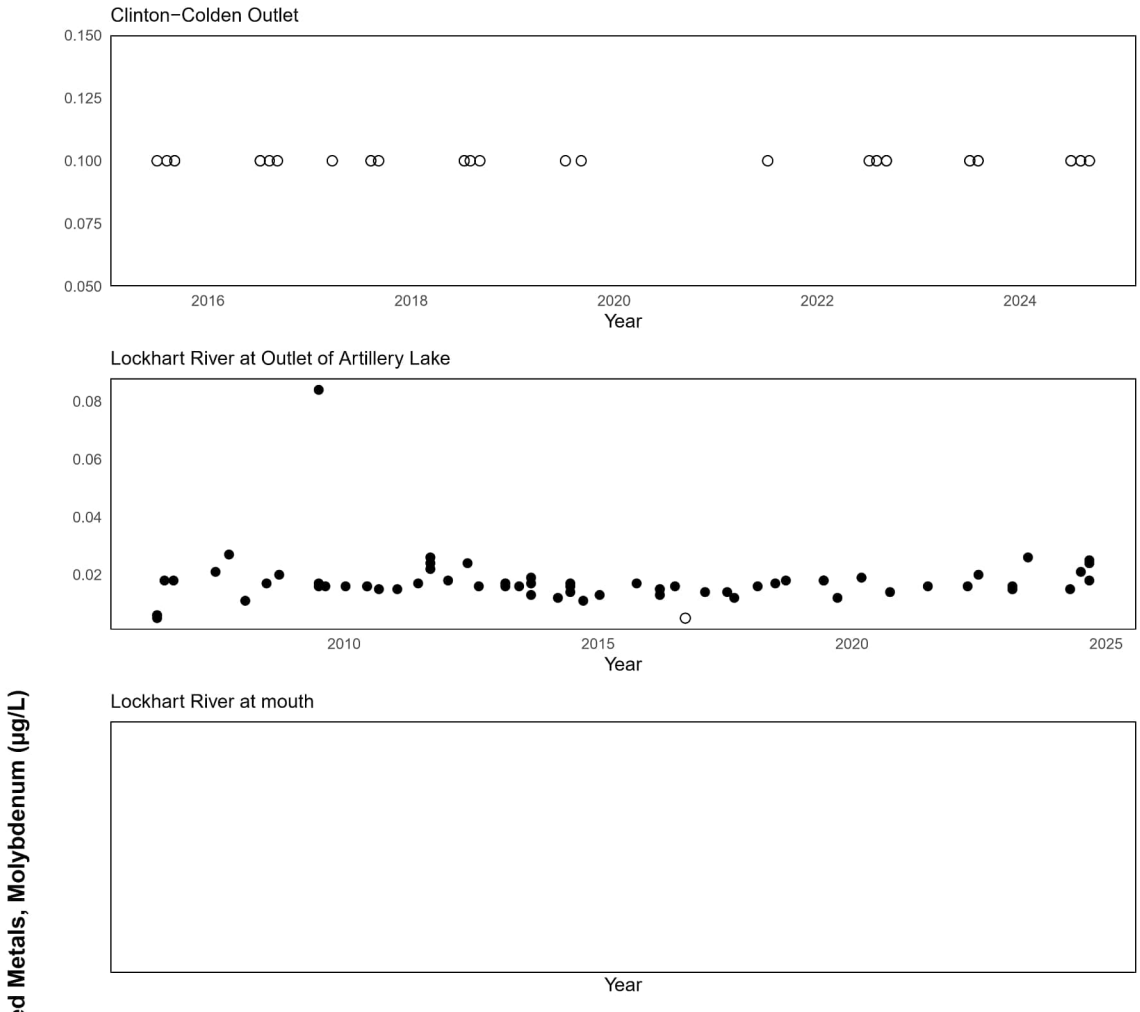
SLR

FIGURE NO: **B.1.59**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

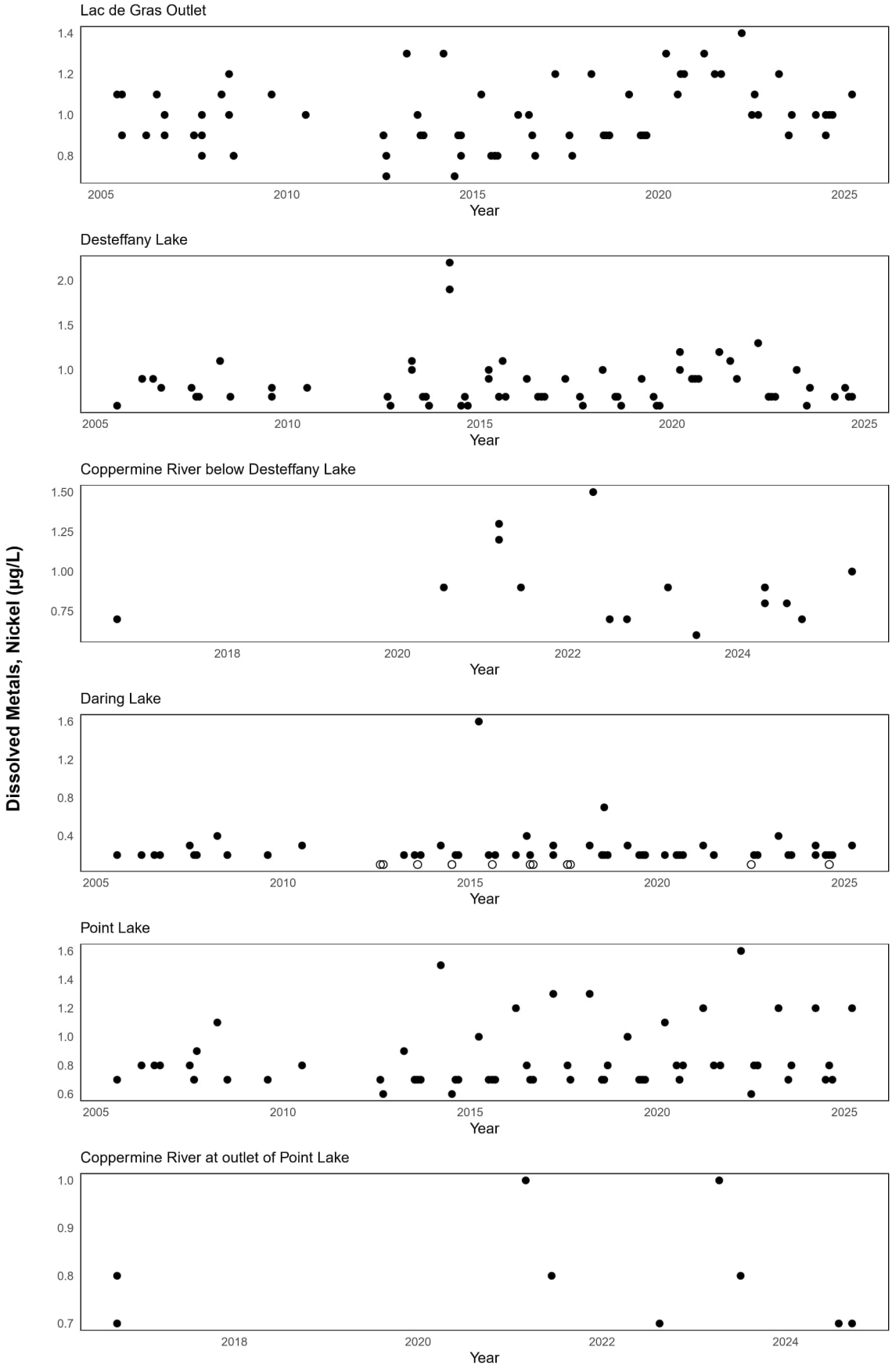
FIGURE NO:
B.1.60

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

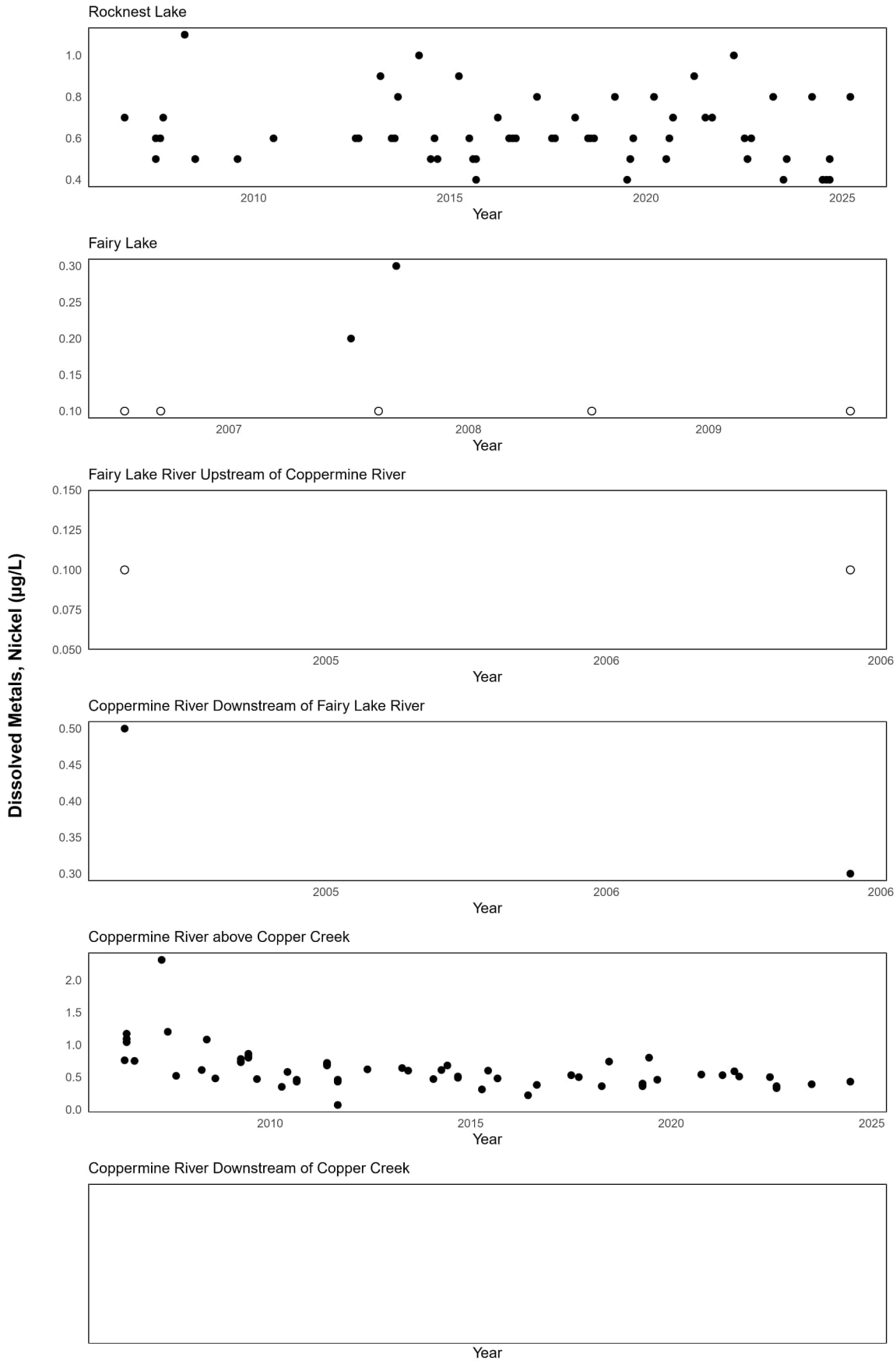
FIGURE NO:
B.1.61

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

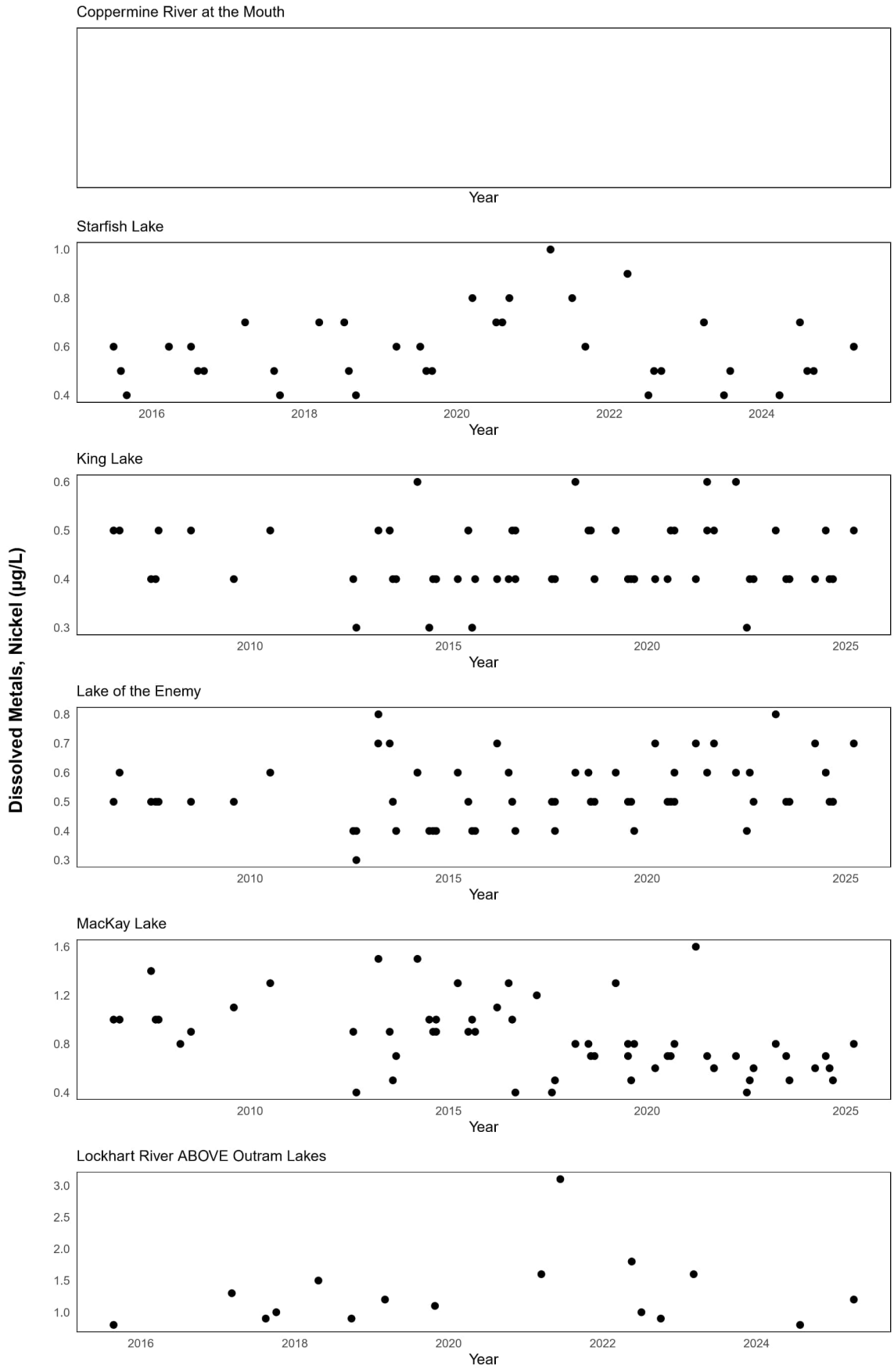
SLR

FIGURE NO: **B.1.62**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

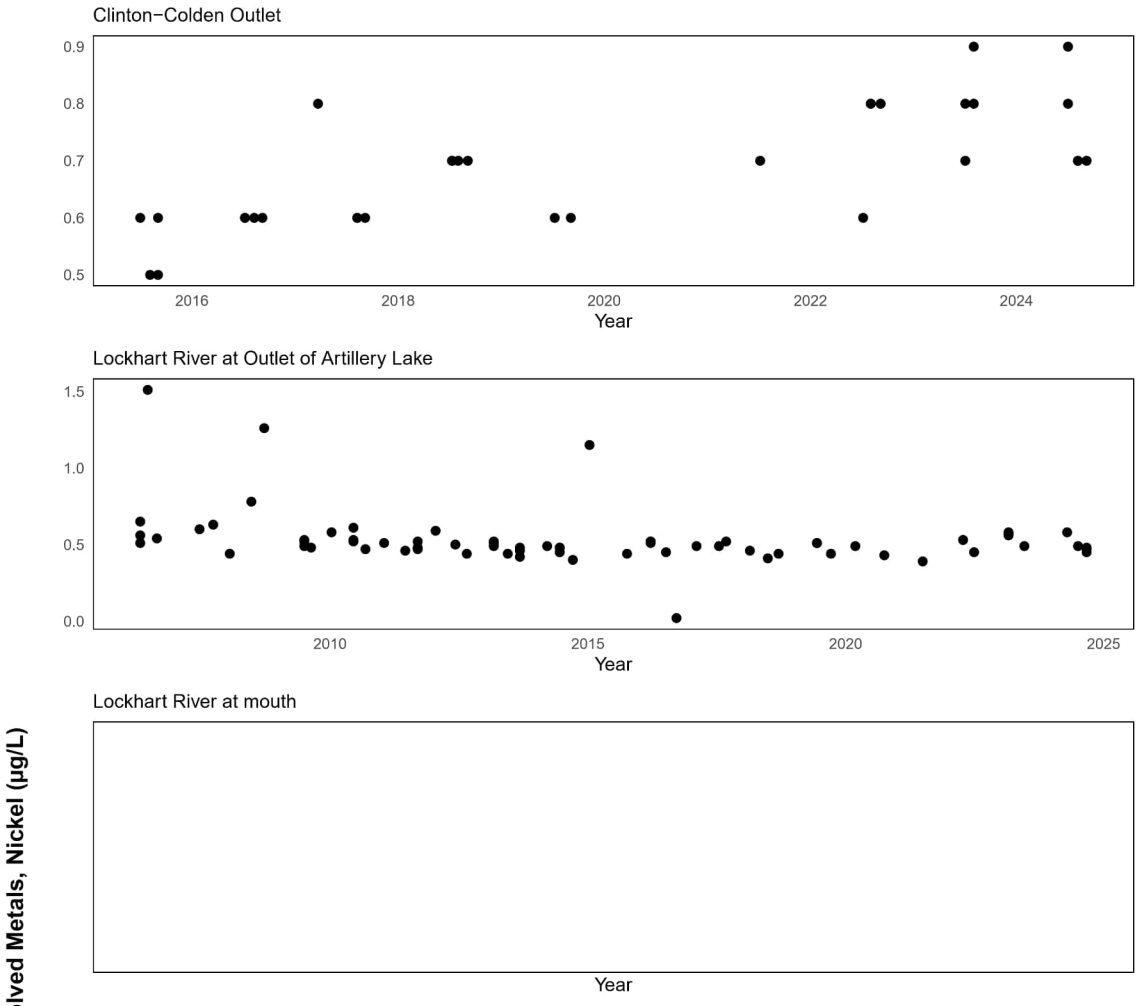
SLR

FIGURE NO: **B.1.63**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

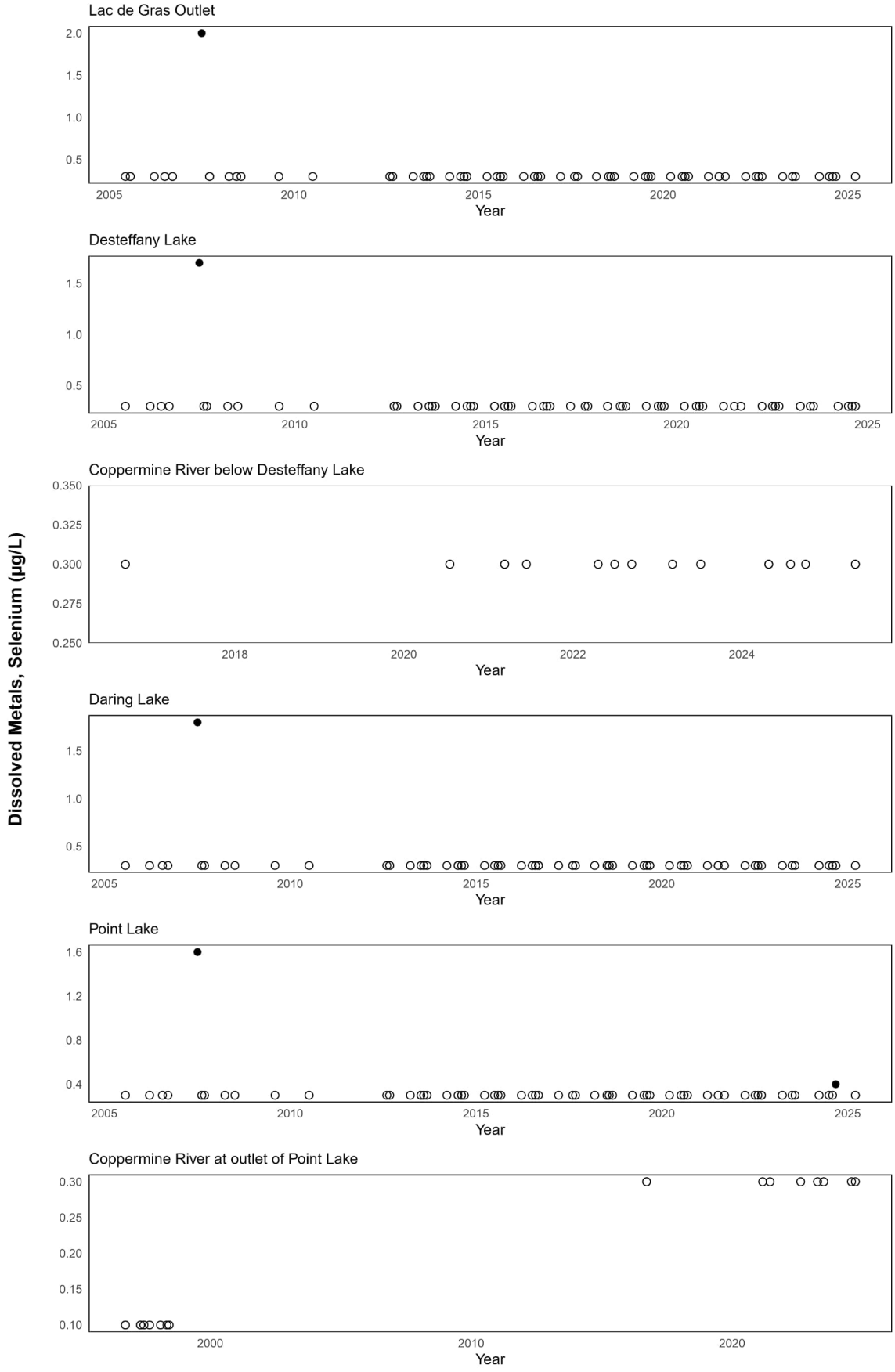
SLR

FIGURE NO:
B.1.64

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

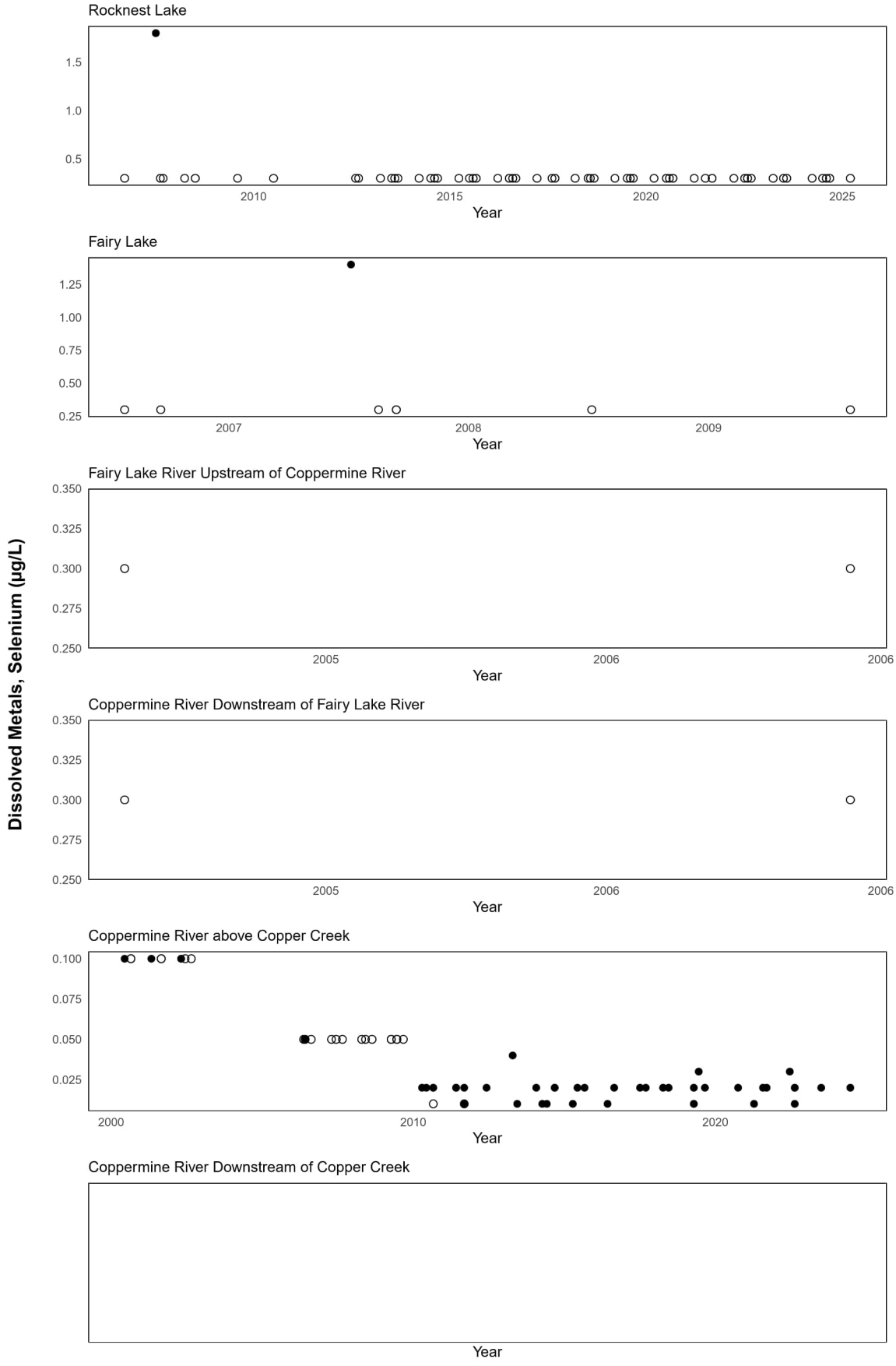
FIGURE NO:
B.1.65

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

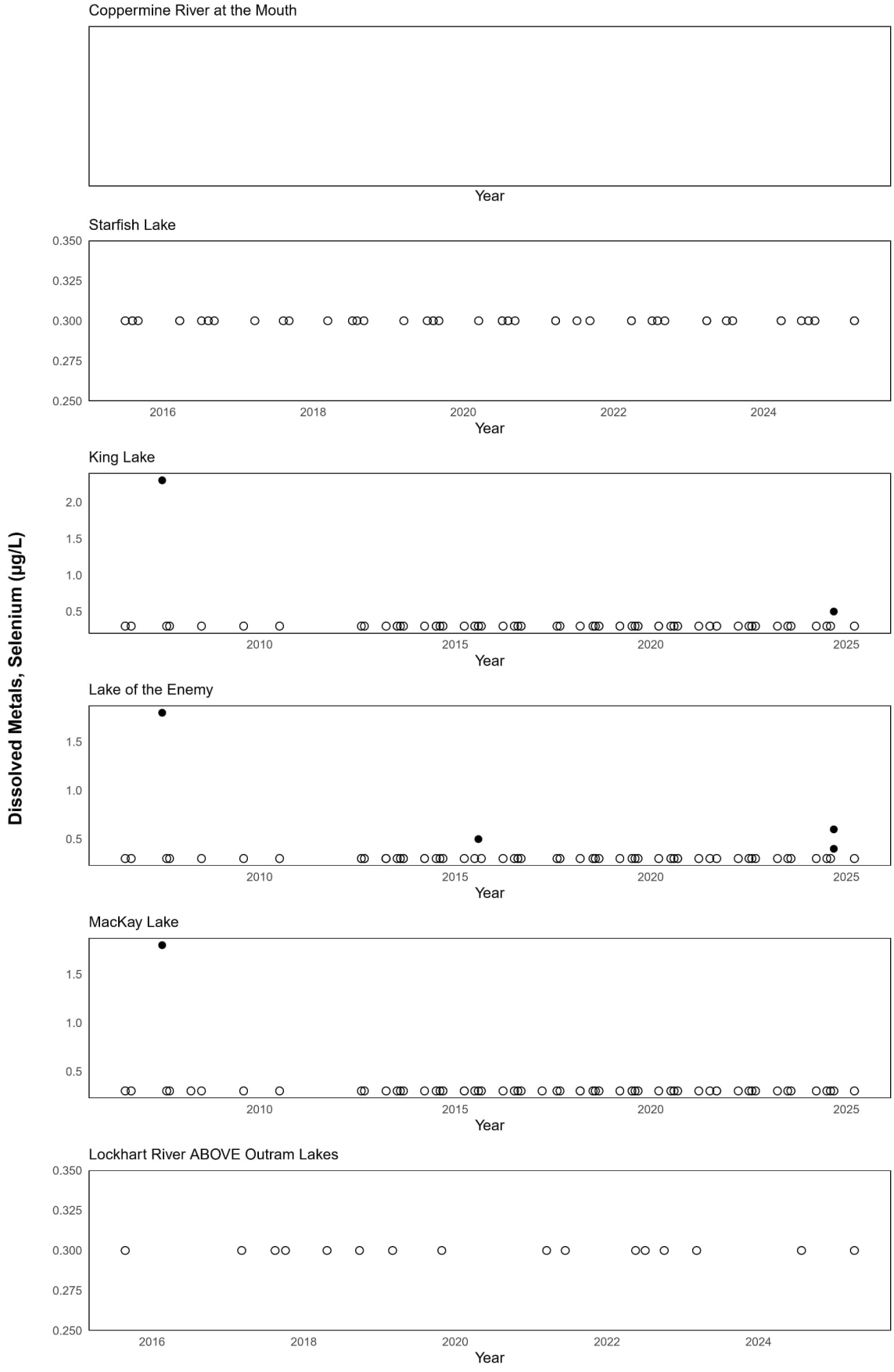
SLR

FIGURE NO: **B.1.66**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

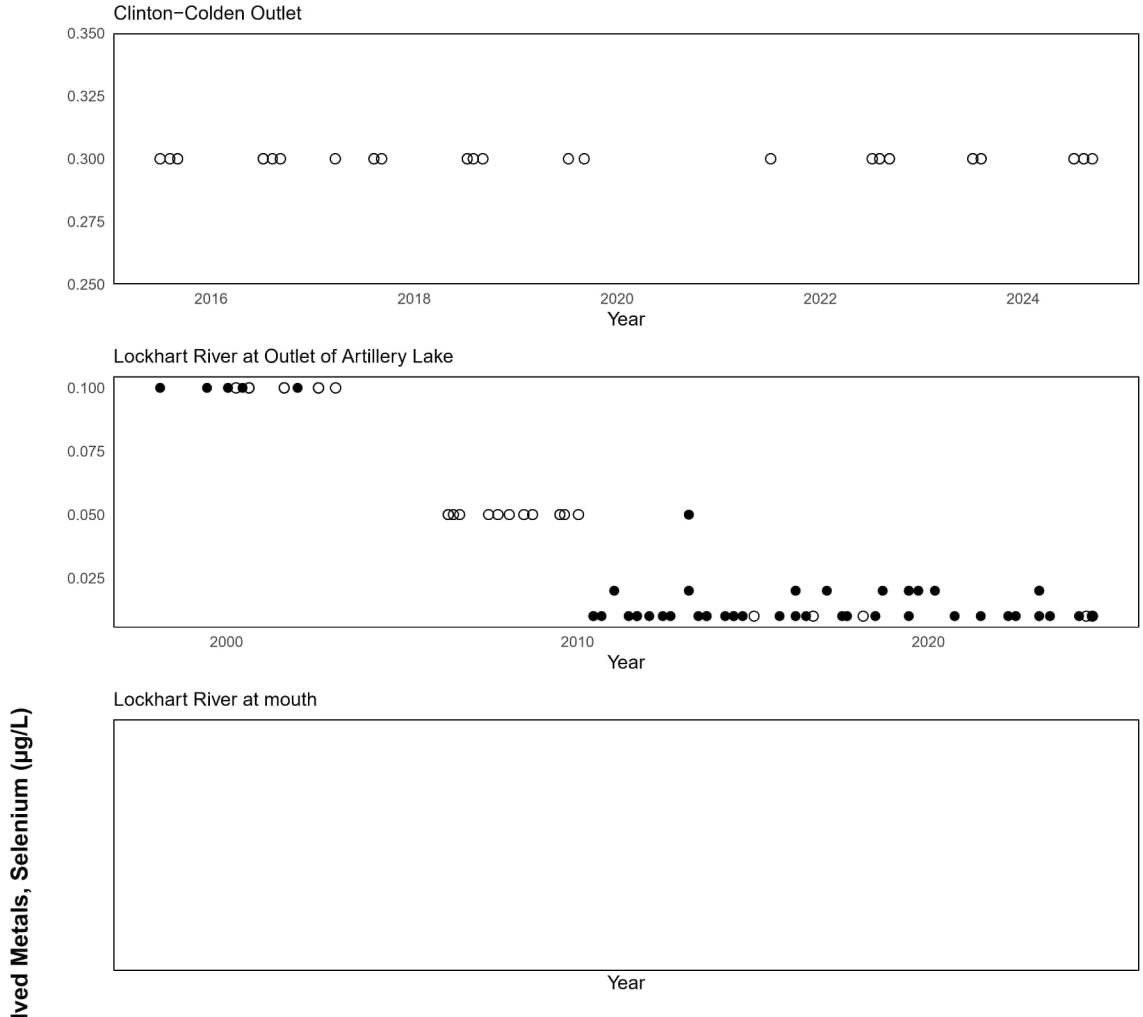
FIGURE NO:
B.1.67

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

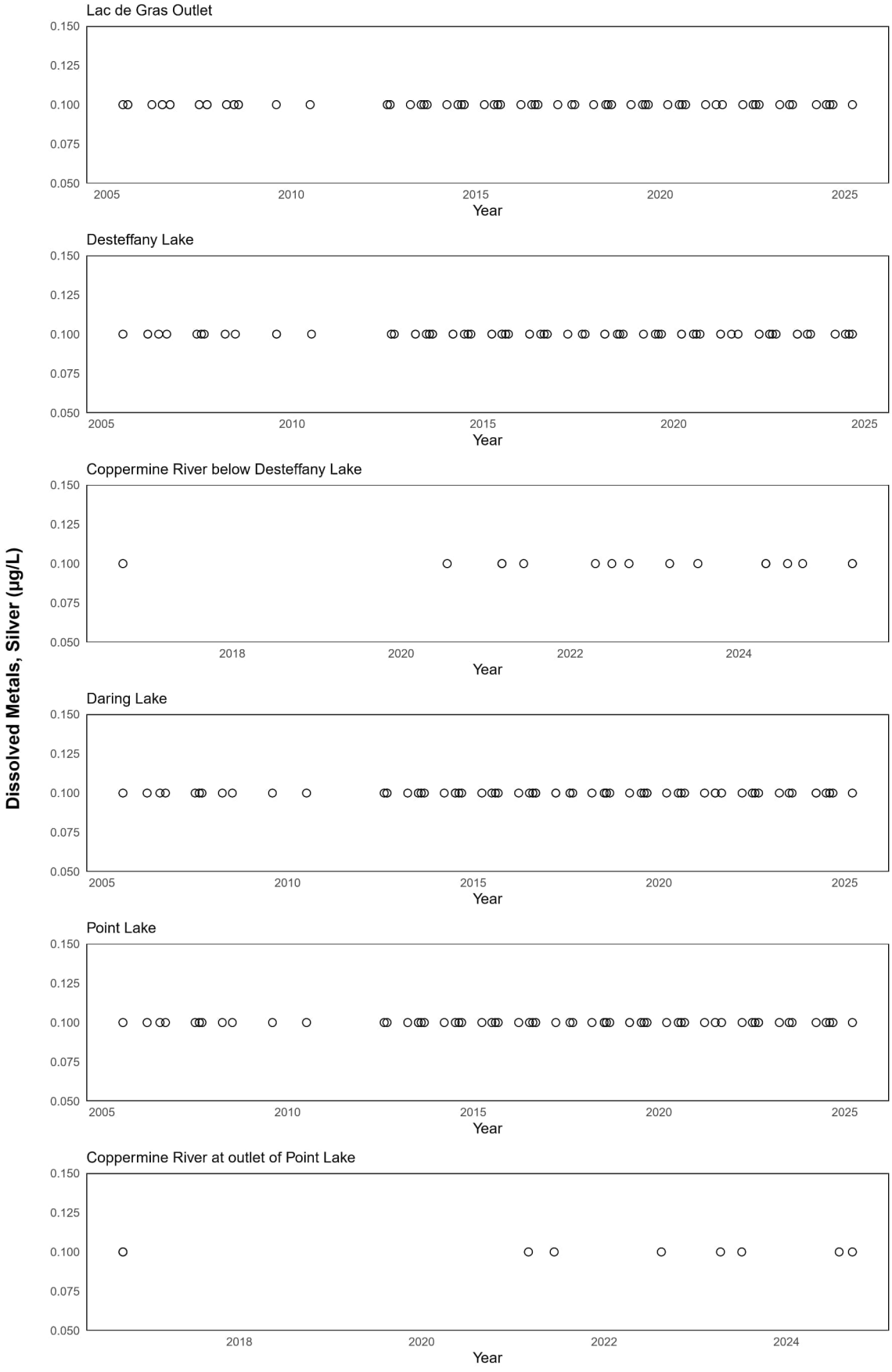
SLR

FIGURE NO:
B.1.68

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

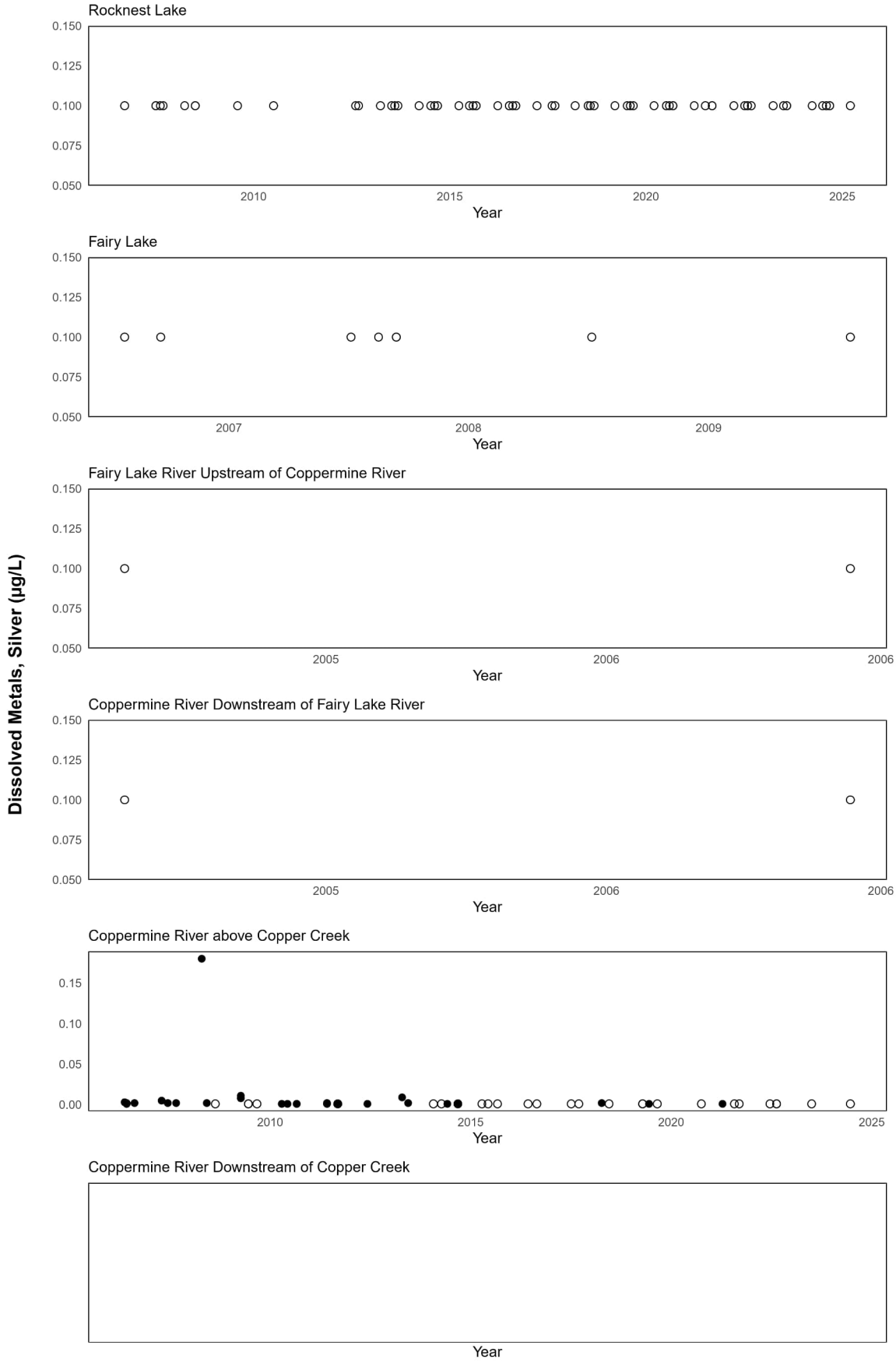
FIGURE NO:
B.1.69

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

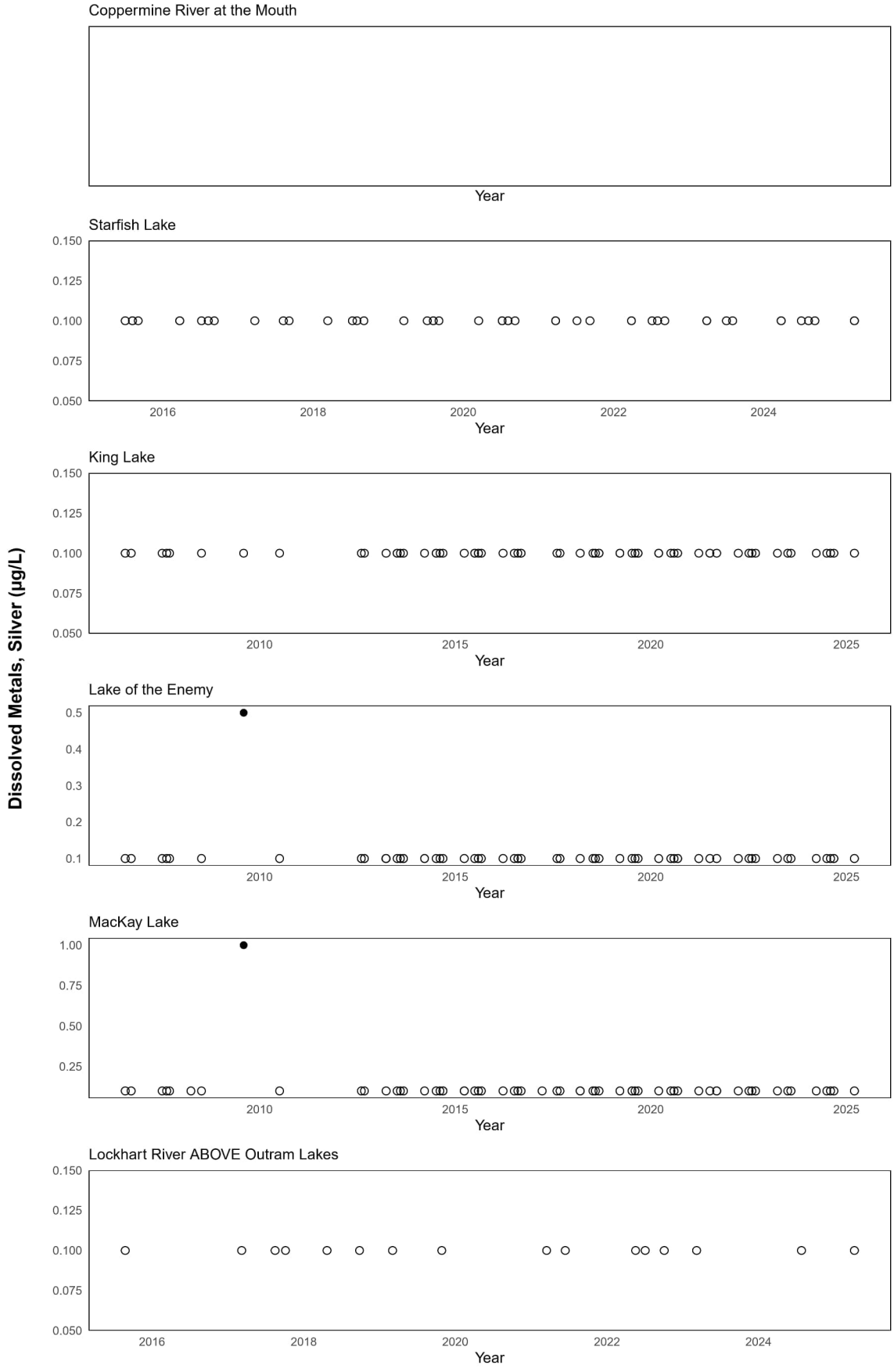
SLR

FIGURE NO:
B.1.70

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

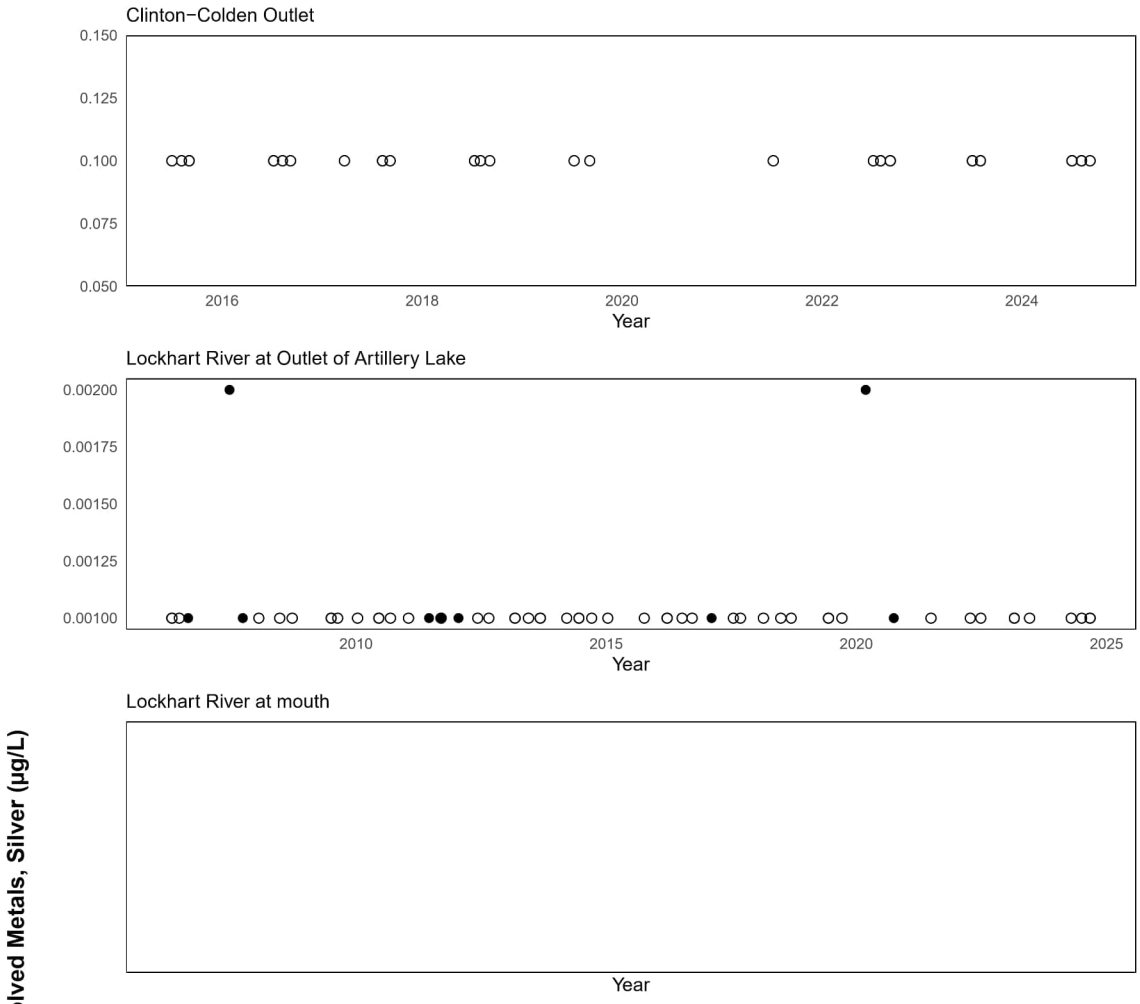
FIGURE NO:
B.1.71

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

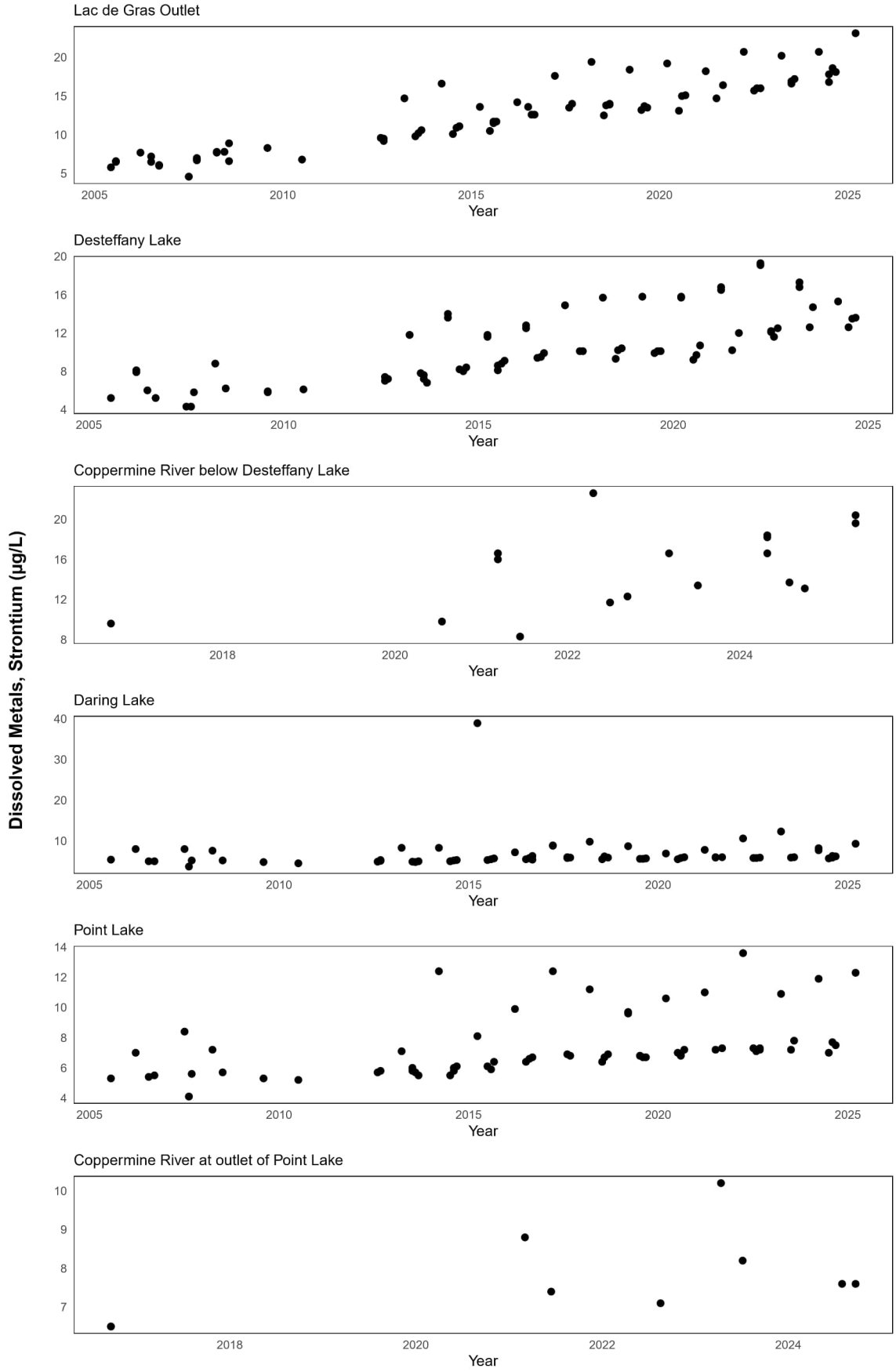
FIGURE NO:
B.1.72

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

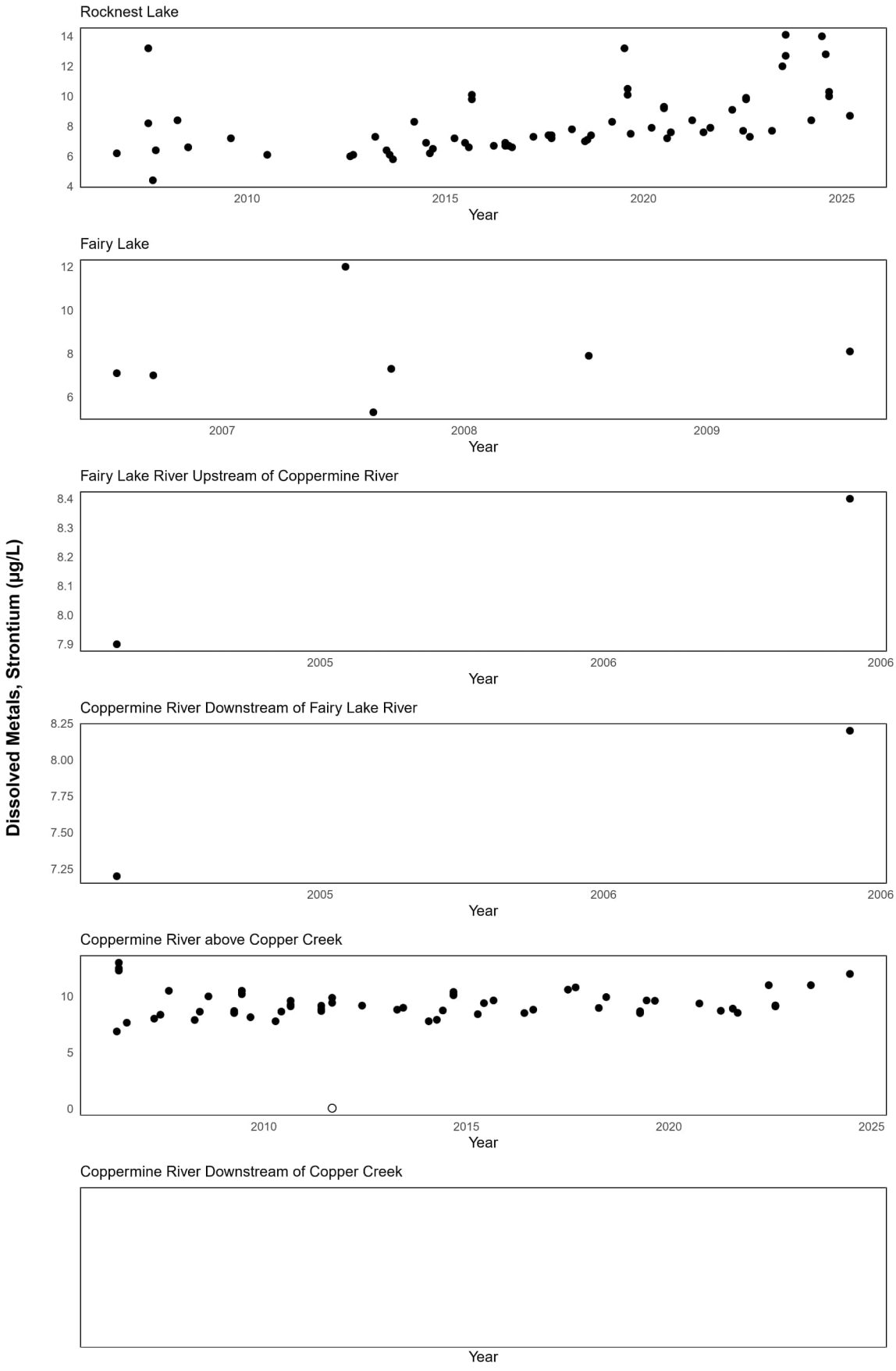
SLR

FIGURE NO: **B.1.73**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

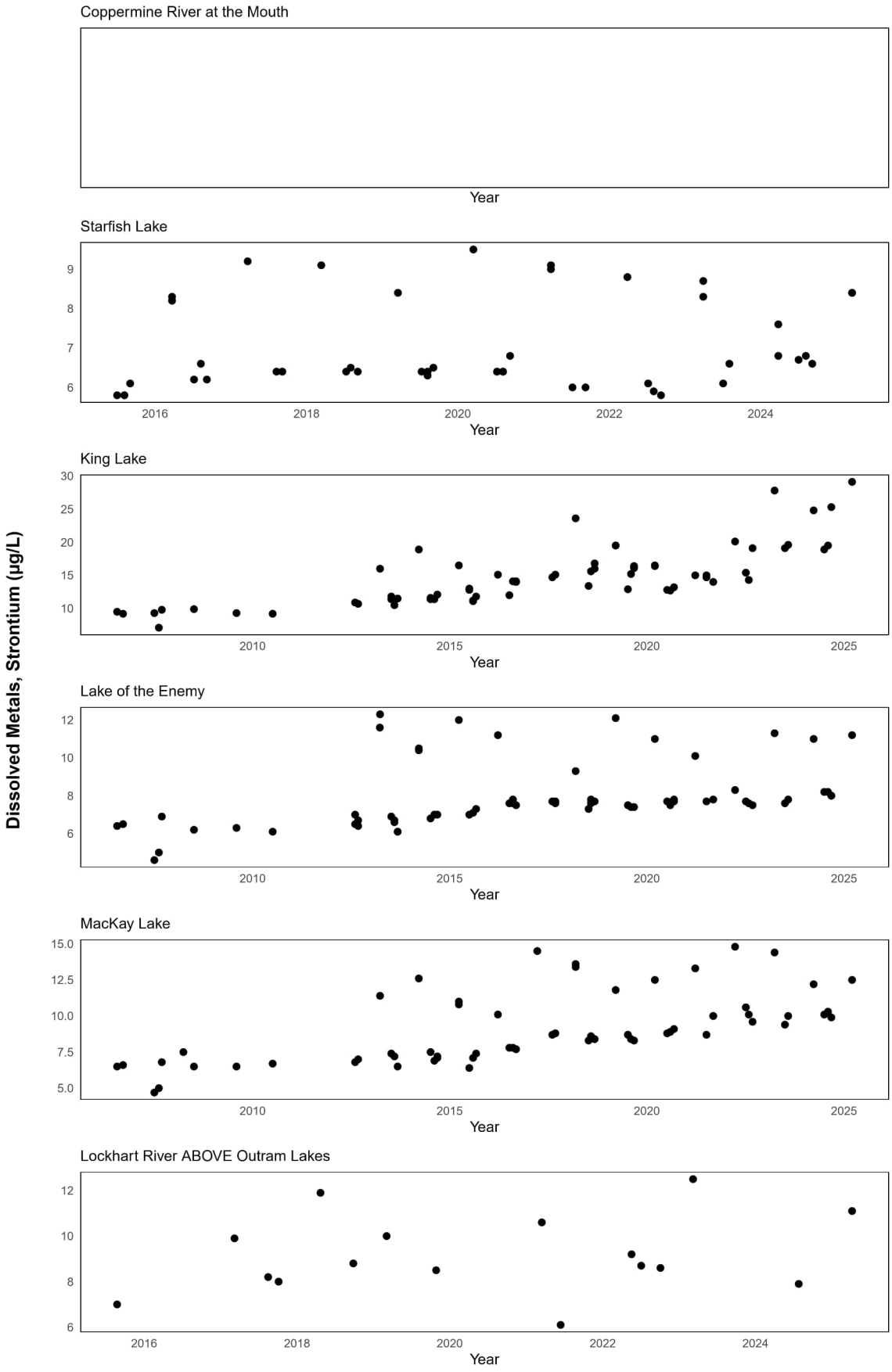
SLR

FIGURE NO: **B.1.74**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

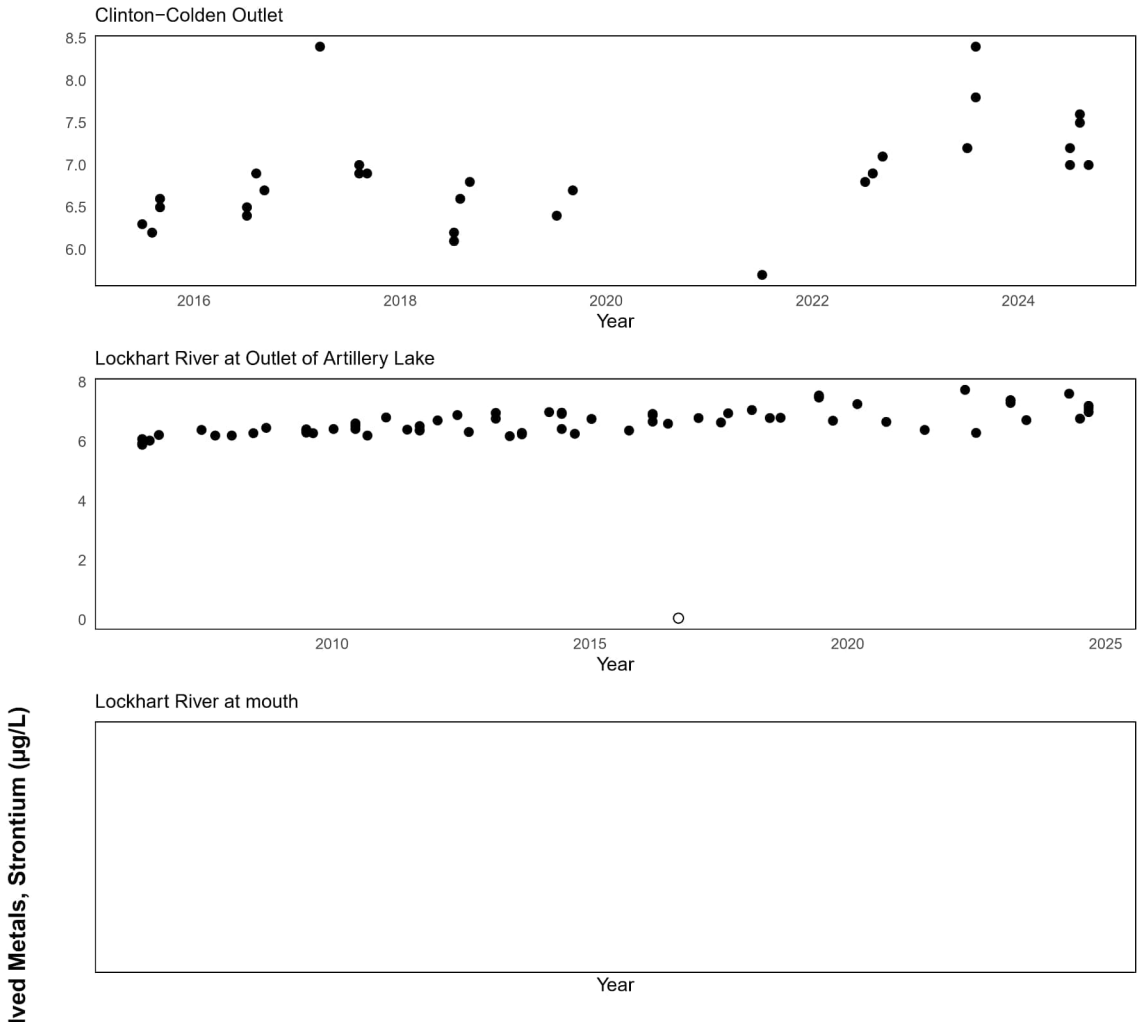
FIGURE NO:
B.1.75

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

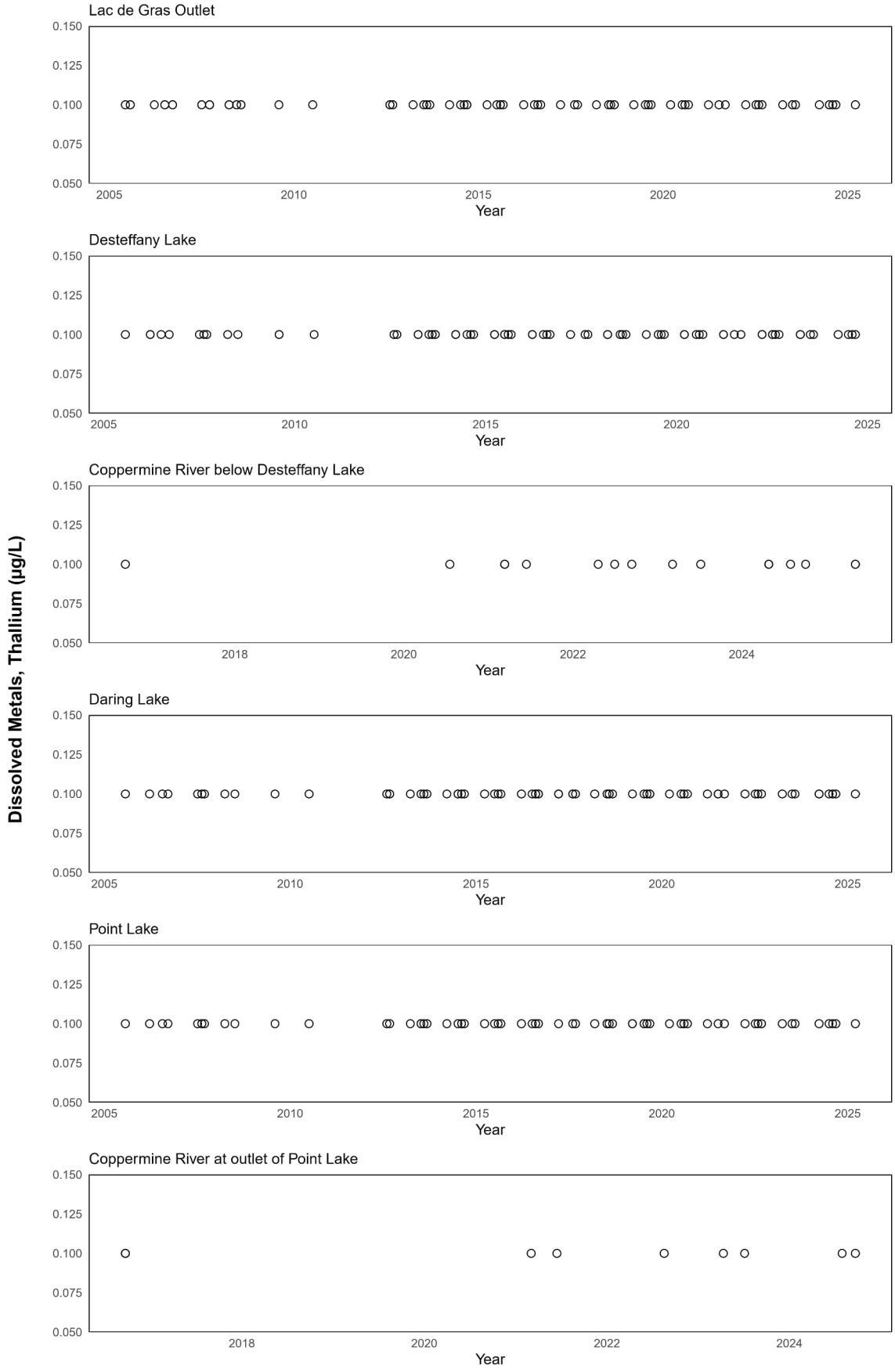
SLR

FIGURE NO:
B.1.76

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

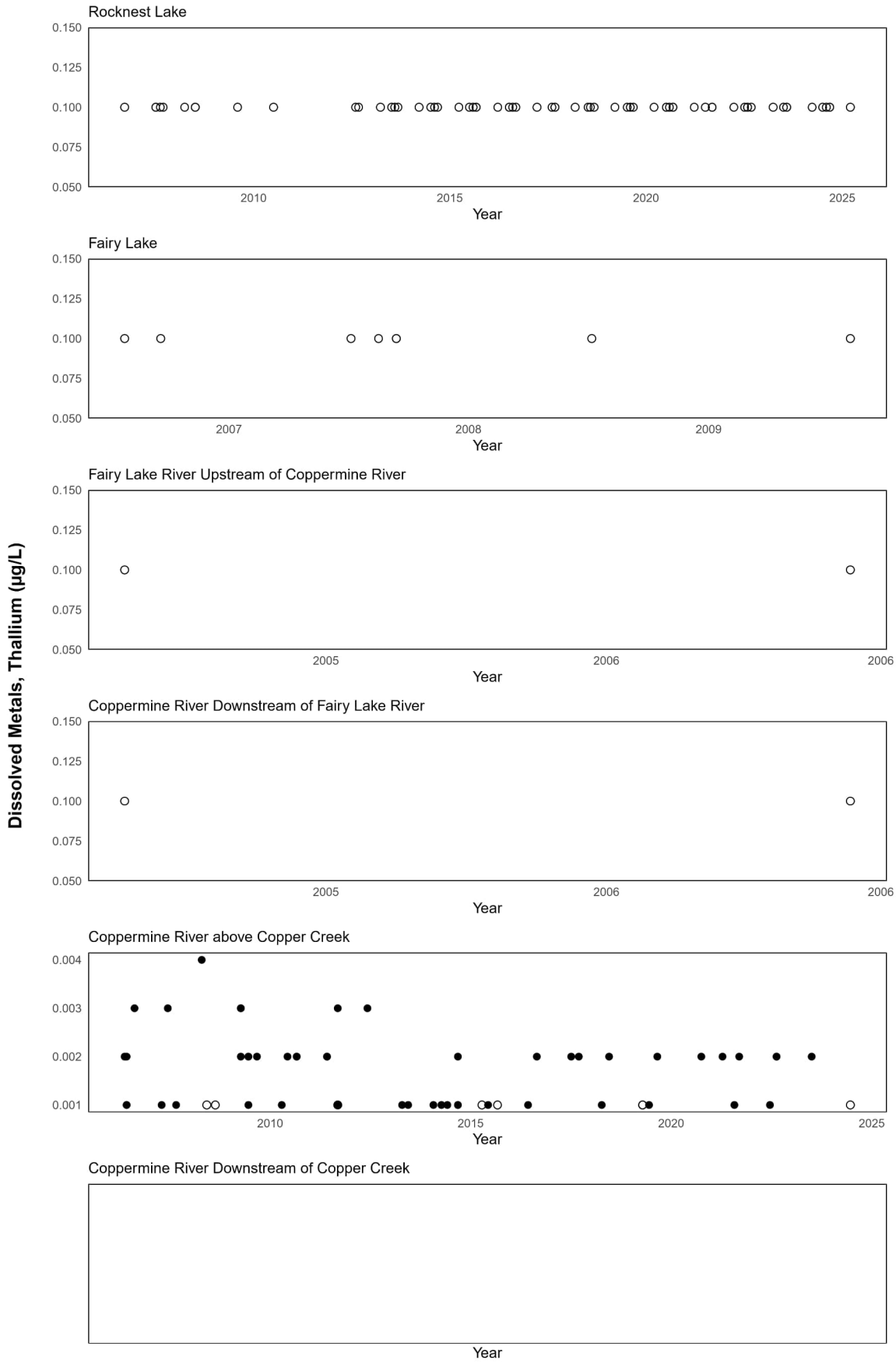
FIGURE NO:
B.1.77

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

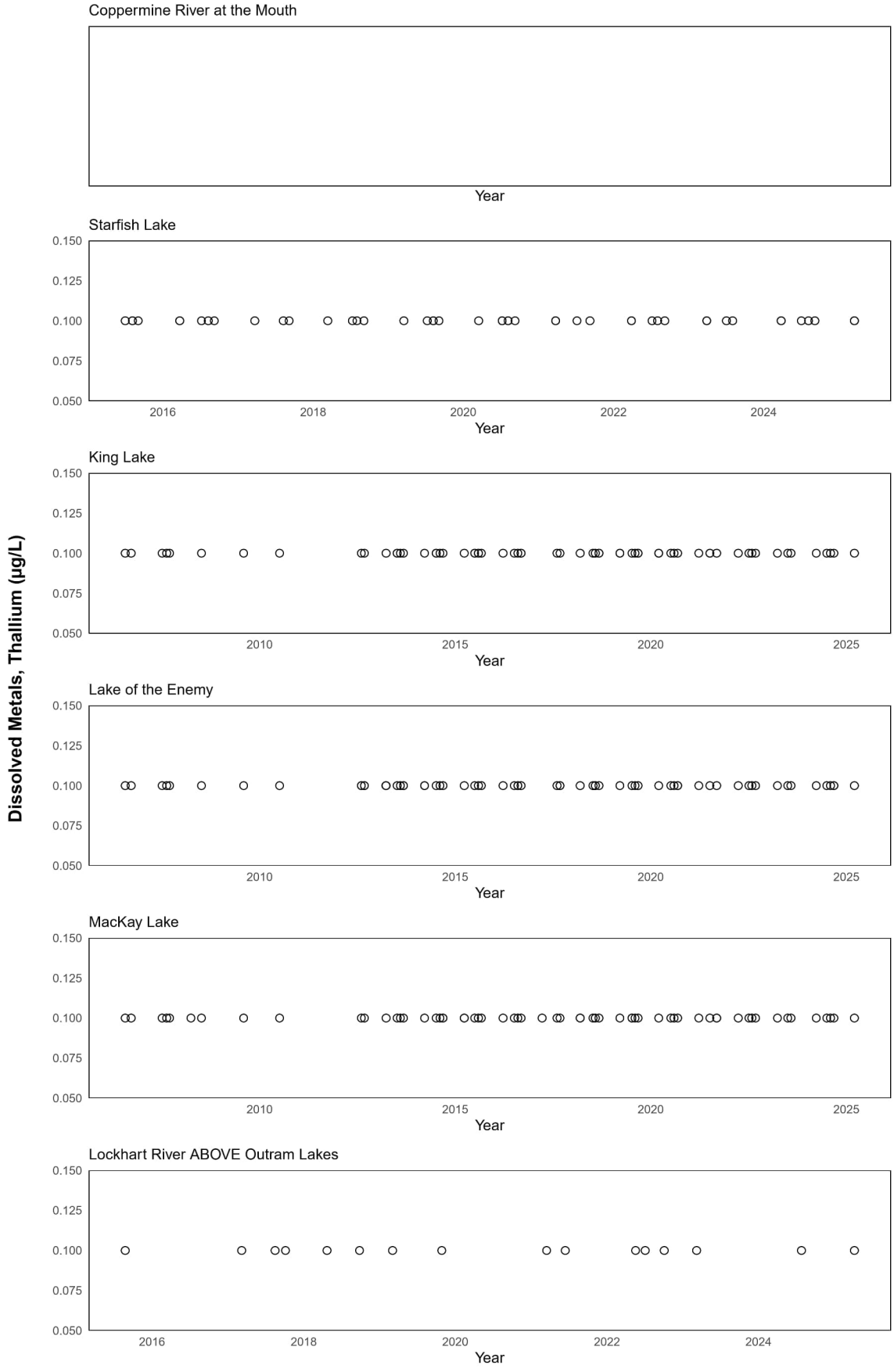
SLR

FIGURE NO:
B.1.78

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

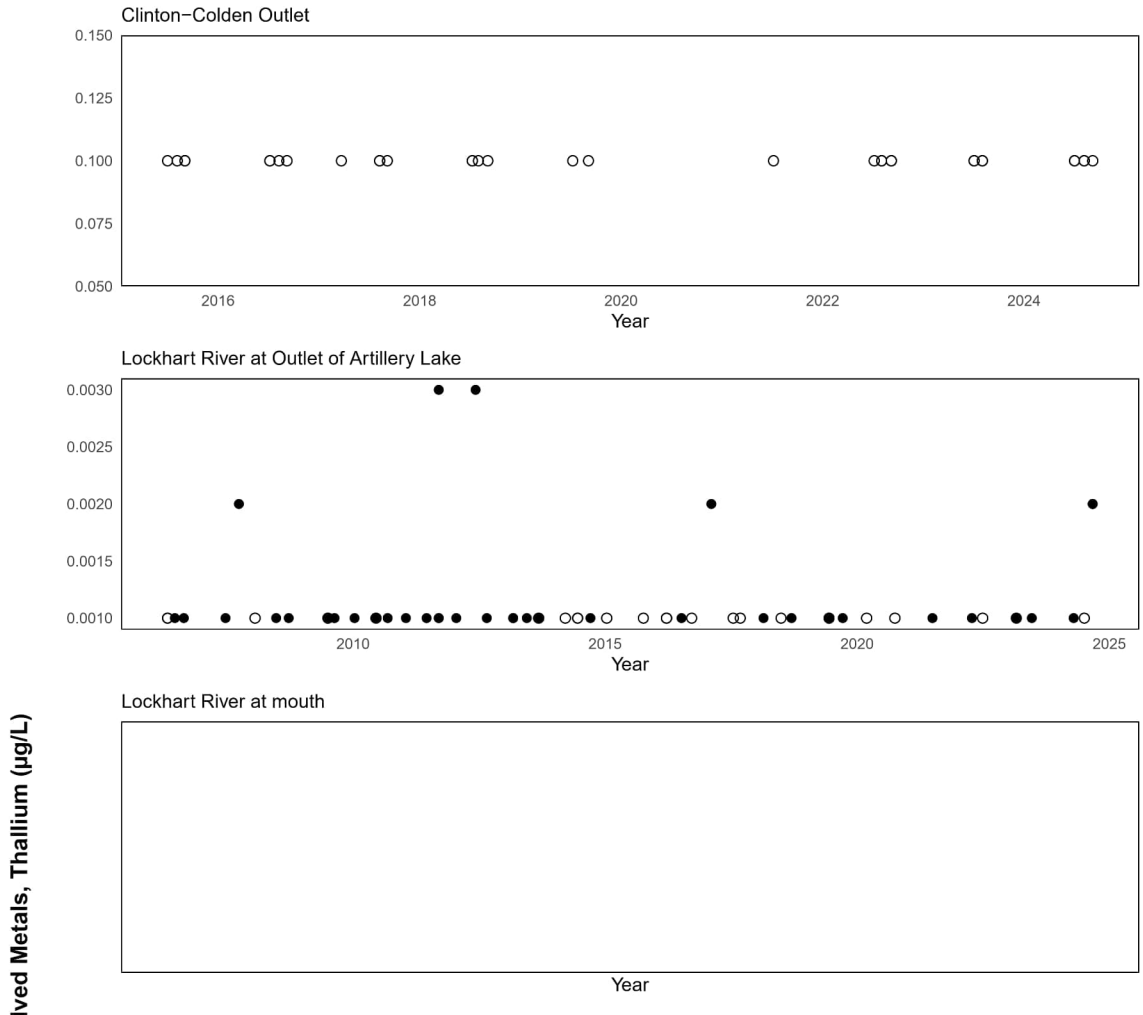
SLR

FIGURE NO:
B.1.79

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

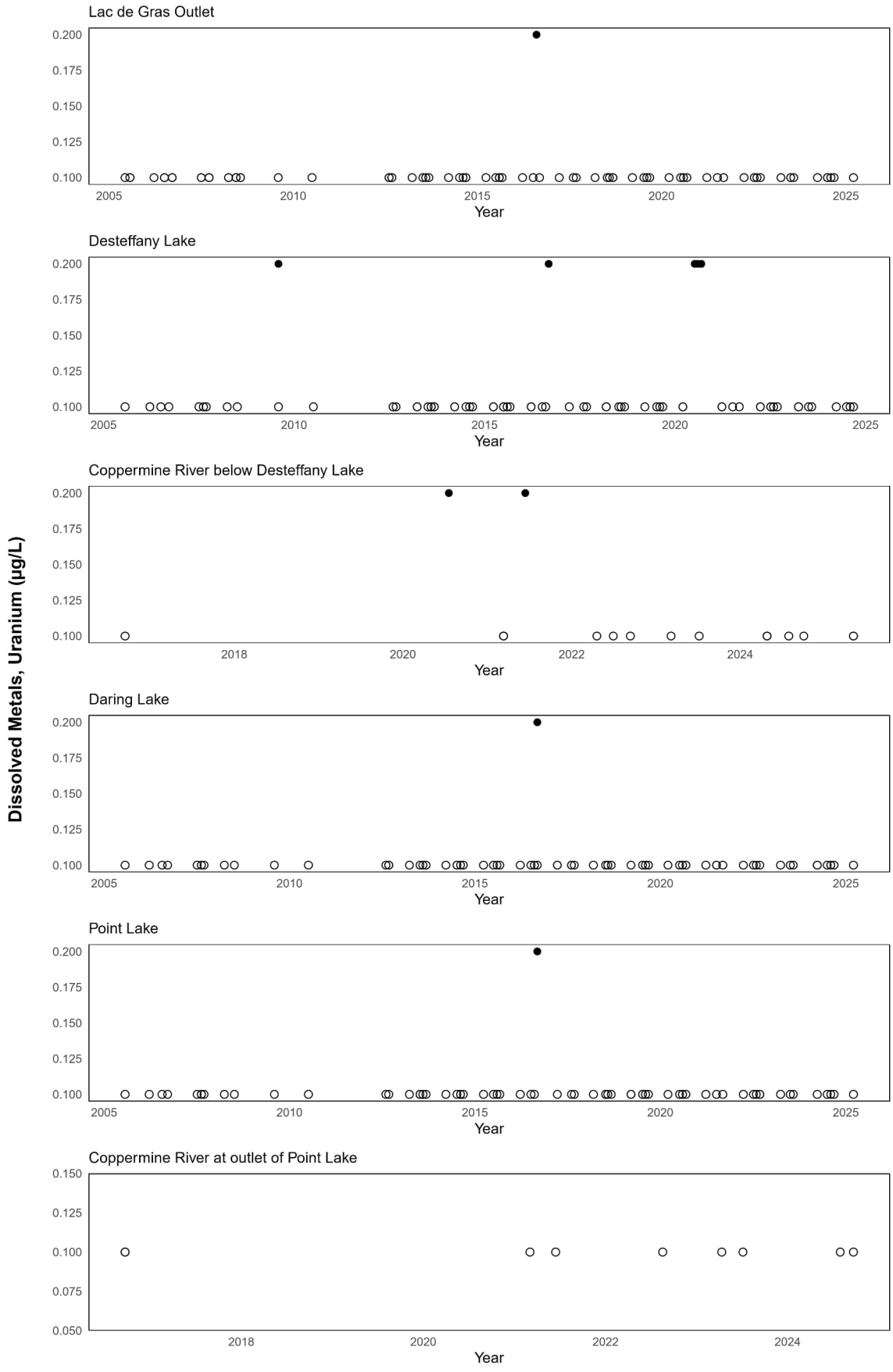
SLR

FIGURE NO:
B.1.80

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

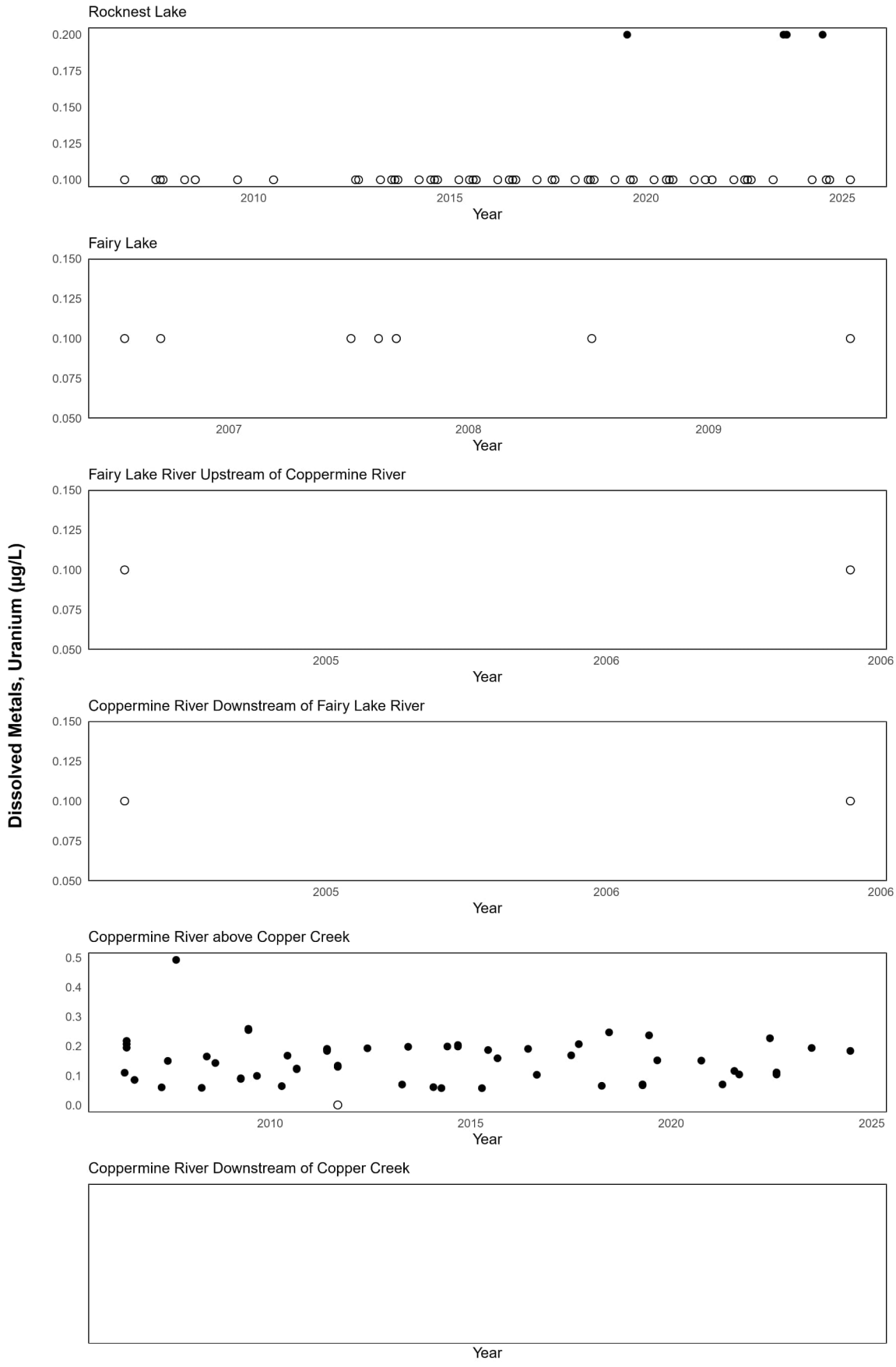
FIGURE NO:
B.1.81

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● **Detect**
- ○ **Non-detect**

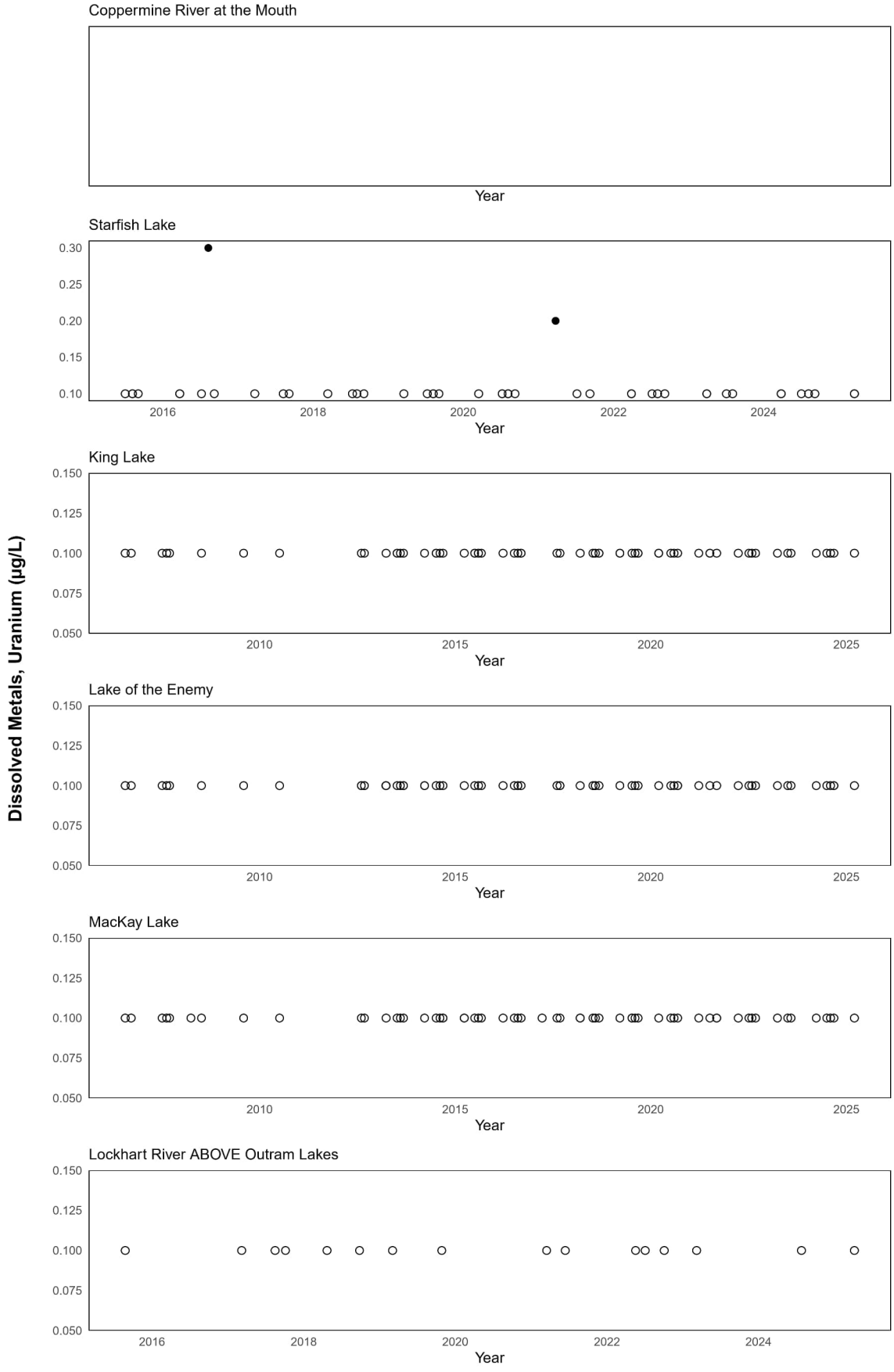
SLR

FIGURE NO: **B.1.82**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

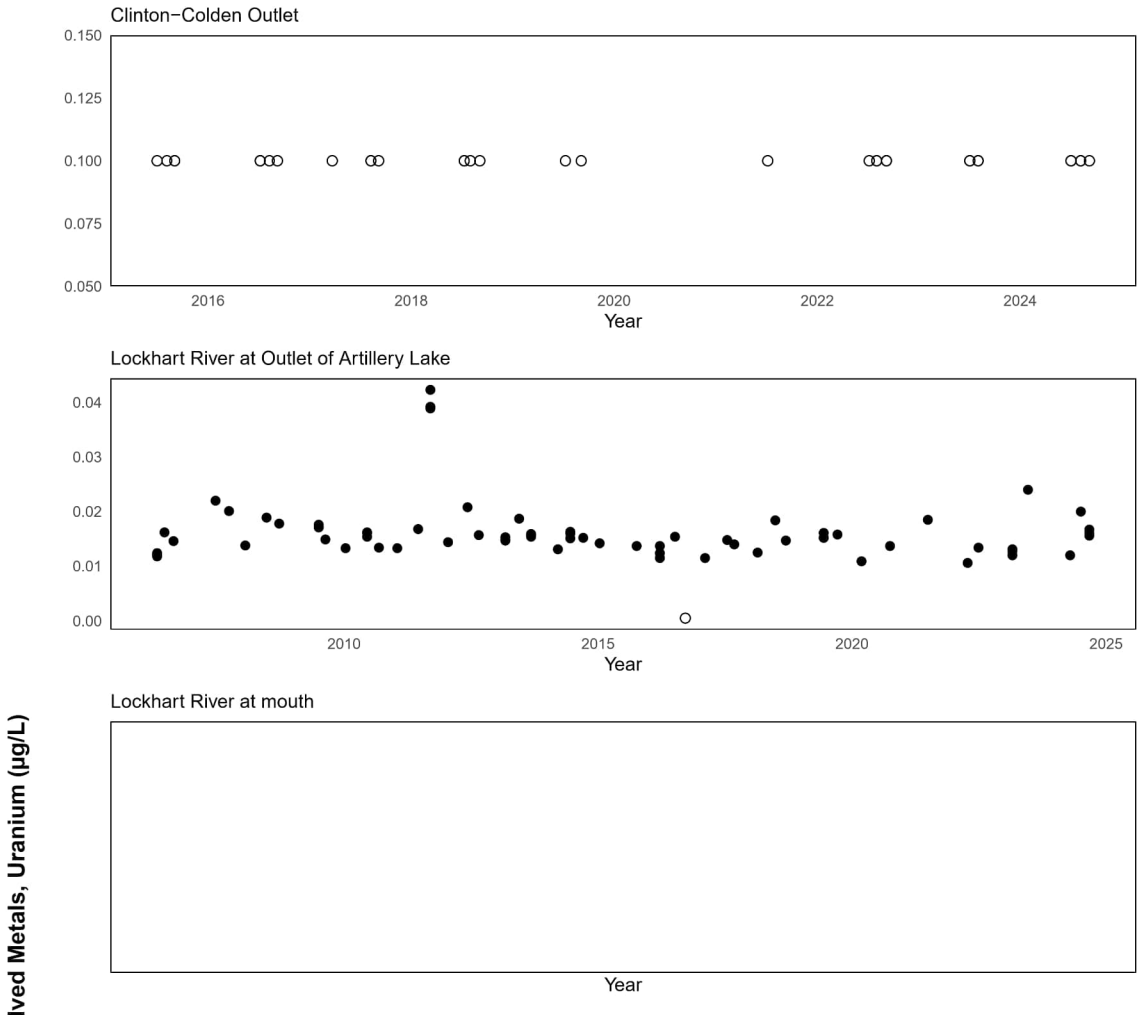
SLR

FIGURE NO: **B.1.83**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

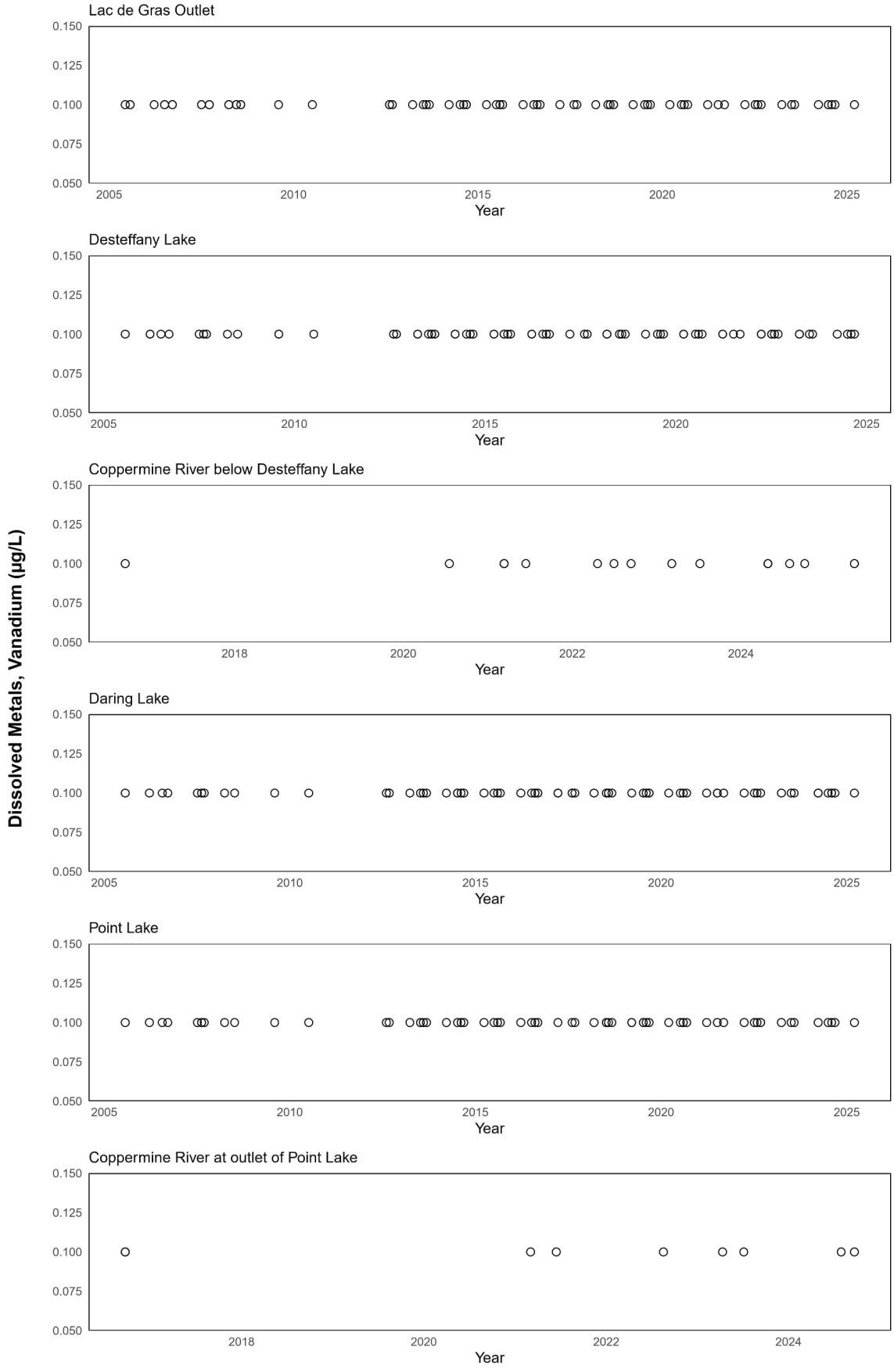
SLR

FIGURE NO:
B.1.84

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

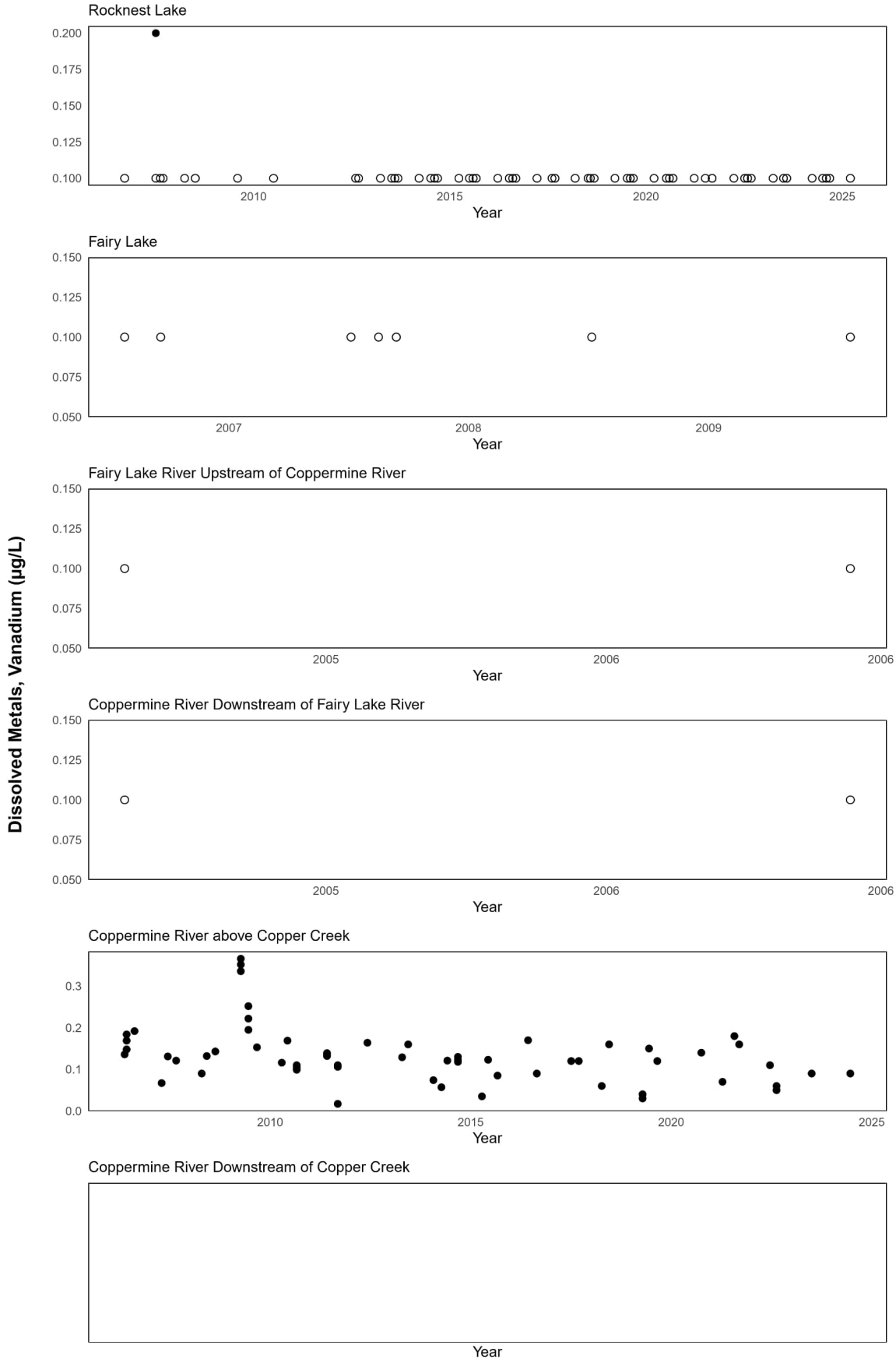
FIGURE NO:
B.1.85

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

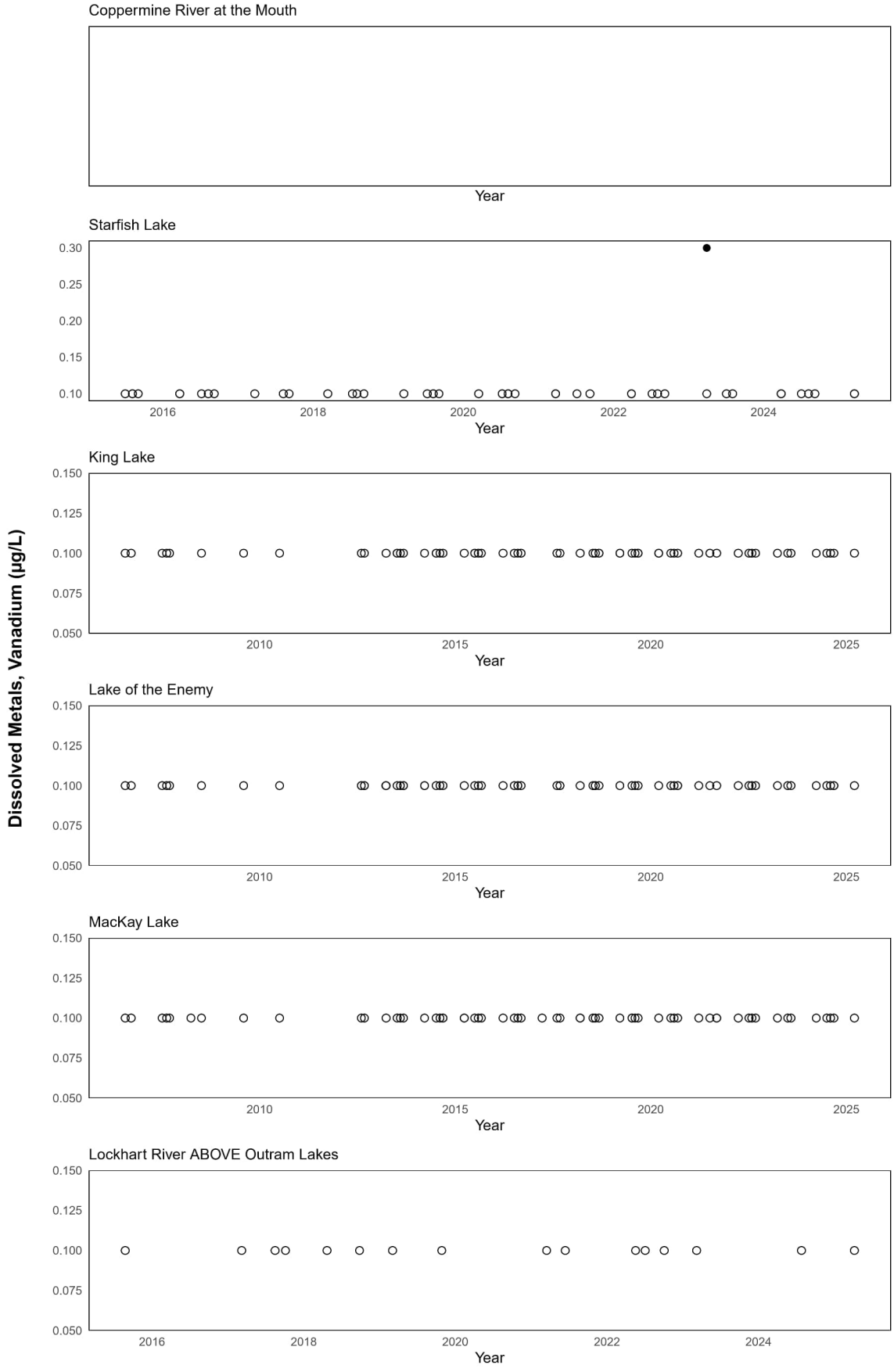
SLR

FIGURE NO: **B.1.86**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

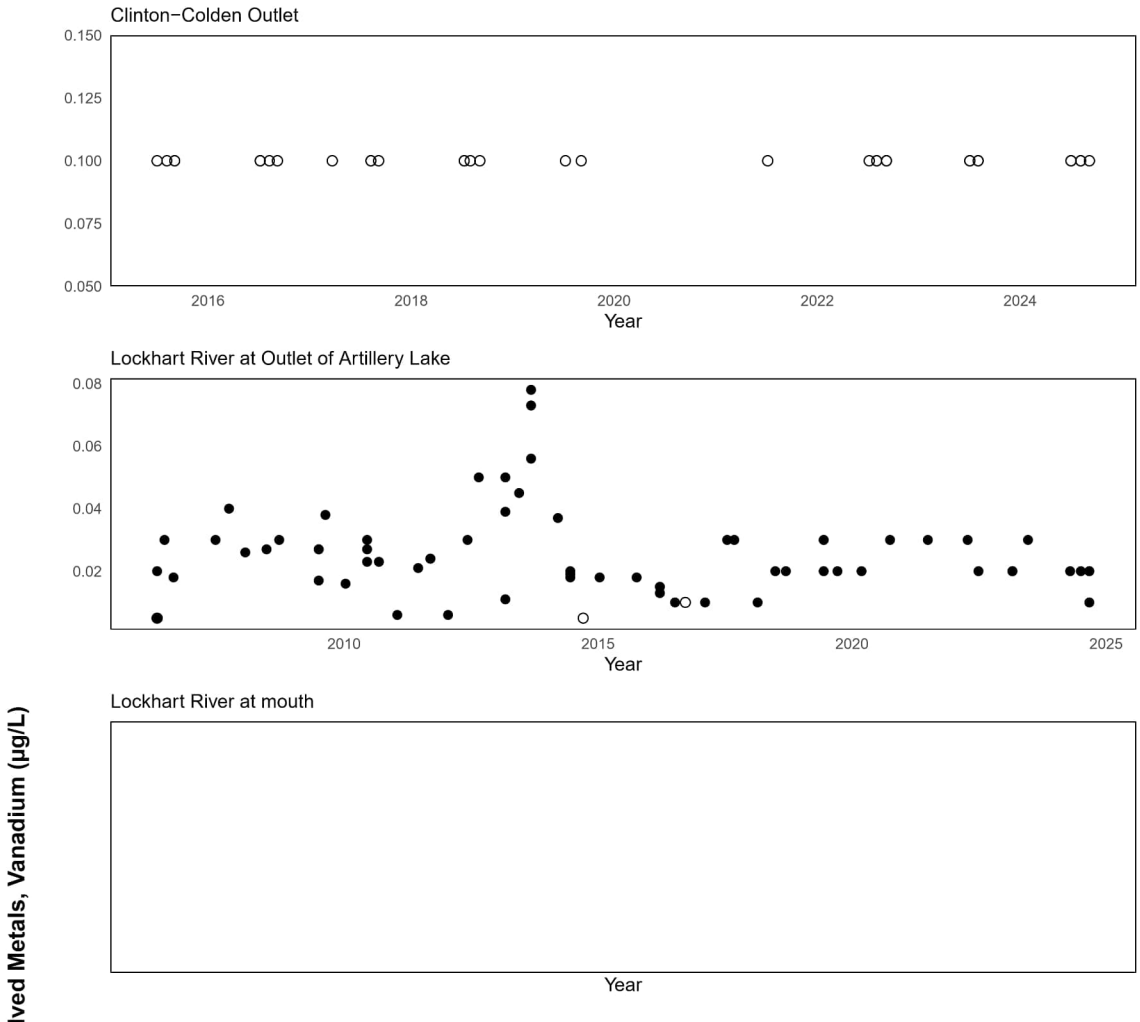
SLR

FIGURE NO: **B.1.87**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

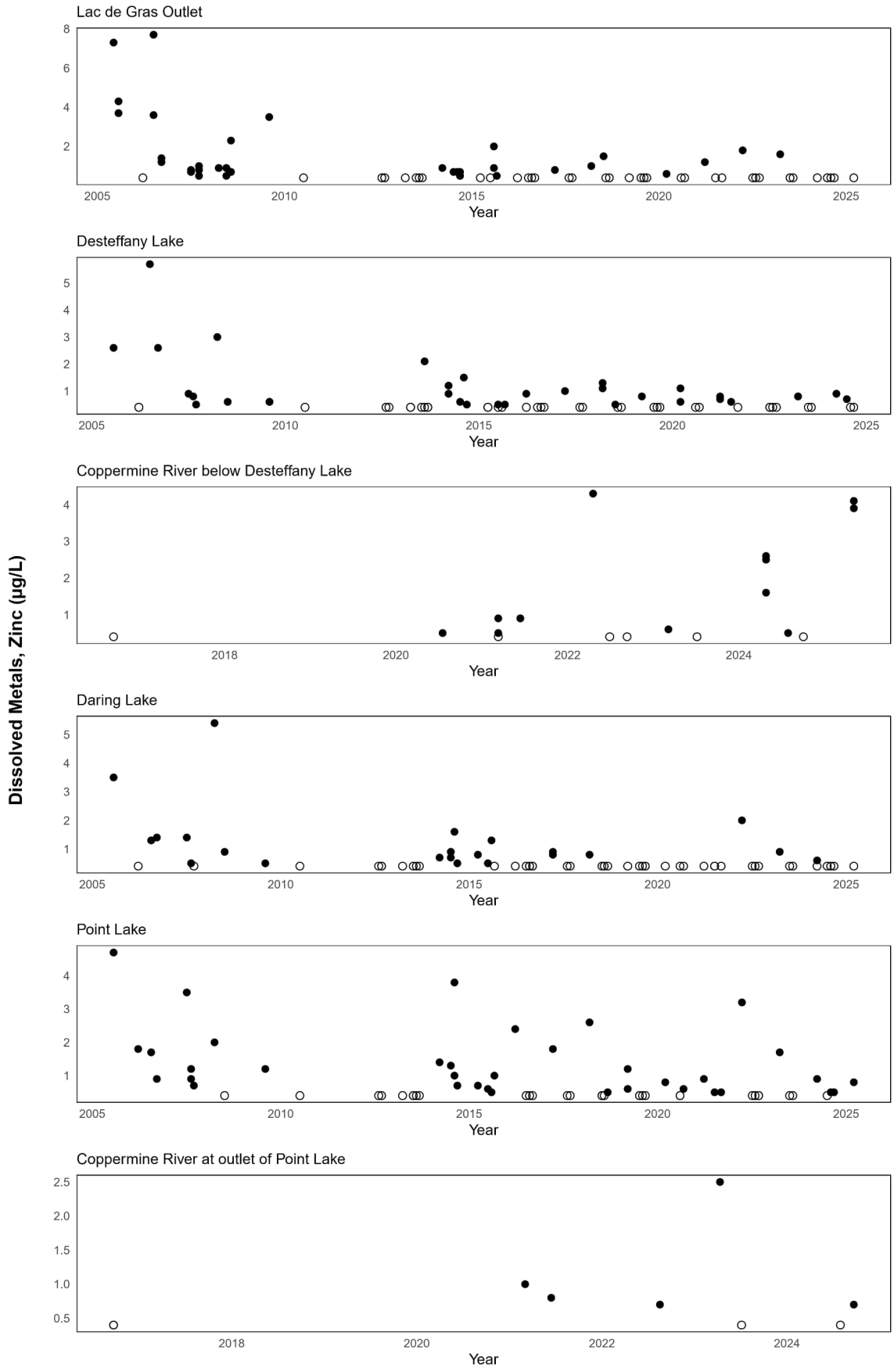
SLR

FIGURE NO:
B.1.88

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

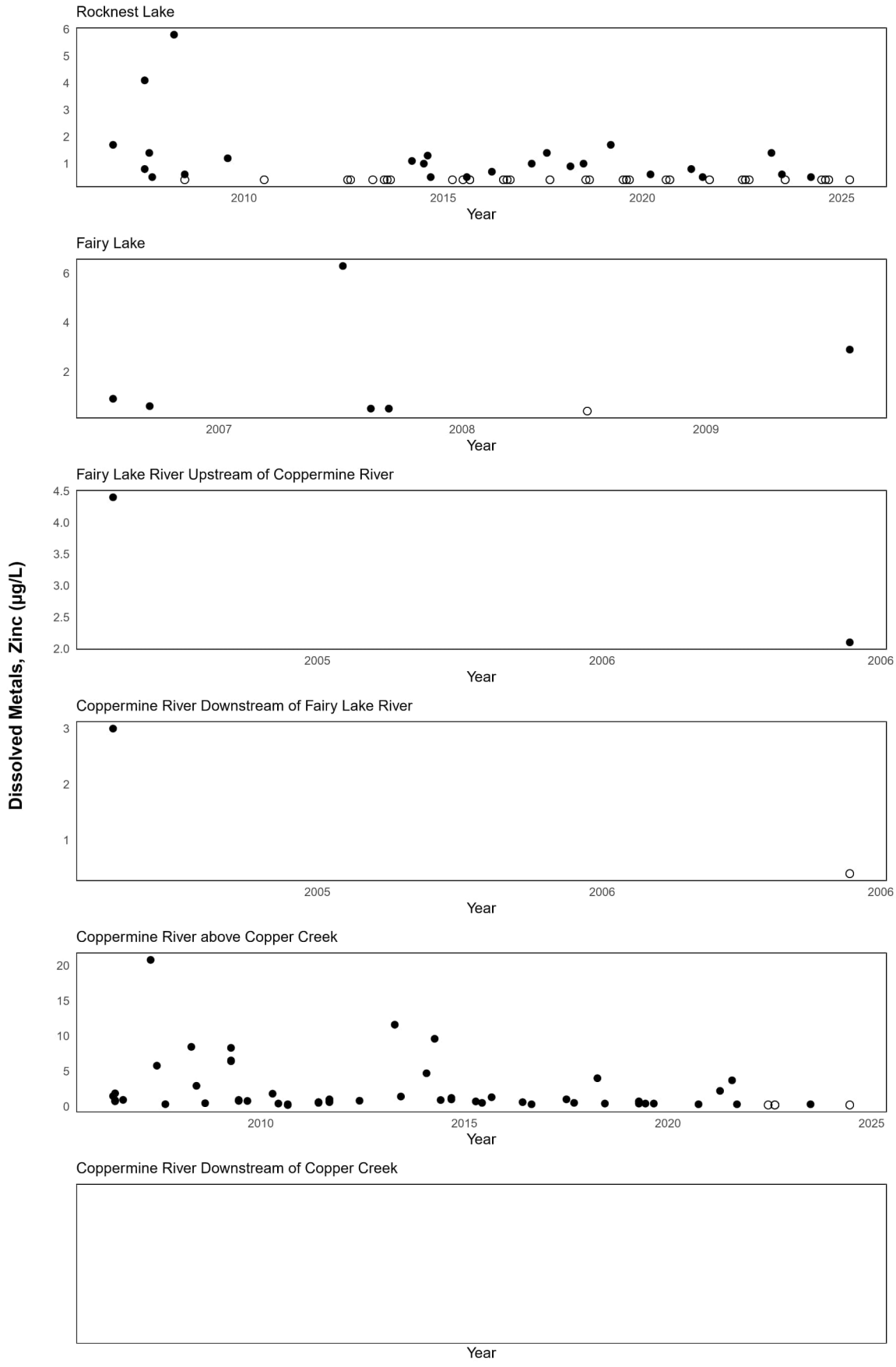
FIGURE NO:
B.1.89

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

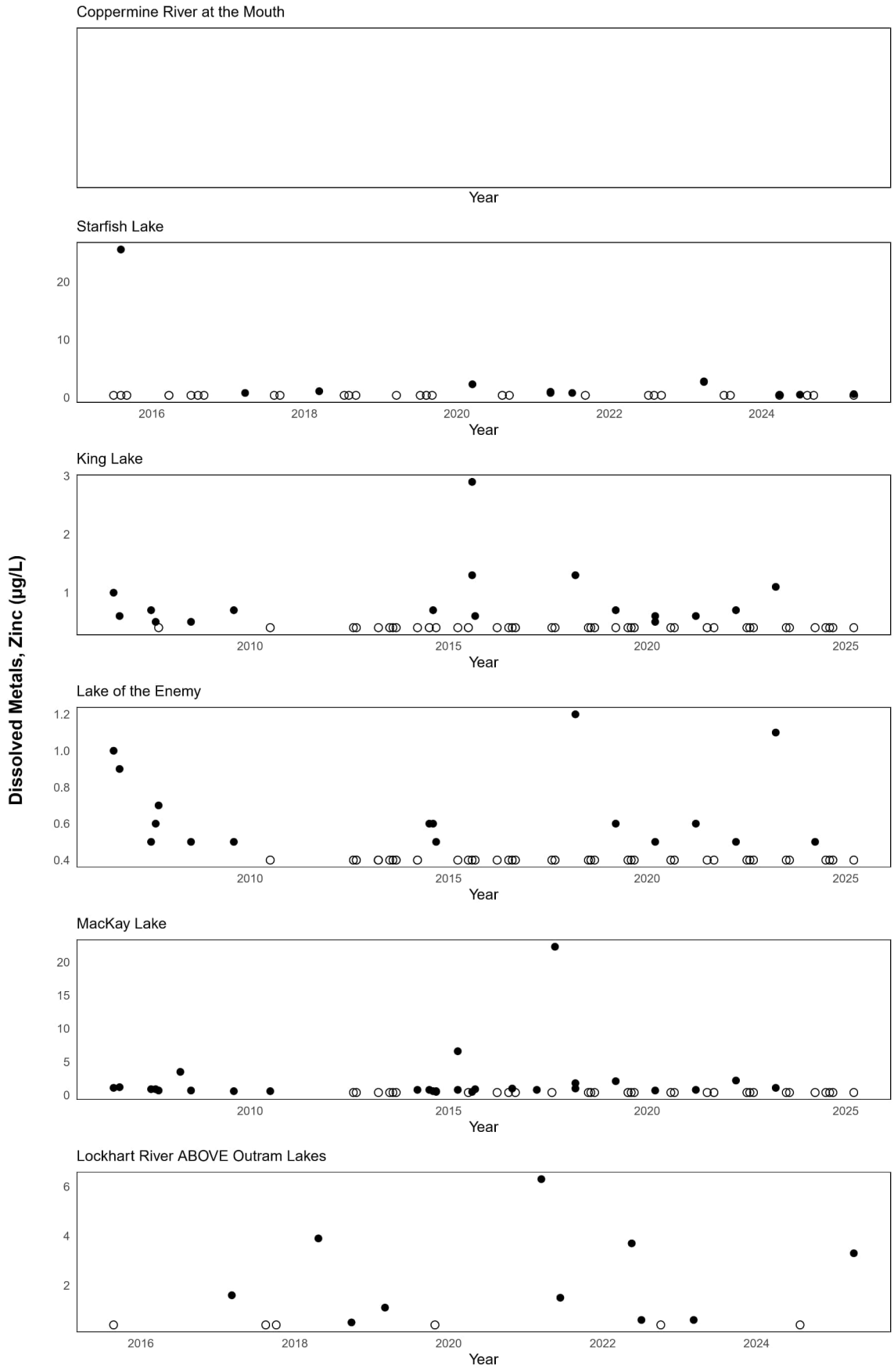
SLR

FIGURE NO: **B.1.90**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

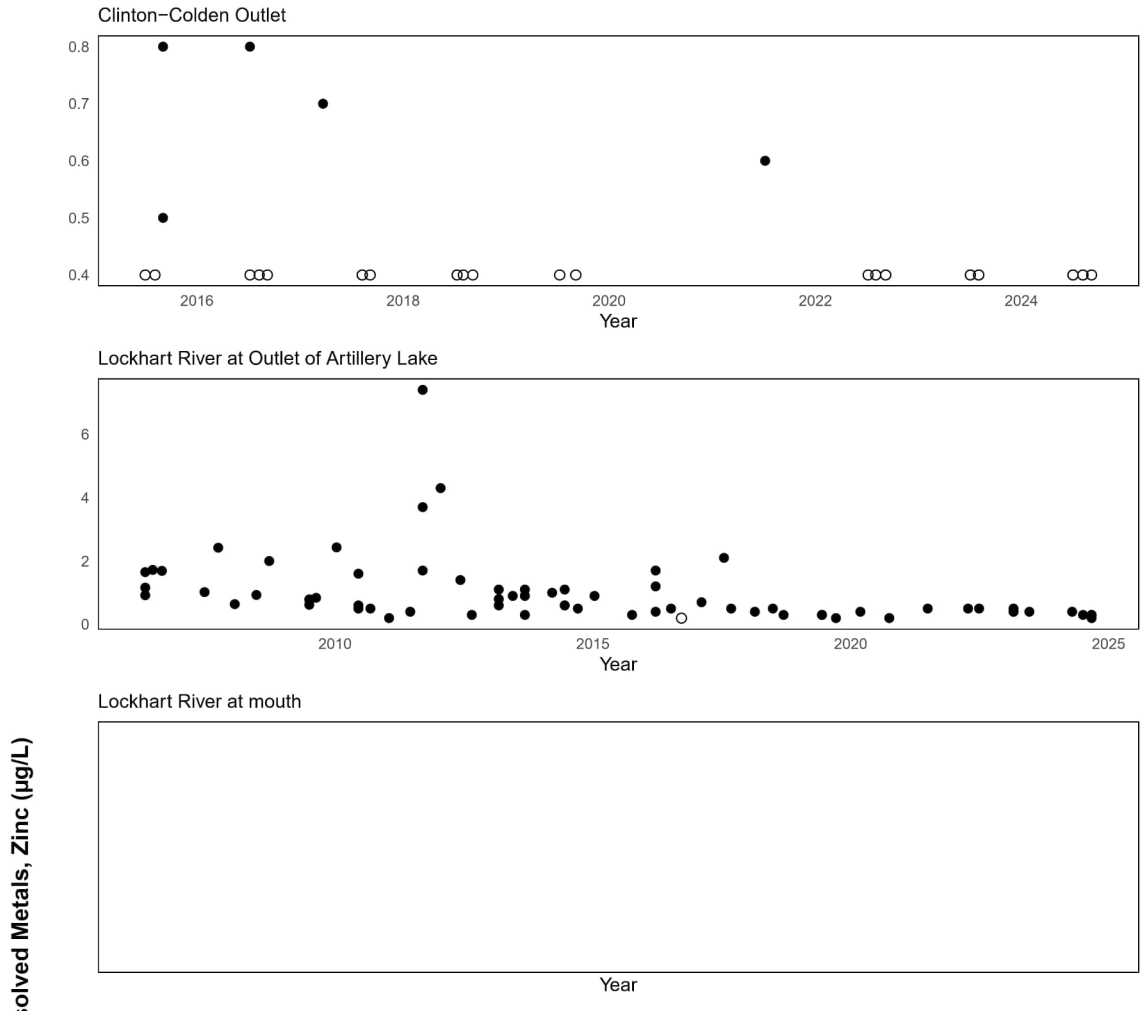
FIGURE NO:
B.1.91

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

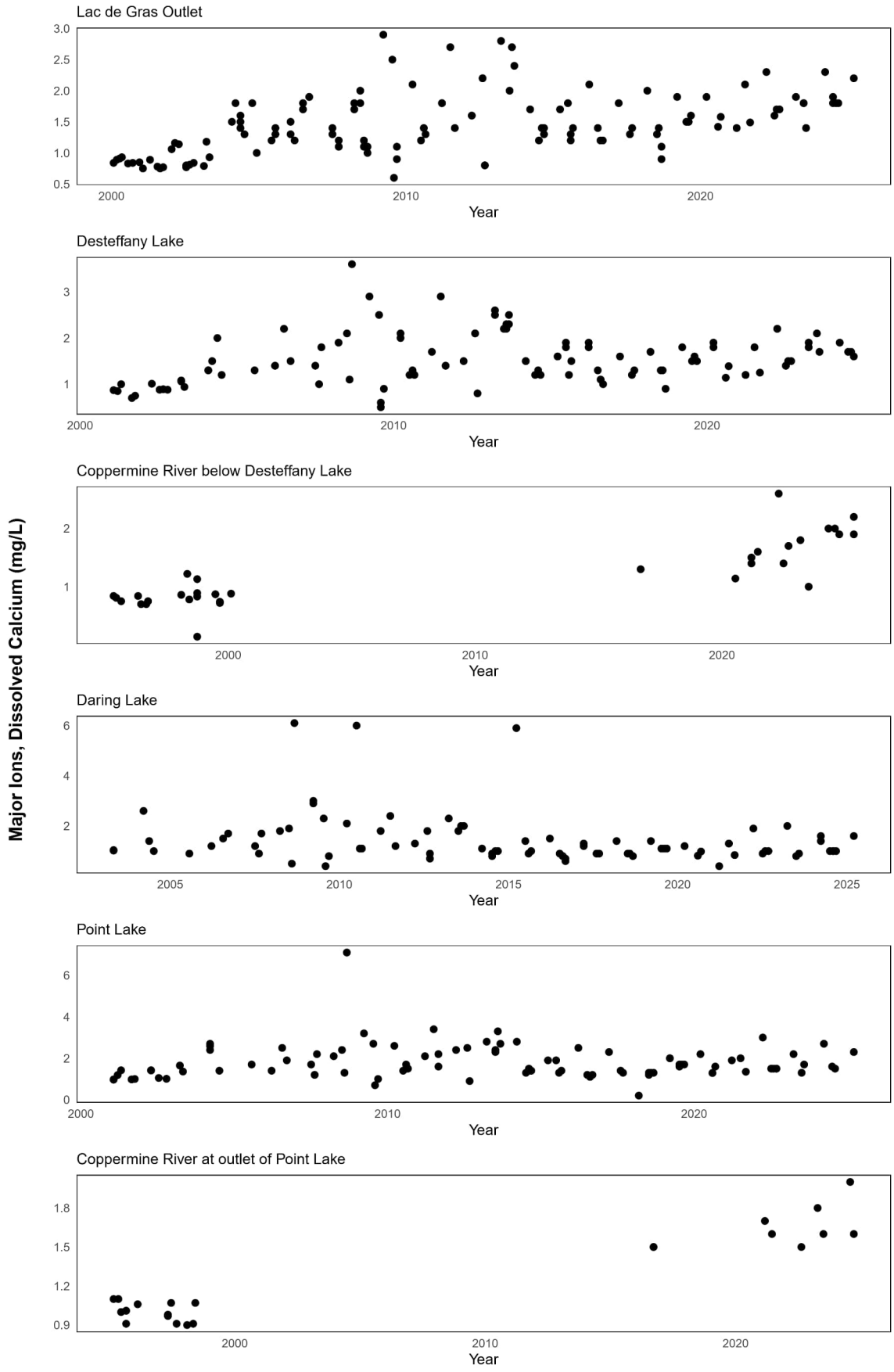
SLR

FIGURE NO:
B.1.92

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- ● **Detect**
- ○ **Non-detect**

SLR

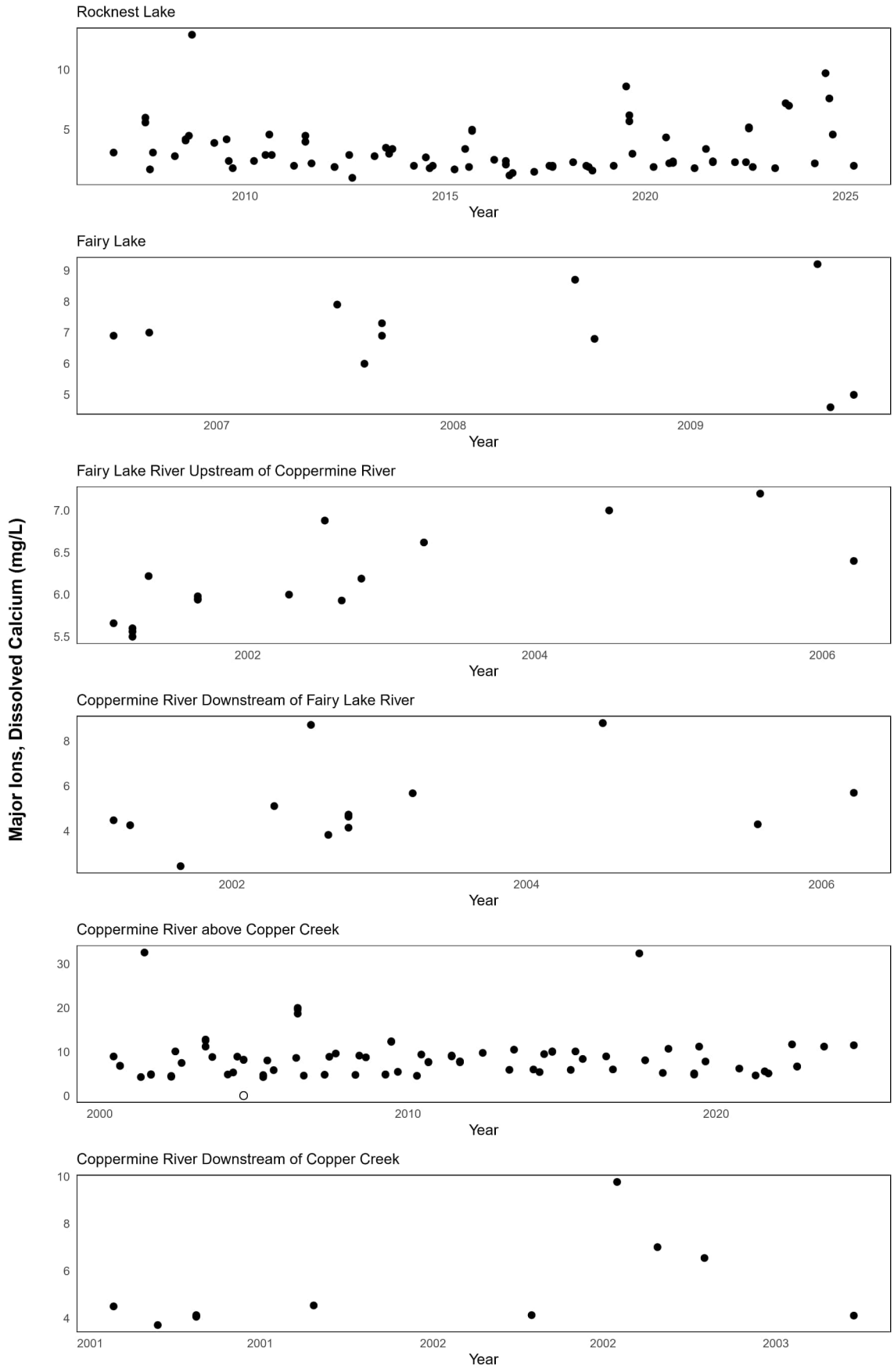
FIGURE NO:
B.1.93

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

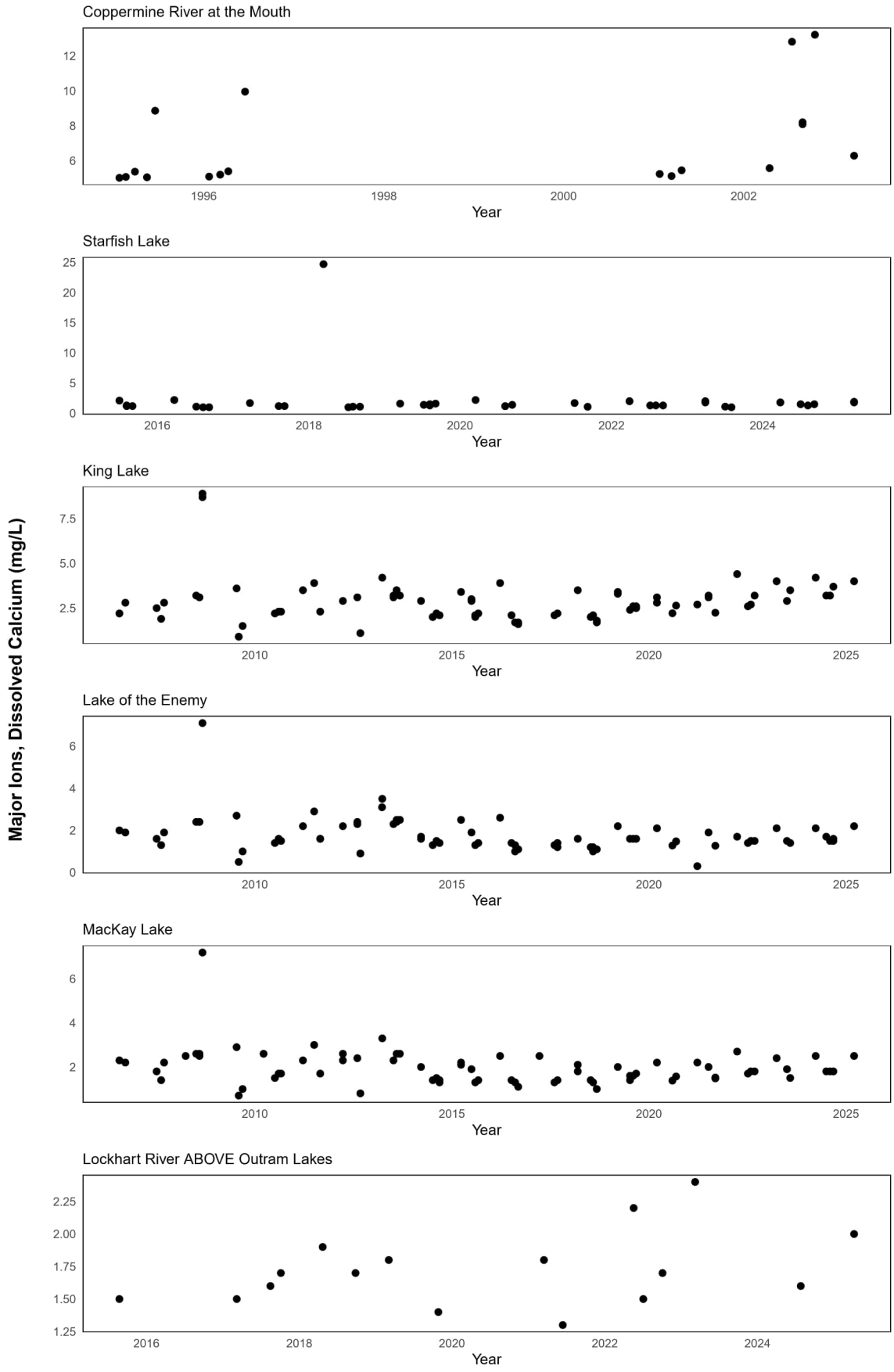
SLR

FIGURE NO: **B.1.94**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

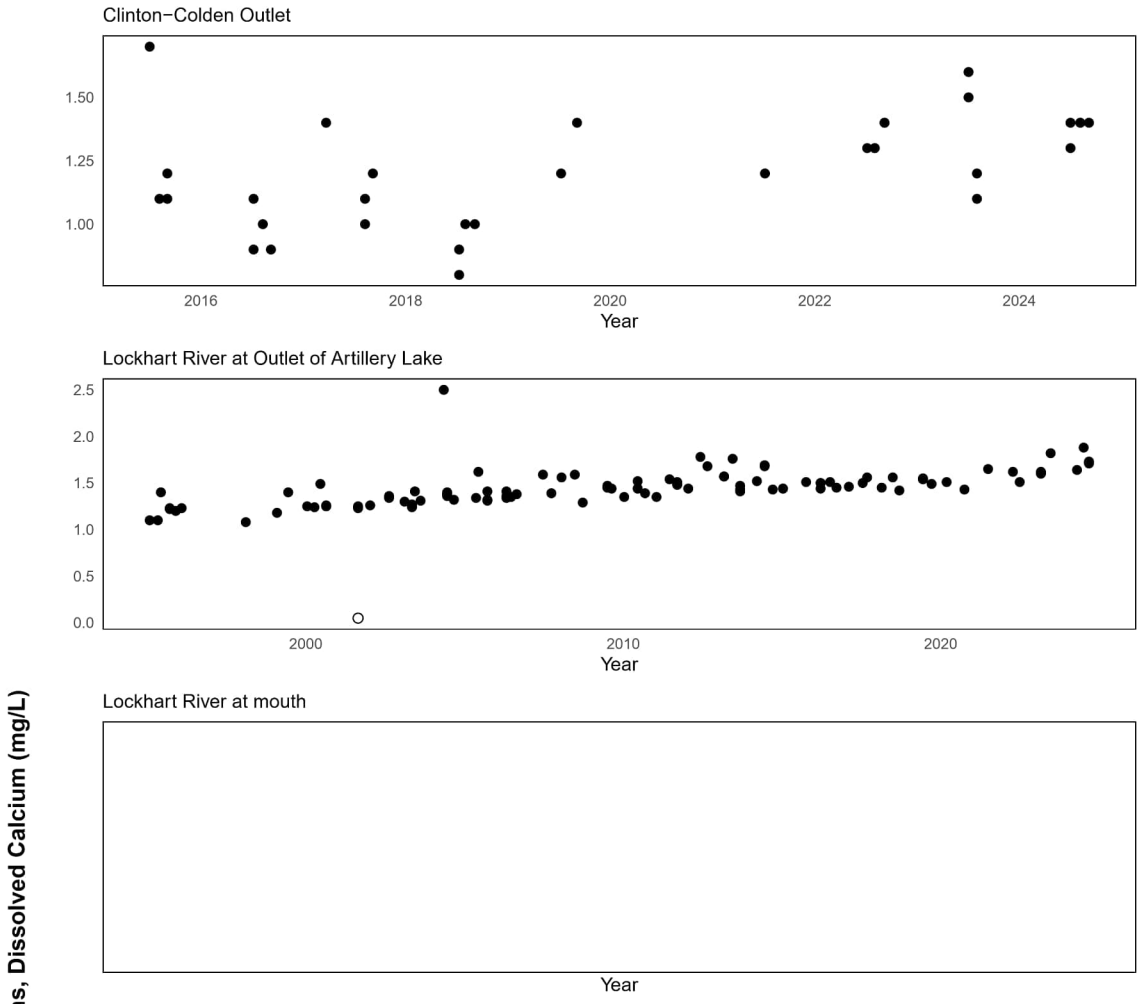
FIGURE NO:
B.1.95

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

FIGURE NO:
B.1.96

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait
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Major Ions, Dissolved Fluoride (mg/L)

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

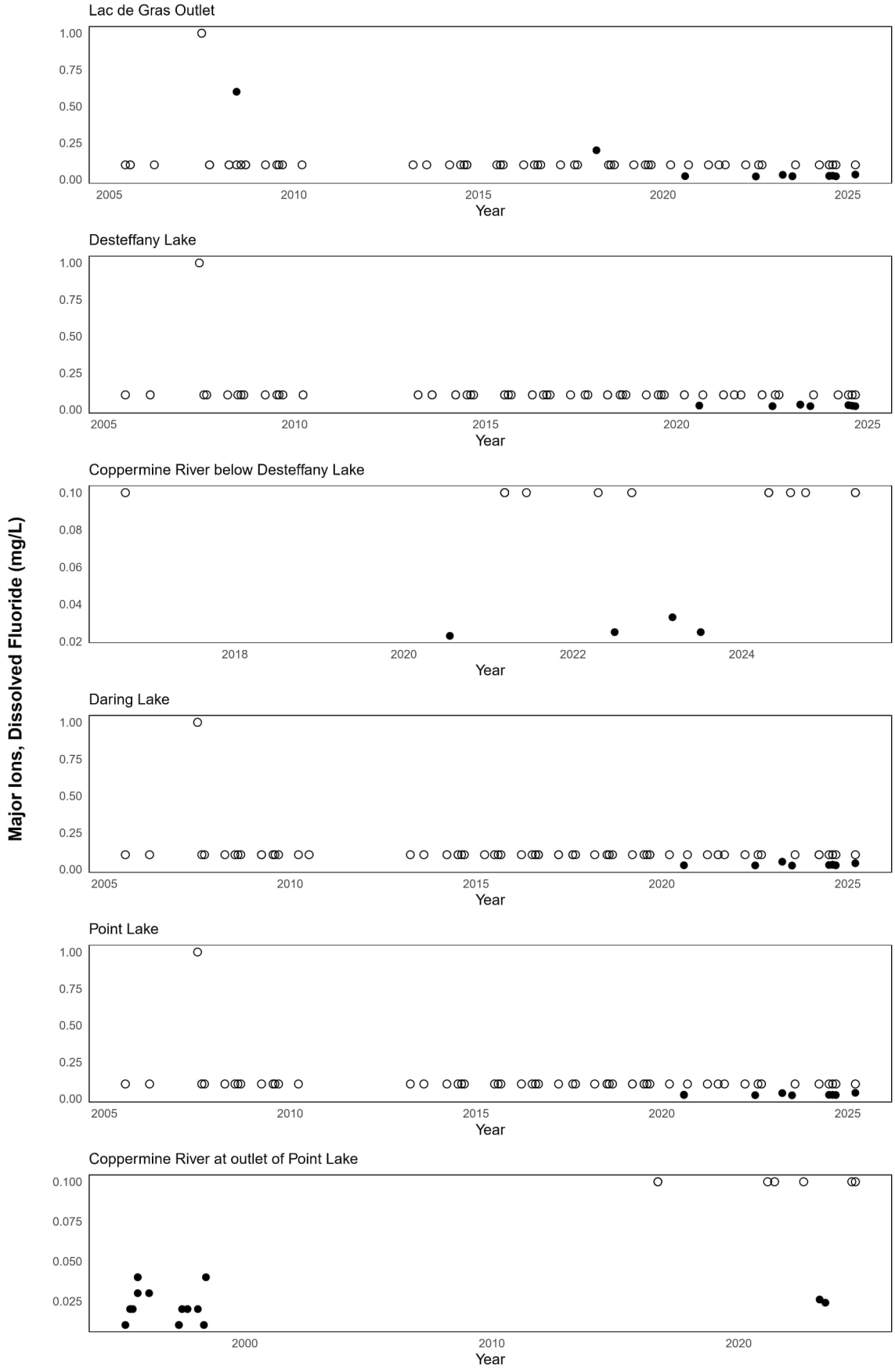
SLR

FIGURE NO:
B.1.97

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

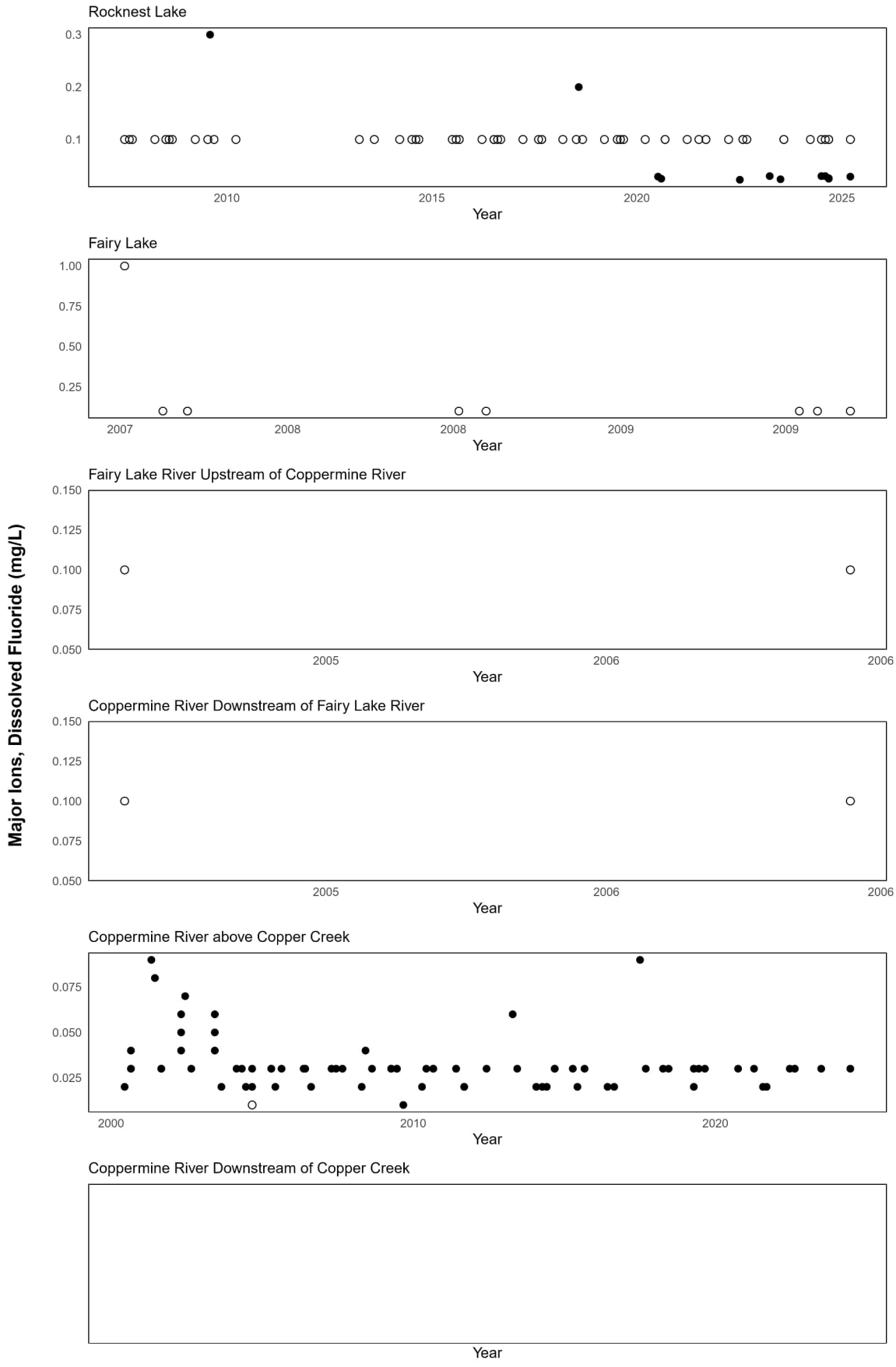
FIGURE NO:
B.1.98

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

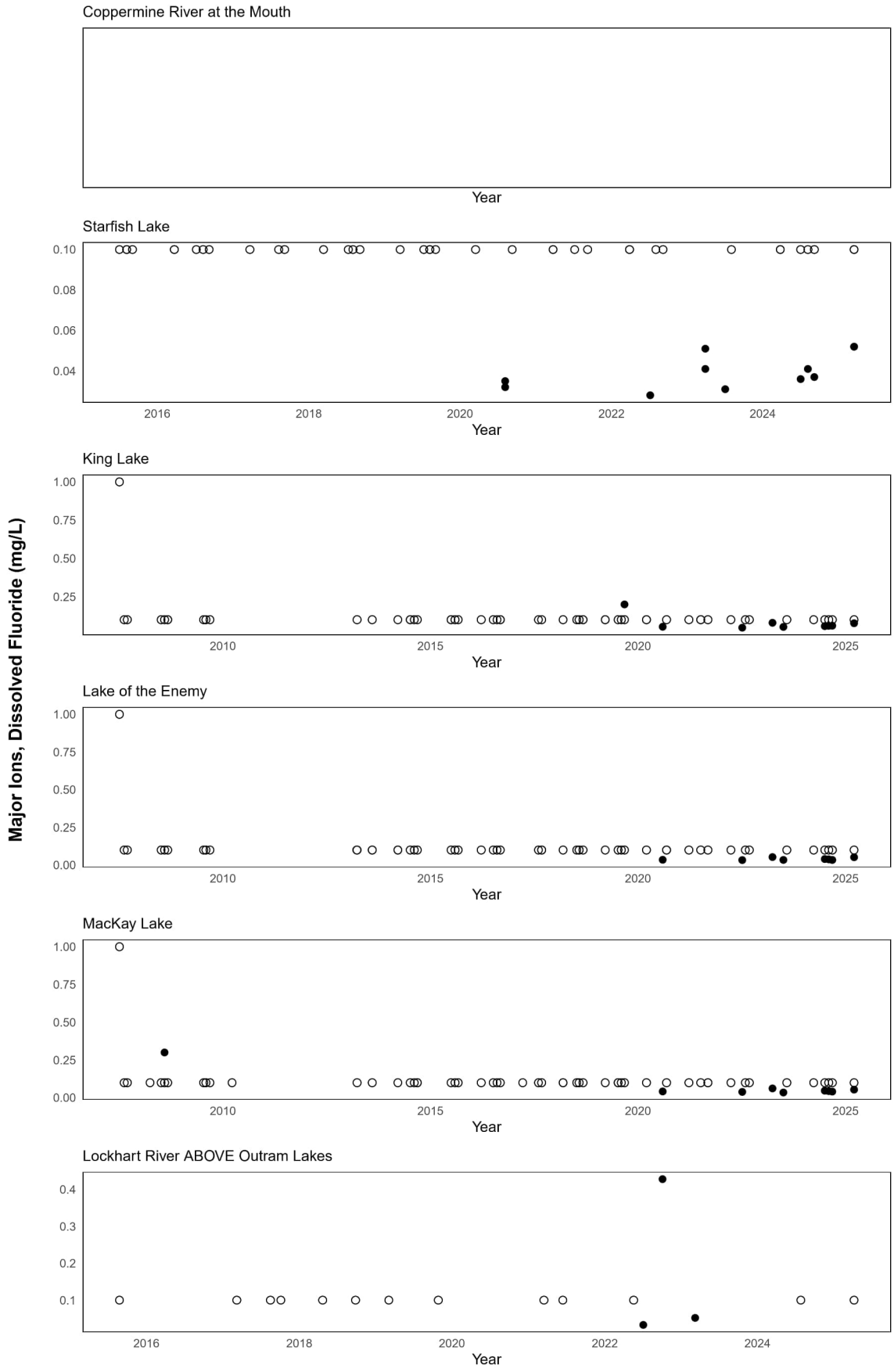
SLR

FIGURE NO: **B.1.99**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

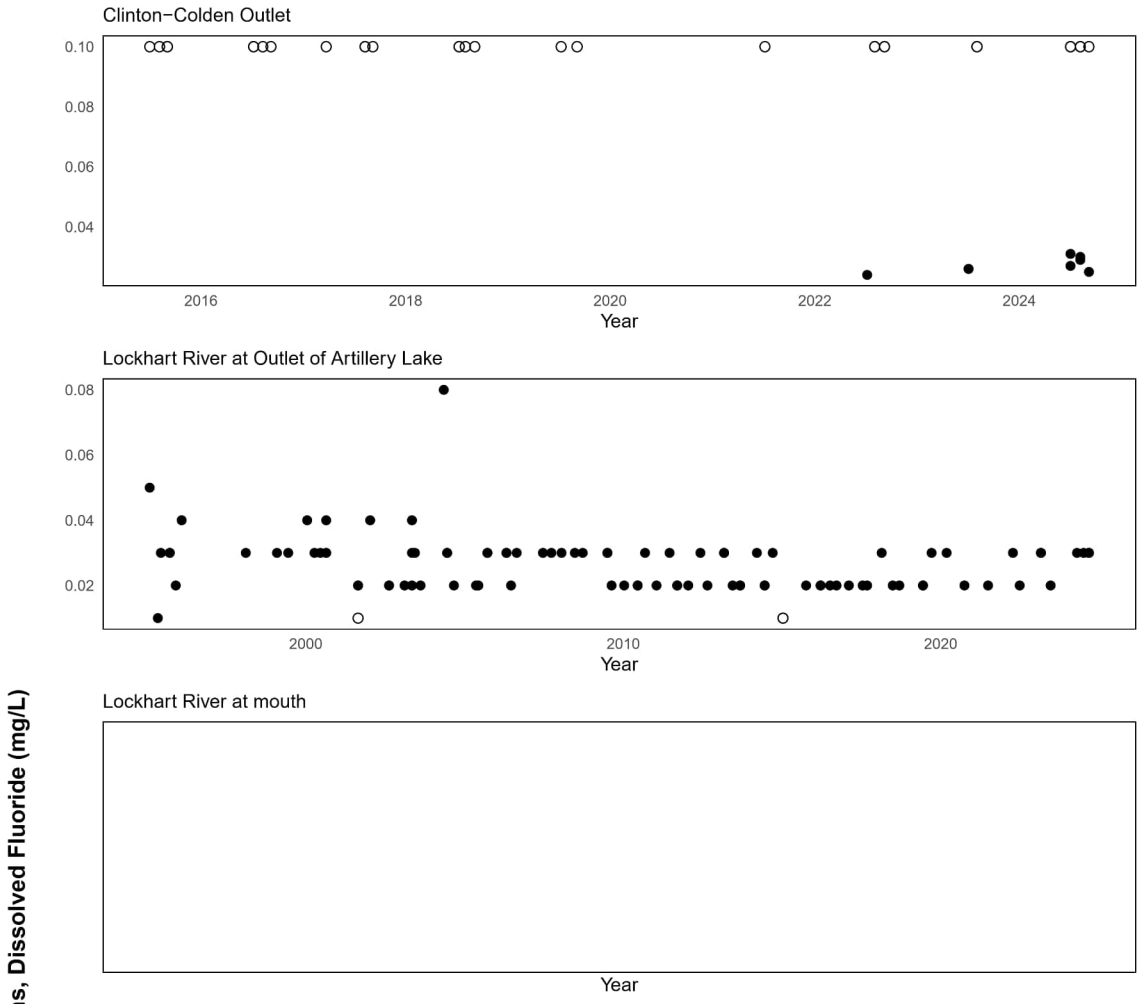
SLR

FIGURE NO: **B.1.100**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_portrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

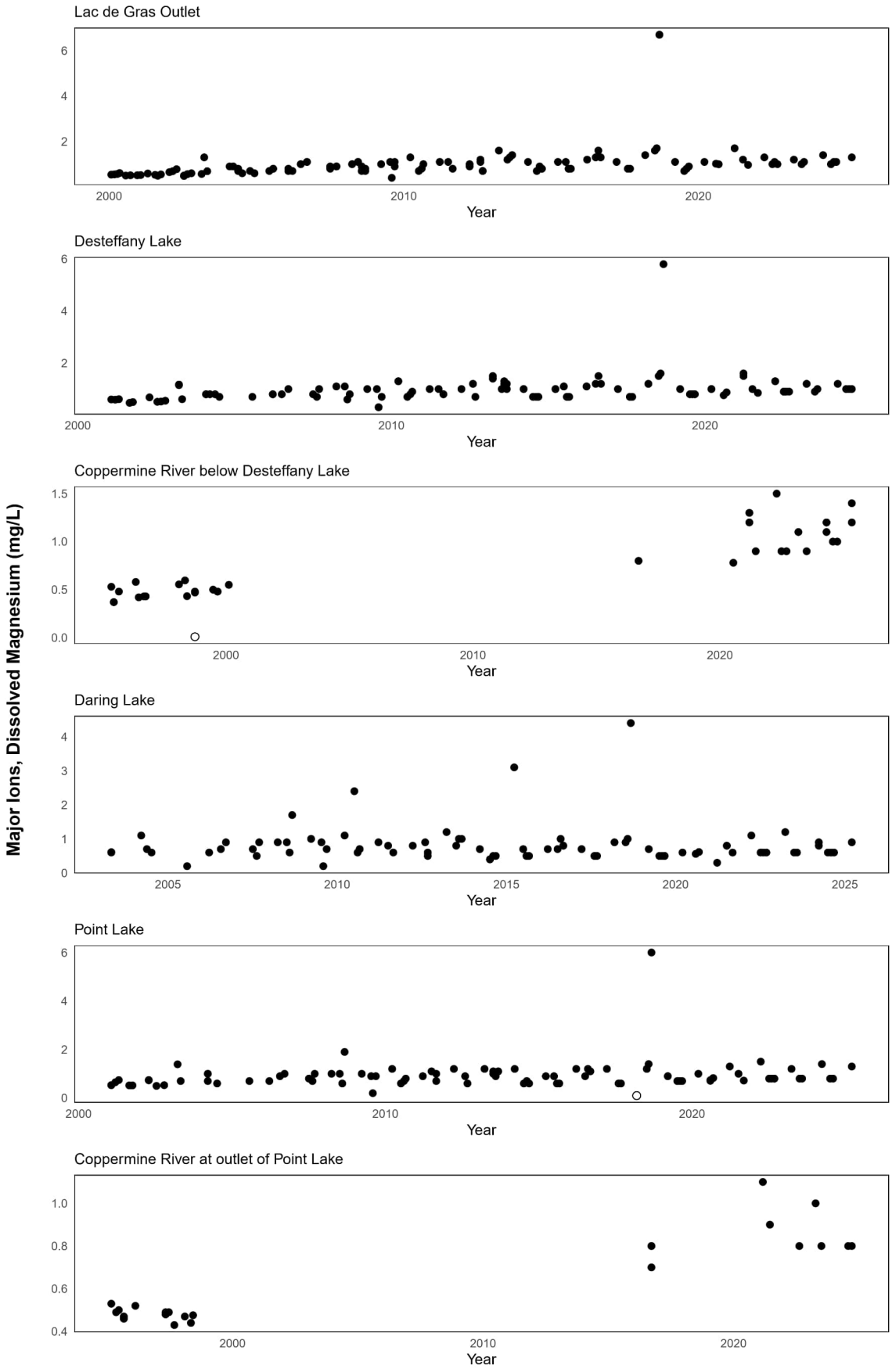
SLR

FIGURE NO:
B.1.101

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- ● **Detect**
- ○ **Non-detect**

SLR

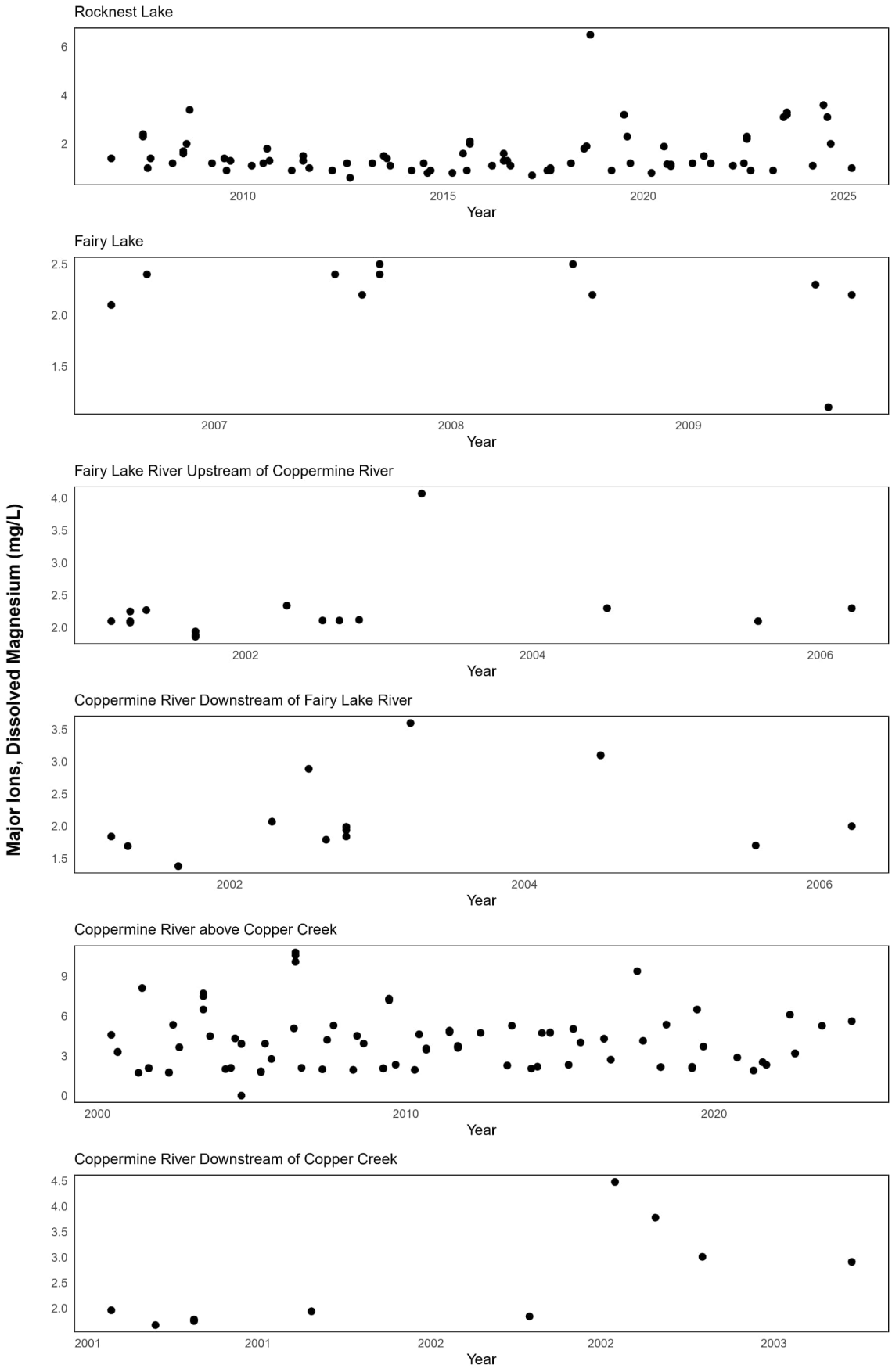
FIGURE NO:
B.1.102

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

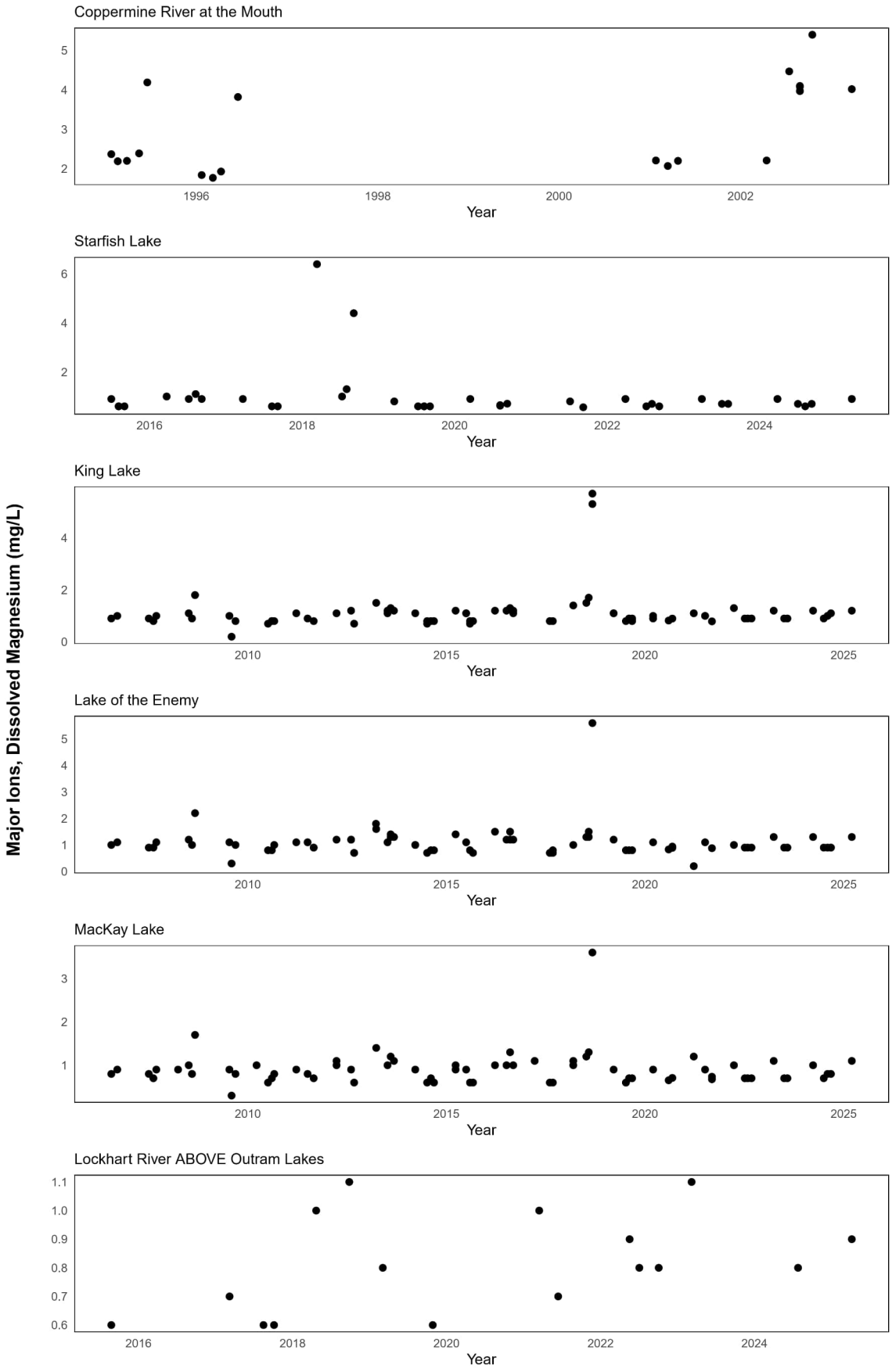
FIGURE NO:
B.1.103

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

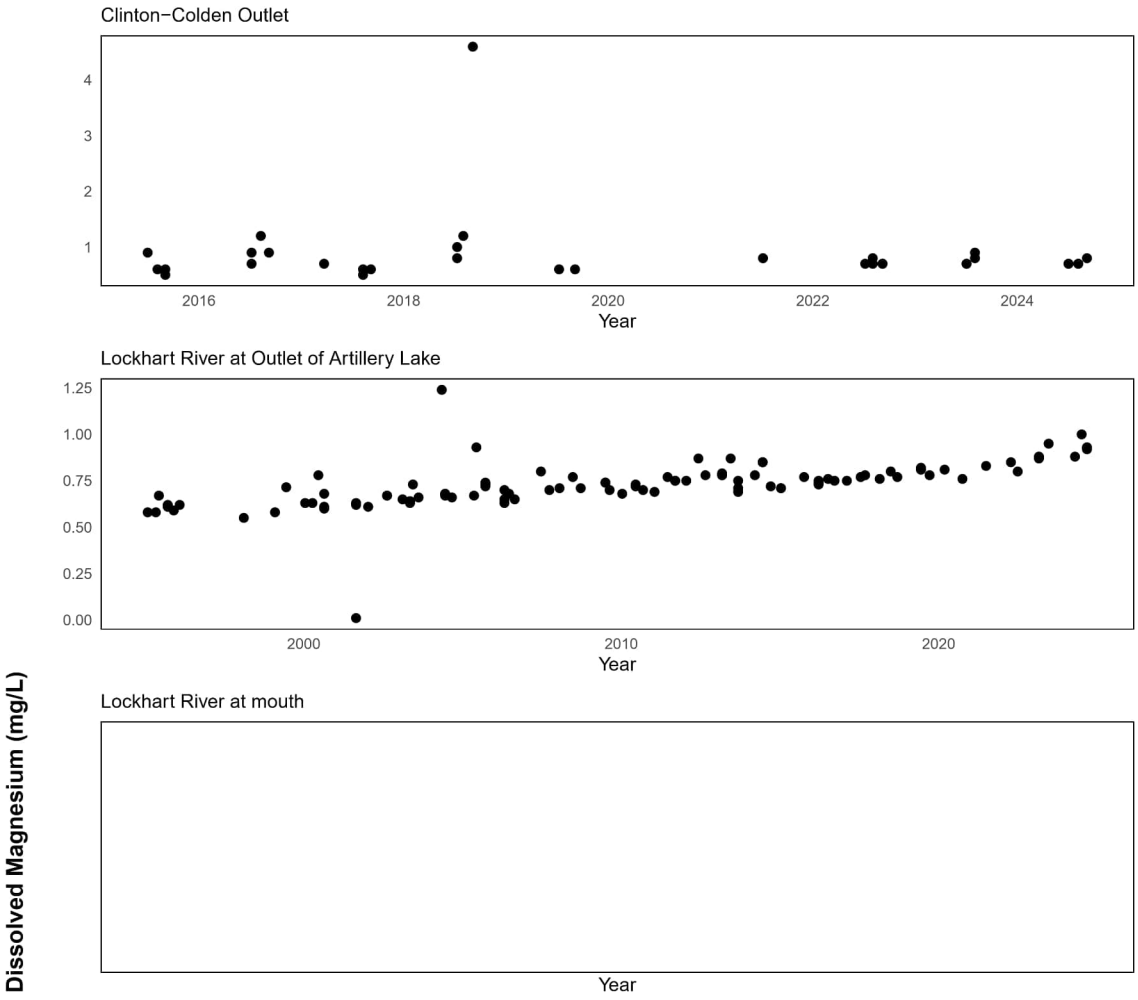
FIGURE NO:
B.1.104

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

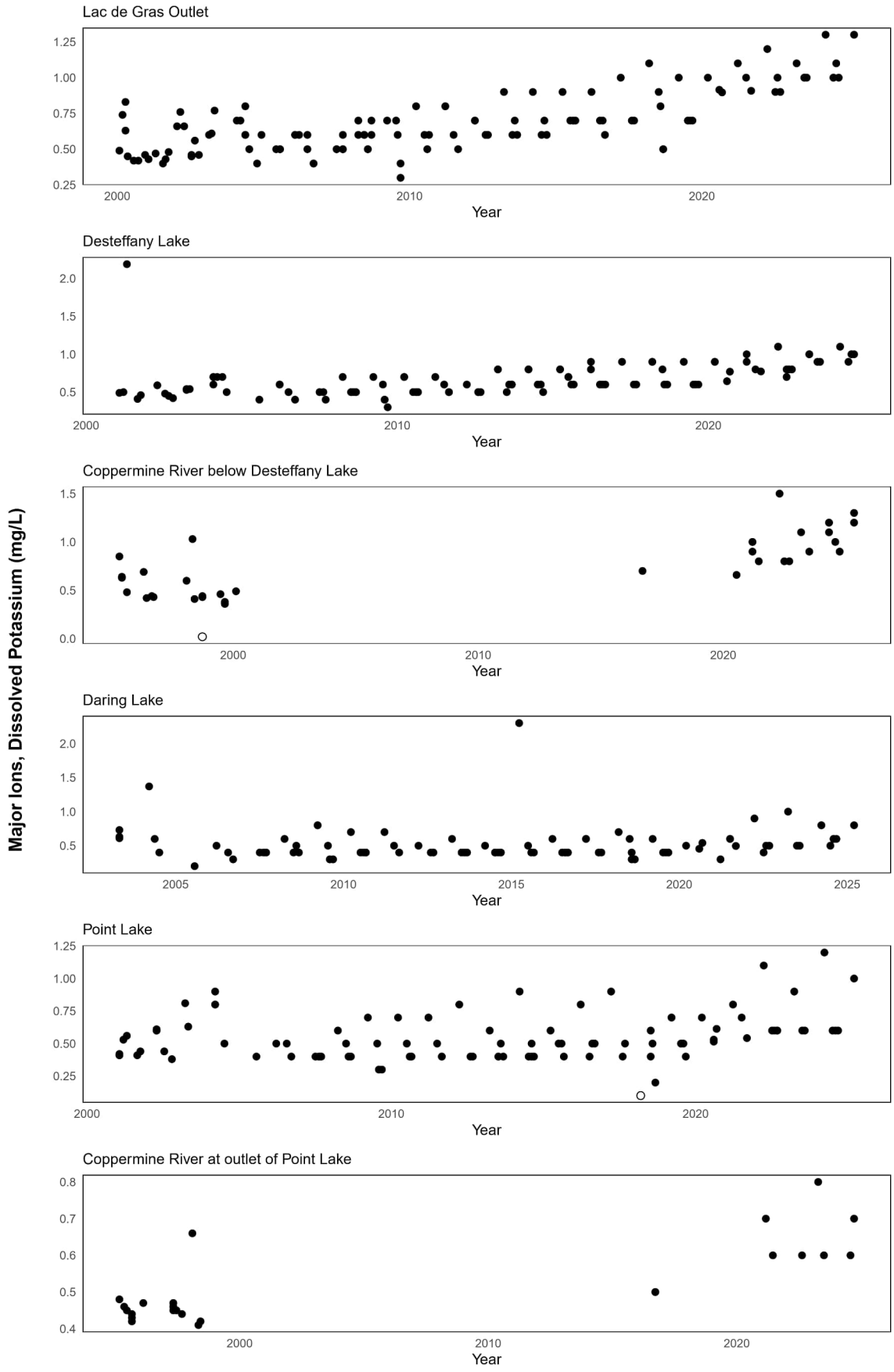
SLR

FIGURE NO:
B.1.105

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- Detect
- Non-detect

SLR

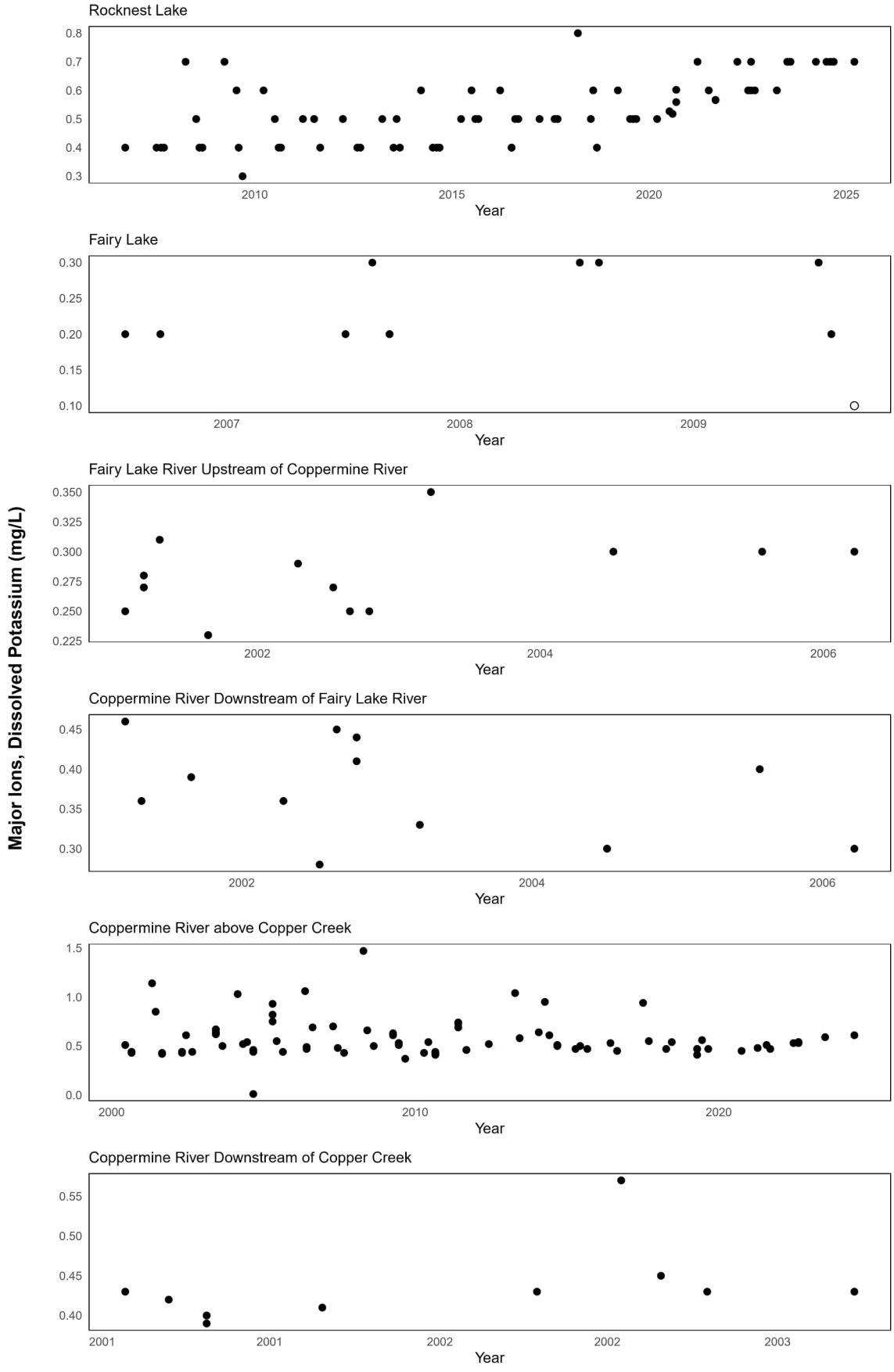
FIGURE NO:
B.1.106

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

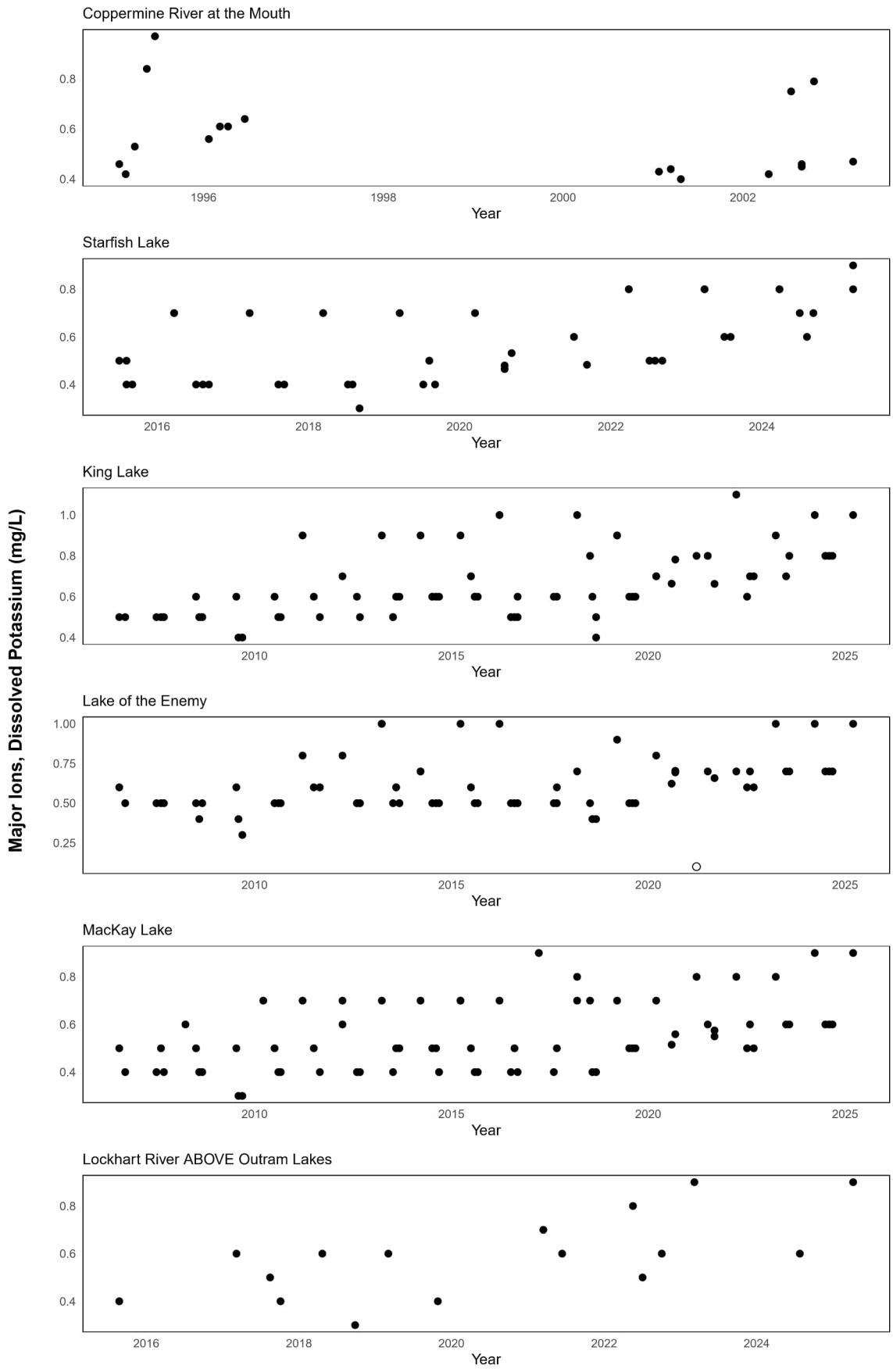
FIGURE NO:
B.1.107

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

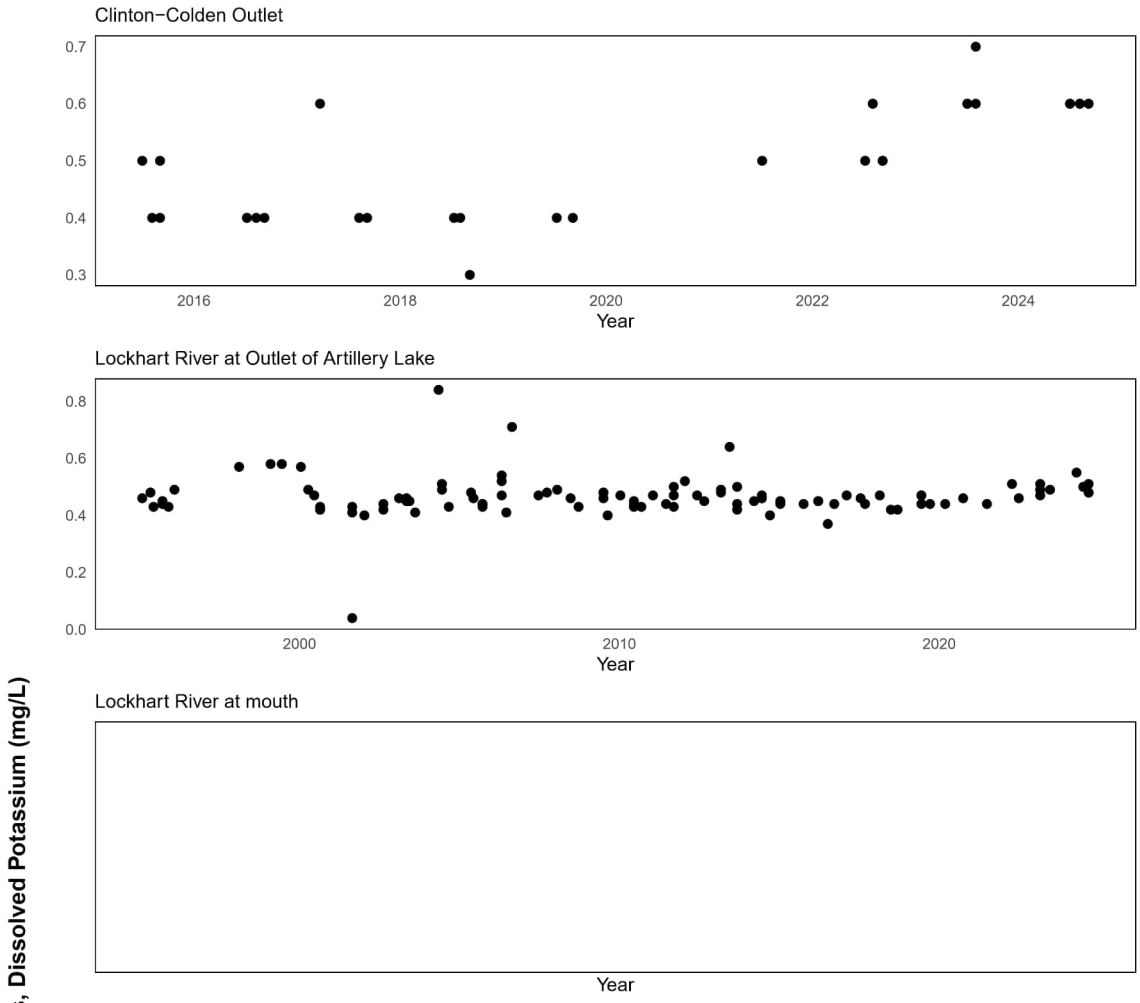
SLR

FIGURE NO: **B.1.108**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

SLR

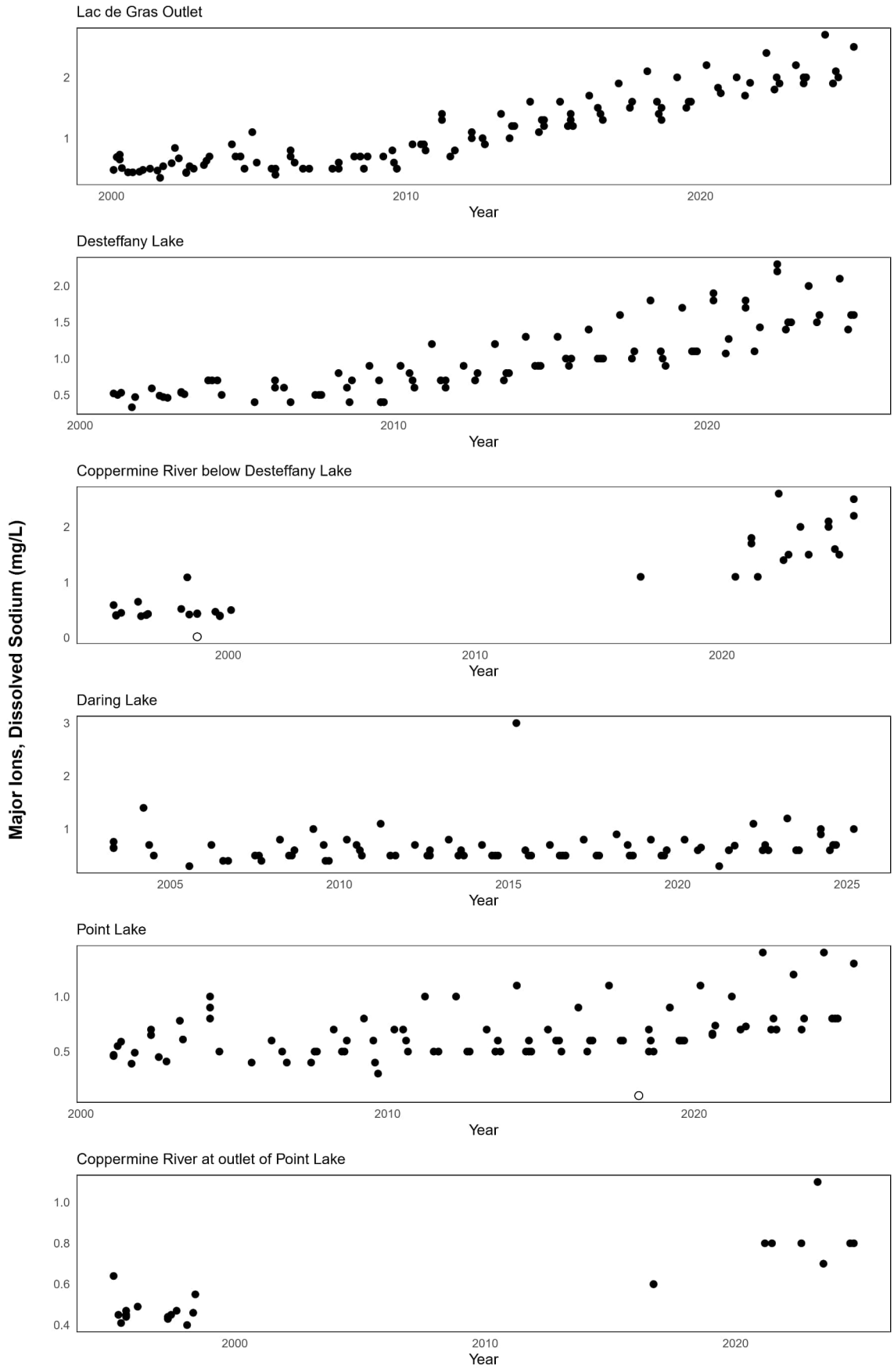
FIGURE NO:

B.1.109

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

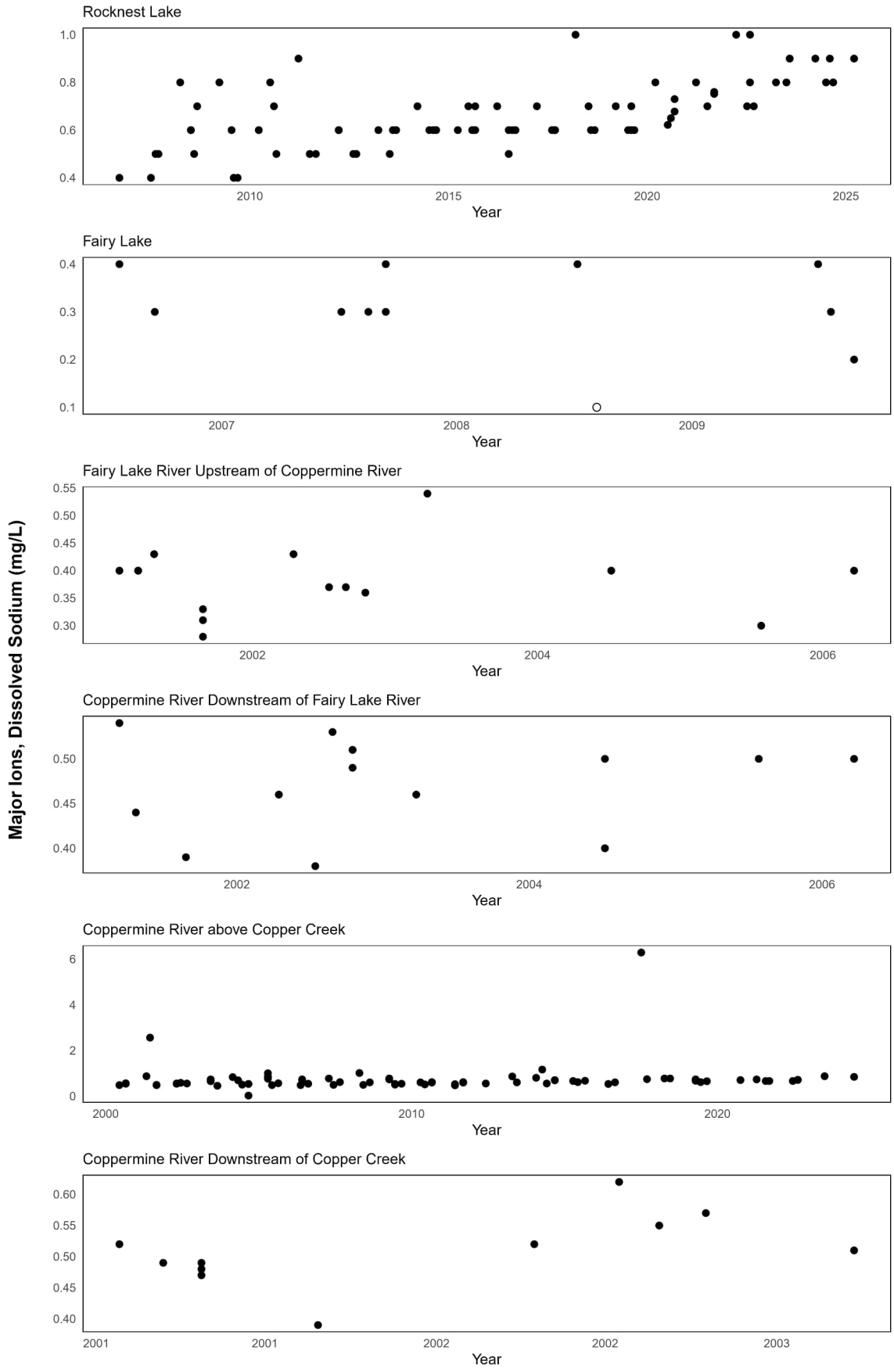
FIGURE NO:
B.1.110

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

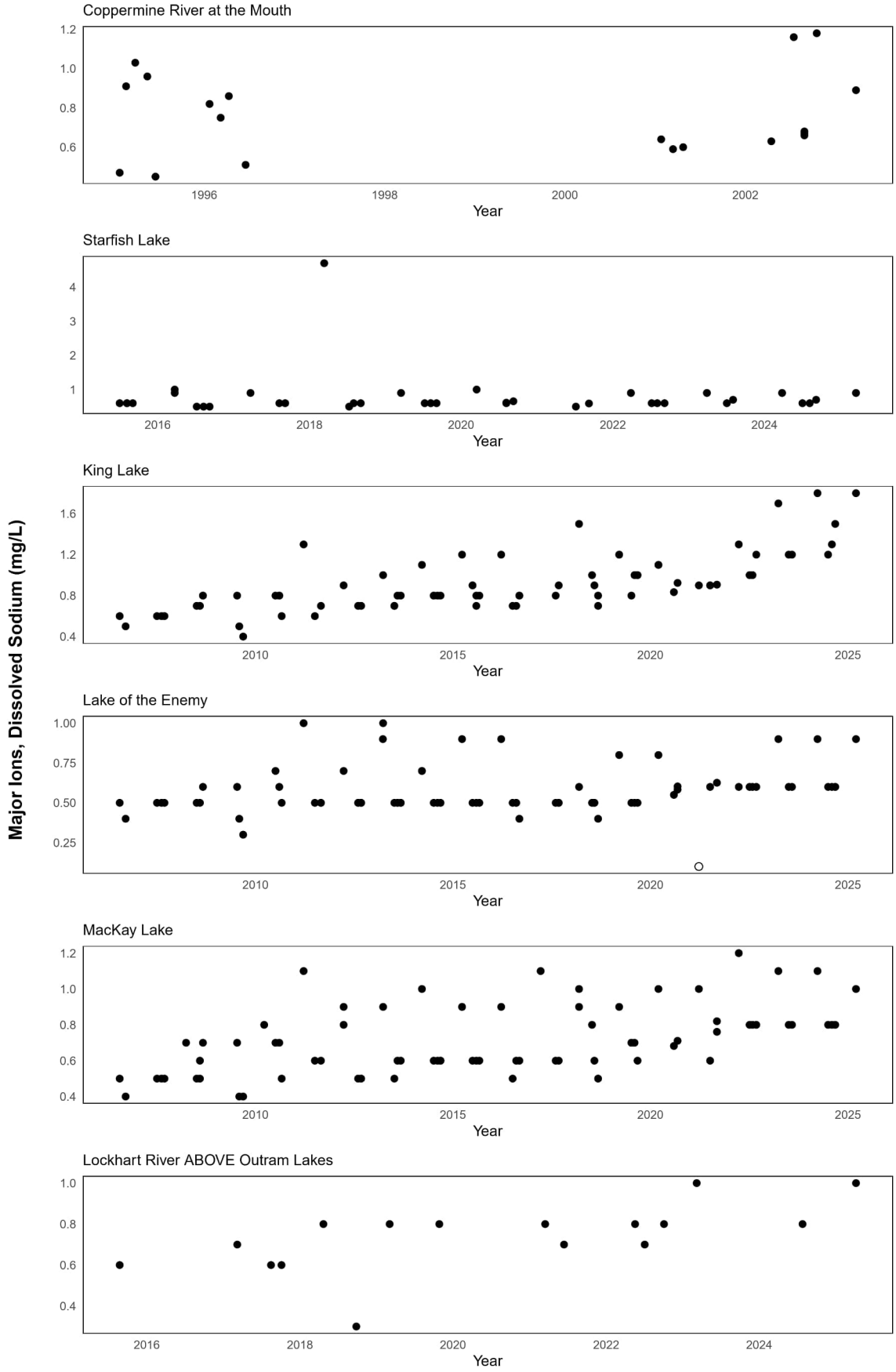
FIGURE NO:
B.1.111

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_potrait

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND
- ● Detect
- ○ Non-detect

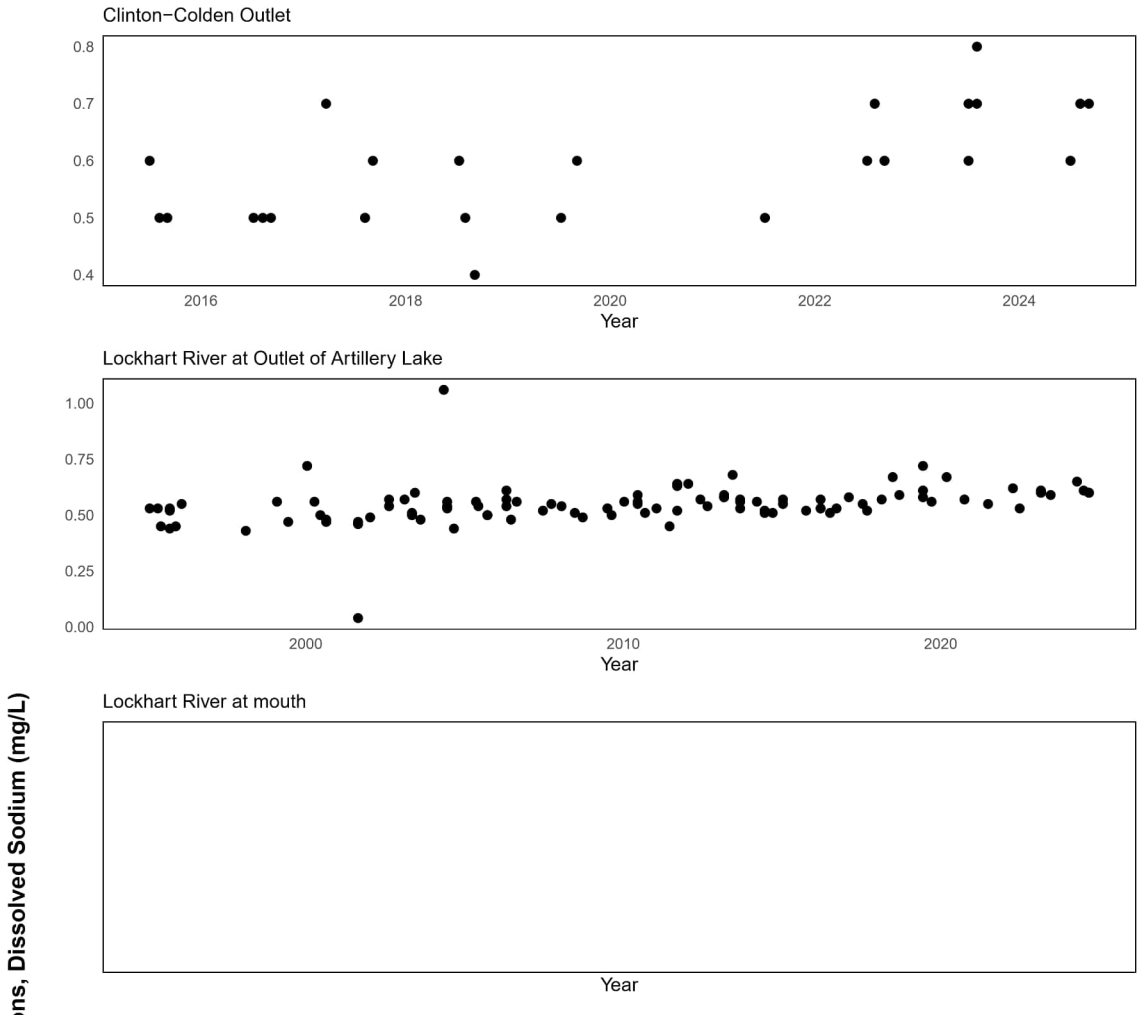
SLR

FIGURE NO: **B.1.112**

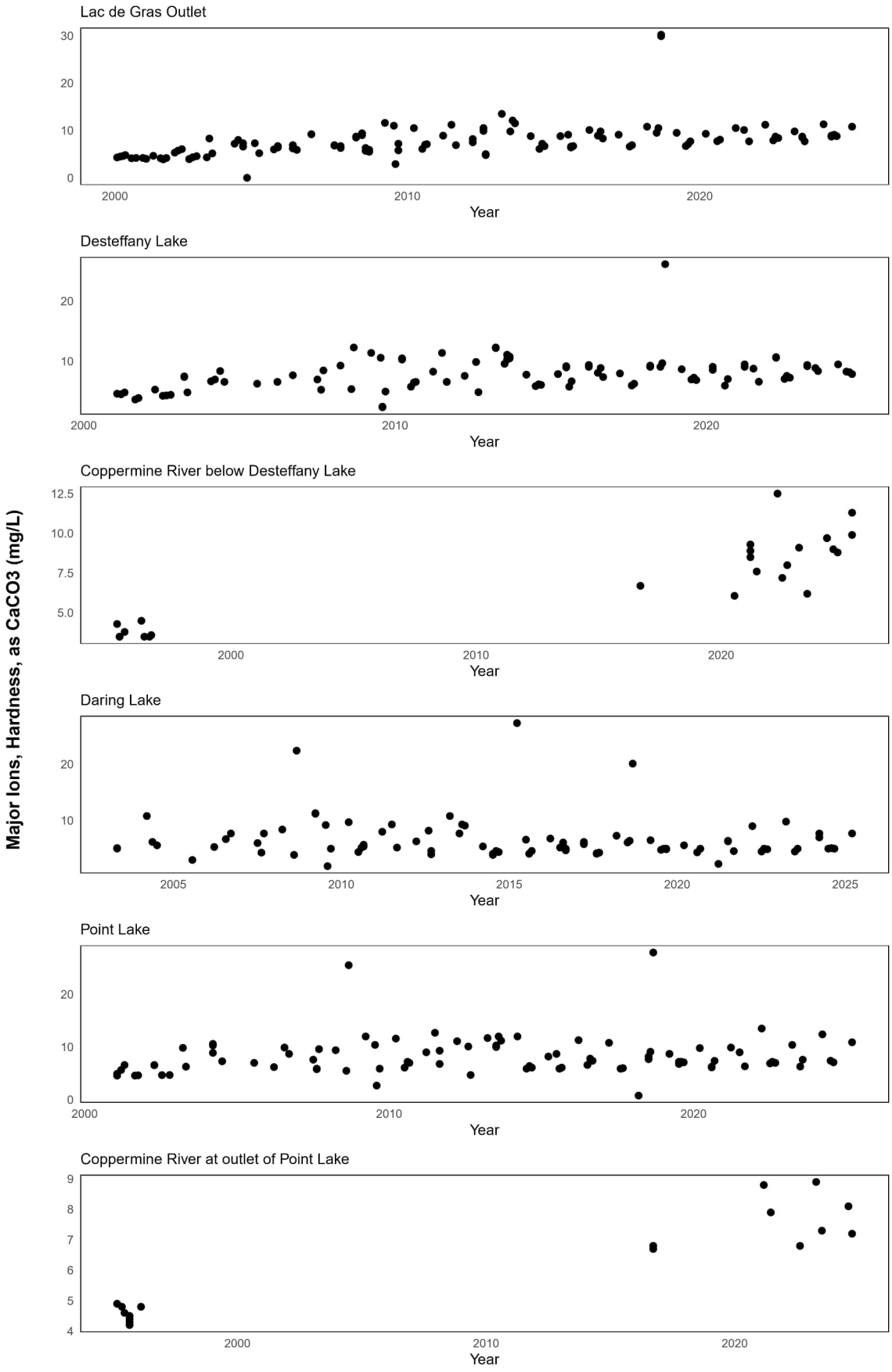
DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- Detect
- Non-detect

SLR

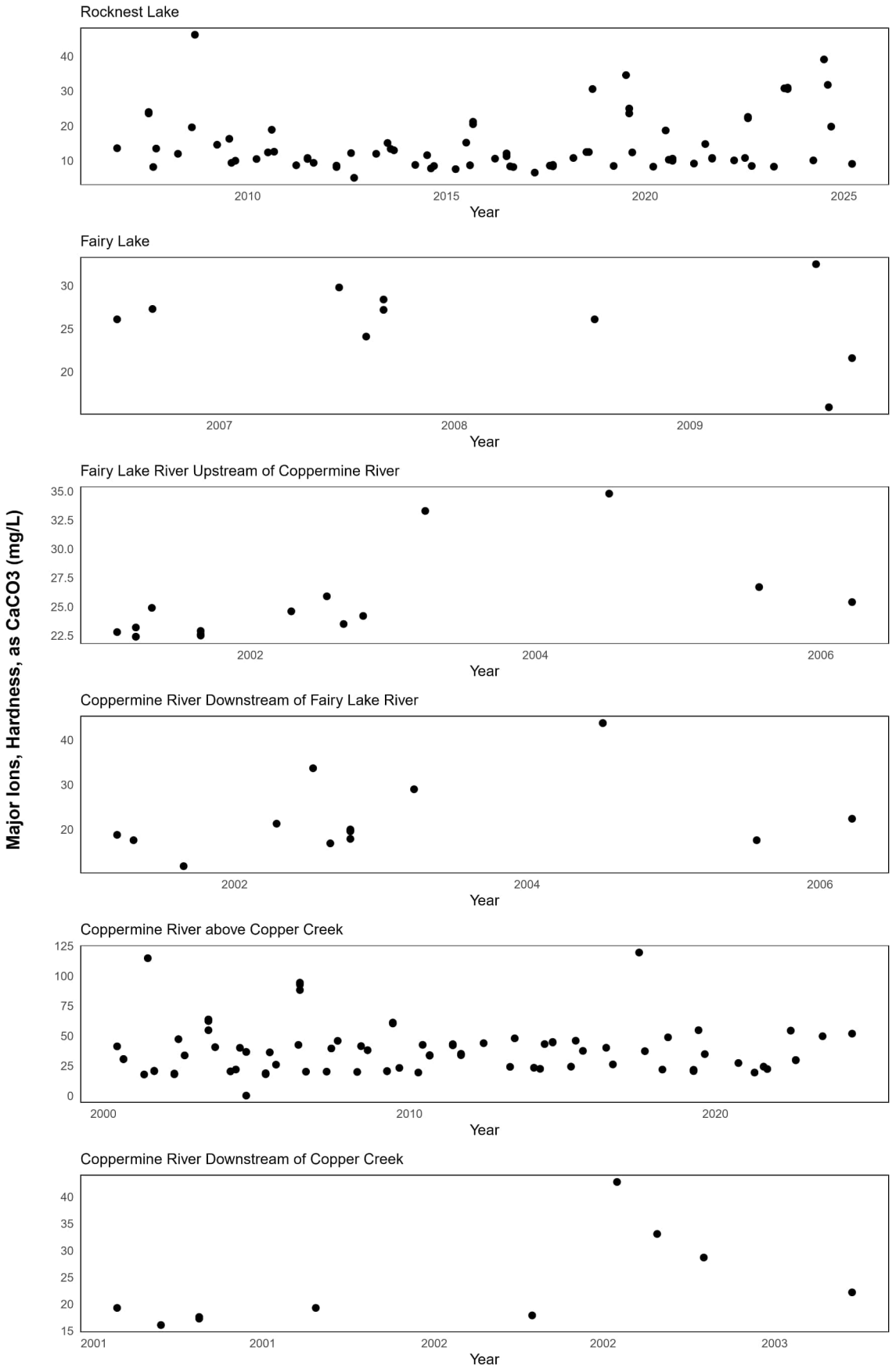
FIGURE NO:
B.1.114

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND: ● Detect ○ Non-detect

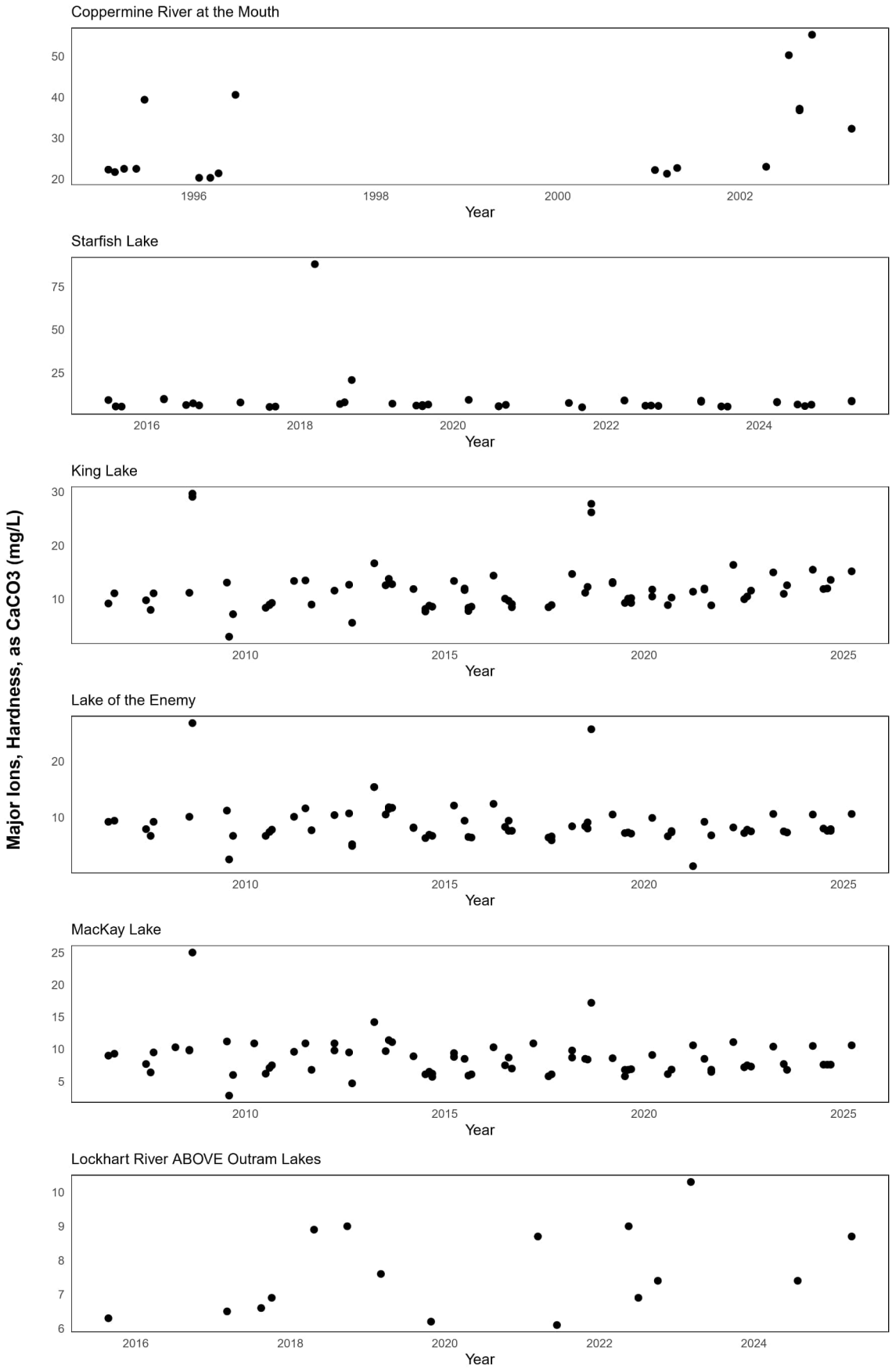
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FIGURE NO: **B.1.115**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

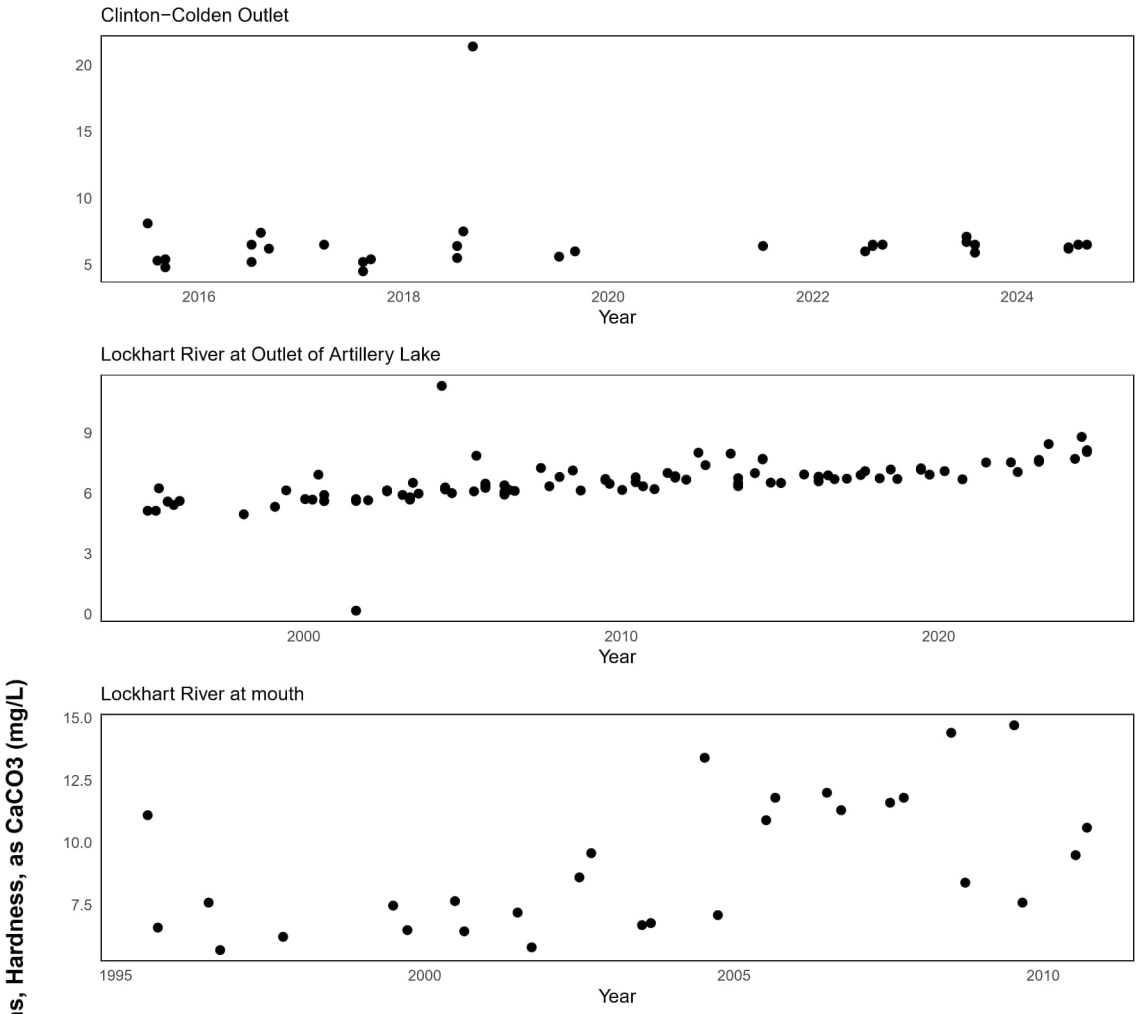
FIGURE NO:
B.1.116

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

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CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

FIGURE NO:
B.1.117

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait

Lac de Gras Outlet

Year

Desteffany Lake

Year

Coppermine River below Desteffany Lake

Year

Major Ions, Silica (mg/L)

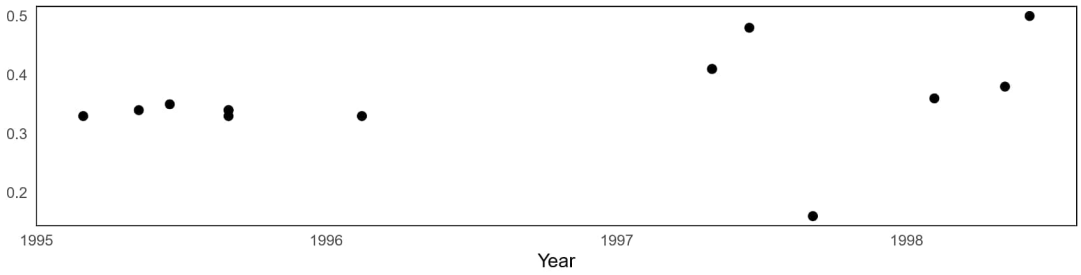
Daring Lake

Year

Point Lake

Year

Coppermine River at outlet of Point Lake



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

● **Detect**

○ **Non-detect**

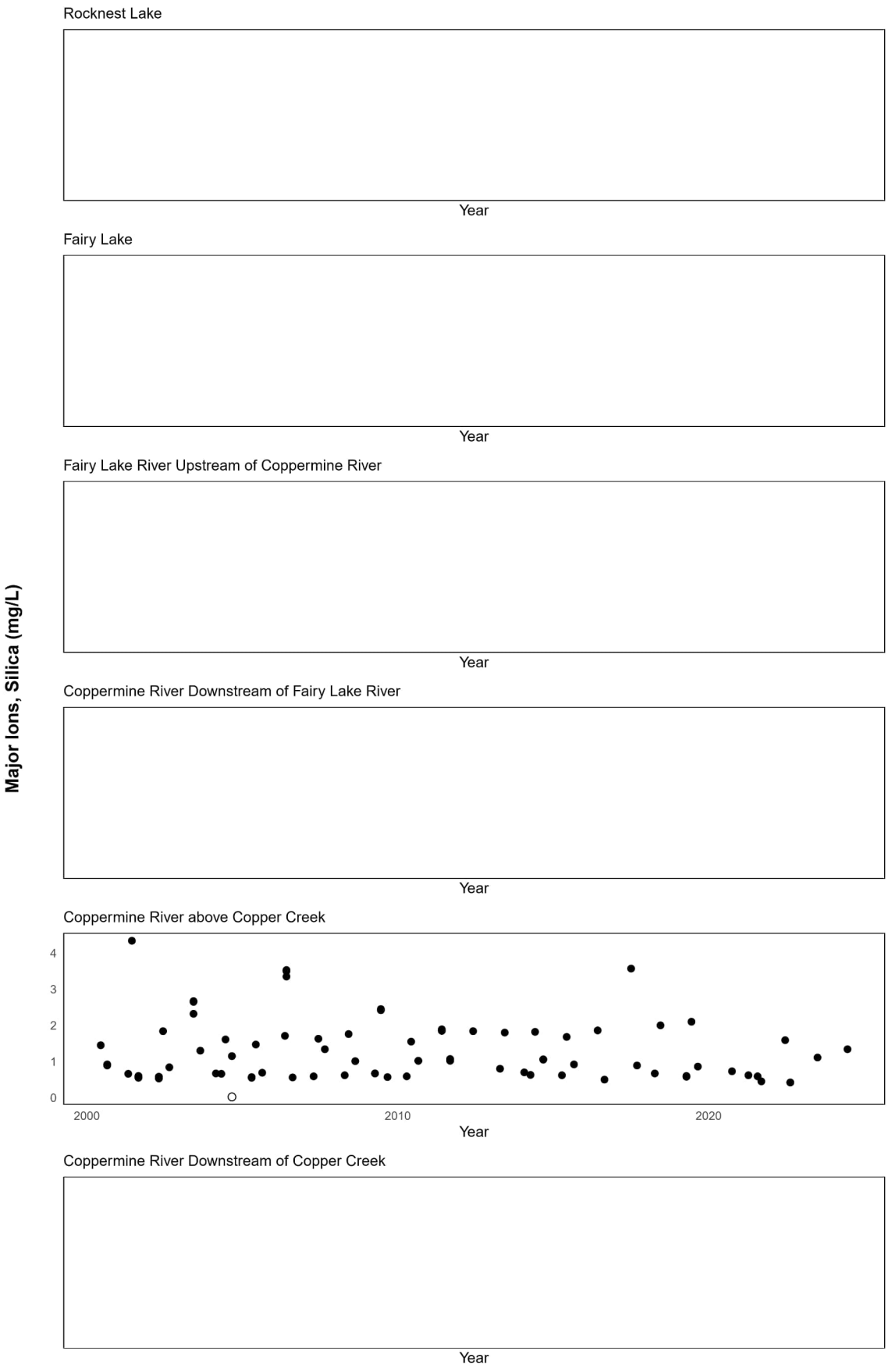
SLR

FIGURE NO: **B.1.118**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B1_Layout_v2_potrait



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

LEGEND

- ● **Detect**
- ○ **Non-detect**

SLR

FIGURE NO: **B.1.119**

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

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Coppermine River at the Mouth

Year

Starfish Lake

Year

King Lake

Year

Major Ions, Silica (mg/L)

Lake of the Enemy

Year

MacKay Lake

Year

Lockhart River ABOVE Outram Lakes

Year

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
- ● **Detect**
- ○ **Non-detect**

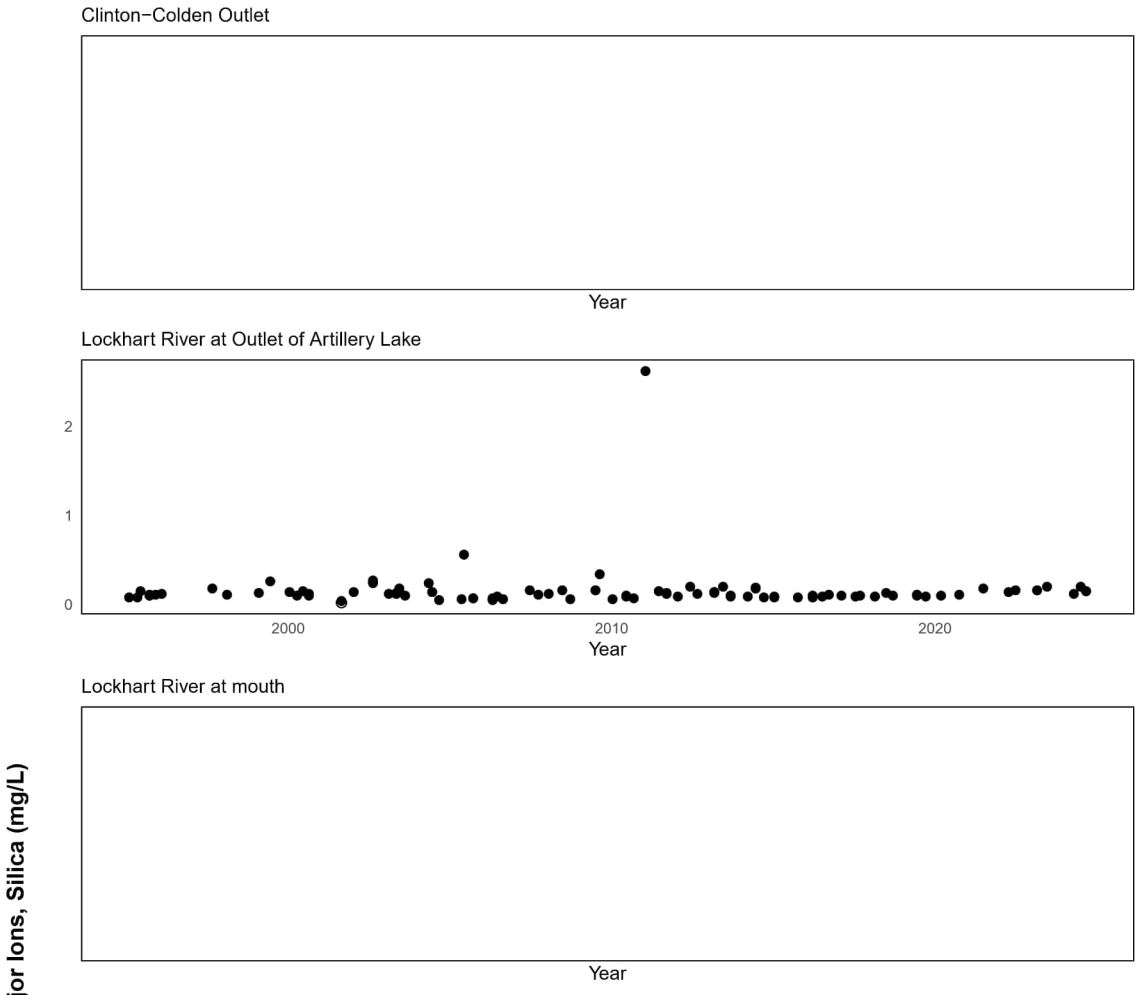
SLR

FIGURE NO:
B.1.120

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

Last Saved: Wednesday, February 11, 2026 7:13 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || B1_Layout_v2_portrait

CLIENT
Government of Northwest Territories, Canada

PROJECT
Water Quality and Quantity Status and Trends

TITLE
Water Quality Data

LEGEND
● **Detect**
○ **Non-detect**

SLR

FIGURE NO:
B.1.121

DATE: February 11, 2026

PROJECT NO: 205.030233.00001

B.2 Coppermine River Summary Statistics

B.3 Lockhart River Summary Statistics

Table B.2.1-1 Coppermine River Above Copper Creek (COR04) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	15	0	0	5	5	6.34	7.45	29.747	9.7	14.9	107	18.7	121	42.471	10.966	1.4
Dissolved Metals, Antimony (µg/L)	15	0	0	0.013	0.013	0.0144	0.031	0.102	0.091	0.169	0.192	0.23	0.23	0.077	0.020	0.8
Dissolved Metals, Arsenic (µg/L)	18	0	0	0.1	0.1	0.135	0.1525	0.186	0.17	0.19	0.293	0.2	0.31	0.060	0.014	0.3
Dissolved Metals, Barium (µg/L)	15	0	0	8.43	8.43	8.936	9.385	9.815	9.62	10.45	10.66	10.9	10.9	0.740	0.191	0.1
Dissolved Metals, Beryllium (µg/L)	15	3	20	0.001	0.001	0.001	0.001	0.002	0.002	0.0025	0.005	0.003	0.005	0.001	0.000	0.6
Dissolved Metals, Bismuth (µg/L)	15	4	27	0.001	0.001	0.001	0.001	0.003	0.002	0.005	0.0066	0.007	0.007	0.002	0.001	0.8
Dissolved Metals, Boron (µg/L)	15	0	0	1.2	1.2	1.28	1.4	1.707	1.5	1.7	2.3	2.0	3.4	0.570	0.147	0.3
Dissolved Metals, Cadmium (µg/L)	15	0	0	0.004	0.004	0.0054	0.022	0.095	0.117	0.166	0.1908	0.221	0.221	0.080	0.021	0.8
Dissolved Metals, Cerium (µg/L)	15	0	0	0.016	0.016	0.0204	0.0225	0.071	0.025	0.0425	0.2472	0.044	0.262	0.094	0.024	1.3
Dissolved Metals, Cesium (µg/L)	15	2	13	0.002	0.002	0.002	0.0025	0.007	0.003	0.005	0.024	0.005	0.026	0.009	0.002	1.2
Dissolved Metals, Chromium (µg/L)	15	0	0	0.07	0.07	0.084	0.13	0.318	0.16	0.5405	0.57	0.74	0.74	0.234	0.060	0.7
Dissolved Metals, Cobalt (µg/L)	15	0	0	0.009	0.009	0.0104	0.0135	0.038	0.025	0.039	0.1032	0.05	0.106	0.036	0.009	0.9
Dissolved Metals, Copper (µg/L)	15	0	0	0.8	0.8	0.834	0.905	1.776	1.41	2.59	2.994	3.26	3.26	0.942	0.243	0.5
Dissolved Metals, Gallium (µg/L)	15	0	0	0.001	0.001	0.0014	0.003	0.012	0.003	0.0055	0.0422	0.006	0.052	0.018	0.005	1.5
Dissolved Metals, Iron (µg/L)	15	0	0	7.8	7.8	8.72	9.55	46.733	17.2	35.2	161.8	40	180	63.391	16.368	1.4
Dissolved Metals, Lanthanum (µg/L)	15	0	0	0.019	0.019	0.022	0.0235	0.050	0.026	0.038	0.1404	0.041	0.147	0.048	0.012	1.0
Dissolved Metals, Lead (µg/L)	15	0	0	0.008	0.008	0.016	0.018	1.041	0.059	0.4365	0.5148	0.552	13.1	3.342	0.863	3.2
Dissolved Metals, Lithium (µg/L)	15	0	0	0.6	0.6	0.652	0.7	0.793	0.74	0.86	1	1.1	1.1	0.146	0.038	0.2
Dissolved Metals, Manganese (µg/L)	15	0	0	0.44	0.44	0.464	0.555	1.383	0.96	1.68	3.188	3.2	3.4	1.060	0.274	0.8
Dissolved Metals, Molybdenum (µg/L)	15	0	0	0.045	0.045	0.05	0.0515	0.059	0.054	0.0675	0.0728	0.076	0.076	0.010	0.003	0.2
Dissolved Metals, Nickel (µg/L)	15	0	0	0.31	0.31	0.354	0.365	0.638	0.53	0.685	0.764	0.78	2.31	0.489	0.126	0.8
Dissolved Metals, Niobium (µg/L)	15	7	47	0.001	0.001	0.001	0.001	0.004	0.002	0.002	0.013	0.002	0.013	0.005	0.001	1.3
Dissolved Metals, Platinum (µg/L)	15	14	93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.0
Dissolved Metals, Rubidium (µg/L)	15	0	0	0.892	0.892	0.977	1.02	1.144	1.11	1.25	1.396	1.44	1.44	0.169	0.044	0.1
Dissolved Metals, Selenium (µg/L)	18	5	28	0.01	0.01	0.01	0.0125	0.040	0.03	0.05	0.1	0.1	0.1	0.032	0.008	0.8
Dissolved Metals, Silver (µg/L)	15	6	40	0.001	0.001	0.001	0.001	0.015	0.001	0.008	0.0102	0.011	0.18	0.046	0.012	3.0
Dissolved Metals, Strontium (µg/L)	15	0	0	7.79	7.79	7.834	7.97	8.391	8.52	8.69	8.78	8.97	8.97	0.398	0.103	0.0
Dissolved Metals, Thallium (µg/L)	15	4	27	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.003	0.003	0.004	0.001	0.000	0.6
Dissolved Metals, Tin (µg/L)	15	2	13	0.005	0.005	0.0062	0.008	0.029	0.017	0.041	0.0452	0.046	0.106	0.027	0.007	0.9
Dissolved Metals, Titanium (µg/L)	5	0	0	0.1	0.1	0.116	0.14	0.170	0.16	0.17	0.236	0.17	0.28	0.067	0.030	0.4
Dissolved Metals, Tungsten (µg/L)	15	1	7	0.001	0.001	0.0014	0.002	0.005	0.005	0.007	0.0106	0.012	0.012	0.004	0.001	0.7
Dissolved Metals, Uranium (µg/L)	15	0	0	0.0576	0.0576	0.05816	0.06065	0.069	0.0674	0.0703	0.0893	0.0704	0.0911	0.011	0.003	0.2
Dissolved Metals, Vanadium (µg/L)	15	0	0	0.03	0.03	0.037	0.0485	0.124	0.07	0.1225	0.3456	0.129	0.366	0.121	0.031	1.0
Dissolved Metals, Yttrium (µg/L)	15	0	0	0.016	0.016	0.0192	0.021	0.032	0.022	0.029	0.0682	0.033	0.074	0.020	0.005	0.6
Dissolved Metals, Zinc (µg/L)	15	0	0	0.4	0.4	0.7	1.25	5.793	4.7	8.38	10.8	11.6	20.8	5.528	1.427	1.0
Field Measurements, Specific Conductivity (µS/cm)	7	0	0	36	36	38.4	42.5	52.714	47	50.5	70.6	51	100	21.523	8.135	0.4
Field Measurements, pH (unitless)	7	0	0	6.74	6.74	6.956	7.15	7.394	7.24	7.625	7.912	8.23	8.23	0.482	0.182	0.1
Major Ions, Dissolved Calcium (mg/L)	23	0	0	4.26	4.26	4.48	4.6	4.940	4.83	5.15	5.8	5.91	5.99	0.486	0.101	0.1
Major Ions, Dissolved Chloride (mg/L)	23	0	0	0.36	0.36	0.392	0.425	0.583	0.49	0.645	0.852	0.88	1.33	0.243	0.051	0.4
Major Ions, Dissolved Fluoride (mg/L)	23	0	0	0.02	0.03	0.02	0.03	0.032	0.03	0.03	0.048	0.03	0.06	0.011	0.002	0.4
Major Ions, Dissolved Magnesium (mg/L)	23	0	0	1.73	1.73	1.774	1.87	2.008	2.05	2.115	2.188	2.33	2.33	0.169	0.035	0.1
Major Ions, Dissolved Potassium (mg/L)	23	0	0	0.41	0.41	0.432	0.47	0.661	0.61	0.785	1.014	1.04	1.47	0.269	0.056	0.4
Major Ions, Dissolved Sodium (mg/L)	23	0	0	0.54	0.54	0.56	0.68	0.760	0.74	0.815	0.972	1.01	1.16	0.150	0.031	0.2
Major Ions, Dissolved Sulphate (mg/L)	23	0	0	0.8	1.92	1.184	2.02	2.057	2.14	2.405	2.47	2.59	2.59	0.488	0.102	0.2
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	22	7	32	0	0	0	0	1.453	0.4745	2.2575	3.2058	3.208	6.497	1.932	0.412	1.3
Major Ions, Silica (mg/L)	23	0	0	0.53	0.53	0.562	0.58	0.622	0.62	0.67	0.67	0.8	0.8	0.061	0.013	0.1
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	23	0	0	16.2	16.2	17.32	18.15	19.409	19.8	20.4	20.88	22.8	22.8	1.638	0.342	0.1
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	22	0	0	17.9	17.9	18.4	19.4	20.7	20.5	21.8	23.3	24.3	24.3	1.856	0.396	0.1
Nutrients, Dissolved Ammonia, as N (mg/L)	23	9	39	0.005	0.005	0.005	0.005	0.016	0.01	0.016	0.0266	0.027	0.09	0.019	0.004	1.2
Nutrients, Dissolved Nitrogen (mg/L)	14	0	0	0.16	0.16	0.183	0.205	0.366	0.27	0.435	0.691	0.46	0.97	0.242	0.065	0.7

Table B.2.1-1 Coppermine River Above Copper Creek (COR04) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Organic Carbon (mg/L)	23	0	0	1.7	1.7	2.4	2.6	3.278	3.3	3.85	4.3	4.9	4.9	0.869	0.181	0.3
Nutrients, Nitrate, as N (mg/L)	15	0	0	0.03	0.05	0.054	0.06	0.066	0.07	0.07	0.08	0.08	0.09	0.014	0.004	0.2
Nutrients, Nitrate/Nitrite, as N (mg/L)	19	1	5	0.03	0.03	0.058	0.06	0.174	0.07	0.08	0.114	0.11	2	0.443	0.102	2.5
Nutrients, Nitrite, as N (mg/L)	15	13	87	0.01	0.01	0.01	0.01	0.015	0.01	0.01	0.022	0.01	0.06	0.014	0.004	0.9
Nutrients, Particulate Nitrogen (mg/L)	23	3	13	0.002	0.002	0.0024	0.0105	0.054	0.041	0.064	0.089	0.092	0.302	0.065	0.014	1.2
Nutrients, Particulate Organic Carbon (mg/L)	23	0	0	0.065	0.065	0.0962	0.289	0.573	0.466	0.742	1.1172	1.16	1.83	0.458	0.096	0.8
Nutrients, Total Dissolved Nitrogen (mg/L)	9	0	0	0.26	0.26	0.3	0.348	0.411	0.362	0.468	0.5858	0.625	0.625	0.122	0.041	0.3
Nutrients, Total Dissolved Phosphorus (mg/L)	23	7	30	0.002	0.002	0.002	0.0025	0.015	0.01	0.013	0.0466	0.021	0.062	0.018	0.004	1.2
Nutrients, Total Nitrogen (mg/L)	15	0	0	0.17	0.17	0.2	0.215	0.376	0.3	0.43	0.69	0.51	0.94	0.230	0.059	0.6
Nutrients, Total Phosphorus (mg/L)	23	4	17	0.002	0.002	0.0022	0.0065	0.025	0.01	0.03	0.0714	0.065	0.082	0.026	0.005	1.0
Physical Parameters, Specific Conductivity (µS/cm)	22	0	0	30.1	40.8	34.68	42.025	43.427	45.25	46.45	47.49	47.7	54.2	5.675	1.210	0.1
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	22	0	0	20.227	20.227	21.1834	22.495	23.752	23.61	24.4125	25.887	26.4	32.6	2.576	0.549	0.1
Physical Parameters, Total Suspended Solids (mg/L)	23	10	43	3	3	3	3	4.609	4	6	6	10	10	1.924	0.401	0.4
Physical Parameters, Turbidity (NTU)	23	0	0	0.31	0.31	0.46	0.77	2.545	1.5	3.995	6.494	8.73	8.73	2.516	0.525	1.0
Physical Parameters, pH (unitless)	22	0	0	6.41	7.15	6.537	7.1625	7.134	7.235	7.29	7.329	7.4	7.4	0.289	0.062	0.0
Total Metals, Aluminum (µg/L)	23	0	0	9.3	9.3	12.82	15.5	61.543	23.4	92.65	189	205	205	69.264	14.442	1.1
Total Metals, Antimony (µg/L)	23	0	0	0.012	0.012	0.0174	0.0295	0.101	0.085	0.156	0.2294	0.258	0.385	0.096	0.020	0.9
Total Metals, Arsenic (µg/L)	20	0	0	0.15	0.15	0.16	0.16	0.216	0.21	0.26	0.291	0.31	0.31	0.056	0.012	0.3
Total Metals, Barium (µg/L)	23	0	0	8.31	8.31	8.632	9.335	10.155	9.87	11.15	11.5	12.7	12.7	1.235	0.258	0.1
Total Metals, Beryllium (µg/L)	23	6	26	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.0062	0.003	0.007	0.002	0.000	0.8
Total Metals, Bismuth (µg/L)	23	4	17	0.001	0.001	0.001	0.002	0.006	0.003	0.01	0.011	0.012	0.012	0.004	0.001	0.7
Total Metals, Boron (µg/L)	23	3	13	0.1	0.6	0.2	1.1	1.409	1.4	1.75	1.98	2	3.5	0.821	0.171	0.6
Total Metals, Cadmium (µg/L)	23	0	0	0.006	0.006	0.0116	0.041	0.188	0.109	0.1955	0.537	0.207	0.59	0.196	0.041	1.0
Total Metals, Cerium (µg/L)	22	0	0	0.025	0.025	0.037	0.03875	0.138	0.0645	0.22875	0.4023	0.431	0.431	0.142	0.030	1.0
Total Metals, Cesium (µg/L)	23	1	4	0.002	0.002	0.003	0.003	0.012	0.006	0.016	0.0372	0.022	0.042	0.013	0.003	1.1
Total Metals, Chromium (µg/L)	23	0	0	0.1	0.1	0.14	0.2465	0.700	0.39	0.9335	1.288	1.35	3.04	0.701	0.146	1.0
Total Metals, Cobalt (µg/L)	23	0	0	0.014	0.014	0.016	0.0185	0.060	0.042	0.089	0.1576	0.173	0.173	0.055	0.012	0.9
Total Metals, Copper (µg/L)	23	0	0	0.73	0.73	0.81	1.165	2.500	2.1	3.54	4.902	6.9	6.9	1.745	0.364	0.7
Total Metals, Gallium (µg/L)	23	0	0	0.004	0.004	0.004	0.005	0.022	0.011	0.028	0.0718	0.051	0.08	0.026	0.005	1.2
Total Metals, Iron (µg/L)	23	0	0	14.2	14.2	18.76	21.45	92.839	40.1	139.8	277.8	300	300	100.973	21.054	1.1
Total Metals, Lanthanum (µg/L)	23	0	0	0.025	0.025	0.0324	0.035	0.083	0.051	0.1085	0.2114	0.157	0.233	0.069	0.014	0.8
Total Metals, Lead (µg/L)	23	0	0	0.021	0.021	0.035	0.062	9.316	0.336	1.344	9.024	1.92	168	35.047	7.308	3.8
Total Metals, Lithium (µg/L)	23	0	0	0.59	0.59	0.64	0.7	0.828	0.79	0.9	1.146	1.2	1.2	0.178	0.037	0.2
Total Metals, Manganese (µg/L)	23	0	0	0.74	0.74	0.816	0.92	2.634	1.9	4.74	5.41	6.09	6.09	2.003	0.418	0.8
Total Metals, Molybdenum (µg/L)	23	0	0	0.037	0.037	0.04	0.0465	0.059	0.053	0.0665	0.0814	0.084	0.113	0.019	0.004	0.3
Total Metals, Nickel (µg/L)	23	0	0	0.28	0.28	0.384	0.47	0.677	0.63	0.895	1.046	1.21	1.21	0.267	0.056	0.4
Total Metals, Niobium (µg/L)	23	7	30	0.001	0.001	0.0012	0.002	0.007	0.003	0.008	0.022	0.014	0.027	0.008	0.002	1.2
Total Metals, Platinum (µg/L)	23	20	87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.005	0.001	0.000	0.7
Total Metals, Rubidium (µg/L)	23	0	0	0.887	0.887	0.9522	1.0035	1.199	1.17	1.395	1.558	1.64	1.64	0.231	0.048	0.2
Total Metals, Selenium (µg/L)	20	9	45	0.01	0.01	0.01	0.0175	0.034	0.045	0.05	0.05	0.06	0.06	0.019	0.004	0.6
Total Metals, Silver (µg/L)	23	11	48	0.001	0.001	0.001	0.001	0.012	0.005	0.0095	0.0148	0.017	0.16	0.033	0.007	2.7
Total Metals, Strontium (µg/L)	23	0	0	7.07	7.07	7.21	7.445	8.122	8.36	8.63	8.734	9	9	0.641	0.134	0.1
Total Metals, Thallium (µg/L)	23	7	30	0.001	0.001	0.001	0.001	0.002	0.001	0.0025	0.004	0.004	0.006	0.002	0.000	0.9
Total Metals, Tin (µg/L)	23	1	4	0.005	0.005	0.0072	0.011	0.056	0.045	0.0615	0.1148	0.12	0.271	0.068	0.014	1.2
Total Metals, Titanium (µg/L)	5	0	0	0.38	0.38	0.384	0.39	0.642	0.39	0.53	1.124	0.53	1.52	0.495	0.221	0.8
Total Metals, Tungsten (µg/L)	23	2	9	0.001	0.001	0.002	0.002	0.012	0.006	0.01	0.0202	0.022	0.089	0.019	0.004	1.6
Total Metals, Uranium (µg/L)	23	0	0	0.0535	0.057	0.0596	0.0682	0.073	0.0726	0.07605	0.09336	0.0836	0.0993	0.012	0.002	0.2
Total Metals, Vanadium (µg/L)	23	0	0	0.049	0.049	0.05	0.07	0.182	0.094	0.25	0.5098	0.333	0.568	0.173	0.036	1.0
Total Metals, Zinc (µg/L)	23	0	0	0.4	0.4	0.78	1.935	8.460	6.13	12.45	18.28	23.5	38	9.269	1.933	1.1

Table B.2.1-2 Coppermine River at Outlet of Point Lake (COR02) -Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	2	0	0	12.5	12.5	12.59	12.725	12.95	12.95	13.175	13.31	13.4	13.4	0.636	0.450	0.049
Dissolved Metals, Antimony (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Arsenic (µg/L)	28	12	43	0.1	0.1	0.1	0.1	0.553571	0.15	0.5	0.5	0.5	8	1.492	0.282	2.694
Dissolved Metals, Barium (µg/L)	2	0	0	3.2	3.2	3.31	3.475	3.75	3.75	4.025	4.19	4.3	4.3	0.778	0.550	0.207
Dissolved Metals, Beryllium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Bismuth (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.000	0.000	0.000
Dissolved Metals, Boron (µg/L)	18	9	50	1.8	20	14.66	20	20.22222	20	20	30	20	40	8.565	2.019	0.424
Dissolved Metals, Cadmium (µg/L)	2	2	100	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.000	0.000	0.000
Dissolved Metals, Cesium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Chromium (µg/L)	2	1	50	0.1	0.1	0.11	0.125	0.15	0.15	0.175	0.19	0.2	0.2	0.071	0.050	0.471
Dissolved Metals, Cobalt (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Copper (µg/L)	3	1	33	0.8	0.8	0.84	0.9	0.966667	1	1.05	1.08	1.1	1.1	0.153	0.088	0.158
Dissolved Metals, Iron (µg/L)	3	2	67	1	1	1.8	3	8	5	11.5	15.4	18	18	8.888	5.132	1.111
Dissolved Metals, Lead (µg/L)	3	2	67	0.1	0.1	0.1	0.1	1.4	0.1	2.05	3.22	4	4	2.252	1.300	1.608
Dissolved Metals, Lithium (µg/L)	2	0	0	1.1	1.1	1.12	1.15	1.2	1.2	1.25	1.28	1.3	1.3	0.141	0.100	0.118
Dissolved Metals, Manganese (µg/L)	3	1	33	0.7	0.7	0.82	1	4	1.3	5.65	8.26	10	10	5.205	3.005	1.301
Dissolved Metals, Mercury (µg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Nickel (µg/L)	2	0	0	1	1	1	1	1	1	1	1	1	1	0.000	0.000	0.000
Dissolved Metals, Rubidium (µg/L)	2	0	0	1.7	1.7	1.74	1.8	1.9	1.9	2	2.06	2.1	2.1	0.283	0.200	0.149
Dissolved Metals, Selenium (µg/L)	27	22	81	0	0	0.1	0.1	0.255556	0.1	0.5	0.5	0.7	0.7	0.204	0.039	0.800
Dissolved Metals, Silver (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Strontium (µg/L)	2	0	0	8.8	8.8	8.94	9.15	9.5	9.5	9.85	10.06	10.2	10.2	0.990	0.700	0.104
Dissolved Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Tin (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Titanium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Uranium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Vanadium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Zinc (µg/L)	3	0	0	1	1	1.3	1.75	2.166667	2.5	2.75	2.9	3	3	1.041	0.601	0.480
Field Measurements, Specific Conductivity (µS/cm)	11	0	0	8.8	8.8	10	10	11.46364	10	13	14.3	16	16	2.310	0.697	0.202
Field Measurements, Turbidity (JTU)	1	0	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	----	----	----
Field Measurements, pH (unitless)	10	0	0	6.3	6.3	6.372	6.75	7.197	7.225	7.6325	7.779	8.4	8.4	0.652	0.206	0.091
Major Ions, Bicarbonate (calc'd) (mg/L)	24	0	0	2.4	2.4	3.7	3.85	4.479167	4.3	4.925	5.38	6.1	7.9	1.053	0.215	0.235
Major Ions, Carbonate (calc'd) (mg/L)	24	24	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	35	3	9	0.1	0.8	0.84	1.005	1.243143	1.1	1.3	1.76	1.7	4.2	0.673	0.114	0.541
Major Ions, Dissolved Chloride (mg/L)	35	2	6	0.1	0.1	0.254	0.3	0.407429	0.38	0.5	0.7	0.75	0.75	0.168	0.028	0.413
Major Ions, Dissolved Fluoride (mg/L)	33	9	27	0.01	0.01	0.02	0.02	0.045939	0.04	0.05	0.076	0.08	0.21	0.039	0.007	0.846
Major Ions, Dissolved Magnesium (mg/L)	29	2	7	0.1	0.4	0.416	0.48	0.534828	0.5	0.6	0.72	0.7	1.1	0.197	0.037	0.369
Major Ions, Dissolved Potassium (mg/L)	35	0	0	0.2	0.3	0.4	0.4	0.461714	0.46	0.5	0.568	0.6	0.8	0.111	0.019	0.240
Major Ions, Dissolved Sodium (mg/L)	35	1	3	0.1	0.4	0.4	0.475	0.530286	0.5	0.59	0.676	0.7	1.1	0.153	0.026	0.288
Major Ions, Dissolved Sulphate (mg/L)	35	3	9	0.3	1	1	1.4	1.776571	1.8	2.05	2.3	2.5	4.5	0.754	0.127	0.424
Major Ions, Hydroxide (calc'd) (mg/L)	17	17	100	0	0	0	0	0	0	0	0	0	0	0.000	0.000	
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	17	2	12	0	0	0.3	0.8	1.270588	1.1	1.6	2	2	4.5	1.020	0.247	0.803
Major Ions, Percent Sodium (calc'd) (%)	17	0	0	12.7	13.8	14.64	16.5	17.35882	17.1	19	19.68	20.8	20.8	2.162	0.524	0.125
Major Ions, Reactive Silica (mg/L)	25	2	8	0.1	0.1	0.12	0.2	0.27276	0.3	0.3	0.376	0.4	0.568	0.108	0.022	0.397
Major Ions, Silica (mg/L)	10	0	0	0.29	0.31	0.308	0.32	0.327	0.33	0.3375	0.342	0.36	0.36	0.019	0.006	0.058
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	35	0	0	1.8	1.8	2.48	3	4.757429	3.5	4.14	6.18	5.7	38.4	6.040	1.021	1.270
Major Ions, Total Calcium (mg/L)	4	0	0	1	1	1.003	1.0075	1.0275	1.025	1.045	1.054	1.06	1.06	0.028	0.014	0.027

Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	32	1	3	0.5	3.7	3.744	4.6	4.935313	4.9	5.35	7.386	6	8.9	1.869	0.330	0.379
Major Ions, Total Magnesium (mg/L)	4	0	0	0.44	0.44	0.443	0.4475	0.465	0.465	0.4825	0.487	0.49	0.49	0.024	0.012	0.051
Major Ions, Total Potassium (mg/L)	4	0	0	0.33	0.33	0.345	0.3675	0.3875	0.385	0.405	0.432	0.45	0.45	0.049	0.025	0.127
Major Ions, Total Sodium (mg/L)	4	1	25	0.02	0.32	0.11	0.245	0.2625	0.335	0.3525	0.357	0.36	0.36	0.163	0.081	0.619
Microbiology, Chlorophyll a (µg/L)	2	2	100	2	2	2	2	2	2	2	2	2	2	0.000	0.000	0.000
Nutrients, Dissolved Ammonia, as N (mg/L)	4	0	0	0.006	0.006	0.0075	0.00975	0.05275	0.0125	0.0555	0.1302	0.014	0.18	0.085	0.042	1.609
Nutrients, Dissolved Inorganic Carbon (mg/L)	3	0	0	1.1	1.1	2.88	5.55	10.03333	10	14.5	17.2	19	19	8.950	5.167	0.892
Nutrients, Dissolved Inorganic Phosphate (mg/L)	1	1	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Dissolved Nitrogen (mg/L)	2	0	0	0.24	0.24	0.243	0.2475	0.255	0.255	0.2625	0.267	0.27	0.27	0.021	0.015	0.083
Nutrients, Dissolved Organic Carbon (mg/L)	28	0	0	1	1.8	1.94	2.1	2.323571	2.22	2.4	2.95	2.8	4	0.574	0.108	0.247
Nutrients, Dissolved o-Phosphate, as P (mg/L)	1	1	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Nitrate, as N (mg/L)	2	0	0	0.04	0.04	0.04502	0.05255	0.0651	0.0651	0.07765	0.08518	0.0902	0.0902	0.035	0.025	0.545
Nutrients, Nitrate/Nitrite, as N (mg/L)	29	0	0	0.04	0.05	0.05	0.06	0.076731	0.065	0.07	0.08924	0.08	0.34	0.054	0.010	0.699
Nutrients, Nitrite, as N (mg/L)	2	2	100	0.001	0.001	0.0019	0.00325	0.0055	0.0055	0.00775	0.0091	0.01	0.01	0.006	0.005	1.157
Nutrients, Particulate Nitrogen (mg/L)	26	6	23	0.008	0.008	0.01	0.01	0.019192	0.0115	0.029	0.035	0.05	0.06	0.014	0.003	0.725
Nutrients, Particulate Organic Carbon (mg/L)	26	0	0	0.03	0.03	0.0685	0.08	0.132731	0.103	0.16	0.232	0.26	0.32	0.075	0.015	0.567
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	24	18	75	0	0.004	0	0.004	0.0115	0.004	0.00625	0.022	0.008	0.096	0.022	0.005	1.937
Nutrients, Saturation Index (calc'd) (unitless)	17	0	0	-100000	-5.14	-5.062	-4.88	-5886.179	-4.26	-3.52	-3.322	-2.24	-2.24	24253	5882.114	-4.120
Nutrients, Total Ammonia, as N (mg/L)	2	2	100	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000
Nutrients, Total Dissolved Nitrogen (mg/L)	27	0	0	0.13	0.13	0.14	0.149	0.182519	0.16	0.2155	0.2464	0.314	0.34	0.055	0.011	0.302
Nutrients, Total Dissolved Phosphorus (mg/L)	29	18	62	0.002	0.002	0.002	0.002	0.003138	0.003	0.003	0.0042	0.004	0.006	0.001	0.000	0.348
Nutrients, Total Inorganic Carbon (mg/L)	2	0	0	1	1	1.1	1.25	1.5	1.5	1.75	1.9	2	2	0.707	0.500	0.471
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	4	4	100	0.1	0.5	0.22	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.200	0.100	0.500
Nutrients, Total Nitrogen (calc'd) (mg/L)	21	0	0	0.14	0.14	0.15	0.16	0.19381	0.18	0.2	0.25	0.25	0.37	0.056	0.012	0.288
Nutrients, Total Nitrogen (mg/L)	2	0	0	0.25	0.25	0.253	0.2575	0.265	0.265	0.2725	0.277	0.28	0.28	0.021	0.015	0.080
Nutrients, Total Organic Carbon (calc'd) (mg/L)	18	1	6	1.13	1.88	1.985	2.205	2.361111	2.325	2.445	2.593	2.6	4.26	0.579	0.136	0.245
Nutrients, Total Organic Carbon (mg/L)	4	0	0	3	3.6	3.18	3.45	3.55	3.6	3.7	3.88	4	4	0.412	0.206	0.116
Nutrients, Total Phosphorus (mg/L)	23	8	35	0.002	0.002	0.0022	0.003	0.014261	0.005	0.0095	0.0342	0.011	0.1	0.024	0.005	1.703
Nutrients, o-Phosphate, as P (mg/L)	2	2	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000
Physical Parameters, Specific Conductivity (µS/cm)	34	0	0	10.8	10.8	12.62	13.125	14.71471	14	14.95	17.79	17.3	23	2.709	0.465	0.184
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	24	0	0	4	5.9	6.18	6.95	7.3625	7.4	8	8	9	10	1.156	0.236	0.157
Physical Parameters, Total Dissolved Solids (mg/L)	2	1	50	10	10	10.6	11.5	13	13	14.5	15.4	16	16	4.243	3.000	0.326
Physical Parameters, Total Suspended Solids (mg/L)	29	22	76	1	1	1	1	2.034483	1	3	4	5	5	1.322	0.246	0.650
Physical Parameters, Turbidity (NTU)	18	0	0	0.07	0.07	0.136	0.1775	0.618889	0.21	0.4	1.44	0.4	3.7	0.980	0.231	1.583
Physical Parameters, pH (unitless)	34	0	0	6.1	6.39	6.4	6.6175	6.781765	6.76	6.8925	7.17	7.2	8.06	0.361	0.062	0.053
Total Metals, Aluminum (µg/L)	6	0	0	13	13	13.5	14.1	19.1	15.3	20.55	28.5	22	35	8.425	3.440	0.441
Total Metals, Antimony (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Arsenic (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.000	0.000	0.000
Total Metals, Barium (µg/L)	25	18	72	1.6	50	2.18	50	57.416	80	80	100	100	100	35.491	7.098	0.618
Total Metals, Beryllium (µg/L)	6	6	100	0.05	0.05	0.05	0.05	0.066667	0.05	0.0875	0.1	0.1	0.1	0.026	0.011	0.387
Total Metals, Bismuth (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.000	0.000	0.000
Total Metals, Boron (µg/L)	2	0	0	1.6	1.6	1.63	1.675	1.75	1.75	1.825	1.87	1.9	1.9	0.212	0.150	0.121
Total Metals, Cadmium (µg/L)	25	15	60	0.04	0.04	0.1	0.1	0.5672	0.2	1	1	2	2	0.526	0.105	0.928
Total Metals, Cesium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Chromium (µg/L)	6	2	33	0.1	0.1	0.15	0.2	0.25	0.25	0.3	0.35	0.4	0.4	0.105	0.043	0.420
Total Metals, Cobalt (µg/L)	25	24	96	0.1	0.1	0.1	0.5	1.164	0.5	1	2	1	10	1.963	0.393	1.686
Total Metals, Copper (µg/L)	25	2	8	0.6	0.6	0.7	1	2.06	1.1	1.9	3.6	3	14	2.843	0.569	1.380
Total Metals, Iron (µg/L)	6	0	0	3.1	3.1	3.65	5.525	17.46667	10.25	30.5	38.5	40	40	16.595	6.775	0.950
Total Metals, Lead (µg/L)	25	22	88	0.1	0.1	0.2	0.7	1.532	0.7	2.1	4	4	4	1.490	0.298	0.973
Total Metals, Lithium (µg/L)	6	0	0	0.8	0.8	0.8	0.825	0.983333	0.9	1.05	1.25	1.1	1.4	0.232	0.095	0.236

Total Metals, Manganese (µg/L)	6	0	0	0.4	0.4	0.45	0.5	0.933333	0.6	1.375	1.75	1.9	1.9	0.647	0.264	0.693
Total Metals, Mercury (ng/L)	2	0	0	0.4	0.4	0.93	1.725	3.05	3.05	4.375	5.17	5.7	5.7	3.748	2.650	1.229
Total Metals, Mercury (µg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	6	4	67	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Nickel (µg/L)	24	11	46	0.5	0.5	0.5	0.7	1.391667	0.95	1.05	2	1.2	10	1.898	0.387	1.364
Total Metals, Rubidium (µg/L)	2	0	0	1.7	1.7	1.73	1.775	1.85	1.85	1.925	1.97	2	2	0.212	0.150	0.115
Total Metals, Selenium (µg/L)	2	2	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.000	0.000	0.000
Total Metals, Silver (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Strontium (µg/L)	6	0	0	5	5	5.15	5.35	6.7	5.5	8.125	9.45	9.9	9.9	2.157	0.881	0.322
Total Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Tin (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Titanium (µg/L)	2	1	50	0.1	0.1	0.11	0.125	0.15	0.15	0.175	0.19	0.2	0.2	0.071	0.050	0.471
Total Metals, Uranium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Vanadium (µg/L)	25	21	84	0	0	0.1	0.1	0.504	0.5	0.5	1	1	1	0.336	0.067	0.667
Total Metals, Zinc (µg/L)	23	0	0	0.3	0.3	0.82	1.15	3.7	2.1	3.65	9.2	6	19.7	4.369	0.911	1.181

Table B.2.1-3 Coppermine River at Mouth (COR06) - Winter

Parameter_Name	n	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	SD	SE	CV
Dissolved Metals, Aluminum (µg/L)	1	0	0	20	20	20	20	20.000	20	20	20	20	20	----	----	----
Dissolved Metals, Copper (µg/L)	2	2	100	1	1	1.9	3.25	5.500	5.5	7.75	9.1	10	10	6.364	4.500	1.157
Dissolved Metals, Iron (µg/L)	3	1	33	1	1	2.8	5.5	13.667	10	20	26	30	30	14.844	8.570	1.086
Dissolved Metals, Lead (µg/L)	2	2	100	1	1	5.9	13.25	25.500	25.5	37.75	45.1	50	50	34.648	24.500	1.359
Dissolved Metals, Manganese (µg/L)	3	3	100	10	10	10	10	10.000	10	10	10	10	10	0.000	0.000	0.000
Dissolved Metals, Zinc (µg/L)	2	1	50	1	1	2.9	5.75	10.500	10.5	15.25	18.1	20	20	13.435	9.500	1.280
Field Measurements, Specific Conductivity (µS/cm)	1	0	0	29	29	29	29	29.000	29	29	29	29	29	----	----	----
Field Measurements, Temperature (°C)	11	5	45	0	0	0	0	0.564	0.6	1.1	1.1	1.7	1.7	0.612	0.185	1.086
Field Measurements, pH (unitless)	7	0	0	4.8	6.63	5.898	6.63	6.654	6.63	7.24	7.308	7.41	7.41	0.885	0.334	0.133
Major Ions, Dissolved Calcium (mg/L)	39	0	0	4.5	4.5	5	5.1	6.253	5.45	6.35	7.56	7.3	17	2.353	0.377	0.376
Major Ions, Dissolved Chloride (mg/L)	39	0	0	0.45	0.45	0.59	0.7	23.708	0.95	1.33	6.92	1.8	400	81.307	13.020	3.429
Major Ions, Dissolved Fluoride (mg/L)	5	3	60	0.05	0.1	0.07	0.1	0.092	0.1	0.1	0.106	0.1	0.11	0.024	0.011	0.260
Major Ions, Dissolved Magnesium (mg/L)	26	0	0	1.77	1.84	1.965	2.1	2.258	2.195	2.2775	2.435	2.47	4.02	0.445	0.087	0.197
Major Ions, Dissolved Potassium (mg/L)	39	0	0	0.4	0.4	0.416	0.47	0.999	0.6	0.7	0.846	1.03	7.9	1.519	0.243	1.519
Major Ions, Dissolved Sodium (mg/L)	39	0	0	0.14	0.14	0.524	0.64	13.437	0.82	1.065	3.94	1.2	228	45.538	7.292	3.389
Major Ions, Dissolved Sulphate (mg/L)	39	17	44	1	1	1.78	2.1	6.200	3	3	6	4	69.7	12.488	2.000	2.014
Major Ions, Phenophthalein Alkalinity, as CaCO3 (mg/L)	12	12	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Reactive Silica (mg/L)	18	0	0	0.4	0.4	0.5	0.6	1.248	0.65	0.845	1.706	0.98	8.4	1.904	0.449	1.526
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	39	0	0	16.3	16.3	17.74	19.05	23.236	21	22.9	26.58	28.5	94	12.074	1.933	0.520
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	31	0	0	20.1	20.1	20.7	21.35	30.377	22.4	24.25	30.9	26.8	160	28.725	5.159	0.946
Nutrients, Dissolved Ammonia, as N (mg/L)	3	2	67	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Nutrients, Dissolved Inorganic Phosphate (mg/L)	2	0	0	0.003	0.003	0.0034	0.004	0.005	0.005	0.006	0.0066	0.007	0.007	0.003	0.002	0.566
Nutrients, Dissolved Organic Carbon (mg/L)	5	0	0	2	2	2.2	2.5	2.640	2.6	3	3.06	3.1	3.1	0.439	0.196	0.166
Nutrients, Dissolved o-Phosphate, as P (mg/L)	19	12	63	0.001	0.001	0.002	0.002	0.003	0.002	0.003	0.005	0.003	0.006	0.001	0.000	0.501
Nutrients, Nitrate, as N (mg/L)	4	0	0	0.077	0.077	0.0806	0.086	0.115	0.093	0.122	0.167	0.097	0.197	0.055	0.028	0.481
Nutrients, Nitrate/Nitrite, as N (mg/L)	38	0	0	0.05	0.05	0.0537	0.0785	0.097	0.09	0.10775	0.1206	0.136	0.23	0.041	0.007	0.421
Nutrients, Nitrite, as N (mg/L)	4	4	100	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.000	0.000	0.000
Nutrients, Total Ammonia, as N (mg/L)	26	3	12	0.005	0.005	0.005	0.013	0.051	0.0235	0.0785	0.1345	0.156	0.182	0.053	0.010	1.026
Nutrients, Total Inorganic Carbon (mg/L)	1	0	0	4	4	4	4	4.000	4	4	4	4	4	----	----	----
Nutrients, Total Organic Carbon (mg/L)	6	0	0	1.8	1.8	1.95	2.225	2.483	2.6	2.75	2.9	3	3	0.449	0.183	0.181
Nutrients, Total Phosphorus (mg/L)	27	1	4	0.004	0.004	0.0056	0.007	0.011	0.009	0.0115	0.0224	0.014	0.037	0.008	0.001	0.662
Nutrients, o-Phosphate, as P (mg/L)	5	3	60	0.002	0.002	0.002	0.002	0.008	0.002	0.009	0.018	0.009	0.024	0.010	0.004	1.224
Physical Parameters, Color-Apparent (CU)	34	5	15	5	5	5	5	7.029	5	5	10	5	25	4.883	0.837	0.695
Physical Parameters, Filterable Residue (mg/L)	21	0	0	25	25	29	30	36.619	31	40	50	50	64	9.790	2.136	0.267
Physical Parameters, Specific Conductivity (µS/cm)	39	0	0	41.3	41.3	44.8	46.8	136.367	52.5	62.25	74.48	76	1569	304.718	48.794	2.235
Physical Parameters, Total Dissolved Solids (mg/L)	5	0	0	23	30	25.8	30	30.600	32	34	34	34	34	4.561	2.040	0.149
Total Suspended Solids (mg/L)	22	9	41	3	3	3	3	19.182	3.5	10.75	74.4	11	127	35.065	7.476	1.828
Physical Parameters, Total Suspended Solids (mg/L)	5	3	60	3	3	3	3	4.200	3	4	6.4	4	8	2.168	0.970	0.516
Physical Parameters, Turbidity (NTU)	39	0	0	0.3	0.3	0.88	1.35	6.823	2.6	5.9	10.5	8.5	71	13.421	2.149	1.967
Physical Parameters, pH (unitless)	39	0	0	6.4	6.8	6.916	7.1	7.222	7.28	7.4	7.484	7.6	7.6	0.252	0.040	0.035
Total Metals, Aluminum (µg/L)	5	1	20	30	30	34.8	42	79.160	46	72.8	152.12	72.8	205	72.065	32.228	0.910
Total Metals, Antimony (µg/L)	5	1	20	0.5	0.5	0.54	0.6	1.008	0.7	0.8	1.784	0.8	2.44	0.808	0.361	0.802
Total Metals, Arsenic (µg/L)	4	1	25	0.5	0.5	0.5	0.5	0.625	0.5	0.625	0.85	0.5	1	0.250	0.125	0.400
Total Metals, Barium (µg/L)	5	0	0	12	13	12.4	13	12.940	13	13	13.42	13	13.7	0.607	0.271	0.047
Total Metals, Beryllium (µg/L)	5	5	100	0.02	2	0.812	2	1.604	2	2	2	2	2	0.885	0.396	0.552
Total Metals, Bismuth (µg/L)	3	3	100	1	1	1.8	3	3.667	5	5	5	5	5	2.309	1.333	0.630
Total Metals, Cadmium (µg/L)	8	8	100	0.02	0.02	0.216	0.3	75.153	0.3	200	200	200	200	103.384	36.552	1.376
Total Metals, Cesium (µg/L)	5	4	80	0.021	0.4	0.1726	0.4	0.324	0.4	0.4	0.4	0.4	0.4	0.169	0.076	0.523

Table B.2.1-3 Coppermine River at Mouth (COR06) - Winter

Parameter_Name	n	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	SD	SE	CV
Total Metals, Chromium (µg/L)	8	4	50	0.3	0.3	2.19	3	1751.538	3	4250	5000	5000	5000	2433.603	860.409	1.389
Total Metals, Cobalt (µg/L)	8	7	88	0.609	0.609	0.8827	1	375.576	1	1000	1000	1000	1000	517.072	182.813	1.377
Total Metals, Copper (µg/L)	8	4	50	0.9	0.9	1.67	2	2001.113	2	5000	5300	6000	6000	2776.545	981.657	1.388
Total Metals, Iron (µg/L)	26	0	0	39	39	75	36500	########	89500	388500	1573000	766000	2740000	825210	161837	1.872
Total Metals, Lead (µg/L)	8	5	63	1	1	1	1	375.669	1.175	1000	1000	1000	1000	516.995	182.785	1.376
Total Metals, Lithium (µg/L)	5	4	80	0.9	3	1.74	3	2.580	3	3	3	3	3	0.939	0.420	0.364
Total Metals, Manganese (µg/L)	5	2	40	1	1	1	1	1.666	2	2	2.198	2.33	2.33	0.623	0.278	0.374
Total Metals, Molybdenum (µg/L)	5	4	80	0.1	1	0.46	1	0.820	1	1	1	1	1	0.402	0.180	0.491
Total Metals, Nickel (µg/L)	8	4	50	0.36	0.36	0.808	1	1000.545	1	2250	3000	3000	3000	1413.773	499.844	1.413
Total Metals, Rubidium (µg/L)	5	0	0	0.8	0.8	0.8	0.8	0.854	0.87	0.9	0.9	0.9	0.9	0.051	0.023	0.059
Total Metals, Selenium (µg/L)	5	5	100	0.3	10	4.18	10	8.060	10	10	10	10	10	4.338	1.940	0.538
Total Metals, Silver (µg/L)	5	5	100	0.006	0.3	0.1236	0.3	0.241	0.3	0.3	0.3	0.3	0.3	0.131	0.059	0.545
Total Metals, Strontium (µg/L)	5	0	0	8	9	8.4	9	9.252	9	9.26	10.304	9.26	11	1.090	0.487	0.118
Total Metals, Thallium (µg/L)	5	5	100	0.1	0.4	0.22	0.4	0.340	0.4	0.4	0.4	0.4	0.4	0.134	0.060	0.395
Total Metals, Titanium (µg/L)	5	4	80	2.68	3	2.808	3	2.936	3	3	3	3	3	0.143	0.064	0.049
Total Metals, Uranium (µg/L)	5	4	80	0.062	0.3	0.1572	0.3	0.252	0.3	0.3	0.3	0.3	0.3	0.106	0.048	0.422
Total Metals, Vanadium (µg/L)	5	4	80	0.19	1	0.514	1	0.838	1	1	1	1	1	0.362	0.162	0.432
Total Metals, Zinc (µg/L)	8	2	25	2.43	2.43	7.729	10	4756.679	15.5	12250	13000	13000	13000	6557.360	2318.377	1.379

Table B.2.1-4 Coppermine River Below Desteffany Lake (COR01) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	8	0	0	3	3	3.21	3.3	5.038	5.8	6.125	6.38	6.8	6.8	1.564	0.553	0.310
Dissolved Metals, Antimony (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	8	7	88	0.2	0.2	0.2	0.2	0.213	0.2	0.2	0.23	0.2	0.3	0.035	0.013	0.166
Dissolved Metals, Barium (µg/L)	8	0	0	2.4	2.4	2.4	2.55	2.925	2.6	2.85	3.75	3.3	4.8	0.808	0.286	0.276
Dissolved Metals, Beryllium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	8	8	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	8	0	0	1.6	1.6	2.09	2.3	2.600	2.6	3.05	3.2	3.2	3.2	0.545	0.193	0.210
Dissolved Metals, Cadmium (µg/L)	8	8	100	0.04	0.04	0.04	0.04	0.040	0.04	0.04	0.04	0.04	0.04	----	----	----
Dissolved Metals, Cesium (µg/L)	10	9	90	0.1	0.1	0.1	0.1	0.130	0.1	0.1	0.13	0.1	0.4	0.095	0.030	0.730
Dissolved Metals, Chromium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	8	7	88	0.1	0.1	0.1	0.1	0.125	0.1	0.1	0.16	0.1	0.3	0.071	0.025	0.566
Dissolved Metals, Copper (µg/L)	8	0	0	0.6	0.6	0.6	0.6	0.700	0.7	0.7	0.79	0.7	1	0.131	0.046	0.187
Dissolved Metals, Iron (µg/L)	8	6	75	5	5	5	5	5.625	5	5.5	7.3	5	8	1.188	0.420	0.211
Dissolved Metals, Lead (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	8	0	0	1.6	1.8	1.67	1.775	1.825	1.8	1.8	1.95	1.8	2.3	0.205	0.073	0.112
Dissolved Metals, Manganese (µg/L)	8	0	0	0.4	0.4	0.4	0.4	1.113	1.15	1.25	1.82	1.4	2.8	0.799	0.282	0.718
Dissolved Metals, Mercury (µg/L)	5	5	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	8	0	0	0.2	0.2	0.2	0.2	0.225	0.2	0.225	0.3	0.2	0.3	0.046	0.016	0.206
Dissolved Metals, Nickel (µg/L)	8	0	0	0.8	0.8	0.87	0.9	1.100	1.05	1.3	1.36	1.5	1.5	0.256	0.091	0.233
Dissolved Metals, Rubidium (µg/L)	8	0	0	2	2	2.07	2.1	2.225	2.15	2.225	2.45	2.3	2.8	0.249	0.088	0.112
Dissolved Metals, Selenium (µg/L)	8	8	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	8	0	0	16	16	16.42	16.6	17.700	16.6	18.25	19.66	18.4	22.6	2.154	0.762	0.122
Dissolved Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	8	1	13	0.4	0.4	0.47	0.575	1.675	1.25	2.525	3.11	4.3	4.3	1.373	0.485	0.820
Field Measurements, Specific Conductivity (µS/cm)	4	0	0	12.2	12.2	12.59	13.175	32.475	13.85	33.15	67.26	14.2	90	38.359	19.179	1.181
Field Measurements, pH (unitless)	4	0	0	6.3	6.3	6.45	6.675	6.838	6.825	6.9875	7.235	7.4	7.4	0.450	0.225	0.066
Major Ions, Dissolved Calcium (mg/L)	10	0	0	0.86	0.86	0.878	1.425	1.654	1.65	2	2.06	2.6	2.6	0.539	0.171	0.326
Major Ions, Dissolved Chloride (mg/L)	10	0	0	0.3	1.9	0.39	1.9	2.070	2.25	2.675	3.04	3.4	3.4	1.026	0.325	0.496
Major Ions, Dissolved Fluoride (mg/L)	8	7	88	0.033	0.1	0.0799	0.1	0.092	0.1	0.1	0.1	0.1	0.1	0.024	0.008	0.259
Major Ions, Dissolved Magnesium (mg/L)	10	0	0	0.55	1.1	0.5545	1.1	1.101	1.2	1.275	1.32	1.5	1.5	0.311	0.098	0.282
Major Ions, Dissolved Potassium (mg/L)	10	0	0	0.49	0.599	0.5881	0.925	1.009	1.05	1.175	1.23	1.5	1.5	0.294	0.093	0.292
Major Ions, Dissolved Sodium (mg/L)	10	0	0	0.5	1.7	0.518	1.725	1.702	1.9	2	2.15	2.1	2.6	0.674	0.213	0.396
Major Ions, Dissolved Sulphate (mg/L)	10	0	0	2	2	2.9	3	3.950	4	4.375	6	6	6	1.301	0.411	0.329
Major Ions, Reactive Silica (mg/L)	8	0	0	0.068	0.068	0.0771	0.081	0.115	0.1085	0.156	0.1599	0.162	0.162	0.040	0.014	0.349
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	10	0	0	3.6	3.6	4.05	4.175	4.980	5.05	5.3	6.33	6.6	6.6	0.967	0.306	0.194
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	8	0	0	8.5	8.5	8.78	9.05	9.675	9.5	9.7	10.54	9.7	12.5	1.221	0.432	0.126
Microbiology, Chlorophyll a (µg/L)	8	5	63	1	1	1	1	2.075	1.05	1.475	3.86	2	8.2	2.498	0.883	1.204
Nutrients, Dissolved Ammonia, as N (mg/L)	1	0	0	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	----	----	----
Nutrients, Dissolved Nitrogen (mg/L)	8	0	0	0.18	0.18	0.18	0.18	0.453	0.345	0.7325	0.839	0.86	0.86	0.298	0.105	0.658
Nutrients, Dissolved Organic Carbon (mg/L)	9	0	0	1.6	3	2.4	3	3.111	3.1	3.1	3.78	3.1	4.9	0.859	0.286	0.276
Nutrients, Dissolved o-Phosphate, as P (mg/L)	2	1	50	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Nitrate, as N (mg/L)	7	0	0	0.02	0.02	0.026	0.03	0.258	0.106	0.485	0.56	0.65	0.65	0.271	0.102	1.051
Nutrients, Nitrate/Nitrite, as N (mg/L)	9	2	22	0.008	0.008	0.008	0.02	0.202	0.03	0.47	0.53	0.65	0.65	0.259	0.086	1.281

Table B.2.1-4 Coppermine River Below Desteffany Lake (COR01) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Nitrite, as N (mg/L)	7	7	100	0.001	0.01	0.0064	0.01	0.009	0.01	0.01	0.01	0.01	0.01	0.003	0.001	0.390
Nutrients, Total Ammonia, as N (mg/L)	8	0	0	0.009	0.009	0.009	0.0105	0.015	0.0125	0.021	0.0219	0.024	0.024	0.006	0.002	0.405
Nutrients, Total Dissolved Nitrogen (mg/L)	1	0	0	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	0.294	----	----	----
Nutrients, Total Dissolved Phosphorus (mg/L)	8	8	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Total Nitrogen (mg/L)	8	0	0	0.19	0.19	0.19	0.19	0.468	0.35	0.74	0.875	0.91	0.91	0.308	0.109	0.660
Nutrients, Total Organic Carbon (mg/L)	8	0	0	2.8	3.1	3.01	3.1	3.438	3.15	3.275	4.1	3.5	5.5	0.855	0.302	0.249
Nutrients, Total Phosphorus (mg/L)	10	5	50	0.002	0.002	0.002	0.002	0.007	0.0035	0.004	0.0091	0.005	0.046	0.014	0.004	1.839
Nutrients, o-Phosphate, as P (mg/L)	7	7	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Physical Parameters, Color-True (CU)	2	1	50	5	5	5	5	5.000	5	5	5	5	5	----	----	----
Physical Parameters, Filterable Residue (mg/L)	1	0	0	12	12	12	12	12.000	12	12	12	12	12	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	10	0	0	12.9	29.3	14.16	29.375	29.340	30.2	34.7	36.03	42.6	42.6	9.210	2.913	0.314
Physical Parameters, Total Dissolved Solids (mg/L)	8	5	63	10	10	10	10	18.000	10	14	29.6	14	66	19.479	6.887	1.082
Physical Parameters, Total Suspended Solids (mg/L)	10	7	70	3	3	3	3	9.100	3	8.25	15.6	12	48	14.075	4.451	1.547
Physical Parameters, Turbidity (NTU)	10	0	0	0.1	0.1	0.109	0.12	0.654	0.2	0.225	1.723	0.23	3.73	1.160	0.367	1.774
Physical Parameters, pH (unitless)	10	0	0	6.28	6.28	6.388	6.47	6.566	6.625	6.66	6.691	6.7	6.7	0.144	0.046	0.022
Total Metals, Aluminum (µg/L)	10	1	10	5	5	5	5.425	25.610	7.6	9.45	44.1	9.6	171	51.624	16.325	2.016
Total Metals, Antimony (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	10	8	80	0.2	0.2	0.2	0.2	0.270	0.2	0.275	0.34	0.3	0.7	0.157	0.050	0.580
Total Metals, Barium (µg/L)	10	0	0	1.5	2	1.95	2.3	2.890	2.5	2.6	3.22	2.7	7.9	1.796	0.568	0.621
Total Metals, Beryllium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.290	0.1	0.1	0.29	0.1	2	0.601	0.190	2.072
Total Metals, Bismuth (µg/L)	9	9	100	0.1	0.2	0.18	0.2	0.189	0.2	0.2	0.2	0.2	0.2	0.033	0.011	0.176
Total Metals, Boron (µg/L)	8	0	0	2.1	2.1	2.24	2.375	2.800	2.75	3.2	3.5	3.5	3.5	0.537	0.190	0.192
Total Metals, Cadmium (µg/L)	10	8	80	0.04	0.04	0.04	0.04	0.083	0.04	0.0475	0.21	0.05	0.3	0.091	0.029	1.098
Total Metals, Cesium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	10	8	80	0.1	0.1	0.1	0.1	0.490	0.1	0.4	0.93	0.7	3	0.907	0.287	1.852
Total Metals, Cobalt (µg/L)	10	9	90	0.1	0.1	0.1	0.1	0.260	0.1	0.1	0.82	0.1	1	0.341	0.108	1.310
Total Metals, Copper (µg/L)	10	1	10	0.7	0.7	0.7	0.7	1.020	0.75	1.05	1.91	1.1	2	0.507	0.160	0.497
Total Metals, Iron (µg/L)	10	2	20	5	5	6.8	7	61.200	12	14.5	77.4	15	504	155.748	49.252	2.545
Total Metals, Lead (µg/L)	8	7	88	0.1	0.1	0.1	0.1	0.113	0.1	0.1	0.13	0.1	0.2	0.035	0.013	0.314
Total Metals, Lithium (µg/L)	10	1	10	1.2	1.2	1.56	1.65	1.940	1.8	1.975	2.73	2	3	0.532	0.168	0.274
Total Metals, Manganese (µg/L)	10	1	10	1	1	1.09	1.1	115.300	1.5	1.8	148.07	1.9	1100	346.228	109.487	3.003
Total Metals, Mercury (ng/L)	7	0	0	0.3	0.3	0.3	0.3	0.814	0.4	0.9	1.7	1.1	2.6	0.841	0.318	1.033
Total Metals, Mercury (µg/L)	5	5	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	10	2	20	0.2	0.2	0.2	0.2	10.270	0.2	0.275	10.9	0.3	100	31.529	9.970	3.070
Total Metals, Nickel (µg/L)	10	1	10	0.8	0.8	0.8	0.9	51.060	1.1	1.3	52.16	1.3	500	157.742	49.882	3.089
Total Metals, Rubidium (µg/L)	8	0	0	2	2	2.07	2.1	2.263	2.15	2.2	2.5	2.2	3.2	0.385	0.136	0.170
Total Metals, Selenium (µg/L)	10	10	100	0.3	0.3	0.3	0.3	101.240	0.3	0.3	109	0.3	1000	315.807	99.867	3.119
Total Metals, Silver (µg/L)	10	10	100	0.1	0.1	0.1	0.1	10.110	0.1	0.1	10.27	0.1	100	31.584	9.988	3.124
Total Metals, Strontium (µg/L)	9	0	0	6.4	16.4	14.4	16.4	16.500	16.7	17.5	19.04	18	23.2	4.343	1.448	0.263
Total Metals, Thallium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.130	0.1	0.1	0.13	0.1	0.4	0.095	0.030	0.730
Total Metals, Tin (µg/L)	8	7	88	0.1	0.1	0.1	0.1	0.125	0.1	0.1	0.16	0.1	0.3	0.071	0.025	0.566
Total Metals, Titanium (µg/L)	9	7	78	0.1	0.1	0.1	0.1	1.489	0.1	0.1	2.66	0.1	12.5	4.129	1.376	2.773
Total Metals, Uranium (µg/L)	9	8	89	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.12	0.1	0.2	0.033	0.011	0.300
Total Metals, Vanadium (µg/L)	10	9	90	0.1	0.1	0.1	0.1	10.240	0.1	0.55	10.9	1	100	31.540	9.974	3.080
Total Metals, Zinc (µg/L)	10	1	10	0.5	0.5	0.5	0.55	252.670	2.1	6.375	259	10	2500	789.638	249.705	3.125

Table B.2.1-5 Coppermine River Downstream of Copper Creek (COR05)- Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Dissolved Calcium (mg/L)	7	0	0	3.71	4.06	3.92	4.08	4.1057	4.11	4.13	4.278	4.13	4.5	0.229	0.087	0.056
Major Ions, Dissolved Chloride (mg/L)	7	0	0	0.3	0.4	0.36	0.4	0.3857	0.4	0.4	0.4	0.4	0.4	0.038	0.014	0.098
Major Ions, Dissolved Magnesium (mg/L)	7	0	0	1.67	1.67	1.718	1.755	1.9529	1.78	1.9	2.34	1.96	2.91	0.431	0.163	0.221
Major Ions, Dissolved Potassium (mg/L)	7	0	0	0.39	0.39	0.396	0.4	0.4143	0.42	0.43	0.43	0.43	0.43	0.017	0.006	0.041
Major Ions, Dissolved Sodium (mg/L)	7	0	0	0.47	0.47	0.476	0.485	0.4971	0.49	0.515	0.52	0.52	0.52	0.020	0.007	0.040
Major Ions, Dissolved Sulphate (mg/L)	7	6	86	3	3	3	3	3.4286	3	3	4.2	3	6	1.134	0.429	0.331
Major Ions, Reactive Silica (mg/L)	7	0	0	0.61	0.61	0.64	0.69	0.7643	0.73	0.755	0.91	0.77	1.12	0.166	0.063	0.217
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	7	0	0	15.6	15.6	15.96	16.2	16.5571	16.3	16.85	17.54	17.3	17.9	0.776	0.293	0.047
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	7	0	0	16.1	16.1	16.82	17.4	18.2714	17.6	18.6	20.46	19.3	22.2	1.972	0.745	0.108
Nutrients, Dissolved Organic Carbon (mg/L)	7	0	0	2.4	2.7	2.58	2.7	2.7571	2.7	2.9	2.94	3	3	0.199	0.075	0.072
Nutrients, Nitrate, as N (mg/L)	4	0	0	0.074	0.074	0.0758	0.0785	0.0970	0.0825	0.101	0.1298	0.085	0.149	0.035	0.017	0.360
Nutrients, Nitrate/Nitrite, as N (mg/L)	6	0	0	0.075	0.075	0.078	0.08225	0.1033	0.095	0.11975	0.137	0.149	0.149	0.029	0.012	0.279
Nutrients, Nitrite, as N (mg/L)	4	4	100	0.008	0.008	0.008	0.008	0.0080	0.008	0.008	0.008	0.008	0.008	0.000	0.000	0.000
Nutrients, Total Ammonia, as N (mg/L)	7	5	71	0.005	0.005	0.005	0.005	0.0084	0.005	0.0105	0.0168	0.018	0.018	0.006	0.002	0.698
Nutrients, Total Organic Carbon (mg/L)	7	0	0	2.1	2.5	2.34	2.6	2.6714	2.8	2.8	2.88	3	3	0.293	0.111	0.110
Nutrients, Total Phosphorus (mg/L)	7	1	14	0.003	0.003	0.0036	0.0045	0.0339	0.012	0.016	0.0826	0.017	0.181	0.065	0.025	1.923
Nutrients, o-Phosphate, as P (mg/L)	7	6	86	0.002	0.002	0.002	0.002	0.0029	0.002	0.002	0.0044	0.002	0.008	0.002	0.001	0.794
Physical Parameters, Color (CU)	7	6	86	5	5	5	5	5.7143	5	5	7	5	10	1.890	0.714	0.331
Physical Parameters, Specific Conductivity (µS/cm)	7	0	0	35.8	37.3	36.7	37.95	38.7000	38.6	38.8	40.54	38.9	43	2.195	0.830	0.057
Physical Parameters, Total Dissolved Solids (mg/L)	7	1	14	10	10	14.8	19	22.8571	24	28.5	29.8	31	31	7.403	2.798	0.324
Physical Parameters, Total Suspended Solids (mg/L)	7	3	43	3	3	3	3	39.2857	4	8.5	103.4	9	245	90.746	34.299	2.310
Physical Parameters, Turbidity (NTU)	7	0	0	0.3	0.3	0.6	0.85	17.6429	0.9	3.8	49.16	6.6	113	42.105	15.914	2.387
Physical Parameters, pH (unitless)	7	0	0	6.7	7.1	6.94	7.1	7.1100	7.12	7.18	7.288	7.22	7.39	0.208	0.079	0.029
Total Metals, Aluminum (µg/L)	7	4	57	17	17	24.8	30	613.0000	30	52	1676.4	74	4080	1528.909	577.873	2.494
Total Metals, Antimony (µg/L)	7	1	14	0.5	0.682	0.6092	0.741	0.7546	0.8	0.8	0.84	0.8	0.9	0.129	0.049	0.171
Total Metals, Arsenic (µg/L)	1	0	0	2.2	2.2	2.2	2.2	2.2000	2.2	2.2	2.2	2.2	2.2			
Total Metals, Barium (µg/L)	7	0	0	7.04	8	7.616	8	13.0057	8	8.5	22.6	9	43	13.238	5.004	1.018
Total Metals, Beryllium (µg/L)	7	7	100	0.02	2	1.208	2	1.7171	2	2	2	2	2	0.748	0.283	0.436
Total Metals, Bismuth (µg/L)	6	6	100	0.4	0.4	0.7	2	3.5667	5	5	5	5	5	2.229	0.910	0.625
Total Metals, Cadmium (µg/L)	7	7	100	0.02	0.3	0.188	0.3	0.2600	0.3	0.3	0.3	0.3	0.3	0.106	0.040	0.407
Total Metals, Cesium (µg/L)	7	6	86	0.033	0.4	0.2532	0.4	0.3476	0.4	0.4	0.4	0.4	0.4	0.139	0.052	0.399
Total Metals, Chromium (µg/L)	7	7	100	0.1	3	1.84	3	2.5857	3	3	3	3	3	1.096	0.414	0.424
Total Metals, Cobalt (µg/L)	7	6	86	0.101	1	0.6404	1	0.8716	1	1	1	1	1	0.340	0.128	0.390
Total Metals, Copper (µg/L)	7	5	71	0.51	2	1.404	2	2.0729	2	2	2.8	2	4	1.015	0.384	0.490
Total Metals, Iron (µg/L)	7	3	43	30	30	30	30	463.8571	37	85	1258	130	2950	1096.884	414.583	2.365
Total Metals, Lead (µg/L)	7	6	86	0.63	1	0.852	1	0.9471	1	1	1	1	1	0.140	0.053	0.148
Total Metals, Lithium (µg/L)	7	6	86	0.8	3	2.12	3	2.6857	3	3	3	3	3	0.832	0.314	0.310
Total Metals, Manganese (µg/L)	7	4	57	1	1	1	1	15.5829	1	5.04	43.4	9	95	35.146	13.284	2.255
Total Metals, Molybdenum (µg/L)	7	6	86	0.08	1	0.632	1	0.8686	1	1	1	1	1	0.348	0.131	0.400
Total Metals, Nickel (µg/L)	7	4	57	0.43	0.43	0.772	1	1.7757	1	2.5	4	4	4	1.534	0.580	0.864
Total Metals, Rubidium (µg/L)	7	0	0	0.8	0.8	0.86	0.9	1.9929	0.9	1.075	4.04	1.2	8.3	2.784	1.052	1.397
Total Metals, Selenium (µg/L)	7	7	100	0.3	10	6.12	10	8.6143	10	10	10	10	10	3.666	1.386	0.426
Total Metals, Silver (µg/L)	7	7	100	0.006	0.3	0.1824	0.3	0.2580	0.3	0.3	0.3	0.3	0.3	0.111	0.042	0.431
Total Metals, Strontium (µg/L)	7	0	0	6.96	6.96	6.984	7	8.2800	7	7.5	10.8	8	15	2.987	1.129	0.361
Total Metals, Thallium (µg/L)	7	7	100	0.1	0.4	0.28	0.4	0.3571	0.4	0.4	0.4	0.4	0.4	0.113	0.043	0.317
Total Metals, Titanium (µg/L)	7	4	57	0.68	3	2.072	3	20.2400	3	3.5	52.4	4	125	46.206	17.464	2.283
Total Metals, Uranium (µg/L)	7	6	86	0.05	0.3	0.2	0.3	0.2643	0.3	0.3	0.3	0.3	0.3	0.094	0.036	0.358
Total Metals, Vanadium (µg/L)	7	6	86	0.03	1	0.612	1	1.4329	1	1	2.6	1	5	1.614	0.610	1.126
Total Metals, Zinc (µg/L)	7	5	71	1.94	10	6.776	10	17.4200	10	10	34	10	70	23.379	8.837	1.342

Table B.2.1-6 Coppermine River Downstream of Fairy Lake River (COR03) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	1	0	0	4	4	4	4	4	4	4	4	4	4	----	----	----
Dissolved Metals, Antimony (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	1	0	0	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	----	----	----
Dissolved Metals, Beryllium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	1	1	100	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	1	0	0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	----	----	----
Dissolved Metals, Iron (µg/L)	1	1	100	50	50	50	50	50	50	50	50	50	50	----	----	----
Dissolved Metals, Lead (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	1	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	----	----	----
Dissolved Metals, Manganese (µg/L)	1	0	0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	----	----	----
Dissolved Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Dissolved Metals, Molybdenum (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	1	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Rubidium (µg/L)	1	0	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	----	----	----
Dissolved Metals, Selenium (µg/L)	1	1	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	1	0	0	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	----	----	----
Dissolved Metals, Thallium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	1	1	100	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	----	----	----
Major Ions, Dissolved Calcium (mg/L)	5	0	0	4.26	4.26	4.348	4.48	5.046	5.11	5.68	5.692	5.7	5.7	0.666	0.298	0.132
Major Ions, Dissolved Chloride (mg/L)	5	1	20	0.3	0.3	0.3	0.3	0.42	0.4	0.4	0.58	0.4	0.7	0.164	0.073	0.391
Major Ions, Dissolved Fluoride (mg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	5	0	0	1.69	1.69	1.75	1.84	2.24	2	2.07	2.988	2.07	3.6	0.774	0.346	0.346
Major Ions, Dissolved Potassium (mg/L)	5	0	0	0.3	0.3	0.312	0.33	0.362	0.36	0.36	0.42	0.36	0.46	0.060	0.027	0.166
Major Ions, Dissolved Sodium (mg/L)	5	0	0	0.44	0.44	0.448	0.46	0.48	0.46	0.5	0.524	0.54	0.54	0.040	0.018	0.083
Major Ions, Dissolved Sulphate (mg/L)	5	5	100	1	3	1.8	3	2.6	3	3	3	3	3	0.894	0.400	0.344
Major Ions, Reactive Silica (mg/L)	4	0	0	0.39	0.39	0.405	0.4275	0.51	0.485	0.5675	0.635	0.68	0.68	0.127	0.064	0.250
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	5	0	0	16.4	16.4	17.4	18.9	20	20.9	21.2	22.04	22.6	22.6	2.407	1.077	0.120
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	5	0	0	17.6	17.6	18.08	18.8	21.82	21.3	22.4	26.36	22.4	29	4.447	1.989	0.204
Nutrients, Dissolved Organic Carbon (mg/L)	5	0	0	1.9	1.9	1.94	2	2.38	2.5	2.6	2.78	2.9	2.9	0.421	0.188	0.177
Nutrients, Nitrate, as N (mg/L)	4	0	0	0.03	0.03	0.033	0.0375	0.0435	0.04	0.046	0.0568	0.04	0.064	0.014	0.007	0.332
Nutrients, Nitrate/Nitrite, as N (mg/L)	4	0	0	0.03	0.03	0.033	0.0375	0.04725	0.047	0.05675	0.0617	0.065	0.065	0.015	0.008	0.326
Nutrients, Nitrite, as N (mg/L)	4	4	100	0.008	0.008	0.008	0.008	0.0085	0.008	0.0085	0.0094	0.008	0.01	0.001	0.001	0.118
Nutrients, Total Ammonia, as N (mg/L)	5	3	60	0.005	0.005	0.005	0.005	0.0084	0.005	0.009	0.0144	0.009	0.018	0.006	0.003	0.671
Nutrients, Total Dissolved Phosphorus (mg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Organic Carbon (mg/L)	5	0	0	1.8	1.8	1.84	1.9	2.22	1.9	2.5	2.8	3	3	0.517	0.231	0.233
Nutrients, Total Phosphorus (mg/L)	5	1	20	0.004	0.004	0.0064	0.01	0.0196	0.01	0.015	0.0414	0.015	0.059	0.022	0.010	1.141
Nutrients, o-Phosphate, as P (mg/L)	4	3	75	0.002	0.002	0.002	0.002	0.004	0.002	0.004	0.0076	0.002	0.01	0.004	0.002	1.000
Physical Parameters, Color (CU)	4	3	75	5	5	5	5	6.25	5	6.25	8.5	5	10	2.500	1.250	0.400
Physical Parameters, Specific Conductivity (µS/cm)	5	0	0	38.3	43.6	40.42	43.6	43.5	44.4	45.6	45.6	45.6	45.6	3.028	1.354	0.070
Physical Parameters, Total Dissolved Solids (mg/L)	5	0	0	21	21	21.4	22	25.6	23	30	31.2	32	32	5.030	2.249	0.196

Table B.2.1-6 Coppermine River Downstream of Fairy Lake River (COR03) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Total Suspended Solids (mg/L)	5	3	60	3	3	3	3	10.6	3	4	25.6	4	40	16.441	7.353	1.551
Physical Parameters, Turbidity (NTU)	5	1	20	0.1	0.1	0.156	0.24	3.528	0.3	2.2	9.76	2.2	14.8	6.360	2.844	1.803
Physical Parameters, pH (unitless)	5	0	0	6.77	7.14	6.918	7.14	7.13	7.19	7.21	7.288	7.21	7.34	0.214	0.096	0.030
Total Metals, Aluminum (µg/L)	5	3	60	6.16	30	15.696	30	56.232	30	30	123	30	185	72.720	32.521	1.293
Total Metals, Antimony (µg/L)	5	1	20	0.2	0.5	0.32	0.5	0.5338	0.6	0.669	0.6876	0.7	0.7	0.202	0.090	0.378
Total Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	5	0	0	7	7	7.4	8	8.936	8.3	9.38	10.952	9.38	12	1.911	0.855	0.214
Total Metals, Beryllium (µg/L)	5	5	100	0.02	0.02	0.052	0.1	1.224	2	2	2	2	2	1.063	0.475	0.868
Total Metals, Bismuth (µg/L)	3	3	100	0.4	0.4	0.52	0.7	2.133333	1	3	4.2	5	5	2.501	1.444	1.172
Total Metals, Cadmium (µg/L)	5	5	100	0.02	0.02	0.052	0.1	0.204	0.3	0.3	0.3	0.3	0.3	0.134	0.060	0.659
Total Metals, Cesium (µg/L)	5	4	80	0.009	0.009	0.0454	0.1	0.2618	0.4	0.4	0.4	0.4	0.4	0.192	0.086	0.733
Total Metals, Chromium (µg/L)	5	4	80	0.1	2	0.86	2	2.22	3	3	3	3	3	1.262	0.564	0.568
Total Metals, Cobalt (µg/L)	5	4	80	0.1	0.1	0.108	0.12	0.644	1	1	1	1	1	0.488	0.218	0.757
Total Metals, Copper (µg/L)	5	3	60	0.1	0.1	0.54	1.2	1.46	2	2	2	2	2	0.835	0.374	0.572
Total Metals, Iron (µg/L)	5	2	40	30	30	30.4	31	92.8	50	60	199.8	60	293	112.640	50.374	1.214
Total Metals, Lead (µg/L)	5	4	80	0.08	0.08	0.088	0.1	0.636	1	1	1	1	1	0.498	0.223	0.784
Total Metals, Lithium (µg/L)	5	3	60	0.3	0.3	0.38	0.5	1.96	3	3	3	3	3	1.426	0.638	0.727
Total Metals, Magnesium (µg/L)	1	0	0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	----	----	----
Total Metals, Manganese (µg/L)	4	1	25	1	1	1.6	2.5	5.5525	3.105	6.1575	11.463	3.21	15	6.377	3.188	1.148
Total Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Total Metals, Molybdenum (µg/L)	5	4	80	0.05	0.05	0.07	0.1	0.63	1	1	1	1	1	0.507	0.227	0.805
Total Metals, Nickel (µg/L)	5	3	60	0.24	0.24	0.264	0.3	0.708	1	1	1	1	1	0.400	0.179	0.566
Total Metals, Rubidium (µg/L)	5	0	0	0.68	0.68	0.688	0.7	0.896	0.8	1.1	1.16	1.2	1.2	0.239	0.107	0.267
Total Metals, Selenium (µg/L)	5	5	100	0.3	0.3	0.58	1	6.26	10	10	10	10	10	5.127	2.293	0.819
Total Metals, Silver (µg/L)	5	5	100	0.006	0.006	0.0436	0.1	0.2012	0.3	0.3	0.3	0.3	0.3	0.139	0.062	0.692
Total Metals, Strontium (µg/L)	5	0	0	7	7	7	7	7.432	7.5	7.66	7.864	8	8	0.434	0.194	0.058
Total Metals, Thallium (µg/L)	5	5	100	0.1	0.1	0.1	0.1	0.28	0.4	0.4	0.4	0.4	0.4	0.164	0.073	0.587
Total Metals, Titanium (µg/L)	5	2	40	0.3	0.3	0.424	0.61	3.582	3	3	7.8	3	11	4.339	1.940	1.211
Total Metals, Uranium (µg/L)	5	4	80	0.038	0.038	0.0628	0.1	0.2076	0.3	0.3	0.3	0.3	0.3	0.128	0.057	0.619
Total Metals, Vanadium (µg/L)	5	5	100	0.03	0.03	0.058	0.1	0.626	1	1	1	1	1	0.513	0.229	0.819
Total Metals, Zinc (µg/L)	5	3	60	2.71	10	5.626	10	12.342	10	10	21.4	10	29	9.833	4.397	0.797

Table B.2.1-7 Daring Lake (DAL)- Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	17	0	0	2.3	2.3	2.46	2.7	3.253	2.9	3.3	4.58	3.6	6.4	1.070	0.260	0.329
Dissolved Metals, Antimony (µg/L)	17	16	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.006	0.229
Dissolved Metals, Arsenic (µg/L)	17	15	88	0.2	0.2	0.2	0.2	0.218	0.2	0.2	0.24	0.2	0.4	0.053	0.013	0.243
Dissolved Metals, Barium (µg/L)	17	0	0	1.5	1.5	1.56	1.7	2.682	1.9	2.2	2.74	2.5	13.9	2.919	0.708	1.088
Dissolved Metals, Beryllium (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	11	11	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	11	0	0	1	1	1	1.2	1.445	1.5	1.65	1.7	2.1	2.1	0.333	0.100	0.230
Dissolved Metals, Cadmium (µg/L)	17	17	100	0.04	0.04	0.04	0.04	0.045	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.115
Dissolved Metals, Cesium (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	17	3	18	0.2	0.2	0.2	0.4	0.482	0.5	0.7	0.7	0.8	0.8	0.188	0.046	0.389
Dissolved Metals, Iron (µg/L)	17	14	82	5	5	5	5	11.176	5	7	29	8	50	14.821	3.595	1.326
Dissolved Metals, Lead (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	17	0	0	0.8	1.1	1.06	1.2	1.471	1.3	1.3	1.7	1.3	4.7	0.861	0.209	0.585
Dissolved Metals, Manganese (µg/L)	17	0	0	0.3	0.3	0.4	0.5	1.694	0.8	1.3	1.64	2	14.4	3.306	0.802	1.952
Dissolved Metals, Mercury (ng/L)	9	6	67	0.2	0.2	0.2	0.2	0.267	0.2	0.3	0.42	0.4	0.5	0.112	0.037	0.419
Dissolved Metals, Mercury (µg/L)	14	14	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.02	0.003	0.001	0.249
Dissolved Metals, Molybdenum (µg/L)	17	16	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.006	0.229
Dissolved Metals, Nickel (µg/L)	16	0	0	0.2	0.2	0.2	0.2	0.356	0.3	0.3	0.4	0.4	1.6	0.339	0.085	0.950
Dissolved Metals, Rubidium (µg/L)	17	0	0	1.4	1.4	1.56	1.6	2.059	1.8	1.9	2.38	2.3	6.2	1.103	0.267	0.536
Dissolved Metals, Selenium (µg/L)	17	17	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	17	0	0	6.9	6.9	7.44	7.8	10.429	8.3	9.3	11.28	10.6	38.9	7.454	1.808	0.715
Dissolved Metals, Thallium (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	17	17	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	17	8	47	0.4	0.4	0.4	0.4	0.947	0.6	0.8	1.34	0.9	5.4	1.214	0.294	1.282
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	4.4	4.4	6.28	9.1	13.800	13.8	18.5	21.32	23.2	23.2	13.294	9.400	0.963
Major Ions, Dissolved Calcium (mg/L)	23	0	0	0.4	0.4	1.2	1.3	1.865	1.6	2.05	2.84	3	5.9	1.068	0.223	0.572
Major Ions, Dissolved Chloride (mg/L)	24	18	75	0.69	0.7	0.7	0.7	0.788	0.7	0.7	0.9	0.7	1.9	0.256	0.052	0.325
Major Ions, Dissolved Fluoride (mg/L)	21	19	90	0.042	0.1	0.1	0.1	0.095	0.1	0.1	0.1	0.1	0.1	0.016	0.003	0.169
Major Ions, Dissolved Magnesium (mg/L)	23	0	0	0.3	0.3	0.62	0.7	0.952	0.9	1.05	1.18	1.2	3.1	0.516	0.108	0.542
Major Ions, Dissolved Potassium (mg/L)	23	0	0	0.3	0.3	0.5	0.6	0.764	0.7	0.8	0.98	1	2.3	0.397	0.083	0.520
Major Ions, Dissolved Sodium (mg/L)	23	0	0	0.3	0.7	0.7	0.8	0.970	0.8	1	1.18	1.2	3	0.493	0.103	0.509
Major Ions, Dissolved Sulphate (mg/L)	24	3	13	1	1	1.3	2	2.480	2	3	3	3.26	9	1.531	0.312	0.617
Major Ions, Reactive Silica (mg/L)	13	0	0	0.114	0.128	0.12	0.148	0.166	0.159	0.164	0.2108	0.164	0.28	0.045	0.012	0.270
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	23	0	0	4.2	4.2	4.4	4.9	6.426	5.8	6.15	7.74	8	22.3	3.655	0.762	0.569
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	23	0	0	2.3	2.3	5.44	6.25	8.530	7.7	9.75	11.12	11.3	27.3	4.665	0.973	0.547
Microbiology, Chlorophyll a (µg/L)	11	2	18	0.23	0.23	0.328	0.565	1.144	1	1.335	2.08	2.08	3.22	0.874	0.264	0.764
Nutrients, Dissolved Nitrogen (mg/L)	12	0	0	0.148	0.148	0.1611	0.18	0.195	0.1985	0.21	0.219	0.25	0.25	0.028	0.008	0.141
Nutrients, Dissolved Organic Carbon (mg/L)	23	0	0	2.3	2.3	2.4	2.8	3.283	3	3.25	4.38	3.5	7.3	1.074	0.224	0.327
Nutrients, Dissolved o-Phosphate, as P (mg/L)	6	4	67	0.001	0.001	0.001	0.001	0.001	0.001	0.001375	0.00205	0.0015	0.0026	0.001	0.000	0.477
Nutrients, Nitrate, as N (mg/L)	27	6	22	0.005	0.005	0.00786	0.01	0.048	0.0164	0.023	0.10856	0.03	0.385	0.096	0.018	2.001
Nutrients, Nitrate/Nitrite, as N (mg/L)	26	8	31	0.0051	0.0051	0.0085	0.01	0.059	0.0151	0.02295	0.21	0.023	0.386	0.114	0.022	1.951
Nutrients, Nitrite, as N (mg/L)	26	25	96	0.001	0.001	0.001	0.001	0.006	0.001	0.01	0.01	0.01	0.05	0.010	0.002	1.653

Table B.2.1-7 Daring Lake (DAL)- Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	23	7	30	0.005	0.005	0.0052	0.0075	0.016	0.012	0.0185	0.0258	0.026	0.05	0.012	0.003	0.782
Nutrients, Total Dissolved Phosphorus (mg/L)	15	6	40	0.001	0.001	0.00128	0.00195	0.005	0.0038	0.00805	0.01	0.01	0.01	0.004	0.001	0.760
Nutrients, Total Nitrogen (mg/L)	14	0	0	0.152	0.152	0.1751	0.19	0.251	0.203	0.222	0.261	0.27	0.866	0.179	0.048	0.715
Nutrients, Total Organic Carbon (mg/L)	23	0	0	2.3	2.3	2.5	2.825	3.372	3.1	3.3	4.48	3.4	8	1.186	0.247	0.352
Nutrients, Total Phosphorus (mg/L)	24	10	42	0.002	0.002	0.002	0.002925	0.005	0.004	0.007575	0.01	0.01	0.01	0.003	0.001	0.586
Nutrients, o-Phosphate, as P (mg/L)	15	14	93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.001	0.000	0.469
Physical Parameters, Specific Conductivity (µS/cm)	24	0	0	13.9	13.9	15.86	17.575	24.296	19.2	22.25	30.16	26.1	75.7	16.161	3.299	0.665
Physical Parameters, Total Dissolved Solids (mg/L)	23	11	48	10	10	10	10	16.087	12	18	20	20	50	10.647	2.220	0.662
Physical Parameters, Total Suspended Solids (mg/L)	23	22	96	3	3	3	3	3.565	3	3	3	3	16	2.711	0.565	0.760
Physical Parameters, Turbidity (NTU)	23	0	0	0.12	0.12	0.122	0.155	0.574	0.23	0.51	1.368	0.67	3.31	0.806	0.168	1.403
Physical Parameters, pH (unitless)	23	0	0	6.06	6.47	6.318	6.51	6.516	6.56	6.6	6.636	6.71	6.71	0.159	0.033	0.024
Total Metals, Aluminum (µg/L)	23	1	4	3	3	3.14	3.8	8.496	4.7	6.45	11.26	7.1	58.5	12.240	2.552	1.441
Total Metals, Antimony (µg/L)	23	21	91	0.1	0.1	0.1	0.1	0.117	0.1	0.1	0.1	0.1	0.4	0.065	0.014	0.554
Total Metals, Arsenic (µg/L)	22	18	82	0.2	0.2	0.2	0.2	0.223	0.2	0.2	0.3	0.2	0.4	0.053	0.011	0.237
Total Metals, Barium (µg/L)	23	0	0	1.6	1.6	1.7	1.8	2.717	2.1	2.55	2.96	3	14	2.519	0.525	0.927
Total Metals, Beryllium (µg/L)	23	23	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	11	11	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	11	1	9	0.9	0.9	1.1	1.3	1.482	1.5	1.75	1.8	1.8	1.8	0.312	0.094	0.211
Total Metals, Cadmium (µg/L)	23	23	100	0.04	0.04	0.04	0.04	0.053	0.05	0.05	0.09	0.05	0.1	0.019	0.004	0.368
Total Metals, Cesium (µg/L)	23	23	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Chromium (µg/L)	22	18	82	0.1	0.1	0.1	0.1	0.223	0.1	0.1	0.3	0.1	1.6	0.354	0.076	1.592
Total Metals, Cobalt (µg/L)	23	22	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.021	0.004	0.200
Total Metals, Copper (µg/L)	23	1	4	0.2	0.3	0.3	0.5	0.630	0.6	0.7	0.8	0.9	2	0.346	0.072	0.548
Total Metals, Iron (µg/L)	23	7	30	5	5	5	6.5	33.696	13	32.5	50	50	287	60.449	12.604	1.794
Total Metals, Lead (µg/L)	23	22	96	0.1	0.1	0.1	0.1	0.170	0.1	0.1	0.1	0.1	1.7	0.334	0.070	1.968
Total Metals, Lithium (µg/L)	23	0	0	0.9	0.9	1.1	1.2	1.461	1.3	1.5	1.66	1.8	4.6	0.715	0.149	0.490
Total Metals, Magnesium (µg/L)	1	0	0	0.5	0.5	0.5	0.5	0.500	0.5	0.5	0.5	0.5	0.5	----	----	----
Total Metals, Manganese (µg/L)	22	0	0	0.4	0.4	0.81	0.925	2.668	1.5	1.95	2.99	3	22.2	4.549	0.970	1.705
Total Metals, Mercury (ng/L)	14	5	36	0.0001	0.0001	0.06014	0.2	0.371	0.4	0.475	0.74	0.8	0.8	0.249	0.067	0.671
Total Metals, Mercury (µg/L)	20	19	95	0.0005	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.003	0.001	0.316
Total Metals, Molybdenum (µg/L)	23	22	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.021	0.004	0.200
Total Metals, Nickel (µg/L)	22	0	0	0.2	0.3	0.2	0.3	0.359	0.3	0.3	0.4	0.3	1.5	0.275	0.059	0.767
Total Metals, Rubidium (µg/L)	23	0	0	1.4	1.4	1.52	1.7	2.022	1.8	1.9	2.36	2.1	6.3	0.971	0.203	0.480
Total Metals, Selenium (µg/L)	23	22	96	0.3	0.3	0.3	0.3	0.365	0.3	0.3	0.5	0.3	1	0.170	0.035	0.464
Total Metals, Silver (µg/L)	23	23	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	23	0	0	7	7	7.2	7.9	10.083	8.5	9.05	11.92	10.4	38.9	6.451	1.345	0.640
Total Metals, Thallium (µg/L)	23	23	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	23	19	83	0.1	0.1	0.1	0.1	0.378	0.1	0.1	0.2	0.1	6.1	1.248	0.260	3.300
Total Metals, Uranium (µg/L)	23	23	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	23	19	83	0.1	0.1	0.1	0.1	0.130	0.1	0.1	0.2	0.1	0.4	0.076	0.016	0.586
Total Metals, Zinc (µg/L)	23	9	39	0.4	0.4	0.4	0.45	2.109	0.8	1.85	5.88	2	10	2.721	0.567	1.290

Table B.2.1-8 Desteffany Lake (DEL) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	24	0	0	3.2	3.2	3.43	3.875	4.600	4.65	4.9	5.9	5.9	6.6	0.942	0.192	0.205
Dissolved Metals, Antimony (µg/L)	24	22	92	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.2	0.028	0.006	0.261
Dissolved Metals, Arsenic (µg/L)	24	20	83	0.2	0.2	0.2	0.2	0.217	0.2	0.2	0.3	0.2	0.3	0.038	0.008	0.176
Dissolved Metals, Barium (µg/L)	24	0	0	1.7	1.7	2.03	2.2	2.442	2.45	2.725	2.87	3	3	0.348	0.071	0.142
Dissolved Metals, Beryllium (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	13	13	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	13	0	0	1.8	1.8	1.9	2	2.154	2.1	2.3	2.4	2.6	2.6	0.230	0.064	0.107
Dissolved Metals, Cadmium (µg/L)	24	24	100	0.04	0.04	0.04	0.04	0.045	0.045	0.05	0.05	0.05	0.05	0.005	0.001	0.114
Dissolved Metals, Cesium (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	24	2	8	0.2	0.4	0.3	0.575	0.604	0.6	0.7	0.8	0.8	1	0.203	0.041	0.336
Dissolved Metals, Iron (µg/L)	24	23	96	5	5	5	5	10.708	5	5	37.1	5	50	15.176	3.098	1.417
Dissolved Metals, Lead (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	24	0	0	1.1	1.4	1.5	1.6	1.717	1.7	1.9	1.97	2	2	0.212	0.043	0.123
Dissolved Metals, Manganese (µg/L)	24	0	0	0.3	0.4	0.4	0.5	0.542	0.55	0.6	0.7	0.7	0.8	0.125	0.025	0.230
Dissolved Metals, Mercury (ng/L)	9	6	67	0.2	0.2	0.2	0.2	0.256	0.2	0.3	0.34	0.3	0.5	0.101	0.034	0.397
Dissolved Metals, Mercury (µg/L)	23	23	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.02	0.003	0.001	0.265
Dissolved Metals, Molybdenum (µg/L)	24	5	21	0.1	0.2	0.1	0.2	0.192	0.2	0.2	0.27	0.2	0.3	0.058	0.012	0.304
Dissolved Metals, Nickel (µg/L)	24	0	0	0.7	0.7	0.9	0.9	1.104	1	1.2	1.3	1.3	2.2	0.328	0.067	0.297
Dissolved Metals, Rubidium (µg/L)	24	0	0	1.7	1.7	1.73	1.875	2.021	2.05	2.2	2.2	2.4	2.4	0.206	0.042	0.102
Dissolved Metals, Selenium (µg/L)	24	24	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	24	0	0	7.9	7.9	9.64	11.8	14.142	15.1	15.975	17.15	19.3	19.3	3.144	0.642	0.222
Dissolved Metals, Thallium (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	13	13	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	24	23	96	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.3	0.041	0.008	0.377
Dissolved Metals, Uranium (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	24	24	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	22	7	32	0.4	0.4	0.4	0.4	0.850	0.8	0.975	1.19	1.3	3	0.561	0.120	0.660
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	4	0	0	4.5	4.5	4.59	4.725	4.875	4.85	5	5.18	5.3	5.3	0.330	0.165	0.068
Major Ions, Dissolved Calcium (mg/L)	40	0	0	0.85	0.85	1.055	1.3	1.629	1.6	1.9	2.2	2.6	2.9	0.469	0.074	0.288
Major Ions, Dissolved Chloride (mg/L)	40	7	18	0.2	0.2	0.39	0.6	1.395	1.3	2.1	2.9	3.17	3.17	0.960	0.152	0.688
Major Ions, Dissolved Fluoride (mg/L)	25	23	92	0.033	0.1	0.1	0.1	0.095	0.1	0.1	0.1	0.1	0.1	0.018	0.004	0.194
Major Ions, Dissolved Magnesium (mg/L)	40	0	0	0.59	0.59	0.788	0.95	1.057	1	1.2	1.31	1.5	1.6	0.247	0.039	0.234
Major Ions, Dissolved Potassium (mg/L)	40	0	0	0.49	0.49	0.539	0.675	0.812	0.8	0.9	1.01	1.1	2.19	0.281	0.044	0.346
Major Ions, Dissolved Sodium (mg/L)	40	0	0	0.5	0.5	0.539	0.7	1.214	1.2	1.725	2	2.3	2.3	0.560	0.089	0.461
Major Ions, Dissolved Sulphate (mg/L)	40	10	25	2	2	2	3	3.782	3	4	5	5	10	1.961	0.310	0.518
Major Ions, Reactive Silica (mg/L)	26	0	0	0.081	0.081	0.1	0.127	0.150	0.156	0.169	0.2	0.21	0.21	0.036	0.007	0.243
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	40	0	0	3.7	3.7	4.09	4.475	5.748	5.1	5.5	5.91	6.5	34.9	4.776	0.755	0.831
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	40	0	0	4.55	4.55	6.472	7.3075	8.366	8.45	9.4	10.61	12.3	12.3	1.884	0.298	0.225
Microbiology, Chlorophyll a (µg/L)	15	2	13	0.351	0.351	0.384	0.459	0.968	0.933	1.05	1.95	1.77	2.13	0.593	0.153	0.613
Nutrients, Dissolved Nitrogen (mg/L)	15	0	0	0.16	0.16	0.164	0.1695	0.195	0.2	0.215	0.22	0.25	0.25	0.028	0.007	0.142
Nutrients, Dissolved Organic Carbon (mg/L)	40	0	0	2.5	2.5	2.7	2.9	3.116	3	3.3	3.8	3.8	4	0.380	0.060	0.122
Nutrients, Dissolved o-Phosphate, as P (mg/L)	7	5	71	0.001	0.001	0.001	0.001	0.001	0.001	0.0011	0.00128	0.0012	0.0014	0.000	0.000	0.145
Nutrients, Nitrate, as N (mg/L)	46	10	22	0.0084	0.0084	0.01	0.010125	0.026	0.01355	0.02925	0.0415	0.05	0.2	0.032	0.005	1.235
Nutrients, Nitrate/Nitrite, as N (mg/L)	42	11	26	0.0084	0.0084	0.01	0.01	0.027	0.0138	0.02925	0.0493	0.05	0.2	0.033	0.005	1.237
Nutrients, Nitrite, as N (mg/L)	44	43	98	0.001	0.001	0.001	0.001	0.006	0.008	0.01	0.01	0.01	0.05	0.008	0.001	1.263

Table B.2.1-8 Desteffany Lake (DEL) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	40	14	35	0.005	0.005	0.005	0.00675	0.013	0.0105	0.01575	0.025	0.028	0.05	0.010	0.002	0.780
Nutrients, Total Dissolved Phosphorus (mg/L)	16	8	50	0.001	0.001	0.00105	0.001575	0.003	0.00205	0.0024	0.01	0.0027	0.01	0.003	0.001	0.996
Nutrients, Total Nitrogen (mg/L)	17	0	0	0.156	0.156	0.1722	0.186	0.200	0.197	0.22	0.228	0.26	0.26	0.026	0.006	0.132
Nutrients, Total Organic Carbon (mg/L)	40	0	0	2.6	2.6	2.7	2.9	3.138	3	3.4	3.81	4	4	0.391	0.062	0.125
Nutrients, Total Phosphorus (mg/L)	40	17	43	0.002	0.002	0.002	0.002375	0.005	0.0036	0.006	0.01	0.01	0.01	0.003	0.000	0.616
Nutrients, o-Phosphate, as P (mg/L)	30	29	97	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.002	0.005	0.001	0.000	0.547
Physical Parameters, Specific Conductivity (µS/cm)	40	0	0	15.3	15.3	15.6	17.6	23.530	23.8	29.45	31.43	34.8	34.8	6.372	1.007	0.271
Physical Parameters, Total Dissolved Solids (mg/L)	38	13	34	10	10	10	10	17.684	14	17.5	24.4	22	84	14.534	2.358	0.822
Physical Parameters, Total Suspended Solids (mg/L)	40	36	90	3	3	3	3	3.350	3	3	3.1	3	8	1.189	0.188	0.355
Physical Parameters, Turbidity (NTU)	40	4	10	0.1	0.1	0.118	0.14	0.351	0.17	0.405	0.901	0.8	1.35	0.342	0.054	0.973
Physical Parameters, pH (unitless)	40	0	0	6.04	6.51	6.298	6.555	6.569	6.625	6.6625	6.691	6.74	6.74	0.158	0.025	0.024
Total Metals, Aluminum (µg/L)	40	6	15	4	4	4.39	5.2	9.972	6.67	9	30	10.1	30	8.668	1.371	0.869
Total Metals, Antimony (µg/L)	40	27	68	0.1	0.1	0.1	0.1	0.249	0.1	0.40825	0.6226	0.8	0.8	0.231	0.037	0.929
Total Metals, Arsenic (µg/L)	30	22	73	0.2	0.2	0.2	0.2	0.253	0.2	0.3	0.3	0.3	1	0.148	0.027	0.584
Total Metals, Barium (µg/L)	40	0	0	1.53	1.53	1.867	2	2.324	2.3	2.6	2.81	3.5	3.5	0.408	0.065	0.176
Total Metals, Beryllium (µg/L)	40	40	100	0.02	0.1	0.02	0.1	0.278	0.1	0.1	0.29	0.1	2	0.582	0.092	2.094
Total Metals, Bismuth (µg/L)	17	17	100	0.2	0.2	0.2	0.2	0.824	0.2	0.2	2.6	0.2	5	1.584	0.384	1.924
Total Metals, Boron (µg/L)	13	0	0	1.7	1.7	1.72	1.9	2.108	2.1	2.4	2.48	2.5	2.5	0.290	0.080	0.138
Total Metals, Cadmium (µg/L)	40	37	93	0.02	0.03	0.029	0.04	0.074	0.05	0.05	0.129	0.05	0.3	0.079	0.012	1.072
Total Metals, Cesium (µg/L)	40	38	95	0.008	0.1	0.0143	0.1	0.117	0.1	0.1	0.13	0.1	0.4	0.100	0.016	0.858
Total Metals, Chromium (µg/L)	40	36	90	0.1	0.1	0.1	0.1	0.480	0.1	0.1	1.92	0.1	3	0.925	0.146	1.927
Total Metals, Cobalt (µg/L)	40	34	85	0.03	0.1	0.0979	0.1	0.186	0.1	0.1	0.208	0.1	1	0.275	0.044	1.484
Total Metals, Copper (µg/L)	40	4	10	0.35	0.5	0.49	0.7	0.995	0.75	0.835	2	1	5.5	0.866	0.137	0.871
Total Metals, Iron (µg/L)	40	25	63	5	5	5	5	19.325	7	30	50	50	50	17.770	2.810	0.920
Total Metals, Lead (µg/L)	40	32	80	0.1	0.1	0.1	0.1	0.276	0.1	0.235	1	0.35	1.05	0.328	0.052	1.191
Total Metals, Lithium (µg/L)	40	4	10	0.7	1.1	1.163	1.5	1.722	1.7	1.825	2.1	2	3	0.522	0.083	0.303
Total Metals, Magnesium (µg/L)	2	0	0	0.9	0.9	0.9	0.9	0.900	0.9	0.9	0.9	0.9	0.9	----	----	----
Total Metals, Manganese (µg/L)	38	4	11	0.68	0.68	0.8	0.825	0.944	0.9	1	1.2	1.2	1.2	0.147	0.024	0.155
Total Metals, Mercury (ng/L)	18	6	33	0.0002	0.0002	0.000242	0.2	0.344	0.35	0.5	0.6	0.8	0.8	0.231	0.054	0.669
Total Metals, Mercury (µg/L)	30	29	97	0.0002	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.004	0.001	0.366
Total Metals, Molybdenum (µg/L)	40	12	30	0.03	0.03	0.07	0.1	0.257	0.2	0.3	0.37	0.3	1	0.263	0.042	1.023
Total Metals, Nickel (µg/L)	40	4	10	0.7	0.81	0.895	0.9	0.999	1	1.0225	1.11	1.2	1.3	0.120	0.019	0.121
Total Metals, Rubidium (µg/L)	40	0	0	1.2	1.2	1.309	1.5	1.796	1.85	2.1	2.2	2.4	2.4	0.356	0.056	0.198
Total Metals, Selenium (µg/L)	40	39	98	0.3	0.3	0.3	0.3	1.318	0.3	0.3	1.9	0.3	10	2.935	0.464	2.228
Total Metals, Silver (µg/L)	40	40	100	0.006	0.1	0.006	0.1	0.106	0.1	0.1	0.12	0.1	0.3	0.074	0.012	0.696
Total Metals, Strontium (µg/L)	40	0	0	5.46	5.46	6	7.15	11.457	11.8	15.525	16.83	19.2	19.2	4.344	0.687	0.379
Total Metals, Thallium (µg/L)	40	39	98	0.1	0.1	0.1	0.1	0.133	0.1	0.1	0.22	0.1	0.4	0.092	0.014	0.692
Total Metals, Tin (µg/L)	13	13	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	40	29	73	0.08	0.08	0.1	0.1	0.417	0.1	0.18	0.75	0.2	3	0.875	0.138	2.101
Total Metals, Uranium (µg/L)	40	34	85	0.058	0.1	0.061	0.1	0.114	0.1	0.1	0.12	0.1	0.3	0.064	0.010	0.564
Total Metals, Vanadium (µg/L)	40	39	98	0.03	0.1	0.03	0.1	0.187	0.1	0.1	0.46	0.1	1	0.280	0.044	1.497
Total Metals, Zinc (µg/L)	38	15	39	0.4	0.4	0.4	0.5	3.106	1.75	3.69	10	5	16	3.808	0.618	1.226

Table B.2.1-9 Fairy Lake River Upstream of Coppermine River (FAR) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	1	0	0	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	----	----	----
Dissolved Metals, Antimony (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	1	0	0	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	----	----	----
Dissolved Metals, Beryllium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	1	1	100	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	1	1	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Iron (µg/L)	1	1	100	50	50	50	50	50	50	50	50	50	50	----	----	----
Dissolved Metals, Lead (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	1	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Manganese (µg/L)	1	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Dissolved Metals, Molybdenum (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Rubidium (µg/L)	1	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	----	----	----
Dissolved Metals, Selenium (µg/L)	1	1	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	1	0	0	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	----	----	----
Dissolved Metals, Thallium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	1	0	0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	----	----	----
Major Ions, Dissolved Calcium (mg/L)	8	0	0	5.5	5.5	5.542	5.59	5.945	5.83	6.265	6.466	6.62	6.62	0.429	0.152	0.072
Major Ions, Dissolved Chloride (mg/L)	8	1	12.5	0.3	0.5	0.3	0.45	0.4875	0.5	0.525	0.63	0.6	0.7	0.136	0.048	0.278
Major Ions, Dissolved Fluoride (mg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	8	0	0	2.08	2.08	2.094	2.1	2.43875	2.26	2.31	2.859	2.34	4.07	0.667	0.236	0.273
Major Ions, Dissolved Potassium (mg/L)	8	0	0	0.25	0.25	0.264	0.27	0.29	0.285	0.3025	0.322	0.35	0.35	0.031	0.011	0.106
Major Ions, Dissolved Sodium (mg/L)	8	0	0	0.4	0.4	0.4	0.4	0.425	0.4	0.43	0.463	0.43	0.54	0.048	0.017	0.114
Major Ions, Dissolved Sulphate (mg/L)	8	8	100	1	3	2.4	3	2.75	3	3	3	3	3	0.707	0.250	0.257
Major Ions, Reactive Silica (mg/L)	7	0	0	0.24	0.24	0.252	0.27	0.281429	0.29	0.295	0.304	0.31	0.31	0.024	0.009	0.086
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	8	0	0	22.8	22.8	23.29	23.575	23.975	23.65	24.45	24.9	25.6	25.6	0.860	0.304	0.036
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	8	0	0	22.4	22.4	22.4	22.7	24.875	23.9	25.025	27.77	25.4	33.3	3.600	1.273	0.145
Nutrients, Dissolved Organic Carbon (mg/L)	8	0	0	1.7	1.7	1.77	1.8	2.05	1.85	2.225	2.48	2.3	2.9	0.404	0.143	0.197
Nutrients, Nitrate, as N (mg/L)	7	4	57.14	0.008	0.008	0.008	0.008	0.013	0.01	0.016	0.0196	0.025	0.025	0.006	0.002	0.493
Nutrients, Nitrate/Nitrite, as N (mg/L)	7	4	57.14	0.008	0.008	0.008	0.008	0.014857	0.01	0.0205	0.0266	0.029	0.029	0.009	0.003	0.595
Nutrients, Nitrite, as N (mg/L)	7	7	100	0.008	0.008	0.008	0.008	0.008286	0.008	0.008	0.0088	0.008	0.01	0.001	0.000	0.091
Nutrients, Total Ammonia, as N (mg/L)	8	6	75	0.005	0.005	0.005	0.005	0.007125	0.005	0.00575	0.0113	0.005	0.019	0.005	0.002	0.689
Nutrients, Total Dissolved Phosphorus (mg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Organic Carbon (mg/L)	8	0	0	1.5	1.5	1.5	1.65	1.8375	1.9	2	2.06	2.2	2.2	0.250	0.089	0.136
Nutrients, Total Phosphorus (mg/L)	8	3	37.5	0.003	0.003	0.0037	0.004	0.31125	0.006	0.00775	0.742	0.01	2.45	0.864	0.306	2.777
Nutrients, o-Phosphate, as P (mg/L)	7	6	85.71	0.002	0.002	0.002	0.002	0.003143	0.002	0.002	0.0052	0.002	0.01	0.003	0.001	0.962
Physical Parameters, Color (CU)	7	7	100	5	5	5	5	5	5	5	5	5	5	0.000	0.000	0.000
Physical Parameters, Specific Conductivity (µS/cm)	8	0	0	49.3	49.3	49.72	49.9	50.4375	50.3	50.7	51.36	51	52.2	0.881	0.312	0.017
Physical Parameters, Total Dissolved Solids (mg/L)	8	0	0	19	27	24.6	27.75	27.75	28.5	30	30.3	31	31	3.770	1.333	0.136

Table B.2.1-9 Fairy Lake River Upstream of Coppermine River (FAR) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Total Suspended Solids (mg/L)	8	6	75	3	3	3	3	3.5	3	3.25	4.6	3	6	1.069	0.378	0.305
Physical Parameters, Turbidity (NTU)	8	1	12.5	0.1	0.1	0.17	0.215	0.4775	0.5	0.65	0.83	0.9	0.9	0.289	0.102	0.605
Physical Parameters, pH (unitless)	8	0	0	6.78	7.33	7.165	7.3525	7.3325	7.41	7.4425	7.459	7.48	7.48	0.228	0.081	0.031
Total Metals, Aluminum (µg/L)	8	7	87.5	2.24	30	21.672	30	26.53	30	30	30	30	30	9.815	3.470	0.370
Total Metals, Antimony (µg/L)	8	4	50	0.2	0.2	0.41	0.5	0.56725	0.5	0.7095	0.7866	0.9	0.9	0.211	0.074	0.371
Total Metals, Arsenic (µg/L)	2	2	100	0.2	0.2	0.28	0.4	0.6	0.6	0.8	0.92	1	1	0.566	0.400	0.943
Total Metals, Barium (µg/L)	8	1	12.5	1	10	7.3	10	9.2625	10.15	10.85	11	11	11	3.367	1.191	0.364
Total Metals, Beryllium (µg/L)	8	8	100	0.02	2	0.076	1.525	1.515	2	2	2	2	2	0.898	0.318	0.593
Total Metals, Bismuth (µg/L)	6	6	100	0.4	0.4	0.7	1	2.233333	1	4	5	5	5	2.156	0.880	0.965
Total Metals, Cadmium (µg/L)	8	8	100	0.02	0.3	0.076	0.25	0.24	0.3	0.3	0.3	0.3	0.3	0.113	0.040	0.471
Total Metals, Cesium (µg/L)	8	8	100	0.008	0.4	0.0724	0.325	0.3135	0.4	0.4	0.4	0.4	0.4	0.162	0.057	0.517
Total Metals, Chromium (µg/L)	8	6	75	0.3	3	1.49	2.75	2.5375	3	3	3	3	3	0.969	0.343	0.382
Total Metals, Cobalt (µg/L)	8	7	87.5	0.1	1	0.1532	0.794	0.7845	1	1	1	1	1	0.400	0.141	0.509
Total Metals, Copper (µg/L)	8	6	75	0.48	2	0.844	1.75	1.685	2	2	2	2	2	0.600	0.212	0.356
Total Metals, Iron (µg/L)	8	8	100	30	30	30	30	32.5	30	30	36	30	50	7.071	2.500	0.218
Total Metals, Lead (µg/L)	8	7	87.5	0.1	1	0.73	1	0.905	1	1	1.042	1	1.14	0.329	0.116	0.363
Total Metals, Lithium (µg/L)	8	7	87.5	0.3	3	0.3	2.325	2.325	3	3	3	3	3	1.250	0.442	0.538
Total Metals, Magnesium (µg/L)	1	0	0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	----	----	----
Total Metals, Manganese (µg/L)	7	6	85.71	0.54	1	0.816	1	0.934286	1	1	1	1	1	0.174	0.066	0.186
Total Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Total Metals, Molybdenum (µg/L)	8	7	87.5	0.08	1	0.094	0.775	0.7725	1	1	1	1	1	0.421	0.149	0.545
Total Metals, Nickel (µg/L)	8	7	87.5	0.1	1	0.107	0.7775	0.77625	1	1	1	1	1	0.414	0.146	0.534
Total Metals, Rubidium (µg/L)	8	6	75	0.5	0.5	0.5	0.5	0.50125	0.5	0.5	0.503	0.5	0.51	0.004	0.001	0.007
Total Metals, Selenium (µg/L)	8	8	100	0.3	10	0.79	7.75	7.6625	10	10	10	10	10	4.332	1.532	0.565
Total Metals, Silver (µg/L)	8	8	100	0.006	0.3	0.0718	0.25	0.23825	0.3	0.3	0.3	0.3	0.3	0.117	0.041	0.491
Total Metals, Strontium (µg/L)	8	1	12.5	1	7	5.2	7	6.67	7.33	7.775	8	8	8	2.332	0.824	0.350
Total Metals, Thallium (µg/L)	8	8	100	0.1	0.4	0.1	0.325	0.325	0.4	0.4	0.4	0.4	0.4	0.139	0.049	0.427
Total Metals, Titanium (µg/L)	8	7	87.5	0.04	3	0.082	2.275	2.2675	3	3	3	3	3	1.356	0.480	0.598
Total Metals, Uranium (µg/L)	8	7	87.5	0.033	0.3	0.0799	0.25	0.241625	0.3	0.3	0.3	0.3	0.3	0.110	0.039	0.453
Total Metals, Vanadium (µg/L)	8	8	100	0.03	1	0.079	0.775	0.76625	1	1	1	1	1	0.433	0.153	0.565
Total Metals, Zinc (µg/L)	8	7	87.5	2.92	10	7.876	10	9.115	10	10	10	10	10	2.503	0.885	0.275

Table B.2.1-10 Lac De Gras Outlet (LDGO) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	16	0	0	1.6	1.6	1.75	1.975	2.906	2.3	2.625	3.2	3.2	12.3	2.550	0.637	0.877
Dissolved Metals, Antimony (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.235
Dissolved Metals, Arsenic (µg/L)	16	9	56	0.2	0.2	0.2	0.2	0.244	0.2	0.3	0.3	0.3	0.3	0.051	0.013	0.210
Dissolved Metals, Barium (µg/L)	16	0	0	1.5	2.2	2.3	2.4	2.619	2.6	2.825	3.1	3.4	3.4	0.432	0.108	0.165
Dissolved Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Bismuth (µg/L)	9	9	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	0.000	0.000	0.000
Dissolved Metals, Boron (µg/L)	9	0	0	2.3	2.3	2.3	2.4	2.511	2.5	2.6	2.66	2.9	2.9	0.190	0.063	0.076
Dissolved Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.045	0.045	0.05	0.05	0.05	0.05	0.005	0.001	0.115
Dissolved Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Chromium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.235
Dissolved Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Copper (µg/L)	16	1	6	0.2	0.4	0.4	0.575	0.650	0.7	0.8	0.8	0.9	0.9	0.190	0.047	0.292
Dissolved Metals, Iron (µg/L)	16	16	100	5	5	5	5	13.438	5	5	50	5	50	18.140	4.535	1.350
Dissolved Metals, Lead (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Lithium (µg/L)	16	0	0	0.9	1.7	1.25	1.775	1.819	1.9	2	2.15	2.3	2.3	0.380	0.095	0.209
Dissolved Metals, Manganese (µg/L)	16	0	0	0.3	0.3	0.3	0.4	0.438	0.4	0.5	0.6	0.6	0.7	0.115	0.029	0.262
Dissolved Metals, Mercury (ng/L)	7	4	57	0.2	0.2	0.2	0.2	0.286	0.2	0.35	0.44	0.5	0.5	0.121	0.046	0.425
Dissolved Metals, Mercury (µg/L)	14	14	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.02	0.003	0.001	0.249
Dissolved Metals, Molybdenum (µg/L)	16	3	19	0.1	0.1	0.1	0.2	0.256	0.3	0.3	0.3	0.4	0.4	0.089	0.022	0.348
Dissolved Metals, Nickel (µg/L)	16	0	0	0.9	0.9	1	1.1	1.163	1.15	1.3	1.3	1.4	1.4	0.136	0.034	0.117
Dissolved Metals, Rubidium (µg/L)	16	0	0	1.4	2	1.5	2.075	2.150	2.3	2.4	2.45	2.5	2.5	0.365	0.091	0.170
Dissolved Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	0.000	0.000	0.000
Dissolved Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Strontium (µg/L)	16	0	0	7.7	7.7	7.75	14.05	16.238	17.9	19.6	20.7	23.1	23.1	4.915	1.229	0.303
Dissolved Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Tin (µg/L)	9	9	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Titanium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.235
Dissolved Metals, Uranium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Vanadium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Dissolved Metals, Zinc (µg/L)	16	7	44	0.4	0.4	0.4	0.4	0.781	0.7	0.925	1.4	1.6	1.8	0.449	0.112	0.575
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	5.4	5.4	5.43	5.475	5.550	5.55	5.625	5.67	5.7	5.7	0.212	0.150	0.038
Major Ions, Dissolved Calcium (mg/L)	39	0	0	0.75	0.75	0.882	1.1	1.563	1.6	1.9	2.22	2.9	2.9	0.553	0.088	0.353
Major Ions, Dissolved Chloride (mg/L)	40	8	20	0.2	0.2	0.49	0.6	1.447	0.75	2.225	3.22	3.77	3.77	1.133	0.179	0.783
Major Ions, Dissolved Fluoride (mg/L)	18	15	83	0.032	0.1	0.0802	0.1	0.098	0.1	0.1	0.1	0.1	0.2	0.033	0.008	0.340
Major Ions, Dissolved Magnesium (mg/L)	39	0	0	0.51	0.51	0.566	0.67	0.960	1	1.15	1.32	1.7	1.7	0.320	0.051	0.334
Major Ions, Dissolved Potassium (mg/L)	39	0	0	0.43	0.43	0.578	0.605	0.786	0.7	0.9	1.1	1.3	1.3	0.227	0.036	0.288
Major Ions, Dissolved Sodium (mg/L)	39	0	0	0.45	0.45	0.548	0.66	1.171	0.84	1.65	2.2	2.7	2.7	0.675	0.108	0.577
Major Ions, Dissolved Sulphate (mg/L)	40	13	33	2	2	2	3	3.544	3	4	5	5	10	1.517	0.240	0.428
Major Ions, Reactive Silica (mg/L)	24	0	0	0.048	0.048	0.053	0.07	0.087	0.082	0.11	0.12	0.14	0.14	0.026	0.005	0.301
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	39	1	3	0.4	3.2	3.64	4.1	5.044	5.4	6	6.32	6.9	6.9	1.272	0.204	0.252
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	39	0	0	4.01	4.01	4.456	5.53	7.855	8.3	9.65	10.88	13.5	13.5	2.544	0.407	0.324
Microbiology, Chlorophyll a (µg/L)	9	2	22	0.31	0.31	0.3532	0.408	0.735	0.558	1	1.15	1.75	1.75	0.461	0.154	0.627
Nutrients, Dissolved Nitrogen (mg/L)	10	0	0	0.152	0.152	0.1637	0.17025	0.331	0.1865	0.22	0.4	0.27	1.57	0.437	0.138	1.319
Nutrients, Dissolved Organic Carbon (mg/L)	40	0	0	1.7	1.7	2.29	2.5	2.871	2.9	3.125	3.51	3.9	3.9	0.494	0.078	0.172
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	4	80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00112	0.001	0.0012	0.000	0.000	0.086
Nutrients, Nitrate, as N (mg/L)	39	28	72	0.005	0.005	0.005	0.005	0.043	0.008	0.0145	0.02992	0.0274	1.04	0.167	0.027	3.888
Nutrients, Nitrate/Nitrite, as N (mg/L)	39	28	72	0.0051	0.0051	0.0051	0.008	0.043	0.01	0.014	0.02308	0.022	1.04	0.167	0.027	3.869
Nutrients, Nitrite, as N (mg/L)	38	37	97	0.001	0.001	0.001	0.001	0.007	0.008	0.01	0.01	0.01	0.05	0.008	0.001	1.222

Table B.2.1-10 Lac De Gras Outlet (LDGO) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	40	15	38	0.005	0.005	0.005	0.00875	0.016	0.012	0.02	0.0301	0.031	0.05	0.012	0.002	0.764
Nutrients, Total Dissolved Phosphorus (mg/L)	15	10	67	0.001	0.001	0.0012	0.0019	0.005	0.0024	0.01	0.01	0.01	0.01	0.004	0.001	0.813
Nutrients, Total Nitrogen (mg/L)	12	0	0	0.152	0.152	0.1613	0.1775	0.310	0.2	0.2125	0.274	0.22	1.55	0.392	0.113	1.266
Nutrients, Total Organic Carbon (mg/L)	40	0	0	1.8	1.8	2.28	2.6	2.888	3	3.2	3.4	4	4	0.485	0.077	0.168
Nutrients, Total Phosphorus (mg/L)	41	18	44	0.002	0.002	0.002	0.0028	0.008	0.005	0.01	0.01	0.02	0.05	0.010	0.002	1.248
Nutrients, o-Phosphate, as P (mg/L)	30	25	83	0.001	0.001	0.001	0.001	0.011	0.002	0.002	0.0041	0.003	0.281	0.051	0.009	4.457
Physical Parameters, Color (CU)	15	14	93	5	5	5	5	5.333	5	5	5	5	10	1.291	0.333	0.242
Physical Parameters, Specific Conductivity (µS/cm)	39	0	0	12.9	12.9	14.86	16.65	23.559	20.2	29.95	36.34	43.1	43.1	8.594	1.376	0.365
Physical Parameters, Total Dissolved Solids (mg/L)	39	17	44	10	10	10	10	15.231	14	18	24.4	29	36	6.611	1.059	0.434
Physical Parameters, Total Suspended Solids (mg/L)	38	34	89	3	3	3	3	3.263	3	3	3.3	3	8	0.950	0.154	0.291
Physical Parameters, Turbidity (NTU)	39	1	3	0.08	0.08	0.128	0.15	0.450	0.28	0.545	0.976	0.92	2.4	0.499	0.080	1.108
Physical Parameters, pH (unitless)	39	0	0	4.77	6.41	6.466	6.57	6.624	6.69	6.775	6.812	7.06	7.06	0.341	0.055	0.052
Total Metals, Aluminum (µg/L)	38	10	26	1.8	1.8	2.64	3.125	18.603	4.1	24.325	30	30	330	53.096	8.613	2.854
Total Metals, Antimony (µg/L)	38	25	66	0.1	0.1	0.1	0.1	0.382	0.1	0.56825	0.858	1	2.6	0.527	0.085	1.378
Total Metals, Arsenic (µg/L)	30	20	67	0.2	0.2	0.2	0.2	0.297	0.2	0.3	0.33	0.3	1	0.208	0.038	0.700
Total Metals, Barium (µg/L)	38	3	8	1	1	1.5	1.925	2.302	2.25	2.8	3.03	4	4	0.689	0.112	0.299
Total Metals, Beryllium (µg/L)	38	37	97	0	0.1	0.1	0.1	0.543	0.1	0.1	2	0.1	2	0.823	0.133	1.515
Total Metals, Bismuth (µg/L)	18	18	100	0.2	0.2	0.2	0.2	1.067	0.3	0.4	5	0.4	5	1.812	0.427	1.699
Total Metals, Boron (µg/L)	9	0	0	2.2	2.2	2.28	2.3	2.456	2.5	2.5	2.64	2.8	2.8	0.181	0.060	0.074
Total Metals, Cadmium (µg/L)	39	37	95	0.02	0.02	0.04	0.05	0.115	0.05	0.2	0.3	0.3	0.3	0.111	0.018	0.961
Total Metals, Cesium (µg/L)	38	37	97	0.008	0.1	0.1	0.1	0.180	0.1	0.1	0.4	0.1	1	0.188	0.030	1.041
Total Metals, Chromium (µg/L)	39	33	85	0.1	0.1	0.1	0.1	0.972	0.1	2.35	3	5	5	1.391	0.223	1.431
Total Metals, Cobalt (µg/L)	39	36	92	0.038	0.038	0.1	0.1	0.330	0.1	0.573	1	1	1	0.399	0.064	1.210
Total Metals, Copper (µg/L)	39	8	21	0.4	0.4	0.6	0.7	1.303	0.8	2	2.088	3	5.2	0.955	0.153	0.733
Total Metals, Iron (µg/L)	38	34	89	5	5	5	5	23.053	18.5	39.75	50	60	60	19.608	3.181	0.851
Total Metals, Lead (µg/L)	39	34	87	0.1	0.1	0.1	0.1	0.402	0.1	1	1	1.09	1.09	0.417	0.067	1.039
Total Metals, Lithium (µg/L)	38	9	24	1	1	1.2	1.5	1.961	1.85	2.25	3	3	3	0.658	0.107	0.336
Total Metals, Magnesium (µg/L)	3	0	0	1.1	1.1	1.14	1.2	1.233	1.3	1.3	1.3	1.3	1.3	0.115	0.067	0.094
Total Metals, Manganese (µg/L)	36	10	28	0.6	0.6	0.7	0.7	0.964	1	1.05	1.245	1.3	1.9	0.267	0.045	0.277
Total Metals, Mercury (ng/L)	13	6	46	0.0001	0.0001	0.0002	0.2	0.277	0.3	0.4	0.5	0.6	0.6	0.201	0.056	0.724
Total Metals, Mercury (µg/L)	24	23	96	0.0008	0.01	0.01	0.01	0.011	0.01	0.01	0.017	0.01	0.02	0.004	0.001	0.367
Total Metals, Molybdenum (µg/L)	38	20	53	0.07	0.07	0.1	0.1	0.382	0.25	0.4	1	0.4	1	0.361	0.059	0.946
Total Metals, Nickel (µg/L)	39	8	21	0.9	0.9	0.98	1	1.168	1.1	1.23	1.4	1.4	2	0.242	0.039	0.207
Total Metals, Rubidium (µg/L)	34	0	0	1.1	1.1	1.4	1.505	1.817	1.75	2.2	2.4	2.5	2.5	0.425	0.073	0.234
Total Metals, Selenium (µg/L)	38	37	97	0.3	0.3	0.3	0.3	2.624	0.3	0.875	10	1	10	4.166	0.676	1.588
Total Metals, Silver (µg/L)	38	37	97	0.006	0.006	0.1	0.1	0.143	0.1	0.175	0.3	0.2	0.3	0.094	0.015	0.660
Total Metals, Strontium (µg/L)	38	0	0	5	5	5.85	7	11.165	8.4	16.275	19.39	23.1	23.1	5.578	0.905	0.500
Total Metals, Thallium (µg/L)	38	38	100	0.1	0.1	0.1	0.1	0.171	0.1	0.1	0.4	0.1	0.4	0.129	0.021	0.756
Total Metals, Tin (µg/L)	9	9	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Titanium (µg/L)	38	32	84	0.1	0.1	0.1	0.1	0.888	0.1	0.3825	3	0.41	6	1.458	0.237	1.642
Total Metals, Uranium (µg/L)	38	35	92	0.041	0.1	0.1	0.1	0.143	0.1	0.1	0.3	0.1	0.3	0.090	0.015	0.632
Total Metals, Vanadium (µg/L)	38	36	95	0.03	0.03	0.1	0.1	0.316	0.1	0.2575	1	0.3	1	0.388	0.063	1.230
Total Metals, Zinc (µg/L)	39	15	38	0.4	0.4	0.4	0.55	5.719	2.1	10	13.8	24	28	7.550	1.209	1.320

Table B.2.1-11 Point Lake (POL) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	16	0	0	10.6	10.6	11	11.4	13.475	13.1	14.425	16.9	18.7	18.7	2.415	0.604	0.179
Dissolved Metals, Antimony (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.1125	0.1	0.1	0.1	0.1	0.3	0.050	0.013	0.444
Dissolved Metals, Arsenic (µg/L)	16	7	44	0.2	0.2	0.2	0.2	0.2625	0.3	0.3	0.3	0.4	0.4	0.062	0.015	0.236
Dissolved Metals, Barium (µg/L)	16	0	0	2	2	2.4	2.775	3.175	3.3	3.65	3.85	3.9	3.9	0.589	0.147	0.186
Dissolved Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	10	0	0	1.5	1.5	1.5	1.6	1.93	1.95	2.25	2.4	2.4	2.4	0.371	0.117	0.192
Dissolved Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.044375	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.115
Dissolved Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	16	1	6	0.2	0.7	0.75	0.8	0.98125	1	1.125	1.35	1.5	1.5	0.308	0.077	0.314
Dissolved Metals, Iron (µg/L)	16	16	100	5	5	5	5	10.625	5	5	27.5	5	50	15.370	3.843	1.447
Dissolved Metals, Lead (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.10625	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.235
Dissolved Metals, Lithium (µg/L)	16	0	0	0.7	1	1.05	1.375	1.45	1.5	1.625	1.75	1.9	1.9	0.312	0.078	0.215
Dissolved Metals, Manganese (µg/L)	16	0	0	0.2	0.2	0.2	0.3	0.3375	0.35	0.4	0.4	0.5	0.5	0.089	0.022	0.262
Dissolved Metals, Mercury (ng/L)	8	4	50	0.2	0.2	0.2	0.2	0.2875	0.25	0.325	0.43	0.5	0.5	0.113	0.040	0.392
Dissolved Metals, Mercury (µg/L)	14	14	100	0.01	0.01	0.01	0.01	0.0107143	0.01	0.01	0.01	0.01	0.02	0.003	0.001	0.249
Dissolved Metals, Molybdenum (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	16	0	0	0.8	0.8	0.95	1	1.1625	1.2	1.225	1.4	1.5	1.6	0.206	0.052	0.177
Dissolved Metals, Rubidium (µg/L)	16	0	0	1.5	1.5	1.55	1.85	2.1125	2.15	2.4	2.6	2.8	2.8	0.405	0.101	0.192
Dissolved Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	16	0	0	7	7	7.15	9.225	10.30625	10.75	12	12.4	13.6	13.6	2.075	0.519	0.201
Dissolved Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	16	1	6	0.4	0.4	0.65	0.8	1.45	1.3	1.85	2.5	3.2	3.2	0.808	0.202	0.557
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	5.5	5.5	5.55	5.625	5.75	5.75	5.875	5.95	6	6	0.354	0.250	0.061
Major Ions, Dissolved Calcium (mg/L)	32	0	0	0.2	0.2	1.001	1.42	1.9915625	2.1	2.525	2.79	3.2	3.2	0.700	0.124	0.351
Major Ions, Dissolved Chloride (mg/L)	33	16	48	0.2	0.3	0.3	0.5	0.6857576	0.7	0.7	1.082	0.7	1.3	0.275	0.048	0.401
Major Ions, Dissolved Fluoride (mg/L)	18	16	89	0.038	0.1	0.082	0.1	0.0932222	0.1	0.1	0.1	0.1	0.1	0.020	0.005	0.212
Major Ions, Dissolved Magnesium (mg/L)	32	1	3	0.1	0.1	0.542	0.7375	0.955625	1	1.2	1.3	1.5	1.5	0.314	0.055	0.328
Major Ions, Dissolved Potassium (mg/L)	32	1	3	0.1	0.41	0.428	0.6	0.7015625	0.7	0.8025	0.9	1.1	1.2	0.218	0.039	0.311
Major Ions, Dissolved Sodium (mg/L)	32	1	3	0.1	0.46	0.478	0.65	0.8315625	0.8	1	1.19	1.4	1.4	0.292	0.052	0.351
Major Ions, Dissolved Sulphate (mg/L)	33	6	18	1	2	2.7	3	3.6233333	3	4	5	5	8	1.198	0.209	0.331
Major Ions, Reactive Silica (mg/L)	23	0	0	0.422	0.422	0.46	0.4885	0.5704348	0.567	0.64	0.678	0.77	0.77	0.096	0.020	0.168
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	32	0	0	3.5	3.5	4.24	5.1	5.984375	6	7.125	7.7	8.4	8.4	1.375	0.243	0.230
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	32	0	0	0.8	0.8	5.002	6.585	8.87875	9.6	10.95	11.97	13.5	13.5	2.865	0.506	0.323
Microbiology, Chlorophyll a (µg/L)	10	2	20	0.327	0.327	0.3342	0.46675	0.6946	0.657	0.97975	1.01	1.1	1.1	0.299	0.095	0.431
Nutrients, Dissolved Nitrogen (mg/L)	11	0	0	0.225	0.225	0.243	0.2795	0.2927273	0.29	0.3185	0.34	0.34	0.34	0.037	0.011	0.126
Nutrients, Dissolved Organic Carbon (mg/L)	32	0	0	2.8	2.8	2.92	3.4	3.8578125	3.76	4.2	4.59	4.6	6	0.761	0.134	0.197
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	2	40	0.001	0.001	0.001	0.001	0.00142	0.0012	0.0018	0.00198	0.0021	0.0021	0.001	0.000	0.354
Nutrients, Nitrate, as N (mg/L)	35	3	9	0.05	0.05	0.062	0.08	0.1072686	0.096	0.1215	0.1904	0.176	0.216	0.045	0.008	0.416
Nutrients, Nitrate/Nitrite, as N (mg/L)	31	3	10	0.05	0.05	0.062	0.075	0.0989774	0.095	0.1145	0.123	0.142	0.216	0.035	0.006	0.357
Nutrients, Nitrite, as N (mg/L)	34	34	100	0.001	0.001	0.001	0.001	0.0093529	0.008	0.01	0.01	0.01	0.05	0.013	0.002	1.436
Nutrients, Total Ammonia, as N (mg/L)	32	27	84	0.005	0.005	0.005	0.005	0.0124375	0.005	0.01	0.0476	0.016	0.05	0.015	0.003	1.209

Table B.2.1-11 Point Lake (POL) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Dissolved Phosphorus (mg/L)	13	4	31	0.001	0.001	0.00186	0.0023	0.0045077	0.0027	0.0053	0.01	0.0053	0.01	0.003	0.001	0.745
Nutrients, Total Nitrogen (mg/L)	13	0	0	0.209	0.209	0.2568	0.28	0.2970769	0.291	0.33	0.34	0.355	0.355	0.040	0.011	0.134
Nutrients, Total Organic Carbon (mg/L)	32	0	0	2.8	2.8	2.9	3.3	3.8478125	3.9	4.35	4.7	5.9	5.9	0.752	0.133	0.195
Nutrients, Total Phosphorus (mg/L)	33	11	33	0.002	0.002	0.002	0.0033	0.0065303	0.006	0.01	0.01	0.02	0.02	0.004	0.001	0.638
Nutrients, o-Phosphate, as P (mg/L)	25	18	72	0.001	0.001	0.001	0.001	0.002736	0.002	0.002	0.0076	0.003	0.01	0.003	0.001	1.033
Physical Parameters, Color (CU)	12	11	92	5	5	5	5	5.4166667	5	5	5	5	10	1.443	0.417	0.266
Physical Parameters, Specific Conductivity (µS/cm)	32	0	0	14.5	14.5	17.09	19.15	23.4125	23.05	27.625	29.7	34.8	34.8	5.558	0.982	0.237
Physical Parameters, Total Dissolved Solids (mg/L)	32	9	28	10	10	10	10	21.25	14	20	26.6	28	175	29.235	5.168	1.376
Physical Parameters, Total Suspended Solids (mg/L)	32	29	91	3	3	3	3	3.375	3	3	3	3	8	1.212	0.214	0.359
Physical Parameters, Turbidity (NTU)	32	2	6	0.05	0.05	0.082	0.13	0.5271875	0.25	0.5325	0.898	0.9	3.33	0.763	0.135	1.447
Physical Parameters, pH (unitless)	32	0	0	6.2	6.45	6.471	6.61	6.695625	6.75	6.79	6.83	6.87	6.87	0.153	0.027	0.023
Total Metals, Aluminum (µg/L)	32	9	28	10.8	10.8	13.54	15.15	20	17.05	30	30	30	30	6.846	1.210	0.342
Total Metals, Antimony (µg/L)	32	22	69	0.1	0.1	0.1	0.1	0.2691875	0.1	0.525	0.6914	0.8	0.8	0.258	0.046	0.957
Total Metals, Arsenic (µg/L)	23	10	43	0.2	0.2	0.2	0.2	0.3608696	0.3	0.3	0.86	0.3	1	0.257	0.054	0.713
Total Metals, Barium (µg/L)	32	0	0	2	2	2	2.675	2.9875	3	3.225	3.88	4	4.3	0.612	0.108	0.205
Total Metals, Beryllium (µg/L)	32	32	100	0.02	0.02	0.1	0.1	0.5725	0.1	0.575	2	0.1	2	0.837	0.148	1.463
Total Metals, Bismuth (µg/L)	18	18	100	0.2	0.2	0.2	0.2	1.3444444	0.2	0.85	5	1	5	2.020	0.476	1.502
Total Metals, Boron (µg/L)	10	0	0	1.5	1.5	1.68	1.725	1.96	1.9	2.225	2.4	2.4	2.4	0.313	0.099	0.160
Total Metals, Cadmium (µg/L)	32	31	97	0.04	0.04	0.04	0.04	0.115	0.05	0.165	0.3	0.3	0.3	0.110	0.019	0.957
Total Metals, Cesium (µg/L)	32	31	97	0.032	0.032	0.1	0.1	0.172875	0.1	0.175	0.4	0.1	0.4	0.134	0.024	0.774
Total Metals, Chromium (µg/L)	32	27	84	0.1	0.1	0.1	0.1	0.91875	0.1	2.325	3	3	3	1.271	0.225	1.384
Total Metals, Cobalt (µg/L)	32	31	97	0.084	0.084	0.1	0.1	0.3245	0.1	0.325	1	0.1	1	0.396	0.070	1.221
Total Metals, Copper (µg/L)	32	7	22	0.7	0.7	1	1.075	1.53625	1.2	2	2	2.1	6	0.931	0.165	0.606
Total Metals, Iron (µg/L)	32	29	91	5	5	5	5	19.75	5	30	50	50	50	17.563	3.105	0.889
Total Metals, Lead (µg/L)	32	28	88	0.1	0.1	0.1	0.1	0.406875	0.1	1	1	1.02	1.02	0.413	0.073	1.015
Total Metals, Lithium (µg/L)	32	9	28	0.2	0.2	1.1	1.275	1.7665625	1.55	2.25	3	3	3	0.786	0.139	0.445
Total Metals, Magnesium (µg/L)	1	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Manganese (µg/L)	31	8	26	0.2	0.2	0.3	0.4	0.5806452	0.5	0.85	1	1	1	0.274	0.049	0.471
Total Metals, Mercury (ng/L)	13	4	31	0.0001	0.0001	0.04016	0.2	0.4000231	0.4	0.5	0.6	0.6	1.1	0.289	0.080	0.722
Total Metals, Mercury (µg/L)	19	18	95	0.0007	0.01	0.01	0.01	0.0100368	0.01	0.01	0.01	0.01	0.02	0.003	0.001	0.321
Total Metals, Molybdenum (µg/L)	32	30	94	0.08	0.08	0.1	0.1	0.330625	0.1	0.475	1	1	1	0.394	0.070	1.192
Total Metals, Nickel (µg/L)	32	8	25	0.8	0.8	1	1	1.119375	1.05	1.2	1.39	1.5	1.6	0.179	0.032	0.160
Total Metals, Rubidium (µg/L)	32	0	0	1.1	1.1	1.32	1.575	1.869375	1.8	2.3	2.4	2.8	2.8	0.440	0.078	0.235
Total Metals, Selenium (µg/L)	32	29	91	0.3	0.3	0.3	0.3	2.775	0.3	3.25	10	1	10	4.240	0.750	1.528
Total Metals, Silver (µg/L)	32	32	100	0.006	0.1	0.1	0.1	0.1470625	0.1	0.15	0.3	0.1	0.3	0.091	0.016	0.620
Total Metals, Strontium (µg/L)	32	0	0	5	5	6.37	7	8.9296875	8.55	11.05	12.33	13.6	13.6	2.335	0.413	0.261
Total Metals, Thallium (µg/L)	32	31	97	0.1	0.1	0.1	0.1	0.18125	0.1	0.325	0.4	0.4	0.4	0.133	0.024	0.734
Total Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Titanium (µg/L)	32	30	94	0.1	0.1	0.1	0.1	0.8328125	0.1	0.975	3	0.3	3	1.272	0.225	1.527
Total Metals, Uranium (µg/L)	32	31	97	0.077	0.077	0.1	0.1	0.1492813	0.1	0.15	0.3	0.1	0.3	0.089	0.016	0.593
Total Metals, Vanadium (µg/L)	32	31	97	0.03	0.03	0.1	0.1	0.3321875	0.1	0.55	1	1	1	0.396	0.070	1.191
Total Metals, Zinc (µg/L)	32	9	28	0.4	0.4	0.61	0.9	5.0065625	2.9	10	10	14	14	4.497	0.795	0.898

Table B.2.1-12 Rocknest Lake (ROL) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	14	0	0	7.8	7.8	8.12	8.725	9.879	9.55	10.525	12.04	12.4	13.8	1.685	0.450	0.171
Dissolved Metals, Antimony (µg/L)	14	13	93	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.2	0.027	0.007	0.249
Dissolved Metals, Arsenic (µg/L)	13	12	92	0.2	0.2	0.2	0.2	0.208	0.2	0.2	0.2	0.2	0.3	0.028	0.008	0.134
Dissolved Metals, Barium (µg/L)	14	0	0	2.4	2.4	2.4	2.55	2.750	2.75	2.975	3.07	3.1	3.1	0.253	0.068	0.092
Dissolved Metals, Beryllium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	9	9	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	9	0	0	1	1	1.08	1.2	1.456	1.5	1.6	1.82	1.9	1.9	0.309	0.103	0.212
Dissolved Metals, Cadmium (µg/L)	14	14	100	0.04	0.04	0.04	0.04	0.044	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.116
Dissolved Metals, Cesium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	14	2	14	0.2	0.4	0.26	0.525	0.707	0.7	0.7	1.15	0.8	1.7	0.393	0.105	0.556
Dissolved Metals, Iron (µg/L)	14	14	100	5	5	5	5	8.214	5	5	5	5	50	12.027	3.214	1.464
Dissolved Metals, Lead (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	14	0	0	0.9	0.9	1	1	1.071	1.1	1.1	1.17	1.2	1.3	0.099	0.027	0.093
Dissolved Metals, Manganese (µg/L)	14	0	0	0.5	0.5	0.5	0.6	0.871	0.7	0.975	1.45	1.1	2.2	0.487	0.130	0.559
Dissolved Metals, Mercury (ng/L)	7	4	57	0.2	0.2	0.2	0.2	0.267	0.2	0.275	0.4	0.3	0.5	0.121	0.046	0.454
Dissolved Metals, Mercury (µg/L)	12	12	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	14	0	0	0.7	0.7	0.73	0.8	0.857	0.8	0.9	1	1	1.1	0.116	0.031	0.135
Dissolved Metals, Rubidium (µg/L)	14	0	0	1.3	1.4	1.4	1.5	1.550	1.6	1.6	1.67	1.7	1.8	0.129	0.034	0.083
Dissolved Metals, Selenium (µg/L)	14	14	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	14	0	0	6.7	6.7	7.23	7.4	7.964	8.1	8.4	8.61	9.1	9.1	0.667	0.178	0.084
Dissolved Metals, Thallium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	9	9	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	13	3	23	0.4	0.4	0.4	0.5	1.208	0.8	1.1	1.64	1.7	5.8	1.437	0.398	1.190
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	5.8	5.8	5.83	5.875	5.950	5.95	6.025	6.07	6.1	6.1	0.212	0.150	0.036
Major Ions, Dissolved Calcium (mg/L)	19	0	0	1.5	1.5	1.78	1.9	2.195	2	2.35	2.8	2.8	3.9	0.540	0.124	0.246
Major Ions, Dissolved Chloride (mg/L)	20	16	80	0.62	0.7	0.7	0.7	0.743	0.7	0.7	0.776	0.7	1.2	0.142	0.032	0.191
Major Ions, Dissolved Fluoride (mg/L)	16	14	88	0.029	0.1	0.065	0.1	0.091	0.1	0.1	0.1	0.1	0.1	0.024	0.006	0.264
Major Ions, Dissolved Magnesium (mg/L)	19	0	0	0.7	0.7	0.8	0.9	1.005	1	1.15	1.2	1.2	1.2	0.161	0.037	0.161
Major Ions, Dissolved Potassium (mg/L)	19	0	0	0.5	0.5	0.5	0.5	0.605	0.6	0.7	0.7	0.8	0.8	0.097	0.022	0.160
Major Ions, Dissolved Sodium (mg/L)	19	0	0	0.6	0.6	0.6	0.65	0.763	0.8	0.85	0.92	1	1	0.134	0.031	0.176
Major Ions, Dissolved Sulphate (mg/L)	20	0	0	2	2	2	2	2.647	2.94	3	3.145	4	4	0.670	0.150	0.253
Major Ions, Reactive Silica (mg/L)	10	0	0	0.383	0.383	0.4109	0.43775	0.462	0.4515	0.498	0.5114	0.542	0.542	0.048	0.015	0.104
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	19	0	0	4.2	4.2	4.84	5.75	6.195	6.2	6.8	7.2	7.6	8.4	1.023	0.235	0.165
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	19	0	0	6.6	6.6	8.08	8.4	9.611	9.1	10.55	12	12	14.6	1.866	0.428	0.194
Microbiology, Chlorophyll a (µg/L)	9	2	22	0.339	0.339	0.3638	0.665	1.041	1	1.03	1.932	1.03	2.3	0.648	0.216	0.622
Nutrients, Dissolved Nitrogen (mg/L)	10	0	0	0.194	0.194	0.1958	0.205	0.231	0.226	0.25275	0.28	0.28	0.28	0.032	0.010	0.140
Nutrients, Dissolved Organic Carbon (mg/L)	19	0	0	2.8	2.8	2.98	3.1	3.313	3.2	3.4	3.96	3.7	4.2	0.407	0.093	0.123
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	3	60	0.001	0.001	0.001	0.001	0.001	0.001	0.0014	0.002	0.0014	0.0024	0.001	0.000	0.446
Nutrients, Nitrate, as N (mg/L)	23	0	0	0.05	0.06	0.052	0.0766	0.086	0.0822	0.0921	0.09846	0.0987	0.196	0.030	0.006	0.353
Nutrients, Nitrate/Nitrite, as N (mg/L)	21	0	0	0.05	0.05	0.05	0.06	0.084	0.0813	0.0942	0.0987	0.136	0.196	0.033	0.007	0.394
Nutrients, Nitrite, as N (mg/L)	22	22	100	0.001	0.001	0.001	0.001	0.004	0.001	0.01	0.01	0.01	0.01	0.004	0.001	1.111
Nutrients, Total Ammonia, as N (mg/L)	19	16	84	0.005	0.005	0.005	0.005	0.010	0.005	0.01	0.01284	0.0103	0.05	0.011	0.002	1.095

Table B.2.1-12 Rocknest Lake (ROL) - Winter

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Dissolved Phosphorus (mg/L)	11	4	36	0.001	0.001	0.0012	0.0016	0.004	0.0022	0.00715	0.01	0.0104	0.0104	0.004	0.001	0.920
Nutrients, Total Nitrogen (mg/L)	12	0	0	0.186	0.186	0.1907	0.2015	0.232	0.2255	0.255	0.279	0.3	0.3	0.038	0.011	0.162
Nutrients, Total Organic Carbon (mg/L)	19	0	0	2.9	2.9	2.9	2.9	3.263	3.1	3.45	3.72	3.8	4.3	0.393	0.090	0.121
Nutrients, Total Phosphorus (mg/L)	20	6	30	0.002	0.002	0.002	0.002275	0.005	0.00275	0.00485	0.01	0.008	0.02	0.004	0.001	0.952
Nutrients, o-Phosphate, as P (mg/L)	13	13	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.258
Physical Parameters, Specific Conductivity (µS/cm)	19	0	0	18	18	19.24	20.9	22.242	21.9	24	25.44	26.1	26.1	2.386	0.547	0.107
Physical Parameters, Total Dissolved Solids (mg/L)	19	7	37	10	10	10	10	17.000	14	22.5	25.6	34	34	7.724	1.772	0.454
Physical Parameters, Total Suspended Solids (mg/L)	19	16	84	3	3	3	3	3.579	3	3	4.8	3	8	1.575	0.361	0.440
Physical Parameters, Turbidity (NTU)	19	0	0	0.09	0.09	0.108	0.11	0.257	0.15	0.205	0.384	0.22	1.7	0.360	0.083	1.398
Physical Parameters, pH (unitless)	19	0	0	6.16	6.66	6.602	6.72	6.705	6.74	6.78	6.808	6.85	6.85	0.165	0.038	0.025
Total Metals, Aluminum (µg/L)	19	0	0	9.5	9.5	9.6	10.85	12.058	12	13.15	13.94	14.1	17	1.926	0.442	0.160
Total Metals, Antimony (µg/L)	19	17	89	0.1	0.1	0.1	0.1	0.121	0.1	0.1	0.12	0.1	0.4	0.071	0.016	0.589
Total Metals, Arsenic (µg/L)	18	16	89	0.2	0.2	0.2	0.2	0.211	0.2	0.2	0.23	0.2	0.3	0.032	0.008	0.153
Total Metals, Barium (µg/L)	19	0	0	2.5	2.5	2.5	2.6	2.832	2.7	3	3.18	3.5	3.7	0.335	0.077	0.118
Total Metals, Beryllium (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	9	9	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	9	0	0	1.1	1.1	1.1	1.1	1.389	1.3	1.6	1.7	2.1	2.1	0.330	0.110	0.237
Total Metals, Cadmium (µg/L)	19	19	100	0.04	0.04	0.04	0.04	0.048	0.05	0.05	0.05	0.05	0.1	0.013	0.003	0.278
Total Metals, Cesium (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cobalt (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	19	0	0	0.4	0.6	0.5	0.75	0.884	0.8	0.9	1.24	1.1	1.9	0.380	0.087	0.430
Total Metals, Iron (µg/L)	19	3	16	5	5	5.8	6	10.211	9	9	11.6	11	50	9.903	2.272	0.970
Total Metals, Lead (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	19	0	0	0.9	0.9	0.98	1	1.074	1.1	1.1	1.2	1.2	1.3	0.105	0.024	0.097
Total Metals, Manganese (µg/L)	19	0	0	0.6	0.6	0.7	0.8	1.037	0.9	1.1	1.4	1.3	2.6	0.467	0.107	0.450
Total Metals, Mercury (ng/L)	13	6	46	0.0001	0.0001	0.00012	0.2	0.362	0.3	0.5	0.76	0.8	1.1	0.330	0.092	0.914
Total Metals, Mercury (µg/L)	18	17	94	0.0005	0.01	0.01	0.01	0.009	0.01	0.01	0.01	0.01	0.01	0.002	0.001	0.236
Total Metals, Molybdenum (µg/L)	19	18	95	0.1	0.1	0.1	0.1	0.121	0.1	0.1	0.1	0.1	0.5	0.092	0.021	0.758
Total Metals, Nickel (µg/L)	19	0	0	0.7	0.7	0.7	0.8	0.837	0.8	0.9	0.92	1	1.1	0.101	0.023	0.121
Total Metals, Rubidium (µg/L)	19	0	0	1.3	1.4	1.4	1.5	1.553	1.5	1.6	1.8	1.7	1.8	0.139	0.032	0.089
Total Metals, Selenium (µg/L)	19	19	100	0.3	0.3	0.3	0.3	0.311	0.3	0.3	0.3	0.3	0.5	0.046	0.011	0.148
Total Metals, Silver (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.000
Total Metals, Strontium (µg/L)	19	0	0	6.5	6.5	7.08	7.4	7.863	7.9	8.45	8.56	9.2	9.2	0.725	0.166	0.092
Total Metals, Thallium (µg/L)	19	19	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	9	9	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	19	18	95	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.2	0.023	0.005	0.218
Total Metals, Uranium (µg/L)	19	18	95	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.2	0.023	0.005	0.218
Total Metals, Vanadium (µg/L)	19	18	95	0.1	0.1	0.1	0.1	0.116	0.1	0.1	0.1	0.1	0.4	0.069	0.016	0.594
Total Metals, Zinc (µg/L)	18	6	33	0.4	0.4	0.4	0.45	1.406	0.85	1.3	2.76	1.8	6.7	1.693	0.399	1.205

Table B.2.2-1 Coppermine River Above Copper Creek (COR04) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	22	0	0	4.8	4.8	15.13	18.275	27.44091	25.15	31.2	45.29	45.8	65.2	14.490	3.089	0.53
Dissolved Metals, Antimony (µg/L)	22	0	0	0.015	0.015	0.0162	0.034	0.051318	0.056	0.06275	0.0811	0.086	0.086	0.023	0.005	0.44
Dissolved Metals, Arsenic (µg/L)	25	0	0	0.1	0.18	0.132	0.19	0.1912	0.2	0.21	0.22	0.23	0.23	0.037	0.007	0.19
Dissolved Metals, Barium (µg/L)	22	0	0	18	18	21.38	24.6	30.84091	27.55	34.75	47.84	48.5	54.6	10.117	2.157	0.33
Dissolved Metals, Beryllium (µg/L)	22	0	0	0.001	0.002	0.002	0.003	0.003545	0.004	0.004	0.005	0.005	0.007	0.001	0.000	0.41
Dissolved Metals, Bismuth (µg/L)	22	6	27	0.001	0.001	0.001	0.001	0.001318	0.001	0.001	0.002	0.001	0.004	0.001	0.000	0.59
Dissolved Metals, Boron (µg/L)	22	0	0	1.5	1.5	2.1	2.4	2.968182	2.75	3.5	4.19	4.7	4.7	0.852	0.182	0.29
Dissolved Metals, Cadmium (µg/L)	22	0	0	0.001	0.001	0.003	0.004	0.012773	0.0045	0.01025	0.022	0.013	0.118	0.025	0.005	1.95
Dissolved Metals, Cerium (µg/L)	22	0	0	0.035	0.035	0.0951	0.121	0.151818	0.168	0.1835	0.2059	0.236	0.236	0.053	0.011	0.35
Dissolved Metals, Cesium (µg/L)	22	6	27	0.002	0.004	0.004	0.005	0.005455	0.005	0.006	0.0079	0.007	0.009	0.002	0.000	0.30
Dissolved Metals, Chromium (µg/L)	22	0	0	0.05	0.05	0.081	0.1	0.162045	0.125	0.16725	0.2171	0.218	0.602	0.128	0.027	0.79
Dissolved Metals, Cobalt (µg/L)	22	0	0	0.011	0.023	0.0232	0.03	0.035045	0.0355	0.037	0.0504	0.045	0.062	0.011	0.002	0.33
Dissolved Metals, Copper (µg/L)	22	0	0	0.71	1.01	1.168	1.3875	1.598182	1.645	1.8	2.078	2.37	2.37	0.391	0.083	0.24
Dissolved Metals, Gallium (µg/L)	22	0	0	0.001	0.001	0.0031	0.006	0.009455	0.0085	0.0135	0.0168	0.023	0.023	0.006	0.001	0.59
Dissolved Metals, Iron (µg/L)	22	0	0	18.3	36.4	36.54	49.725	58.74091	62.95	67.675	81.46	87.4	96.8	19.602	4.179	0.33
Dissolved Metals, Lanthanum (µg/L)	22	0	0	0.031	0.082	0.0821	0.092	0.110318	0.119	0.12575	0.1465	0.158	0.158	0.032	0.007	0.29
Dissolved Metals, Lead (µg/L)	22	0	0	0.013	0.013	0.0274	0.03525	0.059636	0.0435	0.06675	0.0939	0.096	0.246	0.051	0.011	0.85
Dissolved Metals, Lithium (µg/L)	22	0	0	0.56	0.56	0.6	0.61	0.725455	0.64	0.8675	0.99	1.1	1.1	0.164	0.035	0.23
Dissolved Metals, Manganese (µg/L)	22	0	0	0.85	0.85	1.671	1.8825	3.100909	2.755	3.6575	4.415	4.99	9.77	1.837	0.392	0.59
Dissolved Metals, Molybdenum (µg/L)	22	0	0	0.058	0.058	0.0621	0.0655	0.068818	0.0685	0.072	0.0749	0.08	0.08	0.005	0.001	0.08
Dissolved Metals, Nickel (µg/L)	22	0	0	0.22	0.43	0.508	0.605	0.758636	0.73	0.85	1.089	1.2	1.2	0.245	0.052	0.32
Dissolved Metals, Niobium (µg/L)	22	6	27	0.001	0.001	0.0011	0.002	0.002591	0.002	0.003	0.004	0.004	0.005	0.001	0.000	0.44
Dissolved Metals, Platinum (µg/L)	22	22	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Rubidium (µg/L)	22	0	0	0.623	0.623	0.6482	0.655	0.720682	0.7215	0.76	0.7997	0.907	0.907	0.072	0.015	0.10
Dissolved Metals, Selenium (µg/L)	25	9	36	0.01	0.01	0.014	0.02	0.04	0.03	0.05	0.08	0.05	0.1	0.027	0.005	0.68
Dissolved Metals, Silver (µg/L)	22	8	36	0.001	0.001	0.001	0.001	0.001318	0.001	0.00175	0.002	0.002	0.003	0.001	0.000	0.43
Dissolved Metals, Strontium (µg/L)	22	0	0	6.88	6.88	8.532	8.7125	9.803182	9.29	10.5	12.27	13	13	1.558	0.332	0.16
Dissolved Metals, Tellurium (µg/L)	2	2	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Dissolved Metals, Thallium (µg/L)	22	2	9	0.001	0.001	0.001	0.001	0.001591	0.0015	0.002	0.002	0.003	0.003	0.001	0.000	0.42
Dissolved Metals, Tin (µg/L)	22	14	64	0.005	0.005	0.005	0.005	0.006682	0.005	0.006	0.007	0.007	0.03	0.005	0.001	0.79
Dissolved Metals, Titanium (µg/L)	5	1	20	0.05	0.05	0.086	0.14	0.622	0.6	1.01	1.19	1.31	1.31	0.544	0.243	0.87
Dissolved Metals, Tungsten (µg/L)	22	3	14	0.001	0.001	0.001	0.002	0.009727	0.002	0.0045	0.0156	0.008	0.125	0.026	0.006	2.69
Dissolved Metals, Uranium (µg/L)	22	0	0	0.11	0.15	0.1653	0.18475	0.200409	0.194	0.22475	0.2542	0.259	0.259	0.037	0.008	0.18
Dissolved Metals, Vanadium (µg/L)	22	0	0	0.09	0.09	0.1212	0.132	0.154273	0.149	0.169	0.1939	0.222	0.252	0.037	0.008	0.24
Dissolved Metals, Zinc (µg/L)	22	2	9	0.2	0.2	0.4	0.5	1.072273	0.755	0.9075	1.811	1.46	5.78	1.217	0.259	1.13
Dissolved Metals, Zirconium (µg/L)	2	0	0	0.04	0.04	0.042	0.045	0.05	0.05	0.055	0.058	0.06	0.06	0.014	0.010	0.28
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	30	30	47	68.1	98.15	81	100	105	106	410	86.100	21.525	0.88
Field Measurements, pH (unitless)	17	0	0	6.09	7.2	6.92	7.7	7.761176	7.88	8.14	8.352	8.7	8.7	0.661	0.160	0.09
Major Ions, Dissolved Calcium (mg/L)	31	0	0	4.27	4.27	8.89	9.035	11.68032	10.1	12.3	18.7	12.8	32.6	5.099	0.916	0.44
Major Ions, Dissolved Chloride (mg/L)	31	0	0	0.23	0.23	0.29	0.355	0.48129	0.4	0.5	0.88	0.55	1.3	0.248	0.044	0.51
Major Ions, Dissolved Fluoride (mg/L)	31	0	0	0.02	0.03	0.02	0.03	0.035161	0.03	0.03	0.06	0.03	0.09	0.017	0.003	0.49
Major Ions, Dissolved Magnesium (mg/L)	31	0	0	1.73	1.73	4.3	4.68	5.926774	5.28	7.245	8.12	10.8	10.8	2.032	0.365	0.34
Major Ions, Dissolved Potassium (mg/L)	31	0	0	0.47	0.47	0.49	0.525	0.613548	0.55	0.65	0.74	0.74	1.14	0.157	0.028	0.26
Major Ions, Dissolved Sodium (mg/L)	31	0	0	0.47	0.47	0.48	0.5	0.657742	0.55	0.685	0.77	0.87	2.56	0.370	0.067	0.56
Major Ions, Dissolved Sulphate (mg/L)	31	0	0	1.12	1.12	1.23	1.275	2.41871	1.37	1.95	2.43	2.7	26.8	4.546	0.817	1.88
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	30	5	17	0	0	0	0.925	5.191567	1.9165	4.7415	7.3743	6.763	64.632	11.720	2.140	2.26
Major Ions, Silica (mg/L)	31	0	0	0.66	0.66	1.47	1.655	2.095484	1.85	2.425	3.35	3.53	4.34	0.754	0.135	0.36
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	31	0	0	16.9	16.9	37.1	39.9	48.66774	43.8	56.65	59.2	79.6	90.6	14.429	2.591	0.30
Major Ions, Total Calcium (mg/L)	2	0	0	4.34	4.34	4.82	5.54	6.74	6.74	7.94	8.66	9.14	9.14	3.394	2.400	0.50
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	31	0	0	17.785	17.785	40.034	42.291	53.56635	47.246	60.541	88.276	63.704	114.832	19.923	3.578	0.37
Major Ions, Total Magnesium (mg/L)	2	0	0	1.67	1.67	1.974	2.43	3.19	3.19	3.95	4.406	4.71	4.71	2.150	1.520	0.67
Major Ions, Total Potassium (mg/L)	2	0	0	0.55	0.55	0.6	0.675	0.8	0.8	0.925	1	1.05	1.05	0.354	0.250	0.44
Major Ions, Total Sodium (mg/L)	2	0	0	0.42	0.42	0.435	0.4575	0.495	0.495	0.5325	0.555	0.57	0.57	0.106	0.075	0.21
Nutrients, Dissolved Ammonia, as N (mg/L)	30	16	53	0.005	0.005	0.005	0.005	0.008267	0.0055	0.01	0.0109	0.01	0.03	0.006	0.001	0.68

Table B.2.2-1 Coppermine River Above Copper Creek (COR04) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Nitrogen (mg/L)	17	0	0	0.19	0.19	0.216	0.27	0.304118	0.29	0.35	0.398	0.44	0.47	0.078	0.019	0.26
Nutrients, Dissolved Organic Carbon (mg/L)	31	0	0	4.5	4.5	5.2	5.85	6.412903	6.1	7.15	8.1	8.2	9.3	1.166	0.209	0.18
Nutrients, Nitrate, as N (mg/L)	18	1	6	0.01	0.01	0.01	0.02	0.047222	0.035	0.06	0.084	0.06	0.16	0.042	0.010	0.90
Nutrients, Nitrate/Nitrite, as N (mg/L)	31	6	19	0.01	0.01	0.01	0.014	0.043194	0.02	0.06	0.08	0.08	0.2	0.047	0.008	1.09
Nutrients, Nitrite, as N (mg/L)	18	17	94	0.01	0.01	0.01	0.01	0.010556	0.01	0.01	0.01	0.01	0.02	0.002	0.001	0.22
Nutrients, Particulate Nitrogen (mg/L)	31	1	3	0.002	0.002	0.03	0.0445	0.116968	0.062	0.1185	0.275	0.2	0.894	0.165	0.030	1.41
Nutrients, Particulate Organic Carbon (mg/L)	31	0	0	0.114	0.114	0.258	0.331	0.869419	0.536	0.7475	1.28	1.28	8.14	1.418	0.255	1.63
Nutrients, Total Dissolved Nitrogen (mg/L)	14	0	0	0.07	0.07	0.084	0.09875	0.154214	0.15	0.19225	0.228	0.311	0.311	0.067	0.018	0.44
Nutrients, Total Dissolved Phosphorus (mg/L)	29	13	45	0.002	0.002	0.002	0.005	0.010207	0.01	0.013	0.02	0.021	0.021	0.007	0.001	0.64
Nutrients, Total Nitrogen (mg/L)	18	0	0	0.14	0.23	0.237	0.2925	0.344444	0.345	0.37	0.449	0.47	0.62	0.103	0.024	0.30
Nutrients, Total Phosphorus (mg/L)	30	0	0	0.003	0.003	0.0098	0.013	0.027567	0.021	0.036	0.0584	0.068	0.072	0.019	0.003	0.67
Physical Parameters, Specific Conductivity (µS/cm)	31	0	0	51.1	51.1	75.7	79.3	97.03548	91.8	111.5	117	156	175	26.323	4.728	0.27
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	30	0	0	21.986	21.986	40.015	42.95325	53.5361	48.05	60.0175	80.609	84.38	106.845	17.516	3.198	0.33
Physical Parameters, Total Suspended Solids (mg/L)	30	3	10	3	3	5.7	13.25	30.63333	26	36	44.4	64	225	39.609	7.232	1.29
Physical Parameters, Turbidity (NTU)	31	0	0	2.28	2.28	4.15	5.195	11.77323	10.8	17.05	20.4	24.9	36	7.767	1.395	0.66
Physical Parameters, pH (unitless)	31	0	0	6.98	7.57	7.59	7.695	7.750968	7.77	7.85	7.96	8.03	8.03	0.200	0.036	0.03
Total Metals, Aluminum (µg/L)	30	0	0	15.1	15.1	33.6	136.75	301.6	309	459.5	582.4	763	763	212.646	38.824	0.71
Total Metals, Antimony (µg/L)	28	3	11	0.001	0.015	0.0017	0.0175	0.021679	0.0195	0.0225	0.0357	0.03	0.071	0.015	0.003	0.70
Total Metals, Arsenic (µg/L)	27	0	0	0.23	0.23	0.23	0.245	0.278889	0.27	0.305	0.324	0.36	0.36	0.037	0.007	0.13
Total Metals, Barium (µg/L)	30	0	0	8.7	8.7	26.49	27.875	34.75667	30.75	40.85	46.12	51.7	63.4	11.527	2.104	0.33
Total Metals, Beryllium (µg/L)	30	2	7	0.002	0.002	0.0038	0.00725	0.015467	0.015	0.01975	0.0243	0.027	0.05	0.012	0.002	0.76
Total Metals, Bismuth (µg/L)	28	3	11	0.001	0.001	0.001	0.00275	0.006857	0.007	0.009	0.0113	0.012	0.021	0.005	0.001	0.75
Total Metals, Boron (µg/L)	28	1	4	0.1	0.1	1.78	2.275	2.978571	2.75	4.025	4.76	5.3	5.3	1.334	0.252	0.45
Total Metals, Cadmium (µg/L)	30	0	0	0.003	0.003	0.0049	0.00625	0.035733	0.008	0.0415	0.0919	0.09	0.3	0.065	0.012	1.82
Total Metals, Cerium (µg/L)	25	0	0	0.216	0.216	0.2656	0.487	0.88464	0.882	1.21	1.328	2.02	2.02	0.469	0.094	0.53
Total Metals, Cesium (µg/L)	28	0	0	0.005	0.005	0.0128	0.0245	0.044321	0.0475	0.06625	0.068	0.095	0.095	0.025	0.005	0.56
Total Metals, Chromium (µg/L)	30	0	0	0.076	0.076	0.2064	0.3905	0.779967	0.71	0.9985	1.381	1.32	2.4	0.573	0.105	0.73
Total Metals, Cobalt (µg/L)	30	0	0	0.024	0.024	0.0668	0.12975	0.231333	0.2355	0.3305	0.3897	0.5	0.5	0.135	0.025	0.59
Total Metals, Copper (µg/L)	30	0	0	1.12	1.12	1.502	1.6875	2.021667	1.895	2.1725	3.01	2.37	3.8	0.588	0.107	0.29
Total Metals, Gallium (µg/L)	28	0	0	0.004	0.004	0.0189	0.0485	0.09925	0.106	0.15675	0.1859	0.217	0.217	0.065	0.012	0.66
Total Metals, Iron (µg/L)	30	0	0	9.9	9.9	62.6	202	411.9633	442.5	636.75	685.5	949	949	260.694	47.596	0.63
Total Metals, Lanthanum (µg/L)	28	0	0	0.037	0.037	0.1018	0.231	0.416393	0.4515	0.628	0.6684	0.983	0.983	0.249	0.047	0.60
Total Metals, Lead (µg/L)	30	0	0	0.005	0.005	0.0538	0.114	1.313967	0.2395	0.31025	0.454	0.472	32.4	5.874	1.073	4.47
Total Metals, Lithium (µg/L)	30	0	0	0.7	0.7	0.799	0.9	1.107333	1.03	1.29	1.5	1.65	1.65	0.254	0.046	0.23
Total Metals, Manganese (µg/L)	30	0	0	2.2	2.2	6.4	9.1375	16.958	19.2	22.275	27.84	34.9	34.9	8.663	1.582	0.51
Total Metals, Molybdenum (µg/L)	30	0	0	0.025	0.048	0.046	0.061	0.124067	0.067	0.0725	0.0856	0.084	1.84	0.325	0.059	2.62
Total Metals, Nickel (µg/L)	30	0	0	0.57	0.57	0.739	0.9175	1.598333	1.165	1.405	1.527	1.74	14.8	2.511	0.459	1.57
Total Metals, Niobium (µg/L)	28	3	11	0.001	0.001	0.0052	0.015	0.02625	0.0265	0.0395	0.048	0.058	0.058	0.017	0.003	0.64
Total Metals, Platinum (µg/L)	28	27	96	0.001	0.001	0.001	0.001	0.001929	0.001	0.001	0.001	0.001	0.027	0.005	0.001	2.55
Total Metals, Rubidium (µg/L)	28	0	0	0.66	0.66	0.745	0.9655	1.1685	1.225	1.3725	1.403	1.85	1.85	0.299	0.057	0.26
Total Metals, Selenium (µg/L)	27	12	44	0.02	0.02	0.02	0.02	0.039259	0.05	0.05	0.05	0.05	0.1	0.018	0.003	0.46
Total Metals, Silver (µg/L)	30	5	17	0.001	0.001	0.001	0.00125	0.013033	0.003	0.004	0.0101	0.007	0.2	0.040	0.007	3.04
Total Metals, Strontium (µg/L)	30	0	0	7	7	8.795	9.045	10.162	9.785	11.275	12.81	13.9	13.9	1.687	0.308	0.17
Total Metals, Tellurium (µg/L)	2	2	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Total Metals, Terbium (µg/L)	2	0	0	0.003	0.003	0.0031	0.00325	0.0035	0.0035	0.00375	0.0039	0.004	0.004	0.001	0.001	0.20
Total Metals, Thallium (µg/L)	28	1	4	0.001	0.001	0.001	0.002	0.004536	0.0045	0.006	0.0066	0.008	0.019	0.004	0.001	0.78
Total Metals, Tin (µg/L)	28	8	29	0.005	0.005	0.005	0.005	0.014929	0.007	0.00925	0.0125	0.011	0.203	0.037	0.007	2.48
Total Metals, Titanium (µg/L)	5	0	0	3.1	3.1	4.148	5.72	10.564	11.2	16	16.48	16.8	16.8	6.083	2.720	0.58
Total Metals, Tungsten (µg/L)	28	3	11	0.001	0.001	0.001	0.003	0.005929	0.0055	0.007	0.0099	0.012	0.021	0.004	0.001	0.73
Total Metals, Uranium (µg/L)	28	0	0	0.122	0.17	0.1717	0.1915	0.218714	0.218	0.2365	0.2854	0.293	0.293	0.041	0.008	0.19
Total Metals, Vanadium (µg/L)	30	0	0	0.2	0.2	0.2288	0.3705	0.653133	0.673	0.909	1.056	1.4	1.4	0.342	0.062	0.52
Total Metals, Zinc (µg/L)	30	0	0	0.16	0.16	0.475	1.11	2.308667	2	2.47	4.108	4.03	12.2	2.271	0.415	0.98
Total Metals, Zirconium (µg/L)	2	0	0	0.07	0.07	0.078	0.09	0.11	0.11	0.13	0.142	0.15	0.15	0.057	0.040	0.51

Table B.2.2-2 Coppermine River at Outlet of Point Lake (COR02) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	1	0	0	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	----	----	----
Dissolved Metals, Antimony (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	14	4	29	0.1	0.1	0.1	0.1	0.17857143	0.1	0.175	0.44	0.2	0.5	0.148	0.039	0.83
Dissolved Metals, Barium (µg/L)	1	0	0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	----	----	----
Dissolved Metals, Beryllium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	5	3	60	1.4	20	8.84	20	16.28	20	20	20	20	20	8.318	3.720	0.51
Dissolved Metals, Cadmium (µg/L)	1	1	100	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	----	----	----
Dissolved Metals, Cesium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	2	1	50	0.8	0.8	0.82	0.85	0.9	0.9	0.95	0.98	1	1	0.141	0.100	0.16
Dissolved Metals, Iron (µg/L)	3	2	67	15	15	20	27.5	35	40	45	48	50	50	18.028	10.408	0.52
Dissolved Metals, Lead (µg/L)	2	2	100	0.1	0.1	0.19	0.325	0.55	0.55	0.775	0.91	1	1	0.636	0.450	1.16
Dissolved Metals, Lithium (µg/L)	1	0	0	1	1	1	1	1	1	1	1	1	1	----	----	----
Dissolved Metals, Manganese (µg/L)	3	2	67	3.4	3.4	4.72	6.7	7.8	10	10	10	10	10	3.811	2.200	0.49
Dissolved Metals, Mercury (µg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	1	0	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	----	----	----
Dissolved Metals, Rubidium (µg/L)	1	0	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	----	----	----
Dissolved Metals, Selenium (µg/L)	14	13	93	0	0.1	0.1	0.1	0.16428571	0.1	0.1	0.44	0.1	0.5	0.155	0.041	0.94
Dissolved Metals, Silver (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	1	0	0	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	----	----	----
Dissolved Metals, Thallium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	2	0	0	0.8	0.8	1.92	3.6	6.4	6.4	9.2	10.88	12	12	7.920	5.600	1.24
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	4.6	11.2	11.3	12	13.9375	13.9	15.8	17.15	18	23	3.890	0.973	0.28
Field Measurements, Temperature (°C)	25	5	20	0	0	0	0.5	1.884	1	3.3	5.2	6	6	1.950	0.390	1.04
Field Measurements, pH (unitless)	15	0	0	5.75	6.3	6.452	6.75	6.874	6.9	7.175	7.314	7.4	7.4	0.428	0.110	0.06
Major Ions, Bicarbonate (calc'd) (mg/L)	11	0	0	3.4	3.4	3.7	3.8	4.70909091	4	5	6	6	8.8	1.569	0.473	0.33
Major Ions, Carbonate (calc'd) (mg/L)	11	11	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	24	1	4	0.1	0.9	0.903	0.9775	1.12375	1.055	1.2	1.4	1.4	2.9	0.479	0.098	0.43
Major Ions, Dissolved Chloride (mg/L)	24	1	4	0.1	0.27	0.3	0.3375	0.48333333	0.395	0.4925	0.81	0.6	1.6	0.312	0.064	0.65
Major Ions, Dissolved Fluoride (mg/L)	23	4	17	0.01	0.01	0.01	0.02	0.02956522	0.02	0.035	0.05	0.05	0.1	0.022	0.005	0.74
Major Ions, Dissolved Magnesium (mg/L)	19	0	0	0.3	0.44	0.464	0.47	0.51347368	0.49	0.5	0.62	0.53	0.9	0.119	0.027	0.23
Major Ions, Dissolved Potassium (mg/L)	24	0	0	0.3	0.4	0.4	0.4175	0.46125	0.45	0.47	0.57	0.5	0.77	0.104	0.021	0.23
Major Ions, Dissolved Sodium (mg/L)	24	0	0	0.4	0.4	0.416	0.43	0.48833333	0.45	0.5	0.6	0.6	0.8	0.091	0.019	0.19
Major Ions, Dissolved Sulphate (mg/L)	24	3	13	0.8	0.8	1	1.225	2.925	1.8	2	2.14	2.5	33	6.422	1.311	2.20
Major Ions, Hydroxide (calc'd) (mg/L)	9	9	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	9	2	22	0	0	0	0.3	1.06666667	1.3	1.5	1.82	2.3	2.3	0.802	0.267	0.75
Major Ions, Reactive Silica (mg/L)	11	1	9	0.1	0.2	0.1	0.23	0.44445455	0.3	0.31	0.489	0.32	2.25	0.608	0.183	1.37
Major Ions, Silica (mg/L)	13	0	0	0.27	0.27	0.28	0.28	0.36461538	0.35	0.41	0.466	0.5	0.5	0.076	0.021	0.21
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	24	0	0	1.4	2.5	2.59	2.975	3.29583333	3.1	3.5	4.26	3.7	7.2	1.107	0.226	0.34
Major Ions, Total Calcium (mg/L)	6	0	0	0.99	0.99	1	1.01	1.04	1.025	1.055	1.095	1.06	1.13	0.051	0.021	0.05
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	17	0	0	2.4	3.13	3.34	4.1	5.35352941	4.6	4.8	6.76	5.6	17.8	3.422	0.830	0.64
Major Ions, Total Magnesium (mg/L)	6	0	0	0.46	0.46	0.465	0.47	0.47333333	0.475	0.48	0.48	0.48	0.48	0.008	0.003	0.02
Major Ions, Total Potassium (mg/L)	6	0	0	0.32	0.32	0.32	0.32	0.34166667	0.325	0.3525	0.38	0.4	0.4	0.033	0.013	0.10
Major Ions, Total Sodium (mg/L)	6	0	0	0.27	0.29	0.28	0.29	0.38166667	0.29	0.2975	0.575	0.3	0.85	0.230	0.094	0.60
Microbiology, Chlorophyll a (µg/L)	1	1	100	1	1	1	1	1	1	1	1	1	1	----	----	----
Nutrients, Dissolved Ammonia, as N (mg/L)	3	0	0	0.008	0.008	0.0088	0.01	0.01366667	0.012	0.0165	0.0192	0.021	0.021	0.007	0.004	0.49
Nutrients, Dissolved Inorganic Carbon (mg/L)	6	0	0	0.9	1.1	1	1.125	1.2	1.2	1.2	1.4	1.2	1.6	0.228	0.093	0.19
Nutrients, Dissolved Inorganic Phosphate (mg/L)	1	1	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Dissolved Nitrate/Nitrite, as N (mg/L)	5	0	0	0.062	0.062	0.0624	0.063	0.0648	0.063	0.068	0.068	0.068	0.068	0.003	0.001	0.05
Nutrients, Dissolved Nitrogen (mg/L)	1	0	0	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	----	----	----

Table B.2.2-2 Coppermine River at Outlet of Point Lake (COR02) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Organic Carbon (mg/L)	21	0	0	1.8	1.8	2	2.29	2.5147619	2.5	2.7	2.9	2.9	3.7	0.452	0.099	0.18
Nutrients, Dissolved o-Phosphate, as P (mg/L)	1	1	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	8	0	0	0.26	0.26	0.323	0.515	1.55	1.605	2.2725	2.844	3.18	3.18	1.108	0.392	0.72
Nutrients, Nitrate, as N (mg/L)	1	0	0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Nutrients, Nitrate/Nitrite, as N (mg/L)	15	0	0	0.02	0.02	0.03	0.044	0.05666667	0.057	0.069	0.07	0.07	0.118	0.023	0.006	0.41
Nutrients, Nitrite, as N (mg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Particulate Nitrogen (mg/L)	19	2	11	0.01	0.01	0.01	0.0125	0.01978947	0.019	0.024	0.0316	0.04	0.04	0.009	0.002	0.43
Nutrients, Particulate Organic Carbon (mg/L)	19	0	0	0.03	0.03	0.0824	0.101	0.142	0.139	0.167	0.2304	0.232	0.267	0.058	0.013	0.41
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	14	13	93	0	0.004	0.004	0.004	0.00485714	0.004	0.006	0.006	0.006	0.012	0.003	0.001	0.53
Nutrients, Total Ammonia, as N (mg/L)	1	1	100	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	----	----	----
Nutrients, Total Dissolved Nitrogen (mg/L)	21	0	0	0.109	0.109	0.138	0.145	0.19661905	0.15	0.203	0.238	0.238	0.567	0.112	0.024	0.57
Nutrients, Total Dissolved Phosphorus (mg/L)	21	7	33	0.002	0.002	0.002	0.003	0.0042381	0.004	0.004	0.006	0.005	0.013	0.002	0.001	0.58
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	3	1	33	0.45	0.45	0.46	0.475	0.53	0.5	0.57	0.612	0.64	0.64	0.098	0.057	0.19
Nutrients, Total Nitrogen (calc'd) (mg/L)	7	0	0	0.15	0.15	0.15	0.15	0.16	0.15	0.165	0.178	0.17	0.19	0.015	0.006	0.10
Nutrients, Total Nitrogen (mg/L)	1	0	0	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	----	----	----
Nutrients, Total Organic Carbon (calc'd) (mg/L)	6	0	0	2.23	2.23	2.255	2.2825	2.42333333	2.33	2.445	2.685	2.47	2.9	0.248	0.101	0.10
Nutrients, Total Organic Carbon (mg/L)	2	0	0	3.9	3.9	3.91	3.925	3.95	3.95	3.975	3.99	4	4	0.071	0.050	0.02
Nutrients, Total Phosphorus (mg/L)	21	2	10	0.002	0.002	0.003	0.005	0.00938095	0.006	0.01	0.016	0.016	0.045	0.009	0.002	1.00
Nutrients, o-Phosphate, as P (mg/L)	1	1	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	26	0	0	12	13	13.4	13.9	15.1038462	14.4	14.9	17.75	16	28	3.009	0.590	0.20
Physical Parameters, Stability Index (calc'd) (unitless)	9	0	0	13.76	13.76	14.08	15.27	111127.073	15.66	16.43	200017.16	16.45	1000020	333334.848	111111.616	3.00
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	11	0	0	5.6	5.6	5.9	6.5	7.40909091	7	8	9	9	11	1.560	0.470	0.21
Physical Parameters, Total Dissolved Solids (mg/L)	1	1	100	10	10	10	10	10	10	10	10	10	10	----	----	----
Physical Parameters, Total Suspended Solids (mg/L)	22	17	77	1	1	1	1.5	3.18181818	3	3	4.9	5	12	2.383	0.508	0.75
Physical Parameters, Turbidity (NTU)	19	1	5	0.1	0.1	0.116	0.25	0.39263158	0.3	0.4	0.6	0.5	1.6	0.352	0.081	0.90
Physical Parameters, pH (unitless)	26	0	0	5.96	6.28	6.32	6.57	6.69076923	6.68	6.785	6.99	7.1	7.72	0.344	0.067	0.05
Total Metals, Aluminum (µg/L)	7	0	0	13	13	14.2	15	20.7571429	16	25.65	29.78	35	35	8.172	3.089	0.39
Total Metals, Antimony (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	12	5	42	1.8	1.8	1.8	1.8	31.1666667	2.4	57.5	80	100	100	38.343	11.069	1.23
Total Metals, Beryllium (µg/L)	7	7	100	0.05	0.05	0.05	0.05	0.05714286	0.05	0.05	0.07	0.05	0.1	0.019	0.007	0.33
Total Metals, Bismuth (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	1	0	0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	----	----	----
Total Metals, Cadmium (µg/L)	13	10	77	0.04	0.04	0.1	0.1	0.45692308	0.1	1	1	2	2	0.605	0.168	1.32
Total Metals, Cesium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	7	7	100	0.1	0.2	0.16	0.2	0.18571429	0.2	0.2	0.2	0.2	0.2	0.038	0.014	0.20
Total Metals, Cobalt (µg/L)	13	10	77	0.1	0.1	0.1	0.1	0.59230769	0.1	1	1.8	2	2	0.708	0.196	1.19
Total Metals, Copper (µg/L)	13	1	8	0.6	0.6	0.6	0.7	1.69230769	0.9	1.1	2	1.1	10	2.540	0.705	1.50
Total Metals, Iron (µg/L)	7	0	0	4.9	4.9	5.44	5.8	15.5571429	9.1	27	28.52	29.3	29.3	11.536	4.360	0.74
Total Metals, Lead (µg/L)	13	10	77	0.1	0.1	0.2	0.2	1.00769231	0.5	1	3.4	1	4	1.363	0.378	1.35
Total Metals, Lithium (µg/L)	7	0	0	0.5	0.5	0.5	0.55	0.71428571	0.6	0.9	0.94	1	1	0.212	0.080	0.30
Total Metals, Manganese (µg/L)	7	0	0	0.5	0.5	0.5	0.5	1.3	0.5	1.8	2.78	3.5	3.5	1.183	0.447	0.91
Total Metals, Mercury (ng/L)	1	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	----	----	----
Total Metals, Mercury (µg/L)	1	1	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	7	6	86	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Nickel (µg/L)	13	3	23	0.3	0.3	0.52	0.7	1.45384615	0.8	1	1.8	1	9	2.302	0.639	1.58
Total Metals, Rubidium (µg/L)	1	0	0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	----	----	----
Total Metals, Selenium (µg/L)	1	1	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Strontium (µg/L)	7	0	0	4.7	5.1	4.94	5.1	5.37142857	5.1	5.2	6	5.2	7.2	0.824	0.311	0.15
Total Metals, Thallium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	1	0	0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	----	----	----
Total Metals, Uranium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	13	9	69	0	0	0.1	0.1	0.32307692	0.1	0.5	0.9	1	1	0.349	0.097	1.08
Total Metals, Zinc (µg/L)	13	0	0	0.5	0.5	0.6	0.9	2.79230769	2.2	3.8	5.6	6	10	2.739	0.760	0.98

Table B.2.2-3 Coppermine River Below Desteffany Lake (COR01) - Sp;ring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	4	0	0	4.9	4.9	4.96	5.05	14.575	7.6	17.125	29.77	10.1	38.2	15.933	7.966	1.09
Dissolved Metals, Antimony (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Arsenic (µg/L)	4	3	75	0.2	0.2	0.2	0.2	0.225	0.2	0.225	0.27	0.2	0.3	0.050	0.025	0.22
Dissolved Metals, Barium (µg/L)	4	0	0	1.9	2.7	2.14	2.5	2.6	2.75	2.85	2.94	3	3	0.483	0.242	0.19
Dissolved Metals, Beryllium (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Bismuth (µg/L)	4	4	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.000	0.000	0.00
Dissolved Metals, Boron (µg/L)	4	0	0	1.5	1.5	1.56	1.65	2.1	2.15	2.6	2.6	2.6	2.6	0.583	0.292	0.28
Dissolved Metals, Cadmium (µg/L)	4	4	100	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.000	0.000	0.00
Dissolved Metals, Cesium (µg/L)	7	6	86	0.1	0.1	0.1	0.1	0.142857	0.1	0.1	0.22	0.1	0.4	0.113	0.043	0.79
Dissolved Metals, Chromium (µg/L)	4	3	75	0.1	0.1	0.1	0.1	0.125	0.1	0.125	0.17	0.1	0.2	0.050	0.025	0.40
Dissolved Metals, Cobalt (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Copper (µg/L)	4	0	0	0.7	0.7	0.79	0.925	1.075	1.1	1.25	1.34	1.4	1.4	0.299	0.149	0.28
Dissolved Metals, Iron (µg/L)	4	2	50	5	5	5	5	19.5	8.5	23	42.8	12	56	24.556	12.278	1.26
Dissolved Metals, Lead (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Lithium (µg/L)	4	0	0	1.1	1.1	1.19	1.325	1.55	1.6	1.825	1.87	1.9	1.9	0.370	0.185	0.24
Dissolved Metals, Manganese (µg/L)	4	0	0	0.9	0.9	0.9	0.9	3.325	1.25	3.675	7.41	1.6	9.9	4.396	2.198	1.32
Dissolved Metals, Mercury (ng/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.000	0.000	0.00
Dissolved Metals, Mercury (µg/L)	2	2	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.000	0.000	0.00
Dissolved Metals, Molybdenum (µg/L)	4	1	25	0.1	0.2	0.13	0.175	0.175	0.2	0.2	0.2	0.2	0.2	0.050	0.025	0.29
Dissolved Metals, Nickel (µg/L)	4	0	0	0.7	0.7	0.76	0.85	0.9	0.95	1	1	1	1	0.141	0.071	0.16
Dissolved Metals, Rubidium (µg/L)	4	0	0	1.7	1.7	1.73	1.775	2.075	2.1	2.4	2.4	2.4	2.4	0.377	0.189	0.18
Dissolved Metals, Selenium (µg/L)	4	4	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.000	0.000	0.00
Dissolved Metals, Silver (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Strontium (µg/L)	4	0	0	8.3	8.3	9.32	10.85	15	15.65	19.8	20.16	20.4	20.4	5.947	2.973	0.40
Dissolved Metals, Thallium (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Tin (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Titanium (µg/L)	4	3	75	0.1	0.1	0.1	0.1	0.125	0.1	0.125	0.17	0.1	0.2	0.050	0.025	0.40
Dissolved Metals, Uranium (µg/L)	4	3	75	0.1	0.1	0.1	0.1	0.125	0.1	0.125	0.17	0.1	0.2	0.050	0.025	0.40
Dissolved Metals, Vanadium (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Dissolved Metals, Zinc (µg/L)	4	1	25	0.4	0.4	0.55	0.775	2.325	2.4	3.95	4.04	4.1	4.1	1.947	0.973	0.84
Field Measurements, Specific Conductivity (µS/cm)	4	0	0	11	11	11.21	11.525	13.025	12.05	13.55	15.62	12.4	17	2.711	1.355	0.21
Field Measurements, pH (unitless)	3	0	0	6.7	6.7	6.72	6.75	6.836667	6.8	6.905	6.968	7.01	7.01	0.158	0.091	0.02
Major Ions, Dissolved Calcium (mg/L)	13	0	0	0.7	0.7	0.786	0.81	1.136923	0.84	1.4	1.84	2.2	2.2	0.491	0.136	0.43
Major Ions, Dissolved Chloride (mg/L)	13	1	8	0.2	0.2	0.292	0.43	0.942308	0.6	1.1	2.254	1.67	3	0.881	0.244	0.93
Major Ions, Dissolved Fluoride (mg/L)	4	3	75	0.025	0.1	0.0475	0.08125	0.08125	0.1	0.1	0.1	0.1	0.1	0.038	0.019	0.46
Major Ions, Dissolved Magnesium (mg/L)	13	0	0	0.37	0.37	0.37	0.42	0.659077	0.53	0.9	1.14	1.4	1.4	0.338	0.094	0.51
Major Ions, Dissolved Potassium (mg/L)	13	0	0	0.41	0.41	0.428	0.63	0.758462	0.69	0.85	1.166	1.03	1.3	0.281	0.078	0.37
Major Ions, Dissolved Sodium (mg/L)	13	0	0	0.39	0.39	0.4	0.41	0.924615	0.59	1.1	2.04	1.4	2.5	0.715	0.198	0.77
Major Ions, Dissolved Sulphate (mg/L)	13	7	54	1	3	3	3	3.079231	3	3	3.806	3	5	0.862	0.239	0.28
Major Ions, Reactive Silica (mg/L)	4	1	25	0.025	0.025	0.0739	0.14725	0.2685	0.202	0.32325	0.5163	0.216	0.645	0.265	0.132	0.99
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	13	0	0	3	3	3.3	4.1	4.869231	4.7	5.6	6.52	7.3	7.3	1.300	0.361	0.27
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	10	0	0	3.5	3.5	3.5	3.5	5.88	4.4	7.5	10.04	11.3	11.3	2.931	0.927	0.50
Microbiology, Chlorophyll a (µg/L)	4	4	100	1	1	1	1	1.25	1	1.25	1.7	1	2	0.500	0.250	0.40
Nutrients, Dissolved Ammonia, as N (mg/L)	2	0	0	0.018	0.018	0.0386	0.0695	0.121	0.121	0.1725	0.2034	0.224	0.224	0.146	0.103	1.20
Nutrients, Dissolved Nitrogen (mg/L)	4	0	0	0.15	0.15	0.183	0.2325	0.27	0.275	0.3125	0.353	0.38	0.38	0.095	0.047	0.35
Nutrients, Dissolved Organic Carbon (mg/L)	4	0	0	3.7	3.7	3.7	3.7	4.45	3.85	4.6	5.68	4	6.4	1.308	0.654	0.29
Nutrients, Dissolved o-Phosphate, as P (mg/L)	9	8	89	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.00
Nutrients, Nitrate, as N (mg/L)	4	2	50	0.005	0.005	0.0065	0.00875	0.02375	0.02	0.035	0.044	0.05	0.05	0.021	0.010	0.87
Nutrients, Nitrate/Nitrite, as N (mg/L)	13	2	15	0.0051	0.0051	0.0092	0.01	0.019392	0.011	0.028	0.0356	0.05	0.05	0.013	0.004	0.69
Nutrients, Nitrite, as N (mg/L)	4	4	100	0.001	0.01	0.0037	0.00775	0.00775	0.01	0.01	0.01	0.01	0.01	0.005	0.002	0.58
Nutrients, Total Ammonia, as N (mg/L)	10	2	20	0.005	0.005	0.005	0.00525	0.0096	0.0075	0.00875	0.0123	0.01	0.033	0.008	0.003	0.88
Nutrients, Total Dissolved Nitrogen (mg/L)	3	0	0	0.166	0.166	0.2266	0.3175	0.655	0.469	0.8995	1.1578	1.33	1.33	0.604	0.349	0.92
Nutrients, Total Dissolved Phosphorus (mg/L)	7	3	43	0.002	0.002	0.002	0.002	0.003714	0.003	0.004	0.0066	0.005	0.009	0.003	0.001	0.69

Table B.2.2-3 Coppermine River Below Desteffany Lake (COR01) - Sp;ring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Nitrogen (mg/L)	4	0	0	0.17	0.17	0.212	0.275	0.3025	0.325	0.3525	0.375	0.39	0.39	0.094	0.047	0.31
Nutrients, Total Organic Carbon (mg/L)	4	0	0	3.8	3.8	3.8	3.8	4.6	3.95	4.75	5.92	4.1	6.7	1.407	0.704	0.31
Nutrients, Total Phosphorus (mg/L)	13	1	8	0.003	0.003	0.003	0.0034	0.006492	0.006	0.008	0.0098	0.01	0.015	0.004	0.001	0.56
Nutrients, o-Phosphate, as P (mg/L)	4	4	100	0.001	0.002	0.0013	0.00175	0.00175	0.002	0.002	0.002	0.002	0.002	0.001	0.000	0.29
Physical Parameters, Specific Conductivity (µS/cm)	13	0	0	11.1	11.1	12.98	15.7	22.01538	18	25	33.92	38.4	38.4	8.683	2.408	0.39
Physical Parameters, Total Dissolved Solids (mg/L)	4	0	0	12	12	17.4	25.5	30	32	36.5	41	44	44	13.367	6.683	0.45
Physical Parameters, Total Suspended Solids (mg/L)	13	7	54	3	3	3	3	5.769231	3	7	9.8	10	19	4.675	1.297	0.81
Physical Parameters, Turbidity (NTU)	13	0	0	0.1	0.1	0.244	0.3	0.525385	0.3	0.73	1	1.1	1.1	0.338	0.094	0.64
Physical Parameters, pH (unitless)	13	0	0	4.08	5.93	5.936	6.13	6.236154	6.5	6.58	6.764	6.98	6.98	0.725	0.201	0.12
Total Metals, Aluminum (µg/L)	7	0	0	7.2	7.2	8.04	12.8	24.6	20.1	30.25	46.44	38.2	58.8	18.242	6.895	0.74
Total Metals, Antimony (µg/L)	6	4	67	0.0001	0.0001	0.0001	0.025075	0.0667	0.1	0.1	0.1	0.1	0.1	0.052	0.021	0.77
Total Metals, Arsenic (µg/L)	7	5	71	0.2	0.2	0.2	0.2	0.242857	0.2	0.25	0.34	0.3	0.4	0.079	0.030	0.32
Total Metals, Barium (µg/L)	7	0	0	1.8	1.8	1.92	2.05	2.385714	2.4	2.7	2.94	3	3	0.453	0.171	0.19
Total Metals, Beryllium (µg/L)	7	6	86	0.1	0.1	0.1	0.1	0.4	0.1	0.2	0.98	0.3	2	0.709	0.268	1.77
Total Metals, Bismuth (µg/L)	6	6	100	0.1	0.1	0.1	0.125	0.166667	0.2	0.2	0.2	0.2	0.2	0.052	0.021	0.31
Total Metals, Boron (µg/L)	4	0	0	1.5	1.5	1.56	1.65	2.075	2.1	2.525	2.57	2.6	2.6	0.556	0.278	0.27
Total Metals, Cadmium (µg/L)	7	5	71	0.04	0.04	0.04	0.04	0.251429	0.04	0.4	0.62	0.8	0.8	0.301	0.114	1.20
Total Metals, Cesium (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Chromium (µg/L)	7	4	57	0.1	0.1	0.1	0.15	0.6	0.2	0.3	1.44	0.4	3	1.063	0.402	1.77
Total Metals, Cobalt (µg/L)	7	5	71	0.1	0.1	0.1	0.1	0.271429	0.1	0.25	0.58	0.3	1	0.330	0.125	1.22
Total Metals, Copper (µg/L)	7	1	14	0.7	0.7	0.94	1.25	2.4	1.4	2.2	4.56	2.4	7.8	2.446	0.925	1.02
Total Metals, Iron (µg/L)	13	0	0	18	18	21.6	31	19563	111	28000	45400	49000	98000	28808	7990	1.47
Total Metals, Lead (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Lithium (µg/L)	7	1	14	0.8	0.8	0.98	1.25	1.614286	1.4	1.8	2.28	1.8	3	0.708	0.268	0.44
Total Metals, Manganese (µg/L)	7	0	0	1.4	1.4	1.52	2.3	732	6.7	1056	2460	2100	3000	1269	480	1.73
Total Metals, Mercury (ng/L)	4	1	25	0.2	0.2	0.26	0.35	0.85	0.55	1.05	1.68	0.7	2.1	0.858	0.429	1.01
Total Metals, Mercury (µg/L)	2	2	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.000	0.000	0.00
Total Metals, Molybdenum (µg/L)	7	4	57	0.1	0.1	0.1	0.1	0.271429	0.2	0.2	0.52	0.2	1	0.325	0.123	1.20
Total Metals, Nickel (µg/L)	7	1	14	0.7	0.7	0.7	0.8	1.028571	1	1.1	1.34	1.1	1.7	0.340	0.129	0.33
Total Metals, Rubidium (µg/L)	5	0	0	0.0011	1.8	0.72066	1.8	1.68022	1.8	2.4	2.4	2.4	2.4	0.985	0.441	0.59
Total Metals, Selenium (µg/L)	7	7	100	0.3	0.3	0.3	0.3	287.3143	0.3	505	1000	1000	1000	486.870	184.020	1.69
Total Metals, Silver (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.128571	0.1	0.1	0.18	0.1	0.3	0.076	0.029	0.59
Total Metals, Strontium (µg/L)	6	0	0	0.0046	0.0046	0.00595	2.130475	10.01865	10.2	17.825	19.85	19.9	19.9	8.941	3.650	0.89
Total Metals, Thallium (µg/L)	7	6	86	0.0001	0.0001	0.0001	0.05005	0.271457	0.1	0.1	0.66	0.1	1.5	0.544	0.206	2.00
Total Metals, Tin (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Titanium (µg/L)	6	0	0	0.0005	0.0005	0.00065	0.0506	0.43355	0.2	0.5	1.1	0.6	1.6	0.612	0.250	1.41
Total Metals, Uranium (µg/L)	6	4	67	0.0001	0.0001	0.0001	0.025075	0.083367	0.1	0.1	0.15	0.2	0.2	0.075	0.031	0.90
Total Metals, Vanadium (µg/L)	7	6	86	0.1	0.1	0.1	0.1	28.77143	0.1	50.5	100	100	100	48.659	18.392	1.69
Total Metals, Zinc (µg/L)	7	1	14	0.4	0.4	0.76	2.15	13.88571	3.9	11.55	35.8	16	65.5	23.360	8.829	1.68

Table B.2.2-4 Daring Lake (DAL) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Dissolved Calcium (mg/L)	4	0	0	1.02	1.02	1.023	1.0275	1.1225	1.035	1.13	1.292	1.04	1.4	0.185	0.093	0.16
Major Ions, Dissolved Chloride (mg/L)	4	0	0	0.4	0.5	0.43	0.475	0.475	0.5	0.5	0.5	0.5	0.5	0.050	0.025	0.11
Major Ions, Dissolved Magnesium (mg/L)	4	0	0	0.6	0.6	0.603	0.6075	0.63	0.61	0.6325	0.673	0.61	0.7	0.047	0.023	0.07
Major Ions, Dissolved Potassium (mg/L)	4	0	0	0.6	0.6	0.603	0.6075	0.6425	0.62	0.655	0.7	0.63	0.73	0.060	0.030	0.09
Major Ions, Dissolved Sodium (mg/L)	4	0	0	0.64	0.64	0.643	0.6475	0.6875	0.675	0.715	0.742	0.76	0.76	0.055	0.028	0.08
Major Ions, Dissolved Sulphate (mg/L)	4	3	75	1.5	3	1.95	2.625	2.625	3	3	3	3	3	0.750	0.375	0.29
Major Ions, Reactive Silica (mg/L)	4	0	0	0.08	0.08	0.08	0.08	0.09575	0.08	0.09575	0.1241	0.08	0.143	0.032	0.016	0.33
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	4	0	0	5.7	5.7	5.73	5.775	5.85	5.8	5.875	6.01	5.8	6.1	0.173	0.087	0.03
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	4	0	0	5.02	5.02	5.038	5.065	5.3525	5.095	5.3825	5.873	5.11	6.2	0.566	0.283	0.11
Nutrients, Dissolved Organic Carbon (mg/L)	4	0	0	2.5	2.5	2.62	2.8	2.975	2.95	3.125	3.35	3.5	3.5	0.411	0.206	0.14
Nutrients, Nitrate, as N (mg/L)	4	4	100	0.008	0.008	0.008	0.008	0.031	0.008	0.031	0.0724	0.008	0.1	0.046	0.023	1.48
Nutrients, Nitrate/Nitrite, as N (mg/L)	4	4	100	0.008	0.008	0.008	0.008	0.056	0.008	0.056	0.1424	0.008	0.2	0.096	0.048	1.71
Nutrients, Nitrite, as N (mg/L)	4	4	100	0.009	0.009	0.009	0.009	0.01925	0.009	0.01925	0.0377	0.009	0.05	0.021	0.010	1.06
Nutrients, Total Ammonia, as N (mg/L)	4	0	0	0.009	0.009	0.0093	0.00975	0.012	0.0115	0.01375	0.0151	0.016	0.016	0.003	0.002	0.26
Nutrients, Total Organic Carbon (mg/L)	4	0	0	2.4	3.5	2.73	3.225	3.25	3.5	3.525	3.57	3.6	3.6	0.569	0.284	0.17
Nutrients, Total Phosphorus (mg/L)	4	1	25	0.008	0.008	0.0086	0.0095	0.01	0.0105	0.011	0.011	0.011	0.011	0.001	0.001	0.14
Nutrients, o-Phosphate, as P (mg/L)	4	4	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	0.000	0.00
Physical Parameters, Color (CU)	4	4	100	5	5	5	5	5	5	5	5	5	5	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	4	0	0	17	17	17.09	17.225	17.35	17.4	17.525	17.57	17.6	17.6	0.265	0.132	0.02
Physical Parameters, Total Dissolved Solids (mg/L)	4	2	50	10	10	10	10	13	12	15	16.8	18	18	3.830	1.915	0.29
Physical Parameters, Total Suspended Solids (mg/L)	4	3	75	3	3	3	3	3.25	3	3.25	3.7	3	4	0.500	0.250	0.15
Physical Parameters, Turbidity (NTU)	4	0	0	0.2	0.2	0.2	0.2	0.3225	0.25	0.3725	0.503	0.59	0.59	0.184	0.092	0.57
Physical Parameters, pH (unitless)	4	0	0	6.54	6.54	6.558	6.585	6.5975	6.61	6.6225	6.627	6.63	6.63	0.040	0.020	0.01
Total Metals, Aluminum (µg/L)	4	1	25	4.4	4.4	5.96	8.3	13.85	10.5	16.05	24.42	11.4	30	11.168	5.584	0.81
Total Metals, Antimony (µg/L)	4	0	0	0.6	0.6	0.6	0.6	0.72275	0.696	0.81875	0.8669	0.899	0.899	0.148	0.074	0.21
Total Metals, Barium (µg/L)	4	0	0	1.7	1.7	1.766	1.865	1.9	1.95	1.985	1.994	2	2	0.138	0.069	0.07
Total Metals, Beryllium (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Cadmium (µg/L)	4	3	75	0.02	0.02	0.023	0.0275	0.05	0.04	0.0625	0.085	0.1	0.1	0.036	0.018	0.71
Total Metals, Cesium (µg/L)	4	4	100	0.008	0.008	0.008	0.008	0.054	0.054	0.1	0.1	0.1	0.1	0.053	0.027	0.98
Total Metals, Chromium (µg/L)	4	2	50	0.1	0.1	0.1	0.1	0.775	0.65	1.325	1.55	1.7	1.7	0.806	0.403	1.04
Total Metals, Cobalt (µg/L)	4	2	50	0.1	0.1	0.1	0.1	0.15825	0.1475	0.20575	0.2251	0.238	0.238	0.070	0.035	0.44
Total Metals, Copper (µg/L)	4	0	0	1.27	1.27	1.411	1.6225	1.7525	1.82	1.95	2.04	2.1	2.1	0.354	0.177	0.20
Total Metals, Iron (µg/L)	4	4	100	30	30	30	30	35	30	35	44	30	50	10.000	5.000	0.29
Total Metals, Lead (µg/L)	4	1	25	0.1	0.1	0.1	0.1	0.31	0.15	0.36	0.648	0.2	0.84	0.356	0.178	1.15
Total Metals, Lithium (µg/L)	4	0	0	1.1	1.1	1.13	1.175	1.225	1.25	1.3	1.3	1.3	1.3	0.096	0.048	0.08
Total Metals, Manganese (µg/L)	4	0	0	0.5	2.03	0.959	1.6475	1.6775	2.055	2.085	2.094	2.1	2.1	0.786	0.393	0.47
Total Metals, Molybdenum (µg/L)	4	4	100	0.02	0.02	0.02	0.02	0.06	0.06	0.1	0.1	0.1	0.1	0.046	0.023	0.77
Total Metals, Nickel (µg/L)	4	0	0	0.4	0.4	0.406	0.415	1.18	0.46	1.225	2.53	0.5	3.4	1.481	0.740	1.25
Total Metals, Rubidium (µg/L)	4	0	0	1.4	1.64	1.472	1.58	1.6	1.65	1.67	1.688	1.7	1.7	0.136	0.068	0.08
Total Metals, Selenium (µg/L)	4	3	75	0.3	0.3	0.3	0.3	0.5	0.35	0.55	0.82	0.4	1	0.337	0.168	0.67
Total Metals, Silver (µg/L)	4	4	100	0.006	0.006	0.006	0.006	0.053	0.053	0.1	0.1	0.1	0.1	0.054	0.027	1.02
Total Metals, Strontium (µg/L)	4	0	0	6.9	7.4	7.05	7.275	7.3275	7.405	7.4575	7.543	7.6	7.6	0.299	0.150	0.04
Total Metals, Thallium (µg/L)	4	4	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Titanium (µg/L)	4	1	25	0.02	0.02	0.104	0.23	0.435	0.41	0.615	0.786	0.9	0.9	0.371	0.186	0.85
Total Metals, Uranium (µg/L)	4	2	50	0.04	0.04	0.0412	0.043	0.071	0.072	0.1	0.1	0.1	0.1	0.034	0.017	0.47
Total Metals, Vanadium (µg/L)	4	3	75	0.1	0.1	0.1	0.1	0.4	0.25	0.55	0.82	1	1	0.424	0.212	1.06
Total Metals, Zinc (µg/L)	4	0	0	3.5	8.9	5.12	7.55	8.325	9.4	10.175	10.67	11	11	3.329	1.665	0.40

Table B.2.2-5 Desteffany Lake (DEL) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Dissolved Calcium (mg/L)	2	0	0	0.94	0.94	1.046	1.205	1.47	1.47	1.735	1.894	2	2	0.750	0.530	0.51
Major Ions, Dissolved Chloride (mg/L)	2	0	0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	2	0	0	0.61	0.61	0.629	0.6575	0.705	0.705	0.7525	0.781	0.8	0.8	0.134	0.095	0.19
Major Ions, Dissolved Potassium (mg/L)	2	0	0	0.54	0.54	0.556	0.58	0.62	0.62	0.66	0.684	0.7	0.7	0.113	0.080	0.18
Major Ions, Dissolved Sodium (mg/L)	2	0	0	0.51	0.51	0.529	0.5575	0.605	0.605	0.6525	0.681	0.7	0.7	0.134	0.095	0.22
Major Ions, Dissolved Sulphate (mg/L)	2	1	50	2.2	2.2	2.28	2.4	2.6	2.6	2.8	2.92	3	3	0.566	0.400	0.22
Major Ions, Reactive Silica (mg/L)	2	0	0	0.126	0.126	0.1304	0.137	0.148	0.148	0.159	0.1656	0.17	0.17	0.031	0.022	0.21
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	2	0	0	5	5	5.18	5.45	5.9	5.9	6.35	6.62	6.8	6.8	1.273	0.900	0.22
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	2	0	0	4.86	4.86	5.214	5.745	6.63	6.63	7.515	8.046	8.4	8.4	2.503	1.770	0.38
Nutrients, Dissolved Organic Carbon (mg/L)	2	0	0	2.7	2.7	2.72	2.75	2.8	2.8	2.85	2.88	2.9	2.9	0.141	0.100	0.05
Nutrients, Nitrate, as N (mg/L)	2	1	50	0.011	0.011	0.0199	0.03325	0.0555	0.0555	0.07775	0.0911	0.1	0.1	0.063	0.045	1.13
Nutrients, Nitrate/Nitrite, as N (mg/L)	2	1	50	0.011	0.011	0.0299	0.05825	0.1055	0.1055	0.15275	0.1811	0.2	0.2	0.134	0.095	1.27
Nutrients, Nitrite, as N (mg/L)	2	2	100	0.009	0.009	0.0131	0.01925	0.0295	0.0295	0.03975	0.0459	0.05	0.05	0.029	0.021	0.98
Nutrients, Total Ammonia, as N (mg/L)	2	1	50	0.005	0.005	0.0055	0.00625	0.0075	0.0075	0.00875	0.0095	0.01	0.01	0.004	0.003	0.47
Nutrients, Total Organic Carbon (mg/L)	2	0	0	2.8	2.8	2.81	2.825	2.85	2.85	2.875	2.89	2.9	2.9	0.071	0.050	0.02
Nutrients, Total Phosphorus (mg/L)	2	1	50	0.006	0.006	0.0064	0.007	0.008	0.008	0.009	0.0096	0.01	0.01	0.003	0.002	0.35
Nutrients, o-Phosphate, as P (mg/L)	2	2	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	0.000	0.00
Physical Parameters, Specific Conductivity (µS/cm)	2	0	0	15.3	15.3	15.89	16.775	18.25	18.25	19.725	20.61	21.2	21.2	4.172	2.950	0.23
Physical Parameters, Total Dissolved Solids (mg/L)	2	1	50	10	10	10.6	11.5	13	13	14.5	15.4	16	16	4.243	3.000	0.33
Physical Parameters, Total Suspended Solids (mg/L)	2	2	100	3	3	3	3	3	3	3	3	3	3	----	0.000	0.00
Physical Parameters, pH (unitless)	2	0	0	6.56	6.56	6.57	6.585	6.61	6.61	6.635	6.65	6.66	6.66	0.071	0.050	0.01
Total Metals, Aluminum (µg/L)	2	0	0	6.1	6.1	6.3	6.6	7.1	7.1	7.6	7.9	8.1	8.1	1.414	1.000	0.20
Total Metals, Antimony (µg/L)	2	0	0	0.6	0.6	0.6292	0.673	0.746	0.746	0.819	0.8628	0.892	0.892	0.206	0.146	0.28
Total Metals, Barium (µg/L)	2	0	0	1.8	1.8	1.802	1.805	1.81	1.81	1.815	1.818	1.82	1.82	0.014	0.010	0.01
Total Metals, Beryllium (µg/L)	2	2	100	0.02	0.02	0.028	0.04	0.06	0.06	0.08	0.092	0.1	0.1	0.057	0.040	0.94
Total Metals, Cadmium (µg/L)	2	2	100	0.02	0.02	0.023	0.0275	0.035	0.035	0.0425	0.047	0.05	0.05	0.021	0.015	0.61
Total Metals, Cesium (µg/L)	2	2	100	0.008	0.008	0.0172	0.031	0.054	0.054	0.077	0.0908	0.1	0.1	0.065	0.046	1.20
Total Metals, Chromium (µg/L)	2	1	50	0.1	0.1	0.23	0.425	0.75	0.75	1.075	1.27	1.4	1.4	0.919	0.650	1.23
Total Metals, Cobalt (µg/L)	2	1	50	0.1	0.1	0.1104	0.126	0.152	0.152	0.178	0.1936	0.204	0.204	0.074	0.052	0.48
Total Metals, Copper (µg/L)	2	0	0	0.95	0.95	1.055	1.2125	1.475	1.475	1.7375	1.895	2	2	0.742	0.525	0.50
Total Metals, Iron (µg/L)	2	2	100	30	30	32	35	40	40	45	48	50	50	14.142	10.000	0.35
Total Metals, Lead (µg/L)	2	1	50	0.09	0.09	0.091	0.0925	0.095	0.095	0.0975	0.099	0.1	0.1	0.007	0.005	0.07
Total Metals, Lithium (µg/L)	2	0	0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0.000	0.000	0.00
Total Metals, Manganese (µg/L)	2	0	0	1.2	1.2	1.22	1.25	1.3	1.3	1.35	1.38	1.4	1.4	0.141	0.100	0.11
Total Metals, Molybdenum (µg/L)	2	2	100	0.02	0.02	0.028	0.04	0.06	0.06	0.08	0.092	0.1	0.1	0.057	0.040	0.94
Total Metals, Nickel (µg/L)	2	0	0	0.98	0.98	0.982	0.985	0.99	0.99	0.995	0.998	1	1	0.014	0.010	0.01
Total Metals, Rubidium (µg/L)	2	0	0	1.35	1.35	1.355	1.3625	1.375	1.375	1.3875	1.395	1.4	1.4	0.035	0.025	0.03
Total Metals, Selenium (µg/L)	2	2	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.000	0.000	0.00
Total Metals, Silver (µg/L)	2	2	100	0.006	0.006	0.0154	0.0295	0.053	0.053	0.0765	0.0906	0.1	0.1	0.066	0.047	1.25
Total Metals, Strontium (µg/L)	2	0	0	6.55	6.55	6.595	6.6625	6.775	6.775	6.8875	6.955	7	7	0.318	0.225	0.05
Total Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	0.000	0.00
Total Metals, Titanium (µg/L)	2	1	50	0.02	0.02	0.038	0.065	0.11	0.11	0.155	0.182	0.2	0.2	0.127	0.090	1.16
Total Metals, Uranium (µg/L)	2	1	50	0.057	0.057	0.0613	0.06775	0.0785	0.0785	0.08925	0.0957	0.1	0.1	0.030	0.022	0.39
Total Metals, Vanadium (µg/L)	2	1	50	0.1	0.1	0.12	0.15	0.2	0.2	0.25	0.28	0.3	0.3	0.141	0.100	0.71
Total Metals, Zinc (µg/L)	2	0	0	8.5	8.5	8.56	8.65	8.8	8.8	8.95	9.04	9.1	9.1	0.424	0.300	0.05

Table B.2.2-6 Lac De Gras Outlet (LDGO) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	3	0	0	5.2	5.2	5.22	5.25	5.967	5.3	6.35	6.98	7.4	7.4	1.242	0.717	0.21
Dissolved Metals, Antimony (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	3	3	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	3	0	0	1.7	1.7	1.7	1.7	1.767	1.7	1.8	1.86	1.9	1.9	0.115	0.067	0.07
Dissolved Metals, Beryllium (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	3	3	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	3	0	0	0.7	0.7	0.72	0.75	0.800	0.8	0.85	0.88	0.9	0.9	0.100	0.058	0.13
Dissolved Metals, Iron (µg/L)	3	3	100	5	5	5	5	20.000	5	27.5	41	50	50	25.981	15.000	1.30
Dissolved Metals, Lead (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	3	0	0	1	1	1.02	1.05	1.067	1.1	1.1	1.1	1.1	1.1	0.058	0.033	0.05
Dissolved Metals, Manganese (µg/L)	3	0	0	1.3	1.3	1.32	1.35	1.567	1.4	1.7	1.88	2	2	0.379	0.219	0.24
Dissolved Metals, Mercury (µg/L)	2	2	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	3	0	0	1	1	1.02	1.05	1.100	1.1	1.15	1.18	1.2	1.2	0.100	0.058	0.09
Dissolved Metals, Rubidium (µg/L)	3	0	0	1	1	1.02	1.05	1.100	1.1	1.15	1.18	1.2	1.2	0.100	0.058	0.09
Dissolved Metals, Selenium (µg/L)	3	3	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	3	0	0	5.8	5.8	6.2	6.8	7.133	7.8	7.8	7.8	7.8	7.8	1.155	0.667	0.16
Dissolved Metals, Thallium (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	3	2	67	0.1	0.1	0.1	0.1	0.133	0.1	0.15	0.18	0.2	0.2	0.058	0.033	0.43
Dissolved Metals, Uranium (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	3	3	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	3	0	0	0.5	0.5	0.58	0.7	2.900	0.9	4.1	6.02	7.3	7.3	3.816	2.203	1.32
Major Ions, Dissolved Calcium (mg/L)	8	0	0	0.93	0.93	0.93	1.1325	1.420	1.45	1.65	1.86	2	2	0.387	0.137	0.27
Major Ions, Dissolved Chloride (mg/L)	8	1	13	0.4	0.4	0.4	0.4	0.513	0.5	0.6	0.63	0.7	0.7	0.113	0.040	0.22
Major Ions, Dissolved Fluoride (mg/L)	3	2	67	0.1	0.1	0.1	0.1	0.267	0.1	0.35	0.5	0.6	0.6	0.289	0.167	1.08
Major Ions, Dissolved Magnesium (mg/L)	8	0	0	0.61	0.61	0.666	0.6975	0.800	0.7	0.875	1.1	1.1	1.1	0.192	0.068	0.24
Major Ions, Dissolved Potassium (mg/L)	8	0	0	0.45	0.5	0.485	0.575	0.615	0.6	0.6425	0.779	0.6	0.8	0.119	0.042	0.19
Major Ions, Dissolved Sodium (mg/L)	8	0	0	0.5	0.7	0.507	0.6525	0.651	0.7	0.7	0.7	0.7	0.7	0.090	0.032	0.14
Major Ions, Dissolved Sulphate (mg/L)	8	3	38	1	1.8	1.56	1.95	2.113	2	2.325	3	2.1	3	0.649	0.229	0.31
Major Ions, Reactive Silica (mg/L)	6	0	0	0.066	0.066	0.0675	0.06925	0.079	0.07	0.085	0.099	0.108	0.108	0.017	0.007	0.21
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	8	0	0	3.7	3.7	3.714	3.8175	4.909	5.45	5.625	5.73	5.8	5.8	0.965	0.341	0.20
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	8	0	0	4.8	4.8	5.052	5.79	6.858	6.6	7.725	9.12	9.4	9.4	1.658	0.586	0.24
Nutrients, Dissolved Organic Carbon (mg/L)	8	0	0	1.9	2.5	2.32	2.5	2.688	2.7	2.825	3.08	2.9	3.5	0.449	0.159	0.17
Nutrients, Nitrate, as N (mg/L)	8	6	75	0.008	0.008	0.0092	0.01	0.140	0.1	0.1	0.32	0.1	0.65	0.230	0.081	1.64
Nutrients, Nitrate/Nitrite, as N (mg/L)	8	7	88	0.008	0.008	0.008	0.0095	0.161	0.105	0.2	0.335	0.2	0.65	0.219	0.077	1.36
Nutrients, Nitrite, as N (mg/L)	8	7	88	0.009	0.009	0.0096	0.01	0.027	0.01	0.05	0.05	0.05	0.05	0.022	0.008	0.80
Nutrients, Total Ammonia, as N (mg/L)	8	2	25	0.005	0.005	0.005	0.0065	0.009	0.0085	0.00925	0.0127	0.01	0.019	0.004	0.002	0.49
Nutrients, Total Organic Carbon (mg/L)	8	0	0	2.2	2.2	2.34	2.475	2.688	2.6	2.725	3.07	2.8	3.7	0.452	0.160	0.17
Nutrients, Total Phosphorus (mg/L)	8	6	75	0.004	0.01	0.0068	0.0095	0.010	0.01	0.01	0.013	0.01	0.02	0.004	0.002	0.44
Nutrients, o-Phosphate, as P (mg/L)	6	4	67	0.002	0.002	0.002	0.002	0.004	0.002	0.00275	0.0065	0.003	0.01	0.003	0.001	0.92
Physical Parameters, Color (CU)	6	5	83	5	5	5	5	5.333	5	5	6	5	7	0.816	0.333	0.15
Physical Parameters, Specific Conductivity (µS/cm)	8	0	0	13.9	13.9	15.02	15.65	17.013	17.25	18.75	18.9	18.9	18.9	2.000	0.707	0.12
Physical Parameters, Total Dissolved Solids (mg/L)	8	2	25	10	10	10	10.75	13.250	12	13.75	17.8	16	22	4.027	1.424	0.30
Physical Parameters, Total Suspended Solids (mg/L)	8	8	100	3	3	3	3	3.000	3	3	3	3	3	----	----	----
Physical Parameters, Turbidity (NTU)	8	0	0	0.2	0.2	0.221	0.2375	0.460	0.455	0.64	0.724	0.78	0.78	0.240	0.085	0.52
Physical Parameters, pH (unitless)	8	0	0	6.58	6.58	6.594	6.6225	6.668	6.655	6.715	6.76	6.76	6.76	0.069	0.024	0.01
Total Metals, Aluminum (µg/L)	8	1	13	3.8	3.8	4.15	4.9	8.763	5.7	6.825	15.72	9.6	30	8.756	3.096	1.00
Total Metals, Antimony (µg/L)	8	2	25	0.1	0.1	0.1	0.25	0.653	0.65	0.805	1.264	1.6	1.6	0.515	0.182	0.79
Total Metals, Arsenic (µg/L)	4	4	100	0.2	0.2	0.2	0.2	0.650	0.2	0.65	1.46	0.2	2	0.900	0.450	1.38
Total Metals, Barium (µg/L)	8	0	0	1.3	1.3	1.51	1.6	1.971	1.75	2.0775	2.85	2.7	3.2	0.641	0.227	0.33

Table B.2.2-6 Lac De Gras Outlet (LDGO) - Spring

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	8	8	100	0.02	0.1	0.076	0.1	0.328	0.1	0.1	0.67	0.1	2	0.676	0.239	2.07
Total Metals, Bismuth (µg/L)	1	1	100	0.4	0.4	0.4	0.4	0.400	0.4	0.4	0.4	0.4	0.4	----	----	----
Total Metals, Cadmium (µg/L)	8	7	88	0.02	0.05	0.041	0.05	0.079	0.05	0.0525	0.132	0.05	0.3	0.090	0.032	1.14
Total Metals, Cesium (µg/L)	8	8	100	0.008	0.1	0.0724	0.1	0.126	0.1	0.1	0.19	0.1	0.4	0.115	0.041	0.92
Total Metals, Chromium (µg/L)	8	5	63	0.1	0.1	0.1	0.1	0.850	0.55	1.2	1.74	1.2	3	1.010	0.357	1.19
Total Metals, Cobalt (µg/L)	8	6	75	0.1	0.1	0.1	0.1	0.241	0.1	0.20775	0.4617	0.231	1	0.311	0.110	1.29
Total Metals, Copper (µg/L)	8	1	13	0.7	0.7	0.7	0.925	1.664	1.65	2.15	2.723	3.01	3.01	0.854	0.302	0.51
Total Metals, Iron (µg/L)	8	6	75	7	7	7.7	24.5	34.375	40	50	50	50	50	18.746	6.628	0.55
Total Metals, Lead (µg/L)	8	7	88	0.1	0.1	0.1	0.1	0.228	0.1	0.13	0.454	0.1	1	0.315	0.111	1.38
Total Metals, Lithium (µg/L)	8	1	13	1	1	1.14	1.2	1.488	1.3	1.375	2.02	1.6	3	0.633	0.224	0.43
Total Metals, Manganese (µg/L)	8	1	13	1	1	1	1.075	1.521	1.185	2.2	2.23	2.3	2.3	0.595	0.210	0.39
Total Metals, Mercury (µg/L)	3	3	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	8	8	100	0.02	0.1	0.076	0.1	0.203	0.1	0.1	0.37	0.1	1	0.323	0.114	1.60
Total Metals, Nickel (µg/L)	8	1	13	1	1	1	1	1.085	1.05	1.1	1.184	1.1	1.38	0.129	0.046	0.12
Total Metals, Rubidium (µg/L)	7	0	0	1.1	1.1	1.16	1.2	1.297	1.3	1.3	1.452	1.3	1.68	0.185	0.070	0.14
Total Metals, Selenium (µg/L)	8	8	100	0.3	0.3	0.3	0.3	1.513	0.3	0.3	3.21	0.3	10	3.429	1.213	2.27
Total Metals, Silver (µg/L)	8	8	100	0.006	0.1	0.0718	0.1	0.113	0.1	0.1	0.16	0.1	0.3	0.082	0.029	0.73
Total Metals, Strontium (µg/L)	8	0	0	5.6	5.6	5.6	5.975	6.625	6.35	7.425	7.83	7.9	7.9	0.929	0.328	0.14
Total Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.138	0.1	0.1	0.19	0.1	0.4	0.106	0.038	0.77
Total Metals, Titanium (µg/L)	8	4	50	0.1	0.1	0.1	0.1	1.439	0.2	0.9	4.383	0.2	7.61	2.686	0.950	1.87
Total Metals, Uranium (µg/L)	8	7	88	0.04	0.1	0.082	0.1	0.118	0.1	0.1	0.16	0.1	0.3	0.077	0.027	0.65
Total Metals, Vanadium (µg/L)	8	5	63	0.1	0.1	0.1	0.1	0.275	0.15	0.3	0.51	0.3	1	0.306	0.108	1.11
Total Metals, Zinc (µg/L)	8	1	13	0.5	0.5	0.57	2.25	7.013	9.2	10.35	11.7	12.4	12.4	4.904	1.734	0.70

Table B.2.3-1 Coppermine River Above Copper Creek (COR04) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	25	1	4	0.5	0.5	3.08	13.3	24.356	20.7	32.8	51.86	56.7	63.8	18.071	3.614	0.74
Dissolved Metals, Antimony (µg/L)	25	0	0	0.009	0.009	0.011	0.014	0.04108	0.042	0.068	0.0778	0.091	0.091	0.027	0.005	0.65
Dissolved Metals, Arsenic (µg/L)	32	2	6.25	0.01	0.1	0.1	0.16	0.187813	0.215	0.23	0.239	0.27	0.27	0.063	0.011	0.33
Dissolved Metals, Barium (µg/L)	25	1	4	0.05	11.3	12.24	14.4	19.458	21.3	23.5	25.82	34.9	34.9	6.946	1.389	0.36
Dissolved Metals, Beryllium (µg/L)	25	4	16	0.001	0.001	0.001	0.001	0.00176	0.002	0.002	0.0026	0.003	0.003	0.001	0.000	0.38
Dissolved Metals, Bismuth (µg/L)	25	15	60	0.001	0.001	0.001	0.001	0.00132	0.001	0.001	0.002	0.001	0.004	0.001	0.000	0.57
Dissolved Metals, Boron (µg/L)	25	1	4	0.5	1.5	1.54	1.6	1.92	2	2.2	2.4	2.7	2.7	0.447	0.089	0.23
Dissolved Metals, Cadmium (µg/L)	25	3	12	0.001	0.001	0.001	0.002	0.00456	0.004	0.006	0.009	0.01	0.015	0.004	0.001	0.79
Dissolved Metals, Cerium (µg/L)	25	1	4	0.001	0.001	0.008	0.043	0.06932	0.062	0.087	0.1438	0.151	0.17	0.049	0.010	0.70
Dissolved Metals, Cesium (µg/L)	25	1	4	0.001	0.001	0.0024	0.004	0.00568	0.005	0.007	0.0102	0.011	0.012	0.003	0.001	0.53
Dissolved Metals, Chromium (µg/L)	25	0	0	0.01	0.01	0.044	0.08	0.1056	0.1	0.14	0.1506	0.22	0.22	0.049	0.010	0.46
Dissolved Metals, Cobalt (µg/L)	25	1	4	0.002	0.002	0.008	0.015	0.02424	0.023	0.03	0.0422	0.048	0.054	0.014	0.003	0.56
Dissolved Metals, Copper (µg/L)	25	0	0	0.5	0.78	0.794	0.92	1.068	0.99	1.14	1.516	1.18	1.98	0.347	0.069	0.32
Dissolved Metals, Iron (µg/L)	25	1	4	0.5	0.5	5.46	25.7	39.296	36.3	53.7	71.52	87.3	87.3	24.974	4.995	0.64
Dissolved Metals, Lead (µg/L)	25	0	0	0.006	0.006	0.0092	0.013	0.02644	0.019	0.036	0.05	0.051	0.073	0.017	0.003	0.65
Dissolved Metals, Lithium (µg/L)	25	1	4	0.01	0.7	0.718	0.74	0.7752	0.8	0.84	0.906	0.92	0.92	0.172	0.034	0.22
Dissolved Metals, Manganese (µg/L)	25	1	4	0.05	0.05	0.108	0.94	1.3784	1.21	1.62	2.708	2.6	4.02	0.999	0.200	0.72
Dissolved Metals, Molybdenum (µg/L)	25	1	4	0.005	0.05	0.053	0.055	0.06088	0.059	0.064	0.0666	0.075	0.149	0.022	0.004	0.36
Dissolved Metals, Nickel (µg/L)	25	0	0	0.07	0.33	0.354	0.43	0.4576	0.47	0.51	0.536	0.59	0.75	0.117	0.023	0.26
Dissolved Metals, Niobium (µg/L)	25	10	40	0.001	0.001	0.001	0.002	0.00256	0.002	0.003	0.0056	0.004	0.006	0.002	0.000	0.64
Dissolved Metals, Rubidium (µg/L)	25	0	0	0.002	0.81	0.89	0.917	0.97332	1.02	1.09	1.13	1.26	1.26	0.229	0.046	0.24
Dissolved Metals, Selenium (µg/L)	32	13	40.62	0.01	0.01	0.011	0.02	0.04	0.02	0.05	0.1	0.05	0.1	0.034	0.006	0.85
Dissolved Metals, Silver (µg/L)	25	18	72	0.001	0.001	0.001	0.001	0.00108	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.26
Dissolved Metals, Strontium (µg/L)	25	1	4	0.05	7.66	8.306	9.11	9.1644	9.43	10.1	10.56	11	11	2.064	0.413	0.23
Dissolved Metals, Thallium (µg/L)	25	3	12	0.001	0.001	0.001	0.001	0.00176	0.002	0.002	0.002	0.003	0.003	0.001	0.000	0.34
Dissolved Metals, Tin (µg/L)	25	18	72	0.005	0.005	0.005	0.005	0.00688	0.005	0.006	0.0096	0.007	0.021	0.004	0.001	0.63
Dissolved Metals, Titanium (µg/L)	11	4	36.36	0.05	0.05	0.05	0.05	0.775455	0.51	1.315	2.09	2.1	2.1	0.822	0.248	1.06
Dissolved Metals, Tungsten (µg/L)	25	5	20	0.001	0.001	0.001	0.001	0.00176	0.002	0.002	0.003	0.003	0.004	0.001	0.000	0.50
Dissolved Metals, Uranium (µg/L)	25	1	4	0.0005	0.0855	0.10078	0.106	0.149452	0.13	0.169	0.2032	0.207	0.493	0.085	0.017	0.57
Dissolved Metals, Vanadium (µg/L)	25	0	0	0.017	0.05	0.054	0.09	0.1116	0.118	0.13	0.1572	0.18	0.192	0.040	0.008	0.36
Dissolved Metals, Zinc (µg/L)	25	3	12	0.2	0.2	0.2	0.3	0.694	0.45	1	1.12	1.3	3.7	0.720	0.144	1.04
Dissolved Metals, Zirconium (µg/L)	7	1	14.29	0.01	0.01	0.01	0.01	0.028571	0.02	0.045	0.054	0.06	0.06	0.021	0.008	0.74
Field Measurements, Specific Conductivity (µS/cm)	17	0	0	40	40	42.4	59	71.06471	63	79	94	100	176	31.672	7.682	0.45
Field Measurements, pH (unitless)	18	0	0	7.2	7.2	7.307	7.575	7.879444	7.77	8.155	8.4	8.47	9.26	0.509	0.120	0.06
Major Ions, Bicarbonate (calc'd) (mg/L)	3	0	0	50.589	50.589	50.6376	50.7105	50.83233	50.832	50.954	51.0272	51.076	51.076	0.244	0.141	0.00
Major Ions, Carbonate (calc'd) (mg/L)	3	3	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	37	1	2.7	0.05	4.6	4.888	6	7.819189	7.63	8.23	10.04	11.2	32.4	4.621	0.760	0.59
Major Ions, Dissolved Chloride (mg/L)	37	1	2.7	0.02	0.24	0.29	0.31	0.485676	0.34	0.38	0.43	0.45	5.62	0.871	0.143	1.79
Major Ions, Dissolved Fluoride (mg/L)	37	1	2.7	0.01	0.01	0.02	0.02	0.028378	0.03	0.03	0.03	0.04	0.09	0.012	0.002	0.43
Major Ions, Dissolved Magnesium (mg/L)	37	0	0	0.01	2.06	2.1	2.77	3.542432	3.53	3.94	4.774	5.3	9.39	1.434	0.236	0.40
Major Ions, Dissolved Potassium (mg/L)	37	0	0	0.01	0.37	0.42	0.44	0.474324	0.46	0.51	0.544	0.59	0.94	0.124	0.020	0.26
Major Ions, Dissolved Sodium (mg/L)	37	0	0	0.02	0.45	0.486	0.54	0.748108	0.6	0.69	0.71	0.87	6.29	0.945	0.155	1.26
Major Ions, Dissolved Sulphate (mg/L)	37	1	2.7	0.02	1.2	1.612	1.72	3.034054	1.92	2.41	2.87	2.87	35.8	5.581	0.917	1.84
Major Ions, Hydroxide (calc'd) (mg/L)	3	3	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	36	8	22.22	0	0	0	0.09725	1.365806	1.2905	2.20825	3.1785	3.925	3.925	1.312	0.219	0.96
Major Ions, Silica (mg/L)	37	1	2.7	0.02	0.02	0.438	0.57	0.9	0.91	1.05	1.15	1.34	3.57	0.537	0.088	0.60
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	38	0	0	18.9	18.9	22.28	26.375	35.07895	33.05	34.875	41.76	45.7	169	23.415	3.798	0.67
Major Ions, Total Calcium (mg/L)	6	0	0	5.3	5.3	5.31	5.325	6.008333	6	6.6975	6.715	6.72	6.72	0.754	0.308	0.13
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	37	0	0	0.166	20.132	20.785	26.18	34.10868	33.585	37.245	44.8744	49.704	119.561	17.178	2.824	0.50
Major Ions, Total Magnesium (mg/L)	6	0	0	2.2	2.2	2.205	2.2175	2.735	2.73	3.2425	3.27	3.29	3.29	0.568	0.232	0.21
Major Ions, Total Potassium (mg/L)	6	0	0	0.38	0.38	0.38	0.38	0.395	0.39	0.4075	0.415	0.42	0.42	0.018	0.007	0.04
Major Ions, Total Sodium (mg/L)	6	0	0	0.36	0.36	0.365	0.37	0.411667	0.405	0.455	0.465	0.47	0.47	0.050	0.021	0.12
Nutrients, Dissolved Ammonia, as N (mg/L)	38	25	65.79	0.005	0.005	0.005	0.005	0.008342	0.005	0.01	0.015	0.016	0.028	0.005	0.001	0.59
Nutrients, Dissolved Nitrogen (mg/L)	22	1	4.55	0.06	0.09	0.131	0.15	0.172727	0.18	0.2	0.21	0.21	0.28	0.045	0.010	0.26

Table B.2.3-1 Coppermine River Above Copper Creek (COR04) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Organic Carbon (mg/L)	38	0	0	0.7	2.8	2.87	3.3	3.581579	3.4	4.05	4.23	4.6	7.5	0.965	0.157	0.27
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	37	0	0	0.756	0.756	0.8714	0.987	1.59127	1.294	1.462	2.1508	2.072	8.01	1.375	0.226	0.86
Nutrients, Nitrate, as N (mg/L)	25	5	20	0.01	0.01	0.01	0.01	0.043284	0.03	0.07	0.082	0.11	0.11	0.034	0.007	0.78
Nutrients, Nitrate/Nitrite, as N (mg/L)	35	5	14.29	0.01	0.01	0.01	0.01	0.036089	0.021	0.065	0.076	0.11	0.11	0.031	0.005	0.87
Nutrients, Nitrite, as N (mg/L)	25	25	100	0.001	0.01	0.01	0.01	0.00964	0.01	0.01	0.01	0.01	0.01	0.002	0.000	0.19
Nutrients, Particulate Nitrogen (mg/L)	37	0	0	0.003	0.003	0.0176	0.023	0.053865	0.036	0.068	0.1286	0.121	0.173	0.043	0.007	0.80
Nutrients, Particulate Organic Carbon (mg/L)	37	0	0	0.1	0.1	0.1604	0.23	0.26773	0.268	0.323	0.3682	0.402	0.402	0.079	0.013	0.29
Nutrients, Total Dissolved Nitrogen (mg/L)	16	0	0	0.046	0.046	0.049	0.06075	0.150438	0.1795	0.20275	0.219	0.34	0.34	0.086	0.021	0.57
Nutrients, Total Dissolved Phosphorus (mg/L)	29	20	68.97	0.002	0.002	0.002	0.002	0.028966	0.007	0.01	0.0102	0.011	0.611	0.112	0.021	3.88
Nutrients, Total Nitrogen (mg/L)	25	0	0	0.06	0.16	0.16	0.17	0.1852	0.19	0.2	0.234	0.21	0.29	0.048	0.010	0.26
Nutrients, Total Phosphorus (mg/L)	35	14	40	0.002	0.002	0.002	0.004	0.009829	0.007	0.01	0.0188	0.017	0.064	0.011	0.002	1.12
Physical Parameters, Specific Conductivity (µS/cm)	38	0	0	44.1	44.1	51.27	60.75	79.00789	64.35	76.05	89.9	95.8	493	70.421	11.424	0.89
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	33	0	0	21.33	21.33	25.5152	28.757	39.04755	35.35	39.26	45.466	50.62	195.41	29.020	5.052	0.74
Physical Parameters, Total Suspended Solids (mg/L)	38	17	44.74	3	3	3	3	4.368421	4	4	6	5	14	2.235	0.363	0.51
Physical Parameters, Turbidity (NTU)	38	0	0	0.08	0.08	0.779	1.1175	1.741579	1.635	2.1875	2.669	3.6	3.8	0.809	0.131	0.46
Physical Parameters, pH (unitless)	38	0	0	6.99	7.39	7.414	7.5925	7.663421	7.72	7.7725	7.853	7.91	7.91	0.184	0.030	0.02
Total Metals, Aluminum (µg/L)	37	1	2.7	0.5	0.5	28.18	35.7	72.35946	54.4	88.2	106.4	154	466	74.037	12.172	1.02
Total Metals, Antimony (µg/L)	31	0	0	0.001	0.009	0.011	0.013	0.015742	0.014	0.017	0.024	0.02	0.041	0.007	0.001	0.42
Total Metals, Arsenic (µg/L)	30	1	3.33	0.01	0.2	0.209	0.22	0.224333	0.23	0.2475	0.261	0.27	0.32	0.058	0.011	0.26
Total Metals, Barium (µg/L)	37	1	2.7	0.05	10.5	11.12	15.6	20.16622	22.5	24	26.24	35.5	35.5	6.814	1.120	0.34
Total Metals, Beryllium (µg/L)	37	7	18.92	0.001	0.002	0.002	0.003	0.011162	0.004	0.004	0.05	0.004	0.05	0.018	0.003	1.57
Total Metals, Bismuth (µg/L)	31	5	16.13	0.001	0.001	0.001	0.001	0.003	0.001	0.002	0.008	0.002	0.023	0.004	0.001	1.50
Total Metals, Boron (µg/L)	31	2	6.45	0.1	1.1	1.3	1.45	1.716129	1.8	2	2.2	2.8	2.8	0.527	0.095	0.31
Total Metals, Cadmium (µg/L)	37	3	8.11	0.001	0.001	0.001	0.002	0.02827	0.003	0.01	0.1	0.01	0.2	0.054	0.009	1.92
Total Metals, Cerium (µg/L)	30	1	3.33	0.001	0.001	0.0884	0.1005	0.190833	0.1295	0.1735	0.2468	0.272	1.52	0.260	0.047	1.36
Total Metals, Cesium (µg/L)	31	1	3.23	0.001	0.006	0.007	0.008	0.012129	0.01	0.0125	0.016	0.017	0.062	0.010	0.002	0.84
Total Metals, Chromium (µg/L)	37	1	2.7	0.03	0.03	0.0988	0.12	0.23027	0.167	0.217	0.386	0.31	1	0.223	0.037	0.97
Total Metals, Cobalt (µg/L)	37	0	0	0.003	0.003	0.031	0.035	0.084514	0.052	0.076	0.18	0.1	0.4	0.102	0.017	1.20
Total Metals, Copper (µg/L)	37	0	0	0.89	0.89	0.906	0.94	1.123784	1.1	1.2	1.5	1.57	1.62	0.216	0.036	0.19
Total Metals, Iron (µg/L)	37	0	0	1.7	1.7	57.32	63.4	113.1135	101	128	158	224	633	98.244	16.151	0.87
Total Metals, Lead (µg/L)	37	4	10.81	0.022	0.022	0.0256	0.033	0.091541	0.048	0.12	0.2	0.2	0.3	0.083	0.014	0.91
Total Metals, Lithium (µg/L)	37	1	2.7	0.01	0.7	0.74	0.77	0.824865	0.8	0.88	0.93	1	1.48	0.188	0.031	0.23
Total Metals, Manganese (µg/L)	37	1	2.7	0.05	3.06	3.746	4.17	5.757838	4.83	5.93	7.652	8	29	4.286	0.705	0.74
Total Metals, Molybdenum (µg/L)	37	3	8.11	0.005	0.046	0.049	0.053	0.099027	0.059	0.065	0.1	0.077	0.8	0.145	0.024	1.46
Total Metals, Nickel (µg/L)	37	3	8.11	0.2	0.2	0.364	0.43	0.575135	0.46	0.59	0.666	0.7	3.24	0.484	0.080	0.84
Total Metals, Rubidium (µg/L)	31	0	0	0.002	0.84	0.91	0.942	1.029516	1.01	1.155	1.19	1.29	1.64	0.245	0.044	0.24
Total Metals, Selenium (µg/L)	30	11	36.67	0.01	0.01	0.01	0.02	0.03	0.02	0.05	0.05	0.06	0.12	0.023	0.004	0.77
Total Metals, Silver (µg/L)	37	20	54.05	0.001	0.001	0.001	0.001	0.068838	0.001	0.002	0.1	0.002	0.9	0.205	0.034	2.98
Total Metals, Strontium (µg/L)	37	1	2.7	0.05	7.02	7.5	8.4	9.005405	9.3	9.87	10.5	11.1	11.1	1.840	0.302	0.20
Total Metals, Tellurium (µg/L)	7	7	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Total Metals, Thallium (µg/L)	31	2	6.45	0.001	0.002	0.001	0.002	0.002065	0.002	0.002	0.003	0.002	0.005	0.001	0.000	0.35
Total Metals, Tin (µg/L)	31	18	58.06	0.005	0.005	0.005	0.005	0.008194	0.005	0.0095	0.015	0.015	0.027	0.005	0.001	0.66
Total Metals, Titanium (µg/L)	11	0	0	0.98	0.98	0.98	1	3.114545	1.24	2.745	3.29	3.29	17.2	4.755	1.434	1.53
Total Metals, Tungsten (µg/L)	31	4	12.9	0.001	0.001	0.001	0.001	0.002387	0.002	0.003	0.004	0.006	0.01	0.002	0.000	0.77
Total Metals, Uranium (µg/L)	31	0	0	0.0005	0.086	0.109	0.116	0.148435	0.152	0.1765	0.209	0.254	0.254	0.049	0.009	0.33
Total Metals, Vanadium (µg/L)	37	0	0	0.017	0.017	0.116	0.13	0.199162	0.18	0.226	0.3	0.3	0.85	0.130	0.021	0.65
Total Metals, Zinc (µg/L)	37	3	8.11	0.2	0.2	0.2	0.26	0.580811	0.4	0.7	1.158	1.2	2.2	0.476	0.078	0.82
Total Metals, Zirconium (µg/L)	7	0	0	0.02	0.02	0.02	0.025	0.061429	0.04	0.06	0.122	0.07	0.2	0.064	0.024	1.04

Table B.2.3-2 Coppermine River at Outlet of Point Lake (COR02) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	7	0	0	9.8	9.8	10.16	10.4	10.614286	10.5	10.9	11.22	11.4	11.4	0.521	0.197	0.05
Dissolved Metals, Antimony (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	39	24	62	0.1	0.1	0.1	0.1	0.374359	0.2	0.5	0.5	0.5	5	0.778	0.125	2.08
Dissolved Metals, Barium (µg/L)	7	0	0	2	2	2.06	2.1	2.1571429	2.2	2.2	2.24	2.3	2.3	0.098	0.037	0.05
Dissolved Metals, Beryllium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	7	7	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	26	17	65	0.9	0.9	1.1	7.025	16.957692	20	20	20	20	70	13.628	2.673	0.80
Dissolved Metals, Cadmium (µg/L)	7	7	100	0.04	0.04	0.04	0.04	0.0442857	0.04	0.05	0.05	0.05	0.05	0.005	0.002	0.12
Dissolved Metals, Cesium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	10	0	0	0.6	0.6	0.6	0.625	1.07	0.7	0.95	2.1	1	3	0.799	0.253	0.75
Dissolved Metals, Iron (µg/L)	10	5	50	5	5	5	5	15.7	5.5	9	27	10	90	26.525	8.388	1.69
Dissolved Metals, Lead (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.37	0.1	0.775	1	1	1	0.435	0.137	1.17
Dissolved Metals, Lithium (µg/L)	7	0	0	0.9	0.9	0.9	0.95	1	1	1.05	1.1	1.1	1.1	0.082	0.031	0.08
Dissolved Metals, Manganese (µg/L)	10	3	30	0.3	0.3	0.39	0.425	2.44	0.6	0.9	10	1	10	3.989	1.261	1.63
Dissolved Metals, Mercury (ng/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Mercury (µg/L)	5	5	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	7	0	0	0.7	0.7	0.7	0.7	0.7285714	0.7	0.75	0.8	0.8	0.8	0.049	0.018	0.07
Dissolved Metals, Rubidium (µg/L)	7	0	0	1.2	1.2	1.2	1.2	1.3714286	1.4	1.5	1.54	1.6	1.6	0.170	0.064	0.12
Dissolved Metals, Selenium (µg/L)	38	35	92	0	0	0.1	0.1	0.2526316	0.2	0.5	0.5	0.5	0.5	0.180	0.029	0.71
Dissolved Metals, Silver (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	7	0	0	6.5	6.5	6.5	6.5	7.1428571	7.1	7.6	7.84	8.2	8.2	0.680	0.257	0.10
Dissolved Metals, Thallium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	10	5	50	0.4	0.4	0.4	0.4	16.84	0.55	1.675	18.7	3	160	50.309	15.909	2.99
Field Measurements, Specific Conductivity (µS/cm)	30	0	0	10	10	10	11.075	12.473333	12	12.925	14.4	14	19	2.461	0.449	0.20
Field Measurements, Turbidity (JTU)	1	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Field Measurements, pH (unitless)	23	0	0	6.2	6.2	6.39	6.68	7.033913	6.96	7.365	7.496	7.83	8.58	0.555	0.116	0.08
Major Ions, Bicarbonate (calc'd) (mg/L)	28	0	0	0.1	2.4	2.61	3.475	3.9035714	3.95	4.6	5.1	5.5	5.5	1.106	0.209	0.28
Major Ions, Carbonate (calc'd) (mg/L)	28	28	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	51	1	2	0.5	0.5	0.9	0.96	1.1990196	1.1	1.35	1.6	1.8	3.5	0.447	0.063	0.37
Major Ions, Dissolved Chloride (mg/L)	52	7	13	0.1	0.1	0.2	0.3	0.4594231	0.3	0.5	0.7	0.7	2.4	0.426	0.059	0.93
Major Ions, Dissolved Fluoride (mg/L)	51	22	43	0.01	0.01	0.018	0.02	0.0413922	0.04	0.05	0.1	0.05	0.1	0.026	0.004	0.62
Major Ions, Dissolved Magnesium (mg/L)	42	0	0	0.3	0.3	0.421	0.46	0.5338095	0.5	0.58	0.8	0.7	0.8	0.138	0.021	0.26
Major Ions, Dissolved Potassium (mg/L)	51	0	0	0.2	0.4	0.3	0.4	0.4829412	0.41	0.445	0.6	0.5	2.87	0.362	0.051	0.75
Major Ions, Dissolved Sodium (mg/L)	52	0	0	0.2	0.3	0.4	0.44	0.5311538	0.5	0.6	0.7	0.8	1.4	0.193	0.027	0.36
Major Ions, Dissolved Sulphate (mg/L)	52	2	4	0.9	0.9	1	1.2	1.5776923	1.5	2	2.1	3	3	0.504	0.070	0.32
Major Ions, Hydroxide (calc'd) (mg/L)	21	21	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	21	0	0	0.1	0.1	0.1	0.3	1.147619	1.1	1.4	2.2	2.9	4.1	1.015	0.221	0.88
Major Ions, Reactive Silica (mg/L)	38	1	3	0.1	0.1	0.2	0.215	0.2835263	0.3	0.3375	0.3579	0.4	0.4	0.073	0.012	0.26
Major Ions, Silica (mg/L)	14	0	0	0.16	0.16	0.239	0.26	0.29	0.285	0.3375	0.34	0.39	0.39	0.059	0.016	0.20
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	50	4	8	1.1	1.1	2.18	2.925	3.948	3.55	4.3	4.75	5.2	10	2.004	0.283	0.51
Major Ions, Total Calcium (mg/L)	7	0	0	0.9	0.9	0.9	0.9	0.9228571	0.91	0.94	0.958	0.97	0.97	0.028	0.011	0.03
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	44	2	5	0.5	3.64	3.754	4.3	4.9434091	4.7	5.6	6.8	7.3	10.9	1.740	0.262	0.35
Major Ions, Total Magnesium (mg/L)	7	0	0	0.41	0.41	0.41	0.41	0.4314286	0.42	0.455	0.46	0.46	0.46	0.024	0.009	0.06
Major Ions, Total Potassium (mg/L)	7	0	0	0.34	0.34	0.352	0.36	0.37	0.36	0.38	0.398	0.41	0.41	0.023	0.009	0.06
Major Ions, Total Sodium (mg/L)	7	0	0	0.17	0.17	0.176	0.18	0.2542857	0.18	0.335	0.394	0.4	0.4	0.103	0.039	0.41
Microbiology, Chlorophyll a (µg/L)	7	6	86	1	1	1	1	1.1857143	1	1.15	1.58	1.3	2	0.376	0.142	0.32
Nutrients, Dissolved Ammonia, as N (mg/L)	7	0	0	0.008	0.008	0.0086	0.009	0.01	0.009	0.01	0.0126	0.011	0.015	0.002	0.001	0.24
Nutrients, Dissolved Inorganic Carbon (mg/L)	4	2	50	1	1	1	1	1	1	1	1	1	1	----	----	----
Nutrients, Dissolved Inorganic Phosphate (mg/L)	3	3	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Dissolved Nitrate/Nitrite, as N (mg/L)	3	0	0	0.008	0.008	0.0102	0.0135	0.0183333	0.019	0.0235	0.0262	0.028	0.028	0.010	0.006	0.55
Nutrients, Dissolved Nitrogen (mg/L)	7	0	0	0.169	0.169	0.1696	0.17	0.179	0.175	0.1795	0.192	0.18	0.21	0.014	0.005	0.08

Table B.2.3-2 Coppermine River at Outlet of Point Lake (COR02) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Organic Carbon (mg/L)	41	1	2	1	1.5	1.8	2	2.2565854	2.1	2.4	3	3	4	0.574	0.090	0.25
Nutrients, Dissolved o-Phosphate, as P (mg/L)	3	3	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	21	0	0	0.02	0.02	0.08	0.31	1.1585714	0.9	1.7	2.28	3.2	4.2	1.099	0.240	0.95
Nutrients, Nitrate, as N (mg/L)	7	0	0	0.03	0.03	0.03	0.035	0.0389286	0.0425	0.0428	0.04362	0.0444	0.0444	0.006	0.002	0.16
Nutrients, Nitrate/Nitrite, as N (mg/L)	43	1	2	0.019	0.019	0.03	0.0365	0.0427558	0.0431	0.05	0.05	0.06	0.08	0.012	0.002	0.28
Nutrients, Nitrite, as N (mg/L)	7	7	100	0.001	0.001	0.001	0.001	0.0048571	0.001	0.01	0.01	0.01	0.01	0.005	0.002	0.99
Nutrients, Particulate Nitrogen (mg/L)	35	11	31	0.006	0.006	0.01	0.01	0.0246857	0.02	0.0255	0.03	0.04	0.227	0.036	0.006	1.47
Nutrients, Particulate Organic Carbon (mg/L)	35	0	0	0.059	0.059	0.0776	0.114	0.2072286	0.14	0.166	0.1932	0.22	2.58	0.415	0.070	2.00
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	34	25	74	0	0	0	0.0025	0.0038529	0.004	0.006	0.006	0.01	0.01	0.002	0.000	0.64
Nutrients, Saturation Index (calc'd) (unitless)	20	0	0	-6.17	-5.08	-5.071	-4.625	-4.121	-3.92	-3.79	-3.346	-3.04	-2.14	0.862	0.193	-0.21
Nutrients, Total Ammonia, as N (mg/L)	7	6	86	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.0078	0.005	0.012	0.003	0.001	0.44
Nutrients, Total Dissolved Nitrogen (mg/L)	42	3	7	0.008	0.098	0.0992	0.13	0.1564286	0.1355	0.155	0.208	0.174	0.49	0.097	0.015	0.62
Nutrients, Total Dissolved Phosphorus (mg/L)	49	22	45	0.001	0.001	0.002	0.003	0.0045429	0.003	0.006	0.007	0.01	0.028	0.004	0.001	0.89
Nutrients, Total Inorganic Carbon (mg/L)	5	1	20	0.5	1	0.7	1	0.9	1	1	1	1	1	0.224	0.100	0.25
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	6	4	67	0.05	0.05	0.12	0.1925	0.3233333	0.35	0.5	0.5	0.5	0.5	0.201	0.082	0.62
Nutrients, Total Nitrogen (calc'd) (mg/L)	20	0	0	0.11	0.13	0.139	0.14	0.1555	0.145	0.16	0.172	0.19	0.31	0.040	0.009	0.26
Nutrients, Total Nitrogen (mg/L)	7	0	0	0.168	0.168	0.1704	0.176	0.2001429	0.2	0.225	0.2304	0.231	0.231	0.027	0.010	0.14
Nutrients, Total Organic Carbon (calc'd) (mg/L)	18	0	0	1.1	2.01	2.017	2.1525	2.4433333	2.22	2.4775	3.063	2.61	4.95	0.836	0.197	0.34
Nutrients, Total Organic Carbon (mg/L)	12	0	0	2	2	2.73	3	3.425	3.15	4	4.18	5	5	0.801	0.231	0.23
Nutrients, Total Phosphorus (mg/L)	45	14	31	0.002	0.002	0.002	0.003	0.0067333	0.005	0.009	0.0136	0.018	0.024	0.005	0.001	0.76
Nutrients, o-Phosphate, as P (mg/L)	7	6	86	0.001	0.001	0.001	0.001	0.0017143	0.002	0.002	0.0024	0.003	0.003	0.001	0.000	0.44
Physical Parameters, Specific Conductivity (µS/cm)	58	0	0	7.1	11	12.3	12.725	13.734483	13	14.075	17.49	15	20.1	2.200	0.289	0.16
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	27	0	0	4	4.8	5.36	5.95	6.6666667	7	7	7.4	8	12	1.410	0.271	0.21
Physical Parameters, Total Dissolved Solids (mg/L)	7	5	71	10	10	10	10	14.285714	10	16	24.4	22	28	7.521	2.843	0.53
Physical Parameters, Total Suspended Solids (mg/L)	46	34	74	1	1	1	1	2.3822222	3	3	3	4	11.2	1.666	0.246	0.70
Physical Parameters, Turbidity (NTU)	33	0	0	0.1	0.1	0.182	0.2	0.4227273	0.23	0.4	0.88	0.7	3.3	0.567	0.099	1.34
Physical Parameters, pH (unitless)	58	0	0	6.3	6.3	6.417	6.58	6.7981034	6.8	6.9	7.23	7.38	7.9	0.352	0.046	0.05
Total Metals, Aluminum (µg/L)	14	0	0	12.6	12.8	13.16	14.55	20.75	15.05	15.85	44.6	16	56	14.990	4.006	0.72
Total Metals, Antimony (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	7	7	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	35	21	60	1.7	1.7	1.74	2.1	46.5	50	80	100	100	100	39.622	6.697	0.85
Total Metals, Beryllium (µg/L)	14	14	100	0.05	0.05	0.05	0.05	0.075	0.075	0.1	0.1	0.1	0.1	0.026	0.007	0.35
Total Metals, Bismuth (µg/L)	7	7	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	7	1	14	0.9	0.9	0.96	1.05	1.4142857	1.1	1.8	2.02	2.2	2.2	0.511	0.193	0.36
Total Metals, Cadmium (µg/L)	35	28	80	0.04	0.04	0.044	0.1	0.386	0.1	1	1	1	1	0.425	0.072	1.10
Total Metals, Cesium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.000	0.000	0.00
Total Metals, Chromium (µg/L)	14	11	79	0.1	0.1	0.1	0.1	0.1571429	0.2	0.2	0.2	0.2	0.2	0.051	0.014	0.33
Total Metals, Cobalt (µg/L)	35	31	89	0.1	0.1	0.1	0.1	0.8	0.5	1	2	2	6	1.110	0.188	1.39
Total Metals, Copper (µg/L)	35	3	9	0.7	0.7	0.7	0.8	1.2628571	1	1.15	2	1.2	6	0.979	0.165	0.77
Total Metals, Iron (µg/L)	14	0	0	6.2	6.2	6.7	7.175	15.05	10	14	37.1	14	47.3	13.899	3.715	0.92
Total Metals, Lead (µg/L)	35	31	89	0.1	0.1	0.1	0.2	1.1142857	0.7	1	4	1.1	4	1.372	0.232	1.23
Total Metals, Lithium (µg/L)	14	0	0	0.5	0.8	0.59	0.8	0.8428571	0.85	0.975	1	1.1	1.1	0.174	0.047	0.21
Total Metals, Manganese (µg/L)	14	0	0	0.6	0.6	0.6	0.625	1.1714286	0.75	1	2.85	1.1	3.6	1.042	0.278	0.89
Total Metals, Mercury (ng/L)	7	0	0	0.3	0.3	0.42	0.6	1.1428571	0.8	1.1	2.12	1.2	3.5	1.081	0.409	0.95
Total Metals, Mercury (µg/L)	6	6	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	35	10	29	0.5	0.5	0.6	0.75	1.5828571	0.8	1.2	2	1.3	16.9	2.771	0.468	1.75
Total Metals, Rubidium (µg/L)	7	0	0	1.2	1.2	1.26	1.3	1.3857143	1.4	1.45	1.54	1.6	1.6	0.135	0.051	0.10
Total Metals, Selenium (µg/L)	7	7	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	14	0	0	4.4	4.4	4.59	5	6	5.8	7.075	7.75	7.9	7.9	1.303	0.348	0.22
Total Metals, Thallium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	7	3	43	0.1	0.1	0.1	0.1	0.1857143	0.2	0.25	0.3	0.3	0.3	0.090	0.034	0.48
Total Metals, Uranium (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	35	32	91	0	0	0.1	0.1	0.42	0.5	0.5	1	1	1	0.327	0.055	0.78
Total Metals, Zinc (µg/L)	35	5	14	0.4	0.4	0.4	0.55	2.6857143	1.1	2.8	7	4.7	15.9	3.485	0.589	1.30

Table B.2.3-3 Coppermine River at Mouth (COR06) - Summer Recession

Parameter	n	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	SD	SE	CV
Aluminum, Dissolved Metals (µg/L)	1	0	0	30	30	30	30	30	30	30	30	30	30	----	----	----
Arsenic, Dissolved Metals (µg/L)	1	1	100	10	10	10	10	10	10	10	10	10	10	----	----	----
Copper, Dissolved Metals (µg/L)	3	2	67	2	2	3.6	6	7.3333333	10	10	10	10	10	4.619	2.667	0.63
Iron, Dissolved Metals (µg/L)	6	5	83	1	1	1	1	12.166667	5.5	10	30	10	50	19.052	7.778	1.57
Lead, Dissolved Metals (µg/L)	3	2	67	50	50	50	50	53.333333	50	55	58	60	60	5.774	3.333	0.11
Manganese, Dissolved Metals (µg/L)	5	5	100	10	10	10	10	10	10	10	10	10	10	----	----	----
Zinc, Dissolved Metals (µg/L)	3	2	67	3	3	4.4	6.5	7.6666667	10	10	10	10	10	4.041	2.333	0.53
Specific Conductivity (µS/cm)	3	0	0	20.7	20.7	21.56	22.85	30.233333	25	35	41	45	45	12.968	7.487	0.43
pH	3	0	0	7.56	7.56	7.574	7.595	7.7166667	7.63	7.795	7.894	7.96	7.96	0.214	0.123	0.03
Dissolved Calcium (mg/L)	34	0	0	0.8	4.9	5.02	6.65	14.661765	7.79	9.5	37.14	13.2	108	21.705	3.722	1.48
Dissolved Chloride (mg/L)	35	0	0	0.2	0.2	0.344	0.45	300.49657	0.7	1.035	370.32	1.24	4800	989.953	167.333	3.29
Dissolved Fluoride (mg/L)	5	2	40	0.1	0.1	0.1	0.1	0.202	0.21	0.27	0.306	0.33	0.33	0.102	0.046	0.51
Dissolved Magnesium (mg/L)	14	0	0	2.4	2.4	2.59	3	3.5628571	3.53	4.06	4.359	5.4	5.4	0.834	0.223	0.23
Dissolved Potassium (mg/L)	35	0	0	0.3	0.3	0.376	0.4	6.7937143	0.48	0.585	8.26	0.85	103	20.971	3.545	3.09
Dissolved Sodium (mg/L)	35	1	3	0.1	0.1	0.36	0.5	167.254	0.68	0.95	206.44	1.6	2660	549.199	92.832	3.28
Dissolved Sulphate (mg/L)	35	15	43	1	1	1	1.15	30.922857	2.7	3	66.4	4	413	91.782	15.514	2.97
Reactive Silica (mg/L)	27	2	7	0.1	0.1	0.1	0.3	0.6944444	0.6	0.96	1.4	1.9	1.9	0.486	0.093	0.70
Total Alkalinity, (mg/L) as CaCO3	34	0	0	2.6	14.3	15.38	23.95	29.176471	29.15	34.95	44.81	50.4	57	12.685	2.175	0.43
Total Hardness, (mg/L) as CaCO3 (calc'd)	22	0	0	4.8	20.9	21.22	28.25	109.61364	32.3	39.3	54.8	55.3	1559	326.574	69.626	2.98
Dissolved Ammonia, (mg/L) as N	3	0	0	0.1	0.1	0.12	0.15	0.2333333	0.2	0.3	0.36	0.4	0.4	0.153	0.088	0.65
Dissolved Inorganic Phosphate (mg/L)	2	0	0	0.008	0.008	0.0081	0.00825	0.0085	0.0085	0.00875	0.0089	0.009	0.009	0.001	0.000	0.08
Dissolved Nitrate, (mg/L) as N	1	1	100	0	0	0	0	0	0	0	0	0	0	----	----	----
Dissolved Organic Carbon (mg/L)	1	0	0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	----	----	----
Dissolved Organic Carbon (mg/L)	5	0	0	2.7	2.7	2.7	2.7	3.44	2.8	4.5	4.5	4.5	4.5	0.969	0.433	0.28
Dissolved o-Phosphate, (mg/L) as P	10	1	10	0.002	0.002	0.002	0.003	0.1357	0.0035	0.009	0.1516	0.01	1.3	0.409	0.129	3.02
Nitrate, (mg/L) as N	5	3	60	0.008	0.008	0.008	0.008	0.021	0.008	0.009	0.0468	0.009	0.072	0.029	0.013	1.36
Nitrate/Nitrite, (mg/L) as N	29	3	10	0.005	0.005	0.01	0.02	0.0322759	0.03	0.044	0.0616	0.072	0.072	0.018	0.003	0.56
Nitrite, (mg/L) as N	5	5	100	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	----	----	----
Total Ammonia, (mg/L) as N	13	5	38	0.002	0.002	0.005	0.005	0.0106923	0.007	0.01	0.0158	0.017	0.051	0.013	0.004	1.19
Total Inorganic Carbon (mg/L)	1	0	0	6	6	6	6	6	6	6	6	6	6	----	----	----
Total Organic Carbon, (mg/L)	7	0	0	2	2	2.42	2.75	4.0571429	2.8	4.3	6.44	4.4	9.5	2.549	0.964	0.63
Total Phosphorus, (mg/L)	17	3	18	0.002	0.002	0.0036	0.005	0.0229412	0.01	0.023	0.0648	0.023	0.082	0.027	0.006	1.16
o-Phosphate, as P, (mg/L)	5	2	40	0.002	0.002	0.002	0.002	0.0026	0.003	0.003	0.003	0.003	0.003	0.001	0.000	0.21
Specific Conductivity (us/cm)	35	0	0	9	17.6	30.28	58	1028.0657	68.3	86.9	1501.2	112	14200	3074.773	519.731	2.99
Total Dissolved Solids, (mg/L)	5	0	0	44	44	44	44	55.4	48	63	72	78	78	14.859	6.645	0.27
Total Suspended Solids, (mg/L)	9	2	22	3	3	3	3	5.5555556	3	9	9.4	11	11	3.283	1.094	0.59
Total Suspended Solids , (mg/L)	5	3	60	3	3	3	3	23.6	3	33	58.8	76	76	32.044	14.330	1.36
Turbidity (NTU)	35	0	0	0.2	0.2	0.78	1.8	5.6371429	2.6	5.55	15.2	9.4	30.4	7.120	1.203	1.26
pH	35	0	0	6.7	6.8	6.9	7.27	7.4434286	7.5	7.62	7.8	8.1	8.3	0.368	0.062	0.05
Aluminum, Total Metals (µg/L)	5	0	0	58	58	58.8	60	323.2	63	215	818	215	1220	505.783	226.193	1.56
Antimony, Total Metals (µg/L)	5	1	20	0.5	0.745	0.598	0.745	0.809	0.9	0.9	0.96	1	1	0.195	0.087	0.24
Barium, Total Metals (µg/L)	5	0	0	20	20	20.4	21	26	21	32	34.4	36	36	7.450	3.332	0.29
Beryllium, Total Metals (µg/L)	5	4	80	0.03	2	0.818	2	1.606	2	2	2	2	2	0.881	0.394	0.55
Cadmium, Total Metals (µg/L)	5	5	100	0.02	0.3	0.132	0.3	0.244	0.3	0.3	0.3	0.3	0.3	0.125	0.056	0.51
Cesium, Total Metals (µg/L)	5	3	60	0.109	0.4	0.2254	0.4	0.6818	0.4	0.4	1.42	0.4	2.1	0.803	0.359	1.18
Chromium, Total Metals (µg/L)	5	4	80	2.14	3	2.484	3	2.828	3	3	3	3	3	0.385	0.172	0.14
Cobalt, Total Metals (µg/L)	5	4	80	0.945	1	0.967	1	0.989	1	1	1	1	1	0.025	0.011	0.02
Copper, Total Metals (µg/L)	5	3	60	2	2	2	2	3.078	2	4	4.834	5.39	5.39	1.556	0.696	0.51
Iron (µg/L)	13	0	0	75	75	79	289	111316.31	58000	173000	341600	425000	425000	144438	40060	1.30
Lead, Total Metals (µg/L)	5	4	80	1	1	1	1	1.062	1	1	1.186	1	1.31	0.139	0.062	0.13
Lithium, Total Metals (µg/L)	5	4	80	2.7	3	2.82	3	2.94	3	3	3	3	3	0.134	0.060	0.05
Manganese, Total Metals (µg/L)	5	0	0	3	3	3	3	12.58	3	3	31.74	3	50.9	21.422	9.580	1.70
Molybdenum, Total Metals (µg/L)	5	3	60	0.08	1	0.448	1	1.216	1	1	2.2	1	3	1.074	0.480	0.88

Nickel, Total Metals (µg/L)	5	4	80	1	1	1	1	1.368	1	1	2.104	1	2.84	0.823	0.368	0.60
Rubidium, Total Metals (µg/L)	5	0	0	0.9	0.9	0.9	0.9	1.57	0.9	2.35	2.62	2.8	2.8	0.931	0.416	0.59
Selenium, Total Metals (µg/L)	5	5	100	0.3	10	4.18	10	8.06	10	10	10	10	10	4.338	1.940	0.54
Silver, Total Metals (µg/L)	5	5	100	0.006	0.3	0.1236	0.3	0.2412	0.3	0.3	0.3	0.3	0.3	0.131	0.059	0.55
Strontium, Total Metals (µg/L)	5	0	0	10	10	10	10	12.64	12	15	15.72	16.2	16.2	2.854	1.277	0.23
Thallium, Total Metals (µg/L)	5	5	100	0.1	0.4	0.22	0.4	0.34	0.4	0.4	0.4	0.4	0.4	0.134	0.060	0.39
Titanium, Total Metals (µg/L)	5	3	60	3	3	3	3	10.96	3	6	26.28	6	39.8	16.174	7.233	1.48
Uranium, Total Metals (µg/L)	5	3	60	0.3	0.3	0.3	0.3	1.1438	0.3	0.319	2.8276	0.319	4.5	1.876	0.839	1.64
Vanadium, Total Metals (µg/L)	5	4	80	1	1	1	1	1.256	1	1	1.768	1	2.28	0.572	0.256	0.46
Zinc, Total Metals (µg/L)	5	3	60	10	10	10	10	22.74	10	11.7	47.88	11.7	72	27.547	12.319	1.21

Table B.2.3-4 Coppermine River Below Desteffany Lake (COR01) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	6	0	0	4.4	4.4	5.05	5.825	9.6833333	6.3	7.375	17.7	7.7	27.7	8.891	3.630	0.92
Dissolved Metals, Antimony (µg/L)	6	5	83	0.1	0.1	0.1	0.1	0.1166667	0.1	0.1	0.15	0.1	0.2	0.041	0.017	0.35
Dissolved Metals, Arsenic (µg/L)	6	3	50	0.2	0.2	0.2	0.2	0.25	0.25	0.3	0.3	0.3	0.3	0.055	0.022	0.22
Dissolved Metals, Barium (µg/L)	6	0	0	1.6	1.6	1.65	1.725	1.85	1.85	1.9	2.05	1.9	2.2	0.207	0.085	0.11
Dissolved Metals, Beryllium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	6	6	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	6	0	0	1.4	1.4	1.5	1.625	2.0333333	1.7	2.375	2.9	3.2	3.2	0.706	0.288	0.35
Dissolved Metals, Cadmium (µg/L)	6	6	100	0.04	0.04	0.04	0.04	0.0416667	0.04	0.04	0.045	0.04	0.05	0.004	0.002	0.10
Dissolved Metals, Cesium (µg/L)	13	13	100	0.1	0.1	0.1	0.1	0.1692308	0.1	0.1	0.4	0.1	0.4	0.132	0.036	0.78
Dissolved Metals, Chromium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	6	0	0	0.5	0.5	0.55	0.6	0.6333333	0.65	0.7	0.7	0.7	0.7	0.082	0.033	0.13
Dissolved Metals, Iron (µg/L)	6	1	17	5	5	5.5	6	10	7.5	10.5	17	11	23	6.753	2.757	0.68
Dissolved Metals, Lead (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	6	0	0	1.3	1.3	1.3	1.325	1.4166667	1.4	1.475	1.55	1.6	1.6	0.117	0.048	0.08
Dissolved Metals, Manganese (µg/L)	6	0	0	0.2	0.2	0.2	0.25	0.8166667	0.55	1.3	1.7	1.9	1.9	0.719	0.294	0.88
Dissolved Metals, Mercury (ng/L)	1	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Mercury (µg/L)	4	4	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	6	3	50	0.1	0.1	0.1	0.1	0.15	0.15	0.2	0.2	0.2	0.2	0.055	0.022	0.37
Dissolved Metals, Nickel (µg/L)	6	0	0	0.6	0.6	0.65	0.7	0.7333333	0.7	0.775	0.85	0.8	0.9	0.103	0.042	0.14
Dissolved Metals, Rubidium (µg/L)	6	0	0	1.6	1.6	1.6	1.65	1.8	1.85	1.9	1.95	2	2	0.167	0.068	0.09
Dissolved Metals, Selenium (µg/L)	6	6	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	6	0	0	9.6	9.6	9.7	10.425	11.983333	12.7	13.325	13.55	13.7	13.7	1.830	0.747	0.15
Dissolved Metals, Thallium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	6	5	83	0.1	0.1	0.1	0.1	0.1166667	0.1	0.1	0.15	0.1	0.2	0.041	0.017	0.35
Dissolved Metals, Vanadium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	6	4	67	0.4	0.4	0.4	0.4	0.4333333	0.4	0.475	0.5	0.5	0.5	0.052	0.021	0.12
Major Ions, Dissolved Calcium (mg/L)	16	0	0	0.14	0.14	0.71	0.74	1.026875	0.86	1.18	1.8	1.7	2	0.492	0.123	0.48
Major Ions, Dissolved Chloride (mg/L)	16	3	19	0.11	0.11	0.2	0.2	0.745625	0.405	1.235	1.77	1.9	1.9	0.672	0.168	0.90
Major Ions, Dissolved Fluoride (mg/L)	6	4	67	0.023	0.023	0.024	0.04375	0.0746667	0.1	0.1	0.1	0.1	0.1	0.039	0.016	0.53
Major Ions, Dissolved Magnesium (mg/L)	16	1	6	0.01	0.01	0.43	0.47	0.599375	0.48	0.825	0.95	1	1	0.269	0.067	0.45
Major Ions, Dissolved Potassium (mg/L)	16	1	6	0.02	0.02	0.36	0.4175	0.5455625	0.44	0.725	0.9	1	1	0.258	0.064	0.47
Major Ions, Dissolved Sodium (mg/L)	16	1	6	0.02	0.02	0.395	0.4075	0.756875	0.44	1.2	1.5	1.6	1.6	0.527	0.132	0.70
Major Ions, Dissolved Sulphate (mg/L)	16	9	56	2.43	3	3	3	3.026875	3	3	3	3	4	0.296	0.074	0.10
Major Ions, Reactive Silica (mg/L)	6	0	0	0.112	0.112	0.1145	0.12875	0.2376667	0.1895	0.3455	0.409	0.429	0.429	0.138	0.057	0.58
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	16	0	0	0.6	2.7	2.75	3.125	3.6	3.45	4.3	5	5.5	5.5	1.168	0.292	0.32
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	9	0	0	3.5	3.5	3.58	3.8	6.1855556	6.2	8	8.84	9	9	2.177	0.726	0.35
Microbiology, Chlorophyll a (µg/L)	5	3	60	1	1	1	1	1.26	1	1.4	1.7	1.9	1.9	0.397	0.178	0.32
Nutrients, Dissolved Ammonia, as N (mg/L)	3	0	0	0.004	0.004	0.0046	0.0055	0.0066667	0.007	0.008	0.0086	0.009	0.009	0.003	0.001	0.38
Nutrients, Dissolved Nitrogen (mg/L)	6	0	0	0.104	0.16	0.132	0.1625	0.1673333	0.175	0.1875	0.195	0.2	0.2	0.034	0.014	0.20
Nutrients, Dissolved Organic Carbon (mg/L)	9	0	0	3	3	3	3.1	3.4	3.4	3.7	3.78	4.1	4.1	0.374	0.125	0.11
Nutrients, Dissolved o-Phosphate, as P (mg/L)	10	3	30	0.002	0.002	0.002	0.002	0.0021	0.002	0.002	0.0021	0.002	0.003	0.000	0.000	0.15
Nutrients, Nitrate, as N (mg/L)	6	4	67	0.003	0.003	0.004	0.00625	0.013	0.015	0.02	0.02	0.02	0.02	0.008	0.003	0.62
Nutrients, Nitrate/Nitrite, as N (mg/L)	16	13	81	0.005	0.005	0.00655	0.008	0.0106313	0.008	0.0115	0.02	0.016	0.022	0.006	0.001	0.52
Nutrients, Nitrite, as N (mg/L)	6	6	100	0.001	0.001	0.001	0.00325	0.007	0.01	0.01	0.01	0.01	0.01	0.005	0.002	0.66
Nutrients, Total Ammonia, as N (mg/L)	9	7	78	0.002	0.005	0.0044	0.005	0.0053333	0.005	0.005	0.0062	0.005	0.011	0.002	0.001	0.44
Nutrients, Total Dissolved Nitrogen (mg/L)	3	0	0	0.39	0.39	0.392	0.395	0.3966667	0.4	0.4	0.4	0.4	0.4	0.006	0.003	0.01
Nutrients, Total Dissolved Phosphorus (mg/L)	9	8	89	0.001	0.002	0.0018	0.002	0.0018889	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.18
Nutrients, Total Nitrogen (mg/L)	6	0	0	0.126	0.2	0.163	0.205	0.2176667	0.225	0.2375	0.265	0.24	0.29	0.054	0.022	0.25
Nutrients, Total Organic Carbon (mg/L)	6	0	0	3.1	3.1	3.3	3.55	3.8166667	3.85	4.15	4.3	4.4	4.4	0.479	0.196	0.13
Nutrients, Total Phosphorus (mg/L)	16	2	13	0.002	0.002	0.0035	0.004	0.0056875	0.0045	0.00725	0.01	0.01	0.01	0.003	0.001	0.46

Table B.2.3-4 Coppermine River Below Desteffany Lake (COR01) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, o-Phosphate, as P (mg/L)	6	5	83	0.001	0.002	0.0015	0.002	0.002	0.002	0.002	0.0025	0.002	0.003	0.001	0.000	0.32
Physical Parameters, Specific Conductivity (µS/cm)	16	0	0	1.8	1.8	11.6	11.95	16.13125	13.45	21.525	25.75	28.1	28.1	7.053	1.763	0.44
Physical Parameters, Total Dissolved Solids (mg/L)	6	3	50	10	10	10	10	19.666667	16.5	28.25	32.5	35	35	11.255	4.595	0.57
Physical Parameters, Total Suspended Solids (mg/L)	16	11	69	3	3	3	3	4.0625	3	4.25	6.5	6	10	2.016	0.504	0.50
Physical Parameters, Turbidity (NTU)	16	0	0	0.2	0.2	0.335	0.475	0.68875	0.705	0.9	1.05	1.2	1.2	0.291	0.073	0.42
Physical Parameters, pH (unitless)	16	0	0	6.03	6.34	6.42	6.515	6.616875	6.615	6.735	6.92	7.01	7.01	0.238	0.060	0.04
Total Metals, Aluminum (µg/L)	13	7	54	9.6	25	11.66	25	25.276923	25	30	32.96	33.7	41.2	9.132	2.533	0.36
Total Metals, Antimony (µg/L)	10	5	50	0.0003	0.0003	0.0003	0.000325	0.07013	0.1	0.1	0.11	0.2	0.2	0.067	0.021	0.96
Total Metals, Arsenic (µg/L)	13	6	46	0.2	0.2	0.2	0.2	1.0230769	0.3	0.3	0.38	0.4	10.2	2.758	0.765	2.70
Total Metals, Barium (µg/L)	13	1	8	0.1	1.3	1.3	1.4	1.6	1.5	1.9	2.34	2.4	2.4	0.596	0.165	0.37
Total Metals, Beryllium (µg/L)	13	13	100	0.1	0.1	0.1	0.1	0.5384615	0.1	0.1	2	0.1	2	0.833	0.231	1.55
Total Metals, Bismuth (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.16	0.2	0.2	0.2	0.2	0.2	0.052	0.016	0.32
Total Metals, Boron (µg/L)	6	0	0	1.3	1.3	1.4	1.525	2.1	1.65	2.3	3.25	2.5	4	1.018	0.416	0.48
Total Metals, Cadmium (µg/L)	13	13	100	0.04	0.04	0.04	0.04	0.1192308	0.1	0.1	0.3	0.1	0.3	0.106	0.029	0.89
Total Metals, Cesium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	13	11	85	0.1	0.1	0.1	0.1	1.0769231	0.2	2	3	3	3	1.293	0.359	1.20
Total Metals, Cobalt (µg/L)	13	13	100	0.1	0.1	0.1	0.1	0.3076923	0.1	0.1	1	0.1	1	0.395	0.109	1.28
Total Metals, Copper (µg/L)	12	3	25	0.3	0.3	0.61	0.7	1.1583333	0.95	1.775	2	2	2	0.607	0.175	0.52
Total Metals, Iron (µg/L)	16	3	19	19	19	21	29	7593.125	35	70	34500	79	52000	16778.029	4194.507	2.21
Total Metals, Lead (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	13	5	38	0.1	1	0.28	1.1	1.5230769	1.3	1.6	3	1.6	3	0.966	0.268	0.63
Total Metals, Manganese (µg/L)	12	1	8	1.8	1.8	1.83	2.775	386.825	4.35	36.925	1900	15.9	2400	873.069	252.033	2.26
Total Metals, Mercury (ng/L)	6	0	0	0.3	0.3	0.3	0.325	0.5166667	0.45	0.65	0.8	0.9	0.9	0.240	0.098	0.46
Total Metals, Mercury (µg/L)	4	4	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	13	10	77	0.1	0.1	0.1	0.1	0.3307692	0.1	0.2	1	0.2	1	0.384	0.106	1.16
Total Metals, Nickel (µg/L)	13	7	54	0.1	0.1	0.1	0.1	0.6384615	0.8	1	1	1	1	0.388	0.108	0.61
Total Metals, Rubidium (µg/L)	6	0	0	1.6	1.6	1.65	1.725	1.85	1.85	1.975	2.05	2.1	2.1	0.187	0.076	0.10
Total Metals, Selenium (µg/L)	13	13	100	0.3	0.3	0.3	0.3	1694.7538	10	1000	8200	1000	10000	3704.297	1027.387	2.19
Total Metals, Silver (µg/L)	13	13	100	0.1	0.1	0.1	0.1	0.1461538	0.1	0.1	0.3	0.1	0.3	0.088	0.024	0.60
Total Metals, Strontium (µg/L)	10	1	10	0.0001	0.0001	0.00424	0.005	7.36148	9.95	12.975	13.94	14.3	14.3	6.492	2.053	0.88
Total Metals, Thallium (µg/L)	13	13	100	0.0001	0.0001	0.0001	0.0001	0.1384923	0.1	0.1	0.4	0.1	0.4	0.156	0.043	1.12
Total Metals, Tin (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	9	1	11	0.0002	0.0002	0.0002	0.0003	0.5445222	0.3	1	1.52	1.6	1.6	0.648	0.216	1.19
Total Metals, Uranium (µg/L)	10	6	60	0.0001	0.0001	0.0001	0.0001	0.07004	0.1	0.1	0.11	0.2	0.2	0.067	0.021	0.96
Total Metals, Vanadium (µg/L)	13	13	100	0.1	0.1	0.1	0.1	31.046154	1	100	100	100	100	47.848	13.271	1.54
Total Metals, Zinc (µg/L)	13	10	77	0.4	0.4	0.4	0.8	6.2692308	10	10	10	10	10	4.647	1.289	0.74

Table B.2.3-5 Coppermine River Downstream of Copper Creek (COR05) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Dissolved Calcium (mg/L)	4	0	0	4.54	4.54	5.143	6.0475	6.9675	6.78	7.7	8.942	9.77	9.77	2.154	1.077	0.31
Major Ions, Dissolved Chloride (mg/L)	4	2	50	0.2	0.2	0.2	0.2	0.275	0.25	0.325	0.37	0.4	0.4	0.096	0.048	0.35
Major Ions, Dissolved Magnesium (mg/L)	4	0	0	1.94	1.94	2.261	2.7425	3.3025	3.395	3.955	4.27	4.48	4.48	1.089	0.544	0.33
Major Ions, Dissolved Potassium (mg/L)	4	0	0	0.41	0.41	0.416	0.425	0.465	0.44	0.48	0.534	0.45	0.57	0.072	0.036	0.15
Major Ions, Dissolved Sodium (mg/L)	4	0	0	0.39	0.55	0.438	0.51	0.5325	0.56	0.5825	0.605	0.62	0.62	0.099	0.050	0.19
Major Ions, Dissolved Sulphate (mg/L)	4	2	50	1.4	1.4	1.88	2.6	3.1	3	3.5	4.4	3	5	1.474	0.737	0.48
Major Ions, Reactive Silica (mg/L)	4	0	0	0.59	0.59	0.683	0.8225	0.9	0.91	0.9875	1.109	1.19	1.19	0.245	0.123	0.27
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	4	0	0	18.3	18.3	21.15	25.425	29.825	29.75	34.15	38.56	41.5	41.5	9.605	4.802	0.32
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	4	0	0	19.3	19.3	22.12	26.35	30.975	30.9	35.525	39.89	42.8	42.8	9.761	4.880	0.32
Nutrients, Dissolved Organic Carbon (mg/L)	4	0	0	2.9	2.9	2.93	2.975	3.4	3.1	3.525	4.11	3.2	4.5	0.744	0.372	0.22
Nutrients, Nitrate, as N (mg/L)	3	1	33	0.008	0.008	0.0088	0.01	0.018333	0.012	0.0235	0.0304	0.035	0.035	0.015	0.008	0.79
Nutrients, Nitrate/Nitrite, as N (mg/L)	2	0	0	0.016	0.016	0.018	0.021	0.026	0.026	0.031	0.034	0.036	0.036	0.014	0.010	0.54
Nutrients, Nitrite, as N (mg/L)	4	4	100	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	----	----	----
Nutrients, Total Ammonia, as N (mg/L)	4	4	100	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	----	----	----
Nutrients, Total Organic Carbon (mg/L)	4	0	0	3	3	3	3	3.3	3	3.3	3.84	3	4.2	0.600	0.300	0.18
Nutrients, Total Phosphorus (mg/L)	4	0	0	0.012	0.012	0.0132	0.015	0.0375	0.0365	0.059	0.0626	0.065	0.065	0.027	0.014	0.73
Nutrients, o-Phosphate, as P (mg/L)	4	4	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Physical Parameters, Color (CU)	4	3	75	5	5	5	5	8.75	5	8.75	15.5	5	20	7.500	3.750	0.86
Physical Parameters, Specific Conductivity (µS/cm)	4	0	0	42.8	42.8	48.56	57.2	64.15	64.2	71.15	79.7	85.4	85.4	17.484	8.742	0.27
Physical Parameters, Total Dissolved Solids (mg/L)	4	0	0	20	46	27.8	39.5	40.5	46	47	48.8	50	50	13.796	6.898	0.34
Physical Parameters, Total Suspended Solids (mg/L)	4	1	25	3	3	4.2	6	9	7.5	10.5	15	8	18	6.377	3.189	0.71
Physical Parameters, Turbidity (NTU)	4	0	0	1.6	1.6	1.81	2.125	2.625	2.8	3.3	3.3	3.3	3.3	0.830	0.415	0.32
Physical Parameters, pH (unitless)	4	0	0	7.22	7.22	7.256	7.31	7.495	7.48	7.665	7.746	7.8	7.8	0.264	0.132	0.04
Total Metals, Aluminum (µg/L)	4	0	0	71	71	80.9	95.75	167	147	218.25	269.1	303	303	103.618	51.809	0.62
Total Metals, Antimony (µg/L)	4	1	25	0.5	0.5	0.53	0.575	0.66825	0.6865	0.77975	0.7919	0.8	0.8	0.143	0.071	0.21
Total Metals, Barium (µg/L)	4	0	0	9	9	10.17	11.925	16.975	17.45	22.5	23.4	24	24	7.183	3.592	0.42
Total Metals, Beryllium (µg/L)	4	4	100	0.02	2	0.614	1.505	1.505	2	2	2	2	2	0.990	0.495	0.66
Total Metals, Bismuth (µg/L)	1	1	100	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	----	----	----
Total Metals, Cadmium (µg/L)	4	4	100	0.02	0.3	0.104	0.23	0.23	0.3	0.3	0.3	0.3	0.3	0.140	0.070	0.61
Total Metals, Cesium (µg/L)	4	2	50	0.012	0.012	0.1284	0.303	0.728	0.4	0.825	1.59	0.4	2.1	0.933	0.466	1.28
Total Metals, Chromium (µg/L)	4	4	100	0.1	3	0.97	2.275	2.275	3	3	3	3	3	1.450	0.725	0.64
Total Metals, Cobalt (µg/L)	4	3	75	0.208	1	0.4456	0.802	0.802	1	1	1	1	1	0.396	0.198	0.49
Total Metals, Copper (µg/L)	4	3	75	2	2	2	2	2.1725	2	2.1725	2.483	2	2.69	0.345	0.173	0.16
Total Metals, Iron (µg/L)	4	0	0	90	90	103.5	123.75	181.25	184.5	242	256.4	266	266	82.524	41.262	0.46
Total Metals, Lead (µg/L)	4	2	50	0.66	0.66	0.762	0.915	1.415	1	1.5	2.4	1	3	1.069	0.534	0.76
Total Metals, Lithium (µg/L)	4	3	75	1.04	3	1.628	2.51	2.51	3	3	3	3	3	0.980	0.490	0.39
Total Metals, Manganese (µg/L)	4	0	0	5	5	5.3	5.75	7.125	6.5	7.875	9.45	10.5	10.5	2.394	1.197	0.34
Total Metals, Molybdenum (µg/L)	4	2	50	0.05	0.05	0.335	0.7625	1.2625	1	1.5	2.4	1	3	1.242	0.621	0.98
Total Metals, Nickel (µg/L)	4	3	75	0.78	1	0.846	0.945	0.945	1	1	1	1	1	0.110	0.055	0.12
Total Metals, Rubidium (µg/L)	4	0	0	1	1	1	1	1.47	1.04	1.51	2.284	1.08	2.8	0.887	0.444	0.60
Total Metals, Selenium (µg/L)	4	4	100	0.3	10	3.21	7.575	7.575	10	10	10	10	10	4.850	2.425	0.64
Total Metals, Silver (µg/L)	4	4	100	0.006	0.3	0.0942	0.2265	0.2265	0.3	0.3	0.3	0.3	0.3	0.147	0.074	0.65
Total Metals, Strontium (µg/L)	4	0	0	8	8	8.294	8.735	9.745	9.49	10.5	11.4	12	12	1.711	0.855	0.18
Total Metals, Thallium (µg/L)	4	4	100	0.1	0.4	0.19	0.325	0.325	0.4	0.4	0.4	0.4	0.4	0.150	0.075	0.46
Total Metals, Titanium (µg/L)	4	2	50	3	3	3	3	4.8575	4.715	6.5725	6.829	7	7	2.157	1.079	0.44
Total Metals, Uranium (µg/L)	4	2	50	0.154	0.154	0.1978	0.2635	1.3135	0.3	1.35	3.24	0.3	4.5	2.125	1.063	1.62
Total Metals, Vanadium (µg/L)	4	3	75	0.33	1	0.531	0.8325	0.8325	1	1	1	1	1	0.335	0.168	0.40
Total Metals, Zinc (µg/L)	4	2	50	4.4	4.4	6.08	8.6	23.1	10	24.5	50.6	10	68	30.050	15.025	1.30

Table B.2.3-6 Coppermine River Downstream of Fairy Lake (COR03) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	1	0	0	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	----	----	----
Dissolved Metals, Antimony (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	1	0	0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	----	----	----
Dissolved Metals, Beryllium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	1	1	100	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	1	0	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	----	----	----
Dissolved Metals, Iron (µg/L)	1	1	100	50	50	50	50	50	50	50	50	50	50	----	----	----
Dissolved Metals, Lead (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	1	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	----	----	----
Dissolved Metals, Manganese (µg/L)	1	0	0	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	----	----	----
Dissolved Metals, Molybdenum (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	1	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	----	----	----
Dissolved Metals, Rubidium (µg/L)	1	0	0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	----	----	----
Dissolved Metals, Selenium (µg/L)	1	1	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	1	0	0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	----	----	----
Dissolved Metals, Thallium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	1	0	0	3	3	3	3	3	3	3	3	3	3	----	----	----
Major Ions, Dissolved Calcium (mg/L)	10	0	0	2.44	2.44	3.691	4.1875	5.921	4.685	8.78	8.8	8.8	8.8	2.539	0.803	0.43
Major Ions, Dissolved Chloride (mg/L)	10	4	40	0.2	0.2	0.2	0.225	0.33	0.3	0.375	0.43	0.4	0.7	0.149	0.047	0.45
Major Ions, Dissolved Fluoride (mg/L)	1	1	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	10	0	0	1.38	1.38	1.668	1.8025	2.283	1.965	3.0475	3.1	3.1	3.1	0.681	0.215	0.30
Major Ions, Dissolved Potassium (mg/L)	10	0	0	0.28	0.28	0.298	0.3	0.371	0.395	0.4325	0.441	0.45	0.45	0.068	0.022	0.18
Major Ions, Dissolved Sodium (mg/L)	10	0	0	0.38	0.38	0.389	0.4	0.461	0.495	0.5075	0.512	0.53	0.53	0.060	0.019	0.13
Major Ions, Dissolved Sulphate (mg/L)	10	8	80	1	1	1	1.15	2.16	2.5	3	3	3	3	0.937	0.296	0.43
Major Ions, Reactive Silica (mg/L)	10	0	0	0.31	0.31	0.3649	0.485	0.586	0.595	0.6965	0.7659	0.828	0.828	0.167	0.053	0.28
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	10	0	0	9.7	9.7	14.02	18.7	25.98	25.7	32.775	34.53	48.3	48.3	11.738	3.712	0.45
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	10	0	0	11.8	11.8	16.39	17.675	26.89	19.8	41.275	43.8	43.8	43.8	12.908	4.082	0.48
Nutrients, Dissolved Organic Carbon (mg/L)	10	0	0	2.2	2.2	2.29	2.4	2.73	2.75	2.95	3.15	3.6	3.6	0.430	0.136	0.16
Nutrients, Nitrate, as N (mg/L)	9	3	33	0.008	0.008	0.008	0.01	0.031333	0.024	0.027	0.08	0.027	0.08	0.029	0.010	0.91
Nutrients, Nitrate/Nitrite, as N (mg/L)	8	1	13	0.01	0.01	0.017	0.023	0.039	0.0255	0.04275	0.09	0.027	0.09	0.032	0.011	0.82
Nutrients, Nitrite, as N (mg/L)	10	10	100	0.008	0.008	0.008	0.008	0.0088	0.008	0.01	0.01	0.01	0.01	0.001	0.000	0.12
Nutrients, Total Ammonia, as N (mg/L)	10	10	100	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	----	----	----
Nutrients, Total Organic Carbon (mg/L)	10	0	0	2.1	2.1	2.19	2.35	2.69	2.6	2.95	3.24	3.6	3.6	0.470	0.149	0.17
Nutrients, Total Phosphorus (mg/L)	10	4	40	0.01	0.01	0.01	0.01	0.0297	0.011	0.05625	0.0596	0.065	0.065	0.025	0.008	0.85
Nutrients, o-Phosphate, as P (mg/L)	10	9	90	0.002	0.002	0.002	0.002	0.0023	0.002	0.002	0.0023	0.002	0.005	0.001	0.000	0.41
Physical Parameters, Specific Conductivity (µS/cm)	10	0	0	26.1	26.1	33.66	43.6	73.21	55.45	69.1	88.88	69.2	266	69.592	22.007	0.95
Physical Parameters, Total Dissolved Solids (mg/L)	10	1	10	10	28	15.4	28	28.9	31.5	34	36.4	40	40	9.243	2.923	0.32
Physical Parameters, Total Suspended Solids (mg/L)	10	7	70	3	3	3	3	4.1	3	3.75	8	4	8	2.079	0.657	0.51
Physical Parameters, Turbidity (NTU)	10	0	0	0.33	0.33	0.393	0.5	1.137	0.65	1.6025	2.335	2.21	3.46	1.037	0.328	0.91
Physical Parameters, pH (unitless)	10	0	0	7.15	7.15	7.168	7.265	7.492	7.545	7.7025	7.75	7.75	7.75	0.241	0.076	0.03
Total Metals, Aluminum (µg/L)	10	3	30	12.2	12.2	14.54	15.475	21.84	22.6	28.575	30	30	30	6.868	2.172	0.31
Total Metals, Antimony (µg/L)	10	1	10	0.1	0.1	0.28	0.35	0.6623	0.72	0.92225	1.1	1.1	1.1	0.351	0.111	0.53
Total Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	10	0	0	3	3	4.17	5.16	8.146	5.76	12.975	13.01	13.1	13.1	4.257	1.346	0.52
Total Metals, Beryllium (µg/L)	10	10	100	0.02	0.02	0.02	0.04	0.646	0.1	1.525	2	2	2	0.935	0.296	1.45

Table B.2.3-6 Coppermine River Downstream of Fairy Lake (COR03) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Bismuth (µg/L)	1	0	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	----	----	----
Total Metals, Cadmium (µg/L)	10	10	100	0.02	0.02	0.02	0.0275	0.116	0.05	0.2375	0.3	0.3	0.3	0.128	0.040	1.10
Total Metals, Cesium (µg/L)	10	10	100	0.008	0.008	0.008	0.031	0.1624	0.1	0.325	0.4	0.4	0.4	0.169	0.053	1.04
Total Metals, Chromium (µg/L)	10	7	70	0.1	0.1	0.1	0.1	1.01	0.2	2.325	3	3	3	1.375	0.435	1.36
Total Metals, Cobalt (µg/L)	10	7	70	0.088	0.088	0.0988	0.1	0.3741	0.101	0.78775	1	1	1	0.432	0.137	1.16
Total Metals, Copper (µg/L)	10	3	30	0.4	0.4	0.49	0.625	1.273	1.345	1.96	2	2	2	0.708	0.224	0.56
Total Metals, Iron (µg/L)	10	9	90	30	30	30	30	265	40	50	275	50	2300	715.095	226.133	2.70
Total Metals, Lead (µg/L)	10	7	70	0.1	0.1	0.1	0.1	0.508	0.46	0.94	1	1	1	0.403	0.127	0.79
Total Metals, Lithium (µg/L)	10	4	40	0.2	0.2	0.29	0.35	1.2	0.55	2.4	3	3	3	1.249	0.395	1.04
Total Metals, Manganese (µg/L)	10	0	0	1.79	1.79	1.835	1.9	2.219	2	2.54	3	3	3	0.483	0.153	0.22
Total Metals, Molybdenum (µg/L)	10	8	80	0.02	0.02	0.047	0.07	0.353	0.1	0.775	1	1	1	0.447	0.141	1.27
Total Metals, Nickel (µg/L)	10	6	60	0.1	0.1	0.1	0.195	0.528	0.5	0.875	1	1	1	0.369	0.117	0.70
Total Metals, Rubidium (µg/L)	10	1	10	0.4	0.4	0.49	0.5	0.816	0.92	1.055	1.2	1.2	1.2	0.313	0.099	0.38
Total Metals, Selenium (µg/L)	10	9	90	0.3	0.3	0.3	0.3	3.22	0.3	7.6	10	10	10	4.679	1.480	1.45
Total Metals, Silver (µg/L)	10	10	100	0.006	0.006	0.006	0.0295	0.1318	0.1	0.25	0.3	0.3	0.3	0.123	0.039	0.93
Total Metals, Strontium (µg/L)	10	0	0	6	7.3	7.17	7.345	7.622	7.65	7.975	8.1	8	9	0.759	0.240	0.10
Total Metals, Thallium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.19	0.1	0.325	0.4	0.4	0.4	0.145	0.046	0.76
Total Metals, Titanium (µg/L)	10	3	30	0.2	0.2	0.2	0.2925	1.649	2.1	2.825	3	3	3	1.256	0.397	0.76
Total Metals, Uranium (µg/L)	10	7	70	0.097	0.097	0.0997	0.1	0.16	0.1	0.25075	0.3	0.3	0.3	0.097	0.031	0.60
Total Metals, Vanadium (µg/L)	10	10	100	0.03	0.03	0.03	0.0475	0.349	0.1	0.775	1	1	1	0.450	0.142	1.29
Total Metals, Zinc (µg/L)	10	3	30	2.2	2.2	2.416	2.7	5.185	3.555	8.675	10	10	10	3.404	1.077	0.66

Table B.2.3-7 Daring Lake (DAL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	53	0	0	1.1	1.1	1.84	2.6	4.198	3.8	5.5	6.96	8	12.9	2.195	0.301	0.52
Dissolved Metals, Antimony (µg/L)	53	52	98.11	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.13
Dissolved Metals, Arsenic (µg/L)	53	53	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	53	0	0	0.9	1	1	1.1	1.232	1.2	1.2	1.3	1.3	3.6	0.394	0.054	0.32
Dissolved Metals, Beryllium (µg/L)	53	53	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	33	33	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	33	17	51.52	0.9	0.9	0.9	0.9	1.082	0.9	1.2	1.48	1.6	1.9	0.257	0.045	0.24
Dissolved Metals, Cadmium (µg/L)	53	53	100	0.04	0.04	0.04	0.04	0.045	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	53	53	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	52	48	92.31	0.1	0.1	0.1	0.1	0.140	0.1	0.1	0.1	0.1	1.7	0.224	0.031	1.60
Dissolved Metals, Cobalt (µg/L)	53	53	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	53	14	26.42	0.2	0.2	0.2	0.2	0.409	0.3	0.4	0.5	0.7	4.5	0.586	0.080	1.43
Dissolved Metals, Iron (µg/L)	53	47	88.68	5	5	5	5	10.321	5	5	41.6	5	50	14.331	1.969	1.39
Dissolved Metals, Lead (µg/L)	53	50	94.34	0.1	0.1	0.1	0.1	0.306	0.1	0.1	0.1	0.1	8.5	1.184	0.163	3.87
Dissolved Metals, Lithium (µg/L)	53	1	1.89	0.2	0.7	0.7	0.8	0.875	0.9	0.9	1	1	3.2	0.367	0.050	0.42
Dissolved Metals, Manganese (µg/L)	53	1	1.89	0.1	0.1	0.3	0.4	0.802	0.6	1.1	1.5	2.1	2.8	0.587	0.081	0.73
Dissolved Metals, Mercury (ng/L)	31	22	70.97	0.2	0.2	0.2	0.2	0.255	0.2	0.3	0.4	0.4	0.6	0.109	0.020	0.43
Dissolved Metals, Mercury (µg/L)	48	48	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.14
Dissolved Metals, Molybdenum (µg/L)	53	52	98.11	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.13
Dissolved Metals, Nickel (µg/L)	52	15	28.85	0.1	0.1	0.1	0.1	0.188	0.2	0.2	0.2	0.3	0.7	0.094	0.013	0.50
Dissolved Metals, Rubidium (µg/L)	53	0	0	0.8	1	1.1	1.1	1.185	1.2	1.2	1.3	1.3	1.4	0.110	0.015	0.09
Dissolved Metals, Selenium (µg/L)	53	52	98.11	0.3	0.3	0.3	0.3	0.328	0.3	0.3	0.3	0.3	1.8	0.206	0.028	0.63
Dissolved Metals, Silver (µg/L)	53	53	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	53	0	0	3.7	4.5	4.92	5.2	5.568	5.7	5.9	6	6.3	8	0.607	0.083	0.11
Dissolved Metals, Thallium (µg/L)	53	53	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	53	52	98.11	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.13
Dissolved Metals, Uranium (µg/L)	53	52	98.11	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.13
Dissolved Metals, Vanadium (µg/L)	53	53	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	52	39	75	0.4	0.4	0.4	0.4	0.588	0.4	0.425	1.26	0.4	3.5	0.514	0.071	0.87
Field Measurements, Dissolved Oxygen (% Saturation)	17	0	0	93.8	93.8	93.96	96.1	99.347	99.1	101.6	104.66	106.2	106.2	3.926	0.952	0.04
Field Measurements, Dissolved Oxygen (mg/L)	17	0	0	9.71	9.71	9.85	10.05	10.606	10.54	11.12	11.664	11.91	11.91	0.717	0.174	0.07
Field Measurements, Specific Conductivity (µS/cm)	17	0	0	11.2	11.2	11.82	12	12.671	13.1	13.3	13.4	13.5	13.5	0.733	0.178	0.06
Field Measurements, Total Dissolved Solids (mg/L)	9	0	0	0.0076	0.0076	0.0076	0.0076	5.269	7.5	8	8.2	9	9	3.975	1.325	0.75
Field Measurements, Turbidity (NTU)	15	15	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	14	0	0	6.25	6.25	6.507	6.575	6.907	6.725	7.265	7.555	7.61	7.61	0.450	0.120	0.07
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	3	0	0	3.2	3.2	3.2	3.2	3.267	3.2	3.3	3.36	3.4	3.4	0.115	0.067	0.04
Major Ions, Dissolved Calcium (mg/L)	62	0	0	0.4	0.5	0.8	0.9	1.262	1	1.2	1.89	1.5	6.1	0.972	0.123	0.77
Major Ions, Dissolved Chloride (mg/L)	61	59	96.72	0.3	0.7	0.5	0.7	0.668	0.7	0.7	0.7	0.7	0.7	0.089	0.011	0.13
Major Ions, Dissolved Fluoride (mg/L)	53	46	86.79	0.026	0.1	0.032	0.1	0.108	0.1	0.1	0.1	0.1	1	0.127	0.017	1.18
Major Ions, Dissolved Magnesium (mg/L)	62	0	0	0.2	0.2	0.5	0.5	0.766	0.6	0.8	1	1	4.4	0.566	0.072	0.74
Major Ions, Dissolved Potassium (mg/L)	62	0	0	0.2	0.3	0.4	0.4	0.427	0.4	0.499	0.5369	0.6	0.6	0.082	0.010	0.19
Major Ions, Dissolved Sodium (mg/L)	62	0	0	0.3	0.4	0.5	0.5	0.541	0.5	0.6	0.6987	0.7	0.7	0.088	0.011	0.16
Major Ions, Dissolved Sulphate (mg/L)	63	38	60.32	1	1	1	1	1.403	1	2	2	3	3	0.530	0.067	0.38
Major Ions, Reactive Silica (mg/L)	36	2	5.56	0.067	0.067	0.086	0.105	0.142	0.1155	0.1375	0.17	0.171	0.5	0.096	0.016	0.67
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	63	0	0	2.6	2.9	3.1	3.2	3.557	3.5	3.6	4.3	4.2	5	0.543	0.068	0.15
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	62	0	0	1.9	1.9	4.1	4.5175	5.989	5	6.375	8.47	9.1	22.4	3.209	0.408	0.54
Microbiology, Chlorophyll a (µg/L)	33	2	6.06	0.182	0.182	0.2418	0.367	0.703	0.534	1	1.278	1.5	2	0.438	0.076	0.62
Nutrients, Dissolved Nitrogen (mg/L)	35	0	0	0.108	0.108	0.1188	0.1205	0.132	0.132	0.14	0.1476	0.16	0.16	0.013	0.002	0.09
Nutrients, Dissolved Organic Carbon (mg/L)	63	0	0	1.3	1.4	1.9	2.1	2.333	2.4	2.6	2.8	2.9	2.9	0.382	0.048	0.16
Nutrients, Dissolved o-Phosphate, as P (mg/L)	12	11	91.67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0012	0.000	0.000	0.06
Nutrients, Nitrate, as N (mg/L)	73	64	87.67	0.003	0.003	0.005	0.005	0.008	0.005	0.01	0.018	0.01	0.03	0.006	0.001	0.76
Nutrients, Nitrate/Nitrite, as N (mg/L)	72	56	77.78	0.005	0.005	0.0051	0.0051	0.016	0.0051	0.01	0.03	0.01	0.14	0.027	0.003	1.69

Table B.2.3-7 Daring Lake (DAL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Nitrite, as N (mg/L)	73	71	97.26	0.001	0.001	0.001	0.001	0.007	0.001	0.01	0.01	0.01	0.12	0.020	0.002	2.80
Nutrients, Total Ammonia, as N (mg/L)	63	54	85.71	0.005	0.005	0.005	0.005	0.007	0.005	0.0065	0.01	0.008	0.072	0.009	0.001	1.18
Nutrients, Total Dissolved Phosphorus (mg/L)	34	25	73.53	0.001	0.001	0.001	0.00165	0.002	0.002	0.002225	0.00392	0.0028	0.01	0.002	0.000	0.87
Nutrients, Total Nitrogen (mg/L)	38	0	0	0.11	0.11	0.14	0.142	0.156	0.1565	0.17	0.1772	0.19	0.19	0.018	0.003	0.11
Nutrients, Total Organic Carbon (mg/L)	63	0	0	1.8	1.8	2.02	2.25	2.471	2.5	2.7	2.9	3.2	3.2	0.320	0.040	0.13
Nutrients, Total Phosphorus (mg/L)	68	35	51.47	0.002	0.002	0.002	0.002	0.005	0.00305	0.005	0.01	0.006	0.03	0.005	0.001	0.95
Nutrients, o-Phosphate, as P (mg/L)	50	49	98	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.0039	0.001	0.000	0.44
Physical Parameters, Specific Conductivity (µS/cm)	63	0	0	8.5	9.9	10.54	11.5	12.005	12.1	12.6	12.88	14.2	14.3	1.115	0.140	0.09
Physical Parameters, Total Dissolved Solids (mg/L)	60	39	65	10	10	10	10	13.450	10	13.25	18	18	64	9.546	1.232	0.71
Physical Parameters, Total Suspended Solids (mg/L)	63	57	90.48	3	3	3	3	3.317	3	3	3	3	10	1.242	0.156	0.37
Physical Parameters, Turbidity (NTU)	63	0	0	0.19	0.19	0.222	0.25	0.317	0.28	0.32	0.448	0.39	1.04	0.133	0.017	0.42
Physical Parameters, pH (unitless)	63	0	0	6.37	6.58	6.634	6.73	6.778	6.79	6.875	6.918	6.97	6.97	0.124	0.016	0.02
Total Metals, Aluminum (µg/L)	63	0	0	2.7	2.7	5.24	6.45	8.533	7.3	9.1	12.94	12.3	28.8	4.417	0.557	0.52
Total Metals, Antimony (µg/L)	63	60	95.24	0.1	0.1	0.1	0.1	0.113	0.1	0.1	0.1	0.1	0.5	0.061	0.008	0.54
Total Metals, Arsenic (µg/L)	62	62	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	63	0	0	1	1	1.1	1.1	1.256	1.2	1.3	1.4	1.6	3.5	0.318	0.040	0.25
Total Metals, Beryllium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	31	31	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	31	19	61.29	0.9	0.9	0.9	0.9	0.997	0.9	1	1.3	1.1	1.5	0.166	0.030	0.17
Total Metals, Cadmium (µg/L)	63	62	98.41	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.06	0.06	0.005	0.001	0.11
Total Metals, Cesium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	62	60	96.77	0.1	0.1	0.1	0.1	0.158	0.1	0.1	0.1	0.1	3.6	0.444	0.056	2.81
Total Metals, Cobalt (µg/L)	63	62	98.41	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.12
Total Metals, Copper (µg/L)	63	16	25.4	0.2	0.2	0.2	0.3	0.362	0.4	0.4	0.4	0.5	1.1	0.147	0.019	0.41
Total Metals, Iron (µg/L)	63	8	12.7	5	5	9	11	17.302	12	18	45.8	28	50	12.439	1.567	0.72
Total Metals, Lead (µg/L)	63	62	98.41	0.1	0.1	0.1	0.1	0.371	0.1	0.1	0.1	0.1	17.2	2.154	0.271	5.80
Total Metals, Lithium (µg/L)	63	1	1.59	0.2	0.7	0.7	0.8	0.871	0.9	0.9	1	1	3.3	0.348	0.044	0.40
Total Metals, Manganese (µg/L)	63	0	0	0.3	0.3	1.2	1.3	1.838	1.5	2.05	3.08	3.1	4.7	0.889	0.112	0.48
Total Metals, Mercury (ng/L)	49	14	28.57	0.0002	0.0002	0.00099	0.2	0.344	0.3	0.6	0.7	0.9	0.9	0.246	0.035	0.72
Total Metals, Mercury (µg/L)	57	57	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.13
Total Metals, Molybdenum (µg/L)	63	62	98.41	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.12
Total Metals, Nickel (µg/L)	62	17	27.42	0.1	0.1	0.1	0.1	0.211	0.2	0.2	0.2	0.3	2.2	0.262	0.033	1.24
Total Metals, Rubidium (µg/L)	63	0	0	0.9	0.9	1.1	1.1	1.194	1.2	1.25	1.3	1.4	1.4	0.091	0.012	0.08
Total Metals, Selenium (µg/L)	63	61	96.83	0.3	0.3	0.3	0.3	0.329	0.3	0.3	0.3	0.3	1.8	0.192	0.024	0.58
Total Metals, Silver (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	63	0	0	3.8	4.5	5	5.15	5.508	5.6	5.9	6.1	6.3	6.3	0.524	0.066	0.10
Total Metals, Thallium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	63	41	65.08	0.1	0.1	0.1	0.1	0.154	0.1	0.2	0.2	0.3	0.6	0.100	0.013	0.65
Total Metals, Uranium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	63	62	98.41	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.12
Total Metals, Zinc (µg/L)	62	54	87.1	0.4	0.4	0.4	0.4	0.529	0.4	0.4	0.79	0.4	2.6	0.417	0.053	0.79

Table B.2.3-8 Desteffany Lake (DEL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	50	0	0	3.1	3.1	4.6	6.55	10.404	8.35	11.525	13.04	15.2	59.1	9.234	1.306	0.89
Dissolved Metals, Antimony (µg/L)	50	48	96	0.1	0.1	0.1	0.1	0.112	0.1	0.1	0.1	0.1	0.6	0.072	0.010	0.64
Dissolved Metals, Arsenic (µg/L)	50	36	72	0.2	0.2	0.2	0.2	0.228	0.2	0.3	0.3	0.3	0.3	0.045	0.006	0.20
Dissolved Metals, Barium (µg/L)	50	0	0	1.3	1.3	1.4	1.525	1.810	1.7	1.9	2.01	2.3	5.7	0.626	0.089	0.35
Dissolved Metals, Beryllium (µg/L)	50	50	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	26	25	96	0.2	0.2	0.2	0.2	0.208	0.2	0.2	0.2	0.2	0.4	0.039	0.008	0.19
Dissolved Metals, Boron (µg/L)	26	2	8	0.9	0.9	1.05	1.325	1.565	1.6	1.775	2	2.1	2.7	0.401	0.079	0.26
Dissolved Metals, Cadmium (µg/L)	50	50	100	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	50	49	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.14
Dissolved Metals, Chromium (µg/L)	50	48	96	0.1	0.1	0.1	0.1	0.400	0.1	0.1	0.1	0.1	15	2.107	0.298	5.27
Dissolved Metals, Cobalt (µg/L)	50	49	98	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.4	0.042	0.006	0.40
Dissolved Metals, Copper (µg/L)	50	2	4	0.2	0.3	0.3	0.5	0.636	0.6	0.7	0.9	0.9	2.4	0.320	0.045	0.50
Dissolved Metals, Iron (µg/L)	50	17	34	5	5	5	6	15.180	9	13.75	50	25	58	15.608	2.207	1.03
Dissolved Metals, Lead (µg/L)	50	47	94	0.1	0.1	0.1	0.1	1.148	0.1	0.1	0.1	0.1	51.9	7.324	1.036	6.38
Dissolved Metals, Lithium (µg/L)	50	0	0	0.6	1	1	1.125	1.304	1.3	1.4	1.5	1.5	4.5	0.513	0.073	0.39
Dissolved Metals, Manganese (µg/L)	50	0	0	0.2	0.2	0.29	0.4	1.298	0.75	1.7	2.6	3.4	8.7	1.524	0.216	1.17
Dissolved Metals, Mercury (ng/L)	25	9	36	0.2	0.2	0.2	0.2	0.348	0.3	0.4	0.46	0.7	0.9	0.169	0.034	0.48
Dissolved Metals, Mercury (µg/L)	46	46	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.14
Dissolved Metals, Molybdenum (µg/L)	50	38	76	0.1	0.1	0.1	0.1	0.140	0.1	0.1	0.2	0.1	1	0.131	0.019	0.94
Dissolved Metals, Nickel (µg/L)	50	0	0	0.6	0.6	0.6	0.7	0.726	0.7	0.775	0.9	0.8	1.1	0.116	0.016	0.16
Dissolved Metals, Rubidium (µg/L)	50	0	0	1	1	1.29	1.4	1.562	1.6	1.7	1.8	2	2.2	0.253	0.036	0.16
Dissolved Metals, Selenium (µg/L)	50	49	98	0.3	0.3	0.3	0.3	0.328	0.3	0.3	0.3	0.3	1.7	0.198	0.028	0.60
Dissolved Metals, Silver (µg/L)	50	50	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	50	0	0	4.3	4.3	5.8	7.05	8.960	9.15	10.2	12.51	14.7	14.7	2.557	0.362	0.29
Dissolved Metals, Thallium (µg/L)	50	50	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	26	26	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	50	47	94	0.1	0.1	0.1	0.1	0.124	0.1	0.1	0.1	0.1	1.1	0.142	0.020	1.15
Dissolved Metals, Uranium (µg/L)	50	45	90	0.1	0.1	0.1	0.1	0.110	0.1	0.1	0.11	0.1	0.2	0.030	0.004	0.28
Dissolved Metals, Vanadium (µg/L)	50	50	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	49	31	63	0.4	0.4	0.4	0.4	0.710	0.4	0.6	1.02	0.8	5.7	0.889	0.127	1.25
Field Measurements, Dissolved Oxygen (% Saturation)	14	0	0	93.1	93.1	94.04	96.425	99.643	99.6	102.05	105.39	107.3	107.3	4.382	1.171	0.04
Field Measurements, Dissolved Oxygen (mg/L)	14	0	0	9.61	9.61	9.776	10.1325	10.617	10.515	10.9275	11.71	11.9	11.9	0.720	0.192	0.07
Field Measurements, Specific Conductivity (µS/cm)	14	0	0	18.4	18.4	18.72	19.275	20.507	20.55	21.9	22.07	22.5	22.5	1.438	0.384	0.07
Field Measurements, Turbidity (NTU)	13	13	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	12	0	0	6.42	6.42	6.477	6.675	6.886	6.88	7.0075	7.258	7.28	7.65	0.350	0.101	0.05
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	4	0	0	3.9	3.9	3.9	3.9	3.925	3.9	3.925	3.97	3.9	4	0.050	0.025	0.01
Major Ions, Dissolved Calcium (mg/L)	64	0	0	0.5	0.5	0.883	1.2	1.500	1.4	1.8	2.2	2.5	3.6	0.570	0.071	0.38
Major Ions, Dissolved Chloride (mg/L)	61	22	36	0.2	0.2	0.7	0.7	0.992	0.9	1.1	1.7	1.7	2.1	0.461	0.059	0.46
Major Ions, Dissolved Fluoride (mg/L)	47	40	85	0.023	0.1	0.0266	0.1	0.108	0.1	0.1	0.1	0.1	1	0.136	0.020	1.26
Major Ions, Dissolved Magnesium (mg/L)	64	0	0	0.3	0.3	0.565	0.7	0.955	0.8625	1	1.2	1.3	5.8	0.669	0.084	0.70
Major Ions, Dissolved Potassium (mg/L)	64	0	0	0.3	0.4	0.413	0.5	0.594	0.6	0.611	0.8	0.773	1	0.152	0.019	0.26
Major Ions, Dissolved Sodium (mg/L)	64	0	0	0.33	0.33	0.418	0.6	0.872	0.8	1.1	1.421	1.6	1.6	0.355	0.044	0.41
Major Ions, Dissolved Sulphate (mg/L)	65	8	12	1	1	1.58	2	2.396	2	3	3	4	4	0.717	0.089	0.30
Major Ions, Reactive Silica (mg/L)	36	3	8	0.095	0.095	0.1115	0.13825	0.234	0.1725	0.29025	0.5	0.5	0.693	0.151	0.025	0.65
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	65	0	0	1.5	2.8	3.3	3.5	4.526	3.9	4.3	5.06	5.3	41.4	4.707	0.584	1.04
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	64	0	0	2.4	2.4	4.592	6.075	7.667	7.1	9	10.44	12.3	26.1	3.174	0.397	0.41
Microbiology, Chlorophyll a (µg/L)	27	1	4	0.33	0.33	0.426	0.5725	0.913	0.655	1.285	1.668	2	2	0.502	0.097	0.55
Nutrients, Dissolved Nitrogen (mg/L)	30	0	0	0.14	0.14	0.149	0.156	0.173	0.17	0.18775	0.2064	0.22	0.22	0.022	0.004	0.13

Table B.2.3-8 Desteffany Lake (DEL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Organic Carbon (mg/L)	65	0	0	2.2	2.2	2.74	3.1	3.429	3.4	3.7	3.96	4.6	5.7	0.560	0.069	0.16
Nutrients, Dissolved o-Phosphate, as P (mg/L)	11	11	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Nitrate, as N (mg/L)	74	60	81	0.003	0.003	0.005	0.005	0.027	0.005	0.01	0.027	0.0129	1	0.120	0.014	4.51
Nutrients, Nitrate/Nitrite, as N (mg/L)	72	50	69	0.005	0.005	0.0051	0.0051	0.021	0.00725	0.01625	0.039	0.03	0.3	0.043	0.005	2.02
Nutrients, Nitrite, as N (mg/L)	75	73	97	0.001	0.001	0.001	0.001	0.020	0.001	0.01	0.01	0.01	1	0.116	0.013	5.71
Nutrients, Total Ammonia, as N (mg/L)	65	59	91	0.005	0.005	0.005	0.005	0.006	0.005	0.006	0.01	0.0075	0.012	0.002	0.000	0.34
Nutrients, Total Dissolved Phosphorus (mg/L)	27	15	56	0.001	0.001	0.001	0.002	0.003	0.002	0.0027	0.00386	0.0031	0.01	0.002	0.000	0.73
Nutrients, Total Nitrogen (mg/L)	32	0	0	0.159	0.159	0.17	0.171	0.197	0.19	0.2125	0.2293	0.27	0.27	0.028	0.005	0.14
Nutrients, Total Organic Carbon (mg/L)	65	0	0	2.6	2.6	2.94	3.3	3.607	3.6	3.9	4.1	4.8	5.8	0.566	0.070	0.16
Nutrients, Total Phosphorus (mg/L)	70	32	46	0.002	0.002	0.002	0.00305	0.007	0.004	0.01	0.01	0.02	0.061	0.009	0.001	1.38
Nutrients, o-Phosphate, as P (mg/L)	52	50	96	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.003	0.001	0.000	0.38
Physical Parameters, Specific Conductivity (µS/cm)	65	0	0	12	12	13.74	14.6	22.403	17.6	20.6	23.36	27.4	309	36.290	4.501	1.62
Physical Parameters, Total Dissolved Solids (mg/L)	62	31	50	10	10	10	10	15.000	10.5	16.75	22	24	70	9.617	1.221	0.64
Physical Parameters, Total Suspended Solids (mg/L)	64	54	84	3	3	3	3	3.609	3	3	4	3	16	2.036	0.255	0.56
Physical Parameters, Turbidity (NTU)	65	0	0	0.19	0.19	0.3	0.34	0.470	0.41	0.5	0.628	0.73	2.07	0.283	0.035	0.60
Physical Parameters, pH (unitless)	65	0	0	6.38	6.49	6.568	6.7	6.773	6.76	6.88	6.946	7.05	7.05	0.146	0.018	0.02
Total Metals, Aluminum (µg/L)	65	3	5	5.6	5.6	9.8	11.3	18.278	14.4	20.2	30	30.7	78	12.670	1.571	0.69
Total Metals, Antimony (µg/L)	65	55	85	0.1	0.1	0.1	0.1	0.180	0.1	0.1	0.46	0.1	1.42	0.221	0.027	1.23
Total Metals, Arsenic (µg/L)	59	40	68	0.2	0.2	0.2	0.2	0.232	0.2	0.3	0.3	0.3	0.3	0.047	0.006	0.20
Total Metals, Barium (µg/L)	65	3	5	1	1.5	1.5	1.6	1.852	1.8	1.9	2.1	2.2	6.7	0.677	0.084	0.37
Total Metals, Beryllium (µg/L)	65	65	100	0.02	0.1	0.1	0.1	0.216	0.1	0.1	0.1	0.1	2	0.461	0.057	2.14
Total Metals, Bismuth (µg/L)	27	27	100	0.2	0.2	0.2	0.2	0.215	0.2	0.2	0.2	0.2	0.4	0.053	0.010	0.25
Total Metals, Boron (µg/L)	25	1	4	0.9	0.9	1.2	1.3	1.544	1.6	1.7	1.86	2.3	2.3	0.316	0.063	0.20
Total Metals, Cadmium (µg/L)	65	65	100	0.02	0.04	0.04	0.04	0.062	0.05	0.05	0.05	0.05	0.3	0.062	0.008	0.99
Total Metals, Cesium (µg/L)	65	63	97	0.008	0.1	0.1	0.1	0.120	0.1	0.1	0.1	0.1	0.4	0.075	0.009	0.63
Total Metals, Chromium (µg/L)	65	60	92	0.1	0.1	0.1	0.1	0.492	0.1	0.1	0.26	0.1	12.7	1.692	0.210	3.44
Total Metals, Cobalt (µg/L)	65	64	98	0.1	0.1	0.1	0.1	0.158	0.1	0.1	0.1	0.1	1	0.218	0.027	1.38
Total Metals, Copper (µg/L)	65	5	8	0.2	0.3	0.5	0.6	0.834	0.7	0.8	1.3	1	3.29	0.563	0.070	0.68
Total Metals, Iron (µg/L)	65	7	11	6	6	20	23	38.292	30	45	54.4	69	182	29.341	3.639	0.77
Total Metals, Lead (µg/L)	65	59	91	0.1	0.1	0.1	0.1	1.004	0.1	0.1	0.616	0.1	53.1	6.567	0.815	6.54
Total Metals, Lithium (µg/L)	65	4	6	0.6	1.01	1.1	1.2	1.400	1.3	1.4	1.5	1.6	4.5	0.608	0.075	0.43
Total Metals, Magnesium (µg/L)	1	0	0	4	4	4	4	4.000	4	4	4	4	4	----	----	----
Total Metals, Manganese (µg/L)	64	2	3	0.4	0.4	1.9	2.375	3.655	3.05	4.1	6.87	5.7	12.6	2.277	0.285	0.62
Total Metals, Mercury (ng/L)	45	1	2	0.00048	0.00048	0.000842	0.3	0.489	0.5	0.7	0.812	1.2	1.4	0.333	0.050	0.68
Total Metals, Mercury (µg/L)	55	55	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.13
Total Metals, Molybdenum (µg/L)	65	53	82	0.02	0.1	0.1	0.1	0.190	0.1	0.1	0.2	0.1	1.2	0.252	0.031	1.33
Total Metals, Nickel (µg/L)	65	4	6	0.4	0.6	0.6	0.7	0.753	0.7	0.8	0.96	0.9	1.2	0.139	0.017	0.18
Total Metals, Rubidium (µg/L)	65	1	2	0.5	1	1.2	1.4	1.513	1.5	1.7	1.8	2.1	2.1	0.276	0.034	0.18
Total Metals, Selenium (µg/L)	65	63	97	0.3	0.3	0.3	0.3	0.934	0.3	0.3	0.48	0.3	10	2.348	0.291	2.51
Total Metals, Silver (µg/L)	65	65	100	0.006	0.1	0.1	0.1	0.111	0.1	0.1	0.1	0.1	0.3	0.050	0.006	0.45
Total Metals, Strontium (µg/L)	65	1	2	1	1	5.386	6.3	8.366	8.1	10.2	12.02	13.9	13.9	2.612	0.324	0.31
Total Metals, Thallium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.118	0.1	0.1	0.1	0.1	0.4	0.073	0.009	0.61
Total Metals, Tin (µg/L)	25	25	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	65	23	35	0.1	0.1	0.1	0.1	0.484	0.2	0.3	1.38	0.5	3	0.740	0.092	1.53
Total Metals, Uranium (µg/L)	65	58	89	0.1	0.1	0.1	0.1	0.122	0.1	0.1	0.2	0.1	0.3	0.054	0.007	0.45
Total Metals, Vanadium (µg/L)	65	62	95	0.03	0.1	0.1	0.1	0.162	0.1	0.1	0.16	0.1	1	0.220	0.027	1.36
Total Metals, Zinc (µg/L)	64	44	69	0.4	0.4	0.4	0.4	1.414	0.4	0.525	4.01	0.7	11	2.701	0.338	1.91

Table B.2.3-9 Fairy Lake River Upstream of Coppermine River (FAR) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	1	0	0	1.4	1.4	1.4	1.4	1.400	1.4	1.4	1.4	1.4	1.4	----	----	----
Dissolved Metals, Antimony (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	1	0	0	9.1	9.1	9.1	9.1	9.100	9.1	9.1	9.1	9.1	9.1	----	----	----
Dissolved Metals, Beryllium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	1	1	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	1	0	0	0.6	0.6	0.6	0.6	0.600	0.6	0.6	0.6	0.6	0.6	----	----	----
Dissolved Metals, Iron (µg/L)	1	1	100	50	50	50	50	50.000	50	50	50	50	50	----	----	----
Dissolved Metals, Lead (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Manganese (µg/L)	1	0	0	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Molybdenum (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Rubidium (µg/L)	1	0	0	0.4	0.4	0.4	0.4	0.400	0.4	0.4	0.4	0.4	0.4	----	----	----
Dissolved Metals, Selenium (µg/L)	1	1	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	1	0	0	7.9	7.9	7.9	7.9	7.900	7.9	7.9	7.9	7.9	7.9	----	----	----
Dissolved Metals, Thallium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	1	0	0	4.4	4.4	4.4	4.4	4.400	4.4	4.4	4.4	4.4	4.4	----	----	----
Major Ions, Dissolved Calcium (mg/L)	8	0	0	5.93	5.93	5.937	5.9475	6.384	6.085	6.91	7.06	7.2	7.2	0.546	0.193	0.09
Major Ions, Dissolved Chloride (mg/L)	8	7	88	0.2	0.2	0.2	0.2	0.275	0.2	0.225	0.42	0.2	0.7	0.175	0.062	0.64
Major Ions, Dissolved Fluoride (mg/L)	1	1	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	8	0	0	1.86	1.86	1.874	1.925	2.053	2.105	2.1125	2.174	2.3	2.3	0.148	0.052	0.07
Major Ions, Dissolved Potassium (mg/L)	8	0	0	0.23	0.23	0.23	0.23	0.258	0.25	0.2775	0.3	0.3	0.3	0.030	0.010	0.12
Major Ions, Dissolved Sodium (mg/L)	8	0	0	0.28	0.28	0.294	0.3075	0.340	0.345	0.37	0.379	0.4	0.4	0.041	0.015	0.12
Major Ions, Dissolved Sulphate (mg/L)	8	5	63	0.8	0.8	0.8	0.8	1.675	1	3	3	3	3	1.100	0.389	0.66
Major Ions, Reactive Silica (mg/L)	8	0	0	0.32	0.32	0.32	0.32	0.358	0.3285	0.365	0.4481	0.34	0.467	0.060	0.021	0.17
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	8	0	0	21.9	21.9	21.9	21.9	25.200	24.35	25.575	28.83	25.8	35.9	4.615	1.631	0.18
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	8	0	0	22.5	22.5	22.57	22.825	25.388	23.85	26.1	29.13	26.7	34.8	4.103	1.451	0.16
Nutrients, Dissolved Organic Carbon (mg/L)	8	0	0	1.5	1.5	1.5	1.575	1.750	1.7	1.925	2.03	2.1	2.1	0.227	0.080	0.13
Nutrients, Nitrate, as N (mg/L)	5	5	100	0.008	0.008	0.008	0.008	0.009	0.008	0.01	0.01	0.01	0.01	0.001	0.000	0.12
Nutrients, Nitrate/Nitrite, as N (mg/L)	6	6	100	0.008	0.008	0.008	0.008	0.009	0.008	0.0095	0.01	0.01	0.01	0.001	0.000	0.12
Nutrients, Nitrite, as N (mg/L)	8	8	100	0.008	0.008	0.008	0.008	0.009	0.008	0.0085	0.01	0.008	0.01	0.001	0.000	0.11
Nutrients, Total Ammonia, as N (mg/L)	8	7	88	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.0053	0.005	0.006	0.000	0.000	0.07
Nutrients, Total Organic Carbon (mg/L)	8	0	0	1.4	1.4	1.4	1.55	1.688	1.7	1.825	1.93	2	2	0.217	0.077	0.13
Nutrients, Total Phosphorus (mg/L)	8	2	25	0.005	0.005	0.0071	0.00875	0.024	0.01	0.023	0.0659	0.01	0.075	0.028	0.010	1.18
Nutrients, o-Phosphate, as P (mg/L)	8	6	75	0.002	0.002	0.002	0.002	0.002	0.002	0.00225	0.003	0.002	0.003	0.000	0.000	0.21
Physical Parameters, Color (CU)	8	6	75	5	5	5	5	6.250	5	6.25	10	5	10	2.315	0.818	0.37
Physical Parameters, Specific Conductivity (µS/cm)	8	0	0	47.7	47.7	47.84	47.975	61.900	51.75	53.775	80.22	54.6	140	31.669	11.197	0.51
Physical Parameters, Total Dissolved Solids (mg/L)	8	1	13	10	10	15.6	18	24.625	25	31.75	34.6	36	36	9.086	3.212	0.37
Physical Parameters, Total Suspended Solids (mg/L)	8	7	88	3	3	3	3	3.375	3	3	3.9	3	6	1.061	0.375	0.31
Physical Parameters, Turbidity (NTU)	8	0	0	0.2	0.2	0.2	0.2525	0.379	0.38	0.5	0.53	0.6	0.6	0.149	0.053	0.39
Physical Parameters, pH (unitless)	8	0	0	7.22	7.38	7.332	7.4175	7.471	7.47	7.51	7.651	7.63	7.7	0.147	0.052	0.02
Total Metals, Aluminum (µg/L)	8	5	63	2.3	2.3	3.476	4.745	20.160	30	30	30	30	30	13.600	4.808	0.67
Total Metals, Antimony (µg/L)	8	1	13	0.1	0.6	0.45	0.732	0.760	0.8	0.925	1.03	1.1	1.1	0.306	0.108	0.40
Total Metals, Arsenic (µg/L)	1	1	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	8	0	0	9	9	9	9.4275	9.834	9.85	10.1	10.58	11	11	0.678	0.240	0.07
Total Metals, Beryllium (µg/L)	8	8	100	0.02	0.02	0.076	0.1	1.278	2	2	2	2	2	0.997	0.353	0.78

Table B.2.3-9 Fairy Lake River Upstream of Coppermine River (FAR) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Bismuth (µg/L)	3	2	67	0.4	0.4	0.4	0.4	0.433	0.4	0.45	0.48	0.5	0.5	0.058	0.033	0.13
Total Metals, Cadmium (µg/L)	8	8	100	0.02	0.02	0.041	0.05	0.203	0.3	0.3	0.3	0.3	0.3	0.135	0.048	0.67
Total Metals, Cesium (µg/L)	8	8	100	0.008	0.008	0.0724	0.1	0.276	0.4	0.4	0.4	0.4	0.4	0.173	0.061	0.63
Total Metals, Chromium (µg/L)	8	7	88	0.1	0.1	0.1	0.1	0.325	1.950	3	3	3	3	3	1.452	0.513	0.74
Total Metals, Cobalt (µg/L)	8	7	88	0.1	0.1	0.1	0.1	0.1195	0.666	1	1	1	1	1	0.461	0.163	0.69
Total Metals, Copper (µg/L)	8	5	63	0.73	0.73	0.779	0.95	1.566	2	2	2	2	2	0.603	0.213	0.39
Total Metals, Iron (µg/L)	8	8	100	30	30	30	30	35.000	30	35	50	30	50	9.258	3.273	0.26
Total Metals, Lead (µg/L)	8	7	88	0.1	0.1	0.1	0.4975	0.729	1	1	1	1	1	0.409	0.144	0.56
Total Metals, Lithium (µg/L)	8	7	88	0.2	0.2	0.2	0.275	1.963	3	3	3	3	3	1.432	0.506	0.73
Total Metals, Manganese (µg/L)	8	0	0	1.2	1.2	1.214	1.28	1.840	2	2	2.3	3	3	0.602	0.213	0.33
Total Metals, Molybdenum (µg/L)	8	7	88	0.03	0.03	0.079	0.1	0.654	1	1	1	1	1	0.478	0.169	0.73
Total Metals, Nickel (µg/L)	8	7	88	0.09	0.09	0.097	0.1	0.661	1	1	1	1	1	0.468	0.165	0.71
Total Metals, Rubidium (µg/L)	8	5	63	0.4	0.4	0.4	0.415	0.465	0.5	0.5	0.5	0.5	0.5	0.049	0.017	0.10
Total Metals, Selenium (µg/L)	8	7	88	0.3	0.3	0.3	0.375	6.375	10	10	10	10	10	5.003	1.769	0.78
Total Metals, Silver (µg/L)	8	8	100	0.006	0.006	0.0718	0.1	0.213	0.3	0.3	0.3	0.3	0.3	0.123	0.044	0.58
Total Metals, Strontium (µg/L)	8	0	0	6.9	6.9	7.187	7.8275	8.314	8.15	9	9.3	10	10	0.999	0.353	0.12
Total Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.288	0.4	0.4	0.4	0.4	0.4	0.155	0.055	0.54
Total Metals, Titanium (µg/L)	8	7	88	0.06	0.06	0.088	0.1	1.908	3	3	3	3	3	1.508	0.533	0.79
Total Metals, Uranium (µg/L)	8	7	88	0.042	0.042	0.0826	0.1	0.218	0.3	0.3	0.3	0.3	0.3	0.115	0.041	0.53
Total Metals, Vanadium (µg/L)	8	8	100	0.03	0.03	0.079	0.1	0.654	1	1	1	1	1	0.478	0.169	0.73
Total Metals, Zinc (µg/L)	8	5	63	2.5	2.5	2.976	3.27	7.373	10	10	10	10	10	3.634	1.285	0.49

Table B.2.3-10 Fairly Lake (FAL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	8	1	13	0.6	1.8	1.44	1.95	2.750	2.1	2.45	4.64	3.2	8	2.236	0.791	0.81
Dissolved Metals, Antimony (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	8	8	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	8	0	0	9.2	9.2	9.41	9.5	9.938	9.75	10.325	10.76	10.9	10.9	0.612	0.216	0.06
Dissolved Metals, Beryllium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	8	8	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	8	6	75	0.1	0.1	0.1	0.1	0.175	0.1	0.125	0.32	0.1	0.6	0.175	0.062	1.00
Dissolved Metals, Cobalt (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	8	0	0	0.4	0.5	0.47	0.5	1.213	0.5	0.525	2.28	0.5	6.2	2.016	0.713	1.66
Dissolved Metals, Iron (µg/L)	8	8	100	5	50	5	38.75	38.750	50	50	50	50	50	20.831	7.365	0.54
Dissolved Metals, Lead (µg/L)	8	5	63	0.1	0.1	0.1	0.1	0.475	0.1	0.25	1.09	0.4	2.7	0.905	0.320	1.91
Dissolved Metals, Lithium (µg/L)	8	5	63	0.2	0.2	0.2	0.2	0.313	0.2	0.3	0.48	0.3	0.9	0.242	0.085	0.77
Dissolved Metals, Manganese (µg/L)	8	0	0	0.2	0.2	0.2	0.2	0.663	0.3	0.975	1.44	2	2	0.659	0.233	0.99
Dissolved Metals, Mercury (µg/L)	8	8	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.013	0.01	0.02	0.004	0.001	0.31
Dissolved Metals, Molybdenum (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	8	5	63	0.1	0.1	0.1	0.1	0.163	0.1	0.225	0.3	0.3	0.3	0.092	0.032	0.56
Dissolved Metals, Rubidium (µg/L)	8	0	0	0.3	0.4	0.3	0.375	0.375	0.4	0.4	0.4	0.4	0.4	0.046	0.016	0.12
Dissolved Metals, Selenium (µg/L)	8	7	88	0.3	0.3	0.3	0.3	0.438	0.3	0.3	0.63	0.3	1.4	0.389	0.138	0.89
Dissolved Metals, Silver (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	8	0	0	5.3	7	6.49	7.075	7.750	7.3	7.95	9.27	8.1	12	1.912	0.676	0.25
Dissolved Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	8	1	13	0.4	0.4	0.47	0.5	1.575	0.55	1.4	3.92	0.9	6.3	2.082	0.736	1.32
Major Ions, Dissolved Calcium (mg/L)	11	0	0	4.6	5	5	6.4	6.936	6.9	7.6	8.7	9.2	9.2	1.393	0.420	0.20
Major Ions, Dissolved Chloride (mg/L)	10	10	100	0.7	0.7	0.7	0.7	0.700	0.7	0.7	0.7	0.7	0.7	----	----	----
Major Ions, Dissolved Fluoride (mg/L)	9	9	100	0.1	0.1	0.1	0.1	0.200	0.1	0.1	0.28	0.1	1	0.300	0.100	1.50
Major Ions, Dissolved Magnesium (mg/L)	11	0	0	1.1	2.1	2.1	2.2	2.209	2.3	2.4	2.5	2.5	2.5	0.391	0.118	0.18
Major Ions, Dissolved Potassium (mg/L)	11	1	9	0.1	0.1	0.2	0.2	0.227	0.2	0.3	0.3	0.3	0.3	0.065	0.019	0.28
Major Ions, Dissolved Sodium (mg/L)	11	1	9	0.1	0.2	0.2	0.3	0.309	0.3	0.4	0.4	0.4	0.4	0.094	0.028	0.31
Major Ions, Dissolved Sulphate (mg/L)	11	10	91	1	1	1	1	1.182	1	1	1	1	3	0.603	0.182	0.51
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	11	0	0	22.5	22.5	23.2	23.25	42.873	23.7	25.1	26.2	26.2	232	62.736	18.916	1.46
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	11	0	0	15.9	21.6	21.6	25.1	26.464	27.2	29.1	32.1	32.5	32.5	4.748	1.432	0.18
Nutrients, Dissolved Organic Carbon (mg/L)	11	0	0	0.9	1.1	1.1	1.55	1.691	1.7	1.95	2.1	2.2	2.2	0.404	0.122	0.24
Nutrients, Nitrate, as N (mg/L)	11	10	91	0.01	0.01	0.01	0.01	0.012	0.01	0.01	0.01	0.01	0.03	0.006	0.002	0.51
Nutrients, Nitrate/Nitrite, as N (mg/L)	10	7	70	0.01	0.01	0.01	0.01	0.112	0.01	0.025	0.494	0.03	0.53	0.210	0.066	1.88
Nutrients, Nitrite, as N (mg/L)	11	9	82	0.01	0.01	0.01	0.01	0.101	0.01	0.01	0.49	0.01	0.53	0.202	0.061	2.01
Nutrients, Total Ammonia, as N (mg/L)	11	9	82	0.005	0.005	0.005	0.005	0.007	0.005	0.0085	0.01	0.01	0.01	0.002	0.001	0.34
Nutrients, Total Dissolved Phosphorus (mg/L)	2	2	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Organic Carbon (mg/L)	11	0	0	1.4	1.4	1.4	1.55	1.855	1.9	2.1	2.3	2.3	2.3	0.339	0.102	0.18
Nutrients, Total Phosphorus (mg/L)	11	9	82	0.01	0.01	0.01	0.01	0.012	0.01	0.01	0.02	0.01	0.02	0.004	0.001	0.34
Nutrients, o-Phosphate, as P (mg/L)	9	9	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	11	0	0	46.1	46.1	46.8	47.15	49.145	48.6	50.05	51.8	51.8	55.6	2.753	0.830	0.06
Physical Parameters, Total Dissolved Solids (mg/L)	11	1	9	10	10	14	20	24.636	25	29	33	42	42	8.925	2.691	0.36
Physical Parameters, Total Suspended Solids (mg/L)	11	9	82	3	3	3	3	3.364	3	3	4	3	6	0.924	0.279	0.27
Physical Parameters, Turbidity (NTU)	11	0	0	0.23	0.23	0.23	0.235	0.314	0.3	0.365	0.41	0.48	0.48	0.085	0.026	0.27

Table B.2.3-10 Fairly Lake (FAL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, pH (unitless)	11	0	0	7.43	7.43	7.46	7.525	7.605	7.63	7.68	7.73	7.77	7.77	0.111	0.033	0.01
Total Metals, Aluminum (µg/L)	11	2	18	0.6	0.6	0.6	1.25	2.355	2.4	3.4	3.9	3.9	3.9	1.270	0.383	0.54
Total Metals, Antimony (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	11	10	91	0.2	0.2	0.2	0.2	0.209	0.2	0.2	0.2	0.2	0.3	0.030	0.009	0.14
Total Metals, Barium (µg/L)	11	0	0	7.8	9.2	9.2	9.35	9.636	9.8	10	10.2	10.8	10.8	0.759	0.229	0.08
Total Metals, Beryllium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cadmium (µg/L)	11	11	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Total Metals, Cesium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	11	10	91	0.1	0.1	0.1	0.1	0.118	0.1	0.1	0.1	0.1	0.3	0.060	0.018	0.51
Total Metals, Cobalt (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	11	0	0	0.3	0.4	0.4	0.4	0.418	0.4	0.4	0.5	0.4	0.6	0.075	0.023	0.18
Total Metals, Iron (µg/L)	11	9	82	5	5	5	6.5	30.273	50	50	50	50	50	22.712	6.848	0.75
Total Metals, Lead (µg/L)	11	9	82	0.1	0.1	0.1	0.1	0.173	0.1	0.1	0.5	0.1	0.5	0.162	0.049	0.94
Total Metals, Lithium (µg/L)	11	6	55	0.2	0.2	0.2	0.2	0.300	0.2	0.3	0.3	0.3	0.9	0.205	0.062	0.68
Total Metals, Manganese (µg/L)	11	0	0	0.2	1.2	1.2	1.45	1.636	1.9	2	2	2	2	0.555	0.167	0.34
Total Metals, Mercury (µg/L)	10	10	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.011	0.01	0.02	0.003	0.001	0.29
Total Metals, Molybdenum (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Rubidium (µg/L)	11	0	0	0.3	0.4	0.3	0.4	0.382	0.4	0.4	0.4	0.4	0.4	0.040	0.012	0.11
Total Metals, Selenium (µg/L)	11	10	91	0.3	0.3	0.3	0.3	0.391	0.3	0.3	0.3	0.3	1.3	0.302	0.091	0.77
Total Metals, Silver (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	11	0	0	5.4	6.9	6.9	7.05	7.318	7.3	8	8.1	8.1	8.1	0.786	0.237	0.11
Total Metals, Thallium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Uranium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	11	7	64	0.4	0.4	0.4	0.4	0.745	0.4	0.8	1.1	1.1	2.7	0.693	0.209	0.93

Table B.2.3-11 Lac De Gras Outlet (LDGO) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	57	1	1.75	0.6	0.6	1.5	1.8	3.888	2.8	3.5	4.74	6	37.6	5.423	0.718	1.39
Dissolved Metals, Antimony (µg/L)	57	50	87.72	0.1	0.1	0.1	0.1	0.128	0.1	0.1	0.2	0.1	0.8	0.105	0.014	0.82
Dissolved Metals, Arsenic (µg/L)	57	56	98.25	0.2	0.2	0.2	0.2	0.204	0.2	0.2	0.2	0.2	0.4	0.026	0.004	0.13
Dissolved Metals, Barium (µg/L)	57	0	0	1.4	1.4	1.5	1.7	2.079	1.9	2.1	2.2	2.2	7.1	1.002	0.133	0.48
Dissolved Metals, Beryllium (µg/L)	57	57	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	28	27	96.43	0.2	0.2	0.2	0.2	0.218	0.2	0.2	0.2	0.2	0.7	0.094	0.018	0.43
Dissolved Metals, Boron (µg/L)	28	1	3.57	0.9	0.9	1.2	1.6	1.918	1.9	2.15	2.56	2.7	3.7	0.595	0.112	0.31
Dissolved Metals, Cadmium (µg/L)	57	56	98.25	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.05	0.09	0.008	0.001	0.17
Dissolved Metals, Cesium (µg/L)	57	57	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	57	51	89.47	0.1	0.1	0.1	0.1	0.586	0.1	0.1	0.14	0.1	17.4	2.493	0.330	4.25
Dissolved Metals, Cobalt (µg/L)	57	57	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	57	3	5.26	0.2	0.2	0.3	0.4	0.609	0.5	0.6	0.74	0.8	2.8	0.427	0.057	0.70
Dissolved Metals, Iron (µg/L)	57	54	94.74	5	5	5	5	13.877	5	5	50	5	50	17.862	2.366	1.29
Dissolved Metals, Lead (µg/L)	57	51	89.47	0.1	0.1	0.1	0.1	2.021	0.1	0.1	0.14	0.1	65.3	9.518	1.261	4.71
Dissolved Metals, Lithium (µg/L)	57	0	0	0.5	0.8	1.1	1.2	1.335	1.3	1.5	1.6	1.9	1.9	0.254	0.034	0.19
Dissolved Metals, Manganese (µg/L)	57	1	1.75	0.1	0.1	0.26	0.4	1.298	1.2	1.9	2.34	3	4.6	0.933	0.124	0.72
Dissolved Metals, Mercury (ng/L)	27	21	77.78	0.2	0.2	0.2	0.2	0.244	0.2	0.2	0.4	0.2	0.5	0.089	0.017	0.36
Dissolved Metals, Mercury (µg/L)	51	51	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.19
Dissolved Metals, Molybdenum (µg/L)	57	11	19.3	0.1	0.1	0.1	0.2	0.263	0.2	0.3	0.3	0.3	1.5	0.200	0.026	0.76
Dissolved Metals, Nickel (µg/L)	57	0	0	0.7	0.8	0.8	0.9	0.935	0.9	1	1.1	1.1	1.2	0.122	0.016	0.13
Dissolved Metals, Rubidium (µg/L)	57	0	0	0.9	0.9	1.2	1.4	1.598	1.7	1.8	1.9	2	2	0.288	0.038	0.18
Dissolved Metals, Selenium (µg/L)	57	55	96.49	0.3	0.3	0.3	0.3	0.360	0.3	0.3	0.3	0.3	2	0.316	0.042	0.88
Dissolved Metals, Silver (µg/L)	57	57	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	57	0	0	4.6	4.6	6.56	8.9	11.600	11.7	14	16.68	18.6	18.6	3.820	0.506	0.33
Dissolved Metals, Thallium (µg/L)	57	57	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	28	28	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	57	55	96.49	0.1	0.1	0.1	0.1	0.125	0.1	0.1	0.1	0.1	1.1	0.142	0.019	1.14
Dissolved Metals, Uranium (µg/L)	57	56	98.25	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.13
Dissolved Metals, Vanadium (µg/L)	57	57	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	56	34	60.71	0.4	0.4	0.4	0.4	0.952	0.4	0.725	2.15	1.2	7.7	1.298	0.173	1.36
Field Measurements, Dissolved Oxygen (% Saturation)	15	0	0	93.3	93.3	93.8	95	99.013	100.2	102.3	104.18	106.7	106.7	4.466	1.153	0.05
Field Measurements, Dissolved Oxygen (mg/L)	15	0	0	10	10	10.158	10.375	10.885	10.75	11.165	11.978	12.19	12.38	0.725	0.187	0.07
Field Measurements, Specific Conductivity (µS/cm)	15	0	0	21.6	21.6	23.2	24	25.160	25.1	27	27.06	27.2	27.2	1.730	0.447	0.07
Field Measurements, Turbidity (NTU)	14	14	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	12	0	0	6.28	6.28	6.544	6.64	6.902	6.86	7.07	7.46	7.67	7.67	0.400	0.115	0.06
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	4	0	0	3.6	3.6	3.69	3.825	3.925	4	4.1	4.1	4.1	4.1	0.236	0.118	0.06
Major Ions, Dissolved Calcium (mg/L)	77	0	0	0.6	0.6	0.8	1.1	1.408	1.4	1.7	1.94	2.5	2.7	0.469	0.053	0.33
Major Ions, Dissolved Chloride (mg/L)	73	24	32.88	0.2	0.2	0.3	0.7	1.352	1.3	2	2.516	2.8	2.8	0.789	0.092	0.58
Major Ions, Dissolved Fluoride (mg/L)	54	46	85.19	0.021	0.1	0.0243	0.1	0.122	0.1	0.1	0.1	0.1	1	0.176	0.024	1.44
Major Ions, Dissolved Magnesium (mg/L)	77	0	0	0.4	0.4	0.542	0.7	1.058	0.9	1.1	1.3	1.7	6.7	0.965	0.110	0.91
Major Ions, Dissolved Potassium (mg/L)	77	0	0	0.3	0.3	0.426	0.5	0.642	0.6	0.7	1	0.915	1.1	0.191	0.022	0.30
Major Ions, Dissolved Sodium (mg/L)	77	0	0	0.35	0.35	0.488	0.5	1.070	1	1.5	1.9	2.1	2.1	0.542	0.062	0.51
Major Ions, Dissolved Sulphate (mg/L)	78	9	11.54	0.3	0.3	2	2	2.931	3	4	4	6	6	0.983	0.111	0.34
Major Ions, Reactive Silica (mg/L)	45	2	4.44	0.032	0.032	0.04	0.045	0.093	0.061	0.098	0.1356	0.161	0.5	0.096	0.014	1.03
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	78	0	0	1.2	2.9	3.27	3.6	4.167	4.1	4.5	5.29	5.7	6.8	0.872	0.099	0.21
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	77	0	0	0.007	2.9	4.166	6.1	7.780	7.1	8.8	10.26	12.1	30.2	4.262	0.486	0.55
Microbiology, Chlorophyll a (µg/L)	30	3	10	0.169	0.169	0.278	0.34325	0.620	0.471	0.8475	1.07	1.38	2	0.410	0.075	0.66
Nutrients, Dissolved Nitrogen (mg/L)	33	0	0	0.112	0.112	0.1224	0.13	0.141	0.14	0.15	0.16	0.18	0.19	0.018	0.003	0.13
Nutrients, Dissolved Organic Carbon (mg/L)	78	0	0	1.6	1.6	1.9	2.2	2.430	2.5	2.6775	2.9	3.2	3.2	0.374	0.042	0.15
Nutrients, Dissolved o-Phosphate, as P (mg/L)	12	11	91.67	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0016	0.000	0.000	0.16
Nutrients, Nitrate, as N (mg/L)	85	71	83.53	0.003	0.003	0.005	0.005	0.033	0.0067	0.01	0.02	0.011	1	0.151	0.016	4.63
Nutrients, Nitrate/Nitrite, as N (mg/L)	79	60	75.95	0.005	0.005	0.0051	0.0051	0.018	0.0084	0.01	0.034	0.011	0.15	0.030	0.003	1.69
Nutrients, Nitrite, as N (mg/L)	87	85	97.7	0.001	0.001	0.001	0.001	0.030	0.001	0.01	0.01	0.01	1	0.151	0.016	4.96
Nutrients, Total Ammonia, as N (mg/L)	78	70	89.74	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.01	0.005	0.034	0.004	0.000	0.59

Table B.2.3-11 Lac De Gras Outlet (LDGO) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Dissolved Phosphorus (mg/L)	33	22	66.67	0.001	0.001	0.001	0.002	0.003	0.002	0.0027	0.01	0.0027	0.01	0.003	0.001	0.91
Nutrients, Total Nitrogen (mg/L)	35	0	0	0.111	0.111	0.129	0.137	0.158	0.161	0.17	0.19	0.19	0.24	0.028	0.005	0.17
Nutrients, Total Organic Carbon (mg/L)	78	0	0	2	2	2.2	2.3	2.568	2.6	2.8	3	3.3	3.3	0.314	0.036	0.12
Nutrients, Total Phosphorus (mg/L)	83	58	69.88	0.002	0.002	0.002	0.002	0.007	0.003	0.01	0.01	0.021	0.09	0.013	0.001	1.77
Nutrients, o-Phosphate, as P (mg/L)	63	61	96.83	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.003	0.004	0.001	0.000	0.45
Physical Parameters, Color (CU)	13	7	53.85	5	5	5	5	7.077	5	10	10	10	10	2.465	0.684	0.35
Physical Parameters, Specific Conductivity (µS/cm)	78	0	0	12.4	12.4	13.72	15.3	20.468	20.35	25.5	27.89	32.5	32.5	5.568	0.630	0.27
Physical Parameters, Total Dissolved Solids (mg/L)	74	39	52.7	10	10	10	10	15.392	10	16	25.4	24	74	10.441	1.214	0.68
Physical Parameters, Total Suspended Solids (mg/L)	78	60	76.92	3	3	3	3	4.128	3	3	5	3	20	3.669	0.415	0.89
Physical Parameters, Turbidity (NTU)	78	0	0	0.15	0.15	0.18	0.2025	0.308	0.26	0.3675	0.465	0.6	1	0.155	0.018	0.50
Physical Parameters, pH (unitless)	78	0	0	6.38	6.38	6.597	6.695	6.794	6.795	6.91	6.98	7.05	7.05	0.154	0.017	0.02
Total Metals, Aluminum (µg/L)	78	7	8.97	1	1	2.67	3.7	9.331	5	7.1	30	8.3	44	10.734	1.215	1.15
Total Metals, Antimony (µg/L)	78	65	83.33	0.1	0.1	0.1	0.1	0.253	0.1	0.1	0.63	0.1	1.8	0.373	0.042	1.48
Total Metals, Arsenic (µg/L)	68	63	92.65	0.2	0.2	0.2	0.2	0.241	0.2	0.2	0.23	0.2	1	0.166	0.020	0.69
Total Metals, Barium (µg/L)	78	7	8.97	1	1	1.3	1.625	1.967	1.8	2.1	2.3	2.4	7.2	0.874	0.099	0.44
Total Metals, Beryllium (µg/L)	78	78	100	0.02	0.1	0.1	0.1	0.318	0.1	0.1	2	0.1	2	0.611	0.069	1.92
Total Metals, Bismuth (µg/L)	32	32	100	0.2	0.2	0.2	0.2	0.819	0.2	0.2	0.4	0.2	10	2.047	0.362	2.50
Total Metals, Boron (µg/L)	27	0	0	1.1	1.1	1.3	1.6	1.881	1.8	2.05	2.52	2.7	3	0.458	0.088	0.24
Total Metals, Cadmium (µg/L)	78	75	96.15	0.02	0.04	0.04	0.04	0.082	0.05	0.05	0.3	0.05	0.5	0.093	0.010	1.13
Total Metals, Cesium (µg/L)	78	76	97.44	0.008	0.1	0.1	0.1	0.180	0.1	0.1	0.4	0.1	2.2	0.341	0.039	1.90
Total Metals, Chromium (µg/L)	78	73	93.59	0.1	0.1	0.1	0.1	0.733	0.1	0.1	3	0.1	15.2	2.081	0.236	2.84
Total Metals, Cobalt (µg/L)	78	76	97.44	0.1	0.1	0.1	0.1	0.209	0.1	0.1	1	0.1	1	0.290	0.033	1.39
Total Metals, Copper (µg/L)	78	9	11.54	0.2	0.3	0.4	0.5	0.827	0.6	0.7	2	0.9	3	0.645	0.073	0.78
Total Metals, Iron (µg/L)	78	45	57.69	5	5	5	5	27.846	9	30	50	61	690	79.382	8.988	2.85
Total Metals, Lead (µg/L)	78	69	88.46	0.1	0.1	0.1	0.1	1.507	0.1	0.1	1	0.1	62.6	8.152	0.923	5.41
Total Metals, Lithium (µg/L)	78	9	11.54	0.5	0.6	1.1	1.2	1.519	1.4	1.6	3	1.8	3	0.592	0.067	0.39
Total Metals, Magnesium (µg/L)	2	0	0	3.7	3.7	3.73	3.775	3.850	3.85	3.925	3.97	4	4	0.212	0.150	0.06
Total Metals, Manganese (µg/L)	76	2	2.63	0.7	0.7	1.55	1.9	2.785	2.45	3.225	4.7	5.1	6.6	1.299	0.149	0.47
Total Metals, Mercury (ng/L)	47	15	31.91	0.00021	0.00021	0.000546	0.2	0.293	0.2	0.4	0.6	0.7	0.9	0.226	0.033	0.77
Total Metals, Mercury (µg/L)	60	58	96.67	0.01	0.01	0.01	0.01	0.013	0.01	0.01	0.01	0.01	0.14	0.017	0.002	1.33
Total Metals, Molybdenum (µg/L)	78	28	35.9	0.02	0.02	0.1	0.1	0.366	0.2	0.3	1	0.3	3	0.519	0.059	1.42
Total Metals, Nickel (µg/L)	78	7	8.97	0.6	0.8	0.8	0.9	0.966	0.9	1	1.1	1.1	2	0.208	0.024	0.22
Total Metals, Rubidium (µg/L)	77	1	1.3	0.5	0.9	1.16	1.3	1.505	1.5	1.7	1.9	2.1	2.5	0.335	0.038	0.22
Total Metals, Selenium (µg/L)	78	74	94.87	0.3	0.3	0.3	0.3	1.492	0.3	0.3	10	0.3	10	3.108	0.352	2.08
Total Metals, Silver (µg/L)	78	76	97.44	0.006	0.1	0.1	0.1	0.126	0.1	0.1	0.3	0.1	0.3	0.069	0.008	0.55
Total Metals, Strontium (µg/L)	78	0	0	4.6	4.6	5.28	6.9	10.291	10.05	13.7	16.26	19	19	4.094	0.464	0.40
Total Metals, Thallium (µg/L)	78	78	100	0.1	0.1	0.1	0.1	0.135	0.1	0.1	0.4	0.1	0.4	0.096	0.011	0.72
Total Metals, Tin (µg/L)	27	27	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	78	71	91.03	0.1	0.1	0.1	0.1	0.482	0.1	0.1	3	0.1	4	0.972	0.110	2.02
Total Metals, Uranium (µg/L)	78	75	96.15	0.024	0.1	0.1	0.1	0.227	0.1	0.1	0.3	0.1	4.4	0.684	0.077	3.01
Total Metals, Vanadium (µg/L)	78	76	97.44	0.03	0.1	0.1	0.1	0.207	0.1	0.1	1	0.1	1	0.290	0.033	1.40
Total Metals, Zinc (µg/L)	77	57	74.03	0.4	0.4	0.4	0.4	3.518	0.4	0.7	10	1	65	10.595	1.207	3.01

Table B.2.3-12 Point Lake (POL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	51	0	0	5.5	5.5	7.5	8.4	9.794	9.7	10.8	12.3	13.6	16.2	2.204	0.309	0.23
Dissolved Metals, Antimony (µg/L)	51	48	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.003	0.22
Dissolved Metals, Arsenic (µg/L)	51	51	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	51	0	0	1.6	1.6	1.7	1.8	1.971	2	2.1	2.1	2.3	3	0.218	0.030	0.11
Dissolved Metals, Beryllium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	29	28	97	0.2	0.2	0.2	0.2	0.207	0.2	0.2	0.2	0.2	0.4	0.037	0.007	0.18
Dissolved Metals, Boron (µg/L)	29	7	24	0.9	0.9	0.9	1	1.221	1.1	1.4	1.62	1.7	2.3	0.346	0.064	0.28
Dissolved Metals, Cadmium (µg/L)	51	51	100	0.04	0.04	0.04	0.04	0.045	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	51	49	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.020	0.003	0.19
Dissolved Metals, Cobalt (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	51	0	0	0.3	0.3	0.5	0.5	0.827	0.6	0.7	0.8	0.9	9.6	1.292	0.181	1.56
Dissolved Metals, Iron (µg/L)	51	49	96	5	5	5	5	11.333	5	5	50	5	50	15.596	2.184	1.38
Dissolved Metals, Lead (µg/L)	51	47	92	0.1	0.1	0.1	0.1	0.125	0.1	0.1	0.1	0.1	0.5	0.091	0.013	0.73
Dissolved Metals, Lithium (µg/L)	51	1	2	0.2	0.8	0.6	0.9	0.943	0.9	1	1	1.1	3.5	0.402	0.056	0.43
Dissolved Metals, Manganese (µg/L)	50	6	12	0.1	0.1	0.1	0.2	0.366	0.3	0.475	0.51	0.6	1.3	0.260	0.037	0.71
Dissolved Metals, Mercury (ng/L)	28	17	61	0.2	0.2	0.2	0.2	0.268	0.2	0.3	0.43	0.4	0.6	0.109	0.021	0.41
Dissolved Metals, Mercury (µg/L)	47	46	98	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.20
Dissolved Metals, Molybdenum (µg/L)	51	49	96	0.1	0.1	0.1	0.1	0.118	0.1	0.1	0.1	0.1	0.9	0.113	0.016	0.96
Dissolved Metals, Nickel (µg/L)	51	0	0	0.6	0.6	0.7	0.7	0.729	0.7	0.8	0.8	0.9	0.9	0.061	0.009	0.08
Dissolved Metals, Rubidium (µg/L)	51	0	0	0.9	0.9	1.1	1.2	1.304	1.3	1.4	1.4	1.5	1.5	0.139	0.019	0.11
Dissolved Metals, Selenium (µg/L)	51	49	96	0.3	0.3	0.3	0.3	0.327	0.3	0.3	0.3	0.3	1.6	0.182	0.026	0.56
Dissolved Metals, Silver (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	51	0	0	4.1	4.1	5.4	5.75	6.396	6.6	7	7.3	8.4	8.4	0.879	0.123	0.14
Dissolved Metals, Thallium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	29	29	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	51	48	94	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.3	0.034	0.005	0.31
Dissolved Metals, Uranium (µg/L)	51	50	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.14
Dissolved Metals, Vanadium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	50	29	58	0.4	0.4	0.4	0.4	0.768	0.4	0.675	1.21	1	4.7	0.883	0.125	1.15
Field Measurements, Dissolved Oxygen (% Saturation)	16	0	0	91.5	91.5	94.7	96.175	99.425	98.15	102.625	105.45	109.2	109.2	4.860	1.215	0.05
Field Measurements, Dissolved Oxygen (mg/L)	16	0	0	10.37	10.37	10.88	11.05	11.602	11.635	12.3	12.34	12.41	12.41	0.638	0.159	0.05
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	15.7	15.7	15.9	16.35	17.231	17.55	17.95	18.2	18.9	18.9	0.984	0.246	0.06
Field Measurements, Total Dissolved Solids (mg/L)	8	0	0	0.0102	9.8	0.01048	7.35265	7.840	9.95	11	11	11	11	4.860	1.718	0.62
Field Measurements, Turbidity (NTU)	15	15	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	14	1	7	6.39	6.39	6.4	6.52	6.814	6.62	7.03	7.278	7.5	7.5	0.383	0.102	0.06
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	3	0	0	3.5	3.5	3.56	3.65	3.700	3.8	3.8	3.8	3.8	3.8	0.173	0.100	0.05
Major Ions, Dissolved Calcium (mg/L)	63	0	0	0.7	0.9	1.06	1.3	1.695	1.5	1.7	2.48	2.3	7.1	0.881	0.111	0.52
Major Ions, Dissolved Chloride (mg/L)	62	55	89	0.2	0.7	0.5	0.7	0.646	0.7	0.7	0.7	0.7	0.7	0.128	0.016	0.20
Major Ions, Dissolved Fluoride (mg/L)	49	42	86	0.023	0.1	0.026	0.1	0.108	0.1	0.1	0.1	0.1	1	0.133	0.019	1.23
Major Ions, Dissolved Magnesium (mg/L)	63	0	0	0.2	0.5	0.6	0.7	0.898	0.8	0.95	1.1	1.2	6	0.700	0.088	0.78
Major Ions, Dissolved Potassium (mg/L)	64	0	0	0.2	0.3	0.4	0.4	0.467	0.47	0.5	0.6	0.613	0.7	0.092	0.012	0.20
Major Ions, Dissolved Sodium (mg/L)	64	0	0	0.3	0.39	0.422	0.5	0.569	0.55	0.61275	0.7196	0.736	0.8	0.116	0.014	0.20
Major Ions, Dissolved Sulphate (mg/L)	65	3	5	1	1.3	2	2	2.266	2	2.53	3	3	5	0.582	0.072	0.26
Major Ions, Reactive Silica (mg/L)	37	3	8	0.196	0.255	0.2798	0.317	0.356	0.339	0.378	0.48	0.44	0.5	0.074	0.012	0.21
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	64	0	0	3.3	3.3	3.5	3.7	4.844	4.1	4.425	5.4	5.5	47.3	5.428	0.679	1.12
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	63	0	0	2.7	2.7	5.56	6.1	7.932	7.1	8.7	10.26	12	27.9	3.917	0.493	0.49
Microbiology, Chlorophyll a (µg/L)	30	2	7	0.242	0.242	0.3676	0.51675	0.766	0.653	0.8615	1.064	1.37	2.7	0.505	0.092	0.66

Table B.2.3-12 Point Lake (POL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Nitrogen (mg/L)	32	0	0	0.142	0.142	0.1561	0.16	0.174	0.1725	0.1825	0.1995	0.205	0.205	0.016	0.003	0.09
Nutrients, Dissolved Organic Carbon (mg/L)	65	0	0	1.9	1.9	2.34	2.6	2.814	2.8	3.1	3.36	3.6	3.6	0.391	0.049	0.14
Nutrients, Dissolved o-Phosphate, as P (mg/L)	11	11	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Nitrate, as N (mg/L)	74	0	0	0.02	0.02	0.03	0.03785	0.049	0.0437	0.05265	0.06169	0.0739	0.32	0.034	0.004	0.70
Nutrients, Nitrate/Nitrite, as N (mg/L)	73	2	3	0.01	0.02	0.03	0.0388	0.055	0.0446	0.0535	0.06932	0.0739	0.32	0.043	0.005	0.79
Nutrients, Nitrite, as N (mg/L)	76	74	97	0.001	0.001	0.001	0.001	0.007	0.001	0.01	0.01	0.01	0.12	0.019	0.002	2.65
Nutrients, Total Ammonia, as N (mg/L)	65	58	89	0.005	0.005	0.005	0.005	0.007	0.005	0.006	0.01	0.007	0.031	0.004	0.001	0.62
Nutrients, Total Dissolved Phosphorus (mg/L)	32	19	59	0.001	0.001	0.001	0.002	0.003	0.002	0.0029	0.00796	0.0034	0.01	0.003	0.000	0.85
Nutrients, Total Nitrogen (mg/L)	34	0	0	0.144	0.152	0.1566	0.18	0.187	0.19	0.2	0.21	0.22	0.248	0.023	0.004	0.12
Nutrients, Total Organic Carbon (mg/L)	65	0	0	2.2	2.2	2.5	2.6	2.857	2.8	3	3.4	3.5	3.7	0.361	0.045	0.13
Nutrients, Total Phosphorus (mg/L)	69	59	86	0.002	0.002	0.002	0.002	0.006	0.002	0.01	0.01	0.02	0.061	0.008	0.001	1.50
Nutrients, o-Phosphate, as P (mg/L)	52	52	100	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.000	0.000	0.36
Physical Parameters, Color (CU)	6	3	50	5	5	5	5	8.333	7.5	10	12.5	15	15	4.082	1.667	0.49
Physical Parameters, Specific Conductivity (µS/cm)	65	0	0	13.7	13.7	14.34	15	16.254	16	17.2	17.98	19.9	20.6	1.620	0.201	0.10
Physical Parameters, Total Dissolved Solids (mg/L)	61	33	54	10	10	10	10	14.492	10	18	22	26	69	8.769	1.123	0.61
Physical Parameters, Total Suspended Solids (mg/L)	65	55	85	3	3	3	3	3.523	3	3	6	3	10	1.415	0.176	0.40
Physical Parameters, Turbidity (NTU)	65	0	0	0.12	0.12	0.15	0.17	0.315	0.21	0.27	0.486	0.34	4	0.494	0.061	1.57
Physical Parameters, pH (unitless)	65	0	0	6.37	6.56	6.62	6.73	6.790	6.81	6.89	6.94	7.08	7.08	0.137	0.017	0.02
Total Metals, Aluminum (µg/L)	65	3	5	8.9	8.9	10.08	11.2	13.668	12	14.5	17.26	19.1	31.7	4.882	0.606	0.36
Total Metals, Antimony (µg/L)	65	57	88	0.1	0.1	0.1	0.1	0.150	0.1	0.1	0.26	0.1	0.872	0.151	0.019	1.01
Total Metals, Arsenic (µg/L)	60	59	98	0.2	0.2	0.2	0.2	0.202	0.2	0.2	0.2	0.2	0.3	0.013	0.002	0.06
Total Metals, Barium (µg/L)	65	0	0	1.6	1.6	1.8	1.9	1.987	2	2.1	2.1	2.4	2.8	0.190	0.024	0.10
Total Metals, Beryllium (µg/L)	65	65	100	0.02	0.1	0.1	0.1	0.186	0.1	0.1	0.1	0.1	2	0.402	0.050	2.16
Total Metals, Bismuth (µg/L)	30	30	100	0.2	0.2	0.2	0.2	0.213	0.2	0.2	0.2	0.2	0.4	0.051	0.009	0.24
Total Metals, Boron (µg/L)	28	6	21	0.9	0.9	0.9	1	1.171	1.1	1.3	1.46	1.7	1.8	0.242	0.046	0.21
Total Metals, Cadmium (µg/L)	65	65	100	0.02	0.04	0.04	0.04	0.057	0.05	0.05	0.05	0.05	0.3	0.054	0.007	0.95
Total Metals, Cesium (µg/L)	65	65	100	0.008	0.1	0.1	0.1	0.112	0.1	0.1	0.1	0.1	0.4	0.065	0.008	0.58
Total Metals, Chromium (µg/L)	65	64	98	0.1	0.1	0.1	0.1	0.235	0.1	0.1	0.1	0.1	3	0.613	0.076	2.60
Total Metals, Cobalt (µg/L)	65	64	98	0.1	0.1	0.1	0.1	0.142	0.1	0.1	0.1	0.1	1	0.190	0.024	1.34
Total Metals, Copper (µg/L)	65	3	5	0.3	0.3	0.5	0.6	0.776	0.7	0.8	0.9	1	2.11	0.357	0.044	0.46
Total Metals, Iron (µg/L)	65	44	68	5	5	5	5	13.662	6	13	50	13	50	15.364	1.906	1.12
Total Metals, Lead (µg/L)	65	60	92	0.1	0.1	0.1	0.1	0.159	0.1	0.1	0.26	0.1	1	0.199	0.025	1.25
Total Metals, Lithium (µg/L)	65	4	6	0.2	0.6	0.7	0.8	1.017	0.9	1	1.06	1.2	3.4	0.561	0.070	0.55
Total Metals, Manganese (µg/L)	64	3	5	0.2	0.4	0.5	0.5	0.680	0.6	0.7	1	0.9	2.3	0.360	0.045	0.53
Total Metals, Mercury (ng/L)	47	14	30	0.0002	0.0002	0.00081	0.2	0.355	0.3	0.5	0.74	0.9	1.2	0.277	0.040	0.78
Total Metals, Mercury (µg/L)	56	56	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.13
Total Metals, Molybdenum (µg/L)	65	63	97	0.03	0.1	0.1	0.1	0.142	0.1	0.1	0.1	0.1	1	0.191	0.024	1.34
Total Metals, Nickel (µg/L)	65	3	5	0.3	0.6	0.7	0.7	0.735	0.7	0.8	0.8	0.9	1	0.116	0.014	0.16
Total Metals, Rubidium (µg/L)	65	0	0	0.9	0.9	1.14	1.2	1.286	1.3	1.4	1.4	1.6	1.6	0.134	0.017	0.10
Total Metals, Selenium (µg/L)	65	62	95	0.3	0.3	0.3	0.3	0.777	0.3	0.3	0.3	0.3	10	2.052	0.255	2.64
Total Metals, Silver (µg/L)	65	65	100	0.006	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.3	0.044	0.005	0.41
Total Metals, Strontium (µg/L)	65	0	0	4.1	4.1	5.222	5.7	6.229	6.3	6.8	7.3	7.9	7.9	0.857	0.106	0.14
Total Metals, Thallium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.114	0.1	0.1	0.1	0.1	0.4	0.063	0.008	0.56
Total Metals, Tin (µg/L)	28	26	93	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.2	0.026	0.005	0.24
Total Metals, Titanium (µg/L)	65	51	78	0.06	0.1	0.1	0.1	0.261	0.1	0.1	0.26	0.1	3	0.610	0.076	2.34
Total Metals, Uranium (µg/L)	65	64	98	0.052	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.3	0.043	0.005	0.40
Total Metals, Vanadium (µg/L)	65	63	97	0.03	0.1	0.1	0.1	0.145	0.1	0.1	0.1	0.1	1	0.192	0.024	1.32
Total Metals, Zinc (µg/L)	64	31	48	0.4	0.4	0.4	0.4	1.193	0.5	0.7	2.85	1.1	10	2.126	0.266	1.78

Table B.2.3-13 Rocknest Lake (ROL)

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	54	0	0	3	3	5.02	6.975	9.030	9.05	10.3	12.22	14.2	21.4	3.385	0.461	0.37
Dissolved Metals, Antimony (µg/L)	54	50	93	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.3	0.035	0.005	0.32
Dissolved Metals, Arsenic (µg/L)	54	38	70	0.2	0.2	0.2	0.2	0.237	0.2	0.3	0.3	0.4	0.4	0.062	0.008	0.26
Dissolved Metals, Barium (µg/L)	54	0	0	2.1	2.1	2.3	2.7	3.544	3.1	4.3	5.31	6.5	7	1.209	0.165	0.34
Dissolved Metals, Beryllium (µg/L)	54	54	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	34	33	97	0.2	0.2	0.2	0.2	0.209	0.2	0.2	0.2	0.2	0.5	0.051	0.009	0.25
Dissolved Metals, Boron (µg/L)	34	5	15	0.9	0.9	0.9	1.1	1.468	1.25	1.5	2.28	2	4.3	0.694	0.119	0.47
Dissolved Metals, Cadmium (µg/L)	54	54	100	0.04	0.04	0.04	0.04	0.045	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	54	54	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	54	52	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.019	0.003	0.18
Dissolved Metals, Cobalt (µg/L)	54	53	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.13
Dissolved Metals, Copper (µg/L)	54	0	0	0.3	0.5	0.5	0.6	0.900	0.6	0.7	0.87	0.8	14.5	1.893	0.258	2.10
Dissolved Metals, Iron (µg/L)	54	31	57	5	5	5	5	11.167	6	9.75	25.8	16	50	13.181	1.794	1.18
Dissolved Metals, Lead (µg/L)	54	51	94	0.1	0.1	0.1	0.1	0.115	0.1	0.1	0.1	0.1	0.5	0.068	0.009	0.60
Dissolved Metals, Lithium (µg/L)	54	0	0	0.4	0.6	0.7	0.825	0.956	0.9	1	1	1.1	3	0.428	0.058	0.45
Dissolved Metals, Manganese (µg/L)	54	6	11	0.1	0.1	0.13	0.3	0.574	0.6	0.8	0.9	1	2.4	0.368	0.050	0.64
Dissolved Metals, Mercury (ng/L)	33	11	33	0.2	0.2	0.2	0.2	0.427	0.4	0.5	0.76	0.8	1.3	0.266	0.046	0.62
Dissolved Metals, Mercury (µg/L)	50	50	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.19
Dissolved Metals, Molybdenum (µg/L)	54	53	98	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.3	0.027	0.004	0.26
Dissolved Metals, Nickel (µg/L)	54	0	0	0.4	0.4	0.43	0.5	0.563	0.6	0.6	0.7	0.7	0.8	0.092	0.012	0.16
Dissolved Metals, Rubidium (µg/L)	54	0	0	0.8	1	1.1	1.2	1.256	1.3	1.375	1.4	1.5	1.5	0.141	0.019	0.11
Dissolved Metals, Selenium (µg/L)	54	52	96	0.3	0.3	0.3	0.3	0.356	0.3	0.3	0.3	0.3	1.8	0.286	0.039	0.80
Dissolved Metals, Silver (µg/L)	54	54	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	54	0	0	4.4	4.4	6.13	6.6	8.239	7.4	9.8	12.49	14.1	14.1	2.341	0.319	0.28
Dissolved Metals, Thallium (µg/L)	54	54	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	34	34	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	54	52	96	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.3	0.030	0.004	0.29
Dissolved Metals, Uranium (µg/L)	54	49	91	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.2	0.029	0.004	0.27
Dissolved Metals, Vanadium (µg/L)	54	53	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.13
Dissolved Metals, Zinc (µg/L)	52	37	71	0.4	0.4	0.4	0.4	0.613	0.4	0.5	1.18	0.6	4.1	0.585	0.081	0.95
Field Measurements, Depth (m)	13	0	0	0.3	0.3	0.3	0.3	0.538	0.5	0.5	1	0.5	1	0.279	0.077	0.52
Field Measurements, Dissolved Oxygen (% Saturation)	16	0	0	94.3	94.3	95.6	97.25	100.556	98.5	105.45	106.5	107.3	107.3	4.618	1.154	0.05
Field Measurements, Dissolved Oxygen (mg/L)	16	0	0	10.14	10.14	10.225	10.4425	11.308	10.72	11.3	11.725	11.87	19.17	2.159	0.540	0.19
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	19	19	20.85	22.525	31.100	24.25	35.55	49	49	67.8	14.075	3.519	0.45
Field Measurements, Total Dissolved Solids (mg/L)	9	0	0	0.0139	0.0139	0.01446	0.0146	11.305	13	14.6	20.4	30	30	9.992	3.331	0.88
Field Measurements, Turbidity (NTU)	15	15	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	14	0	0	6.59	6.59	6.779	6.89	7.135	7.09	7.4225	7.607	7.61	7.61	0.341	0.091	0.05
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	4	0	0	7.8	7.8	8.22	8.85	13.950	13.7	18.8	19.88	20.6	20.6	6.395	3.197	0.46
Major Ions, Dissolved Calcium (mg/L)	61	0	0	1	1	1.8	2.1	3.755	3	4.6	7	7.6	12.9	2.266	0.290	0.60
Major Ions, Dissolved Chloride (mg/L)	60	58	97	0.45	0.7	0.5	0.7	0.673	0.7	0.7	0.7	0.7	0.7	0.070	0.009	0.10
Major Ions, Dissolved Fluoride (mg/L)	54	44	81	0.023	0.1	0.0293	0.1	0.095	0.1	0.1	0.1	0.1	0.3	0.042	0.006	0.44
Major Ions, Dissolved Magnesium (mg/L)	61	0	0	0.6	0.6	0.9	1.16	1.731	1.4	2	3.1	3.2	6.5	0.960	0.123	0.55
Major Ions, Dissolved Potassium (mg/L)	61	0	0	0.3	0.3	0.4	0.4	0.507	0.5	0.6	0.7	0.7	0.7	0.104	0.013	0.21
Major Ions, Dissolved Sodium (mg/L)	61	0	0	0.4	0.5	0.5	0.6	0.634	0.6	0.7	0.8	0.8	1	0.131	0.017	0.21
Major Ions, Dissolved Sulphate (mg/L)	63	3	5	1	2	2	2	2.193	2	2	3	2	5.35	0.671	0.085	0.31
Major Ions, Reactive Silica (mg/L)	37	1	3	0.267	0.267	0.3032	0.331	0.499	0.435	0.575	0.824	0.872	0.994	0.210	0.034	0.42
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	62	0	0	5.2	5.2	6.1	7.3	12.560	8.6	16.8	25.27	30.1	37.1	8.189	1.040	0.65
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	61	0	0	5.1	5.1	8.5	10.3	16.325	12.6	20.5	30.6	34.6	46.2	8.720	1.116	0.53
Microbiology, Chlorophyll a (µg/L)	36	5	14	0.34	0.34	0.475	0.6345	0.901	0.894	1.03	1.42	1.61	2	0.369	0.061	0.41
Nutrients, Dissolved Nitrogen (mg/L)	38	0	0	0.157	0.157	0.16	0.17	0.201	0.195	0.2175	0.259	0.28	0.316	0.040	0.006	0.20
Nutrients, Dissolved Organic Carbon (mg/L)	63	0	0	2.3	2.3	3	3.3	3.949	3.7	4.6	5.08	6.3	7	0.904	0.114	0.23
Nutrients, Dissolved o-Phosphate, as P (mg/L)	14	13	93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0013	0.000	0.000	0.08
Nutrients, Nitrate, as N (mg/L)	70	20	29	0.003	0.003	0.005	0.01	0.019	0.01985	0.025275	0.03	0.04	0.04	0.010	0.001	0.53
Nutrients, Nitrate/Nitrite, as N (mg/L)	69	23	33	0.005	0.005	0.0051	0.01	0.035	0.02	0.0289	0.042	0.05	0.42	0.065	0.008	1.85

Table B.2.3-13 Rocknest Lake (ROL)

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Nitrite, as N (mg/L)	70	67	96	0.001	0.001	0.001	0.001	0.015	0.001	0.01	0.01	0.01	0.4	0.060	0.007	3.91
Nutrients, Total Ammonia, as N (mg/L)	61	52	85	0.005	0.005	0.005	0.005	0.006	0.005	0.008	0.01	0.011	0.011	0.002	0.000	0.34
Nutrients, Total Dissolved Phosphorus (mg/L)	37	25	68	0.001	0.0013	0.001	0.002	0.003	0.002	0.0025	0.00844	0.0031	0.0134	0.003	0.001	0.97
Nutrients, Total Nitrogen (mg/L)	41	0	0	0.162	0.162	0.172	0.19	0.229	0.22	0.25	0.31	0.33	0.353	0.054	0.008	0.24
Nutrients, Total Organic Carbon (mg/L)	63	0	0	3	3	3.2	3.3	4.095	3.9	4.85	5.18	7	7	0.912	0.115	0.22
Nutrients, Total Phosphorus (mg/L)	68	38	56	0.002	0.002	0.002	0.002	0.005	0.003	0.006	0.01	0.01	0.017	0.003	0.000	0.75
Nutrients, o-Phosphate, as P (mg/L)	46	46	100	0.001	0.001	0.001	0.001	0.001	0.001	0.00175	0.002	0.002	0.002	0.000	0.000	0.35
Physical Parameters, Specific Conductivity (µS/cm)	63	0	0	18.5	18.5	20.3	22.55	31.752	25.2	41.3	52.34	63.7	75	14.070	1.773	0.44
Physical Parameters, Total Dissolved Solids (mg/L)	57	12	21	10	10	10	12	20.965	20	24	32.8	42	88	12.777	1.692	0.61
Physical Parameters, Total Suspended Solids (mg/L)	63	53	84	3	3	3	3	3.381	3	3	4	3	8	1.084	0.137	0.32
Physical Parameters, Turbidity (NTU)	63	0	0	0.2	0.2	0.24	0.26	0.361	0.31	0.405	0.488	0.57	1.52	0.186	0.023	0.51
Physical Parameters, pH (unitless)	63	0	0	6.77	6.77	6.994	7.11	7.265	7.24	7.415	7.62	7.86	7.86	0.240	0.030	0.03
Total Metals, Aluminum (µg/L)	63	0	0	7.7	7.7	9.2	10.55	14.516	12.2	14.8	17.08	18	79.5	11.318	1.426	0.78
Total Metals, Antimony (µg/L)	63	61	97	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.3	0.028	0.004	0.27
Total Metals, Arsenic (µg/L)	63	42	67	0.2	0.2	0.2	0.2	0.240	0.2	0.3	0.3	0.4	0.4	0.061	0.008	0.25
Total Metals, Barium (µg/L)	63	0	0	2.2	2.2	2.5	2.75	3.533	3.1	4.15	5.1	5.8	7.2	1.146	0.144	0.32
Total Metals, Beryllium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	33	33	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	33	3	9	0.9	0.9	1	1	1.276	1.1	1.3	1.94	1.7	2.4	0.397	0.069	0.31
Total Metals, Cadmium (µg/L)	63	61	97	0.04	0.04	0.04	0.04	0.047	0.05	0.05	0.05	0.05	0.16	0.016	0.002	0.33
Total Metals, Cesium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	63	60	95	0.1	0.1	0.1	0.1	0.211	0.1	0.1	0.1	0.1	6.8	0.844	0.106	4.00
Total Metals, Cobalt (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	63	1	2	0.2	0.3	0.5	0.6	0.684	0.7	0.8	0.8	0.9	1.3	0.156	0.020	0.23
Total Metals, Iron (µg/L)	63	6	10	5	5	10.2	13	20.032	16	20.5	39	31	65	12.371	1.559	0.62
Total Metals, Lead (µg/L)	63	59	94	0.1	0.1	0.1	0.1	0.262	0.1	0.1	0.1	0.1	9.1	1.136	0.143	4.34
Total Metals, Lithium (µg/L)	63	0	0	0.4	0.7	0.8	0.8	0.941	0.9	1	1	1.1	3	0.401	0.050	0.43
Total Metals, Manganese (µg/L)	63	0	0	0.3	0.3	1.32	1.65	2.511	2	2.75	5.48	4.2	7	1.482	0.187	0.59
Total Metals, Mercury (ng/L)	51	6	12	0.00029	0.00029	0.00097	0.2	0.509	0.5	0.7	0.9	1.4	1.8	0.413	0.058	0.81
Total Metals, Mercury (µg/L)	59	59	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.18
Total Metals, Molybdenum (µg/L)	63	62	98	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.025	0.003	0.24
Total Metals, Nickel (µg/L)	63	0	0	0.4	0.4	0.42	0.5	0.552	0.6	0.6	0.7	0.7	0.7	0.086	0.011	0.16
Total Metals, Rubidium (µg/L)	63	0	0	0.8	1.1	1.2	1.2	1.263	1.3	1.3	1.4	1.4	1.5	0.130	0.016	0.10
Total Metals, Selenium (µg/L)	63	60	95	0.3	0.3	0.3	0.3	0.348	0.3	0.3	0.3	0.3	1.8	0.256	0.032	0.74
Total Metals, Silver (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	63	0	0	4.5	4.5	6.3	6.7	8.052	7.3	9	10.56	12	14.2	2.089	0.263	0.26
Total Metals, Thallium (µg/L)	63	63	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	63	42	67	0.1	0.1	0.1	0.1	0.176	0.1	0.2	0.2	0.2	1.2	0.190	0.024	1.08
Total Metals, Uranium (µg/L)	63	58	92	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.2	0.027	0.003	0.25
Total Metals, Vanadium (µg/L)	63	62	98	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.4	0.038	0.005	0.36
Total Metals, Zinc (µg/L)	61	45	74	0.4	0.4	0.4	0.4	0.531	0.4	0.5	0.8	0.6	2.5	0.351	0.045	0.66

Table B.2.4-1 Coppermine River Above Copper Creek (COR04)

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	62	1	2	0.5	0.5	5.08	9.975	26.755	20.5	31.25	53.35	56.7	121	24.889	3.161	0.93
Dissolved Metals, Antimony (µg/L)	62	0	0	0.009	0.009	0.0131	0.02025	0.059	0.0495	0.073	0.0964	0.097	0.23	0.049	0.006	0.83
Dissolved Metals, Arsenic (µg/L)	75	2	3	0.01	0.1	0.1	0.17	0.188	0.2	0.22	0.23	0.29	0.31	0.054	0.006	0.29
Dissolved Metals, Barium (µg/L)	62	1	2	0.05	0.05	9.487	11	21.164	21.5	26.35	34.84	48.5	54.6	10.999	1.397	0.52
Dissolved Metals, Beryllium (µg/L)	62	7	11	0.001	0.001	0.001	0.00125	0.003	0.002	0.003	0.0049	0.005	0.007	0.001	0.000	0.57
Dissolved Metals, Bismuth (µg/L)	62	25	40	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.004	0.003	0.007	0.002	0.000	0.88
Dissolved Metals, Boron (µg/L)	62	1	2	0.5	0.5	1.5	1.6	2.240	2.1	2.575	3.49	3.5	4.7	0.840	0.107	0.38
Dissolved Metals, Cadmium (µg/L)	62	3	5	0.001	0.001	0.0011	0.003	0.029	0.005	0.0145	0.1216	0.025	0.221	0.056	0.007	1.89
Dissolved Metals, Cerium (µg/L)	62	1	2	0.001	0.001	0.0201	0.0305	0.099	0.082	0.1655	0.203	0.262	0.262	0.074	0.009	0.75
Dissolved Metals, Cesium (µg/L)	62	9	15	0.001	0.001	0.002	0.003	0.006	0.005	0.006	0.009	0.009	0.026	0.005	0.001	0.81
Dissolved Metals, Chromium (µg/L)	62	0	0	0.01	0.01	0.061	0.09	0.177	0.13	0.15975	0.4868	0.22	0.74	0.162	0.021	0.91
Dissolved Metals, Cobalt (µg/L)	62	1	2	0.002	0.002	0.0091	0.019	0.031	0.0275	0.037	0.0509	0.062	0.106	0.021	0.003	0.67
Dissolved Metals, Copper (µg/L)	62	0	0	0.5	0.5	0.831	0.9425	1.427	1.17	1.7675	2.273	2.85	3.26	0.630	0.080	0.44
Dissolved Metals, Iron (µg/L)	62	1	2	0.5	0.5	8.63	19.325	47.995	40.4	66.55	84.41	96.8	180	37.054	4.706	0.77
Dissolved Metals, Lead (µg/L)	62	0	0	0.006	0.006	0.013	0.019	0.284	0.036	0.0565	0.2126	0.096	13.1	1.658	0.211	5.84
Dissolved Metals, Lithium (µg/L)	62	1	2	0.01	0.56	0.601	0.6625	0.762	0.755	0.84	0.919	1.1	1.1	0.163	0.021	0.21
Dissolved Metals, Manganese (µg/L)	62	1	2	0.05	0.05	0.461	0.9525	1.991	1.615	2.855	3.683	4.99	9.77	1.581	0.201	0.79
Dissolved Metals, Molybdenum (µg/L)	62	1	2	0.005	0.045	0.052	0.055	0.063	0.0635	0.06875	0.074	0.08	0.149	0.016	0.002	0.25
Dissolved Metals, Nickel (µg/L)	62	0	0	0.07	0.07	0.36	0.435	0.608	0.525	0.7275	0.856	1.09	2.31	0.314	0.040	0.52
Dissolved Metals, Rubidium (µg/L)	62	0	0	0.002	0.623	0.652	0.75325	0.925	0.9375	1.0875	1.17	1.44	1.44	0.238	0.030	0.26
Dissolved Metals, Selenium (µg/L)	75	27	36	0.01	0.01	0.01	0.02	0.040	0.02	0.05	0.1	0.05	0.1	0.031	0.004	0.78
Dissolved Metals, Silver (µg/L)	62	32	52	0.001	0.001	0.001	0.001	0.005	0.001	0.001	0.0029	0.001	0.18	0.023	0.003	4.91
Dissolved Metals, Strontium (µg/L)	62	1	2	0.05	6.88	7.93	8.5475	9.204	9.115	9.985	10.78	12	13	1.685	0.214	0.18
Dissolved Metals, Thallium (µg/L)	62	9	15	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.0029	0.003	0.004	0.001	0.000	0.44
Dissolved Metals, Tin (µg/L)	62	34	55	0.005	0.005	0.005	0.005	0.012	0.005	0.00875	0.0363	0.01	0.106	0.017	0.002	1.35
Dissolved Metals, Titanium (µg/L)	21	5	24	0.05	0.05	0.05	0.1	0.595	0.25	0.97	1.66	2.1	2.1	0.679	0.148	1.14
Dissolved Metals, Tungsten (µg/L)	62	9	15	0.001	0.001	0.001	0.001	0.005	0.002	0.003	0.0098	0.006	0.125	0.016	0.002	2.92
Dissolved Metals, Uranium (µg/L)	62	1	2	0.0005	0.0005	0.0646	0.0899	0.148	0.1465	0.19475	0.2261	0.259	0.493	0.077	0.010	0.52
Dissolved Metals, Vanadium (µg/L)	62	0	0	0.017	0.017	0.0507	0.09	0.130	0.1215	0.15825	0.1912	0.252	0.366	0.069	0.009	0.53
Dissolved Metals, Zinc (µg/L)	62	5	8	0.2	0.2	0.21	0.4	2.062	0.745	1.445	6.347	2.92	20.8	3.503	0.445	1.70
Field Measurements, Specific Conductivity (µS/cm)	40	0	0	30	30	40	49.75	78.688	63.55	90	100.4	106	410	60.298	9.534	0.77
Field Measurements, pH (unitless)	42	0	0	6.09	6.5	7.2	7.4075	7.751	7.77	8.11	8.363	8.7	9.26	0.584	0.090	0.08
Major Ions, Bicarbonate (calc'd) (mg/L)	3	0	0	50.589	50.589	50.6376	50.7105	50.832	50.832	50.954	51.0272	51.076	51.076	0.244	0.141	0.00
Major Ions, Carbonate (calc'd) (mg/L)	3	3	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	91	1	1	0.05	0.05	4.64	5.095	8.407	7.7	9.695	12.3	12.8	32.6	4.916	0.515	0.58
Major Ions, Dissolved Chloride (mg/L)	91	1	1	0.02	0.23	0.3	0.33	0.509	0.39	0.49	0.74	0.67	5.62	0.583	0.061	1.15
Major Ions, Dissolved Fluoride (mg/L)	91	1	1	0.01	0.03	0.02	0.03	0.032	0.03	0.03	0.04	0.03	0.09	0.014	0.001	0.45
Major Ions, Dissolved Magnesium (mg/L)	91	0	0	0.01	0.01	1.95	2.115	3.967	3.65	4.815	7.2	8.12	10.8	2.141	0.224	0.54
Major Ions, Dissolved Potassium (mg/L)	91	0	0	0.01	0.37	0.43	0.46	0.569	0.51	0.61	0.82	0.82	1.47	0.197	0.021	0.35
Major Ions, Dissolved Sodium (mg/L)	91	0	0	0.02	0.45	0.49	0.54	0.720	0.61	0.73	0.84	1.01	6.29	0.641	0.067	0.89
Major Ions, Dissolved Sulphate (mg/L)	91	1	1	0.02	0.8	1.26	1.495	2.577	1.92	2.36	2.6	2.87	35.8	4.424	0.464	1.72
Major Ions, Hydroxide (calc'd) (mg/L)	3	3	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	88	20	23	0	0	0	0.137	2.692	1.4615	2.89575	4.8745	6.763	64.632	7.117	0.759	2.64
Major Ions, Silica (mg/L)	91	1	1	0.02	0.02	0.56	0.61	1.237	1.01	1.695	2.42	2.67	4.34	0.839	0.088	0.68
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	92	0	0	16.2	16.2	18.91	20.875	35.740	33.85	42.575	56.07	59.2	169	20.414	2.128	0.57
Major Ions, Total Calcium (mg/L)	8	0	0	4.34	4.34	5.012	5.315	6.191	6	6.7125	7.446	6.72	9.14	1.472	0.520	0.24
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	90	0	0	0.166	0.166	19.864	21.909	37.523	34.276	44.34125	60.393	63.704	119.561	20.464	2.157	0.55
Major Ions, Total Magnesium (mg/L)	8	0	0	1.67	1.67	2.041	2.2075	2.849	2.73	3.26	3.716	4.71	4.71	0.967	0.342	0.34
Major Ions, Total Potassium (mg/L)	8	0	0	0.38	0.38	0.38	0.38	0.496	0.405	0.4525	0.7	0.55	1.05	0.231	0.082	0.46
Major Ions, Total Sodium (mg/L)	8	0	0	0.36	0.36	0.367	0.37	0.433	0.43	0.4625	0.5	0.57	0.57	0.070	0.025	0.16
Nutrients, Dissolved Ammonia, as N (mg/L)	91	50	55	0.005	0.005	0.005	0.005	0.010	0.006	0.01	0.017	0.017	0.09	0.011	0.001	1.05
Nutrients, Dissolved Nitrogen (mg/L)	53	1	2	0.06	0.06	0.15	0.18	0.266	0.21	0.31	0.436	0.47	0.97	0.156	0.021	0.58
Nutrients, Dissolved Organic Carbon (mg/L)	92	0	0	0.7	0.7	2.8	3.3	4.460	3.95	5.9	7.08	9.3	9.3	1.727	0.180	0.39
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	89	0	0	0.756	0.756	0.9812	1.295	2.131	1.588	2.025	2.9254	3.055	13.52	2.209	0.234	1.04

Table B.2.4-1 Coppermine River Above Copper Creek (COR04)

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Nitrate, as N (mg/L)	58	6	10	0.01	0.01	0.01	0.02	0.050	0.06	0.07	0.083	0.14	0.16	0.034	0.004	0.67
Nutrients, Nitrate/Nitrite, as N (mg/L)	85	12	14	0.01	0.01	0.01	0.016	0.070	0.03	0.07	0.09	0.14	2	0.215	0.023	3.10
Nutrients, Nitrite, as N (mg/L)	58	55	95	0.001	0.01	0.01	0.01	0.011	0.01	0.01	0.01	0.01	0.06	0.007	0.001	0.65
Nutrients, Particulate Nitrogen (mg/L)	91	4	4	0.002	0.002	0.015	0.027	0.075	0.048	0.073	0.159	0.14	0.894	0.108	0.011	1.44
Nutrients, Particulate Organic Carbon (mg/L)	91	0	0	0.065	0.065	0.188	0.2545	0.550	0.341	0.55	0.946	0.972	8.14	0.890	0.093	1.62
Nutrients, Total Dissolved Nitrogen (mg/L)	39	0	0	0.046	0.046	0.0608	0.1025	0.212	0.19	0.285	0.3696	0.468	0.625	0.141	0.023	0.66
Nutrients, Total Dissolved Phosphorus (mg/L)	81	40	49	0.002	0.002	0.002	0.003	0.018	0.01	0.01	0.02	0.02	0.611	0.068	0.008	3.73
Nutrients, Total Nitrogen (mg/L)	58	0	0	0.06	0.06	0.17	0.19	0.284	0.225	0.3575	0.433	0.51	0.94	0.157	0.021	0.55
Nutrients, Total Phosphorus (mg/L)	88	18	20	0.002	0.002	0.0027	0.00675	0.020	0.01	0.03	0.0489	0.064	0.082	0.020	0.002	1.01
Physical Parameters, Specific Conductivity (µS/cm)	91	0	0	30.1	30.1	44.1	47.6	76.547	67.9	87.15	111	117	493	51.889	5.439	0.68
Physical Parameters, Total Dissolved Solids (mg/L)	85	0	0	20.227	20.227	22.546	24.69	40.202	35.85	45.29	59.992	61.221	195.41	23.734	2.574	0.59
Physical Parameters, Total Suspended Solids (mg/L)	91	30	33	3	3	3	3	13.088	4	13.5	29	29	225	25.721	2.696	1.97
Physical Parameters, Turbidity (NTU)	92	0	0	0.08	0.08	0.762	1.3625	5.323	2.29	6.8025	15.57	14.8	36	6.570	0.685	1.23
Physical Parameters, pH (unitless)	91	0	0	6.41	6.96	7.17	7.335	7.565	7.69	7.78	7.86	8.03	8.03	0.329	0.034	0.04
Total Metals, Aluminum (µg/L)	90	1	1	0.5	0.5	16.34	32.725	146.009	78.2	178	421	328	763	174.345	18.378	1.19
Total Metals, Antimony (µg/L)	82	3	4	0.001	0.001	0.012	0.014	0.042	0.019	0.03	0.1028	0.053	0.385	0.063	0.007	1.51
Total Metals, Arsenic (µg/L)	77	1	1	0.01	0.15	0.166	0.22	0.241	0.24	0.29	0.31	0.36	0.36	0.058	0.007	0.24
Total Metals, Barium (µg/L)	90	1	1	0.05	0.05	9.497	11.225	22.471	22.6	28.55	40.7	51.7	63.4	12.439	1.311	0.55
Total Metals, Beryllium (µg/L)	90	15	17	0.001	0.001	0.001	0.002	0.010	0.004	0.015	0.0243	0.027	0.05	0.014	0.001	1.35
Total Metals, Bismuth (µg/L)	82	12	15	0.001	0.001	0.001	0.001	0.005	0.003	0.009	0.011	0.02	0.023	0.005	0.001	0.97
Total Metals, Boron (µg/L)	82	6	7	0.1	0.1	1	1.4	2.061	1.8	2.4	3.5	3.5	5.3	1.156	0.128	0.56
Total Metals, Cadmium (µg/L)	90	3	3	0.001	0.001	0.002	0.00325	0.072	0.009	0.1	0.2	0.207	0.59	0.130	0.014	1.81
Total Metals, Cerium (µg/L)	77	1	1	0.001	0.001	0.0416	0.094	0.401	0.174	0.487	1.192	1	2.02	0.464	0.053	1.16
Total Metals, Cesium (µg/L)	82	2	2	0.001	0.001	0.004	0.007	0.023	0.012	0.03625	0.064	0.068	0.095	0.023	0.003	1.00
Total Metals, Chromium (µg/L)	90	1	1	0.03	0.03	0.1	0.147	0.533	0.2895	0.83425	1.031	1.35	3.04	0.560	0.059	1.05
Total Metals, Cobalt (µg/L)	90	0	0	0.003	0.003	0.019	0.0335	0.127	0.0635	0.17525	0.3325	0.381	0.5	0.128	0.014	1.01
Total Metals, Copper (µg/L)	90	0	0	0.73	0.73	0.919	1.1	1.775	1.49	2.065	3.107	3.27	6.9	1.103	0.116	0.62
Total Metals, Gallium (µg/L)	82	1	1	0.001	0.001	0.005	0.011	0.049	0.022	0.06475	0.1548	0.111	0.217	0.057	0.006	1.16
Total Metals, Iron (µg/L)	90	0	0	1.7	1.7	21.18	58.575	207.549	112.5	291.5	616.8	633	949	223.074	23.514	1.07
Total Metals, Lead (µg/L)	90	4	4	0.005	0.005	0.0269	0.04175	2.856	0.1365	0.29575	0.5642	0.516	168	18.156	1.914	6.36
Total Metals, Lithium (µg/L)	90	1	1	0.01	0.59	0.7	0.7825	0.920	0.87	1	1.264	1.32	1.65	0.247	0.026	0.27
Total Metals, Manganese (µg/L)	90	1	1	0.05	0.05	1.03	3.885	8.693	5.39	9.6325	22.21	17.3	34.9	8.305	0.875	0.96
Total Metals, Molybdenum (µg/L)	90	3	3	0.005	0.025	0.0449	0.05225	0.097	0.062	0.07075	0.1	0.097	1.84	0.209	0.022	2.15
Total Metals, Nickel (µg/L)	90	3	3	0.2	0.2	0.4	0.46	0.942	0.64	1.08	1.34	1.74	14.8	1.545	0.163	1.64
Total Metals, Niobium (µg/L)	82	11	13	0.001	0.001	0.002	0.002	0.013	0.0055	0.018	0.0379	0.04	0.058	0.015	0.002	1.16
Total Metals, Rubidium (µg/L)	82	0	0	0.002	0.66	0.891	0.96925	1.124	1.115	1.2775	1.419	1.72	1.85	0.269	0.030	0.24
Total Metals, Selenium (µg/L)	77	32	42	0.01	0.01	0.01	0.02	0.034	0.03	0.05	0.05	0.06	0.12	0.020	0.002	0.60
Total Metals, Silver (µg/L)	90	36	40	0.001	0.001	0.001	0.001	0.036	0.0015	0.005	0.0253	0.011	0.9	0.136	0.014	3.81
Total Metals, Strontium (µg/L)	90	1	1	0.05	7	7.388	8.36	9.165	9.065	9.885	11.11	11.5	13.9	1.739	0.183	0.19
Total Metals, Thallium (µg/L)	82	10	12	0.001	0.001	0.001	0.001	0.003	0.002	0.004	0.006	0.008	0.019	0.003	0.000	0.89
Total Metals, Tin (µg/L)	82	27	33	0.005	0.005	0.005	0.005	0.024	0.008	0.01575	0.0565	0.027	0.271	0.046	0.005	1.92
Total Metals, Titanium (µg/L)	21	0	0	0.38	0.38	0.39	0.98	4.300	1.52	3.29	16	5.72	17.2	5.717	1.248	1.33
Total Metals, Tungsten (µg/L)	82	9	11	0.001	0.001	0.001	0.002	0.006	0.003	0.007	0.01	0.014	0.089	0.011	0.001	1.77
Total Metals, Uranium (µg/L)	82	0	0	0.0005	0.0005	0.06971	0.0842	0.151	0.154	0.2085	0.2354	0.293	0.293	0.069	0.008	0.46
Total Metals, Vanadium (µg/L)	90	0	0	0.017	0.017	0.0727	0.12775	0.346	0.2185	0.4435	0.8556	0.91	1.4	0.316	0.033	0.91
Total Metals, Zinc (µg/L)	90	3	3	0.16	0.16	0.249	0.4	3.170	1.165	2.47	7.226	5.38	38	5.769	0.608	1.82

Table B.4.2-2 Coppermine River at Outlet of Point Lake (COR02) - Entire Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	10	0	0	9.8	9.8	10.34	10.425	12.260	10.9	12.225	14.3	13.4	22.4	3.723	1.177	0.30
Dissolved Metals, Antimony (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	81	40	49	0.1	0.1	0.1	0.1	0.402	0.2	0.5	0.5	0.5	8	1.029	0.114	2.56
Dissolved Metals, Barium (µg/L)	10	0	0	2	2	2.09	2.125	2.530	2.2	2.6	3.31	3.2	4.3	0.718	0.227	0.28
Dissolved Metals, Beryllium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	49	29	59	0.9	20	1.72	20	18.088	20	20	20	20	70	11.455	1.636	0.63
Dissolved Metals, Cadmium (µg/L)	10	10	100	0.04	0.04	0.04	0.04	0.043	0.04	0.0475	0.05	0.05	0.05	0.005	0.002	0.11
Dissolved Metals, Cesium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	10	9	90	0.1	0.1	0.1	0.1	0.110	0.1	0.1	0.11	0.1	0.2	0.032	0.010	0.29
Dissolved Metals, Cobalt (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	15	2	13	0.6	0.6	0.6	0.7	1.027	0.8	1	1.64	1.1	3	0.647	0.167	0.63
Dissolved Metals, Iron (µg/L)	16	9	56	1	1	5	5	17.875	6	18.5	45	20	90	23.608	5.902	1.32
Dissolved Metals, Lead (µg/L)	15	14	93	0.1	0.1	0.1	0.1	0.600	0.1	1	1	1	4	1.025	0.265	1.71
Dissolved Metals, Lithium (µg/L)	10	0	0	0.9	0.9	0.9	1	1.040	1	1.1	1.12	1.1	1.3	0.117	0.037	0.11
Dissolved Metals, Manganese (µg/L)	16	6	38	0.3	0.3	0.4	0.575	3.738	0.85	10	10	10	10	4.419	1.105	1.18
Dissolved Metals, Mercury (ng/L)	1	1	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Mercury (µg/L)	7	7	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	10	0	0	0.7	0.7	0.7	0.7	0.790	0.75	0.8	1	0.8	1	0.120	0.038	0.15
Dissolved Metals, Rubidium (µg/L)	10	0	0	1.2	1.2	1.2	1.25	1.490	1.5	1.575	1.74	1.7	2.1	0.277	0.087	0.19
Dissolved Metals, Selenium (µg/L)	79	70	89	0	0	0.1	0.1	0.238	0.1	0.5	0.5	0.7	0.7	0.186	0.021	0.78
Dissolved Metals, Silver (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	10	0	0	6.5	6.5	6.5	6.65	7.640	7.5	8.05	8.94	8.8	10.2	1.177	0.372	0.15
Dissolved Metals, Thallium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	15	5	33	0.4	0.4	0.4	0.4	12.513	0.8	2.75	8.4	3	160	40.907	10.562	3.27
Field Measurements, Specific Conductivity (µS/cm)	57	0	0	4.6	8.8	10	11	12.689	12	14	16.12	18	23	2.985	0.395	0.24
Field Measurements, Turbidity (JTU)	2	0	0	0.2	0.2	0.26	0.35	0.500	0.5	0.65	0.74	0.8	0.8	0.424	0.300	0.85
Field Measurements, pH (unitless)	48	0	0	5.75	5.75	6.387	6.68	7.018	6.94	7.3525	7.56	7.83	8.58	0.542	0.078	0.08
Major Ions, Bicarbonate (calc'd) (mg/L)	63	0	0	0.1	2.4	3.32	3.7	4.263	4.1	4.9	5.44	6.1	8.8	1.206	0.152	0.28
Major Ions, Carbonate (calc'd) (mg/L)	63	63	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	110	5	5	0.1	0.7	0.895	1	1.197	1.1	1.3	1.6	1.7	4.2	0.532	0.051	0.44
Major Ions, Dissolved Chloride (mg/L)	111	10	9	0.1	0.1	0.23	0.3	0.448	0.37	0.5	0.7	0.75	2.4	0.338	0.032	0.75
Major Ions, Dissolved Fluoride (mg/L)	107	35	33	0.01	0.01	0.0148	0.02	0.040	0.03	0.05	0.074	0.08	0.21	0.030	0.003	0.75
Major Ions, Dissolved Magnesium (mg/L)	90	2	2	0.1	0.4	0.42	0.47	0.530	0.5	0.5375	0.8	0.6	1.1	0.155	0.016	0.29
Major Ions, Dissolved Potassium (mg/L)	110	0	0	0.2	0.3	0.3	0.4	0.471	0.43	0.4875	0.6	0.6	2.87	0.257	0.025	0.55
Major Ions, Dissolved Sodium (mg/L)	111	1	1	0.1	0.3	0.4	0.44	0.522	0.5	0.6	0.7	0.8	1.4	0.163	0.015	0.31
Major Ions, Dissolved Sulphate (mg/L)	111	8	7	0.3	0.3	1	1.2	1.932	1.6	2	2.3	3	33	3.033	0.288	1.57
Major Ions, Hydroxide (calc'd) (mg/L)	47	47	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	47	4	9	0	0	0.1	0.45	1.177	1.1	1.55	2.08	2.9	4.5	0.963	0.140	0.82
Major Ions, Reactive Silica (mg/L)	74	4	5	0.1	0.1	0.165	0.2	0.304	0.3	0.32	0.3614	0.489	2.25	0.247	0.029	0.81
Major Ions, Silica (mg/L)	37	0	0	0.16	0.23	0.26	0.28	0.326	0.33	0.35	0.41	0.41	0.5	0.066	0.011	0.20
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	109	4	4	1.1	1.4	2.38	3	4.064	3.4	4.18	5.04	5.7	38.4	3.723	0.357	0.92
Major Ions, Total Calcium (mg/L)	17	0	0	0.9	0.9	0.9	0.93	0.989	1	1.04	1.06	1.13	1.13	0.067	0.016	0.07
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	93	3	3	0.5	3.13	3.652	4.3	5.016	4.8	5.5	7.12	7.3	17.8	2.158	0.224	0.43
Major Ions, Total Magnesium (mg/L)	17	0	0	0.41	0.41	0.41	0.44	0.454	0.46	0.48	0.48	0.49	0.49	0.027	0.007	0.06
Major Ions, Total Potassium (mg/L)	17	0	0	0.32	0.32	0.32	0.33	0.364	0.36	0.39	0.404	0.45	0.45	0.036	0.009	0.10
Major Ions, Total Sodium (mg/L)	17	1	6	0.02	0.02	0.176	0.18	0.301	0.29	0.35	0.394	0.4	0.85	0.171	0.041	0.57
Microbiology, Chlorophyll a (µg/L)	10	9	90	1	1	1	1	1.330	1	1.825	2	2	2	0.472	0.149	0.35
Nutrients, Dissolved Ammonia, as N (mg/L)	14	0	0	0.006	0.006	0.008	0.009	0.023	0.01	0.0135	0.0192	0.015	0.18	0.045	0.012	1.97

Table B.4.2-2 Coppermine River at Outlet of Point Lake (COR02) - Entire Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Inorganic Carbon (mg/L)	13	2	15	0.9	0.9	1	1	3.177	1.1	1.2	8.32	1.2	19	5.353	1.485	1.69
Nutrients, Dissolved Inorganic Phosphate (mg/L)	5	5	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Dissolved Nitrate/Nitrite, as N (mg/L)	8	0	0	0.008	0.008	0.0157	0.02575	0.047	0.0625	0.06425	0.068	0.068	0.068	0.025	0.009	0.52
Nutrients, Dissolved Nitrogen (mg/L)	10	0	0	0.169	0.169	0.1699	0.17125	0.198	0.1795	0.2175	0.243	0.27	0.27	0.035	0.011	0.18
Nutrients, Dissolved Organic Carbon (mg/L)	90	1	1	1	1.4	1.8	2	2.338	2.24	2.5	3.01	3.1	4	0.551	0.058	0.24
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	5	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	45	0	0	0.02	0.02	0.21	0.36	1.447	0.99	2.13	3.144	4.74	5.95	1.349	0.201	0.93
Nutrients, Nitrate, as N (mg/L)	10	0	0	0.02	0.02	0.029	0.0325	0.042	0.04125	0.04295	0.04898	0.0444	0.0902	0.019	0.006	0.44
Nutrients, Nitrate/Nitrite, as N (mg/L)	87	1	1	0.019	0.019	0.03	0.04	0.056	0.05	0.063	0.074	0.0902	0.34	0.036	0.004	0.65
Nutrients, Nitrite, as N (mg/L)	10	10	100	0.001	0.001	0.001	0.001	0.006	0.0055	0.01	0.01	0.01	0.01	0.005	0.002	0.86
Nutrients, Particulate Nitrogen (mg/L)	80	19	24	0.006	0.006	0.01	0.01	0.022	0.017	0.026	0.0313	0.05	0.227	0.026	0.003	1.18
Nutrients, Particulate Organic Carbon (mg/L)	80	0	0	0.03	0.03	0.0756	0.093	0.168	0.1385	0.1655	0.211	0.267	2.58	0.279	0.031	1.67
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	72	56	78	0	0.001	0	0.004	0.007	0.004	0.006	0.007	0.008	0.096	0.013	0.002	2.02
Nutrients, Total Ammonia, as N (mg/L)	10	9	90	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.0057	0.005	0.012	0.002	0.001	0.39
Nutrients, Total Dissolved Nitrogen (mg/L)	90	3	3	0.008	0.085	0.12	0.13075	0.174	0.149	0.18975	0.2386	0.25	0.567	0.091	0.010	0.53
Nutrients, Total Dissolved Phosphorus (mg/L)	99	47	47	0.001	0.001	0.002	0.003	0.004	0.003	0.005	0.006	0.008	0.028	0.003	0.000	0.77
Nutrients, Total Inorganic Carbon (mg/L)	8	1	13	0.5	1	0.85	1	1.063	1	1	1.3	1	2	0.417	0.148	0.39
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	13	9	69	0.05	0.05	0.118	0.2	0.395	0.5	0.5	0.5	0.64	0.64	0.188	0.052	0.48
Nutrients, Total Nitrogen (calc'd) (mg/L)	48	0	0	0.11	0.11	0.14	0.15	0.173	0.16	0.1825	0.233	0.23	0.37	0.048	0.007	0.28
Nutrients, Total Nitrogen (mg/L)	10	0	0	0.168	0.168	0.1716	0.185	0.215	0.22	0.23075	0.253	0.28	0.28	0.036	0.011	0.17
Nutrients, Total Organic Carbon (calc'd) (mg/L)	42	1	2	1.1	1.88	2.021	2.18	2.405	2.295	2.4675	2.609	2.61	4.95	0.662	0.102	0.28
Nutrients, Total Organic Carbon (mg/L)	18	0	0	2	2	2.91	3.025	3.511	3.6	4	4.06	5	5	0.688	0.162	0.20
Nutrients, Total Phosphorus (mg/L)	89	24	27	0.002	0.002	0.002	0.003	0.009	0.005	0.009	0.0164	0.018	0.1	0.014	0.001	1.48
Nutrients, o-Phosphate, as P (mg/L)	10	9	90	0.001	0.001	0.001	0.00125	0.002	0.002	0.002	0.0021	0.003	0.003	0.001	0.000	0.35
Physical Parameters, Specific Conductivity (µS/cm)	118	0	0	7.1	10.8	12.47	13	14.319	13.85	14.675	17.79	17	28	2.591	0.239	0.18
Physical Parameters, Total Dissolved Solids (mg/L)	62	0	0	4	4	5.62	6.075	7.068	7	8	8	10	12	1.370	0.174	0.19
Physical Parameters, Total Suspended Solids (mg/L)	97	73	75	1	1	1	1	2.460	3	3	4	6	12	1.799	0.183	0.73
Physical Parameters, Turbidity (NTU)	70	1	1	0.07	0.07	0.156	0.2	0.465	0.265	0.4	0.9	0.7	3.7	0.653	0.078	1.40
Physical Parameters, pH (unitless)	118	0	0	5.96	6.1	6.407	6.58	6.770	6.725	6.9	7.2	7.38	8.06	0.352	0.032	0.05
Total Metals, Aluminum (µg/L)	27	0	0	12.6	12.6	13	14.4	20.385	15.1	20	35	26.3	56	11.913	2.293	0.58
Total Metals, Antimony (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	72	44	61	1.6	1.6	1.8	2.175	47.735	50	80	100	100	100	38.542	4.542	0.81
Total Metals, Beryllium (µg/L)	27	27	100	0.05	0.05	0.05	0.05	0.069	0.05	0.1	0.1	0.1	0.1	0.025	0.005	0.36
Total Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	10	1	10	0.9	0.9	0.99	1.1	1.480	1.5	1.85	1.93	2.2	2.2	0.447	0.141	0.30
Total Metals, Cadmium (µg/L)	73	53	73	0.04	0.04	0.05	0.1	0.461	0.1	1	1	2	2	0.495	0.058	1.08
Total Metals, Cesium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	27	20	74	0.1	0.1	0.1	0.1	0.185	0.2	0.2	0.24	0.3	0.4	0.072	0.014	0.39
Total Metals, Cobalt (µg/L)	73	65	89	0.1	0.1	0.1	0.1	0.888	0.5	1	2	2	10	1.412	0.165	1.59
Total Metals, Copper (µg/L)	73	6	8	0.6	0.6	0.7	0.8	1.612	1	1.2	2.36	1.3	14	2.086	0.244	1.29
Total Metals, Iron (µg/L)	27	0	0	3.1	3.1	5.44	6.7	15.719	9.5	20	38.2	37	47.3	13.462	2.591	0.86
Total Metals, Lead (µg/L)	73	63	86	0.1	0.1	0.1	0.2	1.238	0.7	1	4	2.1	4	1.409	0.165	1.14
Total Metals, Lithium (µg/L)	27	0	0	0.5	0.6	0.5	0.8	0.841	0.9	0.95	1.04	1.1	1.4	0.212	0.041	0.25
Total Metals, Manganese (µg/L)	27	0	0	0.4	0.4	0.5	0.55	1.152	0.7	1.2	2.78	1.9	3.6	0.982	0.189	0.85
Total Metals, Mercury (ng/L)	10	0	0	0.3	0.3	0.39	0.55	1.500	0.85	1.15	3.72	1.2	5.7	1.736	0.549	1.16
Total Metals, Mercury (µg/L)	8	8	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	27	24	89	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	72	24	33	0.3	0.3	0.5	0.7	1.496	0.8	1.1	2	1.3	16.9	2.398	0.283	1.60
Total Metals, Rubidium (µg/L)	10	0	0	1.2	1.2	1.29	1.325	1.490	1.45	1.575	1.73	1.7	2	0.233	0.074	0.16
Total Metals, Selenium (µg/L)	10	10	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	27	0	0	4.4	4.4	4.76	5	5.993	5.2	6.95	7.9	9	9.9	1.456	0.280	0.24
Total Metals, Thallium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----

Table B.4.2-2 Coppermine River at Outlet of Point Lake (COR02) - Entire Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	10	4	40	0.1	0.1	0.1	0.1	0.200	0.2	0.275	0.31	0.4	0.4	0.105	0.033	0.53
Total Metals, Uranium (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	73	62	85	0	0	0.1	0.1	0.432	0.5	0.5	1	1	1	0.335	0.039	0.78
Total Metals, Zinc (µg/L)	71	5	7	0.3	0.3	0.5	0.85	3.034	1.8	3.7	7	7	19.7	3.661	0.434	1.21

Table B.2.4-3 Coppermine River at Mouth (COR06) - Full Year

Parameter_Name	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	SD	SE	CV
Dissolved Metals, Aluminum (µg/L)	2	0	0	20	20	21	22.5	25.000	25	27.5	29	30	30	7.071	5.000	0.28
Dissolved Metals,Arsenic (µg/L)	2	2	100	10	10	10	10	10.000	10	10	10	10	10	----	----	----
Dissolved Metals,Copper (µg/L)	8	6	75	1	1	1	1.75	5.875	6.5	10	10	10	10	4.454	1.575	0.76
Dissolved Metals,Iron (µg/L)	14	8	57	1	1	1	1	11.143	10	10	27	20	50	14.054	3.756	1.26
Dissolved Metals,Lead (µg/L)	8	6	75	1	1	1	5.5	33.625	50	50	53	60	60	25.651	9.069	0.76
Dissolved Metals,Manganese (µg/L)	12	12	100	10	10	10	10	10.000	10	10	10	10	10	----	----	----
Dissolved Metals,Zinc (µg/L)	8	4	50	1	1	2.4	3.75	7.750	7	10	13	10	20	6.112	2.161	0.79
Specific Conductivity (µS/cm)	5	0	0	20.7	20.7	21.22	22	28.340	25	29	38.6	29	45	9.845	4.403	0.35
pH	12	0	0	4.8	6.59	6.594	6.63	6.993	7.24	7.57	7.627	7.96	7.96	0.836	0.241	0.12
Dissolved Calcium (mg/L)	88	0	0	0.8	0.8	4.97	5.205	9.548	6.35	8.225	12.86	10.8	108	14.126	1.506	1.48
Dissolved Chloride (mg/L)	88	0	0	0.2	0.2	0.4	0.6	130.274	0.88	1.2325	6.98	1.8	4800	636.626	67.865	4.89
Dissolved Fluoride (mg/L)	17	11	65	0.05	0.05	0.05	0.05	0.134	0.1	0.11	0.294	0.11	0.4	0.105	0.026	0.79
Dissolved Magnesium (mg/L)	46	0	0	1.77	1.77	2.035	2.1125	2.774	2.38	3.3975	4.09	4.47	5.4	0.884	0.130	0.32
Dissolved Potassium (mg/L)	89	0	0	0.25	0.25	0.4	0.42	3.201	0.5	0.7	0.874	1.03	103	13.394	1.420	4.18
Dissolved Sodium (mg/L)	89	1	1	0.1	0.1	0.4	0.5	71.833	0.7	1	3.94	1.6	2660	351.309	37.239	4.89
Dissolved Sulphate (mg/L)	89	39	44	1	1	1	1.3	15.265	3	3	5	5	413	59.034	6.258	3.87
Phenophthalein Alkalinity, (mg/L) as CaCO3	40	40	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Reactive Silica (mg/L)	54	2	4	0.1	0.1	0.3	0.5	0.891	0.6	0.92	1.4	1.42	8.4	1.169	0.159	1.31
Total Alkalinity, (mg/L)as CaCO3	87	0	0	2.3	3.8	17.46	19.6	26.093	23.2	30.4	38.52	43	94	12.620	1.353	0.48
Total Hardness, (mg/L)as CaCO3 (calc'd)	63	0	0	4.7	4.7	20.38	21.6	57.633	24.1	34.65	48.76	50.3	1559	195.020	24.570	3.38
Dissolved Ammonia, (mg/L)as N	9	5	56	0.1	0.1	0.1	0.1	0.144	0.1	0.1	0.24	0.1	0.4	0.101	0.034	0.70
Dissolved Inorganic Phosphate (mg/L)	6	1	17	0.001	0.001	0.002	0.00325	0.005	0.0055	0.00775	0.0085	0.009	0.009	0.003	0.001	0.59
Dissolved Nitrate, (mg/L)as N	1	1	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Dissolved Organic Carbon (mg/L)	1	0	0	8.5	8.5	8.5	8.5	8.500	8.5	8.5	8.5	8.5	8.5	----	----	----
Dissolved Organic Carbon (mg/L)	10	0	0	2	2	2.45	2.625	3.040	2.75	3.075	4.5	3.1	4.5	0.825	0.261	0.27
Dissolved o-Phosphate, (mg/L)as P	39	20	51	0.001	0.001	0.002	0.002	0.037	0.002	0.0035	0.0068	0.005	1.3	0.208	0.033	5.56
Nitrate, (mg/L)as N	9	3	33	0.008	0.008	0.008	0.008	0.063	0.072	0.089	0.117	0.197	0.197	0.063	0.021	1.01
Nitrate/Nitrite, (mg/L)as N	82	3	4	0.005	0.005	0.0203	0.03	0.075	0.0605	0.093	0.1128	0.136	0.48	0.069	0.008	0.92
Nitrite, (mg/L)as N	9	9	100	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	----	----	----
Total Ammonia, (mg/L)as N	45	8	18	0.002	0.002	0.005	0.007	0.036	0.015	0.053	0.1072	0.119	0.182	0.046	0.007	1.27
Total Inorganic Carbon (mg/L)	4	1	25	0.5	4	1.55	3.125	3.625	4	4.5	5.4	6	6	2.287	1.143	0.63
Total Inorganic Phosphate (mg/L)	2	1	50	0.002	0.002	0.0054	0.0105	0.019	0.019	0.0275	0.0326	0.036	0.036	0.024	0.017	1.27
Total Organic Carbon (mg/L)	15	0	0	1	1	1.88	2.35	3.287	2.8	3.6	4.76	5	9.5	2.004	0.517	0.61
Total Phosphorus (mg/L)	52	5	10	0.002	0.002	0.005	0.00575	0.017	0.01	0.01775	0.0362	0.029	0.082	0.018	0.002	1.08
Specific Conductivity (uS/cm)	89	0	0	9	12	44	48.7	474.201	58	73.7	110.4	110	14200	1973.520	209.193	4.16
Total Dissolved Solids (mg/L)	10	0	0	23	23	29.3	32.5	43.000	39	47	64.5	63	78	16.680	5.275	0.39
Total Suspended Solids (mg/L)	38	11	29	3	3	3	3	17.184	6	11	49.1	13	127	28.827	4.676	1.68
Total Suspended Solids (mg/L)	10	6	60	3	3	3	3	13.900	3	7	37.3	8	76	23.727	7.503	1.71
Turbidity (NTU)	89	0	0	0.2	0.2	0.78	1.5	7.601	2.7	6.6	24.2	14	71	11.769	1.248	1.55
pH	89	0	0	6.4	6.4	6.892	7.1	7.322	7.34	7.6	7.7	8.3	8.3	0.336	0.036	0.05
Total Metals, Aluminum (µg/L)	10	1	10	30	30	40.8	49	201.180	61.5	171.95	315.5	215	1220	364.071	115.129	1.81
Total Metals, Antimony (µg/L)	10	2	20	0.5	0.5	0.5	0.625	0.909	0.7725	0.9	1.144	1	2.44	0.564	0.178	0.62
Total Metals, Arsenic (µg/L)	4	1	25	0.5	0.5	0.5	0.5	0.625	0.5	0.625	0.85	0.5	1	0.250	0.125	0.40
Total Metals, Barium (µg/L)	10	0	0	12	12	12.9	13	19.470	16.85	21	32.4	32	36	8.498	2.687	0.44
Total Metals, Beryllium (µg/L)	10	9	90	0.02	2	0.029	2	1.605	2	2	2	2	2	0.833	0.263	0.52
Total Metals, Bismuth (µg/L)	3	3	100	1	1	1.8	3	3.667	5	5	5	5	5	2.309	1.333	0.63
Total Metals, Cadmium (µg/L)	13	13	100	0.02	0.3	0.076	0.3	46.342	0.3	0.3	200	0.3	200	87.599	24.296	1.89
Total Metals, Cesium (µg/L)	10	7	70	0.021	0.4	0.1002	0.4	0.503	0.4	0.4	0.57	0.4	2.1	0.579	0.183	1.15
Total Metals, Chromium (µg/L)	13	8	62	0.3	3	2.312	3	1078.957	3	3	4800	3	5000	2058.846	571.021	1.91
Total Metals, Cobalt (µg/L)	13	11	85	0.609	1	0.956	1	231.504	1	1	1000	1	1000	438.110	121.510	1.89
Total Metals, Copper (µg/L)	13	7	54	0.9	0.9	2	2	1232.638	2	5.39	5000	5.39	6000	2349.609	651.664	1.91
Total Metals, Iron (µg/L)	45	0	0	39	39	79	32000	########	98000	389000	1900000	766000	7040000	########	########	2.24
Total Metals, Lead (µg/L)	13	9	69	1	1	1	1	231.589	1	1.35	1000	1.35	1000	438.062	121.496	1.89
Total Metals, Lithium (µg/L)	10	8	80	0.9	3	2.52	3	2.760	3	3	3	3	3	0.660	0.209	0.24

Table B.2.4-3 Coppermine River at Mouth (COR06) - Full Year

Parameter_Name	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	SD	SE	CV
Total Metals, Manganese (µg/L)	10	2	20	1	1	1	2	7.123	2.665	3	7.79	3	50.9	15.402	4.870	2.16
Total Metals, Molybdenum (µg/L)	10	7	70	0.08	1	0.098	1	1.018	1	1	1.2	1	3	0.793	0.251	0.78
Total Metals, Nickel (µg/L)	13	8	62	0.36	0.36	1	1	616.246	1	2.84	2800	2.84	3000	1192.447	330.725	1.94
Total Metals, Rubidium (µg/L)	10	0	0	0.8	0.87	0.8	0.8775	1.212	0.9	0.9	2.395	0.9	2.8	0.727	0.230	0.60
Total Metals, Selenium (µg/L)	10	10	100	0.3	10	0.3	10	8.060	10	10	10	10	10	4.090	1.293	0.51
Total Metals, Silver (µg/L)	10	10	100	0.006	0.3	0.006	0.3	0.241	0.3	0.3	0.3	0.3	0.3	0.124	0.039	0.51
Total Metals, Strontium (µg/L)	10	0	0	8	8	8.9	9.065	10.946	10	11.75	15.12	15	16.2	2.709	0.857	0.25
Total Metals, Thallium (µg/L)	10	10	100	0.1	0.4	0.1	0.4	0.340	0.4	0.4	0.4	0.4	0.4	0.126	0.040	0.37
Total Metals, Titanium (µg/L)	10	7	70	2.68	3	2.968	3	6.948	3	3	9.38	3	39.8	11.583	3.663	1.67
Total Metals, Uranium (µg/L)	10	7	70	0.062	0.3	0.2762	0.3	0.698	0.3	0.3	0.7371	0.3	4.5	1.338	0.423	1.92
Total Metals, Vanadium (µg/L)	10	8	80	0.19	1	0.919	1	1.047	1	1	1.128	1	2.28	0.502	0.159	0.48
Total Metals, Zinc (µg/L)	13	5	38	2.43	2.43	10	10	2935.933	11	72	12800	72	13000	5552.403	1539.960	1.89

Table B.2.4-4 Coppermine River Below Desteffany Lake (COR01) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	18	0	0	3	3	3.3	4.95	8.706	6.1	6.7	15.38	7.7	38.2	9.156	2.158	1.05
Dissolved Metals, Antimony (µg/L)	18	17	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.006	0.22
Dissolved Metals, Arsenic (µg/L)	18	13	72	0.2	0.2	0.2	0.2	0.228	0.2	0.275	0.3	0.3	0.3	0.046	0.011	0.20
Dissolved Metals, Barium (µg/L)	18	0	0	1.6	1.6	1.77	1.9	2.494	2.5	2.7	3.09	3.3	4.8	0.748	0.176	0.30
Dissolved Metals, Beryllium (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	18	18	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	18	0	0	1.4	1.4	1.57	1.7	2.300	2.4	2.675	3.2	3.2	3.2	0.637	0.150	0.28
Dissolved Metals, Cadmium (µg/L)	18	18	100	0.04	0.04	0.04	0.04	0.041	0.04	0.04	0.04	0.04	0.05	0.002	0.001	0.06
Dissolved Metals, Cesium (µg/L)	30	28	93	0.1	0.1	0.1	0.1	0.150	0.1	0.1	0.4	0.1	0.4	0.114	0.021	0.76
Dissolved Metals, Chromium (µg/L)	18	17	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.006	0.22
Dissolved Metals, Cobalt (µg/L)	18	17	94	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.1	0.1	0.3	0.047	0.011	0.42
Dissolved Metals, Copper (µg/L)	18	0	0	0.5	0.5	0.6	0.6	0.761	0.7	0.7	1.06	0.7	1.4	0.235	0.056	0.31
Dissolved Metals, Iron (µg/L)	18	9	50	5	5	5	5	10.167	5.5	8.75	15.3	12	56	12.273	2.893	1.21
Dissolved Metals, Lead (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	18	0	0	1.1	1.1	1.3	1.4	1.628	1.65	1.8	1.83	2.3	2.3	0.285	0.067	0.17
Dissolved Metals, Manganese (µg/L)	18	0	0	0.2	0.2	0.34	0.4	1.506	1	1.475	2.17	2.8	9.9	2.201	0.519	1.46
Dissolved Metals, Mercury (ng/L)	3	2	67	0.2	0.2	0.2	0.2	0.233	0.2	0.25	0.28	0.3	0.3	0.058	0.033	0.25
Dissolved Metals, Mercury (µg/L)	11	11	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	18	4	22	0.1	0.2	0.1	0.2	0.189	0.2	0.2	0.23	0.2	0.3	0.058	0.014	0.31
Dissolved Metals, Nickel (µg/L)	18	0	0	0.6	0.6	0.7	0.725	0.933	0.9	1	1.3	1.3	1.5	0.247	0.058	0.27
Dissolved Metals, Rubidium (µg/L)	18	0	0	1.6	1.6	1.67	1.825	2.050	2.05	2.2	2.4	2.4	2.8	0.309	0.073	0.15
Dissolved Metals, Selenium (µg/L)	18	18	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	18	0	0	8.3	8.3	9.74	12.5	15.194	16.3	17.8	19.84	22.6	22.6	3.967	0.935	0.26
Dissolved Metals, Thallium (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	18	17	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.006	0.22
Dissolved Metals, Uranium (µg/L)	18	16	89	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.13	0.1	0.2	0.032	0.008	0.29
Dissolved Metals, Vanadium (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	18	6	33	0.4	0.4	0.4	0.4	1.406	0.55	2.275	3.96	4.3	4.3	1.419	0.334	1.01
Field Measurements, Specific Conductivity (µS/cm)	8	0	0	11	11	11.49	12.075	22.750	12.95	14.9	38.9	17	90	27.237	9.630	1.20
Field Measurements, pH (unitless)	7	0	0	6.3	6.7	6.54	6.75	6.837	6.8	6.93	7.166	7.01	7.4	0.331	0.125	0.05
Major Ions, Dissolved Calcium (mg/L)	39	0	0	0.14	0.14	0.736	0.81	1.224	1	1.65	2	2.6	2.6	0.555	0.089	0.45
Major Ions, Dissolved Chloride (mg/L)	39	4	10	0.11	0.11	0.2	0.3	1.151	0.67	1.9	2.62	3.4	3.4	0.990	0.158	0.86
Major Ions, Dissolved Fluoride (mg/L)	18	14	78	0.023	0.1	0.025	0.1	0.084	0.1	0.1	0.1	0.1	0.1	0.031	0.007	0.38
Major Ions, Dissolved Magnesium (mg/L)	39	1	3	0.01	0.01	0.41	0.475	0.748	0.58	1.05	1.22	1.5	1.5	0.364	0.058	0.49
Major Ions, Dissolved Potassium (mg/L)	39	1	3	0.02	0.02	0.404	0.44	0.735	0.69	1	1.2	1.5	1.5	0.327	0.052	0.44
Major Ions, Dissolved Sodium (mg/L)	39	1	3	0.02	0.02	0.4	0.425	1.055	0.65	1.65	2.02	2.6	2.6	0.730	0.117	0.69
Major Ions, Dissolved Sulphate (mg/L)	39	16	41	1	3	3	3	3.281	3	3.015	4.1	3.03	6	0.910	0.146	0.28
Major Ions, Reactive Silica (mg/L)	18	1	6	0.025	0.025	0.0771	0.0925	0.190	0.157	0.20825	0.401	0.216	0.645	0.153	0.036	0.81
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	39	0	0	0.6	2.7	2.98	3.45	4.377	4.3	5.2	6.22	7.3	7.3	1.314	0.210	0.30
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	27	0	0	3.5	3.5	3.5	4.05	7.106	7.6	9.2	9.78	12.5	12.5	2.781	0.535	0.39
Microbiology, Chlorophyll a (µg/L)	17	12	71	1	1	1	1	1.641	1	1.4	2	1.9	8.2	1.731	0.420	1.05
Nutrients, Dissolved Ammonia, as N (mg/L)	6	0	0	0.004	0.004	0.0055	0.0075	0.046	0.01	0.01625	0.121	0.018	0.224	0.088	0.036	1.92
Nutrients, Dissolved Nitrogen (mg/L)	18	0	0	0.104	0.104	0.157	0.18	0.317	0.195	0.36	0.739	0.39	0.86	0.235	0.056	0.74
Nutrients, Dissolved Organic Carbon (mg/L)	22	0	0	1.6	2.6	3	3.1	3.473	3.3	3.7	4.09	4.1	6.4	0.905	0.193	0.26
Nutrients, Dissolved o-Phosphate, as P (mg/L)	21	12	57	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.000	0.000	0.11
Nutrients, Nitrate, as N (mg/L)	17	6	35	0.003	0.003	0.005	0.01	0.116	0.02	0.05	0.482	0.106	0.65	0.206	0.050	1.77
Nutrients, Nitrate/Nitrite, as N (mg/L)	38	17	45	0.005	0.005	0.008	0.008	0.059	0.01	0.0265	0.0668	0.05	0.65	0.146	0.024	2.46
Nutrients, Nitrite, as N (mg/L)	17	17	100	0.001	0.01	0.001	0.01	0.008	0.01	0.01	0.01	0.01	0.01	0.004	0.001	0.50
Nutrients, Total Ammonia, as N (mg/L)	27	9	33	0.002	0.002	0.005	0.005	0.010	0.008	0.011	0.021	0.014	0.033	0.007	0.001	0.73
Nutrients, Total Dissolved Nitrogen (mg/L)	7	0	0	0.166	0.294	0.2428	0.342	0.493	0.4	0.4345	0.8134	0.469	1.33	0.382	0.144	0.78
Nutrients, Total Dissolved Phosphorus (mg/L)	24	19	79	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.009	0.002	0.000	0.63
Nutrients, Total Nitrogen (mg/L)	18	0	0	0.126	0.126	0.184	0.1925	0.348	0.265	0.3775	0.748	0.39	0.91	0.234	0.055	0.67

Table B.2.4-4 Coppermine River Below Desteffany Lake (COR01) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Organic Carbon (mg/L)	18	0	0	2.8	2.8	3.1	3.125	3.822	3.6	4.075	4.73	4.4	6.7	0.964	0.227	0.25
Nutrients, Total Phosphorus (mg/L)	39	8	21	0.002	0.002	0.002	0.0032	0.006	0.004	0.008	0.01	0.015	0.046	0.007	0.001	1.12
Nutrients, o-Phosphate, as P (mg/L)	17	16	94	0.001	0.002	0.0016	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.000	0.000	0.22
Physical Parameters, Specific Conductivity (µS/cm)	39	0	0	1.8	1.8	11.76	13.15	21.479	19	29.45	34.26	42.6	42.6	9.588	1.535	0.45
Physical Parameters, Total Dissolved Solids (mg/L)	18	8	44	10	10	10	10	21.222	13	30	37.7	44	66	15.776	3.718	0.74
Physical Parameters, Total Suspended Solids (mg/L)	39	25	64	3	3	3	3	5.923	3	5.5	10	9	48	7.717	1.236	1.30
Physical Parameters, Turbidity (NTU)	39	0	0	0.1	0.1	0.142	0.235	0.625	0.5	0.85	1.1	1.5	3.73	0.627	0.100	1.00
Physical Parameters, pH (unitless)	39	0	0	4.08	6.03	6.11	6.415	6.477	6.58	6.68	6.806	7.01	7.01	0.473	0.076	0.07
Total Metals, Aluminum (µg/L)	30	8	27	5	5	6.01	8.7	25.230	21.2	30	38.5	58.8	171	30.506	5.570	1.21
Total Metals, Antimony (µg/L)	24	17	71	0.0001	0.1	0.0003	0.0751	0.079	0.1	0.1	0.1	0.1	0.2	0.051	0.010	0.64
Total Metals, Arsenic (µg/L)	30	19	63	0.2	0.2	0.2	0.2	0.590	0.2	0.3	0.4	0.4	10.2	1.818	0.332	3.08
Total Metals, Barium (µg/L)	30	1	3	0.1	1.3	1.39	1.575	2.213	2.1	2.5	2.72	3	7.9	1.234	0.225	0.56
Total Metals, Beryllium (µg/L)	30	29	97	0.1	0.1	0.1	0.1	0.423	0.1	0.1	2	0.1	2	0.718	0.131	1.70
Total Metals, Bismuth (µg/L)	25	25	100	0.1	0.1	0.1	0.1	0.172	0.2	0.2	0.2	0.2	0.2	0.046	0.009	0.27
Total Metals, Boron (µg/L)	18	0	0	1.3	1.3	1.5	1.7	2.406	2.45	2.825	3.5	4	4	0.781	0.184	0.32
Total Metals, Cadmium (µg/L)	30	26	87	0.04	0.04	0.04	0.04	0.138	0.04	0.175	0.3	0.3	0.8	0.174	0.032	1.26
Total Metals, Cesium (µg/L)	18	18	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	30	23	77	0.1	0.1	0.1	0.1	0.770	0.15	0.65	3	0.7	3	1.121	0.205	1.46
Total Metals, Cobalt (µg/L)	30	27	90	0.1	0.1	0.1	0.1	0.283	0.1	0.175	1	0.2	1	0.351	0.064	1.24
Total Metals, Copper (µg/L)	29	5	17	0.3	0.3	0.7	0.7	1.410	1	1.9	2	2.4	7.8	1.355	0.252	0.96
Total Metals, Iron (µg/L)	39	5	13	5	5	10.2	19.5	9651.718	30	307.5	32800	504	98000	20803.738	3331.264	2.16
Total Metals, Lead (µg/L)	18	17	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.024	0.006	0.22
Total Metals, Lithium (µg/L)	30	7	23	0.1	0.8	0.98	1.3	1.683	1.6	1.875	3	2.7	3	0.783	0.143	0.47
Total Metals, Manganese (µg/L)	29	2	7	1	1	1.1	1.5	376.521	3	15.9	2100	15.9	3000	859.632	159.630	2.28
Total Metals, Mercury (ng/L)	17	1	6	0.2	0.2	0.3	0.3	0.718	0.4	0.7	1.5	1.1	2.6	0.667	0.162	0.93
Total Metals, Mercury (µg/L)	11	11	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	30	16	53	0.1	0.1	0.1	0.1	3.630	0.2	0.2	1	0.3	100	18.204	3.324	5.01
Total Metals, Nickel (µg/L)	30	9	30	0.1	0.7	0.1	0.725	17.537	0.9	1.075	1.34	1.3	500	91.124	16.637	5.20
Total Metals, Rubidium (µg/L)	19	0	0	0.0011	1.6	1.68	1.8	1.979	2.1	2.2	2.4	2.4	3.2	0.591	0.136	0.30
Total Metals, Selenium (µg/L)	30	30	100	0.3	0.3	0.3	0.3	835.180	0.3	10	1000	10	10000	2519.406	459.978	3.02
Total Metals, Silver (µg/L)	30	30	100	0.1	0.1	0.1	0.1	3.463	0.1	0.1	0.3	0.1	100	18.233	3.329	5.26
Total Metals, Strontium (µg/L)	25	1	4	0.0001	0.0001	0.00482	6.4	11.289	13.2	16.7	19.08	23.2	23.2	7.467	1.493	0.66
Total Metals, Thallium (µg/L)	30	29	97	0.0001	0.1	0.0001	0.1	0.167	0.1	0.1	0.4	0.1	1.5	0.278	0.051	1.67
Total Metals, Tin (µg/L)	18	17	94	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.1	0.1	0.3	0.047	0.011	0.42
Total Metals, Titanium (µg/L)	24	8	33	0.0002	0.0002	0.00036	0.1	0.871	0.15	0.375	1.57	0.6	12.5	2.530	0.516	2.90
Total Metals, Uranium (µg/L)	25	18	72	0.0001	0.1	0.0001	0.1	0.088	0.1	0.1	0.16	0.1	0.2	0.060	0.012	0.68
Total Metals, Vanadium (µg/L)	30	28	93	0.1	0.1	0.1	0.1	23.580	0.1	1	100	1	100	42.881	7.829	1.82
Total Metals, Zinc (µg/L)	30	12	40	0.4	0.4	0.4	0.725	90.180	3.6	10	10.6	16	2500	455.298	83.126	5.05

Table B.2.4-5 Coppermine River Downstream of Copper Creek (COR05) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Dissolved Calcium (mg/L)	11	0	0	3.71	3.71	4.06	4.105	5.146	4.13	5.545	7.01	7.01	9.77	1.873	0.565	0.36
Major Ions, Dissolved Chloride (mg/L)	11	2	18	0.2	0.2	0.2	0.3	0.345	0.4	0.4	0.4	0.4	0.4	0.082	0.025	0.24
Major Ions, Dissolved Magnesium (mg/L)	11	0	0	1.67	1.67	1.75	1.77	2.444	1.94	2.96	3.78	4.48	4.48	0.965	0.291	0.39
Major Ions, Dissolved Potassium (mg/L)	11	0	0	0.39	0.39	0.4	0.405	0.433	0.43	0.43	0.45	0.45	0.57	0.049	0.015	0.11
Major Ions, Dissolved Sodium (mg/L)	11	0	0	0.39	0.47	0.47	0.485	0.510	0.51	0.535	0.57	0.57	0.62	0.059	0.018	0.12
Major Ions, Dissolved Sulphate (mg/L)	11	8	73	1.4	3	3	3	3.309	3	3	5	3	6	1.205	0.363	0.36
Major Ions, Reactive Silica (mg/L)	11	0	0	0.59	0.59	0.61	0.69	0.814	0.74	0.91	1.12	1.19	1.19	0.198	0.060	0.24
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	11	0	0	15.6	15.6	16.2	16.25	21.382	17.3	23.05	31.7	31.7	41.5	8.535	2.573	0.40
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	11	0	0	16.1	16.1	17.3	17.55	22.891	19.3	25.45	33.1	33.1	42.8	8.485	2.558	0.37
Nutrients, Dissolved Organic Carbon (mg/L)	11	0	0	2.4	2.4	2.7	2.7	2.991	2.9	3	3.2	3.2	4.5	0.543	0.164	0.18
Nutrients, Nitrate, as N (mg/L)	7	1	14	0.008	0.008	0.0104	0.0235	0.063	0.074	0.0825	0.1106	0.149	0.149	0.049	0.019	0.78
Nutrients, Nitrate/Nitrite, as N (mg/L)	8	0	0	0.016	0.016	0.03	0.06525	0.084	0.0835	0.10925	0.1322	0.149	0.149	0.044	0.015	0.52
Nutrients, Nitrite, as N (mg/L)	8	8	100	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	----	----	----
Nutrients, Total Ammonia, as N (mg/L)	11	9	82	0.005	0.005	0.005	0.005	0.007	0.005	0.005	0.016	0.005	0.018	0.005	0.001	0.68
Nutrients, Total Organic Carbon (mg/L)	11	0	0	2.1	2.5	2.5	2.75	2.900	2.8	3	3	3	4.2	0.510	0.154	0.18
Nutrients, Total Phosphorus (mg/L)	11	1	9	0.003	0.003	0.004	0.0085	0.035	0.015	0.037	0.065	0.065	0.181	0.053	0.016	1.50
Nutrients, o-Phosphate, as P (mg/L)	11	10	91	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002	0.008	0.002	0.001	0.71
Physical Parameters, Specific Conductivity (µS/cm)	11	0	0	35.8	35.8	37.3	38.6	47.955	38.9	52.5	66.4	66.4	85.4	16.108	4.857	0.34
Physical Parameters, Total Dissolved Solids (mg/L)	11	1	9	10	10	18	20	29.273	28	38.5	46	50	50	13.008	3.922	0.44
Physical Parameters, Total Suspended Solids (mg/L)	11	4	36	3	3	3	3	28.273	7	8.5	18	9	245	72.018	21.714	2.55
Physical Parameters, Turbidity (NTU)	11	0	0	0.3	0.3	0.8	0.9	12.182	1.6	3.3	6.6	6.6	113	33.486	10.096	2.75
Physical Parameters, pH (unitless)	11	0	0	6.7	7.1	7.1	7.11	7.250	7.22	7.365	7.62	7.62	7.8	0.291	0.088	0.04
Total Metals, Aluminum (µg/L)	11	4	36	17	17	30	30	450.818	71	147	303	303	4080	1206.811	363.867	2.68
Total Metals, Antimony (µg/L)	11	2	18	0.5	0.5	0.5	0.641	0.723	0.8	0.8	0.8	0.9	0.9	0.134	0.040	0.19
Total Metals, Arsenic (µg/L)	1	0	0	2.2	2.2	2.2	2.2	2.200	2.2	2.2	2.2	2.2	2.2	----	----	----
Total Metals, Barium (µg/L)	11	0	0	7.04	7.04	8	8	14.449	9	17.45	24	24	43	11.164	3.366	0.77
Total Metals, Beryllium (µg/L)	11	11	100	0.02	2	0.02	2	1.640	2	2	2	2	2	0.801	0.241	0.49
Total Metals, Bismuth (µg/L)	7	7	100	0.4	0.4	0.4	0.7	3.114	5	5	5	5	5	2.360	0.892	0.76
Total Metals, Cadmium (µg/L)	11	11	100	0.02	0.3	0.02	0.3	0.249	0.3	0.3	0.3	0.3	0.3	0.113	0.034	0.45
Total Metals, Cesium (µg/L)	11	8	73	0.012	0.4	0.033	0.4	0.486	0.4	0.4	0.4	0.4	2.1	0.556	0.168	1.14
Total Metals, Chromium (µg/L)	11	11	100	0.1	3	0.1	3	2.473	3	3	3	3	3	1.173	0.354	0.47
Total Metals, Cobalt (µg/L)	11	9	82	0.101	1	0.208	1	0.846	1	1	1	1	1	0.343	0.103	0.41
Total Metals, Copper (µg/L)	11	8	73	0.51	2	2	2	2.109	2	2	2.69	2	4	0.810	0.244	0.38
Total Metals, Iron (µg/L)	11	3	27	30	30	30	33.5	361.091	90	184.5	266	266	2950	862.708	260.116	2.39
Total Metals, Lead (µg/L)	11	8	73	0.63	1	0.66	1	1.117	1	1	1	1	3	0.640	0.193	0.57
Total Metals, Lithium (µg/L)	11	9	82	0.8	3	1.04	3	2.622	3	3	3	3	3	0.843	0.254	0.32
Total Metals, Manganese (µg/L)	11	4	36	1	1	1	1	12.507	5	8	10.5	10.5	95	27.587	8.318	2.21
Total Metals, Molybdenum (µg/L)	11	8	73	0.05	1	0.08	1	1.012	1	1	1	1	3	0.758	0.229	0.75
Total Metals, Nickel (µg/L)	11	7	64	0.43	1	0.78	1	1.474	1	1	4	1	4	1.261	0.380	0.86
Total Metals, Rubidium (µg/L)	11	0	0	0.8	0.8	0.9	0.9	1.803	1	1.14	2.8	1.2	8.3	2.226	0.671	1.23
Total Metals, Selenium (µg/L)	11	11	100	0.3	10	0.3	10	8.236	10	10	10	10	10	3.924	1.183	0.48
Total Metals, Silver (µg/L)	11	11	100	0.006	0.3	0.006	0.3	0.247	0.3	0.3	0.3	0.3	0.3	0.119	0.036	0.48
Total Metals, Strontium (µg/L)	11	0	0	6.96	6.96	7	7	8.813	8	9.49	12	12	15	2.603	0.785	0.30
Total Metals, Thallium (µg/L)	11	11	100	0.1	0.4	0.1	0.4	0.345	0.4	0.4	0.4	0.4	0.4	0.121	0.037	0.35
Total Metals, Titanium (µg/L)	11	6	55	0.68	0.68	3	3	14.646	3	5.215	7	7	125	36.642	11.048	2.50
Total Metals, Uranium (µg/L)	11	8	73	0.05	0.3	0.154	0.3	0.646	0.3	0.3	0.3	0.3	4.5	1.281	0.386	1.98
Total Metals, Vanadium (µg/L)	11	9	82	0.03	1	0.33	1	1.215	1	1	1	1	5	1.299	0.392	1.07
Total Metals, Zinc (µg/L)	11	7	64	1.94	10	4.4	10	19.485	10	10	68	10	70	24.639	7.429	1.26

Table B.2.4-6 Coppermine River Downstream of Fairy Lake River (COR03) Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	2	0	0	4	4	4.43	5.075	6.15	6.15	7.225	7.87	8.3	8.3	3.041	2.150	0.49
Dissolved Metals, Antimony (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	2	0	0	4.2	4.2	4.6	5.2	6.2	6.2	7.2	7.8	8.2	8.2	2.828	2.000	0.46
Dissolved Metals, Beryllium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	2	2	100	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	2	0	0	0.4	0.4	0.44	0.5	0.6	0.6	0.7	0.76	0.8	0.8	0.283	0.200	0.47
Dissolved Metals, Iron (µg/L)	2	2	100	50	50	50	50	50	50	50	50	50	50	----	----	----
Dissolved Metals, Lead (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	2	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	----	----	----
Dissolved Metals, Manganese (µg/L)	2	0	0	1.1	1.1	1.15	1.225	1.35	1.35	1.475	1.55	1.6	1.6	0.354	0.250	0.26
Dissolved Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Dissolved Metals, Molybdenum (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	2	0	0	0.3	0.3	0.32	0.35	0.4	0.4	0.45	0.48	0.5	0.5	0.141	0.100	0.35
Dissolved Metals, Rubidium (µg/L)	2	0	0	0.8	0.8	0.83	0.875	0.95	0.95	1.025	1.07	1.1	1.1	0.212	0.150	0.22
Dissolved Metals, Selenium (µg/L)	2	2	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	2	0	0	7.2	7.2	7.3	7.45	7.7	7.7	7.95	8.1	8.2	8.2	0.707	0.500	0.09
Dissolved Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	2	1	50	0.4	0.4	0.66	1.05	1.7	1.7	2.35	2.74	3	3	1.838	1.300	1.08
Major Ions, Dissolved Calcium (mg/L)	15	0	0	2.44	2.44	3.958	4.28	5.629	4.73	7.21	8.8	8.8	8.8	2.110	0.545	0.37
Major Ions, Dissolved Chloride (mg/L)	15	5	33	0.2	0.2	0.2	0.3	0.360	0.3	0.4	0.58	0.4	0.7	0.155	0.040	0.43
Major Ions, Dissolved Fluoride (mg/L)	2	2	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	15	0	0	1.38	1.38	1.694	1.815	2.269	1.99	2.995	3.1	3.6	3.6	0.685	0.177	0.30
Major Ions, Dissolved Potassium (mg/L)	15	0	0	0.28	0.28	0.3	0.3	0.368	0.36	0.425	0.446	0.46	0.46	0.064	0.016	0.17
Major Ions, Dissolved Sodium (mg/L)	15	0	0	0.38	0.38	0.394	0.42	0.467	0.49	0.505	0.522	0.54	0.54	0.054	0.014	0.11
Major Ions, Dissolved Sulphate (mg/L)	15	13	87	1	1	1	1.3	2.307	3	3	3	3	3	0.916	0.237	0.40
Major Ions, Reactive Silica (mg/L)	14	0	0	0.31	0.31	0.3767	0.4425	0.564	0.59	0.6725	0.7449	0.828	0.828	0.156	0.042	0.28
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	15	0	0	9.7	9.7	15.26	18.7	23.987	20.9	32.7	32.92	48.3	48.3	9.937	2.566	0.41
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	15	0	0	11.8	11.8	17.18	17.75	25.200	20	31.35	43.8	43.8	43.8	10.903	2.815	0.43
Nutrients, Dissolved Organic Carbon (mg/L)	15	0	0	1.9	1.9	2.08	2.35	2.613	2.6	2.85	3.06	3.1	3.6	0.445	0.115	0.17
Nutrients, Nitrate, as N (mg/L)	13	3	23	0.008	0.008	0.0084	0.02	0.035	0.027	0.04	0.0768	0.064	0.08	0.025	0.007	0.72
Nutrients, Nitrate/Nitrite, as N (mg/L)	12	1	8	0.01	0.01	0.0204	0.02475	0.042	0.0285	0.05675	0.0875	0.09	0.09	0.027	0.008	0.65
Nutrients, Nitrite, as N (mg/L)	14	14	100	0.008	0.008	0.008	0.008	0.009	0.008	0.01	0.01	0.01	0.01	0.001	0.000	0.11
Nutrients, Total Ammonia, as N (mg/L)	15	13	87	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.0074	0.005	0.018	0.003	0.001	0.56
Nutrients, Total Dissolved Phosphorus (mg/L)	1	1	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Organic Carbon (mg/L)	15	0	0	1.8	1.8	1.9	2.15	2.533	2.5	2.9	3.12	3.6	3.6	0.521	0.134	0.21
Nutrients, Total Phosphorus (mg/L)	15	5	33	0.004	0.004	0.01	0.01	0.026	0.011	0.0555	0.059	0.065	0.065	0.024	0.006	0.91
Nutrients, o-Phosphate, as P (mg/L)	14	12	86	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.0041	0.002	0.01	0.002	0.001	0.80
Physical Parameters, Specific Conductivity (µS/cm)	15	0	0	26.1	26.1	36.02	43.6	63.307	44.4	68.05	69.16	69.2	266	57.673	14.891	0.91
Physical Parameters, Total Dissolved Solids (mg/L)	15	1	7	10	10	18	22.5	27.800	30	33.5	35.2	40	40	8.046	2.078	0.29
Physical Parameters, Total Suspended Solids (mg/L)	15	10	67	3	3	3	3	6.267	3	4	8	4	40	9.490	2.450	1.51
Physical Parameters, Turbidity (NTU)	15	1	7	0.1	0.1	0.264	0.365	1.934	0.6	2.035	2.96	3.46	14.8	3.689	0.953	1.91
Physical Parameters, pH (unitless)	15	0	0	6.77	6.77	7.144	7.18	7.371	7.34	7.58	7.746	7.75	7.75	0.286	0.074	0.04
Total Metals, Aluminum (µg/L)	15	6	40	6.16	6.16	13.24	15.95	33.304	24.3	30	30	30	185	42.695	11.024	1.28
Total Metals, Antimony (µg/L)	15	2	13	0.1	0.1	0.24	0.4	0.619	0.669	0.785	1.0412	1.1	1.1	0.308	0.079	0.50
Total Metals, Arsenic (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	15	0	0	3	3	4.58	5.69	8.409	8	12.45	13	13.1	13.1	3.584	0.925	0.43

Table B.2.4-6 Coppermine River Downstream of Fairy Lake River (COR03) Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	15	15	100	0.02	0.02	0.02	0.06	0.839	0.1	2	2	2	2	0.982	0.254	1.17
Total Metals, Bismuth (µg/L)	4	3	75	0.4	0.4	0.52	0.7	1.800	0.9	2	3.8	1	5	2.148	1.074	1.19
Total Metals, Cadmium (µg/L)	15	15	100	0.02	0.02	0.02	0.035	0.145	0.05	0.3	0.3	0.3	0.3	0.132	0.034	0.91
Total Metals, Cesium (µg/L)	15	14	93	0.008	0.008	0.008	0.0545	0.196	0.1	0.4	0.4	0.4	0.4	0.177	0.046	0.90
Total Metals, Chromium (µg/L)	15	11	73	0.1	0.1	0.1	0.1	1.413	0.3	3	3	3	3	1.421	0.367	1.01
Total Metals, Cobalt (µg/L)	15	11	73	0.088	0.088	0.1	0.1	0.464	0.12	1	1	1	1	0.453	0.117	0.98
Total Metals, Copper (µg/L)	15	6	40	0.1	0.1	0.44	0.65	1.335	1.82	2	2	2	2	0.728	0.188	0.55
Total Metals, Iron (µg/L)	15	11	73	30	30	30	30	207.600	50	50	199.8	60	2300	582.595	150.425	2.81
Total Metals, Lead (µg/L)	15	11	73	0.08	0.08	0.1	0.1	0.551	0.47	1	1	1	1	0.423	0.109	0.77
Total Metals, Lithium (µg/L)	15	7	47	0.2	0.2	0.3	0.4	1.453	0.6	3	3	3	3	1.312	0.339	0.90
Total Metals, Magnesium (µg/L)	1	0	0	1.2	1.2	1.2	1.2	1.200	1.2	1.2	1.2	1.2	1.2	----	----	----
Total Metals, Manganese (µg/L)	14	1	7	1	1	1.805	1.9	3.171	2.03	3	3.147	3.21	15	3.462	0.925	1.09
Total Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.020	0.02	0.02	0.02	0.02	0.02	----	----	----
Total Metals, Molybdenum (µg/L)	15	12	80	0.02	0.02	0.05	0.08	0.445	0.1	1	1	1	1	0.469	0.121	1.05
Total Metals, Nickel (µg/L)	15	9	60	0.1	0.1	0.1	0.27	0.588	0.5	1	1	1	1	0.375	0.097	0.64
Total Metals, Rubidium (µg/L)	15	1	7	0.4	0.4	0.5	0.59	0.843	0.92	1.1	1.2	1.2	1.2	0.284	0.073	0.34
Total Metals, Selenium (µg/L)	15	14	93	0.3	0.3	0.3	0.3	4.233	0.4	10	10	10	10	4.877	1.259	1.15
Total Metals, Silver (µg/L)	15	15	100	0.006	0.006	0.006	0.053	0.155	0.1	0.3	0.3	0.3	0.3	0.128	0.033	0.83
Total Metals, Strontium (µg/L)	15	0	0	6	7	7	7.315	7.559	7.5	7.95	8	8	9	0.658	0.170	0.09
Total Metals, Thallium (µg/L)	15	15	100	0.1	0.1	0.1	0.1	0.220	0.1	0.4	0.4	0.4	0.4	0.152	0.039	0.69
Total Metals, Titanium (µg/L)	15	5	33	0.2	0.2	0.236	0.3	2.293	2.2	3	3	3	11	2.699	0.697	1.18
Total Metals, Uranium (µg/L)	15	11	73	0.038	0.038	0.0982	0.1	0.176	0.1	0.3	0.3	0.3	0.3	0.106	0.027	0.60
Total Metals, Vanadium (µg/L)	15	15	100	0.03	0.03	0.03	0.065	0.441	0.1	1	1	1	1	0.473	0.122	1.07
Total Metals, Zinc (µg/L)	15	6	40	2.2	2.2	2.544	2.705	7.571	4.7	10	10	10	29	6.875	1.775	0.91

Table B.2.4-7 Daring Lake (DAL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	70	0	0	1.1	1.1	2	2.6	3.969	3.45	4.9	6.71	8	12.9	2.015	0.241	0.51
Dissolved Metals, Antimony (µg/L)	70	68	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.017	0.002	0.16
Dissolved Metals, Arsenic (µg/L)	70	68	97	0.2	0.2	0.2	0.2	0.204	0.2	0.2	0.2	0.2	0.4	0.027	0.003	0.13
Dissolved Metals, Barium (µg/L)	70	0	0	0.9	0.9	1.09	1.1	1.584	1.2	1.5	2.11	2	13.9	1.577	0.188	1.00
Dissolved Metals, Beryllium (µg/L)	70	70	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	44	44	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	44	17	39	0.9	0.9	0.9	0.9	1.173	1.1	1.4	1.6	2.1	2.1	0.316	0.048	0.27
Dissolved Metals, Cadmium (µg/L)	70	70	100	0.04	0.04	0.04	0.04	0.045	0.045	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	70	70	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	68	64	94	0.1	0.1	0.1	0.1	0.131	0.1	0.1	0.1	0.1	1.7	0.196	0.024	1.50
Dissolved Metals, Cobalt (µg/L)	70	70	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	70	17	24	0.2	0.2	0.2	0.3	0.427	0.3	0.4	0.7	0.5	4.5	0.517	0.062	1.21
Dissolved Metals, Iron (µg/L)	70	61	87	5	5	5	5	10.529	5	5	50	5	50	14.347	1.715	1.36
Dissolved Metals, Lead (µg/L)	70	67	96	0.1	0.1	0.1	0.1	0.256	0.1	0.1	0.1	0.1	8.5	1.032	0.123	4.03
Dissolved Metals, Lithium (µg/L)	70	1	1	0.2	0.6	0.7	0.8	1.020	0.9	1	1.3	1.2	4.7	0.582	0.070	0.57
Dissolved Metals, Manganese (µg/L)	70	1	1	0.1	0.1	0.3	0.4	1.019	0.65	1.1	1.52	2.1	14.4	1.716	0.205	1.68
Dissolved Metals, Mercury (ng/L)	40	28	70	0.2	0.2	0.2	0.2	0.258	0.2	0.3	0.4	0.4	0.6	0.108	0.017	0.42
Dissolved Metals, Mercury (µg/L)	62	62	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.17
Dissolved Metals, Molybdenum (µg/L)	70	68	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.017	0.002	0.16
Dissolved Metals, Nickel (µg/L)	68	15	22	0.1	0.2	0.1	0.2	0.228	0.2	0.2	0.3	0.2	1.6	0.194	0.024	0.85
Dissolved Metals, Rubidium (µg/L)	70	0	0	0.8	0.9	1.1	1.2	1.397	1.2	1.4	1.8	1.6	6.2	0.658	0.079	0.47
Dissolved Metals, Selenium (µg/L)	70	69	99	0.3	0.3	0.3	0.3	0.321	0.3	0.3	0.3	0.3	1.8	0.179	0.021	0.56
Dissolved Metals, Silver (µg/L)	70	70	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	70	0	0	3.7	3.7	5	5.325	6.749	5.8	6.75	8.71	8.8	38.9	4.192	0.501	0.62
Dissolved Metals, Thallium (µg/L)	70	70	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	44	44	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	70	69	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.012	0.001	0.12
Dissolved Metals, Uranium (µg/L)	70	69	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.012	0.001	0.12
Dissolved Metals, Vanadium (µg/L)	70	70	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	69	47	68	0.4	0.4	0.4	0.4	0.677	0.4	0.6	1.3	0.8	5.4	0.754	0.091	1.11
Field Measurements, Dissolved Oxygen (% Saturation)	17	0	0	93.8	93.8	93.96	96.1	99.347	99.1	101.6	104.66	106.2	106.2	3.926	0.952	0.04
Field Measurements, Dissolved Oxygen (mg/L)	17	0	0	9.71	9.71	9.85	10.05	10.606	10.54	11.12	11.664	11.91	11.91	0.717	0.174	0.07
Field Measurements, Specific Conductivity (µS/cm)	17	0	0	11.2	11.2	11.82	12	12.671	13.1	13.3	13.4	13.5	13.5	0.733	0.178	0.06
Field Measurements, Turbidity (NTU)	15	15	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	14	0	0	6.25	6.25	6.507	6.575	6.907	6.725	7.265	7.555	7.61	7.61	0.450	0.120	0.07
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	5	0	0	3.2	3.2	3.2	3.2	7.480	3.4	4.4	15.68	4.4	23.2	8.802	3.936	1.18
Major Ions, Dissolved Calcium (mg/L)	89	0	0	0.4	0.4	0.8	0.9	1.412	1.1	1.6	2.14	2.6	6.1	1.007	0.107	0.71
Major Ions, Dissolved Chloride (mg/L)	89	77	87	0.3	0.7	0.5	0.7	0.691	0.7	0.7	0.7	0.7	1.9	0.166	0.018	0.24
Major Ions, Dissolved Fluoride (mg/L)	74	65	88	0.026	0.1	0.045	0.1	0.104	0.1	0.1	0.1	0.1	1	0.108	0.013	1.04
Major Ions, Dissolved Magnesium (mg/L)	89	0	0	0.2	0.2	0.5	0.6	0.808	0.7	0.9	1.02	1.2	4.4	0.545	0.058	0.67
Major Ions, Dissolved Potassium (mg/L)	89	0	0	0.2	0.2	0.4	0.4	0.524	0.4	0.6	0.744	0.8	2.3	0.258	0.027	0.49
Major Ions, Dissolved Sodium (mg/L)	89	0	0	0.3	0.3	0.5	0.5	0.658	0.6	0.7	0.92	0.9	3	0.318	0.034	0.48
Major Ions, Dissolved Sulphate (mg/L)	91	44	48	1	1	1	1	1.740	2	2	3	3.26	9	1.035	0.109	0.59
Major Ions, Reactive Silica (mg/L)	53	2	4	0.067	0.067	0.08	0.105	0.145	0.119	0.159	0.2022	0.211	0.5	0.084	0.012	0.58
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	90	0	0	2.6	2.6	3.1	3.325	4.392	3.6	5	5.92	6.7	22.3	2.273	0.240	0.52
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	89	0	0	1.9	1.9	4.18	4.8	6.617	5.4	7.7	9.38	11.3	27.3	3.728	0.395	0.56
Microbiology, Chlorophyll a (µg/L)	44	4	9	0.182	0.182	0.2447	0.37825	0.813	0.7505	1.0325	1.44	2	3.22	0.598	0.090	0.74
Nutrients, Dissolved Nitrogen (mg/L)	47	0	0	0.108	0.108	0.12	0.1285	0.148	0.14	0.1545	0.2	0.18	0.25	0.032	0.005	0.22
Nutrients, Dissolved Organic Carbon (mg/L)	90	0	0	1.3	1.8	1.99	2.3	2.605	2.5	2.8	3.1	3.5	7.3	0.755	0.080	0.29
Nutrients, Dissolved o-Phosphate, as P (mg/L)	18	15	83	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00129	0.001	0.0026	0.000	0.000	0.34
Nutrients, Nitrate, as N (mg/L)	104	74	71	0.003	0.003	0.005	0.005	0.019	0.00775	0.01045	0.023	0.0175	0.385	0.052	0.005	2.70
Nutrients, Nitrate/Nitrite, as N (mg/L)	102	68	67	0.005	0.005	0.0051	0.0051	0.028	0.01	0.019675	0.04	0.04	0.386	0.066	0.007	2.34
Nutrients, Nitrite, as N (mg/L)	103	100	97	0.001	0.001	0.001	0.001	0.007	0.001	0.01	0.01	0.01	0.12	0.018	0.002	2.45
Nutrients, Total Ammonia, as N (mg/L)	90	61	68	0.005	0.005	0.005	0.005	0.010	0.005	0.01	0.0171	0.017	0.072	0.010	0.001	1.05

Table B.2.4-7 Daring Lake (DAL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Dissolved Phosphorus (mg/L)	49	31	63	0.001	0.001	0.001	0.0018	0.003	0.002	0.0028	0.01	0.0038	0.01	0.003	0.000	0.89
Nutrients, Total Nitrogen (mg/L)	52	0	0	0.11	0.11	0.14	0.14925	0.182	0.1625	0.19	0.2095	0.24	0.866	0.101	0.014	0.56
Nutrients, Total Organic Carbon (mg/L)	90	0	0	1.8	1.8	2.1	2.4	2.736	2.55	2.975	3.22	3.6	8	0.772	0.081	0.28
Nutrients, Total Phosphorus (mg/L)	96	46	48	0.002	0.002	0.002	0.002	0.005	0.00335	0.00755	0.01	0.011	0.03	0.004	0.000	0.83
Nutrients, o-Phosphate, as P (mg/L)	69	67	97	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.0039	0.001	0.000	0.43
Physical Parameters, Specific Conductivity (µS/cm)	91	0	0	8.5	8.5	10.9	11.75	15.481	12.6	16.9	20.7	23	75.7	9.846	1.032	0.64
Physical Parameters, Total Dissolved Solids (mg/L)	87	52	60	10	10	10	10	14.126	10	14	20	20	64	9.666	1.036	0.68
Physical Parameters, Total Suspended Solids (mg/L)	90	82	91	3	3	3	3	3.378	3	3	3	3	16	1.706	0.180	0.51
Physical Parameters, Turbidity (NTU)	90	0	0	0.12	0.12	0.179	0.23	0.383	0.28	0.35	0.572	0.52	3.31	0.432	0.046	1.13
Physical Parameters, pH (unitless)	90	0	0	6.06	6.28	6.51	6.6	6.703	6.73	6.82	6.91	6.97	6.97	0.175	0.018	0.03
Total Metals, Aluminum (µg/L)	90	2	2	2.7	2.7	3.99	5.425	8.760	6.9	9	13.11	13.2	58.5	7.487	0.789	0.85
Total Metals, Antimony (µg/L)	90	81	90	0.1	0.1	0.1	0.1	0.141	0.1	0.1	0.11	0.1	0.899	0.142	0.015	1.01
Total Metals, Arsenic (µg/L)	84	80	95	0.2	0.2	0.2	0.2	0.206	0.2	0.2	0.2	0.2	0.4	0.028	0.003	0.14
Total Metals, Barium (µg/L)	90	0	0	1	1	1.1	1.2	1.658	1.25	1.775	2.41	2.6	14	1.431	0.151	0.86
Total Metals, Beryllium (µg/L)	90	90	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	42	42	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	42	20	48	0.9	0.9	0.9	0.9	1.124	1	1.3	1.68	1.8	1.8	0.301	0.046	0.27
Total Metals, Cadmium (µg/L)	90	88	98	0.02	0.03	0.04	0.04	0.048	0.05	0.05	0.05	0.06	0.1	0.013	0.001	0.27
Total Metals, Cesium (µg/L)	90	90	100	0.008	0.1	0.1	0.1	0.098	0.1	0.1	0.1	0.1	0.1	0.014	0.001	0.14
Total Metals, Chromium (µg/L)	88	80	91	0.1	0.1	0.1	0.1	0.202	0.1	0.1	0.1	0.1	3.6	0.456	0.049	2.25
Total Metals, Cobalt (µg/L)	90	86	96	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.238	0.023	0.002	0.22
Total Metals, Copper (µg/L)	90	17	19	0.2	0.2	0.2	0.3	0.492	0.4	0.5	0.71	0.8	2.1	0.370	0.039	0.75
Total Metals, Iron (µg/L)	90	19	21	5	5	7.9	11	22.278	13	20	50	30	287	32.755	3.453	1.47
Total Metals, Lead (µg/L)	90	85	94	0.1	0.1	0.1	0.1	0.317	0.1	0.1	0.1	0.1	17.2	1.809	0.191	5.70
Total Metals, Lithium (µg/L)	90	1	1	0.2	0.4	0.79	0.8	1.038	0.9	1.175	1.4	1.7	4.6	0.528	0.056	0.51
Total Metals, Magnesium (µg/L)	1	0	0	0.5	0.5	0.5	0.5	0.500	0.5	0.5	0.5	0.5	0.5	----	----	----
Total Metals, Manganese (µg/L)	89	0	0	0.3	0.3	0.9	1.3	2.036	1.5	2.08	3.02	3.1	22.2	2.377	0.252	1.17
Total Metals, Mercury (ng/L)	63	19	30	0.0001	0.0001	0.00096	0.2	0.350	0.3	0.55	0.7	0.9	0.9	0.245	0.031	0.70
Total Metals, Mercury (µg/L)	77	76	99	0.0005	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.19
Total Metals, Molybdenum (µg/L)	90	88	98	0.02	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.2	0.019	0.002	0.19
Total Metals, Nickel (µg/L)	88	17	19	0.1	0.1	0.1	0.2	0.292	0.2	0.3	0.33	0.42	3.4	0.429	0.046	1.47
Total Metals, Rubidium (µg/L)	90	0	0	0.9	0.9	1.1	1.2	1.423	1.2	1.575	1.8	2.1	6.3	0.609	0.064	0.43
Total Metals, Selenium (µg/L)	90	86	96	0.3	0.3	0.3	0.3	0.346	0.3	0.3	0.3	0.3	1.8	0.195	0.021	0.56
Total Metals, Silver (µg/L)	90	90	100	0.006	0.1	0.1	0.1	0.098	0.1	0.1	0.1	0.1	0.1	0.014	0.001	0.14
Total Metals, Strontium (µg/L)	90	0	0	3.8	3.8	5	5.3	6.758	5.8	7.325	8.81	9.8	38.9	3.802	0.401	0.56
Total Metals, Thallium (µg/L)	90	90	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	42	42	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	90	61	68	0.02	0.02	0.1	0.1	0.224	0.1	0.2	0.3	0.3	6.1	0.639	0.067	2.86
Total Metals, Uranium (µg/L)	90	88	98	0.04	0.1	0.1	0.1	0.099	0.1	0.1	0.1	0.1	0.1	0.009	0.001	0.09
Total Metals, Vanadium (µg/L)	90	84	93	0.1	0.1	0.1	0.1	0.122	0.1	0.1	0.1	0.1	1	0.107	0.011	0.87
Total Metals, Zinc (µg/L)	89	63	71	0.4	0.4	0.4	0.4	1.288	0.4	0.8	2.78	1.4	11	2.276	0.241	1.77

Table B.2.4-8 Desteffany Lake (DEL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	74	0	0	3.1	3.1	3.83	4.725	8.522	6.65	9.275	12.17	15.2	59.1	8.062	0.937	0.95
Dissolved Metals, Antimony (µg/L)	74	70	95	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.1	0.1	0.6	0.061	0.007	0.55
Dissolved Metals, Arsenic (µg/L)	74	56	76	0.2	0.2	0.2	0.2	0.224	0.2	0.2	0.3	0.2	0.3	0.043	0.005	0.19
Dissolved Metals, Barium (µg/L)	74	0	0	1.3	1.3	1.43	1.7	2.015	1.8	2.3	2.67	3	5.7	0.625	0.073	0.31
Dissolved Metals, Beryllium (µg/L)	74	74	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	39	38	97	0.2	0.2	0.2	0.2	0.205	0.2	0.2	0.2	0.2	0.4	0.032	0.005	0.16
Dissolved Metals, Boron (µg/L)	39	2	5	0.9	0.9	1.18	1.5	1.762	1.8	2.1	2.32	2.7	2.7	0.449	0.072	0.25
Dissolved Metals, Cadmium (µg/L)	74	74	100	0.04	0.04	0.04	0.04	0.045	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	74	73	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.012	0.001	0.11
Dissolved Metals, Chromium (µg/L)	74	72	97	0.1	0.1	0.1	0.1	0.303	0.1	0.1	0.1	0.1	15	1.732	0.201	5.72
Dissolved Metals, Cobalt (µg/L)	74	73	99	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.4	0.035	0.004	0.34
Dissolved Metals, Copper (µg/L)	74	4	5	0.2	0.3	0.3	0.5	0.626	0.6	0.7	0.9	0.9	2.4	0.286	0.033	0.46
Dissolved Metals, Iron (µg/L)	74	40	54	5	5	5	5	13.730	7	12	50	18	58	15.509	1.803	1.13
Dissolved Metals, Lead (µg/L)	74	71	96	0.1	0.1	0.1	0.1	0.808	0.1	0.1	0.1	0.1	51.9	6.021	0.700	7.45
Dissolved Metals, Lithium (µg/L)	74	0	0	0.6	0.6	1.1	1.2	1.438	1.4	1.6	1.87	2	4.5	0.478	0.056	0.33
Dissolved Metals, Manganese (µg/L)	74	0	0	0.2	0.2	0.3	0.4	1.053	0.6	1.1	2.34	2	8.7	1.301	0.151	1.24
Dissolved Metals, Mercury (ng/L)	34	15	44	0.2	0.2	0.2	0.2	0.324	0.3	0.4	0.47	0.7	0.9	0.158	0.027	0.49
Dissolved Metals, Mercury (µg/L)	69	69	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.20
Dissolved Metals, Molybdenum (µg/L)	74	43	58	0.1	0.1	0.1	0.1	0.157	0.1	0.2	0.2	0.3	1	0.115	0.013	0.73
Dissolved Metals, Nickel (µg/L)	74	0	0	0.6	0.6	0.6	0.7	0.849	0.7	0.9	1.1	1.2	2.2	0.273	0.032	0.32
Dissolved Metals, Rubidium (µg/L)	74	0	0	1	1	1.3	1.5	1.711	1.7	1.9	2.17	2.4	2.4	0.321	0.037	0.19
Dissolved Metals, Selenium (µg/L)	74	73	99	0.3	0.3	0.3	0.3	0.319	0.3	0.3	0.3	0.3	1.7	0.163	0.019	0.51
Dissolved Metals, Silver (µg/L)	74	74	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	74	0	0	4.3	4.3	6.03	7.925	10.641	10.1	12.75	15.77	19.3	19.3	3.670	0.427	0.34
Dissolved Metals, Thallium (µg/L)	74	74	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	39	39	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	74	70	95	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.1	0.1	1.1	0.119	0.014	1.00
Dissolved Metals, Uranium (µg/L)	74	69	93	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.2	0.025	0.003	0.24
Dissolved Metals, Vanadium (µg/L)	74	74	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	71	38	54	0.4	0.4	0.4	0.4	0.754	0.4	0.8	1.2	1.3	5.7	0.800	0.095	1.06
Field Measurements, Dissolved Oxygen (% Saturation)	14	0	0	93.1	93.1	94.04	96.425	99.643	99.6	102.05	105.39	107.3	107.3	4.382	1.171	0.04
Field Measurements, Dissolved Oxygen (mg/L)	14	0	0	9.61	9.61	9.776	10.1325	10.617	10.515	10.9275	11.71	11.9	11.9	0.720	0.192	0.07
Field Measurements, Specific Conductivity (µS/cm)	14	0	0	18.4	18.4	18.72	19.275	20.507	20.55	21.9	22.07	22.5	22.5	1.438	0.384	0.07
Field Measurements, Total Dissolved Solids (mg/L)	8	0	0	0.0126	0.0126	0.01288	5.70325	8.678	11.9	12.25	13	13	13	5.613	1.984	0.65
Field Measurements, Turbidity (NTU)	13	13	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	12	0	0	6.42	6.42	6.477	6.675	6.886	6.88	7.0075	7.258	7.28	7.65	0.350	0.101	0.05
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	8	0	0	3.9	3.9	3.9	3.9	4.400	4.25	4.825	5.02	5.3	5.3	0.553	0.195	0.13
Major Ions, Dissolved Calcium (mg/L)	106	0	0	0.5	0.5	0.9	1.2	1.548	1.5	1.875	2.2	2.6	3.6	0.535	0.052	0.35
Major Ions, Dissolved Chloride (mg/L)	103	29	28	0.2	0.2	0.4	0.7	1.137	0.9	1.535	2.1	2.7	3.17	0.726	0.072	0.64
Major Ions, Dissolved Fluoride (mg/L)	72	63	88	0.023	0.1	0.0331	0.1	0.103	0.1	0.1	0.1	0.1	1	0.110	0.013	1.06
Major Ions, Dissolved Magnesium (mg/L)	106	0	0	0.3	0.3	0.61	0.77075	0.989	1	1.1375	1.3	1.6	5.8	0.543	0.053	0.55
Major Ions, Dissolved Potassium (mg/L)	106	0	0	0.3	0.3	0.485	0.5	0.677	0.6	0.8	0.9	1.1	2.19	0.234	0.023	0.35
Major Ions, Dissolved Sodium (mg/L)	106	0	0	0.33	0.33	0.495	0.6	0.996	0.9	1.3	1.7	2.3	2.3	0.472	0.046	0.47
Major Ions, Dissolved Sulphate (mg/L)	107	19	18	1	1	2	2	2.918	3	3	4	4.44	10	1.476	0.143	0.51
Major Ions, Reactive Silica (mg/L)	64	3	5	0.081	0.081	0.1113	0.129	0.197	0.1595	0.20175	0.357	0.272	0.693	0.122	0.015	0.62
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	107	0	0	1.5	2.8	3.4	3.7	5.008	4.3	5.1	5.64	6.8	41.4	4.706	0.455	0.94
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	106	0	0	2.4	3.68	4.88	6.6	7.911	7.75	9.2	10.55	12.3	26.1	2.751	0.267	0.35
Microbiology, Chlorophyll a (µg/L)	42	3	7	0.33	0.33	0.405	0.50375	0.933	0.724	1.1775	1.764	2.13	2.13	0.530	0.082	0.57
Nutrients, Dissolved Nitrogen (mg/L)	45	0	0	0.14	0.14	0.15	0.162	0.180	0.17	0.2	0.216	0.25	0.25	0.026	0.004	0.15
Nutrients, Dissolved Organic Carbon (mg/L)	107	0	0	2.2	2.2	2.7	2.9	3.300	3.2	3.7	3.9	4.6	5.7	0.520	0.050	0.16
Nutrients, Dissolved o-Phosphate, as P (mg/L)	18	16	89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00106	0.001	0.0014	0.000	0.000	0.10
Nutrients, Nitrate, as N (mg/L)	122	71	58	0.003	0.003	0.005	0.005	0.027	0.01	0.02	0.03847	0.04	1	0.095	0.009	3.57
Nutrients, Nitrate/Nitrite, as N (mg/L)	116	62	53	0.005	0.005	0.0051	0.0051	0.025	0.01	0.0231	0.0415	0.05	0.3	0.043	0.004	1.72
Nutrients, Nitrite, as N (mg/L)	121	118	98	0.001	0.001	0.001	0.001	0.015	0.001	0.01	0.01	0.01	1	0.092	0.008	5.96

Table B.2.4-8 Desteffany Lake (DEL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	107	74	69	0.005	0.005	0.005	0.005	0.009	0.005	0.01	0.01446	0.015	0.05	0.007	0.001	0.83
Nutrients, Total Dissolved Phosphorus (mg/L)	43	23	53	0.001	0.0011	0.001	0.002	0.003	0.002	0.00265	0.00652	0.0031	0.01	0.003	0.000	0.87
Nutrients, Total Nitrogen (mg/L)	49	0	0	0.156	0.156	0.1694	0.177	0.198	0.19	0.22	0.23	0.27	0.27	0.027	0.004	0.14
Nutrients, Total Organic Carbon (mg/L)	107	0	0	2.6	2.6	2.76	3	3.417	3.4	3.7	4	4.5	5.8	0.554	0.054	0.16
Nutrients, Total Phosphorus (mg/L)	112	50	45	0.002	0.002	0.002	0.002975	0.006	0.004	0.00925	0.01	0.01	0.061	0.008	0.001	1.25
Nutrients, o-Phosphate, as P (mg/L)	84	81	96	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.003	0.005	0.001	0.000	0.45
Physical Parameters, Color (CU)	20	16	80	5	5	5	5	6.600	5	5	10.5	5	20	3.992	0.893	0.60
Physical Parameters, Specific Conductivity (µS/cm)	107	0	0	12	12	14.08	15.75	22.747	18.4	23.6	29.54	34.8	309	28.477	2.753	1.25
Physical Parameters, Total Dissolved Solids (mg/L)	102	45	44	10	10	10	10	15.961	12	16.75	22	24	84	11.631	1.152	0.73
Physical Parameters, Total Suspended Solids (mg/L)	106	92	87	3	3	3	3	3.500	3	3	4	3	16	1.742	0.169	0.50
Physical Parameters, Turbidity (NTU)	107	4	4	0.1	0.1	0.14	0.255	0.450	0.37	0.5	0.708	0.8	3.23	0.410	0.040	0.91
Physical Parameters, pH (unitless)	107	0	0	6.04	6.34	6.52	6.615	6.694	6.69	6.815	6.928	7.05	7.05	0.179	0.017	0.03
Total Metals, Aluminum (µg/L)	107	9	8	4	4	5.26	7.4	14.964	11.5	18.05	30	30.7	78	11.912	1.152	0.80
Total Metals, Antimony (µg/L)	107	82	77	0.1	0.1	0.1	0.1	0.217	0.1	0.2	0.6	0.3	1.42	0.237	0.023	1.09
Total Metals, Arsenic (µg/L)	89	62	70	0.2	0.2	0.2	0.2	0.239	0.2	0.3	0.3	0.3	1	0.094	0.010	0.39
Total Metals, Barium (µg/L)	107	3	3	1	1	1.6	1.7	2.028	1.9	2.2	2.64	2.9	6.7	0.625	0.060	0.31
Total Metals, Beryllium (µg/L)	107	107	100	0.02	0.1	0.1	0.1	0.236	0.1	0.1	0.1	0.1	2	0.504	0.049	2.14
Total Metals, Bismuth (µg/L)	44	44	100	0.2	0.2	0.2	0.2	0.450	0.2	0.2	0.4	0.2	5	1.013	0.153	2.25
Total Metals, Boron (µg/L)	38	1	3	0.9	0.9	1.2	1.5	1.737	1.7	2.05	2.33	2.5	2.5	0.407	0.066	0.23
Total Metals, Cadmium (µg/L)	107	104	97	0.02	0.03	0.04	0.04	0.066	0.05	0.05	0.1	0.05	0.3	0.068	0.007	1.03
Total Metals, Cesium (µg/L)	107	103	96	0.008	0.1	0.1	0.1	0.118	0.1	0.1	0.1	0.1	0.4	0.085	0.008	0.72
Total Metals, Chromium (µg/L)	107	97	91	0.1	0.1	0.1	0.1	0.493	0.1	0.1	1.52	0.1	12.7	1.433	0.139	2.91
Total Metals, Cobalt (µg/L)	107	99	93	0.03	0.1	0.1	0.1	0.168	0.1	0.1	0.1116	0.1	1	0.239	0.023	1.42
Total Metals, Copper (µg/L)	107	9	8	0.2	0.2	0.5	0.6	0.906	0.7	0.9	2	1.3	5.5	0.697	0.067	0.77
Total Metals, Iron (µg/L)	107	34	32	5	5	5	15	31.234	30	40	50	69	182	26.895	2.600	0.86
Total Metals, Lead (µg/L)	107	92	86	0.09	0.1	0.1	0.1	0.715	0.1	0.1	0.85	0.1	53.1	5.120	0.495	7.16
Total Metals, Lithium (µg/L)	107	8	7	0.6	0.6	1.1	1.2	1.520	1.4	1.7	1.9	2	4.5	0.590	0.057	0.39
Total Metals, Magnesium (µg/L)	3	0	0	0.9	0.9	0.9	0.9	1.933	0.9	2.45	3.38	4	4	1.790	1.033	0.93
Total Metals, Manganese (µg/L)	104	6	6	0.4	0.4	0.83	1	2.619	2.1	3.3	5.15	5.7	12.6	2.217	0.217	0.85
Total Metals, Mercury (ng/L)	63	7	11	0.0002	0.0002	0.000622	0.25	0.447	0.5	0.6	0.8	1.1	1.4	0.312	0.039	0.70
Total Metals, Mercury (µg/L)	85	84	99	0.0002	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.24
Total Metals, Molybdenum (µg/L)	107	67	63	0.02	0.02	0.1	0.1	0.212	0.1	0.2	0.3	0.3	1.2	0.256	0.025	1.20
Total Metals, Nickel (µg/L)	107	8	7	0.4	0.4	0.7	0.7	0.849	0.8	1	1.058	1.3	1.3	0.177	0.017	0.21
Total Metals, Rubidium (µg/L)	107	1	1	0.5	1	1.272	1.4	1.616	1.6	1.8	2.1	2.4	2.4	0.335	0.032	0.21
Total Metals, Selenium (µg/L)	107	104	97	0.3	0.3	0.3	0.3	1.065	0.3	0.3	1	0.3	10	2.558	0.247	2.40
Total Metals, Silver (µg/L)	107	107	100	0.006	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.3	0.060	0.006	0.56
Total Metals, Strontium (µg/L)	107	1	1	1	1	5.87	6.6	9.492	8.9	11.85	15.5	19.2	19.2	3.666	0.354	0.39
Total Metals, Thallium (µg/L)	107	106	99	0.1	0.1	0.1	0.1	0.123	0.1	0.1	0.1	0.1	0.4	0.080	0.008	0.65
Total Metals, Tin (µg/L)	38	38	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	107	53	50	0.02	0.02	0.1	0.1	0.452	0.2	0.3	1.32	0.5	3	0.785	0.076	1.74
Total Metals, Uranium (µg/L)	107	93	87	0.057	0.1	0.1	0.1	0.118	0.1	0.1	0.2	0.1	0.3	0.058	0.006	0.49
Total Metals, Vanadium (µg/L)	107	102	95	0.03	0.1	0.1	0.1	0.172	0.1	0.1	0.3	0.1	1	0.241	0.023	1.40
Total Metals, Zinc (µg/L)	104	59	57	0.4	0.4	0.4	0.4	2.174	0.5	2.0875	9.73	4.4	16	3.348	0.328	1.54

Table B.2.4-9 Fairy Lake River Upstream of Coppermine River (FAR) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	2	0	0	1.4	1.4	1.6	1.9	2.4	2.4	2.9	3.2	3.4	3.4	1.414	1.000	0.59
Dissolved Metals, Antimony (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	2	0	0	9.1	9.1	9.21	9.375	9.65	9.65	9.925	10.09	10.2	10.2	0.778	0.550	0.08
Dissolved Metals, Beryllium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	2	2	100	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	2	1	50	0.3	0.3	0.33	0.375	0.45	0.45	0.525	0.57	0.6	0.6	0.212	0.150	0.47
Dissolved Metals, Iron (µg/L)	2	2	100	50	50	50	50	50	50	50	50	50	50	----	----	----
Dissolved Metals, Lead (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	2	1	50	0.2	0.2	0.21	0.225	0.25	0.25	0.275	0.29	0.3	0.3	0.071	0.050	0.28
Dissolved Metals, Manganese (µg/L)	2	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	----	----	----
Dissolved Metals, Molybdenum (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Rubidium (µg/L)	2	0	0	0.4	0.4	0.41	0.425	0.45	0.45	0.475	0.49	0.5	0.5	0.071	0.050	0.16
Dissolved Metals, Selenium (µg/L)	2	2	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	2	0	0	7.9	7.9	7.95	8.025	8.15	8.15	8.275	8.35	8.4	8.4	0.354	0.250	0.04
Dissolved Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	2	0	0	2.1	2.1	2.33	2.675	3.25	3.25	3.825	4.17	4.4	4.4	1.626	1.150	0.50
Major Ions, Dissolved Calcium (mg/L)	16	0	0	5.5	5.5	5.58	5.8625	6.164	5.99	6.455	6.94	7.2	7.2	0.525	0.131	0.09
Major Ions, Dissolved Chloride (mg/L)	16	8	50	0.2	0.2	0.2	0.2	0.381	0.3	0.5	0.65	0.7	0.7	0.187	0.047	0.49
Major Ions, Dissolved Fluoride (mg/L)	2	2	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	16	0	0	1.86	1.86	1.91	2.095	2.246	2.11	2.2775	2.32	2.34	4.07	0.507	0.127	0.23
Major Ions, Dissolved Potassium (mg/L)	16	0	0	0.23	0.23	0.23	0.25	0.274	0.27	0.3	0.305	0.35	0.35	0.034	0.008	0.12
Major Ions, Dissolved Sodium (mg/L)	16	0	0	0.28	0.3	0.305	0.3525	0.383	0.4	0.4	0.43	0.43	0.54	0.062	0.015	0.16
Major Ions, Dissolved Sulphate (mg/L)	16	13	81	0.8	0.8	0.8	1	2.213	3	3	3	3	3	1.052	0.263	0.48
Major Ions, Reactive Silica (mg/L)	15	0	0	0.24	0.24	0.268	0.29	0.322	0.32	0.3285	0.4	0.34	0.467	0.060	0.015	0.19
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	16	0	0	21.9	21.9	21.9	23.325	24.588	24	24.825	25.7	25.8	35.9	3.268	0.817	0.13
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	16	0	0	22.4	22.4	22.45	22.75	25.131	23.85	25.525	30	26.7	34.8	3.738	0.935	0.15
Nutrients, Dissolved Organic Carbon (mg/L)	16	0	0	1.5	1.5	1.55	1.7	1.900	1.8	2.025	2.25	2.3	2.9	0.352	0.088	0.19
Nutrients, Nitrate, as N (mg/L)	12	9	75	0.008	0.008	0.008	0.008	0.011	0.009	0.0115	0.016	0.016	0.025	0.005	0.002	0.47
Nutrients, Nitrate/Nitrite, as N (mg/L)	13	10	77	0.008	0.008	0.008	0.008	0.012	0.008	0.01	0.0232	0.01	0.029	0.007	0.002	0.59
Nutrients, Nitrite, as N (mg/L)	15	15	100	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.01	0.008	0.01	0.001	0.000	0.10
Nutrients, Total Ammonia, as N (mg/L)	16	13	81	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.007	0.005	0.019	0.004	0.001	0.57
Nutrients, Total Dissolved Phosphorus (mg/L)	1	1	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Organic Carbon (mg/L)	16	0	0	1.4	1.4	1.45	1.575	1.763	1.75	1.925	2	2.2	2.2	0.239	0.060	0.14
Nutrients, Total Phosphorus (mg/L)	16	5	31	0.003	0.003	0.004	0.005	0.167	0.0085	0.01	0.0685	0.01	2.45	0.609	0.152	3.64
Nutrients, o-Phosphate, as P (mg/L)	15	12	80	0.002	0.002	0.002	0.002	0.003	0.002	0.002	0.003	0.002	0.01	0.002	0.001	0.77
Physical Parameters, Color (CU)	15	13	87	5	5	5	5	5.667	5	5	8	5	10	1.759	0.454	0.31
Physical Parameters, Specific Conductivity (µS/cm)	16	0	0	47.7	47.7	47.95	49.75	56.169	50.55	52.05	54.05	54.6	140	22.437	5.609	0.40
Physical Parameters, Total Dissolved Solids (mg/L)	16	1	6	10	10	18	21.25	26.188	28	30.25	32.5	36	36	6.911	1.728	0.26
Physical Parameters, Total Suspended Solids (mg/L)	16	13	81	3	3	3	3	3.438	3	3	5	3	6	1.031	0.258	0.30
Physical Parameters, Turbidity (NTU)	16	1	6	0.1	0.1	0.2	0.215	0.428	0.45	0.525	0.7	0.9	0.9	0.228	0.057	0.53
Physical Parameters, pH (unitless)	16	0	0	6.78	7.33	7.275	7.375	7.402	7.435	7.47	7.555	7.48	7.7	0.199	0.050	0.03
Total Metals, Aluminum (µg/L)	16	12	75	2.24	30	3.14	23.75	23.345	30	30	30	30	30	11.920	2.980	0.51
Total Metals, Antimony (µg/L)	16	5	31	0.1	0.1	0.35	0.5	0.663	0.719	0.825	0.95	1.1	1.1	0.273	0.068	0.41
Total Metals, Arsenic (µg/L)	3	3	100	0.2	0.2	0.2	0.2	0.467	0.2	0.6	0.84	1	1	0.462	0.267	0.99

Table B.2.4-9 Fairy Lake River Upstream of Coppermine River (FAR) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Barium (µg/L)	16	1	6	1	9	9	9.6675	9.548	10	10.5	11	11	11	2.365	0.591	0.25
Total Metals, Beryllium (µg/L)	16	16	100	0.02	0.02	0.06	0.1	1.396	2	2	2	2	2	0.925	0.231	0.66
Total Metals, Bismuth (µg/L)	9	8	89	0.4	0.4	0.4	0.4	1.633	1	1	5	1	5	1.927	0.642	1.18
Total Metals, Cadmium (µg/L)	16	16	100	0.02	0.02	0.035	0.0875	0.221	0.3	0.3	0.3	0.3	0.3	0.122	0.030	0.55
Total Metals, Cesium (µg/L)	16	16	100	0.008	0.008	0.054	0.1	0.295	0.4	0.4	0.4	0.4	0.4	0.163	0.041	0.55
Total Metals, Chromium (µg/L)	16	13	81	0.1	0.1	0.2	1.6	2.244	3	3	3	3	3	1.231	0.308	0.55
Total Metals, Cobalt (µg/L)	16	14	88	0.1	0.1	0.1	0.1635	0.725	1	1	1	1	1	0.421	0.105	0.58
Total Metals, Copper (µg/L)	16	11	69	0.48	0.48	0.765	1	1.626	2	2	2	2	2	0.584	0.146	0.36
Total Metals, Iron (µg/L)	16	16	100	30	30	30	30	33.750	30	30	50	30	50	8.062	2.016	0.24
Total Metals, Lead (µg/L)	16	14	88	0.1	1	0.1	0.9075	0.817	1	1	1	1	1.14	0.370	0.092	0.45
Total Metals, Lithium (µg/L)	16	14	88	0.2	0.2	0.25	0.3	2.144	3	3	3	3	3	1.312	0.328	0.61
Total Metals, Magnesium (µg/L)	1	0	0	0.6	0.6	0.6	0.6	0.600	0.6	0.6	0.6	0.6	0.6	----	----	----
Total Metals, Manganese (µg/L)	15	6	40	0.54	0.54	1	1	1.417	1.2	2	2	3	3	0.642	0.166	0.45
Total Metals, Mercury (µg/L)	1	1	100	0.02	0.02	0.02	0.02	0.020	0.02	0.02	0.02	0.02	0.02	----	----	----
Total Metals, Molybdenum (µg/L)	16	14	88	0.03	0.03	0.09	0.1	0.713	1	1	1	1	1	0.440	0.110	0.62
Total Metals, Nickel (µg/L)	16	14	88	0.09	0.09	0.1	0.1075	0.719	1	1	1	1	1	0.431	0.108	0.60
Total Metals, Rubidium (µg/L)	16	11	69	0.4	0.5	0.41	0.5	0.483	0.5	0.5	0.5	0.5	0.51	0.038	0.010	0.08
Total Metals, Selenium (µg/L)	16	15	94	0.3	0.3	0.3	0.85	7.019	10	10	10	10	10	4.570	1.142	0.65
Total Metals, Silver (µg/L)	16	16	100	0.006	0.006	0.053	0.1	0.226	0.3	0.3	0.3	0.3	0.3	0.117	0.029	0.52
Total Metals, Strontium (µg/L)	16	1	6	1	6.9	6.95	7	7.492	7.85	8.075	9	9	10	1.930	0.482	0.26
Total Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.306	0.4	0.4	0.4	0.4	0.4	0.144	0.036	0.47
Total Metals, Titanium (µg/L)	16	14	88	0.04	0.04	0.08	0.1	2.088	3	3	3	3	3	1.398	0.349	0.67
Total Metals, Uranium (µg/L)	16	14	88	0.033	0.033	0.071	0.1	0.230	0.3	0.3	0.3	0.3	0.3	0.109	0.027	0.48
Total Metals, Vanadium (µg/L)	16	16	100	0.03	0.03	0.065	0.1	0.710	1	1	1	1	1	0.445	0.111	0.63
Total Metals, Zinc (µg/L)	16	12	75	2.5	10	3.05	8.325	8.244	10	10	10	10	10	3.146	0.786	0.38

Table B.2.4-10 Fairy Lake (FAL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	8	1	13	0.6	1.8	1.44	1.95	2.750	2.1	2.45	4.64	3.2	8	2.236	0.791	0.81
Dissolved Metals, Antimony (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	8	8	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	8	0	0	9.2	9.2	9.41	9.5	9.938	9.75	10.325	10.76	10.9	10.9	0.612	0.216	0.06
Dissolved Metals, Beryllium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cadmium (µg/L)	8	8	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Cesium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	8	6	75	0.1	0.1	0.1	0.1	0.175	0.1	0.125	0.32	0.1	0.6	0.175	0.062	1.00
Dissolved Metals, Cobalt (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	8	0	0	0.4	0.5	0.47	0.5	1.213	0.5	0.525	2.28	0.5	6.2	2.016	0.713	1.66
Dissolved Metals, Iron (µg/L)	8	8	100	5	50	5	38.75	38.750	50	50	50	50	50	20.831	7.365	0.54
Dissolved Metals, Lead (µg/L)	8	5	63	0.1	0.1	0.1	0.1	0.475	0.1	0.25	1.09	0.4	2.7	0.905	0.320	1.91
Dissolved Metals, Lithium (µg/L)	8	5	63	0.2	0.2	0.2	0.2	0.313	0.2	0.3	0.48	0.3	0.9	0.242	0.085	0.77
Dissolved Metals, Manganese (µg/L)	8	0	0	0.2	0.2	0.2	0.2	0.663	0.3	0.975	1.44	2	2	0.659	0.233	0.99
Dissolved Metals, Mercury (µg/L)	8	8	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.013	0.01	0.02	0.004	0.001	0.31
Dissolved Metals, Molybdenum (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	8	5	63	0.1	0.1	0.1	0.1	0.163	0.1	0.225	0.3	0.3	0.3	0.092	0.032	0.56
Dissolved Metals, Rubidium (µg/L)	8	0	0	0.3	0.4	0.3	0.375	0.375	0.4	0.4	0.4	0.4	0.4	0.046	0.016	0.12
Dissolved Metals, Selenium (µg/L)	8	7	88	0.3	0.3	0.3	0.3	0.438	0.3	0.3	0.63	0.3	1.4	0.389	0.138	0.89
Dissolved Metals, Silver (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	8	0	0	5.3	7	6.49	7.075	7.750	7.3	7.95	9.27	8.1	12	1.912	0.676	0.25
Dissolved Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	8	1	13	0.4	0.4	0.47	0.5	1.575	0.55	1.4	3.92	0.9	6.3	2.082	0.736	1.32
Major Ions, Dissolved Calcium (mg/L)	11	0	0	4.6	5	5	6.4	6.936	6.9	7.6	8.7	9.2	9.2	1.393	0.420	0.20
Major Ions, Dissolved Chloride (mg/L)	10	10	100	0.7	0.7	0.7	0.7	0.700	0.7	0.7	0.7	0.7	0.7	----	----	----
Major Ions, Dissolved Fluoride (mg/L)	9	9	100	0.1	0.1	0.1	0.1	0.200	0.1	0.1	0.28	0.1	1	0.300	0.100	1.50
Major Ions, Dissolved Magnesium (mg/L)	11	0	0	1.1	2.1	2.1	2.2	2.209	2.3	2.4	2.5	2.5	2.5	0.391	0.118	0.18
Major Ions, Dissolved Potassium (mg/L)	11	1	9	0.1	0.1	0.2	0.2	0.227	0.2	0.3	0.3	0.3	0.3	0.065	0.019	0.28
Major Ions, Dissolved Sodium (mg/L)	11	1	9	0.1	0.2	0.2	0.3	0.309	0.3	0.4	0.4	0.4	0.4	0.094	0.028	0.31
Major Ions, Dissolved Sulphate (mg/L)	11	10	91	1	1	1	1	1.182	1	1	1	1	3	0.603	0.182	0.51
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	11	0	0	22.5	22.5	23.2	23.25	42.873	23.7	25.1	26.2	26.2	232	62.736	18.916	1.46
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	11	0	0	15.9	21.6	21.6	25.1	26.464	27.2	29.1	32.1	32.5	32.5	4.748	1.432	0.18
Nutrients, Dissolved Organic Carbon (mg/L)	11	0	0	0.9	1.1	1.1	1.55	1.691	1.7	1.95	2.1	2.2	2.2	0.404	0.122	0.24
Nutrients, Nitrate, as N (mg/L)	11	10	91	0.01	0.01	0.01	0.01	0.012	0.01	0.01	0.01	0.01	0.03	0.006	0.002	0.51
Nutrients, Nitrate/Nitrite, as N (mg/L)	10	7	70	0.01	0.01	0.01	0.01	0.112	0.01	0.025	0.494	0.03	0.53	0.210	0.066	1.88
Nutrients, Nitrite, as N (mg/L)	11	9	82	0.01	0.01	0.01	0.01	0.101	0.01	0.01	0.49	0.01	0.53	0.202	0.061	2.01
Nutrients, Total Ammonia, as N (mg/L)	11	9	82	0.005	0.005	0.005	0.005	0.007	0.005	0.0085	0.01	0.01	0.01	0.002	0.001	0.34
Nutrients, Total Dissolved Phosphorus (mg/L)	2	2	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Organic Carbon (mg/L)	11	0	0	1.4	1.4	1.4	1.55	1.855	1.9	2.1	2.3	2.3	2.3	0.339	0.102	0.18
Nutrients, Total Phosphorus (mg/L)	11	9	82	0.01	0.01	0.01	0.01	0.012	0.01	0.01	0.02	0.01	0.02	0.004	0.001	0.34
Nutrients, o-Phosphate, as P (mg/L)	9	9	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	11	0	0	46.1	46.1	46.8	47.15	49.145	48.6	50.05	51.8	51.8	55.6	2.753	0.830	0.06
Physical Parameters, Total Dissolved Solids (mg/L)	11	1	9	10	10	14	20	24.636	25	29	33	42	42	8.925	2.691	0.36
Physical Parameters, Total Suspended Solids (mg/L)	11	9	82	3	3	3	3	3.364	3	3	4	3	6	0.924	0.279	0.27
Physical Parameters, Turbidity (NTU)	11	0	0	0.23	0.23	0.23	0.235	0.314	0.3	0.365	0.41	0.48	0.48	0.085	0.026	0.27

Table B.2.4-10 Fairy Lake (FAL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, pH (unitless)	11	0	0	7.43	7.43	7.46	7.525	7.605	7.63	7.68	7.73	7.77	7.77	0.111	0.033	0.01
Total Metals, Aluminum (µg/L)	11	2	18	0.6	0.6	0.6	1.25	2.355	2.4	3.4	3.9	3.9	3.9	1.270	0.383	0.54
Total Metals, Antimony (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	11	10	91	0.2	0.2	0.2	0.2	0.209	0.2	0.2	0.2	0.2	0.3	0.030	0.009	0.14
Total Metals, Barium (µg/L)	11	0	0	7.8	9.2	9.2	9.35	9.636	9.8	10	10.2	10.8	10.8	0.759	0.229	0.08
Total Metals, Beryllium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cadmium (µg/L)	11	11	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Total Metals, Cesium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	11	10	91	0.1	0.1	0.1	0.1	0.118	0.1	0.1	0.1	0.1	0.3	0.060	0.018	0.51
Total Metals, Cobalt (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	11	0	0	0.3	0.4	0.4	0.4	0.418	0.4	0.4	0.5	0.4	0.6	0.075	0.023	0.18
Total Metals, Iron (µg/L)	11	9	82	5	5	5	6.5	30.273	50	50	50	50	50	22.712	6.848	0.75
Total Metals, Lead (µg/L)	11	9	82	0.1	0.1	0.1	0.1	0.173	0.1	0.1	0.5	0.1	0.5	0.162	0.049	0.94
Total Metals, Lithium (µg/L)	11	6	55	0.2	0.2	0.2	0.2	0.300	0.2	0.3	0.3	0.3	0.9	0.205	0.062	0.68
Total Metals, Manganese (µg/L)	11	0	0	0.2	1.2	1.2	1.45	1.636	1.9	2	2	2	2	0.555	0.167	0.34
Total Metals, Mercury (µg/L)	10	10	100	0.01	0.01	0.01	0.01	0.011	0.01	0.01	0.011	0.01	0.02	0.003	0.001	0.29
Total Metals, Molybdenum (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Rubidium (µg/L)	11	0	0	0.3	0.4	0.3	0.4	0.382	0.4	0.4	0.4	0.4	0.4	0.040	0.012	0.11
Total Metals, Selenium (µg/L)	11	10	91	0.3	0.3	0.3	0.3	0.391	0.3	0.3	0.3	0.3	1.3	0.302	0.091	0.77
Total Metals, Silver (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	11	0	0	5.4	6.9	6.9	7.05	7.318	7.3	8	8.1	8.1	8.1	0.786	0.237	0.11
Total Metals, Thallium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Uranium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	11	11	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	11	7	64	0.4	0.4	0.4	0.4	0.745	0.4	0.8	1.1	1.1	2.7	0.693	0.209	0.93

Table B.2.4-11 Lac De Gras Outlet (LDGO) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	76	1	1.32	0.6	0.6	1.6	1.9	3.763	2.7	3.425	5.25	5.3	37.6	4.865	0.558	1.29
Dissolved Metals, Antimony (µg/L)	76	68	89.47	0.1	0.1	0.1	0.1	0.122	0.1	0.1	0.15	0.1	0.8	0.092	0.011	0.75
Dissolved Metals, Arsenic (µg/L)	76	68	89.47	0.2	0.2	0.2	0.2	0.212	0.2	0.2	0.25	0.2	0.4	0.036	0.004	0.17
Dissolved Metals, Barium (µg/L)	76	0	0	1.4	1.4	1.55	1.7	2.180	2	2.2	2.75	2.9	7.1	0.918	0.105	0.42
Dissolved Metals, Beryllium (µg/L)	76	76	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	37	36	97.3	0.2	0.2	0.2	0.2	0.214	0.2	0.2	0.2	0.2	0.7	0.082	0.014	0.38
Dissolved Metals, Boron (µg/L)	37	1	2.7	0.9	0.9	1.32	1.7	2.062	2	2.4	2.64	3	3.7	0.583	0.096	0.28
Dissolved Metals, Cadmium (µg/L)	76	75	98.68	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.05	0.09	0.007	0.001	0.15
Dissolved Metals, Cesium (µg/L)	76	76	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	76	69	90.79	0.1	0.1	0.1	0.1	0.466	0.1	0.1	0.1	0.1	17.4	2.164	0.248	4.65
Dissolved Metals, Cobalt (µg/L)	76	76	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	76	4	5.26	0.2	0.3	0.3	0.5	0.625	0.5	0.7	0.8	0.9	2.8	0.381	0.044	0.61
Dissolved Metals, Iron (µg/L)	76	73	96.05	5	5	5	5	14.026	5	5	50	5	50	17.987	2.063	1.28
Dissolved Metals, Lead (µg/L)	76	70	92.11	0.1	0.1	0.1	0.1	1.541	0.1	0.1	0.1	0.1	65.3	8.267	0.948	5.37
Dissolved Metals, Lithium (µg/L)	76	0	0	0.5	0.6	1.1	1.2	1.426	1.4	1.6	1.9	2.2	2.3	0.348	0.040	0.24
Dissolved Metals, Manganese (µg/L)	76	1	1.32	0.1	0.1	0.3	0.4	1.128	0.75	1.725	2.3	3	4.6	0.888	0.102	0.79
Dissolved Metals, Mercury (ng/L)	34	25	73.53	0.2	0.2	0.2	0.2	0.253	0.2	0.275	0.4	0.3	0.5	0.096	0.016	0.38
Dissolved Metals, Mercury (µg/L)	67	67	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.20
Dissolved Metals, Molybdenum (µg/L)	76	17	22.37	0.1	0.1	0.1	0.2	0.255	0.3	0.3	0.3	0.4	1.5	0.180	0.021	0.70
Dissolved Metals, Nickel (µg/L)	76	0	0	0.7	0.7	0.8	0.9	0.989	1	1.1	1.2	1.4	1.4	0.155	0.018	0.16
Dissolved Metals, Rubidium (µg/L)	76	0	0	0.9	0.9	1.2	1.4	1.695	1.7	1.9	2.3	2.5	2.5	0.393	0.045	0.23
Dissolved Metals, Selenium (µg/L)	76	74	97.37	0.3	0.3	0.3	0.3	0.345	0.3	0.3	0.3	0.3	2	0.274	0.031	0.79
Dissolved Metals, Silver (µg/L)	76	76	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	76	0	0	4.6	4.6	6.6	8.175	12.400	12.6	16	18.3	23.1	23.1	4.528	0.519	0.37
Dissolved Metals, Thallium (µg/L)	76	76	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	37	37	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	76	72	94.74	0.1	0.1	0.1	0.1	0.121	0.1	0.1	0.1	0.1	1.1	0.124	0.014	1.02
Dissolved Metals, Uranium (µg/L)	76	75	98.68	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.011	0.001	0.11
Dissolved Metals, Vanadium (µg/L)	76	76	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	75	41	54.67	0.4	0.4	0.4	0.4	0.993	0.4	0.9	1.92	1.6	7.7	1.358	0.157	1.37
Field Measurements, Dissolved Oxygen (% Saturation)	15	0	0	93.3	93.3	93.8	95	99.013	100.2	102.3	104.18	106.7	106.7	4.466	1.153	0.05
Field Measurements, Dissolved Oxygen (mg/L)	15	0	0	10	10	10.158	10.375	10.885	10.75	11.165	11.978	12.19	12.38	0.725	0.187	0.07
Field Measurements, Specific Conductivity (µS/cm)	15	0	0	21.6	21.6	23.2	24	25.160	25.1	27	27.06	27.2	27.2	1.730	0.447	0.07
Field Measurements, Total Dissolved Solids (mg/L)	8	0	0	0.0156	14	0.01588	10.504	11.254	14.45	15.25	16.03	16.1	16.1	6.980	2.468	0.62
Field Measurements, Turbidity (NTU)	14	14	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	12	0	0	6.28	6.28	6.544	6.64	6.902	6.86	7.07	7.46	7.67	7.67	0.400	0.115	0.06
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	6	0	0	3.6	3.6	3.75	3.95	4.467	4.1	5.075	5.55	5.7	5.7	0.864	0.353	0.19
Major Ions, Dissolved Calcium (mg/L)	124	0	0	0.6	0.6	0.833	1.1	1.458	1.4	1.8	2.1	2.8	2.9	0.494	0.044	0.34
Major Ions, Dissolved Chloride (mg/L)	121	33	27.27	0.2	0.2	0.4	0.7	1.328	1.1	2	2.6	3.77	3.77	0.917	0.083	0.69
Major Ions, Dissolved Fluoride (mg/L)	75	63	84	0.021	0.1	0.0284	0.1	0.122	0.1	0.1	0.1	0.1	1	0.160	0.019	1.31
Major Ions, Dissolved Magnesium (mg/L)	124	0	0	0.4	0.4	0.553	0.7	1.011	0.9	1.1	1.3	1.7	6.7	0.784	0.070	0.78
Major Ions, Dissolved Potassium (mg/L)	124	0	0	0.3	0.3	0.453	0.5	0.686	0.605	0.8	1	1.2	1.3	0.209	0.019	0.31
Major Ions, Dissolved Sodium (mg/L)	124	0	0	0.35	0.35	0.5	0.5825	1.075	0.9	1.5	1.973	2.7	2.7	0.581	0.052	0.54
Major Ions, Dissolved Sulphate (mg/L)	126	25	19.84	0.3	0.3	2	2	3.073	3	4	4.04	6	10	1.216	0.108	0.40
Major Ions, Reactive Silica (mg/L)	75	2	2.67	0.032	0.032	0.0424	0.0535	0.090	0.071	0.1015	0.1236	0.161	0.5	0.076	0.009	0.84
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	125	1	0.8	0.4	2.9	3.3	3.8	4.488	4.4	5.4	6	6.9	6.9	1.093	0.098	0.24
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	124	0	0	0.007	2.9	4.306	5.9	7.744	7.2	9.025	10.5	13.5	30.2	3.666	0.329	0.47
Microbiology, Chlorophyll a (µg/L)	39	5	12.82	0.169	0.169	0.304	0.369	0.646	0.495	0.9255	1.08	1.75	2	0.419	0.067	0.65
Nutrients, Dissolved Nitrogen (mg/L)	43	0	0	0.112	0.112	0.1242	0.13	0.185	0.15	0.1675	0.198	0.22	1.57	0.219	0.033	1.18
Nutrients, Dissolved Organic Carbon (mg/L)	126	0	0	1.6	1.6	2	2.3	2.587	2.6	2.9	3.15	3.8	3.9	0.464	0.041	0.18
Nutrients, Dissolved o-Phosphate, as P (mg/L)	17	15	88.24	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00108	0.001	0.0016	0.000	0.000	0.14
Nutrients, Nitrate, as N (mg/L)	132	105	79.55	0.003	0.003	0.005	0.005	0.041	0.008	0.01	0.03	0.015	1.04	0.161	0.014	3.89
Nutrients, Nitrate/Nitrite, as N (mg/L)	126	95	75.4	0.005	0.005	0.0051	0.0051	0.035	0.01	0.010075	0.05	0.015	1.04	0.114	0.010	3.27
Nutrients, Nitrite, as N (mg/L)	133	129	96.99	0.001	0.001	0.001	0.001	0.023	0.008	0.01	0.01	0.01	1	0.123	0.011	5.24

Table B.2.4-11 Lac De Gras Outlet (LDGO) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	126	87	69.05	0.005	0.005	0.005	0.005	0.010	0.005	0.01	0.0185	0.017	0.05	0.009	0.001	0.91
Nutrients, Total Dissolved Phosphorus (mg/L)	48	32	66.67	0.001	0.001	0.001	0.002	0.004	0.00205	0.0054	0.01	0.01	0.01	0.003	0.001	0.89
Nutrients, Total Nitrogen (mg/L)	47	0	0	0.111	0.111	0.1296	0.1415	0.197	0.17	0.19	0.21	0.24	1.55	0.204	0.030	1.04
Nutrients, Total Organic Carbon (mg/L)	126	0	0	1.8	1.8	2.2	2.4	2.676	2.6	3	3.2	3.9	4	0.408	0.036	0.15
Nutrients, Total Phosphorus (mg/L)	132	82	62.12	0.002	0.002	0.002	0.002	0.008	0.004	0.01	0.01	0.021	0.09	0.012	0.001	1.52
Nutrients, o-Phosphate, as P (mg/L)	99	90	90.91	0.001	0.001	0.001	0.001	0.005	0.002	0.002	0.0023	0.003	0.281	0.028	0.003	6.03
Physical Parameters, Color (CU)	34	26	76.47	5	5	5	5	6.000	5	5	10	5	10	1.938	0.332	0.32
Physical Parameters, Specific Conductivity (µS/cm)	125	0	0	12.4	12.4	13.94	15.8	21.211	19.8	25.6	30.48	37.7	43.1	6.733	0.602	0.32
Physical Parameters, Total Dissolved Solids (mg/L)	121	58	47.93	10	10	10	10	15.198	11	17	24	26	74	9.021	0.820	0.59
Physical Parameters, Total Suspended Solids (mg/L)	124	102	82.26	3	3	3	3	3.790	3	3	4	3	20	2.983	0.268	0.79
Physical Parameters, Turbidity (NTU)	125	1	0.8	0.08	0.08	0.15	0.2	0.362	0.27	0.4	0.696	0.7	2.4	0.315	0.028	0.87
Physical Parameters, pH (unitless)	125	0	0	4.77	6.38	6.534	6.64	6.733	6.75	6.86	6.97	7.06	7.06	0.239	0.021	0.04
Total Metals, Aluminum (µg/L)	124	18	14.52	1	1	2.7	3.5	12.136	4.95	7.35	30	13.1	330	30.712	2.758	2.53
Total Metals, Antimony (µg/L)	124	92	74.19	0.1	0.1	0.1	0.1	0.318	0.1	0.425	0.77	0.9	2.6	0.444	0.040	1.39
Total Metals, Arsenic (µg/L)	102	87	85.29	0.2	0.2	0.2	0.2	0.274	0.2	0.2	0.3	0.2	2	0.247	0.024	0.90
Total Metals, Barium (µg/L)	124	10	8.06	1	1	1.33	1.7	2.070	2	2.2	2.87	2.9	7.2	0.818	0.073	0.40
Total Metals, Beryllium (µg/L)	124	123	99.19	0	0.1	0.1	0.1	0.388	0.1	0.1	2	0.1	2	0.689	0.062	1.78
Total Metals, Bismuth (µg/L)	51	51	100	0.2	0.2	0.2	0.2	0.898	0.2	0.4	5	0.4	10	1.933	0.271	2.15
Total Metals, Boron (µg/L)	36	0	0	1.1	1.1	1.45	1.7	2.025	1.9	2.4	2.65	3	3	0.477	0.079	0.24
Total Metals, Cadmium (µg/L)	125	119	95.2	0.02	0.04	0.04	0.04	0.092	0.05	0.05	0.3	0.06	0.5	0.099	0.009	1.08
Total Metals, Cesium (µg/L)	124	121	97.58	0.008	0.1	0.1	0.1	0.176	0.1	0.1	0.4	0.1	2.2	0.291	0.026	1.65
Total Metals, Chromium (µg/L)	125	111	88.8	0.1	0.1	0.1	0.1	0.815	0.1	0.2	3	0.3	15.2	1.830	0.164	2.24
Total Metals, Cobalt (µg/L)	125	118	94.4	0.038	0.1	0.1	0.1	0.249	0.1	0.1	1	0.1	1	0.331	0.030	1.33
Total Metals, Copper (µg/L)	125	18	14.4	0.2	0.2	0.4	0.6	1.029	0.7	1.14	2	1.7	5.2	0.809	0.072	0.79
Total Metals, Iron (µg/L)	124	85	68.55	5	5	5	5	26.798	9	33	50	61	690	63.947	5.743	2.39
Total Metals, Lead (µg/L)	125	110	88	0.1	0.1	0.1	0.1	1.080	0.1	0.2	1	0.3	62.6	6.452	0.577	5.97
Total Metals, Lithium (µg/L)	124	19	15.32	0.5	0.5	1.1	1.2	1.652	1.5	1.8	3	2.3	3	0.644	0.058	0.39
Total Metals, Magnesium (µg/L)	5	0	0	1.1	1.1	1.18	1.3	2.280	1.3	3.7	3.88	4	4	1.439	0.644	0.63
Total Metals, Manganese (µg/L)	120	13	10.83	0.6	0.6	0.8	1	2.155	1.9	2.725	4.1	5.1	6.6	1.347	0.123	0.63
Total Metals, Mercury (ng/L)	60	21	35	0.0001	0.0001	0.000364	0.2	0.289	0.215	0.4	0.6	0.7	0.9	0.219	0.028	0.76
Total Metals, Mercury (µg/L)	87	84	96.55	0.0008	0.01	0.01	0.01	0.012	0.01	0.01	0.01	0.01	0.14	0.014	0.002	1.17
Total Metals, Molybdenum (µg/L)	124	56	45.16	0.02	0.02	0.1	0.1	0.360	0.2	0.3	1	0.4	3	0.464	0.042	1.29
Total Metals, Nickel (µg/L)	125	16	12.8	0.6	0.6	0.8	0.9	1.037	1	1.1	1.276	1.4	2	0.234	0.021	0.23
Total Metals, Rubidium (µg/L)	118	1	0.85	0.5	0.9	1.2	1.3	1.583	1.52	1.8	2.13	2.5	2.5	0.388	0.036	0.24
Total Metals, Selenium (µg/L)	124	119	95.97	0.3	0.3	0.3	0.3	1.840	0.3	0.3	10	0.3	10	3.494	0.314	1.90
Total Metals, Silver (µg/L)	124	121	97.58	0.006	0.1	0.1	0.1	0.130	0.1	0.1	0.3	0.1	0.3	0.078	0.007	0.60
Total Metals, Strontium (µg/L)	124	0	0	4.6	4.6	5.53	6.71	10.322	8.55	13.7	17.24	23.1	23.1	4.584	0.412	0.44
Total Metals, Thallium (µg/L)	124	124	100	0.1	0.1	0.1	0.1	0.146	0.1	0.1	0.4	0.1	0.4	0.108	0.010	0.74
Total Metals, Tin (µg/L)	36	36	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	124	107	86.29	0.1	0.1	0.1	0.1	0.668	0.1	0.2	3	0.3	7.61	1.310	0.118	1.96
Total Metals, Uranium (µg/L)	124	117	94.35	0.024	0.1	0.1	0.1	0.194	0.1	0.1	0.3	0.1	4.4	0.545	0.049	2.81
Total Metals, Vanadium (µg/L)	124	117	94.35	0.03	0.1	0.1	0.1	0.245	0.1	0.1	1	0.1	1	0.325	0.029	1.33
Total Metals, Zinc (µg/L)	124	73	58.87	0.4	0.4	0.4	0.4	4.436	0.5	5.025	10	11.4	65	9.477	0.851	2.14

Table B.2.4-12 Point Lake (POL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	67	0	0	5.5	5.5	7.6	9.15	10.673	10.4	11.9	14.18	14.8	18.7	2.740	0.335	0.26
Dissolved Metals, Antimony (µg/L)	67	63	94.03	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.3	0.032	0.004	0.29
Dissolved Metals, Arsenic (µg/L)	67	58	86.57	0.2	0.2	0.2	0.2	0.215	0.2	0.2	0.3	0.2	0.4	0.040	0.005	0.19
Dissolved Metals, Barium (µg/L)	67	0	0	1.6	1.6	1.8	1.9	2.258	2	2.25	3.3	2.7	3.9	0.618	0.076	0.27
Dissolved Metals, Beryllium (µg/L)	67	67	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	39	38	97.44	0.2	0.2	0.2	0.2	0.205	0.2	0.2	0.2	0.2	0.4	0.032	0.005	0.16
Dissolved Metals, Boron (µg/L)	39	7	17.95	0.9	0.9	0.9	1.05	1.403	1.3	1.6	2.14	2.4	2.4	0.468	0.075	0.33
Dissolved Metals, Cadmium (µg/L)	67	67	100	0.04	0.04	0.04	0.04	0.045	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	67	67	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	67	65	97.01	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.017	0.002	0.17
Dissolved Metals, Cobalt (µg/L)	67	67	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	67	1	1.49	0.2	0.3	0.5	0.6	0.864	0.7	0.8	1.1	1.1	9.6	1.136	0.139	1.32
Dissolved Metals, Iron (µg/L)	67	65	97.01	5	5	5	5	11.164	5	5	50	5	50	15.429	1.885	1.38
Dissolved Metals, Lead (µg/L)	67	62	92.54	0.1	0.1	0.1	0.1	0.121	0.1	0.1	0.1	0.1	0.5	0.081	0.010	0.67
Dissolved Metals, Lithium (µg/L)	67	1	1.49	0.2	0.7	0.76	0.9	1.064	1	1.05	1.6	1.1	3.5	0.438	0.053	0.41
Dissolved Metals, Manganese (µg/L)	66	6	9.09	0.1	0.1	0.2	0.2	0.359	0.3	0.4	0.5	0.6	1.3	0.230	0.028	0.64
Dissolved Metals, Mercury (ng/L)	36	21	58.33	0.2	0.2	0.2	0.2	0.272	0.2	0.3	0.45	0.4	0.6	0.109	0.018	0.40
Dissolved Metals, Mercury (µg/L)	61	60	98.36	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.21
Dissolved Metals, Molybdenum (µg/L)	67	65	97.01	0.1	0.1	0.1	0.1	0.113	0.1	0.1	0.1	0.1	0.9	0.098	0.012	0.87
Dissolved Metals, Nickel (µg/L)	67	0	0	0.6	0.6	0.7	0.7	0.833	0.7	0.8	1.2	0.9	1.6	0.217	0.027	0.26
Dissolved Metals, Rubidium (µg/L)	67	0	0	0.9	1	1.2	1.3	1.497	1.4	1.5	2.2	1.7	2.8	0.415	0.051	0.28
Dissolved Metals, Selenium (µg/L)	67	65	97.01	0.3	0.3	0.3	0.3	0.321	0.3	0.3	0.3	0.3	1.6	0.159	0.019	0.50
Dissolved Metals, Silver (µg/L)	67	67	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	67	0	0	4.1	4.1	5.5	5.95	7.330	6.8	7.4	10.94	8.4	13.6	2.094	0.256	0.29
Dissolved Metals, Thallium (µg/L)	67	67	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	39	39	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	67	64	95.52	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.3	0.030	0.004	0.28
Dissolved Metals, Uranium (µg/L)	67	66	98.51	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.012	0.001	0.12
Dissolved Metals, Vanadium (µg/L)	67	67	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	66	30	45.45	0.4	0.4	0.4	0.4	0.933	0.5	1	1.9	1.8	4.7	0.908	0.112	0.97
Field Measurements, Dissolved Oxygen (% Saturation)	16	0	0	91.5	91.5	94.7	96.175	99.425	98.15	102.625	105.45	109.2	109.2	4.860	1.215	0.05
Field Measurements, Dissolved Oxygen (mg/L)	16	0	0	10.37	10.37	10.88	11.05	11.602	11.635	12.3	12.34	12.41	12.41	0.638	0.159	0.05
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	15.7	15.7	15.9	16.35	17.231	17.55	17.95	18.2	18.9	18.9	0.984	0.246	0.06
Field Measurements, Total Dissolved Solids (mg/L)	8	0	0	0.0102	9.8	0.01048	7.35265	7.840	9.95	11	11	11	11	4.860	1.718	0.62
Field Measurements, Turbidity (NTU)	15	15	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	14	1	7.14	6.39	6.39	6.4	6.52	6.814	6.62	7.03	7.278	7.5	7.5	0.383	0.102	0.06
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	5	0	0	3.5	3.5	3.62	3.8	4.520	3.8	5.5	5.8	6	6	1.143	0.511	0.25
Major Ions, Dissolved Calcium (mg/L)	96	0	0	0.2	0.2	1.03	1.3	1.790	1.55	2.2	2.7	3.4	7.1	0.830	0.085	0.46
Major Ions, Dissolved Chloride (mg/L)	96	71	73.96	0.2	0.7	0.4	0.675	0.657	0.7	0.7	0.7	0.7	1.3	0.192	0.020	0.29
Major Ions, Dissolved Fluoride (mg/L)	67	58	86.57	0.023	0.1	0.0336	0.1	0.104	0.1	0.1	0.1	0.1	1	0.114	0.014	1.10
Major Ions, Dissolved Magnesium (mg/L)	96	1	1.04	0.1	0.5	0.6	0.7	0.915	0.8	1	1.2	1.4	6	0.594	0.061	0.65
Major Ions, Dissolved Potassium (mg/L)	97	1	1.03	0.1	0.2	0.4	0.4	0.546	0.5	0.6	0.8	0.81	1.2	0.182	0.019	0.33
Major Ions, Dissolved Sodium (mg/L)	97	1	1.03	0.1	0.3	0.46	0.5	0.656	0.6	0.728	1	1	1.4	0.227	0.023	0.35
Major Ions, Dissolved Sulphate (mg/L)	99	9	9.09	1	1	2	2	2.746	2.45	3	4	4	8	1.074	0.108	0.39
Major Ions, Reactive Silica (mg/L)	61	3	4.92	0.196	0.196	0.298	0.337	0.441	0.425	0.525	0.62	0.77	0.77	0.134	0.017	0.30
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	97	0	0	3.3	3.3	3.5	3.8	5.230	4.2	5.5	6.92	8	47.3	4.499	0.457	0.86
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	96	0	0	0.8	0.8	5.215	6.2	8.231	7.25	9.9	11.45	13.5	27.9	3.596	0.367	0.44
Microbiology, Chlorophyll a (µg/L)	40	4	10	0.242	0.242	0.3342	0.485	0.748	0.653	0.9205	1.037	1.37	2.7	0.460	0.073	0.61
Nutrients, Dissolved Nitrogen (mg/L)	43	0	0	0.142	0.142	0.1576	0.1625	0.204	0.18	0.215	0.3028	0.29	0.34	0.057	0.009	0.28
Nutrients, Dissolved Organic Carbon (mg/L)	98	0	0	1.9	1.9	2.4	2.7	3.164	3	3.5	4.13	4.6	6	0.728	0.074	0.23
Nutrients, Dissolved o-Phosphate, as P (mg/L)	16	13	81.25	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0015	0.001	0.0021	0.000	0.000	0.29
Nutrients, Nitrate, as N (mg/L)	110	3	2.73	0.02	0.02	0.03171	0.04	0.068	0.05	0.08	0.1174	0.124	0.32	0.046	0.004	0.69
Nutrients, Nitrate/Nitrite, as N (mg/L)	105	5	4.76	0.01	0.01	0.03076	0.04	0.068	0.0515	0.0822	0.1188	0.142	0.32	0.045	0.004	0.67
Nutrients, Nitrite, as N (mg/L)	111	109	98.2	0.001	0.001	0.001	0.001	0.008	0.001	0.01	0.01	0.01	0.12	0.017	0.002	2.21

Table B.2.4-12 Point Lake (POL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	98	86	87.76	0.005	0.005	0.005	0.005	0.009	0.005	0.00775	0.01	0.011	0.05	0.010	0.001	1.12
Nutrients, Total Dissolved Phosphorus (mg/L)	45	23	51.11	0.001	0.001	0.001	0.002	0.004	0.0023	0.0034	0.01	0.0053	0.01	0.003	0.000	0.82
Nutrients, Total Nitrogen (mg/L)	47	0	0	0.144	0.144	0.1586	0.18	0.217	0.2	0.2495	0.3064	0.34	0.355	0.057	0.008	0.26
Nutrients, Total Organic Carbon (mg/L)	98	0	0	2.2	2.2	2.5	2.7	3.191	2.9	3.5225	4.23	4.7	5.9	0.699	0.071	0.22
Nutrients, Total Phosphorus (mg/L)	103	70	67.96	0.002	0.002	0.002	0.002	0.006	0.0026	0.01	0.01	0.02	0.061	0.007	0.001	1.22
Nutrients, o-Phosphate, as P (mg/L)	78	71	91.03	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.002	0.003	0.01	0.002	0.000	0.98
Physical Parameters, Color (CU)	19	15	78.95	5	5	5	5	6.316	5	5	10	5	15	2.810	0.645	0.44
Physical Parameters, Specific Conductivity (µS/cm)	98	0	0	13.7	13.7	14.57	15.5	18.623	16.95	19.775	26.49	25.7	34.8	4.789	0.484	0.26
Physical Parameters, Total Dissolved Solids (mg/L)	94	42	44.68	10	10	10	10	16.872	12	18	23	28	175	18.577	1.916	1.10
Physical Parameters, Total Suspended Solids (mg/L)	98	85	86.73	3	3	3	3	3.469	3	3	6	3	10	1.341	0.135	0.39
Physical Parameters, Turbidity (NTU)	98	2	2.04	0.05	0.05	0.13	0.16	0.385	0.21	0.33	0.7	0.57	4	0.597	0.060	1.55
Physical Parameters, pH (unitless)	98	0	0	6.2	6.41	6.587	6.675	6.759	6.77	6.8575	6.92	7.08	7.08	0.148	0.015	0.02
Total Metals, Aluminum (µg/L)	98	12	12.24	8.9	8.9	10.71	11.4	15.752	13.6	17.05	30	21.8	31.7	6.291	0.635	0.40
Total Metals, Antimony (µg/L)	98	79	80.61	0.1	0.1	0.1	0.1	0.195	0.1	0.1	0.6	0.1	0.872	0.206	0.021	1.06
Total Metals, Arsenic (µg/L)	83	69	83.13	0.2	0.2	0.2	0.2	0.246	0.2	0.2	0.3	0.2	1	0.152	0.017	0.62
Total Metals, Barium (µg/L)	98	0	0	1.6	1.6	1.8	1.9	2.318	2	2.675	3.2	3.7	4.3	0.604	0.061	0.26
Total Metals, Beryllium (µg/L)	98	98	100	0.02	0.1	0.1	0.1	0.311	0.1	0.1	2	0.1	2	0.604	0.061	1.94
Total Metals, Bismuth (µg/L)	48	48	100	0.2	0.2	0.2	0.2	0.638	0.2	0.2	0.58	0.2	5	1.335	0.193	2.09
Total Metals, Boron (µg/L)	38	6	15.79	0.9	0.9	0.9	1.1	1.379	1.2	1.7	1.93	2.4	2.4	0.436	0.071	0.32
Total Metals, Cadmium (µg/L)	98	96	97.96	0.02	0.03	0.04	0.04	0.076	0.05	0.05	0.3	0.05	0.3	0.081	0.008	1.07
Total Metals, Cesium (µg/L)	98	97	98.98	0.008	0.1	0.1	0.1	0.131	0.1	0.1	0.4	0.1	0.4	0.097	0.010	0.74
Total Metals, Chromium (µg/L)	98	92	93.88	0.1	0.1	0.1	0.1	0.457	0.1	0.1	3	0.1	3	0.932	0.094	2.04
Total Metals, Cobalt (µg/L)	98	95	96.94	0.084	0.1	0.1	0.1	0.201	0.1	0.1	1	0.1	1	0.286	0.029	1.42
Total Metals, Copper (µg/L)	98	10	10.2	0.3	0.3	0.57	0.7	1.028	0.8	1.1	2	1.6	6	0.699	0.071	0.68
Total Metals, Iron (µg/L)	98	74	75.51	5	5	5	5	15.816	5.5	30	50	50	50	16.267	1.643	1.03
Total Metals, Lead (µg/L)	98	88	89.8	0.1	0.1	0.1	0.1	0.245	0.1	0.1	1	0.1	1.02	0.309	0.031	1.26
Total Metals, Lithium (µg/L)	98	13	13.27	0.2	0.5	0.77	0.9	1.265	1	1.3	3	1.8	3.4	0.727	0.073	0.58
Total Metals, Magnesium (µg/L)	1	0	0	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Manganese (µg/L)	96	11	11.46	0.2	0.3	0.4	0.5	0.650	0.6	0.7	1	0.9	2.3	0.335	0.034	0.52
Total Metals, Mercury (ng/L)	60	18	30	0.0001	0.0001	0.000569	0.2	0.365	0.3	0.5	0.71	0.9	1.2	0.278	0.036	0.76
Total Metals, Mercury (µg/L)	75	74	98.67	0.0007	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.19
Total Metals, Molybdenum (µg/L)	98	94	95.92	0.02	0.1	0.1	0.1	0.202	0.1	0.1	1	0.1	1	0.286	0.029	1.41
Total Metals, Nickel (µg/L)	98	11	11.22	0.3	0.3	0.7	0.7	0.863	0.8	1	1.2	1.4	1.6	0.228	0.023	0.26
Total Metals, Rubidium (µg/L)	98	0	0	0.9	0.9	1.2	1.3	1.480	1.35	1.6	2.03	2	2.8	0.386	0.039	0.26
Total Metals, Selenium (µg/L)	98	92	93.88	0.3	0.3	0.3	0.3	1.424	0.3	0.3	10	0.3	10	3.069	0.310	2.15
Total Metals, Silver (µg/L)	98	98	100	0.006	0.1	0.1	0.1	0.120	0.1	0.1	0.3	0.1	0.3	0.067	0.007	0.56
Total Metals, Strontium (µg/L)	98	0	0	4.1	4.1	5.3	5.9	7.123	6.8	7.4	9.93	9.6	13.6	1.960	0.198	0.28
Total Metals, Thallium (µg/L)	98	97	98.98	0.1	0.1	0.1	0.1	0.136	0.1	0.1	0.4	0.1	0.4	0.097	0.010	0.71
Total Metals, Tin (µg/L)	38	36	94.74	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.2	0.023	0.004	0.21
Total Metals, Titanium (µg/L)	98	82	83.67	0.02	0.02	0.1	0.1	0.445	0.1	0.1875	3	0.3	3	0.915	0.092	2.05
Total Metals, Uranium (µg/L)	98	95	96.94	0.052	0.1	0.1	0.1	0.121	0.1	0.1	0.3	0.1	0.3	0.064	0.006	0.53
Total Metals, Vanadium (µg/L)	98	95	96.94	0.03	0.1	0.1	0.1	0.206	0.1	0.1	1	0.1	1	0.287	0.029	1.39
Total Metals, Zinc (µg/L)	97	40	41.24	0.4	0.4	0.4	0.4	2.541	0.6	2.9	10	5	14	3.647	0.370	1.44

Table B.2.4-13 Rocknest Lake (ROL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	68	0	0	3	4.3	5.37	7.75	9.204	9.3	10.325	12.4	13.8	21.4	3.120	0.378	0.34
Dissolved Metals, Antimony (µg/L)	68	63	93	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.3	0.033	0.004	0.31
Dissolved Metals, Arsenic (µg/L)	67	50	75	0.2	0.2	0.2	0.2	0.231	0.2	0.25	0.3	0.3	0.4	0.058	0.007	0.25
Dissolved Metals, Barium (µg/L)	68	0	0	2.1	2.1	2.37	2.7	3.381	3	4.2	5.03	6	7	1.128	0.137	0.33
Dissolved Metals, Beryllium (µg/L)	68	68	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	43	42	98	0.2	0.2	0.2	0.2	0.207	0.2	0.2	0.2	0.2	0.5	0.046	0.007	0.22
Dissolved Metals, Boron (µg/L)	43	5	12	0.9	0.9	0.92	1.1	1.465	1.3	1.6	1.98	2	4.3	0.630	0.096	0.43
Dissolved Metals, Cadmium (µg/L)	68	68	100	0.04	0.04	0.04	0.04	0.045	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	68	68	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	68	66	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.017	0.002	0.17
Dissolved Metals, Cobalt (µg/L)	68	67	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.012	0.001	0.12
Dissolved Metals, Copper (µg/L)	68	2	3	0.2	0.4	0.47	0.575	0.860	0.6	0.7	0.9	0.8	14.5	1.694	0.205	1.97
Dissolved Metals, Iron (µg/L)	68	45	66	5	5	5	5	10.559	5	8	20.2	12	50	12.920	1.567	1.22
Dissolved Metals, Lead (µg/L)	68	65	96	0.1	0.1	0.1	0.1	0.112	0.1	0.1	0.1	0.1	0.5	0.061	0.007	0.55
Dissolved Metals, Lithium (µg/L)	68	0	0	0.4	0.8	0.77	0.9	0.979	0.9	1	1.1	1.1	3	0.386	0.047	0.39
Dissolved Metals, Manganese (µg/L)	68	6	9	0.1	0.1	0.2	0.4	0.635	0.6	0.8	0.93	1.1	2.4	0.410	0.050	0.65
Dissolved Metals, Mercury (ng/L)	40	15	38	0.2	0.2	0.2	0.2	0.403	0.3	0.5	0.64	0.8	1.3	0.255	0.040	0.63
Dissolved Metals, Mercury (µg/L)	62	62	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.17
Dissolved Metals, Molybdenum (µg/L)	68	67	99	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.024	0.003	0.24
Dissolved Metals, Nickel (µg/L)	68	0	0	0.4	0.4	0.5	0.5	0.624	0.6	0.7	0.8	0.9	1.1	0.154	0.019	0.25
Dissolved Metals, Rubidium (µg/L)	68	0	0	0.8	0.9	1.17	1.2	1.316	1.3	1.4	1.6	1.6	1.8	0.183	0.022	0.14
Dissolved Metals, Selenium (µg/L)	68	66	97	0.3	0.3	0.3	0.3	0.344	0.3	0.3	0.3	0.3	1.8	0.255	0.031	0.74
Dissolved Metals, Silver (µg/L)	68	68	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	68	0	0	4.4	4.4	6.2	6.7	8.182	7.55	9.125	10.95	12.7	14.1	2.106	0.255	0.26
Dissolved Metals, Thallium (µg/L)	68	68	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	43	43	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	68	66	97	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.3	0.027	0.003	0.26
Dissolved Metals, Uranium (µg/L)	68	63	93	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.2	0.026	0.003	0.24
Dissolved Metals, Vanadium (µg/L)	68	67	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.012	0.001	0.12
Dissolved Metals, Zinc (µg/L)	65	40	62	0.4	0.4	0.4	0.4	0.732	0.4	0.7	1.36	1.1	5.8	0.847	0.105	1.16
Field Measurements, Dissolved Oxygen (% Saturation)	16	0	0	94.3	94.3	95.6	97.25	100.556	98.5	105.45	106.5	107.3	107.3	4.618	1.154	0.05
Field Measurements, Dissolved Oxygen (mg/L)	16	0	0	10.14	10.14	10.225	10.4425	11.308	10.72	11.3	11.725	11.87	19.17	2.159	0.540	0.19
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	19	19	20.85	22.525	31.100	24.25	35.55	49	49	67.8	14.075	3.519	0.45
Field Measurements, Turbidity (NTU)	15	15	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Field Measurements, pH (unitless)	14	0	0	6.59	6.59	6.779	6.89	7.135	7.09	7.4225	7.607	7.61	7.61	0.341	0.091	0.05
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	6	0	0	5.8	5.8	5.95	6.525	11.283	8.5	15.95	19.4	20.6	20.6	6.451	2.633	0.57
Major Ions, Dissolved Calcium (mg/L)	80	0	0	1	1	1.8	2	3.384	2.45	4.24	6.02	7.6	12.9	2.101	0.235	0.62
Major Ions, Dissolved Chloride (mg/L)	80	74	93	0.45	0.7	0.61	0.7	0.690	0.7	0.7	0.7	0.7	1.2	0.097	0.011	0.14
Major Ions, Dissolved Fluoride (mg/L)	70	58	83	0.023	0.1	0.0299	0.1	0.094	0.1	0.1	0.1	0.1	0.3	0.038	0.005	0.41
Major Ions, Dissolved Magnesium (mg/L)	80	0	0	0.6	0.6	0.9	1	1.558	1.2	1.8225	2.47	2.4	6.5	0.896	0.100	0.57
Major Ions, Dissolved Potassium (mg/L)	80	0	0	0.3	0.3	0.4	0.4	0.530	0.5	0.6	0.7	0.8	0.8	0.110	0.012	0.21
Major Ions, Dissolved Sodium (mg/L)	80	0	0	0.4	0.4	0.5	0.6	0.665	0.6	0.77	0.9	1	1	0.142	0.016	0.21
Major Ions, Dissolved Sulphate (mg/L)	83	3	4	1	1	2	2	2.302	2	2.705	3	3.05	5.35	0.695	0.076	0.30
Major Ions, Reactive Silica (mg/L)	47	1	2	0.267	0.267	0.3058	0.3565	0.491	0.448	0.5425	0.7848	0.792	0.994	0.187	0.027	0.38
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	81	0	0	4.2	4.2	5.8	6.6	11.067	7.7	13.3	20.6	20.6	37.1	7.664	0.852	0.69
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	80	0	0	5.1	5.1	8.3	9.025	14.730	11.8	17.8	25.56	30.8	46.2	8.174	0.914	0.55
Microbiology, Chlorophyll a (µg/L)	45	7	16	0.339	0.339	0.4296	0.639	0.929	0.915	1.03	1.436	1.61	2.3	0.433	0.065	0.47
Nutrients, Dissolved Nitrogen (mg/L)	48	0	0	0.157	0.157	0.1607	0.176	0.208	0.2	0.224	0.28	0.29	0.316	0.040	0.006	0.19
Nutrients, Dissolved Organic Carbon (mg/L)	82	0	0	2.3	2.3	3	3.11	3.802	3.6	4.2	4.9	5.6	7	0.858	0.095	0.23
Nutrients, Dissolved o-Phosphate, as P (mg/L)	19	16	84	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00132	0.001	0.0024	0.000	0.000	0.30
Nutrients, Nitrate, as N (mg/L)	93	20	22	0.003	0.003	0.005	0.0142	0.035	0.0228	0.04	0.08252	0.0785	0.196	0.034	0.004	0.96
Nutrients, Nitrate/Nitrite, as N (mg/L)	90	23	26	0.005	0.005	0.0051	0.01045	0.047	0.02505	0.0575	0.09489	0.12	0.42	0.063	0.007	1.34
Nutrients, Nitrite, as N (mg/L)	92	89	97	0.001	0.001	0.001	0.001	0.013	0.001	0.01	0.01	0.01	0.4	0.053	0.006	4.17
Nutrients, Total Ammonia, as N (mg/L)	80	68	85	0.005	0.005	0.005	0.005	0.007	0.005	0.01	0.01	0.011	0.05	0.006	0.001	0.78

Table B.2.4-13 Rocknest Lake (ROL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Dissolved Phosphorus (mg/L)	48	29	60	0.001	0.001	0.001	0.00165	0.003	0.002	0.003175	0.01	0.0043	0.0134	0.003	0.000	0.96
Nutrients, Total Nitrogen (mg/L)	53	0	0	0.162	0.162	0.1776	0.19	0.230	0.22	0.25	0.3	0.33	0.353	0.050	0.007	0.22
Nutrients, Total Organic Carbon (mg/L)	82	0	0	2.9	2.9	3.01	3.2	3.902	3.6	4.3	5.09	5.4	7	0.892	0.098	0.23
Nutrients, Total Phosphorus (mg/L)	88	44	50	0.002	0.002	0.002	0.002	0.005	0.003	0.0057	0.01	0.01	0.02	0.004	0.000	0.80
Nutrients, o-Phosphate, as P (mg/L)	59	59	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.000	0.000	0.34
Physical Parameters, Specific Conductivity (µS/cm)	82	0	0	18	18	20.1	21.975	29.549	24.15	32.05	46.98	45	75	13.003	1.436	0.44
Physical Parameters, Total Dissolved Solids (mg/L)	76	19	25	10	10	10	10.75	19.974	18	24	32	42	88	11.798	1.353	0.59
Physical Parameters, Total Suspended Solids (mg/L)	82	69	84	3	3	3	3	3.427	3	3	4	3	8	1.207	0.133	0.35
Physical Parameters, Turbidity (NTU)	82	0	0	0.09	0.09	0.15	0.2225	0.337	0.29	0.3875	0.478	0.57	1.7	0.239	0.026	0.71
Physical Parameters, pH (unitless)	82	0	0	6.16	6.37	6.74	6.875	7.135	7.14	7.3	7.579	7.86	7.86	0.326	0.036	0.05
Total Metals, Aluminum (µg/L)	82	0	0	7.7	7.7	9.3	10.65	13.946	12.15	13.975	16.57	18	79.5	9.998	1.104	0.72
Total Metals, Antimony (µg/L)	82	78	95	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.4	0.042	0.005	0.39
Total Metals, Arsenic (µg/L)	81	58	72	0.2	0.2	0.2	0.2	0.233	0.2	0.3	0.3	0.4	0.4	0.057	0.006	0.24
Total Metals, Barium (µg/L)	82	0	0	2.2	2.2	2.5	2.7	3.371	2.9	3.7	4.97	5.1	7.2	1.058	0.117	0.31
Total Metals, Beryllium (µg/L)	82	82	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	42	42	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	42	3	7	0.9	0.9	1	1.025	1.300	1.2	1.375	1.97	1.7	2.4	0.383	0.059	0.29
Total Metals, Cadmium (µg/L)	82	80	98	0.04	0.04	0.04	0.04	0.048	0.05	0.05	0.05	0.05	0.16	0.015	0.002	0.31
Total Metals, Cesium (µg/L)	82	82	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	82	79	96	0.1	0.1	0.1	0.1	0.185	0.1	0.1	0.1	0.1	6.8	0.740	0.082	3.99
Total Metals, Cobalt (µg/L)	82	82	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	82	1	1	0.2	0.3	0.5	0.6	0.730	0.7	0.8	0.9	1.1	1.9	0.241	0.027	0.33
Total Metals, Iron (µg/L)	82	9	11	5	5	7.1	10	17.756	14.5	19.5	31	31	65	12.502	1.381	0.70
Total Metals, Lead (µg/L)	82	78	95	0.1	0.1	0.1	0.1	0.224	0.1	0.1	0.1	0.1	9.1	0.997	0.110	4.44
Total Metals, Lithium (µg/L)	82	0	0	0.4	0.8	0.8	0.9	0.972	0.9	1	1.1	1.1	3	0.358	0.040	0.37
Total Metals, Manganese (µg/L)	82	0	0	0.3	0.3	0.81	1.2	2.170	1.9	2.4	3.6	3.6	7	1.456	0.161	0.67
Total Metals, Mercury (ng/L)	64	12	19	0.0001	0.0001	0.00058	0.2	0.479	0.42	0.625	0.9	1.1	1.8	0.399	0.050	0.83
Total Metals, Mercury (µg/L)	77	76	99	0.0005	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.19
Total Metals, Molybdenum (µg/L)	82	80	98	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.5	0.049	0.005	0.46
Total Metals, Nickel (µg/L)	82	0	0	0.4	0.4	0.5	0.5	0.618	0.6	0.7	0.8	0.9	1.1	0.150	0.017	0.24
Total Metals, Rubidium (µg/L)	82	0	0	0.8	0.9	1.2	1.2	1.330	1.3	1.4	1.5	1.6	1.8	0.180	0.020	0.14
Total Metals, Selenium (µg/L)	82	79	96	0.3	0.3	0.3	0.3	0.339	0.3	0.3	0.3	0.3	1.8	0.226	0.025	0.67
Total Metals, Silver (µg/L)	82	82	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	82	0	0	4.5	4.5	6.31	6.7	8.009	7.45	8.5	10.08	10.6	14.2	1.861	0.206	0.23
Total Metals, Thallium (µg/L)	82	82	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	42	42	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	82	60	73	0.1	0.1	0.1	0.1	0.160	0.1	0.2	0.2	0.2	1.2	0.169	0.019	1.06
Total Metals, Uranium (µg/L)	82	76	93	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.2	0.026	0.003	0.24
Total Metals, Vanadium (µg/L)	82	80	98	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.4	0.047	0.005	0.43
Total Metals, Zinc (µg/L)	79	51	65	0.4	0.4	0.4	0.4	0.730	0.4	0.65	1.22	1	6.7	0.925	0.104	1.27

B.4 Spatial Variability

Table B.3.1-1 King Lake (KIL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	14	0	0	2.6	2.6	2.6	2.75	3.914	3.65	4.7	5.85	6.3	6.3	1.304	0.348	0.33
Dissolved Metals, Antimony (µg/L)	14	13	93	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.2	0.027	0.007	0.25
Dissolved Metals, Arsenic (µg/L)	14	14	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	14	0	0	3.5	3.5	3.53	3.725	4.079	3.95	4.1	4.87	4.1	5.4	0.567	0.152	0.14
Dissolved Metals, Beryllium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	10	0	0	2.2	2.2	2.29	2.575	3.030	3.05	3.55	3.8	3.8	3.8	0.596	0.189	0.20
Dissolved Metals, Cadmium (µg/L)	14	14	100	0.04	0.04	0.04	0.04	0.043	0.04	0.0475	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	14	1	7	0.2	0.4	0.43	0.5	0.557	0.6	0.6	0.7	0.7	0.7	0.134	0.036	0.24
Dissolved Metals, Iron (µg/L)	14	14	100	5	5	5	5	5.000	5	5	5	5	5	----	----	----
Dissolved Metals, Lead (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	14	0	0	1.6	1.6	1.6	1.625	1.793	1.8	1.9	1.97	2.2	2.2	0.177	0.047	0.10
Dissolved Metals, Manganese (µg/L)	14	1	7	0.1	0.1	0.2	0.225	0.321	0.3	0.4	0.5	0.5	0.5	0.125	0.033	0.39
Dissolved Metals, Mercury (ng/L)	7	4	57	0.2	0.2	0.2	0.2	0.300	0.2	0.4	0.5	0.5	0.5	0.141	0.053	0.47
Dissolved Metals, Mercury (µg/L)	12	12	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	14	0	0	0.4	0.4	0.4	0.4	0.479	0.5	0.5	0.6	0.6	0.6	0.080	0.021	0.17
Dissolved Metals, Rubidium (µg/L)	14	0	0	1.7	1.7	1.7	1.825	1.971	1.9	2.1	2.3	2.3	2.3	0.220	0.059	0.11
Dissolved Metals, Selenium (µg/L)	14	14	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	14	0	0	15	15	15.37	16.425	19.914	19.2	22.725	26.9	29.1	29.1	4.672	1.249	0.23
Dissolved Metals, Thallium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	14	7	50	0.4	0.4	0.4	0.4	0.593	0.45	0.675	0.98	0.7	1.3	0.284	0.076	0.48
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	10.3	10.3	10.32	10.35	10.400	10.4	10.45	10.48	10.5	10.5	0.141	0.100	0.01
Major Ions, Dissolved Calcium (mg/L)	16	0	0	2.7	2.7	2.85	3.05	3.513	3.45	4	4.2	4.4	4.4	0.549	0.137	0.16
Major Ions, Dissolved Chloride (mg/L)	17	0	0	0.9	0.9	1	1.3	2.179	1.7	2.8	4.412	4.92	4.92	1.390	0.337	0.64
Major Ions, Dissolved Fluoride (mg/L)	14	12	86	0.077	0.1	0.086	0.1	0.097	0.1	0.1	0.1	0.1	0.1	0.008	0.002	0.08
Major Ions, Dissolved Magnesium (mg/L)	16	0	0	0.9	1	1.05	1.1	1.169	1.15	1.2	1.35	1.3	1.5	0.145	0.036	0.12
Major Ions, Dissolved Potassium (mg/L)	16	0	0	0.7	0.7	0.7	0.875	0.894	0.9	1	1	1.1	1.1	0.118	0.030	0.13
Major Ions, Dissolved Sodium (mg/L)	16	0	0	0.9	0.9	0.95	1.1	1.269	1.2	1.35	1.75	1.7	1.8	0.289	0.072	0.23
Major Ions, Dissolved Sulphate (mg/L)	17	1	6	1	1	2	2	2.480	2.78	3	3	3	3	0.604	0.146	0.24
Major Ions, Reactive Silica (mg/L)	11	0	0	0.243	0.243	0.248	0.2785	0.312	0.311	0.3215	0.37	0.37	0.433	0.056	0.017	0.18
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	16	0	0	9	9	9.2	9.475	10.213	10.25	10.625	11	11.9	11.9	0.792	0.198	0.08
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	16	0	0	10.5	10.5	11.5	11.875	13.631	13.4	15.05	15.95	16.7	16.7	1.873	0.468	0.14
Microbiology, Chlorophyll a (µg/L)	10	1	10	0.122	0.122	0.1805	0.24525	0.538	0.5325	0.71325	1.01	1.1	1.1	0.336	0.106	0.63
Nutrients, Dissolved Nitrogen (mg/L)	11	0	0	0.19	0.19	0.19	0.205	0.237	0.235	0.255	0.27	0.27	0.34	0.044	0.013	0.19
Nutrients, Dissolved Organic Carbon (mg/L)	16	0	0	3.5	3.5	3.7	3.8925	4.159	4.085	4.225	4.45	4.5	5.9	0.536	0.134	0.13
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	4	80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00166	0.001	0.0021	0.000	0.000	0.40
Nutrients, Nitrate, as N (mg/L)	18	11	61	0.005	0.005	0.005	0.005	0.014	0.00815	0.018575	0.0261	0.0359	0.06	0.014	0.003	1.03
Nutrients, Nitrate/Nitrite, as N (mg/L)	18	11	61	0.0051	0.0051	0.0051	0.005425	0.015	0.01	0.02	0.02617	0.0359	0.07	0.016	0.004	1.05
Nutrients, Nitrite, as N (mg/L)	17	17	100	0.001	0.001	0.001	0.001	0.004	0.001	0.01	0.01	0.01	0.01	0.004	0.001	1.16
Nutrients, Total Ammonia, as N (mg/L)	16	4	25	0.005	0.005	0.0055	0.00775	0.012	0.0115	0.01585	0.017	0.018	0.018	0.005	0.001	0.39
Nutrients, Total Dissolved Phosphorus (mg/L)	10	5	50	0.001	0.001	0.001	0.00115	0.002	0.00185	0.00215	0.00233	0.0026	0.0026	0.001	0.000	0.34
Nutrients, Total Nitrogen (mg/L)	13	0	0	0.208	0.208	0.21	0.212	0.242	0.227	0.27	0.27	0.34	0.34	0.038	0.011	0.16
Nutrients, Total Organic Carbon (mg/L)	16	0	0	3.5	3.5	3.9	4	4.262	4.15	4.37	4.6	4.7	6	0.544	0.136	0.13
Nutrients, Total Phosphorus (mg/L)	17	6	35	0.002	0.002	0.002	0.002	0.003	0.003	0.0037	0.004	0.0042	0.0042	0.001	0.000	0.29
Nutrients, o-Phosphate, as P (mg/L)	11	11	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----

Table B.3.1-1 King Lake (KIL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Specific Conductivity (µS/cm)	16	0	0	29.1	29.1	30.75	31.275	35.256	34.25	38.325	41.5	45.2	45.2	4.699	1.175	0.13
Physical Parameters, Total Dissolved Solids (mg/L)	16	5	31	10	10	10	10	19.375	17	20.5	35.5	25	50	12.154	3.038	0.63
Physical Parameters, Total Suspended Solids (mg/L)	16	13	81	3	3	3	3	3.313	3	3	4	3	6	0.793	0.198	0.24
Physical Parameters, Turbidity (NTU)	16	0	0	0.06	0.06	0.115	0.12	0.199	0.165	0.2225	0.4	0.26	0.41	0.112	0.028	0.57
Physical Parameters, pH (unitless)	16	0	0	6.31	6.92	6.9	6.95	6.936	6.97	6.9925	7.04	7.01	7.08	0.174	0.044	0.03
Total Metals, Aluminum (µg/L)	16	0	0	2.1	2.1	3.55	4.1	5.875	6	7.45	8.25	8.8	8.8	2.084	0.521	0.35
Total Metals, Antimony (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.1	0.1	0.4	0.075	0.019	0.63
Total Metals, Arsenic (µg/L)	16	16	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	16	0	0	3.5	3.5	3.6	3.675	4.094	3.9	4.175	4.9	4.8	5.6	0.585	0.146	0.14
Total Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	10	0	0	2.3	2.3	2.3	2.525	3.020	3.05	3.5	3.7	3.7	3.7	0.555	0.176	0.18
Total Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.044	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Total Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.24
Total Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	16	0	0	0.3	0.3	0.55	0.6	0.663	0.7	0.8	0.8	0.8	0.8	0.136	0.034	0.21
Total Metals, Iron (µg/L)	16	12	75	5	5	5	5	10.750	5	5.5	7.5	5	90	21.155	5.289	1.97
Total Metals, Lead (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	16	0	0	1.5	1.5	1.55	1.675	1.813	1.8	1.9	2.1	2.2	2.3	0.225	0.056	0.12
Total Metals, Manganese (µg/L)	16	0	0	0.7	0.7	0.8	1	1.231	1.3	1.425	1.65	1.8	1.8	0.326	0.082	0.26
Total Metals, Mercury (ng/L)	13	5	38	0.0001	0.0001	0.04016	0.2	0.362	0.3	0.6	0.6	0.8	0.8	0.247	0.068	0.68
Total Metals, Mercury (µg/L)	15	14	93	0.0006	0.01	0.01	0.01	0.009	0.01	0.01	0.01	0.01	0.01	0.002	0.001	0.26
Total Metals, Molybdenum (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	16	0	0	0.4	0.5	0.4	0.475	0.494	0.5	0.5	0.6	0.5	0.6	0.068	0.017	0.14
Total Metals, Rubidium (µg/L)	16	0	0	1.7	1.7	1.7	1.875	1.981	1.95	2.1	2.25	2.4	2.4	0.210	0.053	0.11
Total Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	16	0	0	14.9	14.9	15.3	15.7	19.381	18.15	21.075	26	29	29	4.531	1.133	0.23
Total Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Uranium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.24
Total Metals, Vanadium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	16	6	38	0.4	0.4	0.4	0.4	0.806	0.65	0.95	1.6	1.7	1.8	0.481	0.120	0.60

Table B.3.1-2 Lake of the Enemy (LEL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	14	1	7	0.6	0.6	0.8	1	1.486	1.2	1.65	2.31	2.4	4	0.881	0.236	0.59
Dissolved Metals, Antimony (µg/L)	14	12	86	0.1	0.1	0.1	0.1	0.114	0.1	0.1	0.17	0.1	0.2	0.036	0.010	0.32
Dissolved Metals, Arsenic (µg/L)	14	14	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	14	0	0	1.9	2.3	2.02	2.4	2.464	2.5	2.6	2.7	2.7	3	0.292	0.078	0.12
Dissolved Metals, Beryllium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	9	9	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	9	0	0	3.4	3.4	3.72	4	4.278	4.2	4.6	4.88	5.2	5.2	0.543	0.181	0.13
Dissolved Metals, Cadmium (µg/L)	14	14	100	0.04	0.04	0.04	0.04	0.044	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.12
Dissolved Metals, Cesium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	14	2	14	0.2	0.4	0.26	0.5	0.529	0.6	0.6	0.67	0.7	0.8	0.168	0.045	0.32
Dissolved Metals, Iron (µg/L)	14	14	100	5	5	5	5	5.000	5	5	5	5	5	----	----	----
Dissolved Metals, Lead (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	14	0	0	1.5	1.5	1.8	1.9	2.043	2	2.175	2.37	2.4	2.7	0.293	0.078	0.14
Dissolved Metals, Manganese (µg/L)	14	1	7	0.1	0.1	0.2	0.2	0.286	0.3	0.375	0.4	0.4	0.4	0.095	0.025	0.33
Dissolved Metals, Mercury (ng/L)	6	4	67	0.2	0.2	0.2	0.2	0.250	0.2	0.275	0.35	0.3	0.4	0.084	0.034	0.33
Dissolved Metals, Mercury (µg/L)	12	12	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	14	0	0	0.6	0.6	0.6	0.6	0.671	0.7	0.7	0.77	0.8	0.8	0.073	0.019	0.11
Dissolved Metals, Rubidium (µg/L)	14	0	0	1.2	1.3	1.33	1.5	1.564	1.6	1.675	1.77	1.8	1.8	0.174	0.046	0.11
Dissolved Metals, Selenium (µg/L)	14	14	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	14	0	0	8.3	9.3	9.54	10.425	10.879	11.1	11.525	12.07	12.3	12.3	1.103	0.295	0.10
Dissolved Metals, Thallium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	9	9	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	14	7	50	0.4	0.4	0.4	0.4	0.557	0.45	0.575	0.95	0.6	1.2	0.262	0.070	0.47
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	6.6	6.6	6.72	6.9	7.200	7.2	7.5	7.68	7.8	7.8	0.849	0.600	0.12
Major Ions, Dissolved Calcium (mg/L)	16	0	0	0.3	1.6	1.6	1.7	2.106	2.15	2.275	2.85	3.1	3.5	0.706	0.176	0.34
Major Ions, Dissolved Chloride (mg/L)	17	13	76	0.69	0.7	0.7	0.7	0.751	0.7	0.7	0.822	0.7	1.3	0.150	0.036	0.20
Major Ions, Dissolved Fluoride (mg/L)	14	12	86	0.052	0.1	0.0671	0.1	0.093	0.1	0.1	0.1	0.1	0.1	0.017	0.005	0.19
Major Ions, Dissolved Magnesium (mg/L)	16	0	0	0.2	1	1	1	1.188	1.2	1.325	1.55	1.8	1.8	0.352	0.088	0.30
Major Ions, Dissolved Potassium (mg/L)	16	1	6	0.1	0.7	0.7	0.7	0.825	0.85	1	1	1	1	0.232	0.058	0.28
Major Ions, Dissolved Sodium (mg/L)	16	1	6	0.1	0.6	0.6	0.7	0.775	0.85	0.9	0.95	1	1	0.221	0.055	0.28
Major Ions, Dissolved Sulphate (mg/L)	17	0	0	3	3	4	4	4.528	4.8	5	5.072	6	6	0.720	0.175	0.16
Major Ions, Reactive Silica (mg/L)	9	0	0	0.124	0.124	0.1312	0.136	0.161	0.161	0.175	0.1968	0.2	0.2	0.027	0.009	0.17
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	16	0	0	5.1	5.1	5.4	5.65	6.338	6.25	6.75	7.55	8.1	8.1	0.892	0.223	0.14
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	16	0	0	1.3	8.1	8.15	8.35	10.131	10.45	10.975	13.9	12.4	15.4	3.245	0.811	0.32
Microbiology, Chlorophyll a (µg/L)	8	1	13	0.285	0.285	0.3326	0.38075	0.531	0.509	0.5875	0.7417	0.631	1	0.222	0.079	0.42
Nutrients, Dissolved Nitrogen (mg/L)	9	0	0	0.14	0.14	0.144	0.152	0.163	0.17	0.17	0.18	0.18	0.18	0.015	0.005	0.09
Nutrients, Dissolved Organic Carbon (mg/L)	16	0	0	2.17	2.17	2.2	2.275	2.529	2.45	2.8	3	3	3	0.314	0.078	0.12
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	4	80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00148	0.001	0.0018	0.000	0.000	0.31
Nutrients, Nitrate, as N (mg/L)	21	14	67	0.001	0.001	0.005	0.005	0.015	0.005	0.0144	0.05	0.0206	0.059	0.018	0.004	1.21
Nutrients, Nitrate/Nitrite, as N (mg/L)	21	15	71	0.005	0.005	0.0051	0.0051	0.016	0.01	0.0144	0.056	0.0206	0.06	0.019	0.004	1.15
Nutrients, Nitrite, as N (mg/L)	19	19	100	0.001	0.001	0.001	0.001	0.004	0.001	0.01	0.01	0.01	0.01	0.004	0.001	1.12
Nutrients, Total Ammonia, as N (mg/L)	16	5	31	0.005	0.005	0.005	0.00825	0.011	0.01	0.01425	0.01885	0.022	0.022	0.005	0.001	0.47
Nutrients, Total Dissolved Phosphorus (mg/L)	8	6	75	0.001	0.001	0.001	0.00115	0.002	0.002	0.002	0.00206	0.0022	0.0022	0.001	0.000	0.31
Nutrients, Total Nitrogen (mg/L)	11	0	0	0.138	0.138	0.148	0.157	0.169	0.17	0.1845	0.19	0.19	0.19	0.018	0.005	0.11
Nutrients, Total Organic Carbon (mg/L)	16	0	0	2.2	2.2	2.3	2.375	2.533	2.5	2.7	2.8	3	3	0.226	0.057	0.09
Nutrients, Total Phosphorus (mg/L)	17	7	41	0.002	0.002	0.002	0.002	0.003	0.0022	0.003	0.004	0.004	0.0046	0.001	0.000	0.33
Nutrients, o-Phosphate, as P (mg/L)	11	11	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----

Table B.3.1-2 Lake of the Enemy (LEL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Specific Conductivity (µS/cm)	16	0	0	20.5	20.5	23.3	23.825	27.088	27.5	29.725	30.4	32.1	32.1	3.299	0.825	0.12
Physical Parameters, Total Dissolved Solids (mg/L)	16	6	38	10	10	10	10	18.000	13.5	20.5	30.5	22	52	11.827	2.957	0.66
Physical Parameters, Total Suspended Solids (mg/L)	16	13	81	3	3	3	3	3.813	3	3	5	3	12	2.316	0.579	0.61
Physical Parameters, Turbidity (NTU)	16	0	0	0.09	0.09	0.1	0.12	0.220	0.14	0.25	0.355	0.38	0.87	0.195	0.049	0.89
Physical Parameters, pH (unitless)	16	0	0	6.23	6.72	6.74	6.78	6.804	6.85	6.875	6.91	6.93	6.93	0.164	0.041	0.02
Total Metals, Aluminum (µg/L)	16	0	0	1.2	1.2	1.85	2.1	2.569	2.35	2.9	3.75	3.3	4.5	0.856	0.214	0.33
Total Metals, Antimony (µg/L)	16	13	81	0.1	0.1	0.1	0.1	0.150	0.1	0.1	0.3	0.1	0.5	0.121	0.030	0.81
Total Metals, Arsenic (µg/L)	16	16	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	16	0	0	2	2	2.15	2.3	2.556	2.5	2.7	2.85	2.9	3.9	0.438	0.110	0.17
Total Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	9	9	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	9	0	0	3.3	3.3	3.78	3.9	4.367	4.3	4.8	4.98	5.3	5.3	0.618	0.206	0.14
Total Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.045	0.045	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Total Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.125	0.1	0.1	0.1	0.1	0.5	0.100	0.025	0.80
Total Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	16	0	0	0.4	0.4	0.6	0.6	0.681	0.7	0.8	0.8	0.9	0.9	0.122	0.031	0.18
Total Metals, Iron (µg/L)	16	15	94	5	5	5	5	5.250	5	5	5	5	9	1.000	0.250	0.19
Total Metals, Lead (µg/L)	16	14	88	0.1	0.1	0.1	0.1	1.225	0.1	0.1	0.25	0.1	17.8	4.421	1.105	3.61
Total Metals, Lithium (µg/L)	16	0	0	1.5	1.5	1.8	1.8	2.006	1.95	2.1	2.25	2.3	3	0.326	0.081	0.16
Total Metals, Manganese (µg/L)	16	0	0	0.4	0.4	0.5	0.575	0.644	0.7	0.7	0.8	0.8	0.8	0.121	0.030	0.19
Total Metals, Mercury (ng/L)	12	6	50	0.0001	0.0001	0.0002	0.15005	0.275	0.25	0.4	0.58	0.7	0.7	0.226	0.065	0.82
Total Metals, Mercury (µg/L)	16	14	88	0.0004	0.01	0.0053	0.01	0.009	0.01	0.01	0.01	0.01	0.01	0.003	0.001	0.37
Total Metals, Molybdenum (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.125	0.1	0.1	0.1	0.1	0.5	0.100	0.025	0.80
Total Metals, Nickel (µg/L)	16	0	0	0.6	0.7	0.6	0.675	0.694	0.7	0.7	0.8	0.7	0.8	0.068	0.017	0.10
Total Metals, Rubidium (µg/L)	16	0	0	1.2	1.4	1.35	1.5	1.569	1.6	1.625	1.75	1.8	2	0.189	0.047	0.12
Total Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	16	0	0	8.2	9.3	9.6	10.375	10.963	10.95	11.6	12.35	13.2	13.2	1.249	0.312	0.11
Total Metals, Thallium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.24
Total Metals, Tin (µg/L)	9	9	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Uranium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.138	0.1	0.1	0.1	0.1	0.7	0.150	0.038	1.09
Total Metals, Vanadium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	16	8	50	0.4	0.4	0.4	0.4	1.050	0.45	0.925	1	1	7.9	1.843	0.461	1.76

Table B.3.1-3 Lockhart River Above Outram Lakes (LOR01) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	6	0	0	2.9	2.9	3.35	3.925	5.200	4.45	6.325	7.8	8.7	8.7	2.171	0.886	0.42
Dissolved Metals, Antimony (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	6	4	67	0.2	0.2	0.2	0.2	0.233	0.2	0.275	0.3	0.3	0.3	0.052	0.021	0.22
Dissolved Metals, Barium (µg/L)	6	0	0	2.5	2.5	2.55	2.65	2.883	2.95	3.1	3.15	3.2	3.2	0.293	0.119	0.10
Dissolved Metals, Beryllium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	6	6	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	6	0	0	1.7	2.5	2.1	2.525	2.567	2.6	2.75	3	2.8	3.2	0.493	0.201	0.19
Dissolved Metals, Cadmium (µg/L)	6	6	100	0.04	0.04	0.04	0.04	0.042	0.04	0.04	0.045	0.04	0.05	0.004	0.002	0.10
Dissolved Metals, Cesium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	6	4	67	0.1	0.1	0.1	0.1	0.133	0.1	0.175	0.2	0.2	0.2	0.052	0.021	0.39
Dissolved Metals, Cobalt (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	6	0	0	0.7	0.7	0.75	0.85	1.483	1.1	1.725	2.6	1.9	3.3	0.987	0.403	0.67
Dissolved Metals, Iron (µg/L)	6	5	83	5	5	5	5	5.500	5	5	6.5	5	8	1.225	0.500	0.22
Dissolved Metals, Lead (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	6	0	0	1.4	1.4	1.45	1.5	1.717	1.65	1.95	2.05	2.1	2.1	0.293	0.119	0.17
Dissolved Metals, Manganese (µg/L)	6	0	0	0.7	0.7	0.75	0.8	1.117	0.85	1.35	1.75	2	2	0.519	0.212	0.47
Dissolved Metals, Mercury (µg/L)	5	5	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	6	0	0	1.2	1.2	1.2	1.225	1.400	1.4	1.575	1.6	1.6	1.6	0.190	0.077	0.14
Dissolved Metals, Rubidium (µg/L)	6	0	0	1.6	1.6	1.6	1.6	1.717	1.65	1.85	1.9	1.9	1.9	0.147	0.060	0.09
Dissolved Metals, Selenium (µg/L)	6	6	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	6	0	0	9.9	9.9	9.95	10.15	11.000	10.85	11.7	12.2	12.5	12.5	1.043	0.426	0.09
Dissolved Metals, Thallium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	6	0	0	0.6	0.6	0.85	1.225	2.800	2.45	3.75	5.1	6.3	6.3	2.139	0.873	0.76
Major Ions, Dissolved Calcium (mg/L)	6	0	0	1.5	1.8	1.65	1.8	1.900	1.85	1.975	2.2	2	2.4	0.297	0.121	0.16
Major Ions, Dissolved Chloride (mg/L)	6	3	50	0.7	0.7	0.7	0.7	0.833	0.75	0.95	1.05	1.1	1.1	0.175	0.071	0.21
Major Ions, Dissolved Fluoride (mg/L)	6	5	83	0.052	0.1	0.076	0.1	0.092	0.1	0.1	0.1	0.1	0.1	0.020	0.008	0.21
Major Ions, Dissolved Magnesium (mg/L)	6	0	0	0.7	0.7	0.75	0.825	0.917	0.95	1	1.05	1.1	1.1	0.147	0.060	0.16
Major Ions, Dissolved Potassium (mg/L)	6	0	0	0.6	0.6	0.6	0.6	0.717	0.65	0.85	0.9	0.9	0.9	0.147	0.060	0.21
Major Ions, Dissolved Sodium (mg/L)	6	0	0	0.7	0.7	0.75	0.8	0.850	0.8	0.95	1	1	1	0.122	0.050	0.14
Major Ions, Dissolved Sulphate (mg/L)	6	1	17	1	2	1.5	2.2325	2.488	2.965	3	3	3	3	0.829	0.338	0.33
Major Ions, Reactive Silica (mg/L)	6	0	0	0.097	0.097	0.1135	0.14325	0.188	0.194	0.21925	0.255	0.286	0.286	0.068	0.028	0.36
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	6	0	0	5.7	5.7	5.75	5.925	6.633	6.7	7.1	7.45	7.8	7.8	0.833	0.340	0.13
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	6	0	0	6.5	6.5	7.05	7.875	8.450	8.7	8.85	9.6	10.3	10.3	1.286	0.525	0.15
Microbiology, Chlorophyll a (µg/L)	6	6	100	1	1	1	1	1.667	1	1.75	3	2	4	1.211	0.494	0.73
Nutrients, Dissolved Nitrogen (mg/L)	6	0	0	0.197	0.197	0.2035	0.21175	0.229	0.2235	0.2375	0.26	0.24	0.28	0.029	0.012	0.13
Nutrients, Dissolved Organic Carbon (mg/L)	6	0	0	3.5	3.5	3.5	3.675	4.067	4.2	4.2	4.5	4.8	4.8	0.497	0.203	0.12
Nutrients, Nitrate, as N (mg/L)	6	1	17	0.01	0.01	0.0137	0.01805	0.028	0.02175	0.025525	0.0481	0.0262	0.07	0.021	0.009	0.77
Nutrients, Nitrate/Nitrite, as N (mg/L)	6	1	17	0.01	0.01	0.0137	0.01805	0.028	0.02175	0.025525	0.0481	0.0262	0.07	0.021	0.009	0.77
Nutrients, Nitrite, as N (mg/L)	6	6	100	0.001	0.001	0.001	0.001	0.006	0.0055	0.01	0.01	0.01	0.01	0.005	0.002	0.90
Nutrients, Total Ammonia, as N (mg/L)	6	3	50	0.005	0.005	0.005	0.005	0.008	0.0065	0.011	0.0125	0.013	0.013	0.004	0.002	0.46
Nutrients, Total Dissolved Phosphorus (mg/L)	6	5	83	0.001	0.0016	0.0013	0.0017	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.23
Nutrients, Total Nitrogen (mg/L)	6	0	0	0.199	0.199	0.2045	0.215	0.237	0.2355	0.24775	0.27	0.29	0.29	0.032	0.013	0.14
Nutrients, Total Organic Carbon (mg/L)	6	0	0	3.6	3.6	3.6	3.775	4.167	4.3	4.375	4.6	4.8	4.8	0.476	0.194	0.11
Nutrients, Total Phosphorus (mg/L)	6	5	83	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.002	0.004	0.001	0.000	0.35
Nutrients, o-Phosphate, as P (mg/L)	6	5	83	0.001	0.001	0.001	0.00125	0.002	0.002	0.002	0.0025	0.003	0.003	0.001	0.000	0.41
Physical Parameters, Specific Conductivity (µS/cm)	6	0	0	20.7	20.7	21.15	22.1	23.667	24	25	25.85	26.5	26.5	2.191	0.894	0.09
Physical Parameters, Total Dissolved Solids (mg/L)	6	2	33	10	10	10	13	20.833	23	25.5	29.5	33	33	9.174	3.745	0.44
Physical Parameters, Total Suspended Solids (mg/L)	6	5	83	3	3	3	3	4.500	3	3	7.5	3	12	3.674	1.500	0.82

Table B.3.1-3 Lockhart River Above Outram Lakes (LOR01) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Turbidity (NTU)	6	0	0	0.11	0.11	0.15	0.1975	0.288	0.245	0.36	0.47	0.55	0.55	0.158	0.065	0.55
Physical Parameters, pH (unitless)	6	0	0	6.12	6.58	6.35	6.585	6.578	6.66	6.72	6.725	6.73	6.73	0.234	0.096	0.04
Total Metals, Aluminum (µg/L)	6	0	0	3.5	3.5	5.3	7.4	12.567	8.3	14.3	24.1	16.3	31.9	10.356	4.228	0.82
Total Metals, Antimony (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	6	5	83	0.2	0.2	0.2	0.2	0.217	0.2	0.2	0.25	0.2	0.3	0.041	0.017	0.19
Total Metals, Barium (µg/L)	6	0	0	2.5	2.5	2.6	2.725	3.167	2.85	3.725	4.05	4.1	4.1	0.698	0.285	0.22
Total Metals, Beryllium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	6	6	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	6	0	0	1.7	1.7	1.95	2.25	2.483	2.5	2.825	3	3.1	3.1	0.504	0.206	0.20
Total Metals, Cadmium (µg/L)	6	4	67	0.04	0.04	0.04	0.04	0.047	0.045	0.05	0.055	0.06	0.06	0.008	0.003	0.17
Total Metals, Cesium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	6	4	67	0.1	0.1	0.1	0.1	0.233	0.1	0.25	0.5	0.3	0.7	0.242	0.099	1.04
Total Metals, Cobalt (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	6	0	0	0.7	0.7	0.75	0.9	2.183	1.25	1.975	4.55	2.2	6.9	2.371	0.968	1.09
Total Metals, Iron (µg/L)	6	0	0	7	7	8	10	13.500	13	16	19.5	22	22	5.431	2.217	0.40
Total Metals, Lead (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	6	0	0	1.5	1.5	1.55	1.6	1.717	1.65	1.85	1.95	2	2	0.194	0.079	0.11
Total Metals, Manganese (µg/L)	6	0	0	1.2	1.2	1.3	1.525	1.883	2	2.25	2.35	2.4	2.4	0.488	0.199	0.26
Total Metals, Mercury (ng/L)	4	0	0	0.5	0.5	0.53	0.575	8.125	0.65	8.2	21.7	0.7	30.7	15.050	7.525	1.85
Total Metals, Mercury (µg/L)	5	5	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	6	0	0	1.1	1.4	1.25	1.425	1.467	1.5	1.575	1.65	1.7	1.7	0.207	0.084	0.14
Total Metals, Rubidium (µg/L)	6	0	0	1.6	1.6	1.6	1.625	1.767	1.75	1.875	1.95	2	2	0.163	0.067	0.09
Total Metals, Selenium (µg/L)	6	6	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	6	0	0	10	10	10.1	10.325	10.967	10.9	11.7	11.9	11.9	11.9	0.819	0.334	0.07
Total Metals, Thallium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	6	3	50	0.1	0.1	0.1	0.1	0.400	0.2	0.75	0.9	0.9	0.9	0.395	0.161	0.99
Total Metals, Uranium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	6	6	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	6	0	0	0.5	0.5	0.9	1.35	4.567	3	7.275	9.8	11.4	11.4	4.393	1.794	0.96

Table B.3.1-4 Lockhart River at Outlet of Artillery Lake (LOR02) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	23	0	0	1.8	1.8	2.22	2.5	3.083	3.3	3.5	3.78	3.8	6	0.876	0.183	0.28
Dissolved Metals, Antimony (µg/L)	23	0	0	0.004	0.004	0.004	0.0055	0.030	0.027	0.0445	0.0638	0.103	0.103	0.027	0.006	0.89
Dissolved Metals, Arsenic (µg/L)	47	13	28	0.08	0.1	0.09	0.1	0.130	0.1	0.1	0.164	0.1	0.5	0.096	0.014	0.74
Dissolved Metals, Barium (µg/L)	23	0	0	2.3	2.3	2.444	2.56	2.650	2.63	2.76	2.826	2.9	3.14	0.183	0.038	0.07
Dissolved Metals, Beryllium (µg/L)	23	12	52	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.000	0.000	0.33
Dissolved Metals, Bismuth (µg/L)	23	21	91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Boron (µg/L)	32	7	22	1.2	1.2	1.5	1.6	6.597	1.95	12.5	20	20	20	7.998	1.414	1.21
Dissolved Metals, Cadmium (µg/L)	23	2	9	0.001	0.001	0.001	0.001	0.013	0.003	0.015	0.0446	0.024	0.071	0.020	0.004	1.45
Dissolved Metals, Cerium (µg/L)	23	0	0	0.012	0.012	0.014	0.0155	0.017	0.017	0.0185	0.02	0.022	0.022	0.003	0.001	0.15
Dissolved Metals, Cesium (µg/L)	23	0	0	0.005	0.005	0.0052	0.006	0.007	0.006	0.007	0.008	0.008	0.008	0.001	0.000	0.15
Dissolved Metals, Chromium (µg/L)	23	0	0	0.02	0.02	0.03	0.0315	0.057	0.057	0.075	0.08	0.11	0.11	0.025	0.005	0.43
Dissolved Metals, Cobalt (µg/L)	23	0	0	0.002	0.002	0.0032	0.004	0.006	0.005	0.0065	0.007	0.009	0.015	0.003	0.001	0.46
Dissolved Metals, Copper (µg/L)	24	0	0	0.49	0.49	0.562	0.59	0.970	0.655	0.8375	2.001	1.07	3	0.670	0.137	0.69
Dissolved Metals, Gallium (µg/L)	23	15	65	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Iron (µg/L)	24	4	17	0.5	0.5	0.53	0.775	1.500	1.2	2.05	3.17	3.5	3.5	0.969	0.198	0.65
Dissolved Metals, Lanthanum (µg/L)	23	0	0	0.016	0.016	0.017	0.017	0.019	0.019	0.0195	0.0218	0.022	0.022	0.002	0.000	0.10
Dissolved Metals, Lead (µg/L)	24	11	46	0.005	0.005	0.005	0.005	0.056	0.006	0.01475	0.0574	0.026	1	0.202	0.041	3.58
Dissolved Metals, Lithium (µg/L)	23	0	0	0.8	0.9	0.82	1.01	1.037	1.07	1.1	1.15	1.16	1.16	0.111	0.023	0.11
Dissolved Metals, Manganese (µg/L)	23	0	0	0.17	0.17	0.18	0.185	0.289	0.22	0.235	0.652	0.24	0.77	0.184	0.038	0.64
Dissolved Metals, Molybdenum (µg/L)	23	0	0	0.005	0.011	0.007	0.013	0.014	0.015	0.016	0.017	0.019	0.019	0.004	0.001	0.27
Dissolved Metals, Nickel (µg/L)	23	0	0	0.44	0.44	0.49	0.5	0.557	0.52	0.575	0.588	0.65	1.15	0.138	0.029	0.25
Dissolved Metals, Niobium (µg/L)	23	23	100	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.000	0.000	0.36
Dissolved Metals, Rubidium (µg/L)	23	0	0	1.03	1.05	1.064	1.12	1.137	1.15	1.17	1.178	1.21	1.21	0.047	0.010	0.04
Dissolved Metals, Selenium (µg/L)	47	22	47	0	0	0.01	0.02	0.100	0.05	0.1	0.1	0.2	1	0.167	0.024	1.67
Dissolved Metals, Silver (µg/L)	23	20	87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.20
Dissolved Metals, Strontium (µg/L)	23	0	0	5.89	6.08	6.104	6.69	6.849	6.89	7.16	7.39	7.74	7.74	0.497	0.104	0.07
Dissolved Metals, Thallium (µg/L)	23	11	48	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.20
Dissolved Metals, Tin (µg/L)	23	13	57	0.005	0.005	0.005	0.005	0.011	0.005	0.0125	0.0168	0.017	0.068	0.014	0.003	1.25
Dissolved Metals, Tungsten (µg/L)	23	21	91	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.20
Dissolved Metals, Uranium (µg/L)	23	0	0	0.0106	0.0106	0.0115	0.012	0.013	0.0128	0.01375	0.01464	0.0153	0.0153	0.001	0.000	0.10
Dissolved Metals, Vanadium (µg/L)	23	1	4	0.005	0.005	0.006	0.0105	0.019	0.018	0.02	0.0356	0.03	0.05	0.011	0.002	0.61
Dissolved Metals, Zinc (µg/L)	24	0	0	0.2	0.2	0.4	0.4	1.113	0.75	1.17	2.211	1.7	4.3	1.070	0.219	0.96
Field Measurements, Specific Conductivity (µS/cm)	23	0	0	2.2	2.2	5.16	9	22.952	11	15.15	21.6	23	273	54.780	11.422	2.39
Field Measurements, pH (unitless)	19	0	0	6.3	6.6	6.744	6.99	7.336	7.3	7.4	8.092	7.6	9	0.593	0.136	0.08
Major Ions, Bicarbonate (calc'd) (mg/L)	21	0	0	4.425	4.425	4.9	5.2	5.757	5.5	6.095	6.948	7.314	8	0.917	0.200	0.16
Major Ions, Carbonate (calc'd) (mg/L)	21	21	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	58	1	2	0.7	1	1.1	1.2	2.434	1.35	1.5075	1.62	1.89	59	7.581	0.995	3.11
Major Ions, Dissolved Chloride (mg/L)	58	0	0	0.1	0.3	0.4	0.4	1.758	0.445	0.5	0.523	0.6	76.1	9.933	1.304	5.65
Major Ions, Dissolved Fluoride (mg/L)	56	8	14	0.01	0.01	0.02	0.02	0.032	0.03	0.04	0.05	0.07	0.12	0.017	0.002	0.54
Major Ions, Dissolved Magnesium (mg/L)	54	0	0	0.5	0.5	0.563	0.6	1.086	0.65	0.75	0.838	0.88	23	3.040	0.414	2.80
Major Ions, Dissolved Potassium (mg/L)	58	0	0	0.3	0.38	0.4	0.43	0.618	0.47	0.5	0.556	0.6	9.2	1.148	0.151	1.86
Major Ions, Dissolved Sodium (mg/L)	58	0	0	0.25	0.4	0.46	0.5	1.355	0.555	0.6	0.643	0.72	47.4	6.153	0.808	4.54
Major Ions, Dissolved Sulphate (mg/L)	58	2	3	0.2	0.9	1	1.4	1.910	1.6	1.7775	2.06	2.2	14.8	2.030	0.267	1.06
Major Ions, Hydroxide (calc'd) (mg/L)	20	20	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	38	9	24	0	0	0	0.05025	0.842	0.875	1.26225	1.7119	2.9	2.9	0.717	0.116	0.85
Major Ions, Reactive Silica (mg/L)	16	2	13	0.06	0.06	0.075	0.0875	0.969	0.1	0.1625	0.265	0.2	13.6	3.369	0.842	3.48
Major Ions, Silica (mg/L)	42	0	0	0.05	0.05	0.071	0.09	0.170	0.11	0.14	0.16	0.19	2.62	0.389	0.060	2.28
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	56	1	2	2.5	2.5	3.9	4.4	5.436	5.5	5.925	6.4	7.2	13.2	1.633	0.218	0.30
Major Ions, Total Calcium (mg/L)	7	0	0	1.14	1.14	1.14	1.17	1.237	1.24	1.3	1.334	1.34	1.34	0.082	0.031	0.07
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	50	0	0	4.8	4.8	5.1315	5.40625	6.305	6.006	6.8115	7.5836	7.718	12.3	1.333	0.188	0.21
Major Ions, Total Magnesium (mg/L)	7	0	0	0.54	0.54	0.54	0.56	0.581	0.58	0.6	0.624	0.63	0.63	0.035	0.013	0.06
Major Ions, Total Potassium (mg/L)	7	0	0	0.34	0.34	0.346	0.36	0.404	0.39	0.405	0.474	0.41	0.57	0.077	0.029	0.19
Major Ions, Total Sodium (mg/L)	7	0	0	0.12	0.12	0.12	0.13	0.290	0.35	0.395	0.468	0.51	0.51	0.162	0.061	0.56
Nutrients, Dissolved Ammonia, as N (mg/L)	27	4	15	0.005	0.005	0.0056	0.007	0.021	0.01	0.02	0.0564	0.03	0.09	0.024	0.005	1.15

Table B.3.1-4 Lockhart River at Outlet of Artillery Lake (LOR02) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Inorganic Carbon (mg/L)	5	1	20	0.5	0.5	0.7	1	1.180	1	1.7	1.7	1.7	1.7	0.517	0.231	0.44
Nutrients, Dissolved Inorganic Phosphate (mg/L)	1	1	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Dissolved Nitrogen (mg/L)	21	0	0	0.1	0.1	0.14	0.16	0.185	0.18	0.21	0.23	0.28	0.28	0.042	0.009	0.23
Nutrients, Dissolved Organic Carbon (mg/L)	50	0	0	0.8	1.3	1.7	2	2.297	2.4	2.6	2.91	3.2	3.2	0.509	0.072	0.22
Nutrients, Dissolved o-Phosphate, as P (mg/L)	1	1	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	42	0	0	0.18	0.18	0.8003	1.24475	1.767	1.585	2.02825	2.9429	3.041	6.69	1.091	0.168	0.62
Nutrients, Nitrate, as N (mg/L)	22	0	0	0.01	0.01	0.02	0.027525	0.038	0.04	0.05	0.06	0.06	0.06	0.016	0.003	0.41
Nutrients, Nitrate/Nitrite, as N (mg/L)	49	1	2	0.001	0.001	0.01	0.02	0.032	0.021	0.04	0.062	0.07	0.14	0.025	0.004	0.78
Nutrients, Nitrite, as N (mg/L)	22	16	73	0.001	0.01	0.0019	0.01	0.014	0.01	0.01	0.019	0.01	0.1	0.020	0.004	1.44
Nutrients, Particulate Nitrogen (mg/L)	53	6	11	0.002	0.002	0.009	0.01	0.029	0.019	0.03	0.05	0.058	0.299	0.044	0.006	1.52
Nutrients, Particulate Organic Carbon (mg/L)	53	1	2	0.005	0.005	0.0714	0.1	0.170	0.139	0.171	0.2088	0.266	1.73	0.226	0.031	1.33
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	24	21	88	0	0.004	0.004	0.004	0.005	0.004	0.006	0.0074	0.008	0.014	0.003	0.001	0.56
Nutrients, Total Dissolved Nitrogen (mg/L)	31	0	0	0.08	0.08	0.09	0.1025	6.725	0.124	0.158	0.244	0.227	204	36.613	6.576	5.44
Nutrients, Total Dissolved Phosphorus (mg/L)	46	30	65	0.002	0.002	0.002	0.002	0.004	0.003	0.004	0.01	0.004	0.016	0.003	0.000	0.80
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	2	0	0	0.9	0.9	0.938	0.995	1.090	1.09	1.185	1.242	1.28	1.28	0.269	0.190	0.25
Nutrients, Total Nitrogen (calc'd) (mg/L)	23	0	0	0.09	0.09	0.1	0.115	0.152	0.13	0.1725	0.2488	0.253	0.3	0.058	0.012	0.38
Nutrients, Total Nitrogen (mg/L)	20	0	0	0.15	0.15	0.15	0.1675	0.187	0.19	0.19	0.223	0.22	0.25	0.028	0.006	0.15
Nutrients, Total Organic Carbon (calc'd) (mg/L)	21	0	0	1.43	1.585	1.89	1.971	2.130	2.081	2.269	2.56	2.659	2.659	0.313	0.068	0.15
Nutrients, Total Organic Carbon (mg/L)	1	0	0	4	4	4	4	4.000	4	4	4	4	4	----	----	----
Nutrients, Total Phosphorus (mg/L)	49	22	45	0.002	0.002	0.002	0.002	0.006	0.004	0.009	0.0128	0.016	0.046	0.007	0.001	1.17
Physical Parameters, Specific Conductivity (µS/cm)	55	0	0	13.5	13.5	15.4	16.05	17.847	17.8	18.85	20.36	22.5	26	2.381	0.321	0.13
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	39	0	0	6	6	6.9054	7.175	8.520	8.533	9.235	10.112	11.6	15	1.691	0.271	0.20
Physical Parameters, Total Suspended Solids (mg/L)	52	46	88	1	1	1	1	2.596	3	3	3	4	8	1.445	0.200	0.56
Physical Parameters, Turbidity (NTU)	44	0	0	0.1	0.1	0.11	0.145	0.343	0.19	0.3625	0.685	0.65	1.7	0.389	0.059	1.13
Physical Parameters, pH (unitless)	56	0	0	6.1	6.53	6.585	6.77	6.870	6.85	6.935	7.15	7.1	7.68	0.267	0.036	0.04
Total Metals, Aluminum (µg/L)	31	0	0	2.1	2.1	2.7	3.2	5.558	3.9	5	8	6.9	23	5.087	0.914	0.92
Total Metals, Antimony (µg/L)	24	1	4	0.001	0.001	0.004	0.004	0.010	0.0055	0.01	0.0187	0.019	0.06	0.012	0.002	1.20
Total Metals, Arsenic (µg/L)	23	0	0	0.07	0.1	0.09	0.1	0.100	0.1	0.105	0.11	0.11	0.11	0.009	0.002	0.09
Total Metals, Barium (µg/L)	46	15	33	2.3	2.3	2.445	2.61	30.480	2.785	80	100	100	100	40.847	6.023	1.34
Total Metals, Beryllium (µg/L)	31	18	58	0.001	0.001	0.001	0.001	0.012	0.001	0.002	0.05	0.002	0.05	0.021	0.004	1.71
Total Metals, Bismuth (µg/L)	24	23	96	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.01	0.002	0.000	1.34
Total Metals, Boron (µg/L)	24	0	0	1.4	1.4	1.6	1.6	1.871	1.85	2	2.1	2.2	3.3	0.379	0.077	0.20
Total Metals, Cadmium (µg/L)	46	19	41	0.001	0.001	0.001	0.002	0.172	0.0945	0.1	1	0.108	1	0.327	0.048	1.91
Total Metals, Cerium (µg/L)	24	0	0	0.012	0.012	0.0163	0.01775	0.021	0.019	0.02225	0.0264	0.028	0.058	0.009	0.002	0.40
Total Metals, Cesium (µg/L)	24	0	0	0.005	0.005	0.005	0.006	0.007	0.006	0.007	0.008	0.008	0.009	0.001	0.000	0.16
Total Metals, Chromium (µg/L)	31	5	16	0.02	0.02	0.02	0.03	0.085	0.04	0.0815	0.2	0.083	0.3	0.091	0.016	1.07
Total Metals, Cobalt (µg/L)	46	21	46	0.002	0.002	0.004	0.006	0.247	0.0115	0.5	1	1	1	0.350	0.052	1.42
Total Metals, Copper (µg/L)	46	3	7	0.4	0.4	0.52	0.5525	1.023	0.645	0.7925	1.75	1	8	1.255	0.185	1.23
Total Metals, Gallium (µg/L)	24	12	50	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0017	0.001	0.002	0.000	0.000	0.30
Total Metals, Iron (µg/L)	31	0	0	0.6	0.6	1.3	1.65	3.590	2.5	4.45	6	6	14.3	3.191	0.573	0.89
Total Metals, Lanthanum (µg/L)	24	0	0	0.015	0.017	0.0183	0.02	0.023	0.022	0.02325	0.0274	0.028	0.047	0.006	0.001	0.27
Total Metals, Lead (µg/L)	46	31	67	0.005	0.005	0.005	0.005	0.334	0.0575	0.7	1	1.6	1.6	0.432	0.064	1.29
Total Metals, Lithium (µg/L)	31	0	0	0.7	0.9	0.8	0.995	1.023	1.01	1.115	1.19	1.21	1.31	0.148	0.027	0.14
Total Metals, Manganese (µg/L)	31	0	0	0.18	0.18	0.28	0.325	0.461	0.379	0.43	0.86	0.55	1.7	0.296	0.053	0.64
Total Metals, Molybdenum (µg/L)	31	8	26	0.005	0.005	0.011	0.012	0.033	0.015	0.024	0.1	0.028	0.1	0.037	0.007	1.11
Total Metals, Nickel (µg/L)	46	10	22	0.4	0.4	0.48	0.5	0.605	0.51	0.58	1	0.7	2	0.264	0.039	0.44
Total Metals, Niobium (µg/L)	24	24	100	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.000	0.000	0.36
Total Metals, Rubidium (µg/L)	24	0	0	1.06	1.06	1.096	1.13	1.164	1.155	1.205	1.237	1.27	1.27	0.055	0.011	0.05
Total Metals, Selenium (µg/L)	23	5	22	0.01	0.01	0.01	0.01	0.027	0.02	0.045	0.05	0.07	0.07	0.019	0.004	0.69
Total Metals, Silver (µg/L)	29	27	93	0.001	0.001	0.001	0.001	0.018	0.001	0.001	0.1	0.001	0.1	0.038	0.007	2.08
Total Metals, Strontium (µg/L)	31	0	0	5.7	5.7	5.8	6.055	6.653	6.75	7.075	7.36	8.31	8.31	0.649	0.116	0.10
Total Metals, Thallium (µg/L)	24	14	58	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Total Metals, Tin (µg/L)	24	17	71	0.005	0.005	0.005	0.005	0.008	0.005	0.006	0.0147	0.006	0.046	0.009	0.002	1.05

Table B.3.1-4 Lockhart River at Outlet of Artillery Lake (LOR02) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Tungsten (µg/L)	24	22	92	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.20
Total Metals, Uranium (µg/L)	24	0	0	0.0076	0.0122	0.0125	0.012825	0.014	0.014	0.0155	0.01621	0.0179	0.0179	0.002	0.000	0.15
Total Metals, Vanadium (µg/L)	46	24	52	0	0	0.0075	0.02	0.183	0.0325	0.5	0.5	1.2	1.2	0.258	0.038	1.41
Total Metals, Zinc (µg/L)	45	2	4	0.2	0.2	0.3	0.4	1.159	0.6	1.3	3	2	6	1.281	0.191	1.11

Table B.3.1-5 MacKay Lake (MCL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	16	0	0	1.9	1.9	2.4	2.775	4.200	3.85	4.6	6.15	7	9.8	1.972	0.493	0.47
Dissolved Metals, Antimony (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.2	0.025	0.006	0.24
Dissolved Metals, Arsenic (µg/L)	16	10	63	0.2	0.2	0.2	0.2	0.244	0.2	0.3	0.3	0.4	0.4	0.063	0.016	0.26
Dissolved Metals, Barium (µg/L)	16	0	0	2.4	2.4	2.55	2.675	2.994	2.85	3.325	3.5	4	4	0.448	0.112	0.15
Dissolved Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	10	0	0	2.2	2.2	2.29	2.55	2.850	2.95	3.175	3.3	3.3	3.3	0.406	0.128	0.14
Dissolved Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.044	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.12
Dissolved Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	16	1	6	0.2	0.2	0.5	0.5	0.794	0.65	0.8	1.05	1.2	2.8	0.579	0.145	0.73
Dissolved Metals, Iron (µg/L)	16	16	100	5	5	5	5	7.813	5	5	5	5	50	11.250	2.813	1.44
Dissolved Metals, Lead (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	16	0	0	0.9	1.6	1.6	1.675	1.788	1.75	2	2.1	2.1	2.1	0.305	0.076	0.17
Dissolved Metals, Manganese (µg/L)	16	0	0	0.2	0.2	0.25	0.3	0.463	0.45	0.6	0.7	0.9	0.9	0.200	0.050	0.43
Dissolved Metals, Mercury (ng/L)	8	5	63	0.2	0.2	0.2	0.2	0.275	0.2	0.325	0.43	0.5	0.5	0.116	0.041	0.42
Dissolved Metals, Mercury (µg/L)	14	14	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	16	0	0	0.6	0.6	0.65	0.8	1.044	0.95	1.3	1.5	1.6	1.6	0.342	0.086	0.33
Dissolved Metals, Rubidium (µg/L)	16	0	0	1.5	1.5	1.6	1.7	1.813	1.8	1.9	2.05	2.1	2.1	0.171	0.043	0.09
Dissolved Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	16	0	0	7.5	10.1	10.45	11.3	12.275	12.5	13.45	14.45	14.8	14.8	1.870	0.467	0.15
Dissolved Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	16	4	25	0.4	0.4	0.4	0.625	1.488	0.8	1.875	2.85	3.5	6.6	1.608	0.402	1.08
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	3	0	0	6.6	6.6	6.62	6.65	6.867	6.7	7	7.18	7.3	7.3	0.379	0.219	0.06
Major Ions, Dissolved Calcium (mg/L)	20	0	0	1.8	1.8	2	2.175	2.365	2.35	2.5	2.61	2.7	3.3	0.325	0.073	0.14
Major Ions, Dissolved Chloride (mg/L)	21	12	57	0.7	0.7	0.7	0.7	0.907	0.7	1.04	1.4	1.41	1.7	0.309	0.067	0.34
Major Ions, Dissolved Fluoride (mg/L)	16	14	88	0.054	0.1	0.081	0.1	0.095	0.1	0.1	0.1	0.1	0.1	0.014	0.004	0.15
Major Ions, Dissolved Magnesium (mg/L)	20	0	0	0.9	0.9	0.9	0.9	1.025	1	1.1	1.11	1.4	1.4	0.125	0.028	0.12
Major Ions, Dissolved Potassium (mg/L)	20	0	0	0.6	0.6	0.69	0.7	0.740	0.7	0.8	0.9	0.9	0.9	0.088	0.020	0.12
Major Ions, Dissolved Sodium (mg/L)	20	0	0	0.7	0.8	0.8	0.9	0.960	0.95	1.025	1.1	1.2	1.2	0.123	0.028	0.13
Major Ions, Dissolved Sulphate (mg/L)	21	1	5	1	1	2	2	2.665	3	3	3	3.25	3.25	0.583	0.127	0.22
Major Ions, Reactive Silica (mg/L)	11	0	0	0.093	0.176	0.176	0.1835	0.207	0.196	0.238	0.249	0.305	0.305	0.054	0.016	0.26
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	20	0	0	5.7	5.7	6.2	6.775	7.340	7.3	7.9	8.42	8.7	8.7	0.824	0.184	0.11
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	20	0	0	8.6	8.6	8.79	9.325	10.170	10.3	10.675	10.92	11.1	14.2	1.251	0.280	0.12
Microbiology, Chlorophyll a (µg/L)	10	3	30	0.312	0.312	0.3804	0.50825	0.743	0.843	0.99625	1	1	1	0.278	0.088	0.37
Nutrients, Dissolved Nitrogen (mg/L)	11	0	0	0.16	0.16	0.188	0.191	0.206	0.2	0.215	0.229	0.229	0.27	0.028	0.008	0.14
Nutrients, Dissolved Organic Carbon (mg/L)	20	0	0	3.2	3.2	3.3	3.615	3.981	4	4.4	4.41	4.8	4.8	0.456	0.102	0.11
Nutrients, Dissolved o-Phosphate, as P (mg/L)	5	4	80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.00136	0.001	0.0016	0.000	0.000	0.24
Nutrients, Nitrate, as N (mg/L)	25	11	44	0.005	0.005	0.005	0.005	0.013	0.008	0.0101	0.03468	0.0135	0.05	0.014	0.003	1.02
Nutrients, Nitrate/Nitrite, as N (mg/L)	23	12	52	0.0051	0.0051	0.0051	0.00655	0.014	0.01	0.01005	0.03464	0.0135	0.06	0.015	0.003	1.05
Nutrients, Nitrite, as N (mg/L)	24	24	100	0.001	0.001	0.001	0.001	0.004	0.001	0.01	0.01	0.01	0.01	0.004	0.001	1.15
Nutrients, Total Ammonia, as N (mg/L)	20	11	55	0.005	0.005	0.005	0.005	0.011	0.0079	0.01125	0.02	0.02	0.05	0.010	0.002	0.93
Nutrients, Total Dissolved Phosphorus (mg/L)	11	8	73	0.001	0.001	0.001	0.0012	0.002	0.002	0.002	0.0022	0.0022	0.01	0.003	0.001	1.07
Nutrients, Total Nitrogen (mg/L)	14	0	0	0.186	0.186	0.1893	0.19425	0.210	0.2085	0.22	0.2294	0.23	0.26	0.020	0.005	0.10
Nutrients, Total Organic Carbon (mg/L)	20	0	0	3.3	3.3	3.39	3.8525	4.144	4.2	4.425	4.6	5.2	5.2	0.488	0.109	0.12
Nutrients, Total Phosphorus (mg/L)	21	8	38	0.002	0.002	0.002	0.002	0.003	0.0028	0.0034	0.004	0.004	0.01	0.002	0.000	0.57
Nutrients, o-Phosphate, as P (mg/L)	14	14	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----

Table B.3.1-5 MacKay Lake (MCL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Specific Conductivity (µS/cm)	20	0	0	18.9	18.9	23.38	23.925	25.725	26.2	27.7	28.48	29.3	29.3	2.637	0.590	0.10
Physical Parameters, Total Dissolved Solids (mg/L)	20	4	20	10	10	10	13.5	18.600	16.5	22	28.6	34	36	7.577	1.694	0.41
Physical Parameters, Total Suspended Solids (mg/L)	20	17	85	3	3	3	3	3.350	3	3	4.2	3	6	0.933	0.209	0.28
Physical Parameters, Turbidity (NTU)	20	0	0	0.12	0.12	0.129	0.15	0.283	0.17	0.195	0.317	0.21	2.1	0.433	0.097	1.53
Physical Parameters, pH (unitless)	20	0	0	6.24	6.59	6.644	6.7	6.756	6.785	6.8325	6.9	6.96	6.96	0.151	0.034	0.02
Total Metals, Aluminum (µg/L)	20	0	0	2	2	3.48	4.125	5.610	5.75	6.8	7.61	10.6	10.6	2.050	0.458	0.37
Total Metals, Antimony (µg/L)	20	19	95	0.1	0.1	0.1	0.1	0.115	0.1	0.1	0.1	0.1	0.4	0.067	0.015	0.58
Total Metals, Arsenic (µg/L)	20	11	55	0.2	0.2	0.2	0.2	0.250	0.2	0.3	0.3	0.4	0.4	0.061	0.014	0.24
Total Metals, Barium (µg/L)	20	0	0	2.3	2.3	2.58	2.7	3.045	3	3.25	3.8	3.9	3.9	0.458	0.102	0.15
Total Metals, Beryllium (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	10	10	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	10	0	0	2.2	2.2	2.47	2.675	2.890	3	3.1	3.21	3.3	3.3	0.348	0.110	0.12
Total Metals, Cadmium (µg/L)	20	20	100	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Total Metals, Cesium (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cobalt (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	20	0	0	0.4	0.4	0.59	0.675	0.750	0.8	0.9	0.9	1	1	0.154	0.034	0.21
Total Metals, Iron (µg/L)	20	14	70	5	5	5	5	8.850	5	8	11.8	11	50	10.256	2.293	1.16
Total Metals, Lead (µg/L)	20	19	95	0.1	0.1	0.1	0.1	0.105	0.1	0.1	0.1	0.1	0.2	0.022	0.005	0.21
Total Metals, Lithium (µg/L)	20	0	0	0.8	1.3	1.39	1.675	1.760	1.8	2.025	2.1	2.1	2.1	0.332	0.074	0.19
Total Metals, Manganese (µg/L)	20	0	0	0.3	0.8	0.8	0.975	1.265	1.25	1.4	2.1	1.5	2.2	0.465	0.104	0.37
Total Metals, Mercury (ng/L)	15	8	53	0.0001	0.0001	0.00014	0.2	0.313	0.2	0.5	0.6	0.8	0.8	0.245	0.063	0.78
Total Metals, Mercury (µg/L)	19	18	95	0.0009	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	0.002	0.000	0.22
Total Metals, Molybdenum (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	20	0	0	0.3	0.3	0.6	0.7	1.100	1.2	1.425	1.6	1.7	1.7	0.432	0.097	0.39
Total Metals, Rubidium (µg/L)	20	0	0	1.4	1.4	1.59	1.7	1.830	1.8	1.925	2.1	2.2	2.2	0.208	0.047	0.11
Total Metals, Selenium (µg/L)	20	20	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	20	0	0	7.5	8.6	9.32	11.025	12.095	12.4	13.25	14.34	14.9	14.9	1.975	0.442	0.16
Total Metals, Thallium (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	10	10	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	20	15	75	0.1	0.1	0.1	0.1	0.160	0.1	0.125	0.32	0.1	0.5	0.127	0.028	0.80
Total Metals, Uranium (µg/L)	20	18	90	0.1	0.1	0.1	0.1	0.115	0.1	0.1	0.11	0.1	0.3	0.049	0.011	0.43
Total Metals, Vanadium (µg/L)	20	20	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	20	5	25	0.4	0.4	0.4	0.475	1.085	0.8	1.325	1.78	2.5	3.9	0.867	0.194	0.80

Table B.3.1-6 Starfish Lake (STL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	16	0	0	5	5	6.95	9.975	16.775	12.1	24.25	29.95	34.5	34.5	9.688	2.422	0.58
Dissolved Metals, Antimony (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	16	0	0	0.3	0.3	0.3	0.3	0.369	0.4	0.4	0.4	0.4	0.4	0.048	0.012	0.13
Dissolved Metals, Barium (µg/L)	16	0	0	1.7	1.7	1.95	2.3	2.506	2.5	2.7	3	3.3	3.6	0.478	0.120	0.19
Dissolved Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	14	14	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	14	0	0	1.4	1.4	1.5	1.55	1.671	1.7	1.7	1.8	1.8	2	0.154	0.041	0.09
Dissolved Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.042	0.04	0.04	0.05	0.04	0.05	0.004	0.001	0.10
Dissolved Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	16	13	81	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.2	0.1	0.2	0.040	0.010	0.34
Dissolved Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	16	0	0	0.9	0.9	0.95	1	1.206	1.15	1.4	1.5	1.5	1.5	0.229	0.057	0.19
Dissolved Metals, Iron (µg/L)	16	11	69	5	5	5	5	7.938	5	8.75	15.5	12	22	5.422	1.355	0.68
Dissolved Metals, Lead (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	16	0	0	1.5	1.5	1.7	1.7	1.844	1.8	2	2.05	2.1	2.1	0.175	0.044	0.09
Dissolved Metals, Manganese (µg/L)	16	0	0	0.3	0.3	0.35	0.5	0.644	0.65	0.8	0.9	1	1	0.210	0.052	0.33
Dissolved Metals, Mercury (ng/L)	11	3	27	0.2	0.2	0.2	0.3	0.500	0.4	0.55	1	0.6	1.1	0.303	0.091	0.61
Dissolved Metals, Mercury (µg/L)	12	12	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	16	0	0	0.4	0.4	0.5	0.6	0.700	0.7	0.825	0.95	1	1	0.183	0.046	0.26
Dissolved Metals, Rubidium (µg/L)	16	0	0	1.7	1.8	1.85	1.975	2.019	2.05	2.1	2.15	2.2	2.2	0.138	0.034	0.07
Dissolved Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	16	0	0	6.8	7.6	7.9	8.3	8.538	8.55	9.025	9.15	9.5	9.5	0.661	0.165	0.08
Dissolved Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	16	14	88	0.1	0.1	0.1	0.1	0.113	0.1	0.1	0.15	0.1	0.2	0.034	0.009	0.30
Dissolved Metals, Vanadium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.113	0.1	0.1	0.1	0.1	0.3	0.050	0.013	0.44
Dissolved Metals, Zinc (µg/L)	14	5	36	0.4	0.4	0.4	0.4	1.043	0.7	1.075	2.58	1.1	2.8	0.881	0.236	0.84
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	2	0	0	5.6	5.6	5.62	5.65	5.700	5.7	5.75	5.78	5.8	5.8	0.141	0.100	0.02
Major Ions, Dissolved Calcium (mg/L)	14	0	0	1.6	1.6	1.73	1.8	3.550	1.95	2.15	2.2	2.2	24.7	6.090	1.628	1.72
Major Ions, Dissolved Chloride (mg/L)	18	10	56	0.43	0.7	0.594	0.7	0.891	0.7	0.7	1.16	0.7	3.5	0.679	0.160	0.76
Major Ions, Dissolved Fluoride (mg/L)	18	14	78	0.041	0.1	0.0517	0.1	0.089	0.1	0.1	0.1	0.1	0.1	0.022	0.005	0.25
Major Ions, Dissolved Magnesium (mg/L)	14	0	0	0.8	0.9	0.9	0.9	1.300	0.9	0.9	1	0.9	6.4	1.469	0.393	1.13
Major Ions, Dissolved Potassium (mg/L)	14	0	0	0.7	0.7	0.7	0.7	0.764	0.8	0.8	0.8	0.9	0.9	0.063	0.017	0.08
Major Ions, Dissolved Sodium (mg/L)	14	0	0	0.9	0.9	0.9	0.9	1.186	0.9	0.9	1	0.9	4.7	1.012	0.271	0.85
Major Ions, Dissolved Sulphate (mg/L)	18	0	0	2	2	2	2.1925	3.726	3	3	4.237	4	19	3.880	0.915	1.04
Major Ions, Reactive Silica (mg/L)	16	0	0	0.202	0.202	0.2865	0.3925	0.637	0.52	1.015	1.125	1.23	1.23	0.347	0.087	0.54
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	16	1	6	0.4	5.1	2.8	5.55	5.169	5.8	6.025	6.2	6.5	6.5	1.873	0.468	0.36
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	14	0	0	7.1	7.1	7.83	8.125	14.264	8.75	9.225	9.81	9.9	88	21.236	5.676	1.49
Microbiology, Chlorophyll a (µg/L)	14	2	14	0.228	0.228	0.3469	0.3565	0.659	0.466	0.99175	1.154	1.26	1.26	0.362	0.097	0.55
Nutrients, Dissolved Nitrogen (mg/L)	16	0	0	0.245	0.245	0.26	0.2615	0.382	0.2865	0.34	0.535	0.35	1.35	0.281	0.070	0.74
Nutrients, Dissolved Organic Carbon (mg/L)	16	0	0	5.3	5.3	5.475	5.775	6.647	6.5	7.475	8.05	8.6	8.6	1.039	0.260	0.16
Nutrients, Dissolved o-Phosphate, as P (mg/L)	10	7	70	0.001	0.001	0.001	0.001	0.001	0.001	0.0013	0.00172	0.0017	0.0019	0.000	0.000	0.29
Nutrients, Nitrate, as N (mg/L)	16	4	25	0.005	0.005	0.005	0.006525	0.052	0.01285	0.01985	0.157	0.021	0.377	0.112	0.028	2.14
Nutrients, Nitrate/Nitrite, as N (mg/L)	16	4	25	0.0051	0.0051	0.0051	0.006525	0.052	0.01285	0.0201	0.1575	0.022	0.377	0.112	0.028	2.13
Nutrients, Nitrite, as N (mg/L)	16	16	100	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.01	0.002	0.001	1.44
Nutrients, Total Ammonia, as N (mg/L)	16	0	0	0.013	0.013	0.014	0.0185	0.022	0.0205	0.02825	0.029	0.03	0.03	0.006	0.002	0.28
Nutrients, Total Dissolved Phosphorus (mg/L)	14	1	7	0.0012	0.0012	0.00152	0.002025	0.003	0.00225	0.00305	0.00379	0.0045	0.0045	0.001	0.000	0.37
Nutrients, Total Nitrogen (mg/L)	18	0	0	0.258	0.258	0.2666	0.28	0.388	0.294	0.34	0.481	0.37	1.39	0.273	0.064	0.70
Nutrients, Total Organic Carbon (mg/L)	16	0	0	5.4	5.4	5.66	6.2	6.876	6.6	7.4	8.3	8.7	8.7	1.019	0.255	0.15
Nutrients, Total Phosphorus (mg/L)	18	4	22	0.002	0.002	0.002	0.003175	0.005	0.004	0.005	0.00736	0.0075	0.012	0.003	0.001	0.55
Nutrients, o-Phosphate, as P (mg/L)	6	6	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----

Table B.3.1-6 Starfish Lake (STL) - Winter Baseflow

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Specific Conductivity (µS/cm)	16	0	0	20.1	20.1	20.35	21.1	23.100	21.75	22.85	24.4	24.5	40.9	4.921	1.230	0.21
Physical Parameters, Total Dissolved Solids (mg/L)	14	3	21	10	10	10	12.5	20.857	20.5	25	35.1	38	38	9.558	2.555	0.46
Physical Parameters, Total Suspended Solids (mg/L)	16	14	88	3	3	3	3	3.500	3	3	4.5	3	8	1.414	0.354	0.40
Physical Parameters, Turbidity (NTU)	16	0	0	0.14	0.14	0.165	0.1875	0.238	0.195	0.2625	0.38	0.3	0.45	0.091	0.023	0.38
Physical Parameters, pH (unitless)	14	0	0	6.12	6.58	6.279	6.585	6.579	6.66	6.6875	6.69	6.71	6.71	0.193	0.051	0.03
Total Metals, Aluminum (µg/L)	16	0	0	5.1	5.1	7.8	11.45	19.419	14.85	27.775	36.55	38.4	38.4	11.227	2.807	0.58
Total Metals, Antimony (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	16	0	0	0.3	0.4	0.3	0.4	0.394	0.4	0.4	0.45	0.4	0.5	0.057	0.014	0.15
Total Metals, Barium (µg/L)	16	0	0	1.6	1.9	2	2.4	2.538	2.55	2.75	3.05	3.1	3.3	0.433	0.108	0.17
Total Metals, Beryllium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	14	14	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	14	0	0	1.3	1.3	1.43	1.5	1.614	1.6	1.7	1.77	1.8	2.1	0.196	0.052	0.12
Total Metals, Cadmium (µg/L)	16	16	100	0.04	0.04	0.04	0.04	0.042	0.04	0.04	0.05	0.04	0.05	0.004	0.001	0.10
Total Metals, Cesium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	16	13	81	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.2	0.1	0.2	0.040	0.010	0.34
Total Metals, Cobalt (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	16	0	0	0.9	0.9	1	1.175	1.294	1.25	1.5	1.55	1.6	1.6	0.229	0.057	0.18
Total Metals, Iron (µg/L)	16	1	6	5	5	6.5	8	14.125	12	18.25	26.5	19	34	8.876	2.219	0.63
Total Metals, Lead (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	16	0	0	1.5	1.5	1.7	1.7	1.875	1.9	2.025	2.1	2.1	2.1	0.184	0.046	0.10
Total Metals, Manganese (µg/L)	16	0	0	1.3	1.3	1.5	1.675	2.000	1.95	2.175	2.65	2.9	2.9	0.466	0.117	0.23
Total Metals, Mercury (ng/L)	14	1	7	0.2	0.3	0.33	0.625	0.771	0.8	0.9	1.17	1.2	1.2	0.310	0.083	0.40
Total Metals, Mercury (µg/L)	12	12	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	16	0	0	0.4	0.4	0.55	0.6	0.700	0.7	0.8	0.95	1	1	0.167	0.042	0.24
Total Metals, Rubidium (µg/L)	16	0	0	1.6	1.8	1.85	1.975	2.013	2.05	2.1	2.15	2.2	2.2	0.154	0.039	0.08
Total Metals, Selenium (µg/L)	16	16	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	16	0	0	6.3	7.6	7.9	8.3	8.513	8.45	9.025	9.25	9.5	9.5	0.769	0.192	0.09
Total Metals, Thallium (µg/L)	16	16	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	14	14	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	16	14	88	0.1	0.1	0.1	0.1	0.113	0.1	0.1	0.15	0.1	0.2	0.034	0.009	0.30
Total Metals, Uranium (µg/L)	16	13	81	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.2	0.1	0.2	0.040	0.010	0.34
Total Metals, Vanadium (µg/L)	16	15	94	0.1	0.1	0.1	0.1	0.119	0.1	0.1	0.1	0.1	0.4	0.075	0.019	0.63
Total Metals, Zinc (µg/L)	14	2	14	0.4	0.4	0.43	0.5	1.164	0.9	1.975	2.2	2.4	2.4	0.769	0.206	0.66

Table B.3.2-1 Lockhart River Above Outram Lakes (LOR01) - Spring Freshet

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	2	0	0	9.1	9.1	12.89	18.575	28.05	28.05	37.525	43.21	47	47	26.799	18.950	0.96
Dissolved Metals, Antimony (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	2	1	50	0.2	0.2	0.21	0.225	0.25	0.25	0.275	0.29	0.3	0.3	0.071	0.050	0.28
Dissolved Metals, Barium (µg/L)	2	0	0	2.4	2.4	2.44	2.5	2.6	2.6	2.7	2.76	2.8	2.8	0.283	0.200	0.11
Dissolved Metals, Beryllium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	2	0	0	1.6	1.6	1.64	1.7	1.8	1.8	1.9	1.96	2	2	0.283	0.200	0.16
Dissolved Metals, Cadmium (µg/L)	2	2	100	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	----	----	----
Dissolved Metals, Cesium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	2	1	50	0.1	0.1	0.15	0.225	0.35	0.35	0.475	0.55	0.6	0.6	0.354	0.250	1.01
Dissolved Metals, Copper (µg/L)	2	0	0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	----	----	----
Dissolved Metals, Iron (µg/L)	2	0	0	12	12	20.8	34	56	56	78	91.2	100	100	62.225	44.000	1.11
Dissolved Metals, Lead (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	2	0	0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	----	----	----
Dissolved Metals, Manganese (µg/L)	2	0	0	11.7	11.7	13.03	15.025	18.35	18.35	21.675	23.67	25	25	9.405	6.650	0.51
Dissolved Metals, Mercury (µg/L)	2	2	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	2	0	0	1.8	1.8	1.93	2.125	2.45	2.45	2.775	2.97	3.1	3.1	0.919	0.650	0.38
Dissolved Metals, Rubidium (µg/L)	2	0	0	1.5	1.5	1.51	1.525	1.55	1.55	1.575	1.59	1.6	1.6	0.071	0.050	0.05
Dissolved Metals, Selenium (µg/L)	2	2	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	2	0	0	6.1	6.1	6.41	6.875	7.65	7.65	8.425	8.89	9.2	9.2	2.192	1.550	0.29
Dissolved Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	2	1	50	0.1	0.1	0.12	0.15	0.2	0.2	0.25	0.28	0.3	0.3	0.141	0.100	0.71
Dissolved Metals, Uranium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	2	0	0	1.5	1.5	1.72	2.05	2.6	2.6	3.15	3.48	3.7	3.7	1.556	1.100	0.60
Major Ions, Dissolved Calcium (mg/L)	2	0	0	1.3	1.3	1.39	1.525	1.75	1.75	1.975	2.11	2.2	2.2	0.636	0.450	0.36
Major Ions, Dissolved Chloride (mg/L)	2	0	0	0.8	0.8	0.81	0.825	0.85	0.85	0.875	0.89	0.9	0.9	0.071	0.050	0.08
Major Ions, Dissolved Fluoride (mg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Major Ions, Dissolved Magnesium (mg/L)	2	0	0	0.7	0.7	0.72	0.75	0.8	0.8	0.85	0.88	0.9	0.9	0.141	0.100	0.18
Major Ions, Dissolved Potassium (mg/L)	2	0	0	0.6	0.6	0.62	0.65	0.7	0.7	0.75	0.78	0.8	0.8	0.141	0.100	0.20
Major Ions, Dissolved Sodium (mg/L)	2	0	0	0.7	0.7	0.71	0.725	0.75	0.75	0.775	0.79	0.8	0.8	0.071	0.050	0.09
Major Ions, Dissolved Sulphate (mg/L)	2	1	50	1	1	1.2	1.5	2	2	2.5	2.8	3	3	1.414	1.000	0.71
Major Ions, Reactive Silica (mg/L)	2	0	0	0.118	0.118	0.1591	0.22075	0.3235	0.3235	0.42625	0.4879	0.529	0.529	0.291	0.206	0.90
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	2	0	0	2.6	2.6	2.89	3.325	4.05	4.05	4.775	5.21	5.5	5.5	2.051	1.450	0.51
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	2	0	0	6.1	6.1	6.39	6.825	7.55	7.55	8.275	8.71	9	9	2.051	1.450	0.27
Microbiology, Chlorophyll a (µg/L)	2	2	100	3	3	3.2	3.5	4	4	4.5	4.8	5	5	1.414	1.000	0.35
Nutrients, Dissolved Nitrogen (mg/L)	2	0	0	0.22	0.22	0.229	0.2425	0.265	0.265	0.2875	0.301	0.31	0.31	0.064	0.045	0.24
Nutrients, Dissolved Organic Carbon (mg/L)	2	0	0	4.98	4.98	5.162	5.435	5.89	5.89	6.345	6.618	6.8	6.8	1.287	0.910	0.22
Nutrients, Nitrate, as N (mg/L)	2	1	50	0.01	0.01	0.012	0.015	0.02	0.02	0.025	0.028	0.03	0.03	0.014	0.010	0.71
Nutrients, Nitrate/Nitrite, as N (mg/L)	2	1	50	0.01	0.01	0.012	0.015	0.02	0.02	0.025	0.028	0.03	0.03	0.014	0.010	0.71
Nutrients, Nitrite, as N (mg/L)	2	2	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Total Ammonia, as N (mg/L)	2	1	50	0.005	0.005	0.0057	0.00675	0.0085	0.0085	0.01025	0.0113	0.012	0.012	0.005	0.004	0.58
Nutrients, Total Dissolved Phosphorus (mg/L)	2	1	50	0.002	0.002	0.00216	0.0024	0.0028	0.0028	0.0032	0.00344	0.0036	0.0036	0.001	0.001	0.40
Nutrients, Total Nitrogen (mg/L)	2	0	0	0.3	0.3	0.307	0.3175	0.335	0.335	0.3525	0.363	0.37	0.37	0.049	0.035	0.15
Nutrients, Total Organic Carbon (mg/L)	2	0	0	5.3	5.3	5.5	5.8	6.3	6.3	6.8	7.1	7.3	7.3	1.414	1.000	0.22
Nutrients, Total Phosphorus (mg/L)	2	0	0	0.0064	0.0064	0.00656	0.0068	0.0072	0.0072	0.0076	0.00784	0.008	0.008	0.001	0.001	0.16
Nutrients, o-Phosphate, as P (mg/L)	2	2	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	2	0	0	12.9	12.9	13.62	14.7	16.5	16.5	18.3	19.38	20.1	20.1	5.091	3.600	0.31
Physical Parameters, Total Dissolved Solids (mg/L)	2	1	50	10	10	12	15	20	20	25	28	30	30	14.142	10.000	0.71
Physical Parameters, Total Suspended Solids (mg/L)	2	1	50	3	3	3.1	3.25	3.5	3.5	3.75	3.9	4	4	0.707	0.500	0.20

Table B.3.2-1 Lockhart River Above Outram Lakes (LOR01) - Spring Freshet

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Turbidity (NTU)	2	0	0	0.49	0.49	0.51	0.54	0.59	0.59	0.64	0.67	0.69	0.69	0.141	0.100	0.24
Physical Parameters, pH (unitless)	2	0	0	6.36	6.36	6.412	6.49	6.62	6.62	6.75	6.828	6.88	6.88	0.368	0.260	0.06
Total Metals, Aluminum (µg/L)	2	0	0	13.7	13.7	18.29	25.175	36.65	36.65	48.125	55.01	59.6	59.6	32.456	22.950	0.89
Total Metals, Antimony (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	2	1	50	0.2	0.2	0.21	0.225	0.25	0.25	0.275	0.29	0.3	0.3	0.071	0.050	0.28
Total Metals, Barium (µg/L)	2	0	0	2.5	2.5	2.6	2.75	3	3	3.25	3.4	3.5	3.5	0.707	0.500	0.24
Total Metals, Beryllium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	2	2	100	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	2	0	0	1.6	1.6	1.65	1.725	1.85	1.85	1.975	2.05	2.1	2.1	0.354	0.250	0.19
Total Metals, Cadmium (µg/L)	2	2	100	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	----	----	----
Total Metals, Cesium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cobalt (µg/L)	2	1	50	0.1	0.1	0.15	0.225	0.35	0.35	0.475	0.55	0.6	0.6	0.354	0.250	1.01
Total Metals, Copper (µg/L)	2	0	0	1	1	1	1	1	1	1	1	1	1	----	----	----
Total Metals, Iron (µg/L)	2	0	0	25	25	44.1	72.75	120.5	120.5	168.25	196.9	216	216	135.057	95.500	1.12
Total Metals, Lead (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	2	0	0	1.3	1.3	1.31	1.325	1.35	1.35	1.375	1.39	1.4	1.4	0.071	0.050	0.05
Total Metals, Manganese (µg/L)	2	0	0	11.5	11.5	12.97	15.175	18.85	18.85	22.525	24.73	26.2	26.2	10.394	7.350	0.55
Total Metals, Mercury (ng/L)	2	0	0	0.8	0.8	0.96	1.2	1.6	1.6	2	2.24	2.4	2.4	1.131	0.800	0.71
Total Metals, Mercury (µg/L)	2	2	100	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	2	0	0	1.8	1.8	1.94	2.15	2.5	2.5	2.85	3.06	3.2	3.2	0.990	0.700	0.40
Total Metals, Rubidium (µg/L)	2	0	0	1.5	1.5	1.51	1.525	1.55	1.55	1.575	1.59	1.6	1.6	0.071	0.050	0.05
Total Metals, Selenium (µg/L)	2	2	100	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	2	0	0	6.2	6.2	6.53	7.025	7.85	7.85	8.675	9.17	9.5	9.5	2.333	1.650	0.30
Total Metals, Thallium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	2	0	0	0.7	0.7	0.71	0.725	0.75	0.75	0.775	0.79	0.8	0.8	0.071	0.050	0.09
Total Metals, Uranium (µg/L)	2	2	100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	2	1	50	0.1	0.1	0.11	0.125	0.15	0.15	0.175	0.19	0.2	0.2	0.071	0.050	0.47
Total Metals, Zinc (µg/L)	2	0	0	1.8	1.8	2.01	2.325	2.85	2.85	3.375	3.69	3.9	3.9	1.485	1.050	0.52

Table B.3.2-2 Lockhart River at Mouth (LOR03) - Spring Freshet

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Calcium (mg/L)	8	0	0	1	1	1.21	1.375	1.618	1.66	1.8	2.106	2.12	2.12	0.383	0.135	0.24
Major Ions, Chloride (mg/L)	8	3	38	0.2	0.2	0.27	0.345	0.515	0.5	0.565	0.832	0.76	1	0.258	0.091	0.50
Major Ions, Hardness, as CaCO3 (mg/L)	7	0	0	6.2	6.2	6.968	7.54	8.406	7.66	9	10.52	9.6	11.9	1.851	0.700	0.22
Major Ions, Magnesium (mg/L)	8	0	0	0.81	0.81	0.824	0.86	0.964	0.95	1.025	1.13	1.2	1.2	0.137	0.048	0.14
Major Ions, Potassium (mg/L)	6	0	0	0.38	0.38	0.385	0.3925	0.411	0.405	0.4205	0.442	0.46	0.46	0.029	0.012	0.07
Major Ions, Sodium (mg/L)	6	0	0	0.32	0.45	0.385	0.455	0.502	0.475	0.4875	0.645	0.49	0.8	0.159	0.065	0.32
Major Ions, Sulphate (mg/L)	8	3	38	1	1	1	1.75	2.400	2.6	3	3.3	4	4	1.053	0.372	0.44
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	8	0	0	5.6	5.6	5.95	6.55	15.863	7	7.625	29.3	8	79	25.523	9.024	1.61
Nutrients, Nitrate/Nitrite, as N (mg/L)	8	3	38	0.02	0.02	0.0228	0.02625	0.050	0.036	0.04	0.082	0.04	0.18	0.053	0.019	1.05
Nutrients, Total Ammonia, as N (mg/L)	8	3	38	0.002	0.002	0.0041	0.005	0.085	0.013	0.03	0.195	0.03	0.58	0.200	0.071	2.36
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	3	0	0	0.08	0.08	0.114	0.165	0.310	0.25	0.425	0.53	0.6	0.6	0.265	0.153	0.86
Nutrients, Total Phosphorus (mg/L)	8	5	63	0.004	0.004	0.004	0.00475	0.023	0.01	0.05	0.05	0.05	0.05	0.023	0.008	0.99
Physical Parameters, Color-True (CU)	7	5	71	5	5	5	5	5.714	5	5	7	5	10	1.890	0.714	0.33
Physical Parameters, Specific Conductivity (µS/cm)	8	0	0	19	19	19	19	20.138	20.05	21	21.3	22	22	1.162	0.411	0.06
Physical Parameters, Total Dissolved Solids (mg/L)	8	1	13	10	10	12.1	13.75	17.500	14.5	20	27.2	26	30	6.928	2.449	0.40
Physical Parameters, Total Suspended Solids (mg/L)	7	6	86	2	2	2.6	3	3.714	3	5	5	5	5	1.254	0.474	0.34
Physical Parameters, Turbidity (NTU)	7	2	29	0	0	0.18	0.35	0.814	0.7	1	1.52	1	2.3	0.752	0.284	0.92
Physical Parameters, pH (unitless)	8	0	0	6.4	6.4	6.54	6.6375	6.788	6.85	6.96	6.996	7.01	7.01	0.218	0.077	0.03
Total Metals, Arsenic (µg/L)	5	5	100	0.3	0.3	0.38	0.5	0.760	1	1	1	1	1	0.336	0.150	0.44
Total Metals, Cadmium (µg/L)	8	6	75	0.05	0.05	0.085	0.1	0.206	0.15	0.3	0.36	0.5	0.5	0.152	0.054	0.74
Total Metals, Chromium (µg/L)	7	4	57	0.2	0.2	0.26	0.4	1.214	0.6	1.95	2.94	3	3	1.213	0.458	1.00
Total Metals, Cobalt (µg/L)	4	3	75	0.1	0.1	0.1	0.1	0.550	0.55	1	1	1	1	0.520	0.260	0.94
Total Metals, Copper (µg/L)	8	3	38	0.4	0.4	0.82	1	1.375	1.25	2	2.03	2.1	2.1	0.607	0.214	0.44
Total Metals, Iron (µg/L)	8	4	50	3	3	4.4	8.075	18.100	17.85	24	33	40	40	12.685	4.485	0.70
Total Metals, Lead (µg/L)	8	5	63	0.2	0.2	0.34	0.4	0.650	0.6	1	1	1	1	0.321	0.113	0.49
Total Metals, Mercury (µg/L)	4	0	0	0.06	0.06	0.075	0.0975	0.118	0.12	0.14	0.158	0.17	0.17	0.046	0.023	0.39
Total Metals, Nickel (µg/L)	8	5	63	0.3	1	0.65	0.95	1.750	1	1	3.07	1	7.9	2.497	0.883	1.43
Total Metals, Zinc (µg/L)	8	5	63	0.5	0.5	1.27	2.65	7.138	7.5	10.5	12.9	15	15	5.322	1.882	0.75

Table B.3.2-3 Lockhart River at Outlet of Artillery Lake (LOR02) - Spring Freshet

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	19	0	0	3.4	3.7	3.64	4.1	4.374	4.3	4.55	5.34	4.7	5.7	0.624	0.143	0.14
Dissolved Metals, Antimony (µg/L)	19	0	0	0.004	0.004	0.004	0.005	0.037	0.027	0.059	0.0778	0.112	0.112	0.035	0.008	0.95
Dissolved Metals, Arsenic (µg/L)	34	10	29	0.08	0.09	0.09	0.0925	0.156	0.1	0.1	0.5	0.11	0.5	0.145	0.025	0.93
Dissolved Metals, Barium (µg/L)	19	0	0	2.52	2.52	2.566	2.705	2.897	2.87	2.925	2.982	3.03	4.7	0.461	0.106	0.16
Dissolved Metals, Beryllium (µg/L)	19	6	32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.22
Dissolved Metals, Bismuth (µg/L)	19	18	95	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.22
Dissolved Metals, Boron (µg/L)	28	7	25	0.8	0.8	1.1	1.375	7.771	1.65	20	20	30	30	9.528	1.801	1.23
Dissolved Metals, Cadmium (µg/L)	19	2	11	0.001	0.001	0.001	0.0015	0.009	0.003	0.0055	0.0294	0.006	0.041	0.013	0.003	1.42
Dissolved Metals, Cerium (µg/L)	19	0	0	0.016	0.021	0.021	0.0215	0.023	0.023	0.0245	0.0264	0.028	0.03	0.003	0.001	0.13
Dissolved Metals, Cesium (µg/L)	20	1	5	0.004	0.004	0.0049	0.005	0.025	0.006	0.006	0.006	0.006	0.4	0.088	0.020	3.49
Dissolved Metals, Chromium (µg/L)	19	0	0	0.03	0.03	0.03	0.04	0.058	0.048	0.07	0.0828	0.09	0.19	0.037	0.008	0.64
Dissolved Metals, Cobalt (µg/L)	19	0	0	0.006	0.006	0.006	0.007	0.008	0.007	0.0095	0.0124	0.012	0.015	0.003	0.001	0.32
Dissolved Metals, Copper (µg/L)	21	0	0	0.19	0.19	0.48	0.62	0.954	0.71	1.21	2	2	2.48	0.597	0.130	0.63
Dissolved Metals, Gallium (µg/L)	19	5	26	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Iron (µg/L)	23	3	13	1	1	2.64	2.95	7.835	4	5.45	9.68	8.4	50	11.997	2.502	1.53
Dissolved Metals, Lanthanum (µg/L)	19	0	0	0.02	0.02	0.0218	0.022	0.023	0.024	0.024	0.025	0.026	0.026	0.002	0.000	0.07
Dissolved Metals, Lead (µg/L)	21	9	43	0.005	0.005	0.005	0.005	0.118	0.009	0.048	0.147	0.064	1	0.295	0.064	2.50
Dissolved Metals, Lithium (µg/L)	19	0	0	0.87	0.87	0.924	0.95	0.995	1	1.02	1.1	1.1	1.1	0.068	0.016	0.07
Dissolved Metals, Manganese (µg/L)	22	3	14	0.4	0.4	0.472	0.5	1.885	0.645	0.77	9.08	0.8	10	3.303	0.704	1.75
Dissolved Metals, Molybdenum (µg/L)	19	0	0	0.014	0.014	0.016	0.016	0.018	0.017	0.018	0.0216	0.02	0.026	0.003	0.001	0.16
Dissolved Metals, Nickel (µg/L)	19	0	0	0.39	0.39	0.434	0.455	0.559	0.5	0.525	0.644	0.61	1.51	0.246	0.056	0.44
Dissolved Metals, Niobium (µg/L)	19	19	100	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.000	0.000	0.36
Dissolved Metals, Rubidium (µg/L)	19	0	0	0.978	0.978	1.008	1.05	1.086	1.07	1.11	1.212	1.14	1.23	0.072	0.016	0.07
Dissolved Metals, Selenium (µg/L)	34	13	38	0.01	0.01	0.01	0.01	0.116	0.05	0.1	0.5	0.1	0.6	0.175	0.030	1.52
Dissolved Metals, Silver (µg/L)	19	17	89	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.22
Dissolved Metals, Strontium (µg/L)	19	0	0	6.03	6.03	6.26	6.39	6.673	6.53	6.91	7.486	7.55	7.55	0.452	0.104	0.07
Dissolved Metals, Thallium (µg/L)	19	8	42	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.000	0.000	0.42
Dissolved Metals, Tin (µg/L)	19	10	53	0.005	0.005	0.005	0.005	0.010	0.005	0.0145	0.0194	0.026	0.026	0.007	0.002	0.70
Dissolved Metals, Titanium (µg/L)	7	6	86	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Tungsten (µg/L)	19	14	74	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.004	0.001	0.015	0.004	0.001	1.67
Dissolved Metals, Uranium (µg/L)	19	0	0	0.0134	0.0134	0.01518	0.0157	0.017	0.0162	0.0186	0.02104	0.022	0.024	0.003	0.001	0.15
Dissolved Metals, Vanadium (µg/L)	19	0	0	0.018	0.018	0.0198	0.02	0.026	0.027	0.03	0.03	0.045	0.045	0.007	0.002	0.25
Dissolved Metals, Zinc (µg/L)	20	0	0	0.3	0.3	0.3	0.475	1.809	0.6	1.04	1.612	1.72	22	4.772	1.067	2.64
Field Measurements, Specific Conductivity (µS/cm)	30	0	0	9	9	10	12.05	18.067	15.25	20	25.3	28	53	9.667	1.765	0.54
Field Measurements, pH (unitless)	28	0	0	5.52	5.73	6.435	6.845	7.169	7.185	7.61	7.946	8.25	8.25	0.678	0.128	0.09
Major Ions, Bicarbonate (calc'd) (mg/L)	14	0	0	4.9	4.9	5.19	5.6985	6.203	6.15	6.70425	7.37	7.4	7.4	0.809	0.216	0.13
Major Ions, Carbonate (calc'd) (mg/L)	14	14	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	52	0	0	1	1	1.2	1.33	1.602	1.495	1.59	1.778	1.82	8.2	0.968	0.134	0.60
Major Ions, Dissolved Chloride (mg/L)	52	2	4	0.1	0.3	0.371	0.4	0.473	0.44	0.5	0.569	0.62	1.84	0.222	0.031	0.47
Major Ions, Dissolved Fluoride (mg/L)	52	8	15	0.01	0.01	0.02	0.02	0.031	0.025	0.0325	0.05	0.05	0.1	0.017	0.002	0.54
Major Ions, Dissolved Magnesium (mg/L)	48	0	0	0.4	0.4	0.587	0.6375	0.731	0.7175	0.81	0.87	0.95	1.24	0.149	0.021	0.20
Major Ions, Dissolved Potassium (mg/L)	52	0	0	0.25	0.4	0.4	0.4275	0.470	0.46	0.48	0.51	0.51	0.9	0.097	0.013	0.21
Major Ions, Dissolved Sodium (mg/L)	52	1	2	0.1	0.45	0.471	0.5	0.544	0.53	0.59	0.609	0.72	1.06	0.118	0.016	0.22
Major Ions, Dissolved Sulphate (mg/L)	51	1	2	0.88	1	1.3	1.4	1.586	1.59	1.705	1.97	2	2.2	0.277	0.039	0.17
Major Ions, Hydroxide (calc'd) (mg/L)	12	12	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	43	13	30	0	0	0	0	0.731	0.732	1.2895	1.6082	2.101	2.101	0.657	0.100	0.90
Major Ions, Reactive Silica (mg/L)	15	1	7	0.08	0.08	0.088	0.1	0.141	0.1	0.2	0.2	0.23	0.23	0.054	0.014	0.38
Major Ions, Silica (mg/L)	37	0	0	0.06	0.06	0.09	0.11	0.154	0.14	0.18	0.2	0.26	0.56	0.083	0.014	0.54
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	51	1	2	3.9	3.9	4.5	5.06	5.969	6	6.4	7.3	8.3	11.1	1.357	0.190	0.23
Major Ions, Total Calcium (mg/L)	2	0	0	1.38	1.38	1.399	1.4275	1.475	1.475	1.5225	1.551	1.57	1.57	0.134	0.095	0.09
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	50	0	0	4.39	4.39	5.2097	5.767	7.002	6.4105	7.23175	7.9819	8.456	28.3	3.295	0.466	0.47
Major Ions, Total Magnesium (mg/L)	2	0	0	0.64	0.64	0.645	0.6525	0.665	0.665	0.6775	0.685	0.69	0.69	0.035	0.025	0.05
Major Ions, Total Potassium (mg/L)	2	0	0	0.37	0.37	0.376	0.385	0.400	0.4	0.415	0.424	0.43	0.43	0.042	0.030	0.11
Major Ions, Total Sodium (mg/L)	2	0	0	0.37	0.37	0.378	0.39	0.410	0.41	0.43	0.442	0.45	0.45	0.057	0.040	0.14

Table B.3.2-3 Lockhart River at Outlet of Artillery Lake (LOR02) - Spring Freshet

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Ammonia, as N (mg/L)	31	18	58	0.005	0.005	0.005	0.005	0.011	0.006	0.01	0.016	0.017	0.1	0.017	0.003	1.56
Nutrients, Dissolved Inorganic Carbon (mg/L)	2	0	0	1	1	1.06	1.15	1.300	1.3	1.45	1.54	1.6	1.6	0.424	0.300	0.33
Nutrients, Dissolved Inorganic Phosphate (mg/L)	2	1	50	0.001	0.001	0.0016	0.0025	0.004	0.004	0.0055	0.0064	0.007	0.007	0.004	0.003	1.06
Nutrients, Dissolved Nitrate/Nitrite, as N (mg/L)	1	0	0	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	----	----	----
Nutrients, Dissolved Nitrogen (mg/L)	17	0	0	0.13	0.13	0.146	0.16	0.169	0.16	0.18	0.194	0.2	0.23	0.024	0.006	0.14
Nutrients, Dissolved Organic Carbon (mg/L)	48	0	0	1.4	1.4	2	2.165	2.516	2.5	2.705	2.9	3	5.1	0.563	0.081	0.22
Nutrients, Dissolved o-Phosphate, as P (mg/L)	4	3	75	0.002	0.002	0.002	0.002	0.002	0.002	0.00225	0.0027	0.002	0.003	0.001	0.000	0.22
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	42	0	0	0.27	0.27	0.8779	1.18675	1.834	1.5375	2.041	2.8291	2.98	7.606	1.291	0.199	0.70
Nutrients, Nitrate, as N (mg/L)	18	0	0	0.01	0.01	0.017	0.02	0.031	0.02115	0.0475	0.05	0.06	0.06	0.016	0.004	0.51
Nutrients, Nitrate/Nitrite, as N (mg/L)	46	6	13	0.001	0.001	0.01	0.01625	0.101	0.02	0.05	0.135	0.07	2	0.323	0.048	3.19
Nutrients, Nitrite, as N (mg/L)	18	15	83	0.001	0.01	0.0073	0.01	0.011	0.01	0.01	0.02	0.01	0.02	0.005	0.001	0.48
Nutrients, Particulate Nitrogen (mg/L)	48	4	8	0.002	0.002	0.0085	0.01175	0.039	0.0195	0.037	0.0708	0.069	0.444	0.068	0.010	1.75
Nutrients, Particulate Organic Carbon (mg/L)	48	0	0	0.03	0.03	0.0391	0.1	0.211	0.1815	0.258	0.3057	0.381	1.65	0.237	0.034	1.12
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	16	13	81	0	0	0.001	0.0035	0.004	0.004	0.006	0.006	0.007	0.007	0.002	0.001	0.53
Nutrients, Total Dissolved Nitrogen (mg/L)	32	1	3	0.008	0.063	0.091	0.1085	0.164	0.12	0.15475	0.2757	0.21	0.671	0.129	0.023	0.79
Nutrients, Total Dissolved Phosphorus (mg/L)	45	32	71	0.002	0.002	0.002	0.003	0.005	0.004	0.01	0.01	0.014	0.014	0.004	0.001	0.65
Nutrients, Total Inorganic Carbon (mg/L)	2	1	50	0.5	0.5	0.65	0.875	1.250	1.25	1.625	1.85	2	2	1.061	0.750	0.85
Nutrients, Total Inorganic Phosphate (mg/L)	1	1	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	1	0	0	1.1	1.1	1.1	1.1	1.100	1.1	1.1	1.1	1.1	1.1	----	----	----
Nutrients, Total Nitrogen (calc'd) (mg/L)	17	0	0	0.1	0.1	0.1	0.12	0.177	0.16	0.187	0.2518	0.221	0.488	0.095	0.023	0.54
Nutrients, Total Nitrogen (mg/L)	18	0	0	0.12	0.12	0.14	0.15	0.171	0.16	0.18	0.209	0.2	0.25	0.032	0.008	0.19
Nutrients, Total Organic Carbon (calc'd) (mg/L)	16	0	0	1.5	1.5	1.805	2.074	2.246	2.245	2.50775	2.624	2.82	2.82	0.352	0.088	0.16
Nutrients, Total Organic Carbon (mg/L)	2	0	0	1	1	1.3	1.75	2.500	2.5	3.25	3.7	4	4	2.121	1.500	0.85
Nutrients, Total Phosphorus (mg/L)	44	23	52	0.002	0.002	0.002	0.003	0.006	0.005	0.01	0.01	0.02	0.021	0.005	0.001	0.72
Physical Parameters, Specific Conductivity (µS/cm)	51	0	0	14.3	14.3	15.8	17.05	17.892	17.7	19	20.1	20.9	20.9	1.582	0.221	0.09
Physical Parameters, Total Dissolved Solids (calc'd) (mg/L)	45	0	0	7	7	8	8.46	9.354	9	9.742	10.0784	10.99	24.2	2.427	0.362	0.26
Physical Parameters, Total Suspended Solids (mg/L)	49	38	78	1	1	1	2	2.694	3	3	3.2	4	8	1.262	0.180	0.47
Physical Parameters, Turbidity (NTU)	41	0	0	0.1	0.1	0.17	0.2	0.470	0.3	0.6	1	1.2	2.1	0.426	0.067	0.91
Physical Parameters, pH (unitless)	52	0	0	6.3	6.6	6.682	6.7975	6.879	6.9	6.9925	7.098	7.24	7.41	0.212	0.029	0.03
Total Metals, Aluminum (µg/L)	31	0	0	3.1	3.1	3.2	4	5.435	4.9	5.6	6.7	6.9	20.9	3.249	0.584	0.60
Total Metals, Antimony (µg/L)	30	5	17	0.0006	0.001	0.001	0.004	0.010	0.005	0.006	0.0125	0.009	0.13	0.023	0.004	2.38
Total Metals, Arsenic (µg/L)	30	1	3	0.09	0.09	0.09	0.09	0.105	0.1	0.11	0.121	0.14	0.2	0.022	0.004	0.21
Total Metals, Barium (µg/L)	43	10	23	2.52	2.52	2.594	2.725	23.915	2.92	50	80	120	120	36.404	5.552	1.52
Total Metals, Beryllium (µg/L)	31	13	42	0.001	0.001	0.001	0.001	0.067	0.001	0.001	0.003	0.001	2	0.359	0.064	5.33
Total Metals, Bismuth (µg/L)	30	27	90	0.0004	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.11
Total Metals, Boron (µg/L)	29	5	17	0.1	1.3	0.1	1.3	1.269	1.5	1.7	1.8	1.9	1.9	0.619	0.115	0.49
Total Metals, Cadmium (µg/L)	43	13	30	0.001	0.001	0.001	0.002	0.210	0.016	0.1	1	0.1	1.1	0.374	0.057	1.78
Total Metals, Cerium (µg/L)	25	0	0	0.018	0.025	0.025	0.026	0.039	0.027	0.03	0.0338	0.036	0.307	0.056	0.011	1.45
Total Metals, Cesium (µg/L)	29	0	0	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.007	0.006	0.007	0.001	0.000	0.11
Total Metals, Chromium (µg/L)	31	1	3	0.02	0.02	0.03	0.03	0.051	0.038	0.05	0.088	0.068	0.2	0.043	0.008	0.83
Total Metals, Cobalt (µg/L)	43	11	26	0.004	0.004	0.0052	0.008	0.395	0.009	0.5	1	1	4	0.853	0.130	2.16
Total Metals, Copper (µg/L)	43	5	12	0.11	0.11	0.5	0.545	0.876	0.6	0.97	1.304	1.4	5	0.791	0.121	0.90
Total Metals, Gallium (µg/L)	29	8	28	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.000	0.000	0.40
Total Metals, Iron (µg/L)	31	0	0	0.7	0.7	1.4	4	9.245	6.1	8.35	11.7	11.9	96	16.602	2.982	1.80
Total Metals, Lanthanum (µg/L)	29	0	0	0.011	0.021	0.0234	0.025	0.032	0.027	0.028	0.0302	0.031	0.188	0.030	0.006	0.96
Total Metals, Lead (µg/L)	43	25	58	0.005	0.005	0.005	0.005	0.556	0.028	0.7	1	1	4	1.161	0.177	2.09
Total Metals, Lithium (µg/L)	31	0	0	0.3	0.9	0.9	0.935	0.971	1	1.025	1.1	1.12	1.12	0.146	0.026	0.15
Total Metals, Manganese (µg/L)	31	0	0	0.29	0.29	0.33	0.7	1.146	0.94	1.215	1.35	1.93	8.06	1.340	0.241	1.17
Total Metals, Molybdenum (µg/L)	31	5	16	0.005	0.01	0.005	0.0145	0.022	0.017	0.02	0.025	0.025	0.1	0.022	0.004	1.01
Total Metals, Nickel (µg/L)	43	8	19	0.42	0.42	0.47	0.5	0.876	0.53	0.715	1.302	1	6	1.015	0.155	1.16
Total Metals, Niobium (µg/L)	29	28	97	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.004	0.001	0.000	0.50
Total Metals, Rubidium (µg/L)	29	0	0	1.01	1.01	1.038	1.07	1.114	1.11	1.15	1.204	1.24	1.24	0.063	0.012	0.06
Total Metals, Selenium (µg/L)	30	14	47	0.01	0.01	0.01	0.01	0.362	0.02	0.05	0.05	0.05	10	1.820	0.332	5.02
Total Metals, Silver (µg/L)	31	20	65	0.001	0.001	0.001	0.001	0.009	0.001	0.0015	0.013	0.002	0.1	0.025	0.004	2.83

Table B.3.2-3 Lockhart River at Outlet of Artillery Lake (LOR02) - Spring Freshet

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Strontium (µg/L)	31	0	0	0.008	5.8	6.07	6.275	6.333	6.44	6.675	7.13	7.13	7.49	1.254	0.225	0.20
Total Metals, Thallium (µg/L)	30	14	47	0.001	0.001	0.001	0.001	0.031	0.001	0.001	0.002	0.001	0.9	0.164	0.030	5.28
Total Metals, Tin (µg/L)	29	19	66	0.005	0.005	0.005	0.005	0.055	0.005	0.012	0.0354	0.017	1.26	0.232	0.043	4.24
Total Metals, Titanium (µg/L)	8	4	50	0.003	0.05	0.0359	0.05	0.052	0.05	0.0625	0.073	0.08	0.08	0.023	0.008	0.44
Total Metals, Tungsten (µg/L)	29	23	79	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0012	0.001	0.011	0.002	0.000	1.32
Total Metals, Uranium (µg/L)	30	1	3	0.0003	0.0137	0.01388	0.015825	0.018	0.01745	0.018775	0.02239	0.0232	0.0418	0.007	0.001	0.38
Total Metals, Vanadium (µg/L)	43	13	30	0.014	0.014	0.02	0.0225	0.213	0.033	0.5	0.5	1	1	0.313	0.048	1.47
Total Metals, Zinc (µg/L)	43	3	7	0.28	0.28	0.3	0.38	1.468	0.6	1	3	1.3	11.2	2.418	0.369	1.65

Table B.3.3-1 Clinton Colden Outlet (CCO) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	32	0	0	2.5	2.5	3.5	3.975	5.247	4.7	6.025	6.68	7.4	18.4	2.717	0.480	0.517872
Dissolved Metals, Antimony (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	32	32	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	32	0	0	1.7	1.7	1.81	1.9	1.981	2	2.1	2.1	2.3	2.3	0.120	0.021	0.060727
Dissolved Metals, Beryllium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	28	28	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	28	2	7	0.9	0.9	1.2	1.5	1.893	1.95	2.225	2.4	2.6	3.8	0.593	0.112	0.31335
Dissolved Metals, Cadmium (µg/L)	32	32	100	0.04	0.04	0.04	0.04	0.043	0.04	0.0425	0.05	0.04	0.05	0.004	0.001	0.103516
Dissolved Metals, Chromium (µg/L)	32	31	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.018	0.003	0.17142
Dissolved Metals, Cobalt (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	32	2	6	0.2	0.3	0.3	0.4	0.478	0.5	0.5	0.6	0.6	0.8	0.129	0.023	0.269494
Dissolved Metals, Iron (µg/L)	32	31	97	5	5	5	5	5.219	5	5	5	5	12	1.237	0.219	0.237114
Dissolved Metals, Lead (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	32	0	0	1	1.2	1.2	1.3	1.309	1.3	1.4	1.4	1.4	1.7	0.117	0.021	0.089653
Dissolved Metals, Manganese (µg/L)	32	0	0	0.2	0.2	0.4	0.5	1.503	1	1.9	2.39	2.4	9	1.764	0.312	1.173477
Dissolved Metals, Mercury (µg/L)	27	27	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	32	0	0	0.5	0.5	0.6	0.6	0.684	0.7	0.8	0.8	0.9	0.9	0.105	0.019	0.153517
Dissolved Metals, Selenium (µg/L)	32	32	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	32	0	0	5.7	5.7	6.21	6.5	6.847	6.9	7.1	7.47	7.8	8.4	0.530	0.094	0.07746
Dissolved Metals, Thallium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	28	28	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	31	27	87	0.4	0.4	0.4	0.4	0.435	0.4	0.4	0.5	0.4	0.8	0.105	0.019	0.24119
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	4	0	0	3.4	3.4	3.49	3.625	3.700	3.75	3.825	3.87	3.9	3.9	0.216	0.108	0.058385
Major Ions, Dissolved Calcium (mg/L)	32	0	0	0.8	0.8	0.91	1.075	1.213	1.2	1.4	1.4	1.7	1.7	0.217	0.038	0.178677
Major Ions, Dissolved Chloride (mg/L)	37	29	78	0.47	0.7	0.556	0.7	0.666	0.7	0.7	0.7	0.7	0.7	0.067	0.011	0.101085
Major Ions, Dissolved Fluoride (mg/L)	37	29	78	0.024	0.1	0.0266	0.1	0.084	0.1	0.1	0.1	0.1	0.1	0.030	0.005	0.360525
Major Ions, Dissolved Magnesium (mg/L)	32	0	0	0.5	0.5	0.6	0.675	0.872	0.7	0.825	0.99	1	4.6	0.700	0.124	0.803255
Major Ions, Dissolved Potassium (mg/L)	32	0	0	0.3	0.3	0.4	0.4	0.488	0.5	0.6	0.6	0.7	0.7	0.101	0.018	0.206776
Major Ions, Dissolved Sodium (mg/L)	32	0	0	0.4	0.4	0.5	0.5	0.584	0.6	0.625	0.7	0.8	0.8	0.092	0.016	0.157374
Major Ions, Dissolved Sulphate (mg/L)	33	0	0	1.92	2	2	2	1.997	2	2	2	2	2.13	0.032	0.006	0.016092
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	32	0	0	2	3.4	3.7	3.775	4.066	3.9	4.325	4.68	5	6	0.684	0.121	0.16829
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	32	0	0	4.5	4.5	5.21	5.575	6.653	6.4	6.5	7.37	7.5	21.4	2.800	0.495	0.420889
Microbiology, Chlorophyll a (µg/L)	31	5	16	0.142	0.142	0.32	0.438	0.675	0.513	0.845	1	1.23	2	0.439	0.079	0.650526
Nutrients, Dissolved Organic Carbon (mg/L)	32	0	0	2.1	2.7	2.7	2.8	3.003	2.9	3.225	3.5	3.6	3.6	0.339	0.060	0.112995
Nutrients, Nitrate, as N (mg/L)	35	17	49	0.003	0.003	0.005	0.005	0.010	0.007	0.00975	0.02078	0.0122	0.0752	0.012	0.002	1.203138
Nutrients, Nitrate/Nitrite, as N (mg/L)	35	17	49	0.005	0.005	0.0051	0.0051	0.011	0.007	0.00975	0.02148	0.0122	0.0752	0.013	0.002	1.156479
Nutrients, Nitrite, as N (mg/L)	35	35	100	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.01	0.003	0.000	1.443049
Nutrients, Total Ammonia, as N (mg/L)	32	31	97	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.015	0.002	0.000	0.332756
Nutrients, Total Nitrogen (mg/L)	37	0	0	0.127	0.127	0.1342	0.14	0.162	0.16	0.18	0.19	0.23	0.23	0.025	0.004	0.155829
Nutrients, Total Organic Carbon (mg/L)	32	0	0	2.7	2.7	2.8	2.8	3.056	3	3.225	3.5	3.6	3.6	0.292	0.052	0.095462
Nutrients, Total Phosphorus (mg/L)	37	27	73	0.002	0.002	0.002	0.002	0.003	0.002	0.0021	0.00404	0.0021	0.013	0.002	0.000	0.735437
Physical Parameters, Specific Conductivity (µS/cm)	32	0	0	12.7	12.7	13.66	14.5	15.266	15.35	16	16.9	17.5	17.5	1.216	0.215	0.079668
Physical Parameters, Total Dissolved Solids (mg/L)	28	15	54	10	10	10	10	14.714	10	16	20.1	25	61	10.099	1.909	0.686339
Physical Parameters, Total Suspended Solids (mg/L)	32	28	88	3	3	3	3	3.375	3	3	3.9	3	8	1.129	0.200	0.33446
Physical Parameters, pH (unitless)	32	0	0	6.37	6.72	6.474	6.8	6.801	6.845	6.9125	6.987	7.01	7.01	0.178	0.031	0.026177
Total Metals, Aluminum (µg/L)	32	0	0	4.5	4.5	5.31	5.65	9.666	6.4	7.075	8.18	8.2	94.9	15.840	2.800	1.638778
Total Metals, Antimony (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	32	32	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	32	0	0	1.8	1.8	1.9	1.9	1.984	2	2	2.1	2.1	2.2	0.085	0.015	0.042663

Table B.3.3-1 Clinton Colden Outlet (CCO) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	28	28	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	28	3	11	0.9	0.9	1.11	1.575	1.771	1.8	2.1	2.2	2.4	2.4	0.426	0.080	0.240417
Total Metals, Cadmium (µg/L)	32	32	100	0.04	0.04	0.04	0.04	0.043	0.04	0.0425	0.05	0.04	0.05	0.004	0.001	0.103516
Total Metals, Chromium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cobalt (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	32	2	6	0.2	0.4	0.4	0.5	0.541	0.55	0.6	0.7	0.7	0.8	0.141	0.025	0.260995
Total Metals, Iron (µg/L)	32	12	38	5	5	5	5	7.313	6	7	9.8	10	34	5.158	0.912	0.705419
Total Metals, Lead (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	32	0	0	1	1.2	1.2	1.3	1.319	1.3	1.4	1.4	1.5	1.5	0.103	0.018	0.078089
Total Metals, Manganese (µg/L)	32	0	0	1.2	1.2	1.3	1.5	2.853	1.95	4.05	4.39	6.7	11.7	2.210	0.391	0.77457
Total Metals, Molybdenum (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	32	0	0	0.5	0.5	0.6	0.6	0.681	0.65	0.8	0.8	0.9	0.9	0.106	0.019	0.155693
Total Metals, Selenium (µg/L)	32	31	97	0.3	0.3	0.3	0.3	0.306	0.3	0.3	0.3	0.3	0.5	0.035	0.006	0.115446
Total Metals, Silver (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	32	0	0	5.7	5.7	6.31	6.4	6.881	6.9	7.2	7.3	7.8	8.8	0.568	0.100	0.082574
Total Metals, Thallium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	28	28	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	32	30	94	0.1	0.1	0.1	0.1	0.116	0.1	0.1	0.1	0.1	0.5	0.072	0.013	0.62557
Total Metals, Uranium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	32	32	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	31	29	94	0.4	0.4	0.4	0.4	0.413	0.4	0.4	0.4	0.4	0.6	0.050	0.009	0.120963

Table B.3.3-2 King Lake (KIL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	51	0	0	1.6	1.6	2.3	4	5.298	4.7	6.65	8.3	10.3	13.5	2.457	0.344	0.46
Dissolved Metals, Antimony (µg/L)	51	47	92	0.1	0.1	0.1	0.1	0.110	0.1	0.1	0.1	0.1	0.3	0.036	0.005	0.33
Dissolved Metals, Arsenic (µg/L)	51	51	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	51	0	0	2.4	2.4	2.5	2.65	2.955	3	3.15	3.3	3.7	3.7	0.321	0.045	0.11
Dissolved Metals, Beryllium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	30	30	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	30	0	0	1.1	1.1	1.49	1.825	2.170	2.05	2.475	2.81	2.9	3.9	0.618	0.113	0.28
Dissolved Metals, Cadmium (µg/L)	51	51	100	0.04	0.04	0.04	0.04	0.045	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Chromium (µg/L)	51	49	96	0.1	0.1	0.1	0.1	0.114	0.1	0.1	0.1	0.1	0.7	0.085	0.012	0.75
Dissolved Metals, Cobalt (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	51	5	10	0.2	0.2	0.3	0.4	0.569	0.5	0.55	0.7	0.7	4.6	0.601	0.084	1.06
Dissolved Metals, Iron (µg/L)	51	48	94	5	5	5	5	9.569	5	5	9	5	50	13.479	1.887	1.41
Dissolved Metals, Lead (µg/L)	51	50	98	0.1	0.1	0.1	0.1	0.161	0.1	0.1	0.1	0.1	3.2	0.434	0.061	2.70
Dissolved Metals, Lithium (µg/L)	51	1	2	0.2	1.1	1.1	1.2	1.296	1.3	1.4	1.5	1.6	4.3	0.497	0.070	0.38
Dissolved Metals, Manganese (µg/L)	51	13	25	0.1	0.1	0.1	0.15	0.394	0.3	0.6	0.8	1.1	1.5	0.336	0.047	0.85
Dissolved Metals, Mercury (µg/L)	48	48	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.14
Dissolved Metals, Molybdenum (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	51	0	0	0.3	0.3	0.3	0.4	0.427	0.4	0.5	0.5	0.6	0.6	0.070	0.010	0.16
Dissolved Metals, Selenium (µg/L)	51	49	96	0.3	0.3	0.3	0.3	0.343	0.3	0.3	0.3	0.3	2.3	0.281	0.039	0.82
Dissolved Metals, Silver (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	51	0	0	7.1	7.1	9.5	11.3	13.461	12.9	15.15	18.9	19.6	25.3	3.408	0.477	0.25
Dissolved Metals, Thallium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	30	30	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	51	50	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.14
Dissolved Metals, Uranium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	51	51	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	50	40	80	0.4	0.4	0.4	0.4	0.510	0.4	0.4	0.7	0.4	2.9	0.383	0.054	0.75
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	5	0	0	5.9	5.9	5.9	5.9	6.420	6.7	6.8	6.8	6.8	6.8	0.476	0.213	0.07
Major Ions, Dissolved Calcium (mg/L)	60	0	0	0.9	0.9	1.7	2.1	2.710	2.45	3.1	3.5	3.9	8.9	1.307	0.169	0.48
Major Ions, Dissolved Chloride (mg/L)	57	13	23	0.7	0.7	0.7	0.8	1.363	1.1	1.6	2.364	2.79	4.1	0.775	0.103	0.57
Major Ions, Dissolved Fluoride (mg/L)	50	43	86	0.048	0.1	0.0609	0.1	0.115	0.1	0.1	0.1	0.1	1	0.129	0.018	1.13
Major Ions, Dissolved Magnesium (mg/L)	60	0	0	0.2	0.7	0.799	0.8	1.122	0.9	1.1	1.32	1.5	5.7	0.863	0.111	0.77
Major Ions, Dissolved Potassium (mg/L)	60	0	0	0.4	0.4	0.5	0.5	0.595	0.6	0.61575	0.8	0.782	0.8	0.107	0.014	0.18
Major Ions, Dissolved Sodium (mg/L)	60	0	0	0.4	0.4	0.6	0.7	0.826	0.8	0.9	1.02	1.2	1.5	0.200	0.026	0.24
Major Ions, Dissolved Sulphate (mg/L)	61	17	28	1	1	1	1	1.752	2	2	2	3	4	0.560	0.072	0.32
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	61	0	0	5.6	5.6	5.9	6.2	6.769	6.8	7.1	7.8	8.3	9	0.770	0.099	0.11
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	60	0	0	3	5.6	8.18	8.8875	11.353	10.15	12.075	13.51	13.8	29.7	4.988	0.644	0.44
Microbiology, Chlorophyll a (µg/L)	31	4	13	0.12	0.12	0.304	0.3985	0.660	0.66	0.911	1	1.4	1.4	0.314	0.056	0.48
Nutrients, Dissolved Organic Carbon (mg/L)	61	1	2	0.5	2.4	2.8	3	3.230	3.3	3.5	3.8	4.1	4.1	0.543	0.070	0.17
Nutrients, Nitrate, as N (mg/L)	71	62	87	0.003	0.003	0.005	0.005	0.010	0.005	0.01	0.02	0.0148	0.08	0.012	0.001	1.21
Nutrients, Nitrate/Nitrite, as N (mg/L)	70	56	80	0.005	0.005	0.0051	0.0051	0.018	0.0051	0.01	0.04	0.0148	0.17	0.033	0.004	1.82
Nutrients, Nitrite, as N (mg/L)	71	69	97	0.001	0.001	0.001	0.001	0.006	0.001	0.01	0.01	0.01	0.17	0.020	0.002	3.15
Nutrients, Total Ammonia, as N (mg/L)	61	59	97	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.01	0.005	0.01	0.002	0.000	0.33
Nutrients, Total Nitrogen (mg/L)	36	1	3	0.06	0.135	0.1475	0.1655	0.184	0.182	0.2	0.215	0.23	0.32	0.039	0.006	0.21
Nutrients, Total Organic Carbon (mg/L)	61	1	2	0.5	2.7	2.9	3.3	3.449	3.5	3.7	4	4.3	4.4	0.546	0.070	0.16
Nutrients, Total Phosphorus (mg/L)	67	42	63	0.002	0.002	0.002	0.002	0.004	0.0025	0.00395	0.01	0.005	0.02	0.004	0.000	0.86
Physical Parameters, Specific Conductivity (µS/cm)	61	0	0	18.6	18.6	19.2	20.9	23.216	22.5	24.9	27	30.7	37.9	3.571	0.457	0.15
Physical Parameters, Total Dissolved Solids (mg/L)	58	22	38	10	10	10	10	18.034	14	21.5	26.3	28	78	13.252	1.740	0.73
Physical Parameters, Total Suspended Solids (mg/L)	61	52	85	3	3	3	3	3.541	3	3	4	3	12	1.629	0.209	0.46
Physical Parameters, pH (unitless)	61	0	0	6.5	6.87	6.97	7.01	7.059	7.07	7.13	7.19	7.23	7.23	0.133	0.017	0.02
Total Metals, Aluminum (µg/L)	61	0	0	5.3	5.3	7.1	7.7	9.711	9.2	11	13.1	15.8	16.7	2.618	0.335	0.27
Total Metals, Antimony (µg/L)	61	58	95	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.3	0.038	0.005	0.35
Total Metals, Arsenic (µg/L)	61	60	98	0.2	0.2	0.2	0.2	0.202	0.2	0.2	0.2	0.2	0.3	0.013	0.002	0.06
Total Metals, Barium (µg/L)	61	0	0	2.5	2.5	2.6	2.9	3.067	3.1	3.2	3.4	3.5	4.7	0.371	0.048	0.12

Table B.3.3-2 King Lake (KIL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	29	29	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	29	0	0	1.4	1.4	1.58	1.9	2.190	2.1	2.4	2.82	3	3.8	0.522	0.097	0.24
Total Metals, Cadmium (µg/L)	61	60	98	0.04	0.04	0.04	0.04	0.047	0.05	0.05	0.05	0.05	0.09	0.007	0.001	0.16
Total Metals, Chromium (µg/L)	61	57	93	0.1	0.1	0.1	0.1	0.175	0.1	0.1	0.1	0.1	3.1	0.401	0.051	2.28
Total Metals, Cobalt (µg/L)	61	59	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.018	0.002	0.17
Total Metals, Copper (µg/L)	61	3	5	0.2	0.2	0.3	0.4	0.603	0.6	0.6	0.8	0.8	4.5	0.533	0.068	0.88
Total Metals, Iron (µg/L)	61	6	10	5	5	9	10	15.590	12	15	25	21	50	11.011	1.410	0.71
Total Metals, Lead (µg/L)	61	57	93	0.1	0.1	0.1	0.1	0.228	0.1	0.1	0.1	0.1	4.7	0.662	0.085	2.90
Total Metals, Lithium (µg/L)	61	1	2	0.2	0.7	1.1	1.1	1.269	1.3	1.4	1.4	1.6	4.2	0.443	0.057	0.35
Total Metals, Manganese (µg/L)	61	0	0	0.3	0.3	2	2.4	3.484	3.3	4.1	5.4	6.3	7.2	1.393	0.178	0.40
Total Metals, Molybdenum (µg/L)	61	60	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.13
Total Metals, Nickel (µg/L)	61	1	2	0.1	0.3	0.4	0.4	0.444	0.4	0.5	0.5	0.6	0.8	0.090	0.012	0.20
Total Metals, Selenium (µg/L)	61	57	93	0.3	0.3	0.3	0.3	0.341	0.3	0.3	0.3	0.3	2.4	0.270	0.035	0.79
Total Metals, Silver (µg/L)	61	60	98	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.026	0.003	0.25
Total Metals, Strontium (µg/L)	61	0	0	7.1	7.1	9.8	10.1	13.043	12.5	14.9	16.5	20.4	25.2	3.347	0.429	0.26
Total Metals, Thallium (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	29	29	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	61	53	87	0.1	0.1	0.1	0.1	0.115	0.1	0.1	0.2	0.1	0.3	0.040	0.005	0.35
Total Metals, Uranium (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	61	60	98	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.026	0.003	0.25
Total Metals, Zinc (µg/L)	60	54	90	0.4	0.4	0.4	0.4	0.508	0.4	0.4	0.41	0.4	4.5	0.558	0.072	1.10

Table B.3.3-3 Lake of the Enemy (LEL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	52	3	6	0.6	0.6	0.7	1.075	1.679	1.55	1.9	2.78	3.1	5.4	0.947	0.131	0.56
Dissolved Metals, Antimony (µg/L)	52	50	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.019	0.003	0.19
Dissolved Metals, Arsenic (µg/L)	52	52	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	52	0	0	1.2	1.3	1.4	1.575	1.688	1.7	1.8	1.8	1.9	3.1	0.278	0.039	0.16
Dissolved Metals, Beryllium (µg/L)	52	52	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	30	30	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	30	0	0	1.7	2.3	2.39	2.8	3.043	3	3.275	3.73	3.7	4.2	0.536	0.098	0.18
Dissolved Metals, Cadmium (µg/L)	52	52	100	0.04	0.04	0.04	0.04	0.045	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Chromium (µg/L)	52	51	98	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.5	0.055	0.008	0.52
Dissolved Metals, Cobalt (µg/L)	52	52	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	52	13	25	0.2	0.2	0.2	0.275	0.396	0.4	0.5	0.59	0.7	0.7	0.141	0.020	0.36
Dissolved Metals, Iron (µg/L)	51	51	100	5	5	5	5	9.412	5	5	5	5	50	13.515	1.892	1.44
Dissolved Metals, Lead (µg/L)	52	49	94	0.1	0.1	0.1	0.1	0.156	0.1	0.1	0.1	0.1	2.8	0.374	0.052	2.40
Dissolved Metals, Lithium (µg/L)	52	1	2	0.2	1.1	1.1	1.3	1.369	1.4	1.5	1.5	1.5	4.7	0.527	0.073	0.39
Dissolved Metals, Manganese (µg/L)	52	8	15	0.1	0.1	0.1	0.2	0.577	0.45	0.825	1.09	1.4	2.4	0.445	0.062	0.77
Dissolved Metals, Mercury (µg/L)	48	48	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.14
Dissolved Metals, Molybdenum (µg/L)	52	52	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	52	0	0	0.3	0.3	0.4	0.4	0.492	0.5	0.5	0.6	0.6	0.7	0.081	0.011	0.17
Dissolved Metals, Selenium (µg/L)	52	48	92	0.3	0.3	0.3	0.3	0.340	0.3	0.3	0.3	0.3	1.8	0.213	0.029	0.62
Dissolved Metals, Silver (µg/L)	52	51	98	0.1	0.1	0.1	0.1	0.108	0.1	0.1	0.1	0.1	0.5	0.055	0.008	0.52
Dissolved Metals, Strontium (µg/L)	52	0	0	4.6	6.1	6.21	6.7	7.158	7.45	7.7	7.8	8.2	8.2	0.752	0.104	0.11
Dissolved Metals, Thallium (µg/L)	52	52	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	30	30	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	52	51	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.014	0.002	0.14
Dissolved Metals, Uranium (µg/L)	52	52	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	52	52	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	51	41	80	0.4	0.4	0.4	0.4	0.447	0.4	0.4	0.6	0.4	1	0.122	0.017	0.27
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	3	0	0	4	4	4	4	4.067	4	4.1	4.16	4.2	4.2	0.115	0.067	0.03
Major Ions, Dissolved Calcium (mg/L)	60	0	0	0.5	0.5	1.09	1.3	1.698	1.5	1.9	2.41	2.7	7.1	0.867	0.112	0.51
Major Ions, Dissolved Chloride (mg/L)	57	56	98	0.35	0.7	0.5	0.7	0.673	0.7	0.7	0.7	0.7	0.7	0.076	0.010	0.11
Major Ions, Dissolved Fluoride (mg/L)	49	42	86	0.033	0.1	0.0374	0.1	0.109	0.1	0.1	0.1	0.1	1	0.132	0.019	1.21
Major Ions, Dissolved Magnesium (mg/L)	60	0	0	0.3	0.3	0.7	0.8	1.076	0.9	1.2	1.3	1.5	5.6	0.654	0.084	0.61
Major Ions, Dissolved Potassium (mg/L)	60	0	0	0.3	0.4	0.49	0.5	0.545	0.5	0.6	0.7	0.704	0.704	0.094	0.012	0.17
Major Ions, Dissolved Sodium (mg/L)	60	0	0	0.3	0.4	0.5	0.5	0.521	0.5	0.6	0.6	0.7	0.7	0.066	0.009	0.13
Major Ions, Dissolved Sulphate (mg/L)	62	2	3	1	3	3	3	3.085	3	3	3.295	3	7	0.703	0.089	0.23
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	61	0	0	2.6	3.4	3.8	3.9	5.075	4.2	4.4	5.3	5.1	56.1	6.666	0.853	1.31
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	60	0	0	2.5	4.9	6.4	6.8725	8.679	7.65	9.4	11.51	11.8	26.8	3.777	0.488	0.44
Microbiology, Chlorophyll a (µg/L)	31	5	16	0.094	0.094	0.122	0.17	0.449	0.336	0.71	1	1	1	0.323	0.058	0.72
Nutrients, Dissolved Organic Carbon (mg/L)	61	1	2	0.5	0.9	1.4	1.6	1.782	1.8	2.1	2.2	2.4	2.4	0.368	0.047	0.21
Nutrients, Nitrate, as N (mg/L)	72	62	86	0.003	0.003	0.005	0.005	0.008	0.005	0.01	0.01939	0.0139	0.04	0.007	0.001	0.84
Nutrients, Nitrate/Nitrite, as N (mg/L)	71	55	77	0.005	0.005	0.0051	0.0051	0.017	0.0051	0.01	0.03	0.0139	0.14	0.029	0.003	1.73
Nutrients, Nitrite, as N (mg/L)	72	70	97	0.001	0.001	0.001	0.001	0.007	0.001	0.01	0.01	0.01	0.14	0.021	0.003	3.02
Nutrients, Total Ammonia, as N (mg/L)	61	58	95	0.005	0.005	0.005	0.005	0.007	0.005	0.005	0.01	0.005	0.041	0.006	0.001	0.84
Nutrients, Total Nitrogen (mg/L)	36	0	0	0.085	0.085	0.099	0.10075	0.119	0.119	0.1325	0.15	0.16	0.16	0.021	0.003	0.18
Nutrients, Total Organic Carbon (mg/L)	61	1	2	0.5	1.4	1.6	1.8	1.877	1.9	2.1	2.2	2.3	2.3	0.284	0.036	0.15
Nutrients, Total Phosphorus (mg/L)	67	59	88	0.002	0.002	0.002	0.002	0.004	0.002	0.00325	0.01	0.004	0.01	0.003	0.000	0.84
Physical Parameters, Specific Conductivity (µS/cm)	61	0	0	15	15.4	16.5	17.3	18.075	18	18.7	19.1	20.6	20.9	1.214	0.155	0.07
Physical Parameters, Total Dissolved Solids (mg/L)	57	33	58	10	10	10	10	13.965	10	14	22	20	74	9.289	1.230	0.67
Physical Parameters, Total Suspended Solids (mg/L)	61	53	87	3	3	3	3	3.328	3	3	4	3	8	1.106	0.142	0.33
Physical Parameters, pH (unitless)	61	0	0	6.4	6.58	6.7	6.79	6.852	6.89	6.95	6.99	7.05	7.05	0.139	0.018	0.02
Total Metals, Aluminum (µg/L)	61	2	3	0.6	0.6	1.7	2.3	3.293	2.9	3.6	4.4	5	23.7	2.864	0.367	0.87
Total Metals, Antimony (µg/L)	61	56	92	0.1	0.1	0.1	0.1	0.116	0.1	0.1	0.1	0.1	0.4	0.061	0.008	0.52
Total Metals, Arsenic (µg/L)	61	60	98	0.2	0.2	0.2	0.2	0.202	0.2	0.2	0.2	0.2	0.3	0.013	0.002	0.06
Total Metals, Barium (µg/L)	61	0	0	1.4	1.4	1.5	1.6	1.772	1.7	1.8	1.9	2	3.8	0.329	0.042	0.19

Table B.3.3-3 Lake of the Enemy (LEL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	29	29	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	29	0	0	2	2.4	2.48	2.8	3.045	3	3.3	3.7	3.7	4.2	0.485	0.090	0.16
Total Metals, Cadmium (µg/L)	61	60	98	0.04	0.04	0.04	0.04	0.047	0.05	0.05	0.05	0.05	0.12	0.011	0.001	0.23
Total Metals, Chromium (µg/L)	61	60	98	0.1	0.1	0.1	0.1	0.120	0.1	0.1	0.1	0.1	1.3	0.154	0.020	1.28
Total Metals, Cobalt (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	61	7	11	0.2	0.2	0.2	0.4	0.515	0.5	0.6	0.6	0.8	3	0.355	0.045	0.69
Total Metals, Iron (µg/L)	60	53	88	5	5	5	5	8.867	5	5	6	5	50	12.511	1.615	1.41
Total Metals, Lead (µg/L)	61	56	92	0.1	0.1	0.1	0.1	0.241	0.1	0.1	0.1	0.1	7.4	0.938	0.120	3.89
Total Metals, Lithium (µg/L)	61	1	2	0.2	1.2	1.2	1.3	1.369	1.4	1.4	1.5	1.5	4.7	0.487	0.062	0.36
Total Metals, Manganese (µg/L)	61	0	0	0.4	0.4	0.9	1.1	1.410	1.3	1.8	1.9	2.3	3.1	0.450	0.058	0.32
Total Metals, Molybdenum (µg/L)	61	60	98	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.026	0.003	0.25
Total Metals, Nickel (µg/L)	61	0	0	0.2	0.5	0.4	0.5	0.502	0.5	0.5	0.6	0.5	0.6	0.074	0.009	0.15
Total Metals, Selenium (µg/L)	61	57	93	0.3	0.3	0.3	0.3	0.336	0.3	0.3	0.3	0.3	1.8	0.198	0.025	0.59
Total Metals, Silver (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	61	0	0	5	6.3	6.5	6.8	7.211	7.3	7.7	8	8.2	8.2	0.623	0.080	0.09
Total Metals, Thallium (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	29	29	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	61	60	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.13
Total Metals, Uranium (µg/L)	61	61	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	61	59	97	0.1	0.1	0.1	0.1	0.107	0.1	0.1	0.1	0.1	0.3	0.036	0.005	0.34
Total Metals, Zinc (µg/L)	60	52	87	0.4	0.4	0.4	0.4	0.493	0.4	0.4	0.51	0.4	3	0.384	0.050	0.78

Table B.3.3-4 Lockhart River Above Outram Lakes (LOR01) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	8	0	0	1.9	1.9	2.46	2.85	3.925	3.9	4.625	5.63	6.4	6.4	1.459	0.516	0.37
Dissolved Metals, Antimony (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	8	7	88	0.2	0.2	0.2	0.2	0.213	0.2	0.2	0.23	0.2	0.3	0.035	0.013	0.17
Dissolved Metals, Barium (µg/L)	8	0	0	1.3	1.6	1.51	1.675	1.713	1.7	1.825	1.93	2	2	0.210	0.074	0.12
Dissolved Metals, Beryllium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	7	7	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	7	0	0	1.2	1.2	1.44	1.65	1.986	2	2.35	2.52	2.7	2.7	0.521	0.197	0.26
Dissolved Metals, Cadmium (µg/L)	8	8	100	0.04	0.04	0.04	0.04	0.041	0.04	0.04	0.043	0.04	0.05	0.004	0.001	0.09
Dissolved Metals, Chromium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Cobalt (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	8	0	0	0.4	0.4	0.47	0.5	0.525	0.5	0.6	0.6	0.6	0.6	0.071	0.025	0.13
Dissolved Metals, Iron (µg/L)	8	4	50	5	5	5	5	8.250	7	11.25	12.6	14	14	3.732	1.319	0.45
Dissolved Metals, Lead (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	8	0	0	1.1	1.1	1.17	1.2	1.250	1.2	1.325	1.4	1.4	1.4	0.107	0.038	0.09
Dissolved Metals, Manganese (µg/L)	8	0	0	0.5	0.5	0.57	0.675	1.475	0.85	2.225	2.9	3.6	3.6	1.151	0.407	0.78
Dissolved Metals, Mercury (µg/L)	7	7	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	8	0	0	0.8	0.8	0.8	0.875	0.925	0.9	1	1.03	1.1	1.1	0.104	0.037	0.11
Dissolved Metals, Selenium (µg/L)	8	8	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	8	0	0	7	7	7.63	7.975	8.213	8.35	8.625	8.73	8.8	8.8	0.589	0.208	0.07
Dissolved Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	8	6	75	0.4	0.4	0.4	0.4	0.438	0.4	0.425	0.53	0.4	0.6	0.074	0.026	0.17
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	1	0	0	4.1	4.1	4.1	4.1	4.100	4.1	4.1	4.1	4.1	4.1	----	----	----
Major Ions, Dissolved Calcium (mg/L)	8	0	0	1.4	1.4	1.47	1.5	1.588	1.6	1.7	1.7	1.7	1.7	0.113	0.040	0.07
Major Ions, Dissolved Chloride (mg/L)	8	4	50	0.7	0.7	0.7	0.7	7.064	0.705	0.85	16.06	1	51.2	17.834	6.305	2.52
Major Ions, Dissolved Fluoride (mg/L)	8	6	75	0.033	0.1	0.0799	0.1	0.133	0.1	0.1	0.1984	0.1	0.428	0.122	0.043	0.92
Major Ions, Dissolved Magnesium (mg/L)	8	0	0	0.6	0.6	0.6	0.6	0.738	0.7	0.8	0.89	1.1	1.1	0.177	0.063	0.24
Major Ions, Dissolved Potassium (mg/L)	8	0	0	0.3	0.3	0.37	0.4	0.463	0.45	0.525	0.6	0.6	0.6	0.106	0.038	0.23
Major Ions, Dissolved Sodium (mg/L)	8	0	0	0.3	0.3	0.51	0.6	0.650	0.65	0.8	0.8	0.8	0.8	0.169	0.060	0.26
Major Ions, Dissolved Sulphate (mg/L)	8	1	13	1	2	1.63	1.975	11.338	2	2	24.74	2	77.8	26.857	9.495	2.37
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	8	0	0	4.1	4.6	4.45	4.675	4.813	4.85	5.05	5.2	5.2	5.2	0.360	0.127	0.07
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	8	0	0	6.2	6.2	6.27	6.525	7.088	6.9	7.4	7.88	7.4	9	0.892	0.315	0.13
Microbiology, Chlorophyll a (µg/L)	8	5	63	0.448	0.817	0.7063	0.9055	1.025	1	1	1.3	1	2	0.437	0.155	0.43
Nutrients, Dissolved Organic Carbon (mg/L)	8	0	0	3	3	3.14	3.2	3.463	3.45	3.625	3.82	4.1	4.1	0.346	0.122	0.10
Nutrients, Nitrate, as N (mg/L)	8	6	75	0.005	0.005	0.005	0.005	0.011	0.00705	0.01	0.01807	0.01	0.0369	0.011	0.004	1.01
Nutrients, Nitrate/Nitrite, as N (mg/L)	8	6	75	0.0051	0.0051	0.0051	0.0051	0.011	0.0071	0.01	0.01849	0.01	0.0383	0.011	0.004	1.03
Nutrients, Nitrite, as N (mg/L)	8	7	88	0.001	0.001	0.001	0.001	0.003	0.001	0.00355	0.01	0.0014	0.01	0.004	0.001	1.25
Nutrients, Total Ammonia, as N (mg/L)	8	6	75	0.005	0.005	0.005	0.005	0.006	0.005	0.00575	0.008	0.005	0.008	0.001	0.000	0.24
Nutrients, Total Nitrogen (mg/L)	8	0	0	0.154	0.154	0.1582	0.16675	0.183	0.172	0.19	0.226	0.22	0.24	0.030	0.011	0.17
Nutrients, Total Organic Carbon (mg/L)	8	0	0	3.2	3.2	3.41	3.5	3.750	3.75	3.975	4.2	4.2	4.2	0.351	0.124	0.09
Nutrients, Total Phosphorus (mg/L)	8	3	38	0.002	0.002	0.002	0.002	0.003	0.00335	0.00425	0.005	0.005	0.005	0.001	0.000	0.39
Physical Parameters, Specific Conductivity (µS/cm)	8	0	0	16.4	16.4	17.24	17.6	18.488	18.35	19.1	20.24	20.8	20.8	1.412	0.499	0.08
Physical Parameters, Total Dissolved Solids (mg/L)	8	5	63	10	10	10	10	13.500	10	13.5	19.5	15	30	6.928	2.449	0.51
Physical Parameters, Total Suspended Solids (mg/L)	8	6	75	3	3	3	3	3.250	3	3.25	4	3	4	0.463	0.164	0.14
Physical Parameters, pH (unitless)	8	0	0	6.73	6.9	6.849	6.93	6.979	6.98	7.0225	7.141	7.12	7.19	0.139	0.049	0.02
Total Metals, Aluminum (µg/L)	8	0	0	5.7	5.7	5.98	8.95	14.875	11.3	13.3	25.09	16	46.3	13.137	4.645	0.88
Total Metals, Antimony (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	8	6	75	0.2	0.2	0.2	0.2	0.225	0.2	0.225	0.3	0.2	0.3	0.046	0.016	0.21
Total Metals, Barium (µg/L)	8	0	0	1.6	1.6	1.67	1.7	1.875	1.85	2.025	2.13	2.2	2.2	0.212	0.075	0.11

Table B.3.3-4 Lockhart River Above Outram Lakes (LOR01) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	7	7	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	7	0	0	1.1	1.1	1.28	1.5	1.914	1.6	2.5	2.64	2.7	2.7	0.639	0.241	0.33
Total Metals, Cadmium (µg/L)	8	8	100	0.04	0.04	0.04	0.04	0.041	0.04	0.04	0.043	0.04	0.05	0.004	0.001	0.09
Total Metals, Chromium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cobalt (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	8	0	0	0.4	0.6	0.54	0.6	0.613	0.6	0.7	0.7	0.7	0.7	0.099	0.035	0.16
Total Metals, Iron (µg/L)	8	0	0	11	11	11.7	18.75	29.500	28	37.5	46.8	58	58	15.757	5.571	0.53
Total Metals, Lead (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	8	0	0	1.1	1.1	1.17	1.275	1.338	1.3	1.425	1.53	1.6	1.6	0.160	0.056	0.12
Total Metals, Manganese (µg/L)	8	0	0	2.5	2.5	2.99	3.8	5.213	5.1	6.25	7.54	8.8	8.8	2.073	0.733	0.40
Total Metals, Molybdenum (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	8	0	0	0.8	0.8	0.87	0.9	0.975	1	1.025	1.1	1.1	1.1	0.104	0.037	0.11
Total Metals, Selenium (µg/L)	8	8	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	8	0	0	8	8	8.21	8.375	8.563	8.5	8.65	8.98	8.8	9.4	0.410	0.145	0.05
Total Metals, Thallium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	7	7	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	8	4	50	0.1	0.1	0.1	0.1	0.238	0.15	0.3	0.42	0.3	0.7	0.207	0.073	0.87
Total Metals, Uranium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	8	8	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	8	5	63	0.4	0.4	0.4	0.4	1.513	0.4	0.7	3.1	0.7	8.7	2.907	1.028	1.92

Table B.3.3-5 Lockhart River at Mouth (LOR03) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Chloride (mg/L)	49	21	43	0.2	0.2	0.332	0.4	0.520	0.5	0.7	0.7	0.9	0.9	0.162	0.023	0.31
Major Ions, Hardness, as CaCO3 (mg/L)	47	0	0	4.3	4.3	5.834	6.6	8.241	7.5	9.54	11.8	13.4	14.7	2.502	0.365	0.30
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	49	0	0	3.1	3.1	5	5.2	7.151	6.2	7.4	8.92	9.5	41	5.174	0.739	0.72
Nutrients, Nitrate/Nitrite, as N (mg/L)	49	18	37	0.008	0.008	0.0096	0.01	0.037	0.02	0.04	0.048	0.08	0.28	0.056	0.008	1.53
Nutrients, Total Ammonia, as N (mg/L)	49	32	65	0.002	0.002	0.005	0.005	0.012	0.007	0.013	0.03	0.023	0.05	0.012	0.002	0.93
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	7	1	14	0.0043	0.0043	0.02572	0.06	0.115	0.09	0.175	0.216	0.24	0.24	0.085	0.032	0.74
Nutrients, Total Phosphorus (mg/L)	49	30	61	0	0	0.004	0.005	0.017	0.01	0.02	0.05	0.03	0.068	0.019	0.003	1.11
Physical Parameters, Specific Conductivity (µS/cm)	49	0	0	15.3	15.3	16.16	17	18.755	18.7	19.9	20.98	23.2	26	2.097	0.300	0.11
Physical Parameters, Total Dissolved Solids (mg/L)	49	13	27	5	5	10	10	19.612	16	22	31.6	40	76	14.168	2.024	0.72
Physical Parameters, Total Suspended Solids (mg/L)	34	25	74	0.7	2	2	3	4.462	3	4	5	5	33	5.350	0.918	1.20
Physical Parameters, pH (unitless)	49	0	0	6.2	6.5	6.58	6.83	6.938	6.94	7.1	7.208	7.45	7.82	0.287	0.041	0.04
Total Metals, Arsenic (µg/L)	25	24	96	0.05	0.05	0.3	0.3	0.886	0.5	1	1.6	2	5	0.998	0.200	1.13
Total Metals, Cadmium (µg/L)	49	43	88	0.05	0.05	0.05	0.1	0.499	0.1	0.2	0.54	0.3	10	1.598	0.228	3.20
Total Metals, Chromium (µg/L)	47	31	66	0.1	0.1	0.1	0.25	2.260	0.6	1	3	2	62	8.959	1.307	3.96
Total Metals, Cobalt (µg/L)	32	27	84	0.03	0.03	0.1	0.1	0.320	0.1	0.375	1	0.6	1	0.378	0.067	1.18
Total Metals, Copper (µg/L)	49	15	31	0.2	0.2	0.4	0.5	2.003	1	1.1	2.2	2	40	5.667	0.810	2.83
Total Metals, Iron (µg/L)	48	16	33	3	3	5	9.5	27.433	20	42	50	67	125	23.326	3.367	0.85
Total Metals, Lead (µg/L)	48	34	71	0.1	0.1	0.1	0.1	0.646	0.6	1	1	2	3.6	0.627	0.090	0.97
Total Metals, Manganese (µg/L)	21	4	19	0.4	0.4	0.6	0.7	0.976	0.9	1.1	1.8	1.1	2	0.437	0.095	0.45
Total Metals, Nickel (µg/L)	48	16	33	0.3	0.3	0.4	0.475	1.177	0.8	1	1	1.3	10	1.938	0.280	1.65
Total Metals, Zinc (µg/L)	49	29	59	0.4	0.4	0.4	0.5	6.288	2.7	10	15	19	30	6.752	0.965	1.07

Table B.3.3-6 Lockhart River at Outlet of Artillery lake (LOR02) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	28	1	4	0.5	2	2.6	2.775	3.171	3.1	3.55	4.23	4.6	4.6	0.829	0.157	0.26
Dissolved Metals, Antimony (µg/L)	28	0	0	0.004	0.004	0.004	0.01325	0.056	0.042	0.086	0.1188	0.152	0.23	0.054	0.010	0.96
Dissolved Metals, Arsenic (µg/L)	63	24	38	0	0.08	0.09	0.09	0.160	0.1	0.1	0.44	0.11	1.5	0.210	0.027	1.31
Dissolved Metals, Barium (µg/L)	28	1	4	0.05	2.38	2.41	2.4725	2.520	2.565	2.67	2.783	2.79	3.19	0.518	0.098	0.21
Dissolved Metals, Beryllium (µg/L)	28	6	21	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.000	0.000	0.38
Dissolved Metals, Bismuth (µg/L)	28	26	93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Boron (µg/L)	42	14	33	0.5	0.5	1.4	1.625	8.488	1.95	20	20	20	50	10.770	1.662	1.27
Dissolved Metals, Cadmium (µg/L)	28	4	14	0.001	0.001	0.001	0.001	0.009	0.003	0.00525	0.0156	0.009	0.081	0.017	0.003	2.03
Dissolved Metals, Chromium (µg/L)	28	0	0	0.03	0.03	0.03	0.03	0.045	0.04	0.054	0.07	0.07	0.07	0.014	0.003	0.32
Dissolved Metals, Cobalt (µg/L)	28	1	4	0.002	0.004	0.0047	0.006	0.007	0.006	0.0075	0.0113	0.009	0.014	0.003	0.001	0.40
Dissolved Metals, Copper (µg/L)	30	1	3	0.05	0.05	0.53	0.5525	0.824	0.58	0.9325	1.335	1.38	3	0.531	0.097	0.65
Dissolved Metals, Iron (µg/L)	33	4	12	0.5	0.5	1.02	1.5	6.385	2.2	2.9	3.72	3.8	80	15.908	2.769	2.49
Dissolved Metals, Lead (µg/L)	30	16	53	0.005	0.005	0.005	0.005	0.080	0.005	0.01975	0.0463	0.039	1	0.251	0.046	3.14
Dissolved Metals, Lithium (µg/L)	28	1	4	0.01	0.9	0.935	0.9675	0.970	1	1.0425	1.08	1.11	1.11	0.196	0.037	0.20
Dissolved Metals, Manganese (µg/L)	31	4	13	0.05	0.05	0.24	0.285	1.302	0.36	0.51	0.7	0.7	10	2.897	0.520	2.22
Dissolved Metals, Molybdenum (µg/L)	28	1	4	0.005	0.011	0.012	0.01475	0.020	0.017	0.02125	0.0253	0.027	0.084	0.014	0.003	0.68
Dissolved Metals, Nickel (µg/L)	28	0	0	0.02	0.4	0.427	0.44	0.490	0.475	0.4975	0.533	0.54	1.26	0.180	0.034	0.37
Dissolved Metals, Selenium (µg/L)	63	39	62	0	0	0.01	0.01	0.103	0.1	0.1	0.26	0.1	0.5	0.139	0.018	1.35
Dissolved Metals, Silver (µg/L)	28	24	86	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Strontium (µg/L)	28	1	4	0.05	6.2	6.214	6.28	6.284	6.375	6.67	6.962	7.2	7.2	1.255	0.237	0.20
Dissolved Metals, Tellurium (µg/L)	6	6	100	0.02	0.02	0.02	0.02	0.020	0.02	0.02	0.02	0.02	0.02	----	----	----
Dissolved Metals, Thallium (µg/L)	28	9	32	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.000	0.000	0.41
Dissolved Metals, Tin (µg/L)	28	21	75	0.005	0.005	0.005	0.005	0.007	0.005	0.00525	0.0123	0.005	0.024	0.005	0.001	0.73
Dissolved Metals, Titanium (µg/L)	11	11	100	0.05	0.05	0.05	0.05	0.050	0.05	0.05	0.05	0.05	0.05	----	----	----
Dissolved Metals, Uranium (µg/L)	28	1	4	0.0005	0.0134	0.0137	0.014775	0.018	0.0157	0.0173	0.02574	0.0201	0.0423	0.009	0.002	0.48
Dissolved Metals, Vanadium (µg/L)	28	2	7	0.005	0.005	0.01	0.0195	0.028	0.024	0.03	0.0518	0.04	0.078	0.017	0.003	0.62
Dissolved Metals, Zinc (µg/L)	30	1	3	0.2	0.2	0.2	0.3	1.298	0.56	1.6975	3.07	3.7	7.4	1.641	0.300	1.26
Dissolved Metals, Zirconium (µg/L)	6	5	83	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Major Ions, Carbonate (calc'd) (mg/L)	24	24	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Dissolved Calcium (mg/L)	81	1	1	0.05	1.1	1.2	1.29	1.496	1.4	1.5	1.8	1.8	5.4	0.630	0.070	0.42
Major Ions, Dissolved Chloride (mg/L)	84	2	2	0.05	0.3	0.3	0.38	0.476	0.41	0.4625	0.7	0.5	3.6	0.374	0.041	0.79
Major Ions, Dissolved Fluoride (mg/L)	81	11	14	0.01	0.01	0.02	0.02	0.029	0.03	0.03	0.05	0.04	0.07	0.012	0.001	0.41
Major Ions, Dissolved Magnesium (mg/L)	71	0	0	0.01	0.4	0.6	0.61	0.683	0.69	0.75	0.8	0.93	1	0.131	0.016	0.19
Major Ions, Dissolved Potassium (mg/L)	83	1	1	0.04	0.36	0.362	0.4	0.419	0.42	0.44	0.48	0.5	0.9	0.096	0.010	0.23
Major Ions, Dissolved Sodium (mg/L)	83	0	0	0.04	0.4	0.4	0.47	0.530	0.5	0.545	0.6	0.64	3	0.290	0.032	0.55
Major Ions, Dissolved Sulphate (mg/L)	84	8	10	0.01	0.6	1	1.2	1.484	1.5	1.615	1.856	2.1	6.8	0.719	0.078	0.48
Major Ions, Hydroxide (calc'd) (mg/L)	22	22	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Phenophthalein Alkalinity, as CaCO3 (mg/L)	39	39	100	0	0	0	0	0.000	0	0	0	0	0	----	----	----
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	84	3	4	0.1	3	3.83	4.5	5.150	5.25	5.75	6.87	7.4	10	1.399	0.153	0.27
Major Ions, Total Calcium (mg/L)	8	0	0	1.17	1.17	1.184	1.1975	1.255	1.255	1.3025	1.325	1.36	1.36	0.067	0.024	0.05
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	75	0	0	0.166	4.9	5.4	5.7	6.464	6.343	6.7915	7.9508	8.149	16.9	1.813	0.209	0.28
Major Ions, Total Magnesium (mg/L)	8	0	0	0.54	0.54	0.554	0.5675	0.598	0.605	0.63	0.633	0.64	0.64	0.039	0.014	0.07
Major Ions, Total Potassium (mg/L)	8	0	0	0.35	0.35	0.35	0.35	0.365	0.365	0.3725	0.383	0.39	0.39	0.015	0.005	0.04
Major Ions, Total Sodium (mg/L)	8	0	0	0.19	0.28	0.253	0.3175	0.324	0.33	0.365	0.383	0.39	0.39	0.064	0.023	0.20
Nutrients, Dissolved Organic Carbon (mg/L)	75	0	0	1	1.3	1.894	2.075	2.358	2.3	2.7	2.8	3.5	3.5	0.465	0.054	0.20
Nutrients, Nitrate, as N (mg/L)	28	6	21	0.01	0.01	0.01	0.0175	0.029	0.03	0.04	0.05	0.06	0.06	0.015	0.003	0.52
Nutrients, Nitrate/Nitrite, as N (mg/L)	78	24	31	0.005	0.005	0.0087	0.01	0.019	0.01	0.02825	0.04	0.05	0.06	0.014	0.002	0.75
Nutrients, Nitrite, as N (mg/L)	28	27	96	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Nutrients, Particulate Organic Carbon (mg/L)	74	0	0	0.06	0.06	0.1203	0.15075	0.269	0.21	0.26875	0.3383	0.4	1.53	0.266	0.031	0.99
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	6	4	67	0.1	0.1	0.1	0.1	0.242	0.15	0.3875	0.475	0.5	0.5	0.186	0.076	0.77
Nutrients, Total Nitrogen (mg/L)	28	0	0	0.1	0.11	0.12	0.15	0.182	0.16	0.18	0.22	0.22	0.69	0.105	0.020	0.58
Nutrients, Total Organic Carbon (mg/L)	5	0	0	1	3	1.8	3	3.100	3	3.5	4.4	3.5	5	1.432	0.640	0.46
Nutrients, Total Phosphorus (mg/L)	73	32	44	0.002	0.002	0.002	0.003	0.008	0.006	0.01	0.01	0.02	0.069	0.009	0.001	1.18
Physical Parameters, Specific Conductivity (µS/cm)	90	0	0	11	14.2	15.09	15.4	17.188	16.6	18.2	19.44	22.4	34.7	2.991	0.315	0.17

Table B.3.3-6 Lockhart River at Outlet of Artillery lake (LOR02) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, Total Suspended Solids (mg/L)	78	52	67	1	1	1	1.4	3.531	3	3	6	5	30	3.901	0.442	1.10
Physical Parameters, pH (unitless)	90	0	0	4.82	6.52	6.61	6.84	6.896	6.95	7.0775	7.2	7.3	7.7	0.371	0.039	0.05
Total Metals, Aluminum (µg/L)	44	0	0	2.7	2.7	3.06	3.775	4.820	4.3	5.3	6.07	6.1	14	2.068	0.312	0.43
Total Metals, Antimony (µg/L)	36	2	6	0.001	0.001	0.003	0.004	0.007	0.005	0.009	0.0135	0.016	0.025	0.005	0.001	0.73
Total Metals, Arsenic (µg/L)	33	0	0	0.08	0.08	0.09	0.09	0.094	0.09	0.1	0.1	0.11	0.11	0.006	0.001	0.07
Total Metals, Barium (µg/L)	65	20	31	2.2	2.2	2.4	2.5	26.982	2.66	80	80	100	100	36.694	4.551	1.36
Total Metals, Beryllium (µg/L)	44	19	43	0.001	0.001	0.001	0.001	0.010	0.001	0.002	0.05	0.002	0.05	0.019	0.003	1.90
Total Metals, Bismuth (µg/L)	36	34	94	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.004	0.001	0.01	0.003	0.000	1.39
Total Metals, Boron (µg/L)	36	4	11	0.1	1.2	0.15	1.3	1.394	1.6	1.7	1.9	2.3	2.3	0.569	0.095	0.41
Total Metals, Cadmium (µg/L)	66	23	35	0.001	0.001	0.001	0.002	0.189	0.014	0.1	1	0.2	1	0.335	0.041	1.77
Total Metals, Chromium (µg/L)	44	5	11	0.02	0.02	0.0273	0.03	0.088	0.03	0.04	0.2	0.044	1.2	0.185	0.028	2.11
Total Metals, Cobalt (µg/L)	66	24	36	0.005	0.005	0.006	0.008	0.342	0.01	0.5	1	1	2	0.542	0.067	1.58
Total Metals, Copper (µg/L)	66	9	14	0.4	0.4	0.5	0.53	0.793	0.625	0.895	1.1	1.43	4	0.519	0.064	0.65
Total Metals, Iron (µg/L)	44	0	0	2	2	3.19	4	5.800	5.05	6.5	8.25	9.7	21	3.398	0.512	0.59
Total Metals, Lead (µg/L)	66	42	64	0.005	0.005	0.005	0.005	0.524	0.038	0.7	1	1.5	4	0.974	0.120	1.86
Total Metals, Lithium (µg/L)	44	0	0	0.7	0.8	0.812	0.9	0.963	1	1.01	1.074	1.1	1.1	0.096	0.014	0.10
Total Metals, Manganese (µg/L)	44	0	0	0.287	0.287	0.5223	0.6475	0.793	0.765	0.9625	1.097	1.27	1.27	0.225	0.034	0.28
Total Metals, Molybdenum (µg/L)	44	5	11	0.005	0.007	0.015	0.01575	0.055	0.018	0.02175	0.1	0.026	0.6	0.112	0.017	2.04
Total Metals, Nickel (µg/L)	66	15	23	0.2	0.4	0.42	0.46	1.532	0.49	0.6	2	0.7	31.9	4.691	0.577	3.06
Total Metals, Selenium (µg/L)	33	13	39	0.01	0.01	0.01	0.01	0.027	0.01	0.05	0.05	0.1	0.1	0.023	0.004	0.83
Total Metals, Silver (µg/L)	42	34	81	0.001	0.001	0.001	0.001	0.063	0.001	0.001	0.1	0.001	0.8	0.200	0.031	3.16
Total Metals, Strontium (µg/L)	44	0	0	5.3	5.3	5.443	5.7	6.235	6.275	6.705	6.937	7.39	7.39	0.560	0.084	0.09
Total Metals, Thallium (µg/L)	36	11	31	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.001	0.000	0.48
Total Metals, Tin (µg/L)	36	29	81	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.008	0.005	0.021	0.004	0.001	0.60
Total Metals, Titanium (µg/L)	11	10	91	0.05	0.05	0.05	0.05	0.051	0.05	0.05	0.05	0.05	0.06	0.003	0.001	0.06
Total Metals, Uranium (µg/L)	36	0	0	0.0138	0.0138	0.01455	0.0158	0.019	0.0167	0.017875	0.0248	0.0188	0.0417	0.007	0.001	0.38
Total Metals, Vanadium (µg/L)	66	30	45	0	0	0.018	0.02	0.209	0.0325	0.5	0.5	1	1	0.287	0.035	1.37
Total Metals, Zinc (µg/L)	66	6	9	0.2	0.2	0.2	0.3	1.245	0.5	1.015	2.145	2	19	2.584	0.318	2.07
Total Metals, Zirconium (µg/L)	6	4	67	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----

Table B.3.3-7 MacKay Lake (MCL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	46	0	0	1.9	1.9	2.25	3.1	4.646	4.4	5.6	7.55	9.3	9.9	2.002	0.295	0.43
Dissolved Metals, Antimony (µg/L)	46	44	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.021	0.003	0.20
Dissolved Metals, Arsenic (µg/L)	46	46	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	46	0	0	1.6	1.6	1.65	1.8	1.937	1.95	2.1	2.2	2.4	2.4	0.209	0.031	0.11
Dissolved Metals, Beryllium (µg/L)	46	46	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	27	26	96	0.2	0.2	0.2	0.2	0.204	0.2	0.2	0.2	0.2	0.3	0.019	0.004	0.09
Dissolved Metals, Boron (µg/L)	27	2	7	0.9	0.9	1.18	1.55	1.778	1.8	2	2.32	2.5	2.8	0.476	0.092	0.27
Dissolved Metals, Cadmium (µg/L)	46	46	100	0.04	0.04	0.04	0.04	0.045	0.045	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Chromium (µg/L)	46	44	96	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.4	0.046	0.007	0.43
Dissolved Metals, Cobalt (µg/L)	46	46	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	46	5	11	0.2	0.3	0.25	0.4	1.250	0.4	0.5	0.7	0.6	37.3	5.436	0.801	4.35
Dissolved Metals, Iron (µg/L)	46	45	98	5	5	5	5	10.022	5	5	30.5	5	50	14.143	2.085	1.41
Dissolved Metals, Lead (µg/L)	46	43	93	0.1	0.1	0.1	0.1	0.170	0.1	0.1	0.1	0.1	1.8	0.313	0.046	1.84
Dissolved Metals, Lithium (µg/L)	46	1	2	0.2	1	1	1.125	1.207	1.2	1.3	1.3	1.3	4.1	0.485	0.072	0.40
Dissolved Metals, Manganese (µg/L)	46	5	11	0.1	0.1	0.15	0.3	0.991	0.5	0.875	1.95	1.7	6.9	1.512	0.223	1.53
Dissolved Metals, Mercury (µg/L)	43	42	98	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.002	0.000	0.20
Dissolved Metals, Molybdenum (µg/L)	46	46	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	46	0	0	0.4	0.4	0.5	0.6	0.780	0.75	0.975	1	1.4	1.4	0.247	0.036	0.32
Dissolved Metals, Selenium (µg/L)	46	45	98	0.3	0.3	0.3	0.3	0.333	0.3	0.3	0.3	0.3	1.8	0.221	0.033	0.66
Dissolved Metals, Silver (µg/L)	46	45	98	0.1	0.1	0.1	0.1	0.120	0.1	0.1	0.1	0.1	1	0.133	0.020	1.11
Dissolved Metals, Strontium (µg/L)	46	0	0	4.7	4.7	6.5	6.925	8.033	8.05	8.875	10	10.6	10.6	1.424	0.210	0.18
Dissolved Metals, Thallium (µg/L)	46	46	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	27	27	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	46	45	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.015	0.002	0.14
Dissolved Metals, Uranium (µg/L)	46	46	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	46	46	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	45	29	64	0.4	0.4	0.4	0.4	1.011	0.4	0.6	0.9	0.8	22.3	3.253	0.485	3.22
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	3	0	0	4.2	4.2	4.22	4.25	4.300	4.3	4.35	4.38	4.4	4.4	0.100	0.058	0.02
Major Ions, Dissolved Calcium (mg/L)	54	0	0	0.7	0.7	1.3	1.4	1.823	1.65	1.975	2.6	2.6	7.2	0.905	0.123	0.50
Major Ions, Dissolved Chloride (mg/L)	52	39	75	0.7	0.7	0.7	0.7	0.763	0.7	0.72	1	0.7	1.1	0.120	0.017	0.16
Major Ions, Dissolved Fluoride (mg/L)	46	39	85	0.035	0.1	0.0455	0.1	0.116	0.1	0.1	0.1	0.1	1	0.138	0.020	1.19
Major Ions, Dissolved Magnesium (mg/L)	54	0	0	0.3	0.6	0.6	0.68275	0.853	0.7215	0.9	1.17	1.2	3.6	0.445	0.061	0.52
Major Ions, Dissolved Potassium (mg/L)	54	0	0	0.3	0.3	0.4	0.4	0.474	0.5	0.5	0.6	0.6	0.7	0.084	0.011	0.18
Major Ions, Dissolved Sodium (mg/L)	54	0	0	0.4	0.4	0.5	0.5	0.624	0.6	0.7	0.8	0.82	0.82	0.118	0.016	0.19
Major Ions, Dissolved Sulphate (mg/L)	55	11	20	1	1.61	1	1.84	1.816	2	2	2	2	3	0.462	0.062	0.25
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	55	0	0	1.5	3.9	4.04	4.2	4.793	4.7	5.1	5.88	6	9.4	0.991	0.134	0.21
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	54	0	0	2.8	2.8	5.93	6.42	8.081	7.4	8.925	10.72	11.4	25	3.192	0.434	0.39
Microbiology, Chlorophyll a (µg/L)	28	2	7	0.154	0.154	0.1771	0.23875	0.588	0.441	0.76675	1.054	1.5	2	0.444	0.084	0.76
Nutrients, Dissolved Organic Carbon (mg/L)	55	0	0	2	2.4	2.6	2.75	2.918	3	3.1	3.2	3.5	3.7	0.309	0.042	0.11
Nutrients, Nitrate, as N (mg/L)	64	53	83	0.003	0.003	0.005	0.005	0.009	0.005	0.01	0.0182	0.014	0.0658	0.010	0.001	1.07
Nutrients, Nitrate/Nitrite, as N (mg/L)	63	48	76	0.005	0.005	0.0051	0.0051	0.019	0.0051	0.01	0.04	0.014	0.15	0.031	0.004	1.64
Nutrients, Nitrite, as N (mg/L)	64	61	95	0.001	0.001	0.001	0.001	0.008	0.001	0.01	0.01	0.02	0.15	0.021	0.003	2.78
Nutrients, Total Ammonia, as N (mg/L)	55	52	95	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.01	0.005	0.018	0.002	0.000	0.41
Nutrients, Total Nitrogen (mg/L)	32	0	0	0.115	0.127	0.1346	0.15	0.161	0.16	0.17	0.19	0.194	0.201	0.021	0.004	0.13
Nutrients, Total Organic Carbon (mg/L)	55	0	0	2.5	2.5	2.7	2.9	3.064	3.1	3.2	3.4	3.5	4.1	0.288	0.039	0.09
Nutrients, Total Phosphorus (mg/L)	60	42	70	0.002	0.002	0.002	0.002	0.004	0.0022	0.006075	0.01	0.01	0.02	0.004	0.001	0.88
Physical Parameters, Specific Conductivity (µS/cm)	55	0	0	13.9	13.9	14.98	15.45	16.562	16.3	17.4	18.38	20	20.6	1.543	0.208	0.09
Physical Parameters, Total Dissolved Solids (mg/L)	52	25	48	10	10	10	10	19.385	11.5	18	22	30	244	32.895	4.562	1.70
Physical Parameters, Total Suspended Solids (mg/L)	55	48	87	3	3	3	3	3.273	3	3	4	3	8	0.971	0.131	0.30
Physical Parameters, pH (unitless)	55	0	0	6.42	6.64	6.734	6.825	6.888	6.91	6.985	7.036	7.09	7.09	0.135	0.018	0.02
Total Metals, Aluminum (µg/L)	55	0	0	3	3	4.48	5.55	7.175	7	8.15	10.56	11.7	17.5	2.543	0.343	0.35
Total Metals, Antimony (µg/L)	55	52	95	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.1	0.1	0.4	0.050	0.007	0.45
Total Metals, Arsenic (µg/L)	55	54	98	0.2	0.2	0.2	0.2	0.204	0.2	0.2	0.2	0.2	0.4	0.027	0.004	0.13
Total Metals, Barium (µg/L)	55	0	0	1.6	1.6	1.74	1.8	1.998	2	2.1	2.2	2.5	2.7	0.212	0.029	0.11

Table B.3.3-7 MacKay Lake (MCL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	55	55	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	26	26	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	26	2	8	0.9	1.3	1.3	1.525	1.731	1.7	1.9	2.2	2.2	2.7	0.392	0.077	0.23
Total Metals, Cadmium (µg/L)	55	55	100	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Total Metals, Chromium (µg/L)	55	52	95	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.4	0.044	0.006	0.41
Total Metals, Cobalt (µg/L)	55	54	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.13
Total Metals, Copper (µg/L)	55	2	4	0.2	0.2	0.3	0.4	0.493	0.5	0.6	0.6	0.8	0.8	0.125	0.017	0.25
Total Metals, Iron (µg/L)	55	8	15	5	5	6	7.5	13.655	10	13.5	21	18	50	12.151	1.638	0.89
Total Metals, Lead (µg/L)	55	50	91	0.1	0.1	0.1	0.1	0.135	0.1	0.1	0.1	0.1	1.1	0.146	0.020	1.08
Total Metals, Lithium (µg/L)	55	1	2	0.2	1	1	1.1	1.191	1.2	1.3	1.3	1.4	4.1	0.455	0.061	0.38
Total Metals, Manganese (µg/L)	55	0	0	0.5	0.5	1.64	2.3	3.364	2.8	3.6	6.12	4.6	10.9	2.044	0.276	0.61
Total Metals, Molybdenum (µg/L)	55	55	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	55	0	0	0.4	0.4	0.5	0.6	0.805	0.8	1	1.1	1.4	1.4	0.243	0.033	0.30
Total Metals, Selenium (µg/L)	55	53	96	0.3	0.3	0.3	0.3	0.327	0.3	0.3	0.3	0.3	1.7	0.189	0.025	0.58
Total Metals, Silver (µg/L)	55	54	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.013	0.002	0.13
Total Metals, Strontium (µg/L)	55	0	0	4.7	4.7	6.54	6.95	7.927	7.7	8.8	9.96	10.5	10.5	1.346	0.182	0.17
Total Metals, Thallium (µg/L)	55	55	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	26	26	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	55	53	96	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.2	0.019	0.003	0.18
Total Metals, Uranium (µg/L)	55	55	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	55	54	98	0.1	0.1	0.1	0.1	0.104	0.1	0.1	0.1	0.1	0.3	0.027	0.004	0.26
Total Metals, Zinc (µg/L)	54	42	78	0.4	0.4	0.4	0.4	0.530	0.4	0.4	0.5	0.4	3.9	0.516	0.070	0.97

Table B.3.3-8 Starfish Lake (STL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	31	0	0	5.9	5.9	6.5	8.3	14.545	10.9	18.45	27.1	32.8	32.8	7.841	1.408	0.54
Dissolved Metals, Antimony (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	31	8	26	0.2	0.2	0.2	0.25	0.281	0.3	0.3	0.3	0.3	0.4	0.054	0.010	0.19
Dissolved Metals, Barium (µg/L)	31	0	0	1.4	1.4	1.6	1.7	1.868	1.8	2.05	2.2	2.3	2.3	0.241	0.043	0.13
Dissolved Metals, Beryllium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	27	27	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	27	7	26	0.9	0.9	0.9	0.95	1.181	1.2	1.3	1.5	1.6	2.1	0.280	0.054	0.24
Dissolved Metals, Cadmium (µg/L)	31	31	100	0.04	0.04	0.04	0.04	0.042	0.04	0.04	0.05	0.04	0.05	0.004	0.001	0.10
Dissolved Metals, Chromium (µg/L)	31	30	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.018	0.003	0.17
Dissolved Metals, Cobalt (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	31	0	0	0.5	0.6	0.7	0.8	1.348	0.9	1	1	1.1	15.8	2.686	0.482	1.99
Dissolved Metals, Iron (µg/L)	31	14	45	5	5	5	5	10.419	6	14.5	23	24	33	7.915	1.422	0.76
Dissolved Metals, Lead (µg/L)	31	30	97	0.1	0.1	0.1	0.1	0.116	0.1	0.1	0.1	0.1	0.6	0.090	0.016	0.77
Dissolved Metals, Lithium (µg/L)	31	0	0	1.1	1.2	1.2	1.3	1.352	1.4	1.4	1.5	1.5	1.5	0.100	0.018	0.07
Dissolved Metals, Manganese (µg/L)	31	0	0	0.2	0.2	0.3	0.35	4.345	0.5	2.55	14.6	4.3	38	8.298	1.490	1.91
Dissolved Metals, Mercury (µg/L)	28	28	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	31	0	0	0.4	0.4	0.4	0.5	0.555	0.5	0.65	0.7	0.8	0.8	0.118	0.021	0.21
Dissolved Metals, Selenium (µg/L)	31	31	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	31	0	0	5.8	5.8	5.8	6.1	6.297	6.4	6.45	6.6	6.8	6.8	0.294	0.053	0.05
Dissolved Metals, Thallium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	27	27	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	31	30	97	0.1	0.1	0.1	0.1	0.106	0.1	0.1	0.1	0.1	0.3	0.036	0.006	0.34
Dissolved Metals, Vanadium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	29	26	90	0.4	0.4	0.4	0.4	1.286	0.4	0.4	0.42	0.4	25.6	4.677	0.868	3.64
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	4	0	0	3.7	3.7	3.7	3.7	3.750	3.75	3.8	3.8	3.8	3.8	0.058	0.029	0.02
Major Ions, Dissolved Calcium (mg/L)	29	0	0	1	1	1	1.1	1.281	1.2	1.4	1.52	1.7	2.1	0.243	0.045	0.19
Major Ions, Dissolved Chloride (mg/L)	32	31	97	0.22	0.7	0.5	0.7	0.648	0.7	0.7	0.7	0.7	0.7	0.111	0.020	0.17
Major Ions, Dissolved Fluoride (mg/L)	32	25	78	0.028	0.1	0.0351	0.1	0.086	0.1	0.1	0.1	0.1	0.1	0.028	0.005	0.32
Major Ions, Dissolved Magnesium (mg/L)	29	0	0	0.562	0.562	0.6	0.6	0.846	0.648	0.8	1.02	1.1	4.4	0.706	0.131	0.83
Major Ions, Dissolved Potassium (mg/L)	29	0	0	0.3	0.3	0.4	0.4	0.481	0.483	0.5	0.6	0.6	0.7	0.097	0.018	0.20
Major Ions, Dissolved Sodium (mg/L)	29	0	0	0.5	0.6	0.5	0.6	0.592	0.6	0.6	0.6234	0.6	0.7	0.051	0.009	0.09
Major Ions, Dissolved Sulphate (mg/L)	30	3	10	1	1.87	1.387	1.9025	1.839	2	2	2	2	2	0.323	0.059	0.18
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	31	0	0	3.3	3.3	3.6	3.8	4.045	3.9	4.15	4.8	4.4	5.2	0.470	0.084	0.12
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	29	0	0	5.01	5.01	5.4	5.5	6.673	6	6.6	7.58	7.9	20.8	2.865	0.532	0.43
Microbiology, Chlorophyll a (µg/L)	28	1	4	0.329	0.329	0.7451	0.92225	1.175	1.16	1.415	1.703	2	2	0.393	0.074	0.33
Nutrients, Dissolved Organic Carbon (mg/L)	31	0	0	4	4.3	4.5	4.9	5.126	5.1	5.4	5.6	6	6.2	0.504	0.091	0.10
Nutrients, Nitrate, as N (mg/L)	32	27	84	0.003	0.005	0.005	0.005	0.007	0.005	0.005	0.01234	0.005	0.026	0.005	0.001	0.75
Nutrients, Nitrate/Nitrite, as N (mg/L)	32	27	84	0.005	0.0051	0.0051	0.0051	0.007	0.0051	0.0051	0.01234	0.0051	0.026	0.005	0.001	0.71
Nutrients, Nitrite, as N (mg/L)	32	32	100	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.01	0.002	0.000	1.42
Nutrients, Total Ammonia, as N (mg/L)	31	30	97	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.000	0.000	0.04
Nutrients, Total Nitrogen (mg/L)	34	0	0	0.19	0.19	0.21	0.21625	0.238	0.24	0.25	0.27	0.28	0.28	0.023	0.004	0.10
Nutrients, Total Organic Carbon (mg/L)	31	0	0	4.6	4.6	5	5.1	5.474	5.5	5.75	6.1	6.5	6.5	0.468	0.084	0.09
Nutrients, Total Phosphorus (mg/L)	34	11	32	0.002	0.002	0.002	0.002	0.004	0.0033	0.004	0.00573	0.007	0.014	0.002	0.000	0.63
Physical Parameters, Specific Conductivity (µS/cm)	31	0	0	12.1	12.3	13.2	14.05	14.542	14.5	15.25	15.6	16.4	16.4	0.996	0.179	0.07
Physical Parameters, Total Dissolved Solids (mg/L)	28	10	36	10	10	10	10	19.000	14	21	32.6	34	76	14.074	2.660	0.74
Physical Parameters, Total Suspended Solids (mg/L)	31	27	87	3	3	3	3	3.258	3	3	4	3	8	0.930	0.167	0.29
Physical Parameters, pH (unitless)	31	0	0	6.34	6.5	6.62	6.71	6.789	6.82	6.9	6.94	6.94	6.94	0.146	0.026	0.02
Total Metals, Aluminum (µg/L)	31	0	0	10.6	10.6	13.2	15	21.187	16.7	26.75	34.8	42	42	9.024	1.621	0.43
Total Metals, Antimony (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	31	6	19	0.2	0.3	0.2	0.3	0.297	0.3	0.3	0.4	0.3	0.4	0.060	0.011	0.20
Total Metals, Barium (µg/L)	31	0	0	1.6	1.6	1.7	1.8	1.948	1.9	2.1	2.3	2.4	2.4	0.242	0.043	0.12

Table B.3.3-8 Starfish Lake (STL) - Summer Recession

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Beryllium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	27	27	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	27	9	33	0.9	0.9	0.9	0.9	1.085	1.1	1.2	1.34	1.5	1.5	0.188	0.036	0.17
Total Metals, Cadmium (µg/L)	31	31	100	0.04	0.04	0.04	0.04	0.042	0.04	0.04	0.05	0.04	0.05	0.004	0.001	0.10
Total Metals, Chromium (µg/L)	31	30	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.018	0.003	0.17
Total Metals, Cobalt (µg/L)	31	30	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.018	0.003	0.17
Total Metals, Copper (µg/L)	31	0	0	0.4	0.7	0.7	0.85	0.916	1	1	1.1	1.1	1.1	0.159	0.029	0.17
Total Metals, Iron (µg/L)	31	0	0	15	15	22	24	36.419	27	47	63	80	90	19.836	3.563	0.54
Total Metals, Lead (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	31	0	0	1.1	1.2	1.2	1.3	1.345	1.3	1.4	1.5	1.5	1.5	0.109	0.020	0.08
Total Metals, Manganese (µg/L)	31	0	0	4	4	5	6.65	11.277	7.1	12.05	20.7	19	47.1	9.629	1.729	0.85
Total Metals, Molybdenum (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	31	0	0	0.4	0.4	0.5	0.5	0.597	0.6	0.7	0.8	0.9	0.9	0.138	0.025	0.23
Total Metals, Selenium (µg/L)	31	31	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Total Metals, Silver (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	31	0	0	5.8	5.8	5.9	6.05	6.323	6.4	6.5	6.6	6.8	6.8	0.275	0.049	0.04
Total Metals, Thallium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	27	27	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	31	19	61	0.1	0.1	0.1	0.1	0.161	0.1	0.2	0.3	0.3	0.4	0.088	0.016	0.55
Total Metals, Uranium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	31	31	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	29	22	76	0.4	0.4	0.4	0.4	0.441	0.4	0.4	0.5	0.4	0.9	0.102	0.019	0.23

Table B.3.4-1 Clinton-Colden Outlet (CCO) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	33	0	0	2.5	2.5	3.5	4	5.252	4.7	6	6.66	7.4	18.4	2.675	0.466	0.51
Dissolved Metals, Antimony (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Arsenic (µg/L)	33	33	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	33	0	0	1.7	1.7	1.82	1.9	1.997	2	2.1	2.1	2.3	2.5	0.149	0.026	0.07
Dissolved Metals, Beryllium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	29	29	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	29	2	7	0.9	0.9	1.2	1.5	1.893	1.9	2.2	2.4	2.6	3.8	0.582	0.108	0.31
Dissolved Metals, Cadmium (µg/L)	33	33	100	0.04	0.04	0.04	0.04	0.043	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	33	32	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.017	0.003	0.17
Dissolved Metals, Cobalt (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	33	2	6	0.2	0.3	0.3	0.4	0.476	0.5	0.5	0.6	0.6	0.8	0.128	0.022	0.27
Dissolved Metals, Iron (µg/L)	33	32	97	5	5	5	5	5.212	5	5	5	5	12	1.219	0.212	0.23
Dissolved Metals, Lead (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Lithium (µg/L)	33	0	0	1	1.2	1.2	1.3	1.315	1.3	1.4	1.4	1.5	1.7	0.120	0.021	0.09
Dissolved Metals, Manganese (µg/L)	33	0	0	0.2	0.2	0.4	0.5	1.470	1	1.9	2.38	2.4	9	1.747	0.304	1.19
Dissolved Metals, Mercury (ng/L)	29	17	59	0.2	0.2	0.2	0.2	0.272	0.2	0.3	0.4	0.4	0.9	0.139	0.026	0.51
Dissolved Metals, Mercury (µg/L)	28	28	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Dissolved Metals, Molybdenum (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	33	0	0	0.5	0.5	0.6	0.6	0.688	0.7	0.8	0.8	0.9	0.9	0.105	0.018	0.15
Dissolved Metals, Rubidium (µg/L)	33	0	0	1.1	1.1	1.1	1.2	1.218	1.2	1.3	1.3	1.4	1.5	0.095	0.017	0.08
Dissolved Metals, Selenium (µg/L)	33	33	100	0.3	0.3	0.3	0.3	0.300	0.3	0.3	0.3	0.3	0.3	----	----	----
Dissolved Metals, Silver (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	33	0	0	5.7	5.7	6.22	6.5	6.894	6.9	7.1	7.58	7.8	8.4	0.588	0.102	0.09
Dissolved Metals, Thallium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	29	29	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Uranium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	32	27	84	0.4	0.4	0.4	0.4	0.444	0.4	0.4	0.59	0.4	0.8	0.113	0.020	0.26
Field Measurements, Dissolved Oxygen (% Saturation)	15	0	0	93.3	93.3	94.94	97.65	101.553	102	103.6	108	110.3	110.3	5.072	1.310	0.05
Field Measurements, Dissolved Oxygen (mg/L)	13	0	0	10.43	10.43	10.638	10.83	11.412	11.02	12	12.65	12.87	12.87	0.831	0.230	0.07
Field Measurements, Specific Conductivity (µS/cm)	15	0	0	13.4	13.4	14.28	14.65	15.353	15.5	15.75	16.08	16.2	18.5	1.161	0.300	0.08
Field Measurements, Turbidity (NTU)	13	11	85	0	0	0	0	0.031	0	0	0.16	0	0.2	0.075	0.021	2.44
Field Measurements, pH (unitless)	10	0	0	5.35	5.86	5.809	6.6525	6.812	6.87	7.2825	7.487	7.91	7.91	0.756	0.239	0.11
Major Ions, Dissolved Calcium (mg/L)	33	0	0	0.8	0.8	0.92	1.1	1.218	1.2	1.4	1.4	1.7	1.7	0.216	0.038	0.18
Major Ions, Dissolved Chloride (mg/L)	38	30	79	0.47	0.7	0.557	0.7	0.667	0.7	0.7	0.7	0.7	0.7	0.067	0.011	0.10
Major Ions, Dissolved Fluoride (mg/L)	38	30	79	0.024	0.1	0.0267	0.1	0.085	0.1	0.1	0.1	0.1	0.1	0.030	0.005	0.36
Major Ions, Dissolved Magnesium (mg/L)	33	0	0	0.5	0.6	0.6	0.7	0.867	0.7	0.8	0.98	0.9	4.6	0.690	0.120	0.80
Major Ions, Dissolved Potassium (mg/L)	33	0	0	0.3	0.3	0.4	0.4	0.491	0.5	0.6	0.6	0.7	0.7	0.101	0.018	0.21
Major Ions, Dissolved Sodium (mg/L)	33	0	0	0.4	0.4	0.5	0.5	0.588	0.6	0.7	0.7	0.8	0.8	0.093	0.016	0.16
Major Ions, Dissolved Sulphate (mg/L)	34	0	0	1.92	2	2	2	1.997	2	2	2	2	2.13	0.032	0.005	0.02
Major Ions, Reactive Silica (mg/L)	33	2	6	0.08	0.08	0.084	0.085	0.128	0.094	0.115	0.129	0.13	0.5	0.106	0.018	0.83
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	33	0	0	2	3.4	3.7	3.8	4.088	3.9	4.4	4.78	5	6	0.685	0.119	0.17
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	33	0	0	4.5	4.5	5.22	5.6	6.648	6.4	6.5	7.34	7.5	21.4	2.756	0.480	0.41
Microbiology, Chlorophyll a (µg/L)	32	6	19	0.142	0.142	0.323	0.448	0.685	0.513	0.90025	1	1.23	2	0.436	0.077	0.64
Nutrients, Dissolved Nitrogen (mg/L)	35	0	0	0.12	0.12	0.1248	0.135	0.153	0.15	0.1685	0.1812	0.2	0.22	0.024	0.004	0.16
Nutrients, Dissolved Organic Carbon (mg/L)	33	0	0	2.1	2.1	2.7	2.8	3.015	2.9	3.3	3.5	3.6	3.6	0.341	0.059	0.11
Nutrients, Dissolved o-Phosphate, as P (mg/L)	15	15	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Nutrients, Nitrate, as N (mg/L)	36	17	47	0.003	0.003	0.005	0.005	0.010	0.0071	0.01	0.02065	0.0122	0.0752	0.012	0.002	1.18
Nutrients, Nitrate/Nitrite, as N (mg/L)	36	17	47	0.005	0.005	0.0051	0.0051	0.011	0.0071	0.010275	0.02145	0.0122	0.0752	0.013	0.002	1.14
Nutrients, Nitrite, as N (mg/L)	36	36	100	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.01	0.003	0.000	1.44
Nutrients, Total Ammonia, as N (mg/L)	33	31	94	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.015	0.002	0.000	0.33
Nutrients, Total Dissolved Phosphorus (mg/L)	29	18	62	0.001	0.001	0.001	0.0018	0.002	0.002	0.0026	0.00286	0.0031	0.0078	0.001	0.000	0.60

Table B.3.4-1 Clinton-Colden Outlet (CCO) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Nitrogen (mg/L)	38	0	0	0.127	0.127	0.1344	0.14	0.162	0.16	0.18	0.19	0.23	0.23	0.025	0.004	0.15
Nutrients, Total Organic Carbon (mg/L)	33	0	0	2.7	2.7	2.8	2.8	3.070	3	3.3	3.5	3.6	3.6	0.297	0.052	0.10
Nutrients, Total Phosphorus (mg/L)	38	28	74	0.002	0.002	0.002	0.002	0.003	0.002	0.002075	0.00388	0.0021	0.013	0.002	0.000	0.73
Nutrients, o-Phosphate, as P (mg/L)	18	18	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	33	0	0	12.7	12.7	13.72	14.5	15.339	15.4	16	16.9	17.7	17.7	1.270	0.221	0.08
Physical Parameters, Total Dissolved Solids (mg/L)	29	16	55	10	10	10	10	14.552	10	16	19.4	25	61	9.956	1.849	0.68
Physical Parameters, Total Suspended Solids (mg/L)	33	29	88	3	3	3	3	3.364	3	3	3.8	3	8	1.113	0.194	0.33
Physical Parameters, pH (unitless)	33	0	0	6.37	6.72	6.478	6.8	6.798	6.84	6.91	6.984	7.01	7.01	0.176	0.031	0.03
Total Metals, Aluminum (µg/L)	33	0	0	4.5	4.5	5.32	5.7	9.564	6.4	7	8.16	8.2	94.9	15.601	2.716	1.63
Total Metals, Antimony (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Arsenic (µg/L)	33	33	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Barium (µg/L)	33	0	0	1.8	1.8	1.9	1.9	2.006	2	2	2.1	2.1	2.7	0.150	0.026	0.07
Total Metals, Beryllium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	29	29	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	29	3	10	0.9	0.9	1.14	1.6	1.776	1.8	2.1	2.2	2.4	2.4	0.419	0.078	0.24
Total Metals, Cadmium (µg/L)	33	33	100	0.04	0.04	0.04	0.04	0.043	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Total Metals, Cesium (µg/L)	33	32	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.017	0.003	0.17
Total Metals, Chromium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Cobalt (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Copper (µg/L)	33	2	6	0.2	0.4	0.4	0.5	0.536	0.5	0.6	0.7	0.7	0.8	0.141	0.025	0.26
Total Metals, Iron (µg/L)	33	13	39	5	5	5	5	7.242	6	7	9.6	10	34	5.093	0.887	0.70
Total Metals, Lead (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Lithium (µg/L)	33	0	0	1	1.2	1.2	1.3	1.324	1.3	1.4	1.4	1.5	1.5	0.106	0.018	0.08
Total Metals, Manganese (µg/L)	33	0	0	0.6	0.6	1.3	1.5	2.785	1.9	4	4.38	6.7	11.7	2.210	0.385	0.79
Total Metals, Mercury (ng/L)	33	8	24	0.2	0.2	0.2	0.3	0.400	0.4	0.5	0.6	0.8	0.8	0.175	0.030	0.44
Total Metals, Mercury (µg/L)	28	28	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.01	----	----	----
Total Metals, Molybdenum (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Nickel (µg/L)	33	0	0	0.5	0.5	0.6	0.6	0.688	0.7	0.8	0.8	0.9	0.9	0.111	0.019	0.16
Total Metals, Rubidium (µg/L)	33	0	0	1.1	1.1	1.1	1.1	1.203	1.2	1.3	1.3	1.4	1.4	0.088	0.015	0.07
Total Metals, Selenium (µg/L)	33	32	97	0.3	0.3	0.3	0.3	0.306	0.3	0.3	0.3	0.3	0.5	0.035	0.006	0.11
Total Metals, Silver (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Strontium (µg/L)	33	0	0	5.7	5.7	6.32	6.4	6.930	6.9	7.2	7.3	7.8	8.8	0.626	0.109	0.09
Total Metals, Thallium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	29	29	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	33	31	94	0.1	0.1	0.1	0.1	0.115	0.1	0.1	0.1	0.1	0.5	0.071	0.012	0.62
Total Metals, Uranium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Vanadium (µg/L)	33	33	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Zinc (µg/L)	32	29	91	0.4	0.4	0.4	0.4	0.434	0.4	0.4	0.4	0.4	1.1	0.131	0.023	0.30

Table B.3.4-2 King Lake (KIL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	65	0	0	1.6	1.6	2.6	3.3	5.000	4.6	6.3	8.16	10.3	13.5	2.322	0.288	0.46
Dissolved Metals, Antimony (µg/L)	65	60	92	0.1	0.1	0.1	0.1	0.109	0.1	0.1	0.1	0.1	0.3	0.034	0.004	0.31
Dissolved Metals, Arsenic (µg/L)	65	65	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Barium (µg/L)	65	0	0	2.4	2.4	2.5	2.8	3.197	3.1	3.3	3.96	4	5.4	0.602	0.075	0.19
Dissolved Metals, Beryllium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Bismuth (µg/L)	40	40	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Dissolved Metals, Boron (µg/L)	40	0	0	1.1	1.1	1.5	1.975	2.385	2.2	2.8	3.52	3.9	3.9	0.713	0.113	0.30
Dissolved Metals, Cadmium (µg/L)	65	65	100	0.04	0.04	0.04	0.04	0.045	0.04	0.05	0.05	0.05	0.05	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Chromium (µg/L)	65	63	97	0.1	0.1	0.1	0.1	0.111	0.1	0.1	0.1	0.1	0.7	0.075	0.009	0.68
Dissolved Metals, Cobalt (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Copper (µg/L)	65	6	9	0.2	0.2	0.3	0.4	0.566	0.5	0.6	0.7	0.8	4.6	0.535	0.066	0.94
Dissolved Metals, Iron (µg/L)	65	62	95	5	5	5	5	8.585	5	5	7	5	50	12.063	1.496	1.41
Dissolved Metals, Lead (µg/L)	65	64	98	0.1	0.1	0.1	0.1	0.148	0.1	0.1	0.1	0.1	3.2	0.385	0.048	2.60
Dissolved Metals, Lithium (µg/L)	65	1	2	0.2	1.1	1.1	1.2	1.403	1.3	1.5	1.8	1.9	4.3	0.491	0.061	0.35
Dissolved Metals, Manganese (µg/L)	65	14	22	0.1	0.1	0.1	0.2	0.378	0.3	0.5	0.7	0.8	1.5	0.304	0.038	0.80
Dissolved Metals, Mercury (ng/L)	35	18	51	0.2	0.2	0.2	0.2	0.289	0.2	0.3	0.5	0.4	0.6	0.118	0.020	0.41
Dissolved Metals, Mercury (µg/L)	60	60	100	0.01	0.01	0.01	0.01	0.010	0.01	0.01	0.01	0.01	0.02	0.001	0.000	0.13
Dissolved Metals, Molybdenum (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Nickel (µg/L)	65	0	0	0.3	0.3	0.4	0.4	0.438	0.4	0.5	0.5	0.6	0.6	0.074	0.009	0.17
Dissolved Metals, Rubidium (µg/L)	65	0	0	0.9	0.9	1.2	1.3	1.475	1.4	1.6	1.9	2	2.3	0.310	0.038	0.21
Dissolved Metals, Selenium (µg/L)	65	63	97	0.3	0.3	0.3	0.3	0.334	0.3	0.3	0.3	0.3	2.3	0.249	0.031	0.75
Dissolved Metals, Silver (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Strontium (µg/L)	65	0	0	7.1	7.1	9.84	11.5	14.851	14.1	16.5	19.56	23.6	29.1	4.545	0.564	0.31
Dissolved Metals, Thallium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Tin (µg/L)	40	40	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Titanium (µg/L)	65	64	98	0.1	0.1	0.1	0.1	0.102	0.1	0.1	0.1	0.1	0.2	0.012	0.002	0.12
Dissolved Metals, Uranium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Vanadium (µg/L)	65	65	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Dissolved Metals, Zinc (µg/L)	64	47	73	0.4	0.4	0.4	0.4	0.528	0.4	0.5	0.7	0.6	2.9	0.363	0.045	0.69
Field Measurements, Dissolved Oxygen (% Saturation)	14	0	0	92.4	92.4	93.1	93.925	97.971	98.65	100.525	103.58	103.8	103.8	4.157	1.111	0.04
Field Measurements, Dissolved Oxygen (mg/L)	14	0	0	9.39	9.39	9.62	9.785	10.201	9.915	10.52	10.722	10.8	12.28	0.729	0.195	0.07
Field Measurements, Specific Conductivity (µS/cm)	14	0	0	21.9	21.9	22.7	23.8	25.193	24.95	27.15	27.74	27.8	27.8	1.992	0.533	0.08
Field Measurements, pH (unitless)	12	0	0	6.7	6.7	6.728	6.8375	7.046	7.045	7.215	7.386	7.44	7.44	0.258	0.075	0.04
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	7	0	0	5.9	5.9	5.9	6.3	7.557	6.8	8.55	10.38	10.5	10.5	1.981	0.749	0.26
Major Ions, Dissolved Calcium (mg/L)	76	0	0	0.9	0.9	1.85	2.2	2.879	2.75	3.2	3.9	4.4	8.9	1.230	0.141	0.43
Major Ions, Dissolved Chloride (mg/L)	74	13	18	0.7	0.7	0.7	0.9	1.551	1.3	1.7	2.748	2.8	4.92	1.002	0.116	0.65
Major Ions, Dissolved Fluoride (mg/L)	64	55	86	0.048	0.1	0.0779	0.1	0.111	0.1	0.1	0.1	0.1	1	0.114	0.014	1.03
Major Ions, Dissolved Magnesium (mg/L)	76	0	0	0.2	0.7	0.8	0.8	1.132	1	1.2	1.35	1.7	5.7	0.769	0.088	0.68
Major Ions, Dissolved Potassium (mg/L)	76	0	0	0.4	0.4	0.5	0.5	0.658	0.6	0.8	0.9	1.1	1.1	0.164	0.019	0.25
Major Ions, Dissolved Sodium (mg/L)	76	0	0	0.4	0.4	0.6	0.7	0.919	0.8	1.025	1.25	1.5	1.8	0.285	0.033	0.31
Major Ions, Dissolved Sulphate (mg/L)	78	18	23	1	1	1	1.5625	1.910	2	2	3	2.38	4	0.642	0.073	0.34
Major Ions, Reactive Silica (mg/L)	44	2	5	0.131	0.131	0.1839	0.19675	0.258	0.248	0.30825	0.3236	0.433	0.5	0.082	0.012	0.32
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	77	0	0	5.6	5.6	5.9	6.2	7.484	6.9	8.3	10.24	11.2	11.9	1.603	0.183	0.21
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	76	0	0	3	5.6	8.4	9	11.832	11.2	12.85	15.1	16.7	29.7	4.598	0.527	0.39
Microbiology, Chlorophyll a (µg/L)	41	5	12	0.12	0.12	0.234	0.374	0.630	0.585	0.898	1	1.4	1.4	0.320	0.050	0.51
Nutrients, Dissolved Nitrogen (mg/L)	45	1	2	0.06	0.135	0.1422	0.15	0.182	0.17	0.191	0.25	0.25	0.34	0.049	0.007	0.27
Nutrients, Dissolved Organic Carbon (mg/L)	77	1	1	0.5	2.1	2.86	3.1	3.423	3.4	3.8	4.128	4.5	5.9	0.659	0.075	0.19
Nutrients, Dissolved o-Phosphate, as P (mg/L)	16	13	81	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0012	0.001	0.0021	0.000	0.000	0.25
Nutrients, Nitrate, as N (mg/L)	89	73	82	0.003	0.003	0.005	0.005	0.011	0.005	0.01	0.02	0.0148	0.08	0.012	0.001	1.17
Nutrients, Nitrate/Nitrite, as N (mg/L)	88	67	76	0.005	0.005	0.0051	0.0051	0.018	0.0051	0.01	0.03713	0.0148	0.17	0.030	0.003	1.72
Nutrients, Nitrite, as N (mg/L)	88	86	98	0.001	0.001	0.001	0.001	0.006	0.001	0.01	0.01	0.01	0.17	0.018	0.002	3.11
Nutrients, Total Ammonia, as N (mg/L)	77	63	82	0.005	0.005	0.005	0.005	0.007	0.005	0.01	0.0114	0.017	0.018	0.004	0.000	0.50
Nutrients, Total Dissolved Phosphorus (mg/L)	40	25	63	0.001	0.001	0.001	0.001525	0.002	0.002	0.0022	0.00287	0.0028	0.0121	0.002	0.000	0.95

Table B.3.4-2 King Lake (KIL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Nitrogen (mg/L)	49	1	2	0.06	0.135	0.1568	0.179	0.200	0.2	0.22	0.2564	0.27	0.34	0.046	0.007	0.23
Nutrients, Total Organic Carbon (mg/L)	77	1	1	0.5	2.7	3	3.4	3.618	3.6	4	4.3	4.7	6	0.635	0.072	0.18
Nutrients, Total Phosphorus (mg/L)	84	48	57	0.002	0.002	0.002	0.002	0.004	0.0027	0.003925	0.01	0.005	0.02	0.003	0.000	0.83
Nutrients, o-Phosphate, as P (mg/L)	61	60	98	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.000	0.000	0.34
Physical Parameters, Specific Conductivity (µS/cm)	77	0	0	18.6	18.6	19.3	21.8	25.718	23.2	28.7	34.76	37.9	45.2	6.213	0.708	0.24
Physical Parameters, Total Dissolved Solids (mg/L)	74	27	36	10	10	10	10	18.324	15	21.5	26.7	28	78	12.953	1.506	0.71
Physical Parameters, Total Suspended Solids (mg/L)	77	65	84	3	3	3	3	3.494	3	3	4	3	12	1.492	0.170	0.43
Physical Parameters, pH (unitless)	77	0	0	6.31	6.87	6.92	6.99	7.034	7.04	7.12	7.19	7.23	7.23	0.150	0.017	0.02
Total Metals, Aluminum (µg/L)	77	0	0	2.1	3.4	5.56	7.3	8.914	8.7	10.3	12.8	14.4	16.7	2.953	0.337	0.33
Total Metals, Antimony (µg/L)	77	73	95	0.1	0.1	0.1	0.1	0.110	0.1	0.1	0.1	0.1	0.4	0.048	0.005	0.43
Total Metals, Arsenic (µg/L)	77	76	99	0.2	0.2	0.2	0.2	0.201	0.2	0.2	0.2	0.2	0.3	0.011	0.001	0.06
Total Metals, Barium (µg/L)	77	0	0	2.5	2.5	2.6	2.9	3.281	3.2	3.5	3.94	4.4	5.6	0.593	0.068	0.18
Total Metals, Beryllium (µg/L)	77	77	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Bismuth (µg/L)	39	39	100	0.2	0.2	0.2	0.2	0.200	0.2	0.2	0.2	0.2	0.2	----	----	----
Total Metals, Boron (µg/L)	39	0	0	1.4	1.4	1.68	2	2.403	2.3	2.85	3.28	3.8	3.8	0.639	0.102	0.27
Total Metals, Cadmium (µg/L)	77	76	99	0.04	0.04	0.04	0.04	0.046	0.05	0.05	0.05	0.05	0.09	0.007	0.001	0.15
Total Metals, Cesium (µg/L)	77	77	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Chromium (µg/L)	77	72	94	0.1	0.1	0.1	0.1	0.161	0.1	0.1	0.1	0.1	3.1	0.357	0.041	2.22
Total Metals, Cobalt (µg/L)	77	75	97	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.2	0.016	0.002	0.16
Total Metals, Copper (µg/L)	77	3	4	0.2	0.3	0.36	0.5	0.616	0.6	0.7	0.8	0.9	4.5	0.478	0.054	0.78
Total Metals, Iron (µg/L)	77	18	23	5	5	5	9	14.584	11	15	22.6	21	90	13.710	1.562	0.94
Total Metals, Lead (µg/L)	77	73	95	0.1	0.1	0.1	0.1	0.201	0.1	0.1	0.1	0.1	4.7	0.590	0.067	2.93
Total Metals, Lithium (µg/L)	77	1	1	0.2	1	1.1	1.2	1.382	1.3	1.5	1.8	1.9	4.2	0.463	0.053	0.33
Total Metals, Manganese (µg/L)	77	0	0	0.3	0.3	1.22	1.9	3.016	2.8	4	5.3	6.9	7.2	1.549	0.177	0.51
Total Metals, Mercury (ng/L)	62	12	19	0.0001	0.0001	0.000769	0.2	0.382	0.4	0.5375	0.6	0.9	1.6	0.280	0.036	0.74
Total Metals, Mercury (µg/L)	73	71	97	0.0006	0.01	0.01	0.01	0.012	0.01	0.01	0.01	0.01	0.16	0.018	0.002	1.46
Total Metals, Molybdenum (µg/L)	77	76	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.011	0.001	0.11
Total Metals, Nickel (µg/L)	77	1	1	0.1	0.3	0.4	0.4	0.455	0.5	0.5	0.5	0.6	0.8	0.088	0.010	0.19
Total Metals, Rubidium (µg/L)	77	0	0	0.9	0.9	1.2	1.3	1.465	1.4	1.6	1.94	2	2.4	0.311	0.035	0.21
Total Metals, Selenium (µg/L)	77	73	95	0.3	0.3	0.3	0.3	0.332	0.3	0.3	0.3	0.3	2.4	0.240	0.027	0.72
Total Metals, Silver (µg/L)	77	76	99	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.023	0.003	0.22
Total Metals, Strontium (µg/L)	77	0	0	7.1	7.1	9.8	11.2	14.360	13.3	16.4	19.64	23.8	29	4.427	0.504	0.31
Total Metals, Thallium (µg/L)	77	77	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Tin (µg/L)	39	39	100	0.1	0.1	0.1	0.1	0.100	0.1	0.1	0.1	0.1	0.1	----	----	----
Total Metals, Titanium (µg/L)	77	69	90	0.1	0.1	0.1	0.1	0.112	0.1	0.1	0.14	0.1	0.3	0.036	0.004	0.32
Total Metals, Uranium (µg/L)	77	76	99	0.1	0.1	0.1	0.1	0.101	0.1	0.1	0.1	0.1	0.2	0.011	0.001	0.11
Total Metals, Vanadium (µg/L)	77	76	99	0.1	0.1	0.1	0.1	0.103	0.1	0.1	0.1	0.1	0.3	0.023	0.003	0.22
Total Metals, Zinc (µg/L)	76	60	79	0.4	0.4	0.4	0.4	0.571	0.4	0.4	0.9	0.4	4.5	0.553	0.063	0.97

Table B.3.4-3 Lake of the Enemy (LEL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	66	4	6	0.600	0.600	0.700	1.000	1.638	1.400	1.900	2.700	3.200	5.400	0.930	0.115	0.57
Dissolved Metals, Antimony (µg/L)	66	62	94	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.200	0.024	0.003	0.23
Dissolved Metals, Arsenic (µg/L)	66	66	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.000	0.000	0.00
Dissolved Metals, Barium (µg/L)	66	0	0	1.200	1.200	1.400	1.600	1.853	1.800	1.900	2.500	2.300	3.100	0.424	0.052	0.23
Dissolved Metals, Beryllium (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Bismuth (µg/L)	39	39	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Dissolved Metals, Boron (µg/L)	39	0	0	1.700	1.700	2.560	2.850	3.328	3.200	3.900	4.240	5.200	5.200	0.748	0.120	0.22
Dissolved Metals, Cadmium (µg/L)	66	66	100	0.040	0.040	0.040	0.040	0.045	0.045	0.050	0.050	0.050	0.050	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Chromium (µg/L)	66	65	98	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.500	0.049	0.006	0.46
Dissolved Metals, Cobalt (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Copper (µg/L)	66	15	23	0.200	0.200	0.200	0.300	0.424	0.400	0.500	0.600	0.800	0.800	0.156	0.019	0.37
Dissolved Metals, Iron (µg/L)	65	65	100	5.000	5.000	5.000	5.000	8.462	5.000	5.000	5.000	5.000	50.000	12.084	1.499	1.43
Dissolved Metals, Lead (µg/L)	66	63	95	0.100	0.100	0.100	0.100	0.144	0.100	0.100	0.100	0.100	2.800	0.332	0.041	2.31
Dissolved Metals, Lithium (µg/L)	66	1	2	0.200	1.100	1.150	1.300	1.512	1.400	1.500	2.000	1.500	4.700	0.559	0.069	0.37
Dissolved Metals, Manganese (µg/L)	66	9	14	0.100	0.100	0.100	0.200	0.515	0.400	0.800	1.000	1.400	2.400	0.414	0.051	0.80
Dissolved Metals, Mercury (ng/L)	35	30	86	0.200	0.200	0.200	0.200	0.220	0.200	0.200	0.300	0.200	0.400	0.053	0.009	0.24
Dissolved Metals, Mercury (µg/L)	60	60	100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.020	0.001	0.000	0.13
Dissolved Metals, Molybdenum (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Nickel (µg/L)	66	0	0	0.300	0.400	0.400	0.500	0.530	0.500	0.600	0.700	0.700	0.800	0.108	0.013	0.20
Dissolved Metals, Rubidium (µg/L)	66	0	0	0.700	0.900	0.900	1.000	1.121	1.100	1.100	1.600	1.200	1.800	0.262	0.032	0.23
Dissolved Metals, Selenium (µg/L)	66	62	94	0.300	0.300	0.300	0.300	0.332	0.300	0.300	0.300	0.300	1.800	0.189	0.023	0.57
Dissolved Metals, Silver (µg/L)	66	65	98	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.500	0.049	0.006	0.46
Dissolved Metals, Strontium (µg/L)	66	0	0	4.600	6.100	6.350	6.925	7.947	7.600	8.000	11.100	9.300	12.300	1.743	0.214	0.22
Dissolved Metals, Thallium (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Tin (µg/L)	39	39	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Titanium (µg/L)	66	65	98	0.100	0.100	0.100	0.100	0.102	0.100	0.100	0.100	0.100	0.200	0.012	0.002	0.12
Dissolved Metals, Uranium (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Vanadium (µg/L)	66	66	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Zinc (µg/L)	65	48	74	0.400	0.400	0.400	0.400	0.471	0.400	0.500	0.600	0.600	1.200	0.167	0.021	0.35
Field Measurements, Dissolved Oxygen (% Saturation)	16	0	0	93.800	93.800	94.950	96.550	99.338	98.200	101.700	104.000	106.500	106.500	3.733	0.933	0.04
Field Measurements, Dissolved Oxygen (mg/L)	16	1	6	10.040	10.040	10.056	10.220	10.715	10.550	10.800	11.648	10.820	12.670	0.762	0.190	0.07
Field Measurements, Specific Conductivity (µS/cm)	16	0	0	17.500	17.500	17.750	18.000	18.719	19.050	19.400	19.450	19.500	19.500	0.751	0.188	0.04
Field Measurements, Turbidity (NTU)	15	15	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	----	----	----
Field Measurements, pH (unitless)	13	0	0	6.030	6.030	6.410	6.540	6.841	6.720	7.140	7.284	7.640	7.640	0.445	0.124	0.07
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	5	0	0	4.000	4.000	4.000	4.000	5.320	4.200	6.600	7.320	7.800	7.800	1.770	0.791	0.33
Major Ions, Dissolved Calcium (mg/L)	76	0	0	0.300	0.300	1.100	1.375	1.784	1.600	2.200	2.500	3.100	7.100	0.848	0.097	0.48
Major Ions, Dissolved Chloride (mg/L)	74	69	93	0.350	0.700	0.693	0.700	0.691	0.700	0.700	0.700	0.700	1.300	0.102	0.012	0.15
Major Ions, Dissolved Fluoride (mg/L)	63	54	86	0.033	0.100	0.042	0.100	0.106	0.100	0.100	0.100	0.100	1.000	0.117	0.015	1.10
Major Ions, Dissolved Magnesium (mg/L)	76	0	0	0.200	0.700	0.750	0.888	1.099	1.000	1.200	1.400	1.600	5.600	0.603	0.069	0.55
Major Ions, Dissolved Potassium (mg/L)	76	1	1	0.100	0.300	0.500	0.500	0.604	0.550	0.700	0.850	0.900	1.000	0.176	0.020	0.29
Major Ions, Dissolved Sodium (mg/L)	76	1	1	0.100	0.400	0.500	0.500	0.575	0.500	0.600	0.850	0.700	1.000	0.155	0.018	0.27
Major Ions, Dissolved Sulphate (mg/L)	79	2	3	1.000	3.000	3.000	3.000	3.396	3.000	3.775	5.000	4.800	7.000	0.921	0.104	0.27
Major Ions, Reactive Silica (mg/L)	41	2	5	0.080	0.080	0.096	0.102	0.146	0.128	0.144	0.175	0.200	0.500	0.086	0.013	0.59
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	77	0	0	2.600	2.600	3.800	3.900	5.338	4.300	5.400	6.400	7.300	56.100	5.958	0.679	1.12
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	76	0	0	1.300	2.500	6.450	7.200	8.984	8.000	10.500	11.700	15.400	26.800	3.699	0.424	0.41
Microbiology, Chlorophyll a (µg/L)	39	6	15	0.094	0.094	0.127	0.219	0.466	0.357	0.658	1.000	1.000	1.000	0.304	0.049	0.65
Nutrients, Dissolved Nitrogen (mg/L)	42	1	2	0.060	0.060	0.093	0.098	0.121	0.115	0.140	0.169	0.180	0.180	0.029	0.004	0.24
Nutrients, Dissolved Organic Carbon (mg/L)	77	1	1	0.500	1.000	1.460	1.700	1.937	1.900	2.200	2.440	2.800	3.000	0.468	0.053	0.24
Nutrients, Dissolved o-Phosphate, as P (mg/L)	16	15	94	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.19
Nutrients, Nitrate, as N (mg/L)	93	76	82	0.001	0.001	0.005	0.005	0.010	0.005	0.010	0.020	0.014	0.059	0.011	0.001	1.09
Nutrients, Nitrate/Nitrite, as N (mg/L)	92	70	76	0.005	0.005	0.005	0.005	0.016	0.005	0.010	0.030	0.014	0.140	0.027	0.003	1.62
Nutrients, Nitrite, as N (mg/L)	91	89	98	0.001	0.001	0.001	0.001	0.006	0.001	0.010	0.010	0.010	0.140	0.019	0.002	2.99
Nutrients, Total Ammonia, as N (mg/L)	77	63	82	0.005	0.005	0.005	0.005	0.008	0.005	0.010	0.013	0.015	0.041	0.006	0.001	0.76
Nutrients, Total Dissolved Phosphorus (mg/L)	39	27	69	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.003	0.010	0.002	0.000	0.75

Table B.3.4-3 Lake of the Enemy (LEL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Nitrogen (mg/L)	47	0	0	0.085	0.085	0.100	0.104	0.131	0.124	0.150	0.174	0.190	0.190	0.029	0.004	0.22
Nutrients, Total Organic Carbon (mg/L)	77	1	1	0.500	1.400	1.600	1.800	2.013	2.000	2.200	2.500	2.700	3.000	0.381	0.043	0.19
Nutrients, Total Phosphorus (mg/L)	84	66	79	0.002	0.002	0.002	0.002	0.004	0.002	0.003	0.010	0.005	0.010	0.003	0.000	0.82
Nutrients, o-Phosphate, as P (mg/L)	60	58	97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.000	0.000	0.37
Physical Parameters, Specific Conductivity (µS/cm)	77	0	0	15.000	15.000	16.820	17.600	19.948	18.500	20.500	27.440	23.900	32.100	4.106	0.468	0.21
Physical Parameters, Total Dissolved Solids (mg/L)	73	39	53	10.000	10.000	10.000	10.000	14.849	10.000	16.000	22.000	24.000	74.000	9.954	1.165	0.67
Physical Parameters, Total Suspended Solids (mg/L)	77	66	86	3.000	3.000	3.000	3.000	3.429	3.000	3.000	4.000	3.000	12.000	1.437	0.164	0.42
Physical Parameters, Turbidity (NTU)	77	0	0	0.090	0.090	0.130	0.160	0.211	0.180	0.240	0.324	0.350	0.870	0.109	0.012	0.52
Physical Parameters, pH (unitless)	77	0	0	6.230	6.580	6.706	6.780	6.842	6.860	6.930	6.990	7.050	7.050	0.145	0.017	0.02
Total Metals, Aluminum (µg/L)	77	2	3	0.600	0.600	1.660	2.300	3.143	2.800	3.500	4.280	5.000	23.700	2.590	0.295	0.82
Total Metals, Antimony (µg/L)	77	69	90	0.100	0.100	0.100	0.100	0.123	0.100	0.100	0.140	0.100	0.500	0.078	0.009	0.63
Total Metals, Arsenic (µg/L)	77	76	99	0.200	0.200	0.200	0.200	0.201	0.200	0.200	0.200	0.200	0.300	0.011	0.001	0.06
Total Metals, Barium (µg/L)	77	0	0	1.400	1.400	1.600	1.700	1.935	1.800	2.000	2.540	2.400	3.900	0.475	0.054	0.25
Total Metals, Beryllium (µg/L)	77	77	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Bismuth (µg/L)	38	38	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Total Metals, Boron (µg/L)	38	0	0	2.000	2.000	2.500	2.825	3.358	3.150	3.700	4.420	4.900	5.300	0.765	0.124	0.23
Total Metals, Cadmium (µg/L)	77	76	99	0.040	0.040	0.040	0.040	0.047	0.050	0.050	0.050	0.050	0.120	0.010	0.001	0.21
Total Metals, Cesium (µg/L)	77	77	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Chromium (µg/L)	77	75	97	0.100	0.100	0.100	0.100	0.121	0.100	0.100	0.100	0.100	1.300	0.144	0.016	1.19
Total Metals, Cobalt (µg/L)	77	77	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.000	0.000	0.00
Total Metals, Copper (µg/L)	77	7	9	0.200	0.200	0.300	0.400	0.549	0.500	0.600	0.700	0.800	3.000	0.327	0.037	0.60
Total Metals, Iron (µg/L)	76	68	89	5.000	5.000	5.000	5.000	8.105	5.000	5.000	6.000	5.000	50.000	11.204	1.285	1.38
Total Metals, Lead (µg/L)	77	70	91	0.100	0.100	0.100	0.100	0.445	0.100	0.100	0.100	0.100	17.800	2.171	0.247	4.87
Total Metals, Lithium (µg/L)	77	1	1	0.200	1.100	1.200	1.300	1.501	1.400	1.500	2.000	1.600	4.700	0.525	0.060	0.35
Total Metals, Manganese (µg/L)	77	0	0	0.400	0.400	0.660	0.800	1.251	1.200	1.600	1.840	2.300	3.100	0.510	0.058	0.41
Total Metals, Mercury (ng/L)	61	30	49	0.000	0.200	0.000	0.200	0.240	0.200	0.300	0.500	0.400	0.700	0.170	0.022	0.71
Total Metals, Mercury (µg/L)	73	70	96	0.000	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.020	0.002	0.000	0.23
Total Metals, Molybdenum (µg/L)	77	75	97	0.100	0.100	0.100	0.100	0.108	0.100	0.100	0.100	0.100	0.500	0.051	0.006	0.47
Total Metals, Nickel (µg/L)	77	0	0	0.200	0.400	0.400	0.500	0.542	0.500	0.600	0.700	0.700	0.800	0.107	0.012	0.20
Total Metals, Rubidium (µg/L)	77	0	0	0.700	0.900	0.900	1.000	1.123	1.000	1.100	1.600	1.200	2.000	0.257	0.029	0.23
Total Metals, Selenium (µg/L)	77	73	95	0.300	0.300	0.300	0.300	0.329	0.300	0.300	0.300	0.300	1.800	0.177	0.020	0.54
Total Metals, Silver (µg/L)	77	77	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Strontium (µg/L)	77	0	0	5.000	6.300	6.500	6.900	7.991	7.500	8.000	10.940	9.300	13.200	1.721	0.196	0.22
Total Metals, Thallium (µg/L)	77	76	99	0.100	0.100	0.100	0.100	0.101	0.100	0.100	0.100	0.100	0.200	0.011	0.001	0.11
Total Metals, Tin (µg/L)	38	38	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Titanium (µg/L)	77	76	99	0.100	0.100	0.100	0.100	0.101	0.100	0.100	0.100	0.100	0.200	0.011	0.001	0.11
Total Metals, Uranium (µg/L)	77	76	99	0.100	0.100	0.100	0.100	0.108	0.100	0.100	0.100	0.100	0.700	0.068	0.008	0.63
Total Metals, Vanadium (µg/L)	77	75	97	0.100	0.100	0.100	0.100	0.105	0.100	0.100	0.100	0.100	0.300	0.032	0.004	0.30
Total Metals, Zinc (µg/L)	76	60	79	0.400	0.400	0.400	0.400	0.611	0.400	0.400	0.850	0.400	7.900	0.921	0.106	1.51

Table B.3.4-4 Lockhart River Above Outram Lakes (LOR01) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	16	0	0	1.900	1.900	2.800	3.575	7.419	4.350	6.525	8.900	9.100	47.000	10.755	2.689	1.45
Dissolved Metals, Antimony (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Arsenic (µg/L)	16	12	75	0.200	0.200	0.200	0.200	0.225	0.200	0.225	0.300	0.200	0.300	0.045	0.011	0.20
Dissolved Metals, Barium (µg/L)	16	0	0	1.300	1.300	1.650	1.700	2.263	2.200	2.800	3.100	3.200	3.200	0.621	0.155	0.27
Dissolved Metals, Beryllium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Bismuth (µg/L)	15	15	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Dissolved Metals, Boron (µg/L)	15	0	0	1.200	1.200	1.600	1.700	2.193	2.300	2.600	2.760	3.200	3.200	0.559	0.144	0.25
Dissolved Metals, Cadmium (µg/L)	16	16	100	0.040	0.040	0.040	0.040	0.041	0.040	0.040	0.045	0.040	0.050	0.003	0.001	0.08
Dissolved Metals, Cesium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Chromium (µg/L)	16	14	88	0.100	0.100	0.100	0.100	0.113	0.100	0.100	0.150	0.100	0.200	0.034	0.009	0.30
Dissolved Metals, Cobalt (µg/L)	16	15	94	0.100	0.100	0.100	0.100	0.131	0.100	0.100	0.100	0.100	0.600	0.125	0.031	0.95
Dissolved Metals, Copper (µg/L)	16	0	0	0.400	0.400	0.500	0.500	0.931	0.650	0.925	1.550	1.200	3.300	0.733	0.183	0.79
Dissolved Metals, Iron (µg/L)	16	9	56	5.000	5.000	5.000	5.000	13.188	5.000	11.250	13.000	14.000	100.000	23.370	5.843	1.77
Dissolved Metals, Lead (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Lithium (µg/L)	16	0	0	1.100	1.100	1.200	1.200	1.444	1.400	1.500	1.900	1.800	2.100	0.290	0.072	0.20
Dissolved Metals, Manganese (µg/L)	16	0	0	0.500	0.500	0.650	0.775	3.450	0.900	2.225	7.650	3.600	25.000	6.361	1.590	1.84
Dissolved Metals, Mercury (µg/L)	14	14	100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	----	----	----
Dissolved Metals, Molybdenum (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Nickel (µg/L)	16	0	0	0.800	0.800	0.850	0.900	1.294	1.150	1.525	1.700	1.800	3.100	0.573	0.143	0.44
Dissolved Metals, Rubidium (µg/L)	16	0	0	1.200	1.200	1.250	1.300	1.481	1.450	1.600	1.800	1.900	1.900	0.229	0.057	0.15
Dissolved Metals, Selenium (µg/L)	16	16	100	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	----	----	----
Dissolved Metals, Silver (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Strontium (µg/L)	16	0	0	6.100	6.100	7.450	8.150	9.188	8.750	10.150	11.500	12.500	12.500	1.727	0.432	0.19
Dissolved Metals, Thallium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Tin (µg/L)	15	15	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Titanium (µg/L)	16	15	94	0.100	0.100	0.100	0.100	0.113	0.100	0.100	0.100	0.100	0.300	0.050	0.013	0.44
Dissolved Metals, Uranium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Vanadium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Zinc (µg/L)	16	6	38	0.400	0.400	0.400	0.400	1.594	0.600	2.025	3.800	3.900	6.300	1.766	0.442	1.11
Major Ions, Dissolved Calcium (mg/L)	16	0	0	1.300	1.300	1.450	1.500	1.725	1.700	1.825	2.100	2.200	2.400	0.291	0.073	0.17
Major Ions, Dissolved Chloride (mg/L)	16	7	44	0.700	0.700	0.700	0.700	3.951	0.755	0.925	1.050	1.100	51.200	12.601	3.150	3.19
Major Ions, Dissolved Fluoride (mg/L)	16	13	81	0.033	0.100	0.076	0.100	0.113	0.100	0.100	0.100	0.100	0.428	0.086	0.022	0.76
Major Ions, Dissolved Magnesium (mg/L)	16	0	0	0.600	0.600	0.600	0.675	0.813	0.800	0.925	1.050	1.100	1.100	0.175	0.044	0.21
Major Ions, Dissolved Potassium (mg/L)	16	0	0	0.300	0.300	0.400	0.475	0.588	0.600	0.625	0.850	0.800	0.900	0.175	0.044	0.30
Major Ions, Dissolved Sodium (mg/L)	16	0	0	0.300	0.600	0.600	0.675	0.738	0.800	0.800	0.900	0.800	1.000	0.167	0.042	0.23
Major Ions, Dissolved Sulphate (mg/L)	16	3	19	1.000	1.000	1.000	1.975	6.852	2.000	3.000	3.000	3.000	77.800	18.933	4.733	2.76
Major Ions, Reactive Silica (mg/L)	16	2	13	0.025	0.025	0.079	0.115	0.199	0.178	0.211	0.393	0.286	0.529	0.139	0.035	0.70
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	16	0	0	2.600	4.100	4.350	4.775	5.400	5.200	5.925	7.100	7.100	7.800	1.268	0.317	0.23
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	16	0	0	6.100	6.100	6.250	6.575	7.656	7.400	8.750	9.000	10.300	10.300	1.276	0.319	0.17
Microbiology, Chlorophyll a (µg/L)	16	13	81	0.448	0.448	0.876	1.000	1.638	1.000	2.000	3.500	3.000	5.000	1.287	0.322	0.79
Nutrients, Dissolved Nitrogen (mg/L)	16	0	0	0.135	0.135	0.142	0.158	0.199	0.199	0.223	0.260	0.310	0.310	0.050	0.013	0.25
Nutrients, Dissolved Organic Carbon (mg/L)	16	0	0	3.000	3.000	3.200	3.475	3.993	3.650	4.200	4.890	4.980	6.800	0.938	0.235	0.24
Nutrients, Nitrate, as N (mg/L)	16	8	50	0.005	0.005	0.005	0.008	0.018	0.010	0.024	0.033	0.037	0.070	0.017	0.004	0.93
Nutrients, Nitrate/Nitrite, as N (mg/L)	16	8	50	0.005	0.005	0.005	0.008	0.018	0.010	0.024	0.034	0.038	0.070	0.017	0.004	0.92
Nutrients, Nitrite, as N (mg/L)	16	15	94	0.001	0.001	0.001	0.001	0.005	0.001	0.010	0.010	0.010	0.010	0.005	0.001	0.92
Nutrients, Total Ammonia, as N (mg/L)	16	10	63	0.005	0.005	0.005	0.005	0.007	0.005	0.008	0.012	0.012	0.013	0.003	0.001	0.42
Nutrients, Total Dissolved Phosphorus (mg/L)	15	10	67	0.001	0.002	0.001	0.002	0.002	0.002	0.002	0.003	0.002	0.005	0.001	0.000	0.43
Nutrients, Total Nitrogen (mg/L)	16	0	0	0.154	0.154	0.165	0.173	0.222	0.215	0.243	0.295	0.300	0.370	0.059	0.015	0.27
Nutrients, Total Organic Carbon (mg/L)	16	0	0	3.200	3.200	3.500	3.600	4.225	4.050	4.325	5.050	5.300	7.300	0.981	0.245	0.23
Nutrients, Total Phosphorus (mg/L)	16	8	50	0.002	0.002	0.002	0.002	0.003	0.003	0.004	0.006	0.006	0.008	0.002	0.000	0.54
Nutrients, o-Phosphate, as P (mg/L)	16	15	94	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.003	0.003	0.001	0.000	0.38
Physical Parameters, Specific Conductivity (µS/cm)	16	0	0	12.900	12.900	17.000	17.900	20.181	20.050	22.100	24.800	26.500	26.500	3.529	0.882	0.17
Physical Parameters, Total Dissolved Solids (mg/L)	16	8	50	10.000	10.000	10.000	10.000	17.063	11.500	24.500	30.000	33.000	33.000	8.797	2.199	0.52
Physical Parameters, Total Suspended Solids (mg/L)	16	12	75	3.000	3.000	3.000	3.000	3.750	3.000	3.250	4.000	3.000	12.000	2.236	0.559	0.60
Physical Parameters, Turbidity (NTU)	16	0	0	0.110	0.110	0.185	0.235	0.364	0.335	0.475	0.610	0.690	0.690	0.172	0.043	0.47

Table B.3.4-4 Lockhart River Above Outram Lakes (LOR01) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Physical Parameters, pH (unitless)	16	0	0	6.120	6.360	6.470	6.690	6.784	6.805	6.980	7.055	7.190	7.190	0.277	0.069	0.04
Total Metals, Aluminum (µg/L)	16	0	0	3.500	3.500	5.900	8.000	16.731	11.300	16.075	39.100	16.300	59.600	15.754	3.938	0.94
Total Metals, Antimony (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Arsenic (µg/L)	16	12	75	0.200	0.200	0.200	0.200	0.225	0.200	0.225	0.300	0.200	0.300	0.045	0.011	0.20
Total Metals, Barium (µg/L)	16	0	0	1.600	1.600	1.700	1.875	2.500	2.350	2.825	3.750	4.100	4.100	0.797	0.199	0.32
Total Metals, Beryllium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Bismuth (µg/L)	15	15	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Total Metals, Boron (µg/L)	15	0	0	1.100	1.100	1.480	1.600	2.133	2.200	2.600	2.820	3.100	3.100	0.602	0.155	0.28
Total Metals, Cadmium (µg/L)	16	14	88	0.040	0.040	0.040	0.040	0.043	0.040	0.043	0.050	0.040	0.060	0.006	0.002	0.14
Total Metals, Cesium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Chromium (µg/L)	16	14	88	0.100	0.100	0.100	0.100	0.150	0.100	0.100	0.200	0.100	0.700	0.155	0.039	1.03
Total Metals, Cobalt (µg/L)	16	15	94	0.100	0.100	0.100	0.100	0.131	0.100	0.100	0.100	0.100	0.600	0.125	0.031	0.95
Total Metals, Copper (µg/L)	16	0	0	0.400	0.400	0.600	0.600	1.250	0.700	1.050	1.750	1.300	6.900	1.566	0.391	1.25
Total Metals, Iron (µg/L)	16	0	0	7.000	7.000	10.000	12.750	34.875	21.500	30.750	50.000	42.000	216.000	50.174	12.544	1.44
Total Metals, Lead (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Lithium (µg/L)	16	0	0	1.100	1.100	1.250	1.300	1.481	1.450	1.600	1.800	2.000	2.000	0.246	0.061	0.17
Total Metals, Manganese (µg/L)	16	0	0	1.200	1.200	1.650	2.250	5.669	3.600	6.250	10.150	11.500	26.200	6.188	1.547	1.09
Total Metals, Mercury (ng/L)	14	3	21	0.200	0.200	0.200	0.400	2.793	0.500	0.775	2.010	1.100	30.700	8.052	2.152	2.88
Total Metals, Mercury (µg/L)	14	14	100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	----	----	----
Total Metals, Molybdenum (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Nickel (µg/L)	16	0	0	0.800	0.800	0.900	1.000	1.350	1.100	1.525	1.750	1.800	3.200	0.584	0.146	0.43
Total Metals, Rubidium (µg/L)	16	0	0	1.200	1.200	1.300	1.300	1.513	1.450	1.625	1.850	2.000	2.000	0.242	0.060	0.16
Total Metals, Selenium (µg/L)	16	16	100	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	----	----	----
Total Metals, Silver (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Strontium (µg/L)	16	0	0	6.200	6.200	8.150	8.475	9.375	9.100	10.325	11.500	11.900	11.900	1.530	0.382	0.16
Total Metals, Thallium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Tin (µg/L)	15	15	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Titanium (µg/L)	16	7	44	0.100	0.100	0.100	0.100	0.363	0.250	0.700	0.850	0.900	0.900	0.318	0.080	0.88
Total Metals, Uranium (µg/L)	16	16	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Vanadium (µg/L)	16	15	94	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.200	0.025	0.006	0.24
Total Metals, Zinc (µg/L)	16	5	31	0.400	0.400	0.400	0.400	2.825	1.000	4.050	8.450	8.700	11.400	3.558	0.889	1.26

Table B.3.4-5 Lockhart River at Mouth (LOR03) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Major Ions, Calcium (mg/L)	57	1	2	1.000	1.000	1.250	1.400	1.828	1.700	2.100	2.640	2.700	3.700	0.589	0.078	0.32
Major Ions, Chloride (mg/L)	57	24	42	0.200	0.200	0.300	0.400	0.519	0.500	0.700	0.700	1.000	1.000	0.176	0.023	0.34
Major Ions, Hardness, as CaCO3 (mg/L)	54	0	0	4.300	4.300	5.895	6.625	8.262	7.600	9.560	11.800	13.400	14.700	2.413	0.328	0.29
Major Ions, Magnesium (mg/L)	57	0	0	0.600	0.600	0.666	0.700	0.883	0.800	1.000	1.200	1.400	1.500	0.223	0.030	0.25
Major Ions, Potassium (mg/L)	48	0	0	0.200	0.380	0.387	0.400	0.426	0.405	0.460	0.536	0.550	0.600	0.083	0.012	0.20
Major Ions, Sodium (mg/L)	48	1	2	0.100	0.320	0.400	0.415	0.515	0.475	0.505	0.600	0.630	1.800	0.234	0.034	0.46
Major Ions, Sulphate (mg/L)	56	16	29	0.900	0.900	1.000	1.000	2.570	2.100	3.000	4.000	5.000	15.000	2.190	0.293	0.85
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	57	0	0	3.100	3.100	5.000	5.400	8.374	6.500	7.400	8.940	9.500	79.000	10.663	1.412	1.27
Nutrients, Nitrate/Nitrite, as N (mg/L)	57	21	37	0.008	0.008	0.010	0.013	0.039	0.020	0.040	0.056	0.080	0.280	0.055	0.007	1.43
Nutrients, Total Ammonia, as N (mg/L)	57	35	61	0.002	0.002	0.005	0.005	0.023	0.007	0.019	0.030	0.030	0.580	0.076	0.010	3.36
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	10	1	10	0.004	0.004	0.036	0.080	0.173	0.120	0.230	0.285	0.250	0.600	0.171	0.054	0.99
Nutrients, Total Phosphorus (mg/L)	57	35	61	0.000	0.000	0.004	0.005	0.018	0.010	0.026	0.050	0.050	0.068	0.019	0.003	1.08
Physical Parameters, Specific Conductivity (µS/cm)	57	0	0	15.300	15.300	16.260	17.400	18.949	19.000	20.000	21.120	23.200	26.000	2.043	0.271	0.11
Physical Parameters, Total Dissolved Solids (mg/L)	57	14	25	5.000	5.000	10.000	10.000	19.316	16.000	22.000	30.000	40.000	76.000	13.365	1.770	0.69
Physical Parameters, Total Suspended Solids (mg/L)	41	31	76	0.700	0.700	2.000	3.000	4.334	3.000	5.000	5.000	5.000	33.000	4.892	0.764	1.13
Physical Parameters, Turbidity (NTU)	49	5	10	0.000	0.000	0.200	0.230	0.592	0.400	0.700	1.260	1.400	3.300	0.592	0.085	1.00
Physical Parameters, pH (unitless)	57	0	0	6.200	6.500	6.560	6.800	6.917	6.920	7.030	7.194	7.290	7.820	0.282	0.037	0.04
Total Metals, Arsenic (µg/L)	30	29	97	0.050	0.050	0.300	0.300	0.865	0.750	1.000	1.100	2.000	5.000	0.917	0.167	1.06
Total Metals, Cadmium (µg/L)	57	49	86	0.050	0.050	0.050	0.100	0.458	0.100	0.300	0.500	0.500	10.000	1.484	0.197	3.24
Total Metals, Chromium (µg/L)	54	35	65	0.100	0.100	0.100	0.300	2.125	0.600	1.000	3.000	2.000	62.000	8.363	1.138	3.94
Total Metals, Cobalt (µg/L)	36	30	83	0.030	0.030	0.100	0.100	0.345	0.100	0.700	1.000	1.000	1.000	0.394	0.066	1.14
Total Metals, Copper (µg/L)	57	18	32	0.200	0.200	0.400	0.500	1.915	1.000	2.000	2.040	3.000	40.000	5.255	0.696	2.74
Total Metals, Iron (µg/L)	56	20	36	3.000	3.000	5.000	8.825	26.100	20.000	40.250	50.000	67.000	125.000	22.278	2.977	0.85
Total Metals, Lead (µg/L)	56	39	70	0.100	0.100	0.100	0.100	0.646	0.600	1.000	1.000	2.000	3.600	0.591	0.079	0.91
Total Metals, Manganese (µg/L)	21	4	19	0.400	0.400	0.600	0.700	0.976	0.900	1.100	1.800	1.100	2.000	0.437	0.095	0.45
Total Metals, Mercury (µg/L)	17	6	35	0.010	0.010	0.016	0.030	0.109	0.050	0.110	0.146	0.170	0.912	0.212	0.051	1.94
Total Metals, Nickel (µg/L)	56	21	38	0.300	0.300	0.400	0.500	1.259	1.000	1.000	1.000	1.300	10.000	2.011	0.269	1.60
Total Metals, Zinc (µg/L)	57	34	60	0.400	0.400	0.400	0.600	6.407	4.000	10.000	15.000	19.000	30.000	6.535	0.866	1.02

Table B.3.4-6 Lockhart River at Outlet of Artillery Lake (LOR02) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	70	1	1	0.500	1.800	2.490	2.725	3.469	3.400	4.200	4.510	6.000	6.000	0.963	0.115	0.28
Dissolved Metals, Antimony (µg/L)	70	0	0	0.004	0.004	0.004	0.005	0.042	0.029	0.065	0.090	0.152	0.230	0.043	0.005	1.01
Dissolved Metals, Arsenic (µg/L)	144	47	33	0.000	0.100	0.090	0.100	0.149	0.100	0.100	0.370	0.100	1.500	0.165	0.014	1.10
Dissolved Metals, Barium (µg/L)	70	1	1	0.050	2.300	2.430	2.535	2.665	2.650	2.798	2.931	3.190	4.700	0.441	0.053	0.17
Dissolved Metals, Beryllium (µg/L)	70	24	34	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.000	0.000	0.33
Dissolved Metals, Bismuth (µg/L)	70	65	93	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.12
Dissolved Metals, Boron (µg/L)	102	28	27	0.500	0.500	1.300	1.500	7.698	1.900	20.000	20.000	30.000	50.000	9.572	0.948	1.24
Dissolved Metals, Cadmium (µg/L)	70	8	11	0.001	0.001	0.001	0.001	0.010	0.003	0.008	0.032	0.017	0.081	0.017	0.002	1.65
Dissolved Metals, Cerium (µg/L)	70	1	1	0.001	0.012	0.014	0.016	0.018	0.017	0.022	0.024	0.030	0.030	0.004	0.001	0.24
Dissolved Metals, Cesium (µg/L)	71	2	3	0.001	0.006	0.005	0.006	0.012	0.006	0.006	0.007	0.006	0.400	0.047	0.006	4.07
Dissolved Metals, Chromium (µg/L)	70	0	0	0.020	0.020	0.030	0.030	0.052	0.050	0.068	0.080	0.110	0.190	0.026	0.003	0.49
Dissolved Metals, Cobalt (µg/L)	70	1	1	0.002	0.002	0.004	0.005	0.007	0.007	0.007	0.011	0.010	0.015	0.003	0.000	0.41
Dissolved Metals, Copper (µg/L)	75	1	1	0.050	0.050	0.530	0.570	0.907	0.630	0.970	1.882	1.450	3.000	0.593	0.068	0.65
Dissolved Metals, Gallium (µg/L)	70	37	53	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.12
Dissolved Metals, Iron (µg/L)	80	11	14	0.500	0.500	0.800	1.275	5.336	2.350	3.425	5.710	5.500	80.000	12.232	1.368	2.29
Dissolved Metals, Lanthanum (µg/L)	70	1	1	0.001	0.015	0.016	0.017	0.019	0.019	0.022	0.024	0.026	0.026	0.004	0.000	0.19
Dissolved Metals, Lead (µg/L)	75	36	48	0.005	0.005	0.005	0.005	0.083	0.007	0.029	0.067	0.062	1.000	0.248	0.029	2.99
Dissolved Metals, Lithium (µg/L)	70	1	1	0.010	0.870	0.900	0.970	0.999	1.005	1.080	1.100	1.160	1.160	0.145	0.017	0.15
Dissolved Metals, Manganese (µg/L)	76	7	9	0.050	0.050	0.190	0.230	1.164	0.395	0.635	0.790	0.800	10.000	2.611	0.300	2.24
Dissolved Metals, Molybdenum (µg/L)	70	1	1	0.005	0.011	0.012	0.015	0.017	0.016	0.018	0.024	0.022	0.084	0.009	0.001	0.53
Dissolved Metals, Nickel (µg/L)	70	0	0	0.020	0.390	0.440	0.460	0.531	0.490	0.530	0.601	0.630	1.510	0.189	0.023	0.36
Dissolved Metals, Niobium (µg/L)	70	68	97	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.000	0.000	0.35
Dissolved Metals, Platinum (µg/L)	70	68	97	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Dissolved Metals, Rubidium (µg/L)	70	1	1	0.001	0.978	1.030	1.050	1.077	1.080	1.130	1.170	1.230	1.230	0.143	0.017	0.13
Dissolved Metals, Selenium (µg/L)	144	74	51	0.000	0.000	0.010	0.010	0.105	0.050	0.100	0.270	0.200	1.000	0.157	0.013	1.49
Dissolved Metals, Silver (µg/L)	70	61	87	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.16
Dissolved Metals, Strontium (µg/L)	70	1	1	0.050	5.890	6.200	6.305	6.575	6.625	6.945	7.309	7.740	7.740	0.901	0.108	0.14
Dissolved Metals, Thallium (µg/L)	70	28	40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.000	0.000	0.37
Dissolved Metals, Tin (µg/L)	70	44	63	0.005	0.005	0.005	0.005	0.009	0.005	0.008	0.019	0.011	0.068	0.009	0.001	1.02
Dissolved Metals, Titanium (µg/L)	26	25	96	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	----	----	----
Dissolved Metals, Tungsten (µg/L)	70	56	80	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.015	0.002	0.000	1.51
Dissolved Metals, Uranium (µg/L)	70	1	1	0.001	0.011	0.012	0.013	0.016	0.015	0.017	0.020	0.021	0.042	0.006	0.001	0.37
Dissolved Metals, Vanadium (µg/L)	70	3	4	0.005	0.005	0.010	0.018	0.025	0.020	0.030	0.039	0.045	0.078	0.014	0.002	0.56
Dissolved Metals, Zinc (µg/L)	74	1	1	0.200	0.200	0.300	0.400	1.376	0.610	1.190	2.427	2.100	22.000	2.726	0.317	1.98
Field Measurements, Specific Conductivity (µS/cm)	100	0	0	2.200	2.200	9.000	10.000	17.816	14.000	17.250	25.000	28.000	273.000	27.048	2.705	1.52
Field Measurements, pH (unitless)	92	0	0	4.200	6.050	6.600	6.890	7.242	7.295	7.505	7.958	8.360	9.700	0.714	0.074	0.10
Major Ions, Bicarbonate (calc'd) (mg/L)	60	0	0	0.100	4.425	4.890	5.400	5.841	5.815	6.525	7.323	8.000	8.655	1.295	0.167	0.22
Major Ions, Carbonate (calc'd) (mg/L)	59	59	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	----	----	----
Major Ions, Dissolved Calcium (mg/L)	191	2	1	0.050	0.900	1.160	1.250	1.810	1.400	1.530	1.760	1.900	59.000	4.223	0.306	2.33
Major Ions, Dissolved Chloride (mg/L)	194	4	2	0.050	0.300	0.343	0.400	0.858	0.430	0.500	0.600	0.620	76.100	5.437	0.390	6.33
Major Ions, Dissolved Fluoride (mg/L)	189	27	14	0.010	0.010	0.020	0.020	0.031	0.030	0.030	0.050	0.040	0.120	0.015	0.001	0.49
Major Ions, Dissolved Magnesium (mg/L)	173	0	0	0.010	0.400	0.580	0.610	0.822	0.690	0.770	0.850	1.000	23.000	1.701	0.129	2.07
Major Ions, Dissolved Potassium (mg/L)	193	1	1	0.040	0.300	0.390	0.400	0.492	0.440	0.480	0.510	0.580	9.200	0.636	0.046	1.29
Major Ions, Dissolved Sodium (mg/L)	193	1	1	0.040	0.400	0.440	0.500	0.782	0.520	0.580	0.610	0.700	47.400	3.379	0.243	4.32
Major Ions, Dissolved Sulphate (mg/L)	193	11	6	0.010	0.800	1.000	1.300	1.639	1.560	1.700	1.978	2.200	14.800	1.225	0.088	0.75
Major Ions, Hydroxide (calc'd) (mg/L)	54	54	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	----	----	----
Major Ions, Non-Carbonate Hardness (calc'd) (mg/L)	141	33	23	0.000	0.000	0.000	0.099	0.978	1.000	1.354	1.641	2.900	12.200	1.231	0.104	1.26
Major Ions, Reactive Silica (mg/L)	59	8	14	0.060	0.060	0.080	0.100	0.372	0.100	0.160	0.300	0.230	13.600	1.755	0.229	4.72
Major Ions, Silica (mg/L)	135	2	1	0.020	0.020	0.070	0.090	0.142	0.120	0.150	0.180	0.240	2.620	0.224	0.019	1.57
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	191	5	3	0.100	2.500	4.000	4.600	5.453	5.400	6.150	6.900	8.300	13.200	1.491	0.108	0.27
Major Ions, Total Calcium (mg/L)	17	0	0	1.140	1.140	1.158	1.200	1.274	1.270	1.330	1.368	1.380	1.570	0.107	0.026	0.08
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	175	0	0	0.166	4.390	5.207	5.624	6.573	6.254	6.932	7.762	8.811	28.300	2.244	0.170	0.34
Major Ions, Total Magnesium (mg/L)	17	0	0	0.540	0.540	0.540	0.570	0.599	0.580	0.630	0.640	0.690	0.690	0.043	0.011	0.07
Major Ions, Total Potassium (mg/L)	17	0	0	0.340	0.340	0.350	0.350	0.385	0.370	0.390	0.418	0.430	0.570	0.053	0.013	0.14
Major Ions, Total Sodium (mg/L)	17	0	0	0.120	0.140	0.132	0.280	0.320	0.350	0.380	0.444	0.510	0.510	0.115	0.028	0.36

Table B.3.4-6 Lockhart River at Outlet of Artillery Lake (LOR02) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Dissolved Ammonia, as N (mg/L)	105	54	51	0.003	0.003	0.005	0.005	0.015	0.007	0.012	0.026	0.022	0.100	0.022	0.002	1.46
Nutrients, Dissolved Inorganic Carbon (mg/L)	9	1	11	0.500	0.500	0.900	1.000	1.167	1.000	1.600	1.700	1.700	1.700	0.409	0.136	0.35
Nutrients, Dissolved Inorganic Phosphate (mg/L)	5	4	80	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.005	0.001	0.007	0.003	0.001	1.22
Nutrients, Dissolved Nitrate/Nitrite, as N (mg/L)	4	0	0	0.014	0.014	0.014	0.014	0.022	0.019	0.027	0.033	0.037	0.037	0.011	0.005	0.49
Nutrients, Dissolved Nitrogen (mg/L)	64	1	2	0.060	0.110	0.130	0.150	0.166	0.160	0.180	0.210	0.220	0.280	0.037	0.005	0.22
Nutrients, Dissolved Organic Carbon (mg/L)	173	0	0	0.800	1.300	1.818	2.050	2.384	2.400	2.700	2.900	3.600	5.100	0.511	0.039	0.21
Nutrients, Dissolved o-Phosphate, as P (mg/L)	10	9	90	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.000	0.000	0.15
Nutrients, Free Carbon Dioxide (calc'd) (mg/L)	146	0	0	0.010	0.010	0.595	0.947	3.328	1.437	1.963	2.915	3.041	224.824	18.621	1.541	5.60
Nutrients, Nitrate, as N (mg/L)	68	6	9	0.010	0.010	0.010	0.020	0.033	0.030	0.050	0.050	0.060	0.060	0.016	0.002	0.48
Nutrients, Nitrate/Nitrite, as N (mg/L)	173	31	18	0.001	0.001	0.010	0.010	0.044	0.020	0.030	0.060	0.060	2.000	0.169	0.013	3.83
Nutrients, Nitrite, as N (mg/L)	68	58	85	0.001	0.010	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.100	0.012	0.001	1.01
Nutrients, Particulate Nitrogen (mg/L)	175	14	8	0.002	0.002	0.010	0.012	0.034	0.022	0.040	0.064	0.082	0.444	0.046	0.003	1.34
Nutrients, Particulate Organic Carbon (mg/L)	175	1	1	0.005	0.005	0.080	0.123	0.223	0.171	0.242	0.311	0.400	1.730	0.249	0.019	1.11
Nutrients, Particulate Phosphorus (calc'd) (mg/L)	75	62	83	0.000	0.002	0.003	0.004	0.005	0.004	0.006	0.006	0.008	0.014	0.002	0.000	0.52
Nutrients, Total Dissolved Nitrogen (mg/L)	116	2	2	0.008	0.025	0.062	0.100	1.893	0.120	0.151	0.207	0.227	204.000	18.929	1.757	10.00
Nutrients, Total Dissolved Phosphorus (mg/L)	167	109	65	0.002	0.002	0.002	0.002	0.005	0.003	0.009	0.010	0.016	0.019	0.004	0.000	0.73
Nutrients, Total Inorganic Carbon (mg/L)	8	1	13	0.500	0.500	0.850	1.000	1.563	2.000	2.000	2.000	2.000	2.000	0.623	0.220	0.40
Nutrients, Total Inorganic Phosphate (mg/L)	4	4	100	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	----	----	----
Nutrients, Total Kjeldahl Nitrogen, as N (mg/L)	9	4	44	0.100	0.100	0.100	0.100	0.526	0.450	0.900	1.136	1.280	1.280	0.460	0.153	0.88
Nutrients, Total Nitrogen (calc'd) (mg/L)	73	0	0	0.042	0.042	0.090	0.100	0.144	0.130	0.170	0.220	0.253	0.488	0.067	0.008	0.47
Nutrients, Total Nitrogen (mg/L)	66	0	0	0.100	0.100	0.140	0.150	0.180	0.165	0.190	0.220	0.250	0.690	0.071	0.009	0.40
Nutrients, Total Organic Carbon (calc'd) (mg/L)	66	0	0	1.270	1.430	1.805	2.033	2.256	2.190	2.501	2.675	3.000	3.621	0.433	0.053	0.19
Nutrients, Total Organic Carbon (mg/L)	8	0	0	1.000	1.000	1.000	2.500	3.063	3.250	4.000	4.300	5.000	5.000	1.425	0.504	0.47
Nutrients, Total Phosphorus (mg/L)	166	77	46	0.002	0.002	0.002	0.003	0.007	0.005	0.010	0.010	0.020	0.069	0.008	0.001	1.10
Physical Parameters, Specific Conductivity (µS/cm)	196	0	0	11.000	13.500	15.200	15.875	17.556	17.300	18.700	20.200	22.500	34.700	2.532	0.181	0.14
Physical Parameters, Total Dissolved Solids (mg/L)	145	0	0	5.000	6.767	7.000	8.000	8.693	8.620	9.230	9.996	11.000	24.200	1.826	0.152	0.21
Physical Parameters, Total Suspended Solids (mg/L)	179	136	76	1.000	1.000	1.000	1.000	3.030	3.000	3.000	4.000	6.000	30.000	2.794	0.209	0.92
Physical Parameters, Turbidity (NTU)	155	3	2	0.050	0.050	0.120	0.175	0.396	0.240	0.450	0.856	0.790	2.500	0.424	0.034	1.07
Physical Parameters, pH (unitless)	198	0	0	4.820	6.500	6.600	6.793	6.884	6.900	7.000	7.193	7.300	7.700	0.306	0.022	0.04
Total Metals, Aluminum (µg/L)	106	0	0	2.100	2.100	3.000	3.600	5.216	4.500	5.250	6.900	6.900	23.000	3.504	0.340	0.67
Total Metals, Antimony (µg/L)	90	8	9	0.001	0.001	0.003	0.004	0.009	0.005	0.009	0.017	0.016	0.130	0.015	0.002	1.70
Total Metals, Arsenic (µg/L)	86	1	1	0.070	0.080	0.090	0.090	0.099	0.100	0.100	0.110	0.110	0.200	0.015	0.002	0.15
Total Metals, Barium (µg/L)	154	45	29	2.200	2.200	2.453	2.580	27.171	2.830	80.000	80.000	120.000	120.000	37.737	3.041	1.39
Total Metals, Beryllium (µg/L)	106	50	47	0.001	0.001	0.001	0.001	0.027	0.001	0.002	0.050	0.003	2.000	0.194	0.019	7.09
Total Metals, Bismuth (µg/L)	90	84	93	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.010	0.002	0.000	1.34
Total Metals, Boron (µg/L)	89	9	10	0.100	1.200	0.180	1.400	1.482	1.600	1.800	2.000	2.300	3.300	0.589	0.062	0.40
Total Metals, Cadmium (µg/L)	155	55	35	0.001	0.001	0.001	0.002	0.190	0.022	0.100	1.000	0.200	1.100	0.342	0.027	1.80
Total Metals, Cerium (µg/L)	84	0	0	0.012	0.012	0.017	0.019	0.027	0.024	0.027	0.030	0.036	0.307	0.031	0.003	1.16
Total Metals, Cesium (µg/L)	89	0	0	0.005	0.005	0.005	0.006	0.006	0.006	0.007	0.007	0.008	0.009	0.001	0.000	0.14
Total Metals, Chromium (µg/L)	106	11	10	0.020	0.020	0.027	0.030	0.076	0.034	0.050	0.200	0.080	1.200	0.131	0.013	1.72
Total Metals, Cobalt (µg/L)	155	56	36	0.002	0.002	0.005	0.007	0.328	0.010	0.500	1.000	1.000	4.000	0.601	0.048	1.83
Total Metals, Copper (µg/L)	155	17	11	0.110	0.110	0.500	0.540	0.884	0.630	0.905	1.372	1.430	8.000	0.868	0.070	0.98
Total Metals, Gallium (µg/L)	89	39	44	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.003	0.000	0.000	0.34
Total Metals, Iron (µg/L)	106	0	0	0.600	0.600	1.550	2.825	6.161	4.450	6.575	10.100	11.900	96.000	9.550	0.928	1.55
Total Metals, Lanthanum (µg/L)	89	0	0	0.011	0.015	0.020	0.021	0.026	0.024	0.027	0.028	0.035	0.188	0.018	0.002	0.69
Total Metals, Lead (µg/L)	155	98	63	0.005	0.005	0.005	0.005	0.477	0.033	0.700	1.000	1.600	4.000	0.912	0.073	1.91
Total Metals, Lithium (µg/L)	106	0	0	0.300	0.800	0.800	0.915	0.983	1.000	1.055	1.110	1.210	1.310	0.130	0.013	0.13
Total Metals, Manganese (µg/L)	106	0	0	0.180	0.180	0.325	0.403	0.799	0.700	1.000	1.215	1.700	8.060	0.793	0.077	0.99
Total Metals, Molybdenum (µg/L)	106	18	17	0.005	0.005	0.011	0.014	0.039	0.017	0.021	0.100	0.028	0.600	0.077	0.007	1.97
Total Metals, Nickel (µg/L)	155	33	21	0.200	0.400	0.450	0.480	1.075	0.500	0.600	1.294	0.700	31.900	3.124	0.251	2.91
Total Metals, Niobium (µg/L)	89	86	97	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.004	0.001	0.000	0.40
Total Metals, Rubidium (µg/L)	89	0	0	0.960	0.960	1.050	1.070	1.111	1.100	1.150	1.204	1.240	1.270	0.063	0.007	0.06
Total Metals, Selenium (µg/L)	86	32	37	0.010	0.010	0.010	0.010	0.144	0.020	0.050	0.050	0.100	10.000	1.075	0.116	7.47
Total Metals, Silver (µg/L)	102	81	79	0.001	0.001	0.001	0.001	0.034	0.001	0.001	0.100	0.001	0.800	0.132	0.013	3.90
Total Metals, Strontium (µg/L)	106	0	0	0.008	5.300	5.685	6.070	6.386	6.415	6.830	7.150	7.580	8.310	0.854	0.083	0.13

Table B.3.4-6 Lockhart River at Outlet of Artillery Lake (LOR02) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Total Metals, Thallium (µg/L)	90	39	43	0.001	0.001	0.001	0.001	0.011	0.001	0.001	0.001	0.001	0.900	0.095	0.010	8.54
Total Metals, Tin (µg/L)	89	65	73	0.005	0.005	0.005	0.005	0.023	0.005	0.006	0.016	0.006	1.260	0.133	0.014	5.87
Total Metals, Titanium (µg/L)	27	21	78	0.003	0.050	0.050	0.050	0.053	0.050	0.050	0.064	0.050	0.110	0.016	0.003	0.31
Total Metals, Tungsten (µg/L)	89	74	83	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.011	0.001	0.000	0.91
Total Metals, Uranium (µg/L)	90	1	1	0.000	0.012	0.013	0.015	0.017	0.016	0.018	0.022	0.022	0.042	0.006	0.001	0.37
Total Metals, Vanadium (µg/L)	155	67	43	0.000	0.000	0.016	0.020	0.202	0.033	0.500	0.500	1.200	1.200	0.285	0.023	1.41
Total Metals, Zinc (µg/L)	154	11	7	0.200	0.200	0.286	0.333	1.282	0.555	1.188	2.820	2.400	19.000	2.220	0.179	1.73

Table B.3.4-7 MacKay Lake (MCL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	62	0	0	1.900	1.900	2.310	2.950	4.531	4.350	5.550	7.450	9.300	9.900	1.988	0.253	0.44
Dissolved Metals, Antimony (µg/L)	62	59	95	0.100	0.100	0.100	0.100	0.105	0.100	0.100	0.100	0.100	0.200	0.022	0.003	0.21
Dissolved Metals, Arsenic (µg/L)	62	56	90	0.200	0.200	0.200	0.200	0.211	0.200	0.200	0.200	0.200	0.400	0.037	0.005	0.17
Dissolved Metals, Barium (µg/L)	62	0	0	1.600	1.600	1.700	1.800	2.210	2.000	2.400	2.990	3.300	4.000	0.547	0.069	0.25
Dissolved Metals, Beryllium (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Bismuth (µg/L)	37	36	97	0.200	0.200	0.200	0.200	0.203	0.200	0.200	0.200	0.200	0.300	0.016	0.003	0.08
Dissolved Metals, Boron (µg/L)	37	2	5	0.900	0.900	1.300	1.600	2.068	1.900	2.500	3.040	3.300	3.300	0.662	0.109	0.32
Dissolved Metals, Cadmium (µg/L)	62	62	100	0.040	0.040	0.040	0.040	0.045	0.040	0.050	0.050	0.050	0.050	0.005	0.001	0.11
Dissolved Metals, Cesium (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Chromium (µg/L)	62	60	97	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.400	0.040	0.005	0.38
Dissolved Metals, Cobalt (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Copper (µg/L)	62	6	10	0.200	0.200	0.300	0.400	1.132	0.500	0.600	0.800	0.800	37.300	4.682	0.595	4.13
Dissolved Metals, Iron (µg/L)	62	61	98	5.000	5.000	5.000	5.000	9.452	5.000	5.000	10.400	5.000	50.000	13.403	1.702	1.42
Dissolved Metals, Lead (µg/L)	62	59	95	0.100	0.100	0.100	0.100	0.152	0.100	0.100	0.100	0.100	1.800	0.270	0.034	1.78
Dissolved Metals, Lithium (µg/L)	62	1	2	0.200	0.900	1.000	1.200	1.356	1.200	1.525	2.000	2.000	4.100	0.512	0.065	0.38
Dissolved Metals, Manganese (µg/L)	62	5	8	0.100	0.100	0.200	0.300	0.855	0.500	0.775	1.700	1.400	6.900	1.323	0.168	1.55
Dissolved Metals, Mercury (ng/L)	34	19	56	0.200	0.200	0.200	0.200	0.276	0.200	0.300	0.470	0.400	0.500	0.105	0.018	0.38
Dissolved Metals, Mercury (µg/L)	57	56	98	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.020	0.002	0.000	0.18
Dissolved Metals, Molybdenum (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Nickel (µg/L)	62	0	0	0.400	0.400	0.500	0.625	0.848	0.800	1.000	1.300	1.500	1.600	0.296	0.038	0.35
Dissolved Metals, Rubidium (µg/L)	62	0	0	0.800	0.900	1.100	1.200	1.353	1.200	1.450	1.800	1.800	2.100	0.299	0.038	0.22
Dissolved Metals, Selenium (µg/L)	62	61	98	0.300	0.300	0.300	0.300	0.324	0.300	0.300	0.300	0.300	1.800	0.191	0.024	0.59
Dissolved Metals, Silver (µg/L)	62	61	98	0.100	0.100	0.100	0.100	0.115	0.100	0.100	0.100	0.100	1.000	0.114	0.015	1.00
Dissolved Metals, Strontium (µg/L)	62	0	0	4.700	4.700	6.510	7.200	9.127	8.700	10.250	12.590	14.800	14.800	2.421	0.307	0.27
Dissolved Metals, Thallium (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Tin (µg/L)	37	37	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Titanium (µg/L)	62	61	98	0.100	0.100	0.100	0.100	0.102	0.100	0.100	0.100	0.100	0.200	0.013	0.002	0.12
Dissolved Metals, Uranium (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Vanadium (µg/L)	62	62	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Zinc (µg/L)	61	33	54	0.400	0.400	0.400	0.400	1.136	0.400	0.800	1.200	1.200	22.300	2.907	0.372	2.56
Field Measurements, Dissolved Oxygen (% Saturation)	15	0	0	91.700	91.700	92.920	94.800	98.873	99.400	102.850	104.680	105.700	105.700	4.717	1.218	0.05
Field Measurements, Dissolved Oxygen (mg/L)	15	0	0	9.680	9.680	9.868	9.975	10.740	10.380	11.655	12.064	12.280	12.280	0.922	0.238	0.09
Field Measurements, Specific Conductivity (µS/cm)	15	1	7	15.800	15.800	16.090	16.450	17.414	17.550	18.500	18.500	18.600	18.600	1.088	0.281	0.06
Field Measurements, Turbidity (NTU)	14	14	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	----	----	----
Field Measurements, pH (unitless)	12	0	0	6.290	6.290	6.301	6.468	6.836	6.845	7.170	7.308	7.680	7.680	0.455	0.131	0.07
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	6	0	0	4.200	4.200	4.250	4.325	5.583	5.500	6.675	7.000	7.300	7.300	1.427	0.583	0.26
Major Ions, Dissolved Calcium (mg/L)	74	0	0	0.700	0.700	1.300	1.420	1.970	1.800	2.375	2.600	3.300	7.200	0.825	0.096	0.42
Major Ions, Dissolved Chloride (mg/L)	73	51	70	0.700	0.700	0.700	0.700	0.805	0.700	0.870	1.032	1.100	1.700	0.202	0.024	0.25
Major Ions, Dissolved Fluoride (mg/L)	62	53	85	0.035	0.100	0.055	0.100	0.111	0.100	0.100	0.100	0.100	1.000	0.119	0.015	1.08
Major Ions, Dissolved Magnesium (mg/L)	74	0	0	0.300	0.300	0.600	0.700	0.900	0.850	1.000	1.170	1.400	3.600	0.392	0.046	0.44
Major Ions, Dissolved Potassium (mg/L)	74	0	0	0.300	0.300	0.400	0.400	0.546	0.500	0.675	0.700	0.900	0.900	0.146	0.017	0.27
Major Ions, Dissolved Sodium (mg/L)	74	0	0	0.400	0.400	0.500	0.600	0.715	0.700	0.800	1.000	1.100	1.200	0.191	0.022	0.27
Major Ions, Dissolved Sulphate (mg/L)	76	12	16	1.000	2.000	1.000	2.000	2.051	2.000	2.000	3.000	2.000	3.250	0.625	0.072	0.30
Major Ions, Reactive Silica (mg/L)	40	3	8	0.072	0.072	0.101	0.127	0.182	0.159	0.190	0.255	0.249	0.500	0.104	0.016	0.57
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	75	0	0	1.500	1.500	4.140	4.350	5.472	5.000	6.400	7.660	9.400	9.400	1.475	0.170	0.27
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	74	0	0	2.800	2.800	6.100	6.800	8.646	8.500	9.875	10.900	14.200	25.000	2.946	0.342	0.34
Microbiology, Chlorophyll a (µg/L)	38	5	13	0.154	0.154	0.194	0.324	0.628	0.500	0.924	1.000	1.500	2.000	0.409	0.066	0.65
Nutrients, Dissolved Nitrogen (mg/L)	41	0	0	0.115	0.115	0.122	0.133	0.160	0.152	0.188	0.210	0.270	0.270	0.035	0.005	0.22
Nutrients, Dissolved Organic Carbon (mg/L)	75	0	0	2.000	2.000	2.600	2.800	3.202	3.100	3.400	4.100	4.300	4.800	0.589	0.068	0.18
Nutrients, Dissolved o-Phosphate, as P (mg/L)	16	14	88	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.16
Nutrients, Nitrate, as N (mg/L)	89	64	72	0.003	0.003	0.005	0.005	0.011	0.005	0.010	0.022	0.014	0.066	0.011	0.001	1.07
Nutrients, Nitrate/Nitrite, as N (mg/L)	86	60	70	0.005	0.005	0.005	0.005	0.018	0.008	0.010	0.040	0.014	0.150	0.028	0.003	1.57
Nutrients, Nitrite, as N (mg/L)	88	85	97	0.001	0.001	0.001	0.001	0.006	0.001	0.010	0.010	0.020	0.150	0.018	0.002	2.79
Nutrients, Total Ammonia, as N (mg/L)	75	63	84	0.005	0.005	0.005	0.005	0.007	0.005	0.009	0.010	0.015	0.050	0.006	0.001	0.82

Table B.3.4-7 MacKay Lake (MCL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Dissolved Phosphorus (mg/L)	39	28	72	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.004	0.003	0.010	0.002	0.000	0.85
Nutrients, Total Nitrogen (mg/L)	46	0	0	0.115	0.115	0.141	0.151	0.176	0.170	0.194	0.216	0.230	0.260	0.031	0.005	0.17
Nutrients, Total Organic Carbon (mg/L)	75	0	0	2.500	2.500	2.800	2.900	3.352	3.200	3.450	4.360	4.200	5.200	0.594	0.069	0.18
Nutrients, Total Phosphorus (mg/L)	81	50	62	0.002	0.002	0.002	0.002	0.004	0.002	0.004	0.010	0.006	0.020	0.003	0.000	0.85
Nutrients, o-Phosphate, as P (mg/L)	57	57	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002	0.000	0.000	0.34
Physical Parameters, Specific Conductivity (µS/cm)	75	0	0	13.900	13.900	15.200	15.800	19.005	17.300	21.000	26.700	28.400	29.300	4.490	0.519	0.24
Physical Parameters, Total Dissolved Solids (mg/L)	72	29	40	10.000	10.000	10.000	10.000	19.167	14.000	20.000	23.900	34.000	244.000	28.156	3.318	1.47
Physical Parameters, Total Suspended Solids (mg/L)	75	65	87	3.000	3.000	3.000	3.000	3.293	3.000	3.000	4.000	3.000	8.000	0.955	0.110	0.29
Physical Parameters, pH (unitless)	75	0	0	6.240	6.530	6.688	6.770	6.853	6.860	6.955	7.026	7.090	7.090	0.150	0.017	0.02
Total Metals, Aluminum (µg/L)	75	0	0	2.000	2.000	3.940	5.000	6.757	6.500	7.800	10.300	11.700	17.500	2.506	0.289	0.37
Total Metals, Antimony (µg/L)	75	71	95	0.100	0.100	0.100	0.100	0.112	0.100	0.100	0.100	0.100	0.400	0.054	0.006	0.49
Total Metals, Arsenic (µg/L)	75	65	87	0.200	0.200	0.200	0.200	0.216	0.200	0.200	0.300	0.200	0.400	0.044	0.005	0.20
Total Metals, Barium (µg/L)	75	0	0	1.600	1.600	1.800	1.900	2.277	2.100	2.550	3.100	3.500	3.900	0.551	0.064	0.24
Total Metals, Beryllium (µg/L)	75	75	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Bismuth (µg/L)	36	36	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Total Metals, Boron (µg/L)	36	2	6	0.900	0.900	1.350	1.700	2.053	1.900	2.525	3.050	3.300	3.300	0.647	0.108	0.31
Total Metals, Cadmium (µg/L)	75	75	100	0.040	0.040	0.040	0.040	0.046	0.050	0.050	0.050	0.050	0.050	0.005	0.001	0.11
Total Metals, Cesium (µg/L)	75	75	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.000	0.000	0.00
Total Metals, Chromium (µg/L)	75	72	96	0.100	0.100	0.100	0.100	0.107	0.100	0.100	0.100	0.100	0.400	0.038	0.004	0.36
Total Metals, Cobalt (µg/L)	75	74	99	0.100	0.100	0.100	0.100	0.101	0.100	0.100	0.100	0.100	0.200	0.012	0.001	0.11
Total Metals, Copper (µg/L)	75	2	3	0.200	0.300	0.400	0.500	0.561	0.500	0.700	0.800	0.900	1.000	0.175	0.020	0.31
Total Metals, Iron (µg/L)	75	22	29	5.000	5.000	5.000	6.000	12.373	9.000	12.500	18.600	19.000	50.000	11.803	1.363	0.95
Total Metals, Lead (µg/L)	75	69	92	0.100	0.100	0.100	0.100	0.127	0.100	0.100	0.100	0.100	1.100	0.126	0.014	0.99
Total Metals, Lithium (µg/L)	75	1	1	0.200	0.700	1.000	1.100	1.343	1.200	1.400	1.960	1.800	4.100	0.493	0.057	0.37
Total Metals, Manganese (µg/L)	75	0	0	0.300	0.300	1.140	1.400	2.804	2.400	3.300	4.520	6.000	10.900	1.994	0.230	0.71
Total Metals, Mercury (ng/L)	58	15	26	0.000	0.000	0.001	0.200	0.323	0.345	0.475	0.600	0.800	0.800	0.201	0.026	0.62
Total Metals, Mercury (µg/L)	71	69	97	0.001	0.010	0.010	0.010	0.011	0.010	0.010	0.010	0.010	0.050	0.005	0.001	0.47
Total Metals, Molybdenum (µg/L)	75	75	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Nickel (µg/L)	75	0	0	0.300	0.300	0.500	0.650	0.884	0.800	1.050	1.400	1.600	1.700	0.329	0.038	0.37
Total Metals, Rubidium (µg/L)	75	0	0	0.800	0.900	1.100	1.200	1.359	1.200	1.450	1.900	1.800	2.200	0.316	0.037	0.23
Total Metals, Selenium (µg/L)	75	73	97	0.300	0.300	0.300	0.300	0.320	0.300	0.300	0.300	0.300	1.700	0.162	0.019	0.51
Total Metals, Silver (µg/L)	75	74	99	0.100	0.100	0.100	0.100	0.101	0.100	0.100	0.100	0.100	0.200	0.012	0.001	0.11
Total Metals, Strontium (µg/L)	75	0	0	4.700	4.700	6.600	7.150	9.039	8.600	10.200	12.920	14.700	14.900	2.401	0.277	0.27
Total Metals, Thallium (µg/L)	75	75	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Tin (µg/L)	36	36	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Titanium (µg/L)	75	68	91	0.100	0.100	0.100	0.100	0.119	0.100	0.100	0.100	0.100	0.500	0.071	0.008	0.60
Total Metals, Uranium (µg/L)	75	73	97	0.100	0.100	0.100	0.100	0.104	0.100	0.100	0.100	0.100	0.300	0.026	0.003	0.25
Total Metals, Vanadium (µg/L)	75	74	99	0.100	0.100	0.100	0.100	0.103	0.100	0.100	0.100	0.100	0.300	0.023	0.003	0.22
Total Metals, Zinc (µg/L)	74	47	64	0.400	0.400	0.400	0.400	0.680	0.400	0.575	1.270	0.800	3.900	0.671	0.078	0.99

Table B.3.4-8 Starfish Lake (STL) - Full Year

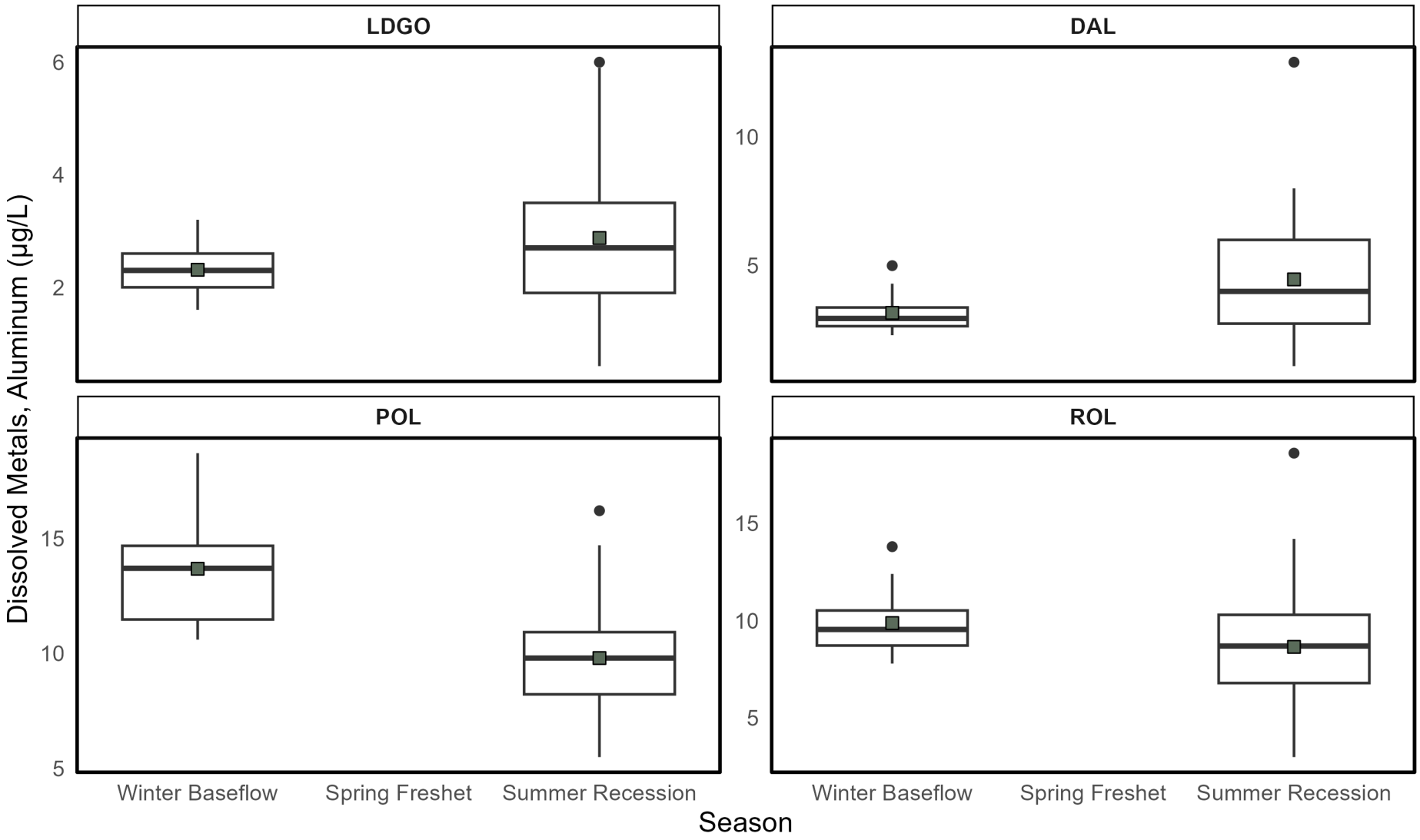
Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Dissolved Metals, Aluminum (µg/L)	47	0	0	5.000	5.000	6.380	8.550	15.304	11.900	21.600	27.420	34.500	34.500	8.476	1.236	0.55
Dissolved Metals, Antimony (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Arsenic (µg/L)	47	8	17	0.200	0.200	0.200	0.300	0.311	0.300	0.400	0.400	0.400	0.400	0.067	0.010	0.21
Dissolved Metals, Barium (µg/L)	47	0	0	1.400	1.400	1.600	1.750	2.085	2.000	2.300	2.700	2.700	3.600	0.454	0.066	0.22
Dissolved Metals, Beryllium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Bismuth (µg/L)	41	41	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Dissolved Metals, Boron (µg/L)	41	7	17	0.900	0.900	0.900	1.100	1.349	1.300	1.700	1.700	2.100	2.100	0.338	0.053	0.25
Dissolved Metals, Cadmium (µg/L)	47	47	100	0.040	0.040	0.040	0.040	0.042	0.040	0.040	0.050	0.040	0.050	0.004	0.001	0.10
Dissolved Metals, Cesium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Chromium (µg/L)	47	43	91	0.100	0.100	0.100	0.100	0.109	0.100	0.100	0.100	0.100	0.200	0.028	0.004	0.26
Dissolved Metals, Cobalt (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Copper (µg/L)	47	0	0	0.500	0.500	0.760	0.850	1.300	0.900	1.100	1.400	1.400	15.800	2.174	0.317	1.67
Dissolved Metals, Iron (µg/L)	47	25	53	5.000	5.000	5.000	5.000	9.574	5.000	11.500	20.800	20.000	33.000	7.201	1.050	0.75
Dissolved Metals, Lead (µg/L)	47	46	98	0.100	0.100	0.100	0.100	0.111	0.100	0.100	0.100	0.100	0.600	0.073	0.011	0.66
Dissolved Metals, Lithium (µg/L)	47	0	0	1.100	1.100	1.260	1.300	1.519	1.400	1.700	2.000	2.100	2.100	0.268	0.039	0.18
Dissolved Metals, Manganese (µg/L)	47	0	0	0.200	0.200	0.300	0.400	3.085	0.600	0.800	12.060	1.000	38.000	6.933	1.011	2.25
Dissolved Metals, Mercury (ng/L)	38	6	16	0.200	0.200	0.200	0.400	0.557	0.500	0.800	0.940	1.200	1.200	0.278	0.045	0.50
Dissolved Metals, Mercury (µg/L)	40	40	100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	----	----	----
Dissolved Metals, Molybdenum (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Nickel (µg/L)	47	0	0	0.400	0.400	0.400	0.500	0.604	0.600	0.700	0.800	0.900	1.000	0.157	0.023	0.26
Dissolved Metals, Rubidium (µg/L)	47	0	0	1.300	1.300	1.400	1.400	1.655	1.500	1.950	2.100	2.200	2.200	0.293	0.043	0.18
Dissolved Metals, Selenium (µg/L)	47	47	100	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	----	----	----
Dissolved Metals, Silver (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Strontium (µg/L)	47	0	0	5.800	5.800	5.960	6.250	7.060	6.500	8.300	8.880	9.500	9.500	1.162	0.170	0.16
Dissolved Metals, Thallium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Tin (µg/L)	41	41	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Titanium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Dissolved Metals, Uranium (µg/L)	47	44	94	0.100	0.100	0.100	0.100	0.109	0.100	0.100	0.100	0.100	0.300	0.035	0.005	0.32
Dissolved Metals, Vanadium (µg/L)	47	46	98	0.100	0.100	0.100	0.100	0.104	0.100	0.100	0.100	0.100	0.300	0.029	0.004	0.28
Dissolved Metals, Zinc (µg/L)	43	31	72	0.400	0.400	0.400	0.400	1.207	0.400	0.500	1.080	0.600	25.600	3.852	0.587	3.19
Field Measurements, Depth (m)	12	0	0	0.300	0.300	0.300	0.300	0.542	0.500	0.625	1.000	1.000	1.000	0.291	0.084	0.54
Field Measurements, Dissolved Oxygen (% Saturation)	15	0	0	91.300	91.300	91.660	94.150	97.207	97.600	100.200	102.420	103.900	103.900	4.106	1.060	0.04
Field Measurements, Dissolved Oxygen (mg/L)	15	0	0	9.310	9.310	9.456	9.640	10.117	10.140	10.555	10.838	11.320	11.320	0.603	0.156	0.06
Field Measurements, Specific Conductivity (µS/cm)	15	0	0	14.100	14.100	14.380	14.700	15.747	15.900	16.550	16.800	17.100	17.100	1.029	0.266	0.07
Field Measurements, Turbidity (NTU)	14	14	100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	----	----	----
Field Measurements, pH (unitless)	13	0	0	6.400	6.400	6.614	6.730	6.925	6.920	7.060	7.312	7.370	7.650	0.329	0.091	0.05
Major Ions, Bicarbonate Alkalinity, as CaCO3 (mg/L)	6	0	0	3.700	3.700	3.700	3.725	4.400	3.800	5.150	5.700	5.800	5.800	1.010	0.412	0.23
Major Ions, Dissolved Calcium (mg/L)	43	0	0	1.000	1.000	1.084	1.200	2.020	1.400	1.800	2.080	2.200	24.700	3.561	0.543	1.76
Major Ions, Dissolved Chloride (mg/L)	50	41	82	0.220	0.700	0.500	0.700	0.735	0.700	0.700	0.700	0.700	3.500	0.426	0.060	0.58
Major Ions, Dissolved Fluoride (mg/L)	50	39	78	0.028	0.100	0.037	0.100	0.087	0.100	0.100	0.100	0.100	0.100	0.026	0.004	0.29
Major Ions, Dissolved Magnesium (mg/L)	43	0	0	0.562	0.562	0.600	0.600	0.994	0.800	0.900	1.000	1.300	6.400	1.023	0.156	1.03
Major Ions, Dissolved Potassium (mg/L)	43	0	0	0.300	0.300	0.400	0.400	0.573	0.500	0.700	0.800	0.900	0.900	0.160	0.024	0.28
Major Ions, Dissolved Sodium (mg/L)	43	0	0	0.500	0.500	0.518	0.600	0.785	0.600	0.900	0.900	1.000	4.700	0.631	0.096	0.80
Major Ions, Dissolved Sulphate (mg/L)	48	3	6	1.000	1.430	1.627	2.000	2.547	2.000	2.458	3.000	3.000	19.000	2.522	0.364	0.99
Major Ions, Reactive Silica (mg/L)	47	1	2	0.181	0.181	0.212	0.301	0.493	0.385	0.598	0.977	1.040	1.230	0.284	0.041	0.58
Major Ions, Total Alkalinity, as CaCO3 (mg/L)	47	1	2	0.400	3.300	3.560	3.800	4.428	4.100	5.500	5.940	6.500	6.500	1.256	0.183	0.28
Major Ions, Total Hardness, as CaCO3 (calc'd) (mg/L)	43	0	0	5.010	5.010	5.420	5.685	9.145	6.600	8.300	9.280	9.900	88.000	12.570	1.917	1.37
Microbiology, Chlorophyll a (µg/L)	42	3	7	0.228	0.228	0.353	0.683	1.003	1.000	1.313	1.500	2.000	2.000	0.451	0.070	0.45
Nutrients, Dissolved Nitrogen (mg/L)	48	0	0	0.169	0.169	0.180	0.190	0.260	0.219	0.261	0.326	0.350	1.350	0.182	0.026	0.70
Nutrients, Dissolved Organic Carbon (mg/L)	47	0	0	4.000	4.000	4.760	4.950	5.644	5.400	6.100	7.040	7.800	8.600	1.024	0.149	0.18
Nutrients, Dissolved o-Phosphate, as P (mg/L)	19	16	84	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	0.000	0.000	0.24
Nutrients, Nitrate, as N (mg/L)	48	31	65	0.003	0.003	0.005	0.005	0.022	0.005	0.013	0.020	0.024	0.377	0.067	0.010	3.03
Nutrients, Nitrate/Nitrite, as N (mg/L)	48	31	65	0.005	0.005	0.005	0.005	0.022	0.005	0.013	0.021	0.024	0.377	0.067	0.010	3.00
Nutrients, Nitrite, as N (mg/L)	48	48	100	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.010	0.002	0.000	1.41

Table B.3.4-8 Starfish Lake (STL) - Full Year

Parameter	N	nND	%ND	Min	Low	10th	25th	Mean	Median	75th	90th	High	Max	STD	SE	CV
Nutrients, Total Ammonia, as N (mg/L)	47	30	64	0.005	0.005	0.005	0.005	0.011	0.005	0.017	0.027	0.030	0.030	0.009	0.001	0.82
Nutrients, Total Dissolved Phosphorus (mg/L)	40	16	40	0.001	0.001	0.001	0.002	0.002	0.002	0.003	0.004	0.004	0.005	0.001	0.000	0.40
Nutrients, Total Nitrogen (mg/L)	52	0	0	0.190	0.190	0.211	0.230	0.290	0.251	0.280	0.340	0.340	1.390	0.174	0.024	0.60
Nutrients, Total Organic Carbon (mg/L)	47	0	0	4.600	4.600	5.100	5.200	5.951	5.700	6.450	7.200	8.100	8.700	0.966	0.141	0.16
Nutrients, Total Phosphorus (mg/L)	52	15	29	0.002	0.002	0.002	0.002	0.004	0.004	0.005	0.007	0.009	0.014	0.002	0.000	0.60
Nutrients, o-Phosphate, as P (mg/L)	27	27	100	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	----	----	----
Physical Parameters, Specific Conductivity (µS/cm)	47	0	0	12.100	12.100	13.780	14.350	17.455	15.300	21.000	22.620	24.500	40.900	5.034	0.734	0.29
Physical Parameters, Total Dissolved Solids (mg/L)	42	13	31	10.000	10.000	10.000	10.000	19.619	16.000	23.500	33.900	42.000	76.000	12.657	1.953	0.65
Physical Parameters, Total Suspended Solids (mg/L)	47	41	87	3.000	3.000	3.000	3.000	3.340	3.000	3.000	4.000	3.000	8.000	1.109	0.162	0.33
Physical Parameters, Turbidity (NTU)	47	0	0	0.140	0.140	0.190	0.250	0.364	0.360	0.445	0.534	0.660	0.750	0.137	0.020	0.38
Physical Parameters, pH (unitless)	45	0	0	6.120	6.340	6.580	6.640	6.724	6.750	6.880	6.920	6.940	6.940	0.188	0.028	0.03
Total Metals, Aluminum (µg/L)	47	0	0	5.100	5.100	11.360	13.650	20.585	16.400	27.450	36.120	42.000	42.000	9.743	1.421	0.47
Total Metals, Antimony (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Arsenic (µg/L)	47	6	13	0.200	0.200	0.200	0.300	0.330	0.300	0.400	0.400	0.500	0.500	0.075	0.011	0.23
Total Metals, Barium (µg/L)	47	0	0	1.600	1.600	1.700	1.800	2.149	2.000	2.400	2.640	3.300	3.300	0.423	0.062	0.20
Total Metals, Beryllium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Bismuth (µg/L)	41	41	100	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	----	----	----
Total Metals, Boron (µg/L)	41	9	22	0.900	0.900	0.900	1.000	1.266	1.200	1.500	1.700	2.100	2.100	0.316	0.049	0.25
Total Metals, Cadmium (µg/L)	47	47	100	0.040	0.040	0.040	0.040	0.042	0.040	0.040	0.050	0.040	0.050	0.004	0.001	0.10
Total Metals, Cesium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Chromium (µg/L)	47	43	91	0.100	0.100	0.100	0.100	0.109	0.100	0.100	0.100	0.100	0.200	0.028	0.004	0.26
Total Metals, Cobalt (µg/L)	47	46	98	0.100	0.100	0.100	0.100	0.102	0.100	0.100	0.100	0.100	0.200	0.015	0.002	0.14
Total Metals, Copper (µg/L)	47	0	0	0.400	0.700	0.700	0.900	1.045	1.000	1.150	1.500	1.500	1.600	0.258	0.038	0.25
Total Metals, Iron (µg/L)	47	1	2	5.000	5.000	8.600	15.000	28.830	25.000	33.000	55.400	56.000	90.000	19.908	2.904	0.69
Total Metals, Lead (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Lithium (µg/L)	47	0	0	1.100	1.100	1.200	1.300	1.526	1.400	1.700	2.000	2.100	2.100	0.289	0.042	0.19
Total Metals, Manganese (µg/L)	47	0	0	1.300	1.300	1.760	2.250	8.119	6.600	8.950	16.960	19.000	47.100	8.960	1.307	1.10
Total Metals, Mercury (ng/L)	45	2	4	0.200	0.200	0.440	0.600	0.844	0.800	1.100	1.360	1.600	1.600	0.347	0.052	0.41
Total Metals, Mercury (µg/L)	40	40	100	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	----	----	----
Total Metals, Molybdenum (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Nickel (µg/L)	47	0	0	0.400	0.400	0.500	0.500	0.632	0.600	0.700	0.800	0.900	1.000	0.155	0.023	0.24
Total Metals, Rubidium (µg/L)	47	0	0	1.300	1.300	1.400	1.400	1.651	1.500	1.950	2.100	2.200	2.200	0.292	0.043	0.18
Total Metals, Selenium (µg/L)	47	47	100	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	----	----	----
Total Metals, Silver (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Strontium (µg/L)	47	0	0	5.800	5.800	6.000	6.300	7.068	6.500	8.300	8.940	9.500	9.500	1.159	0.169	0.16
Total Metals, Thallium (µg/L)	47	47	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Tin (µg/L)	41	41	100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	----	----	----
Total Metals, Titanium (µg/L)	47	33	70	0.100	0.100	0.100	0.100	0.145	0.100	0.200	0.300	0.300	0.400	0.077	0.011	0.54
Total Metals, Uranium (µg/L)	47	44	94	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.200	0.025	0.004	0.23
Total Metals, Vanadium (µg/L)	47	46	98	0.100	0.100	0.100	0.100	0.106	0.100	0.100	0.100	0.100	0.400	0.044	0.006	0.41
Total Metals, Zinc (µg/L)	43	24	56	0.400	0.400	0.400	0.400	0.677	0.400	0.550	1.500	0.600	2.400	0.555	0.085	0.82

B.5 Seasonal Cycles

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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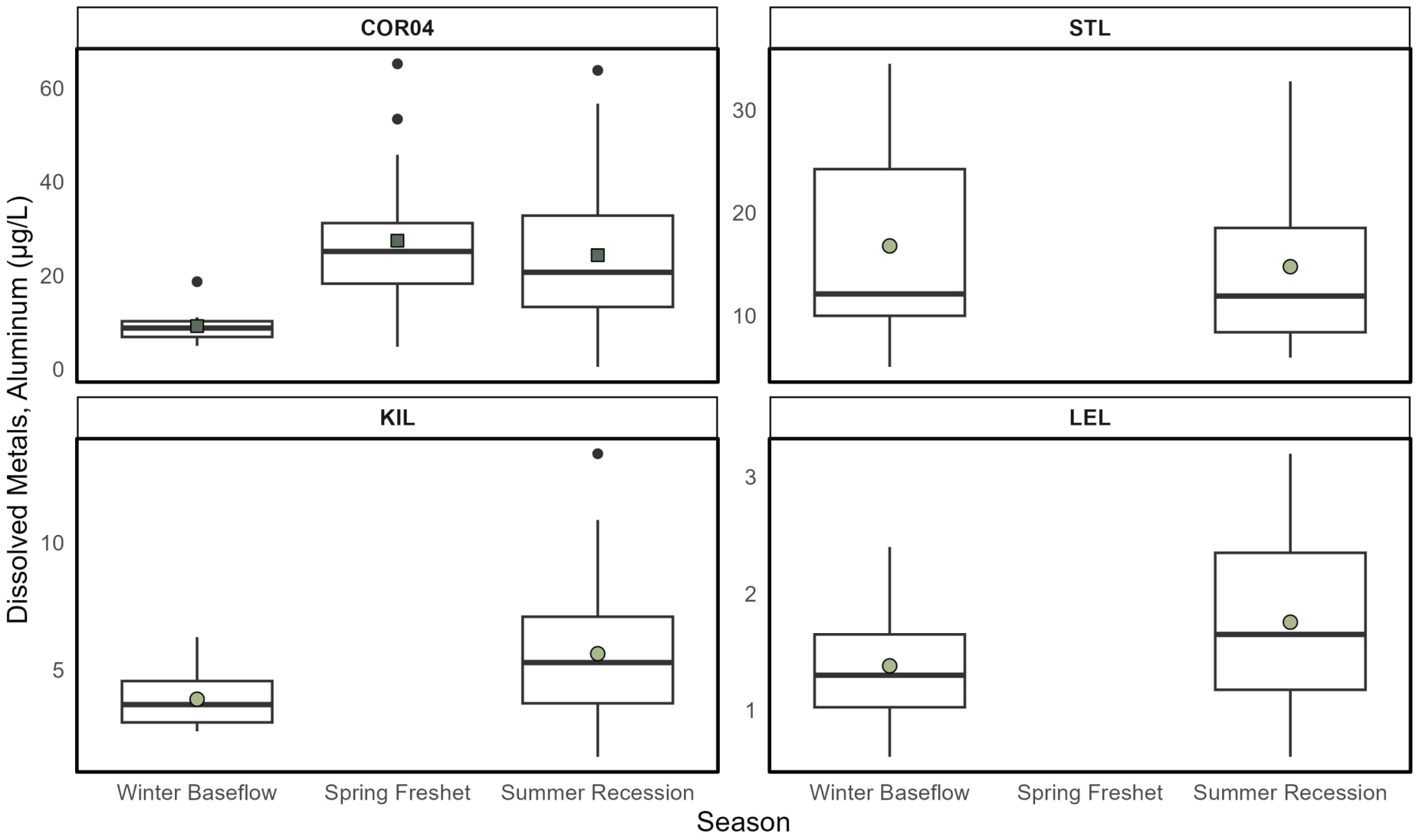
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FIGURE NO: **B.5.4**

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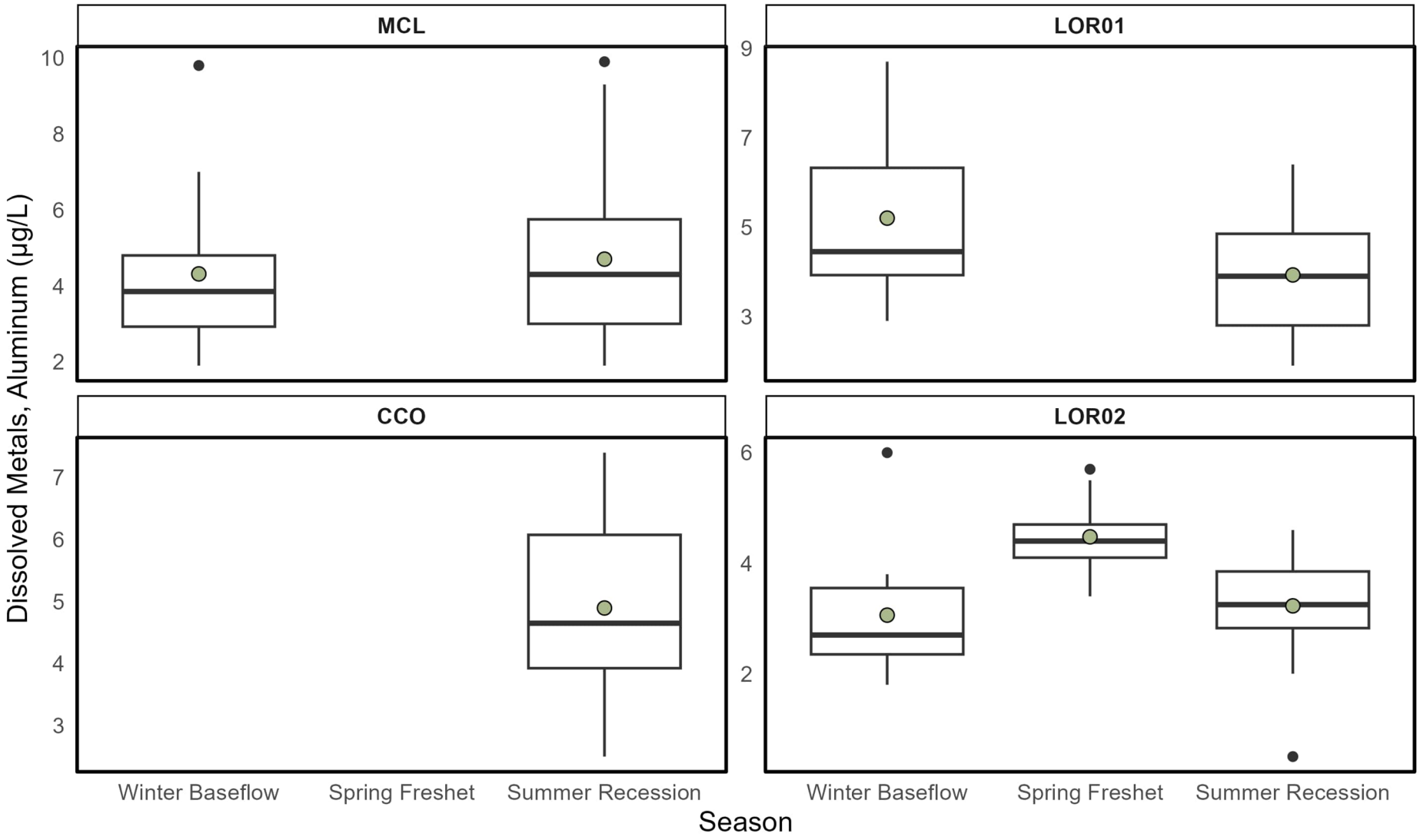
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FIGURE NO: **B.5.5**

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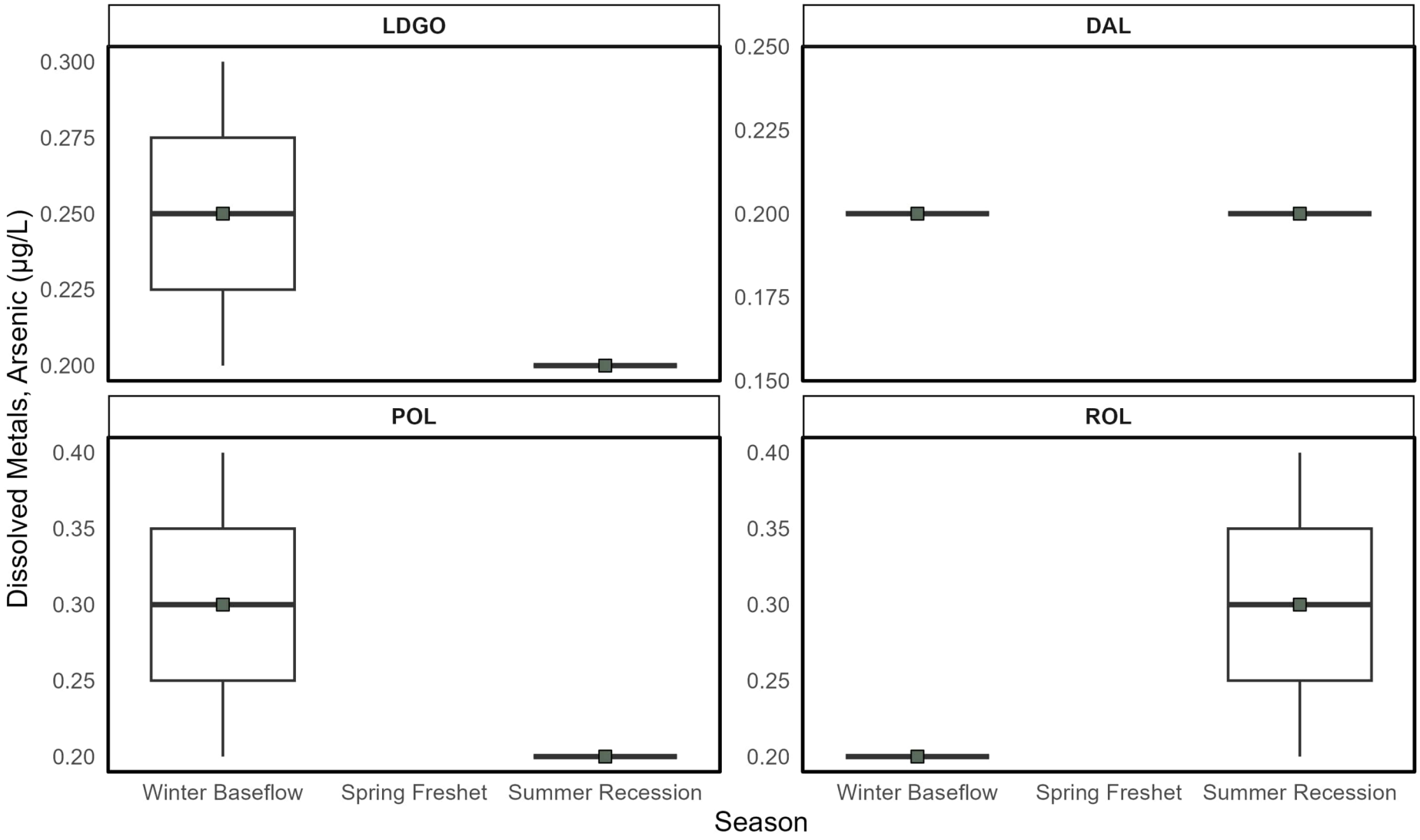
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FIGURE NO: **B.5.6**

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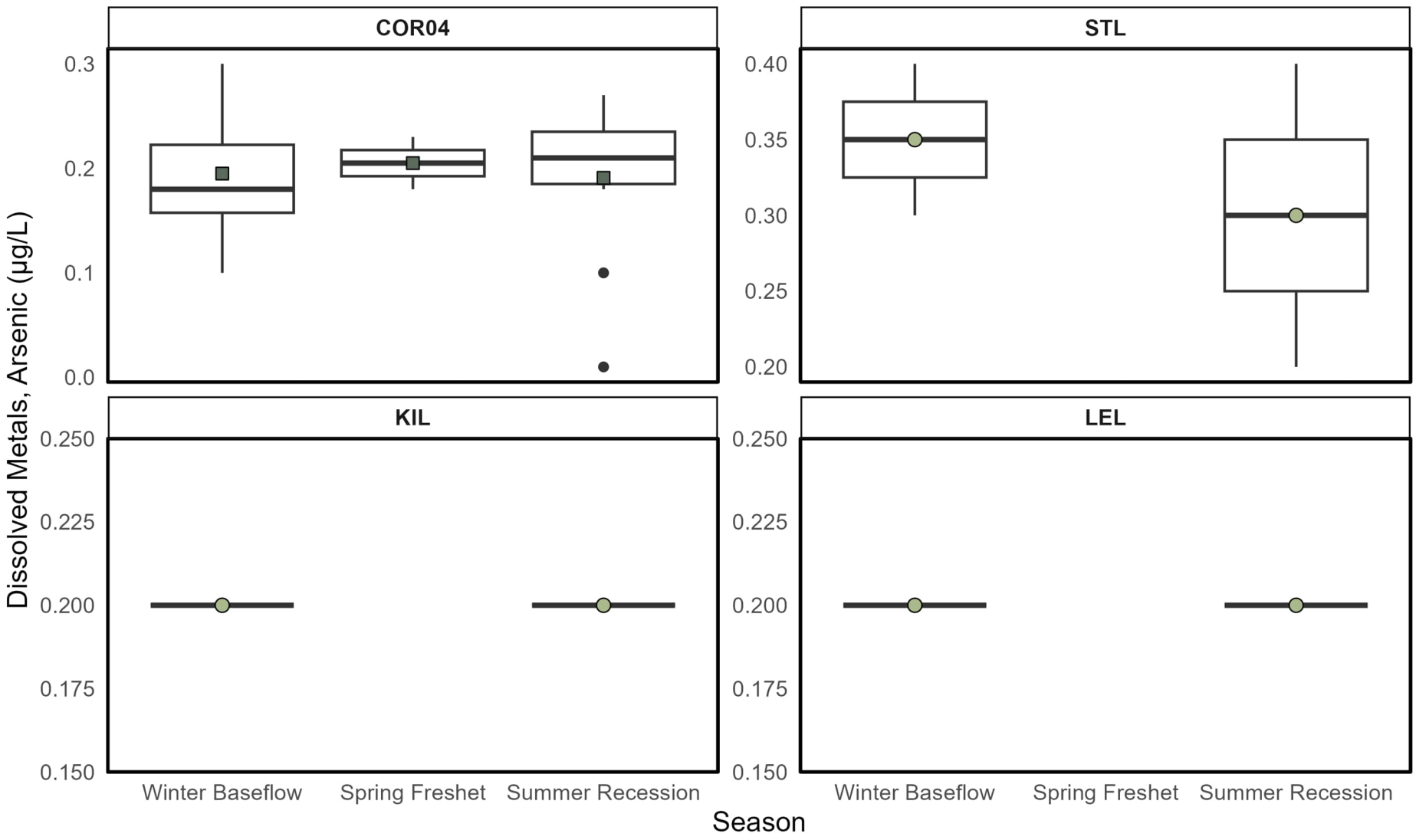
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FIGURE NO: **B.5.7**

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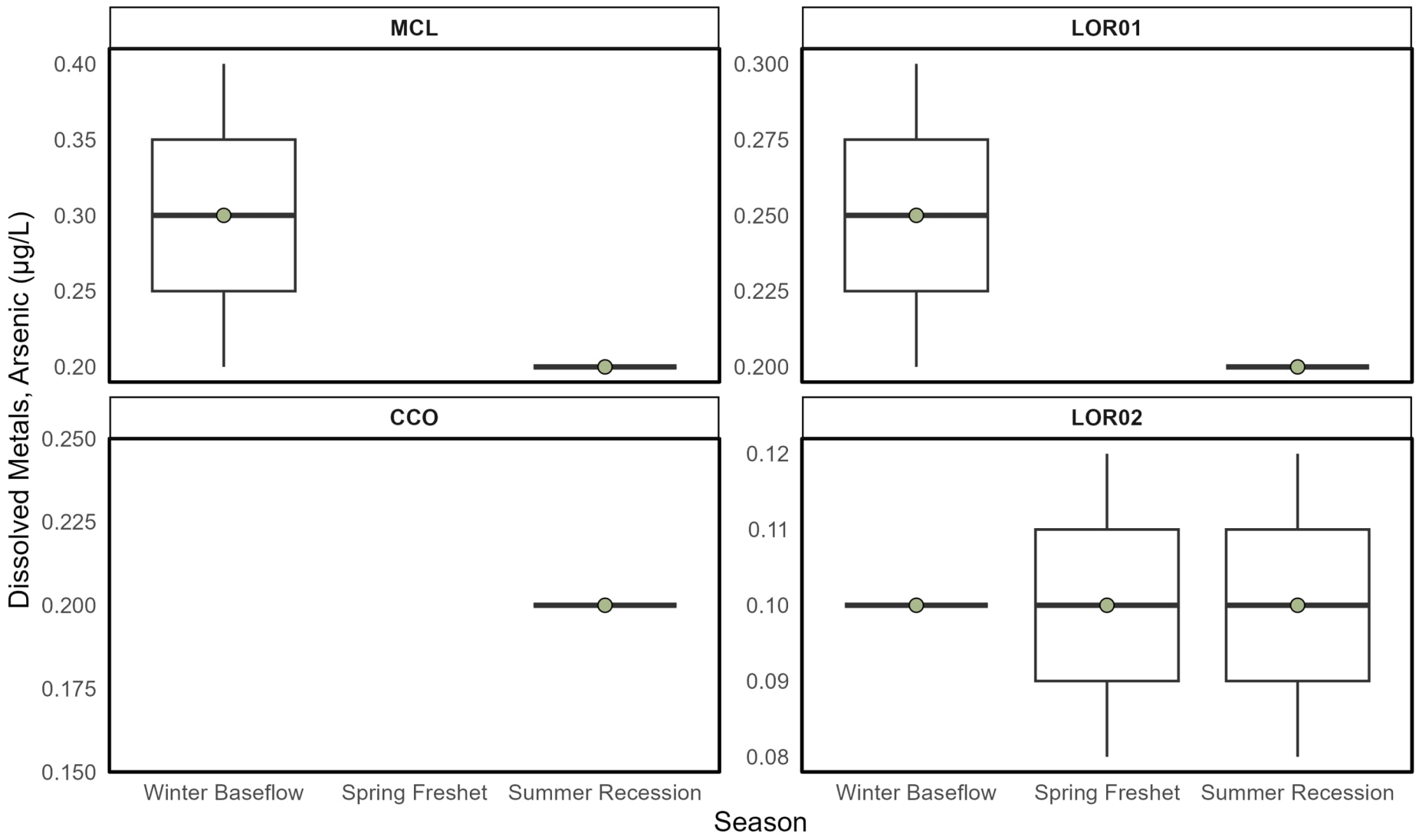
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FIGURE NO: **B.5.8**

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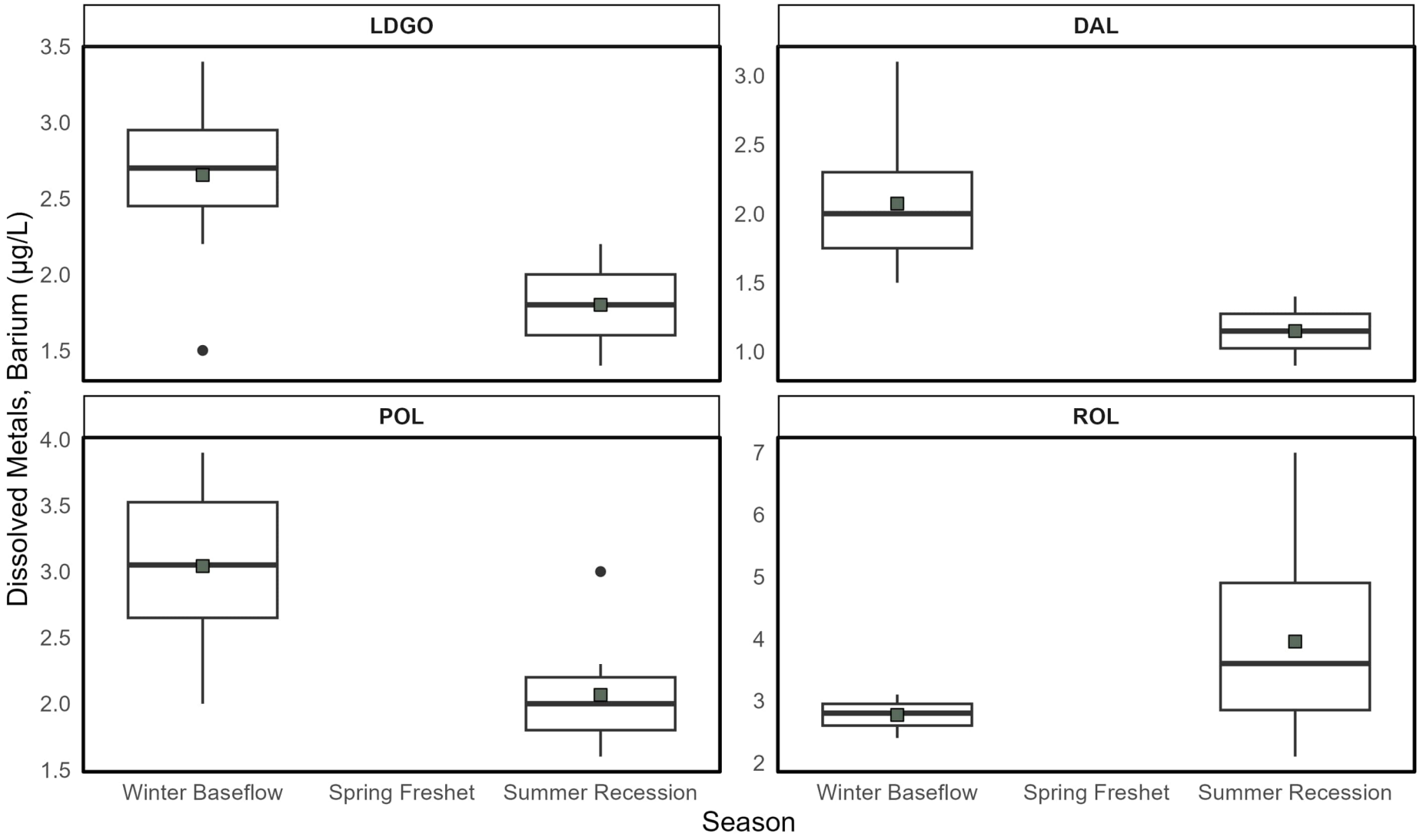
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FIGURE NO: **B.5.9**

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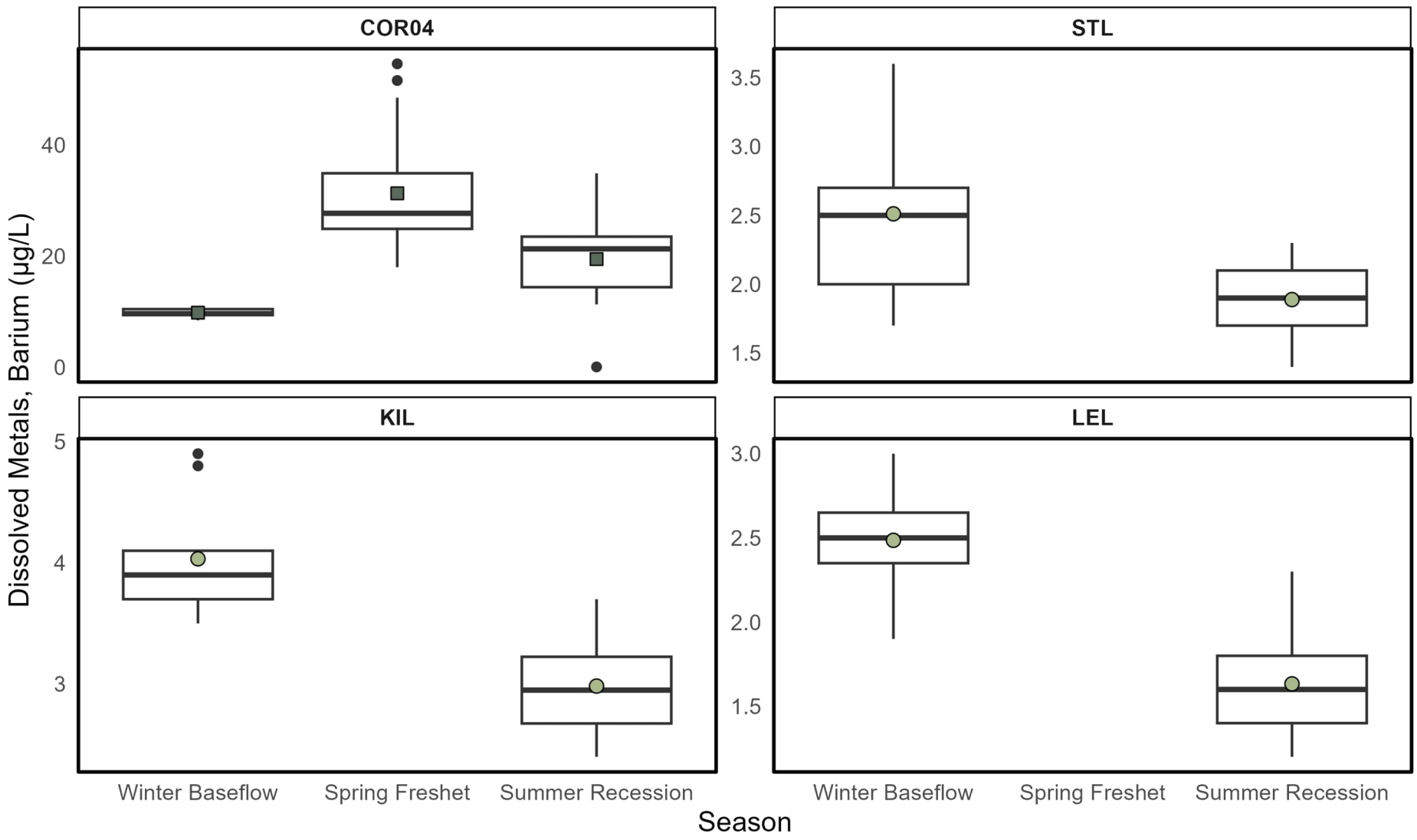
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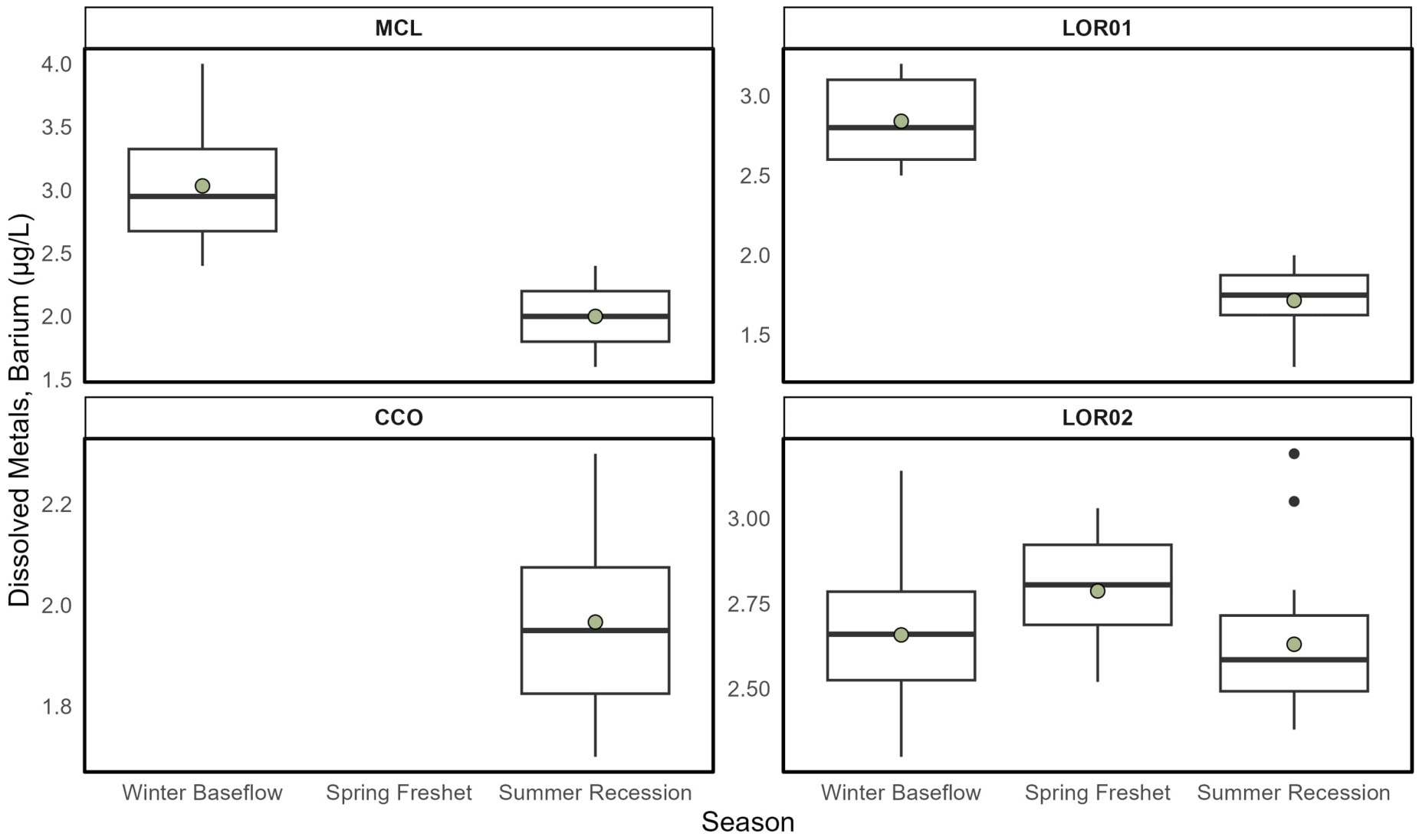
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FIGURE NO: **B.5.11**

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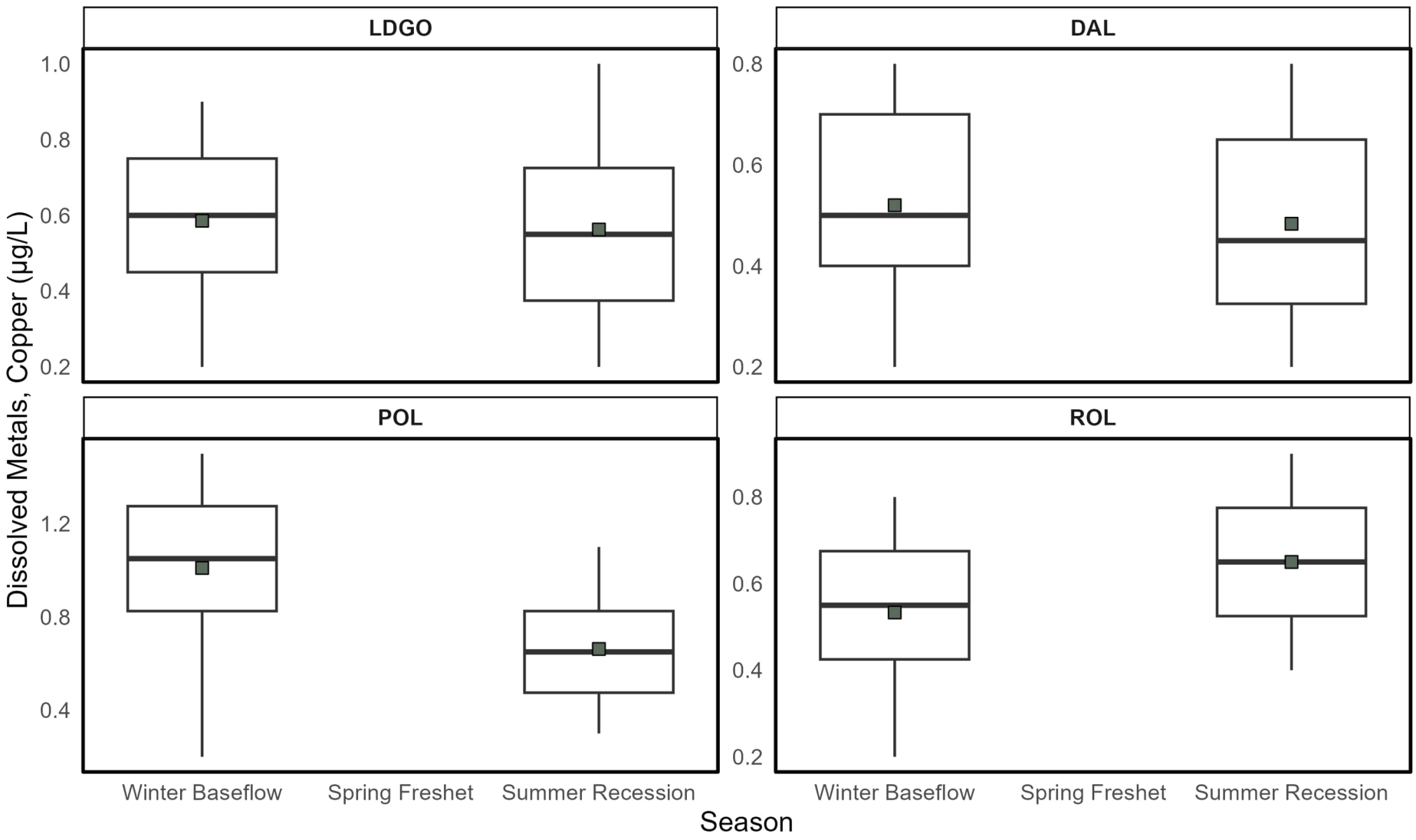
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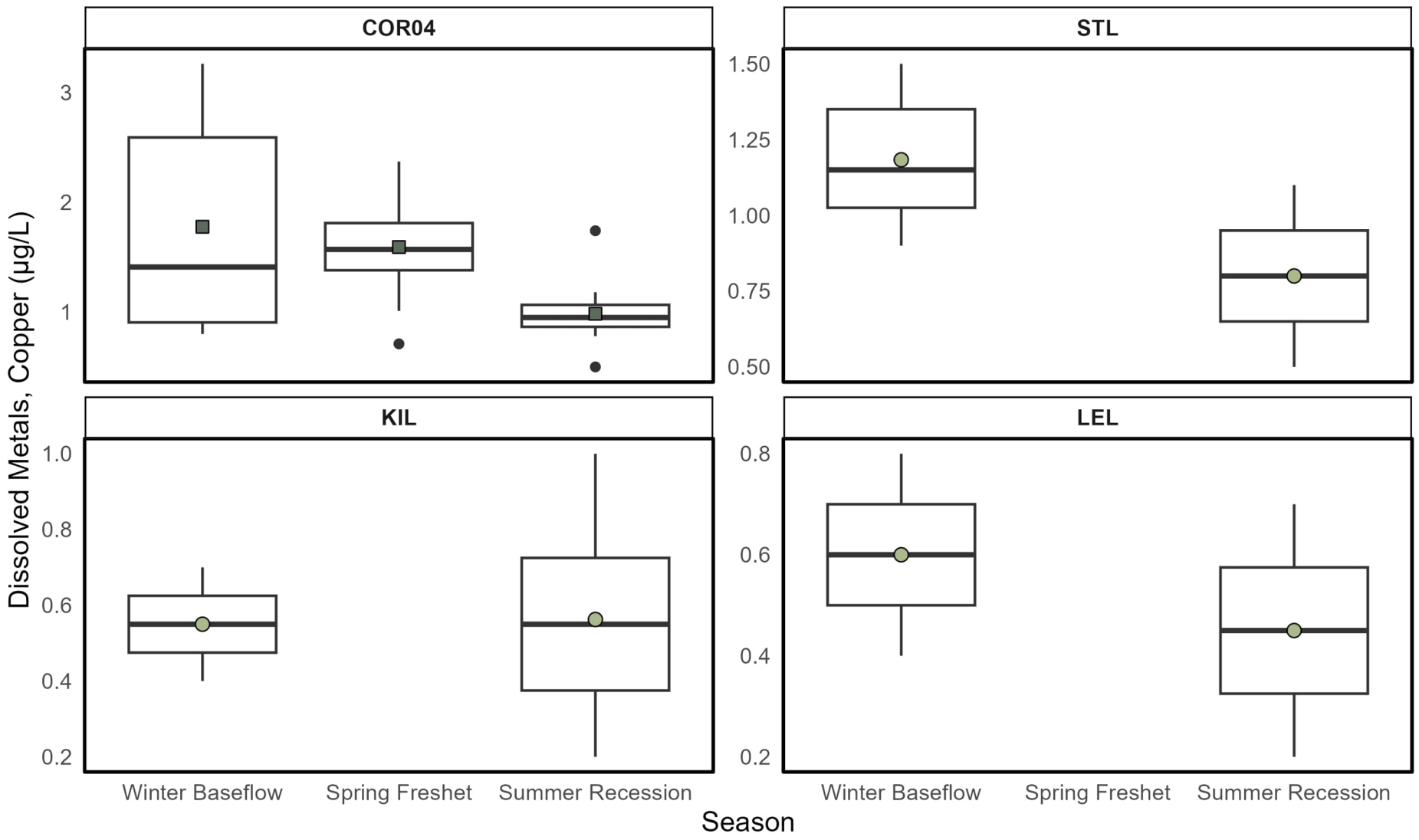
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FIGURE NO: **B.5.13**

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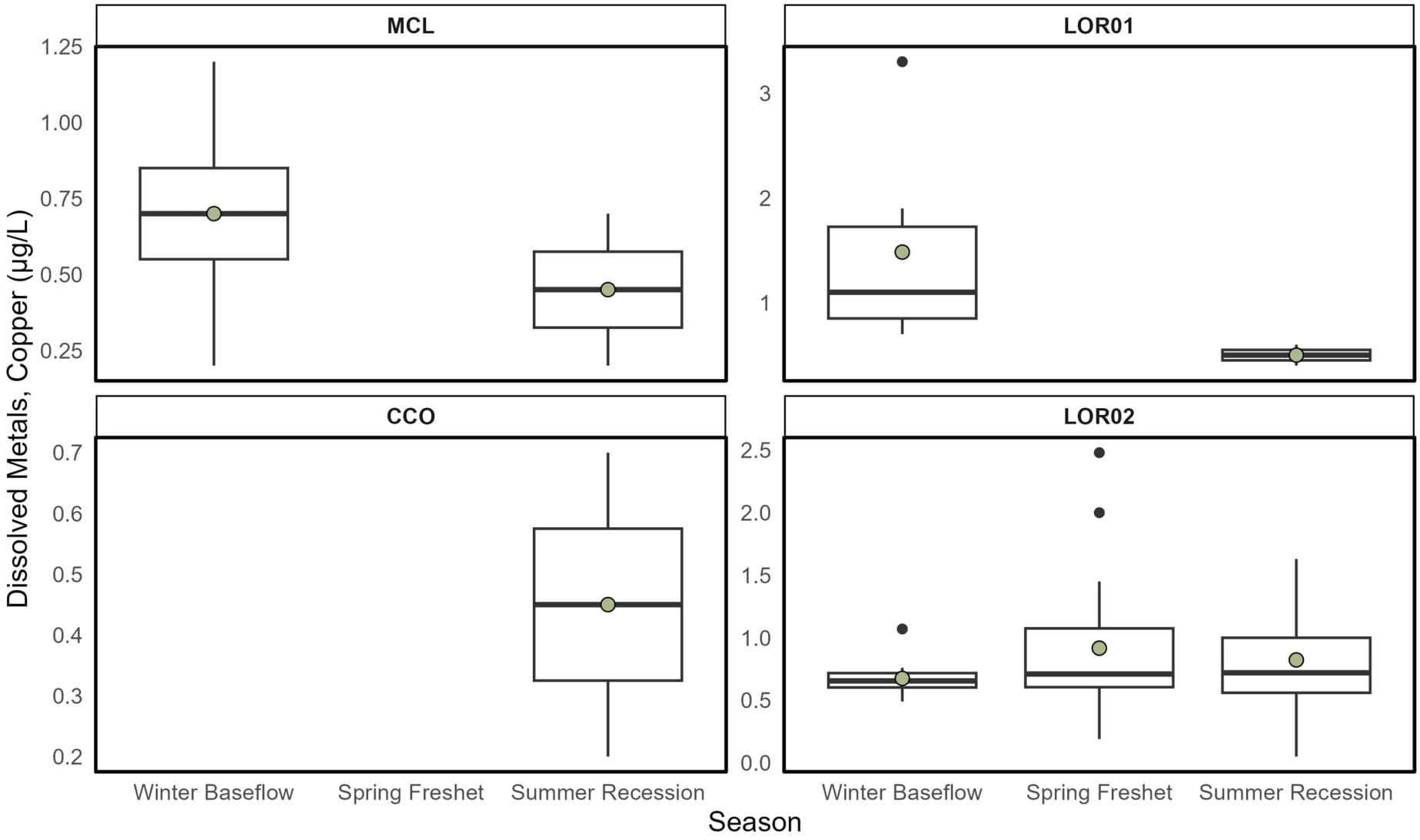
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FIGURE NO: **B.5.14**

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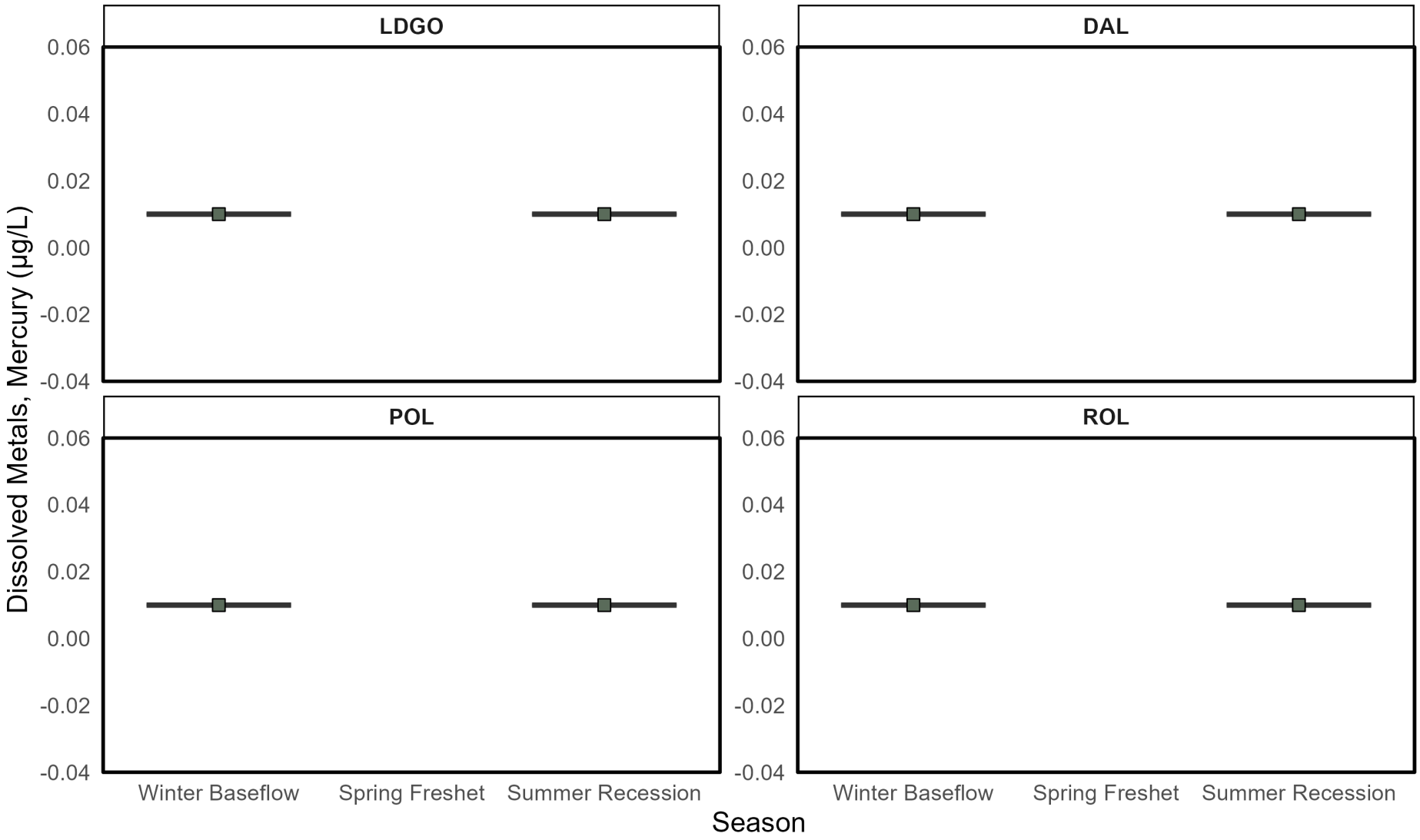
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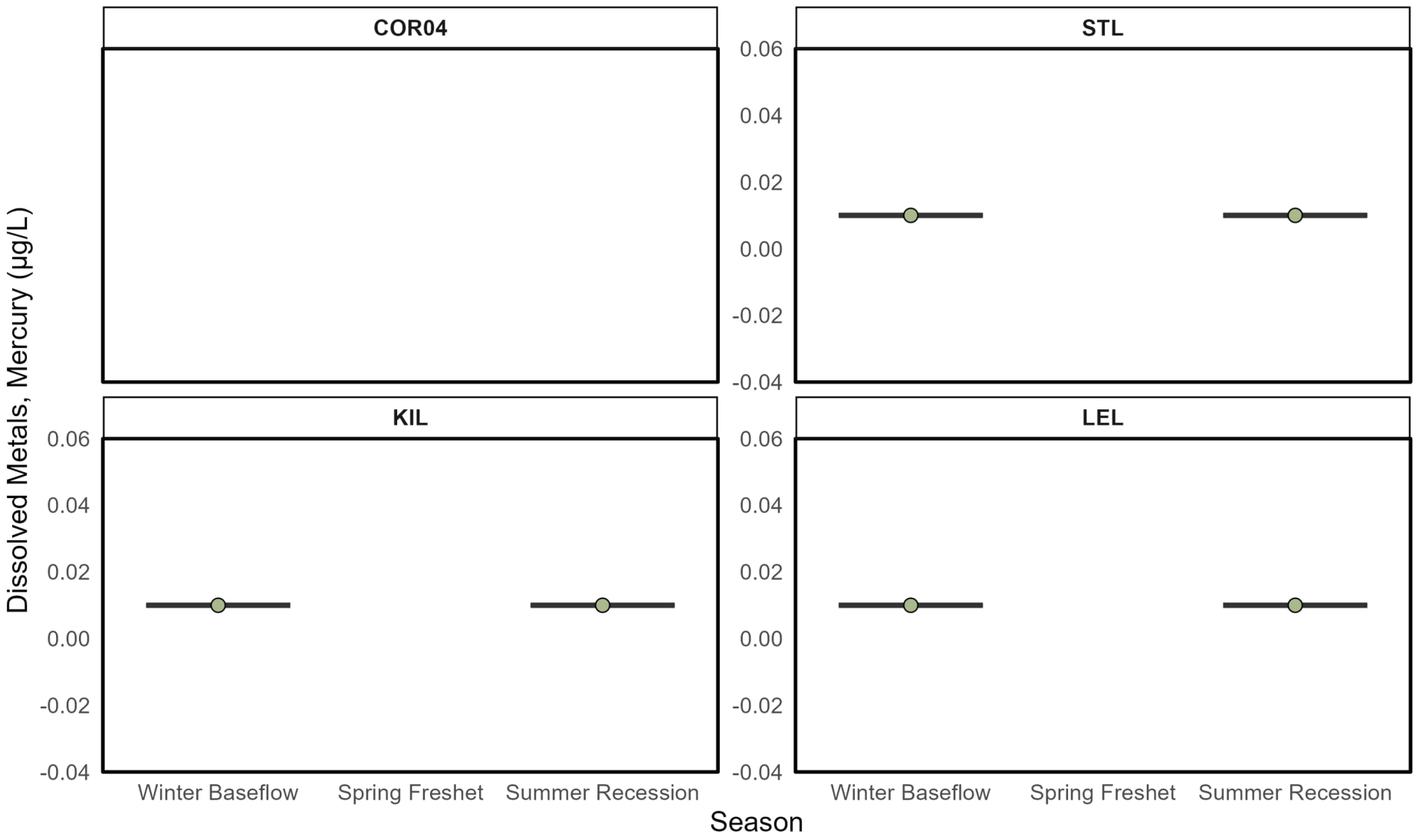
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FIGURE NO: **B.5.16**

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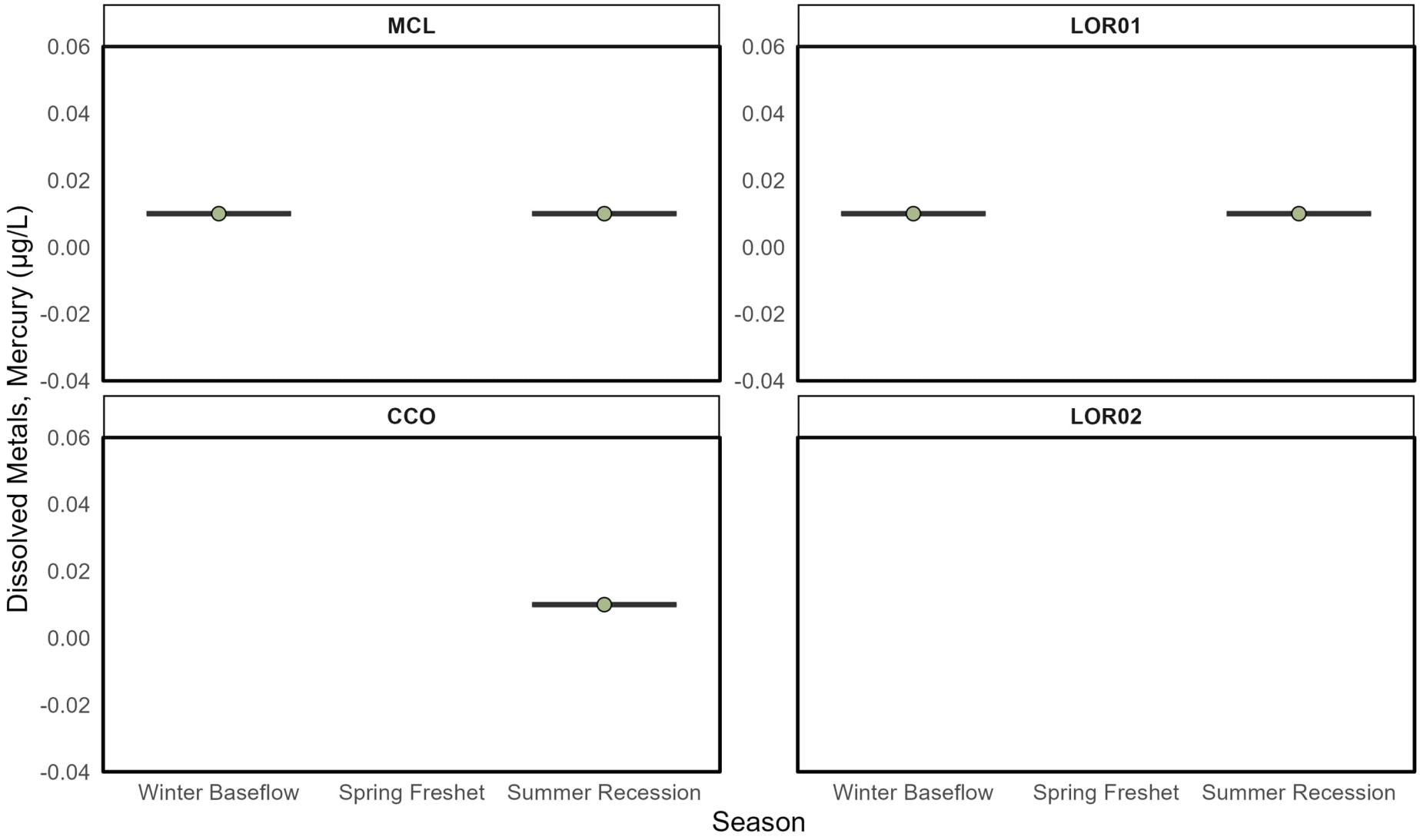
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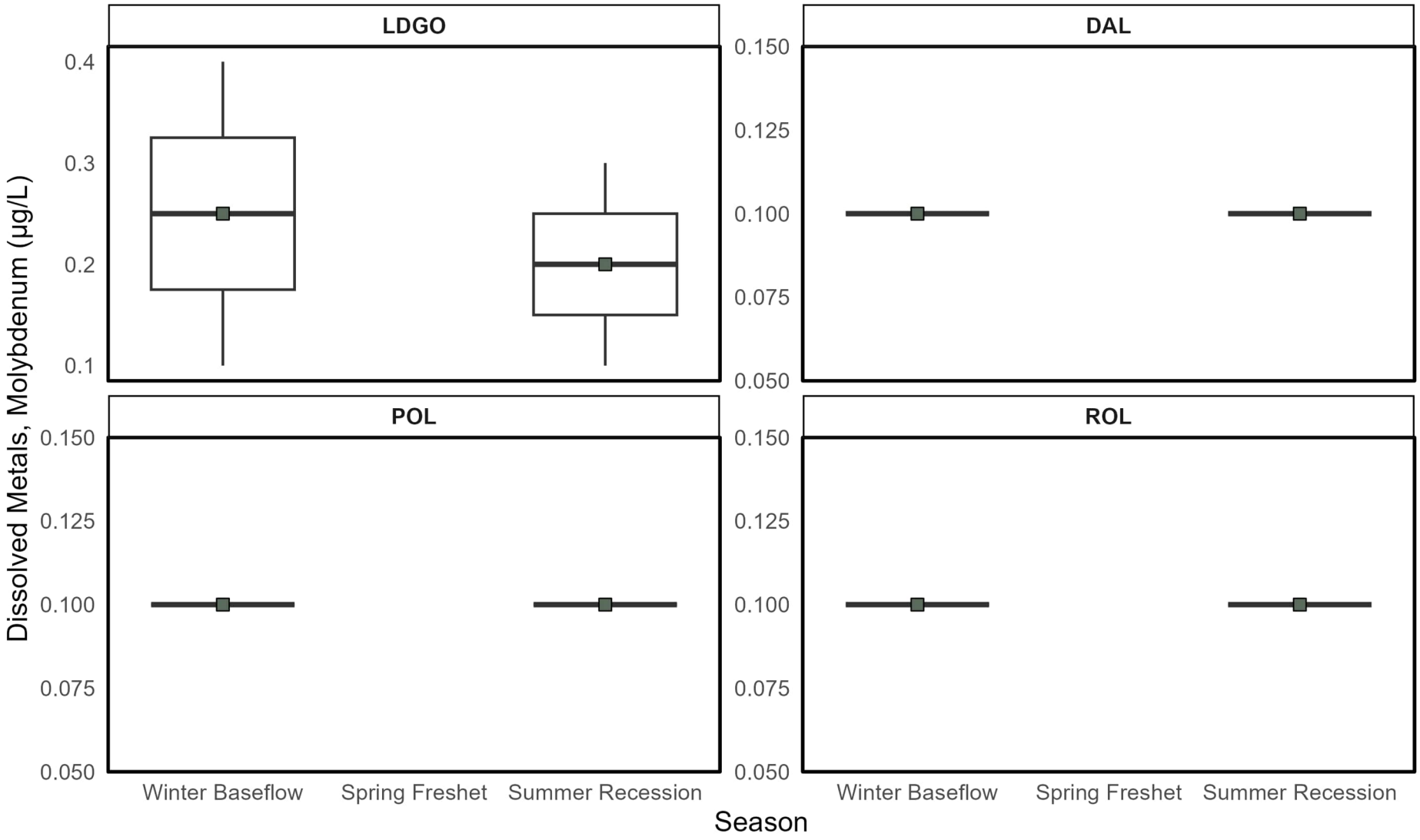
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FIGURE NO: **B.5.18**

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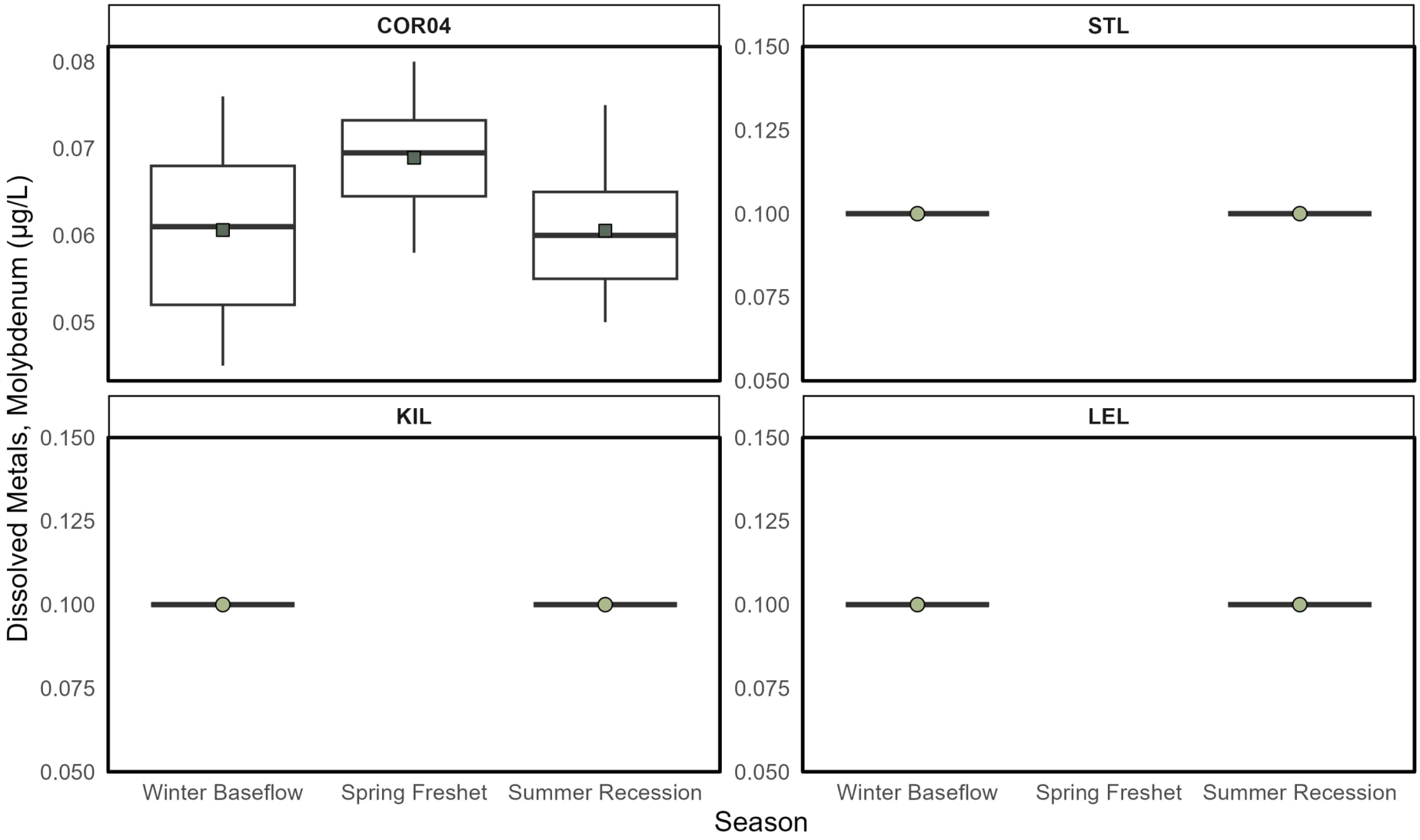
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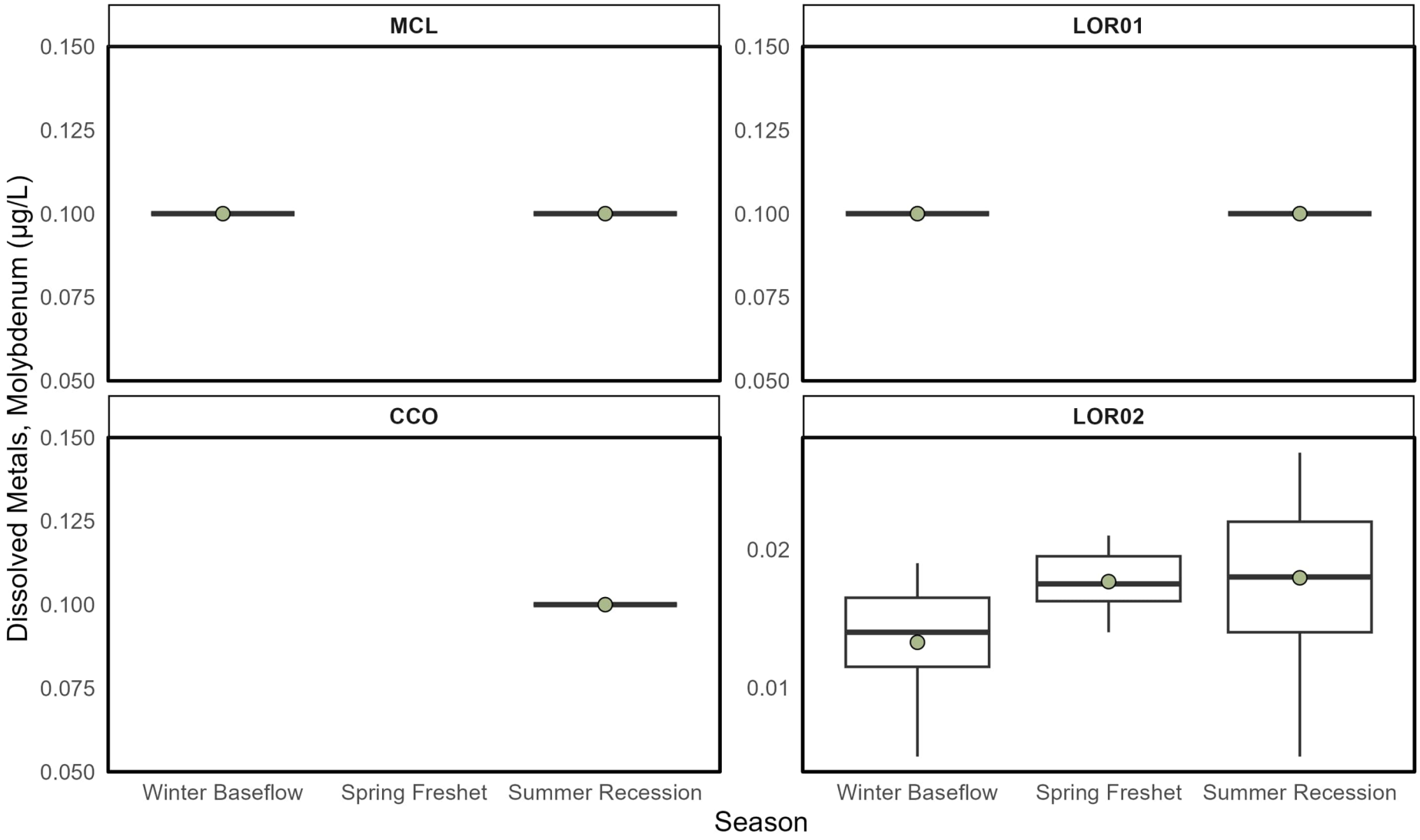
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FIGURE NO: **B.5.20**

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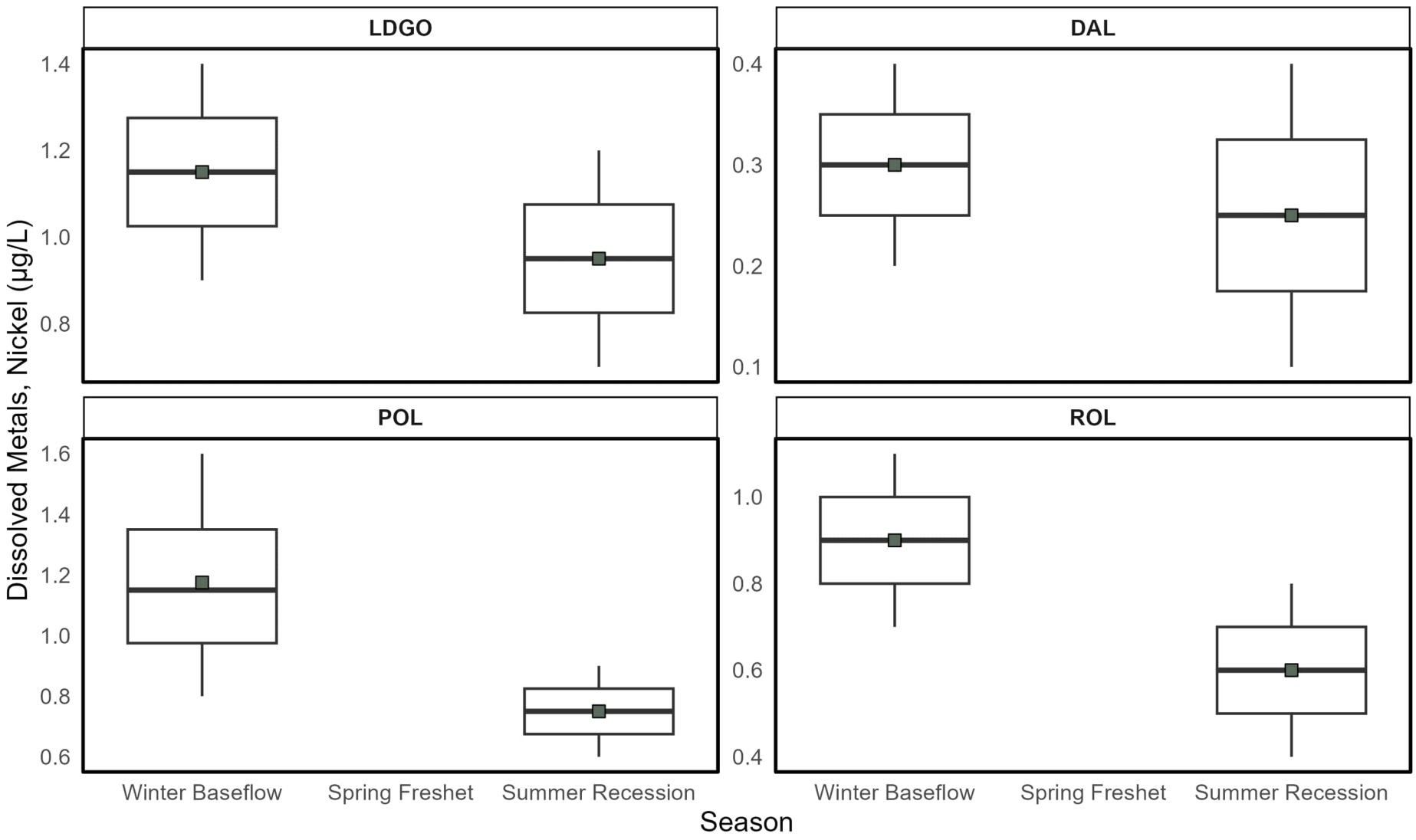
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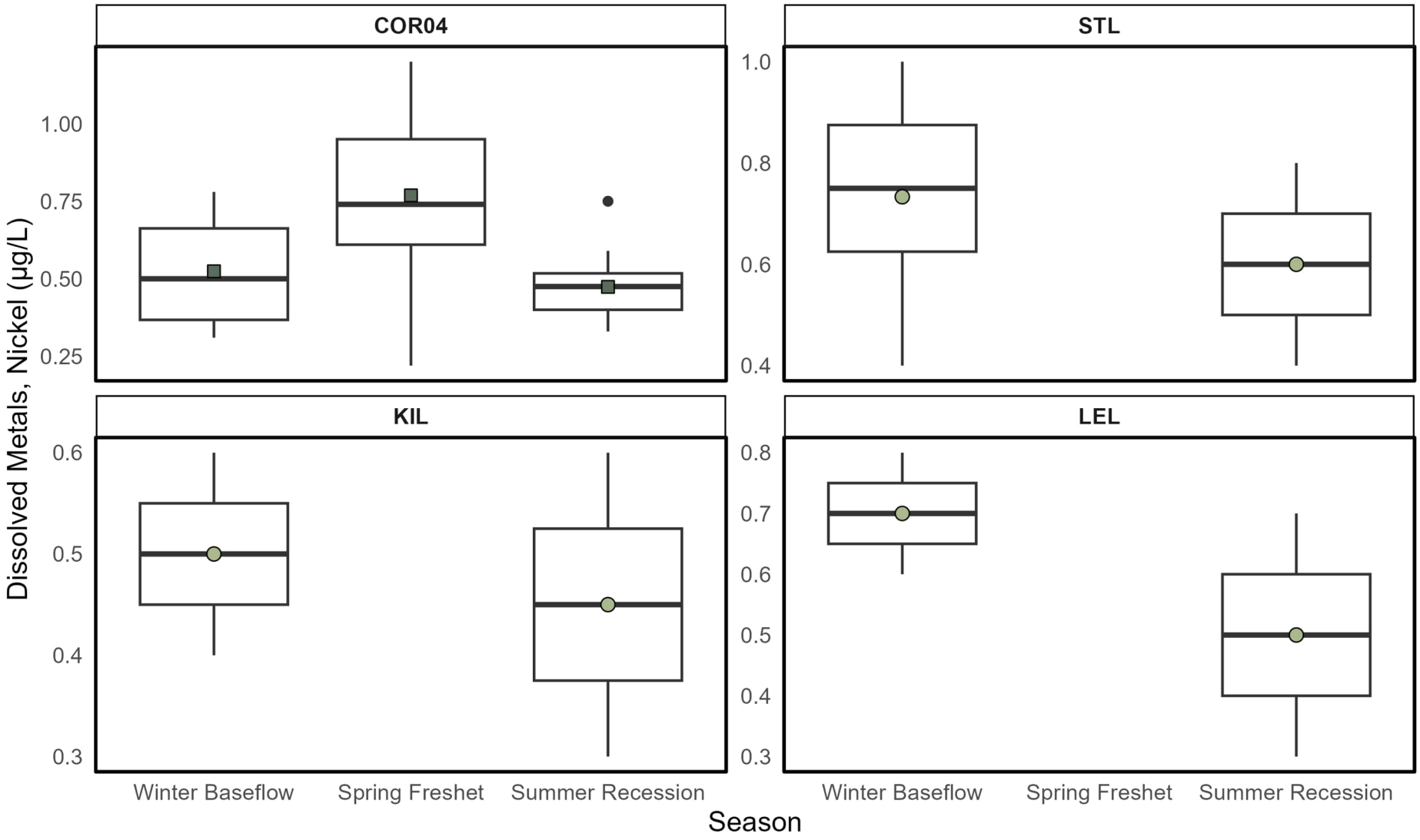
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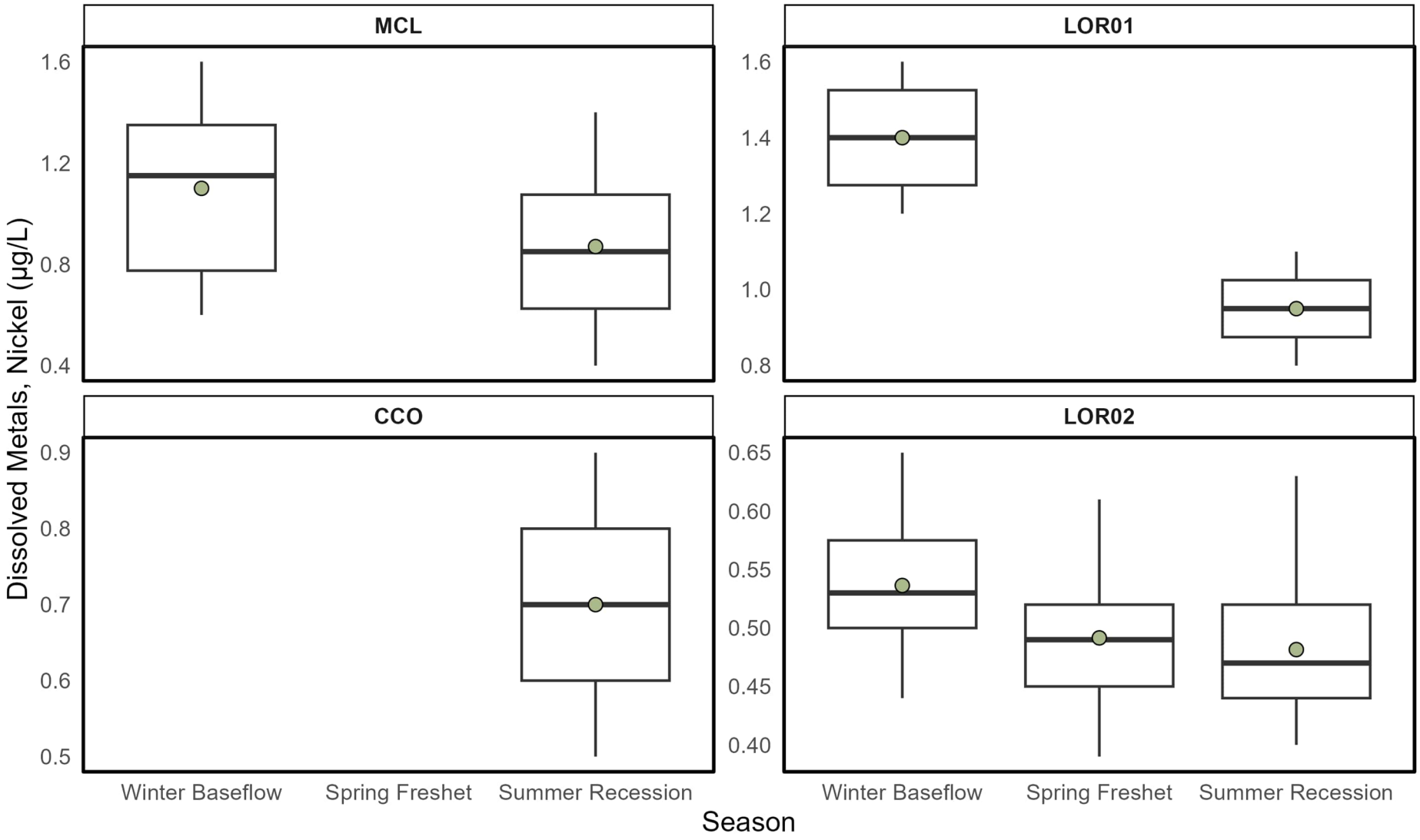
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FIGURE NO: **B.5.23**

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- Coppermine
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

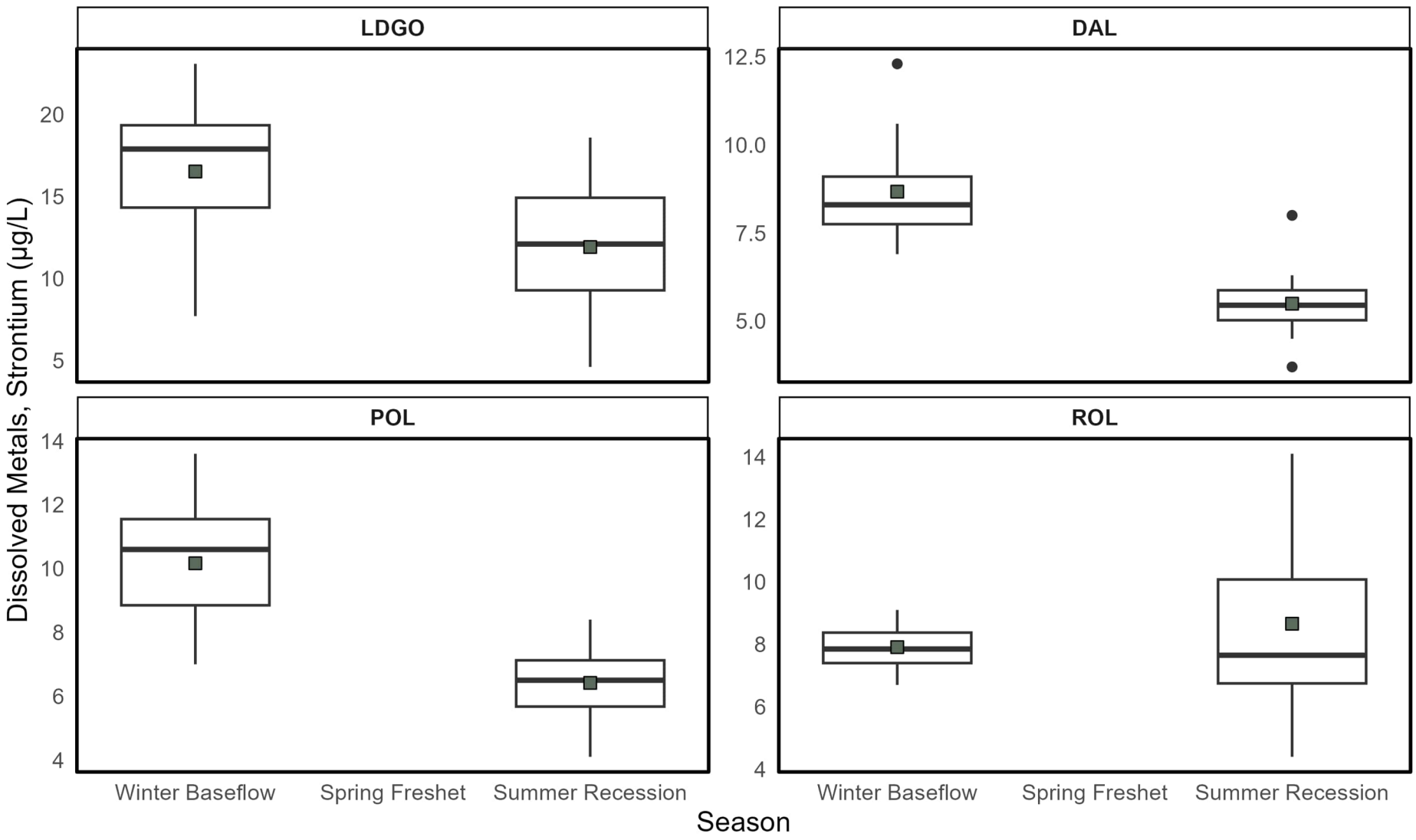
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FIGURE NO: **B.5.24**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

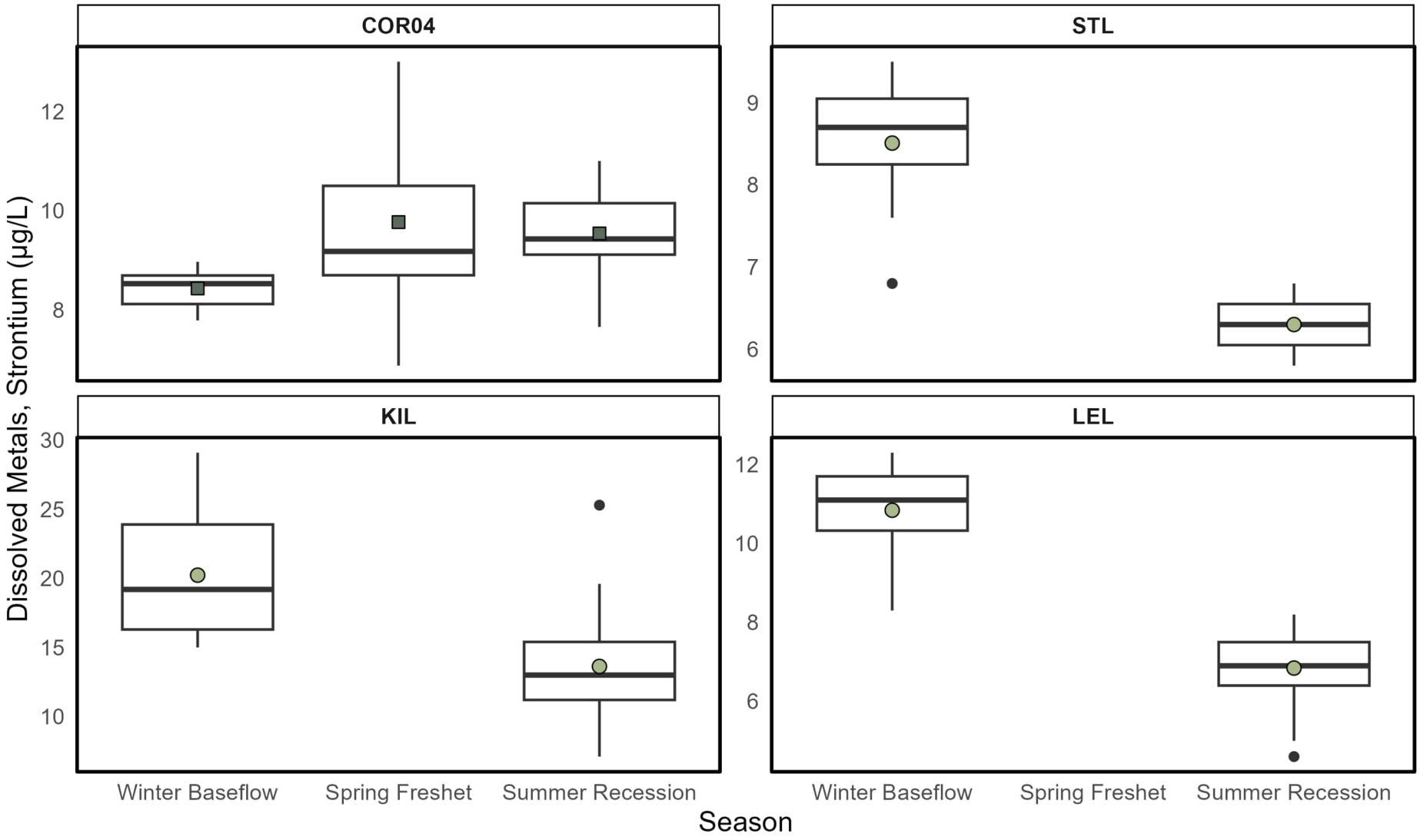
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FIGURE NO: **B.5.25**

DATE: February 20, 2026

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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

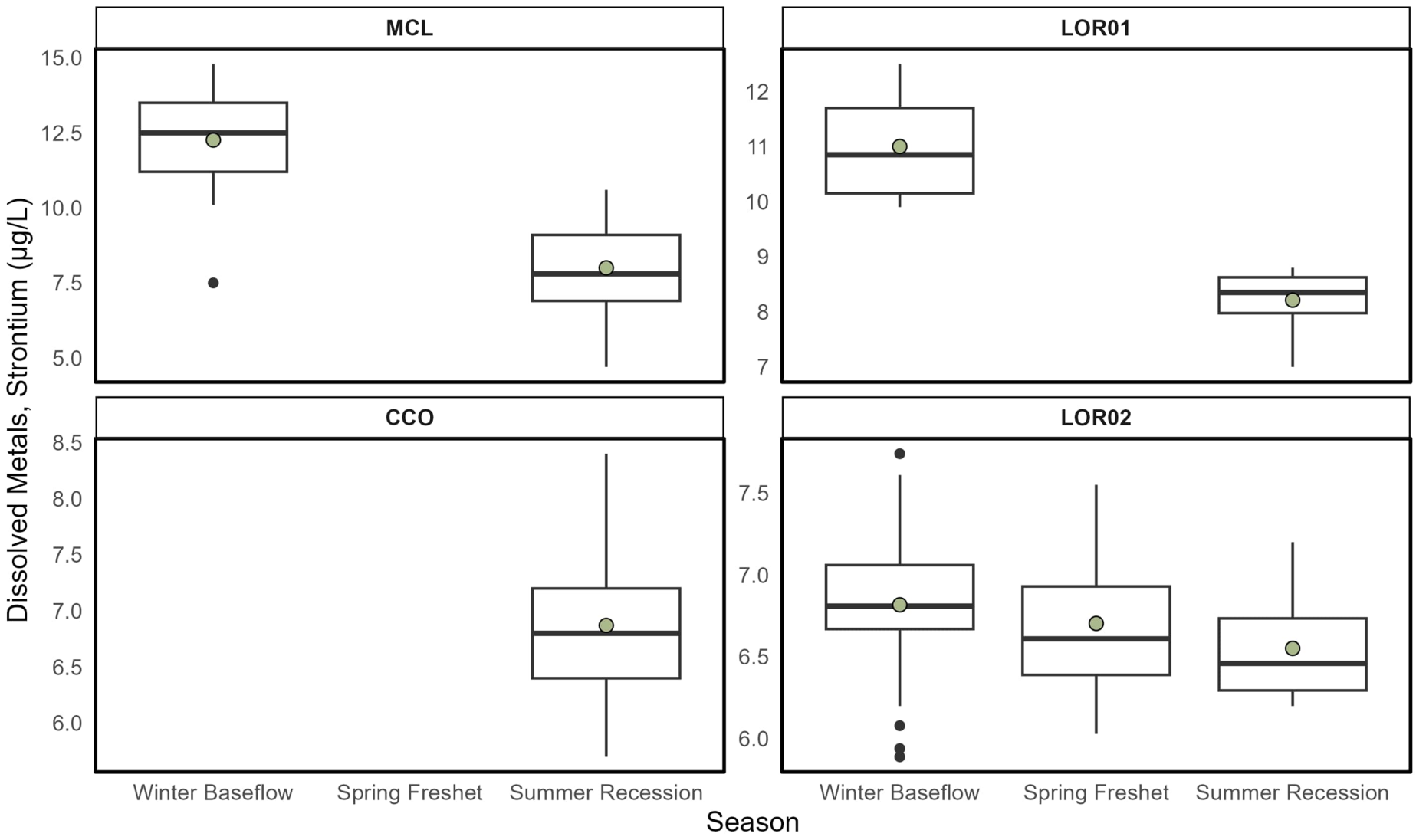
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FIGURE NO: **B.5.26**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

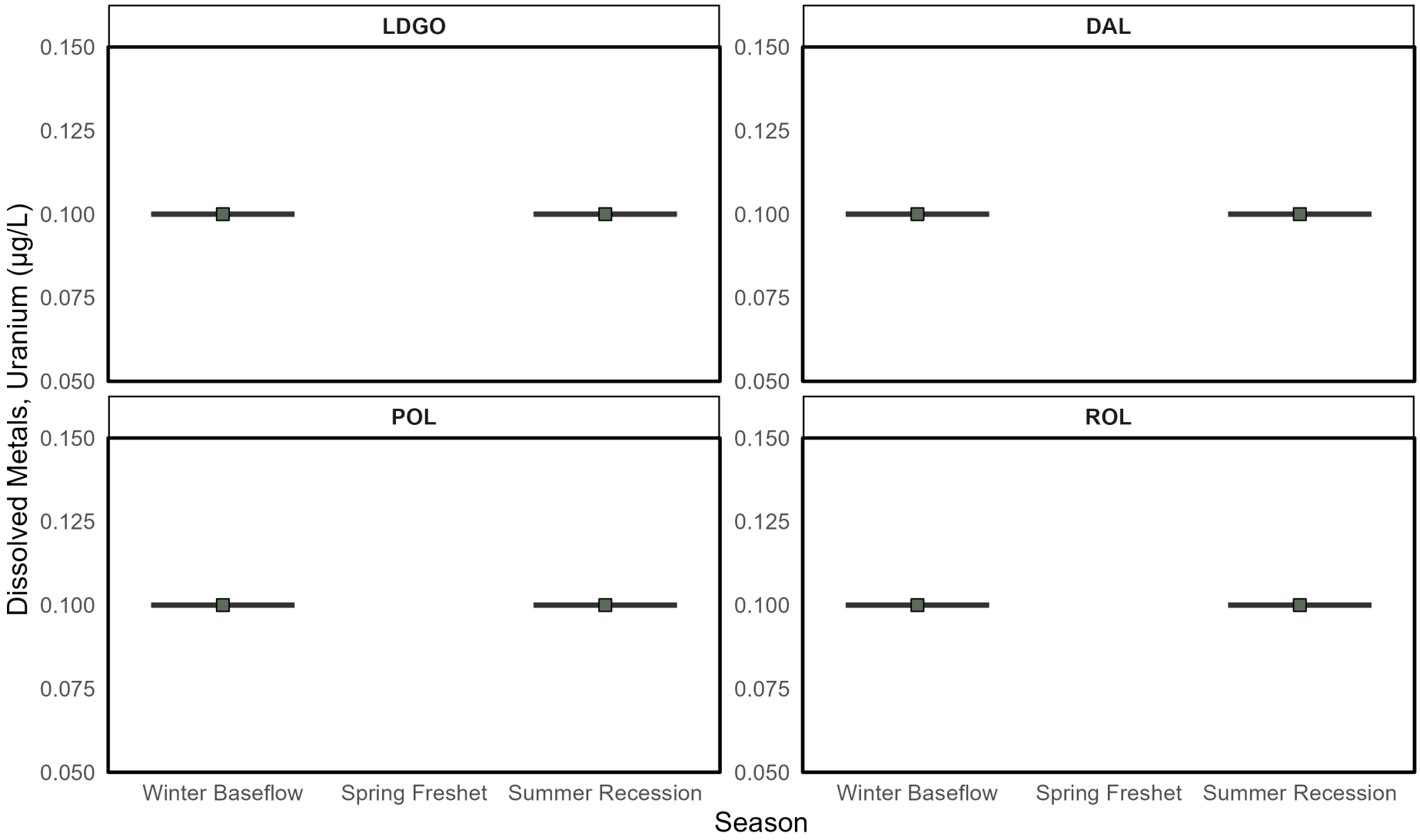
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FIGURE NO: **B.5.27**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

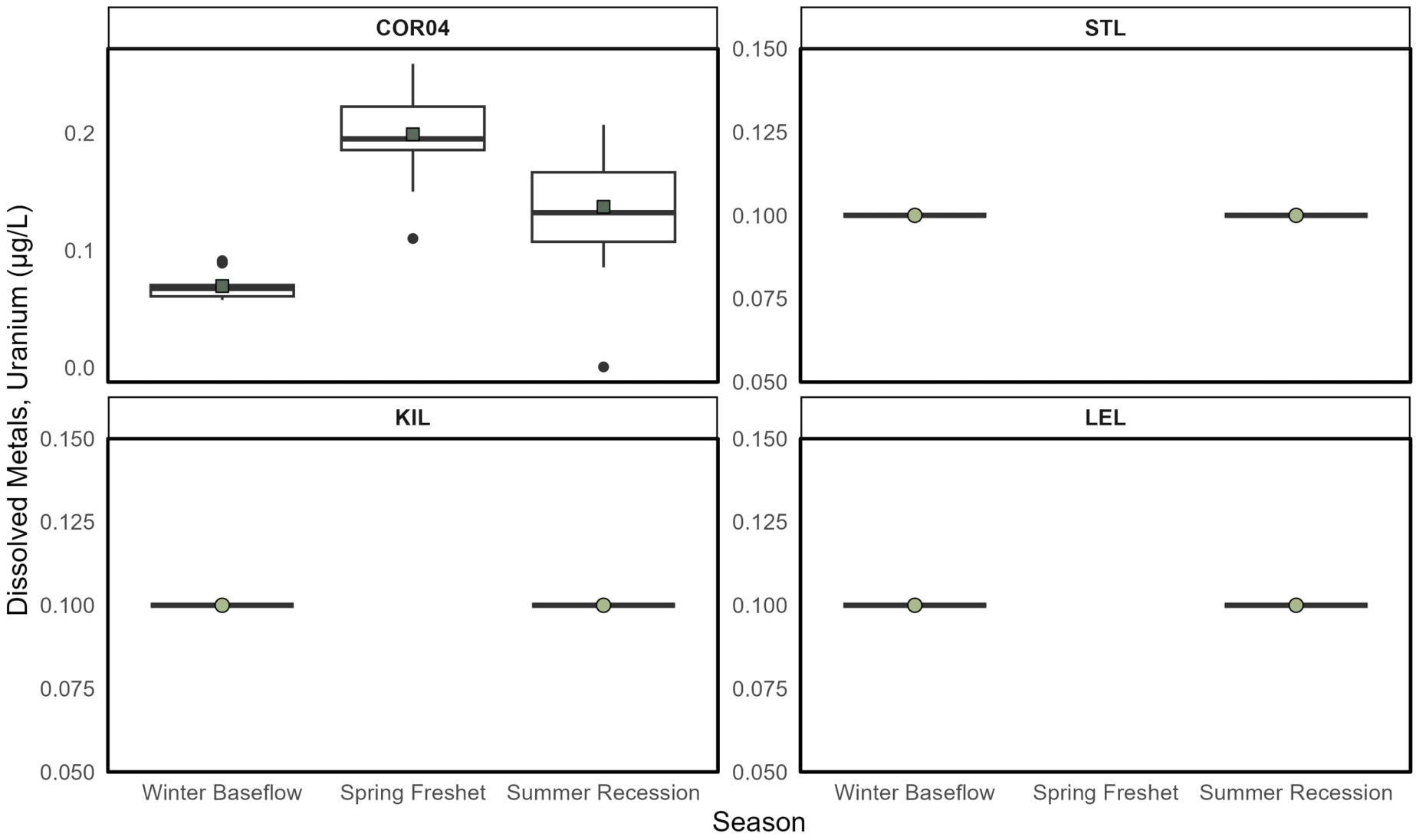
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FIGURE NO: **B.5.28**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

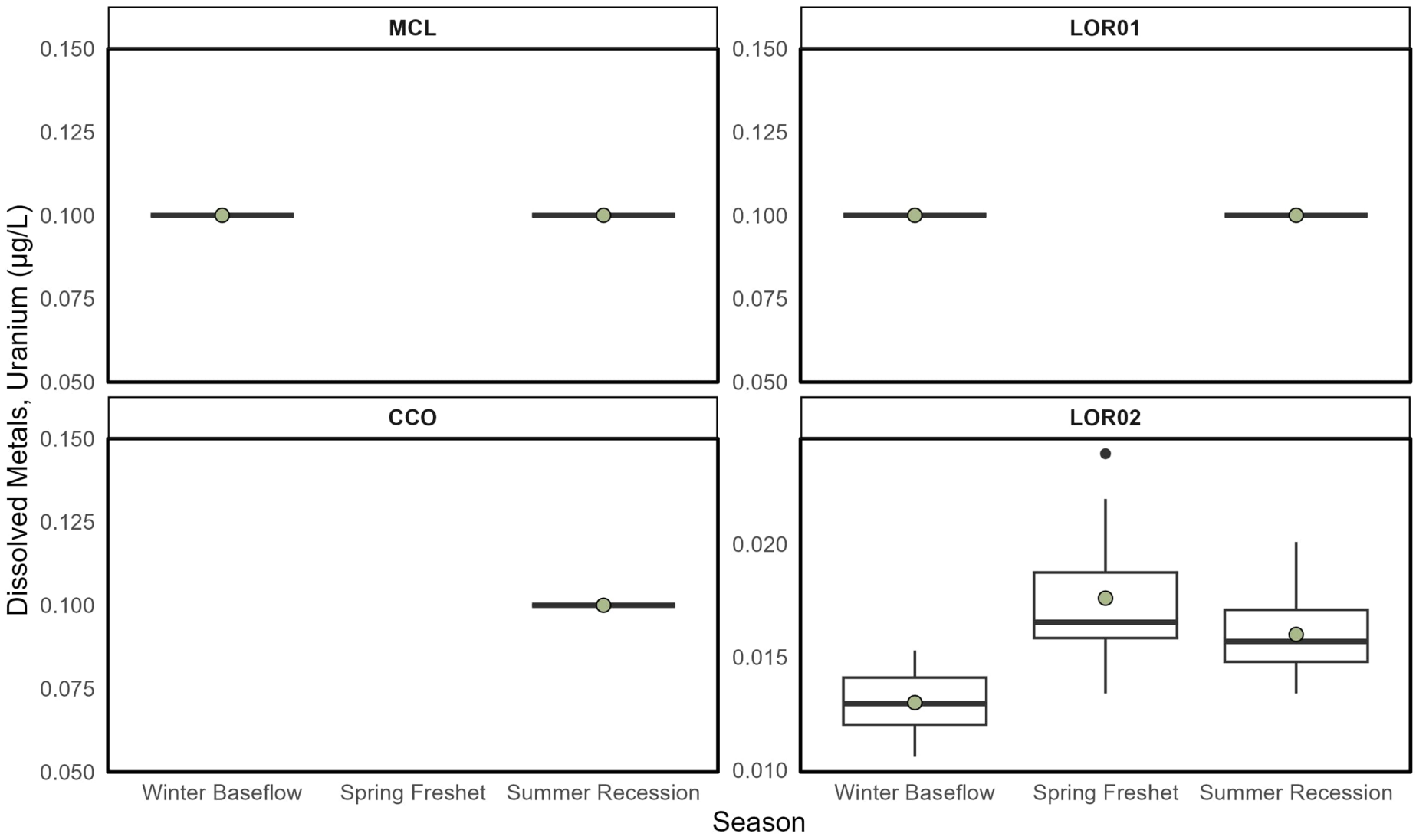
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FIGURE NO: **B.5.29**

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TITLE: **Water Quality Data**

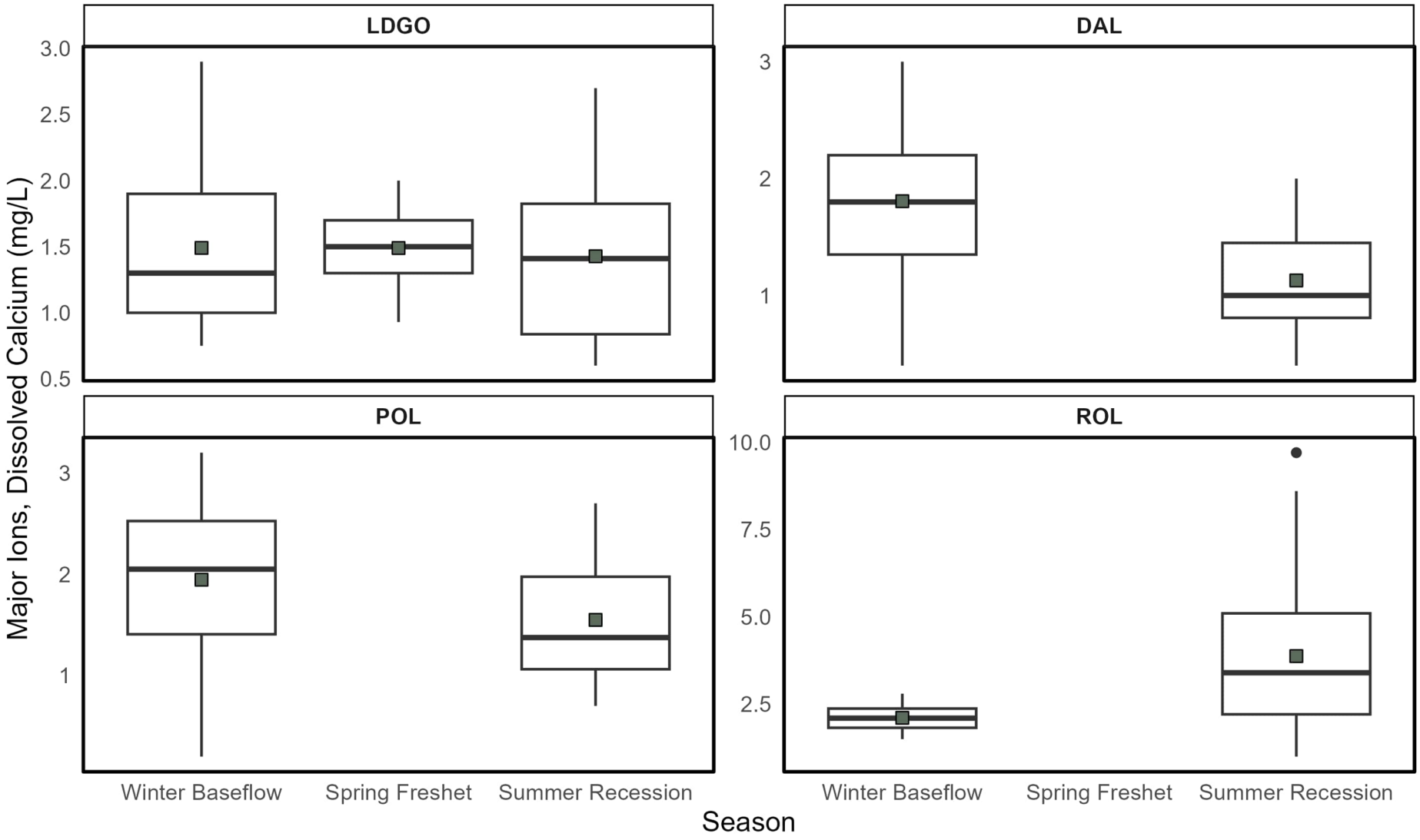
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FIGURE NO: **B.5.30**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

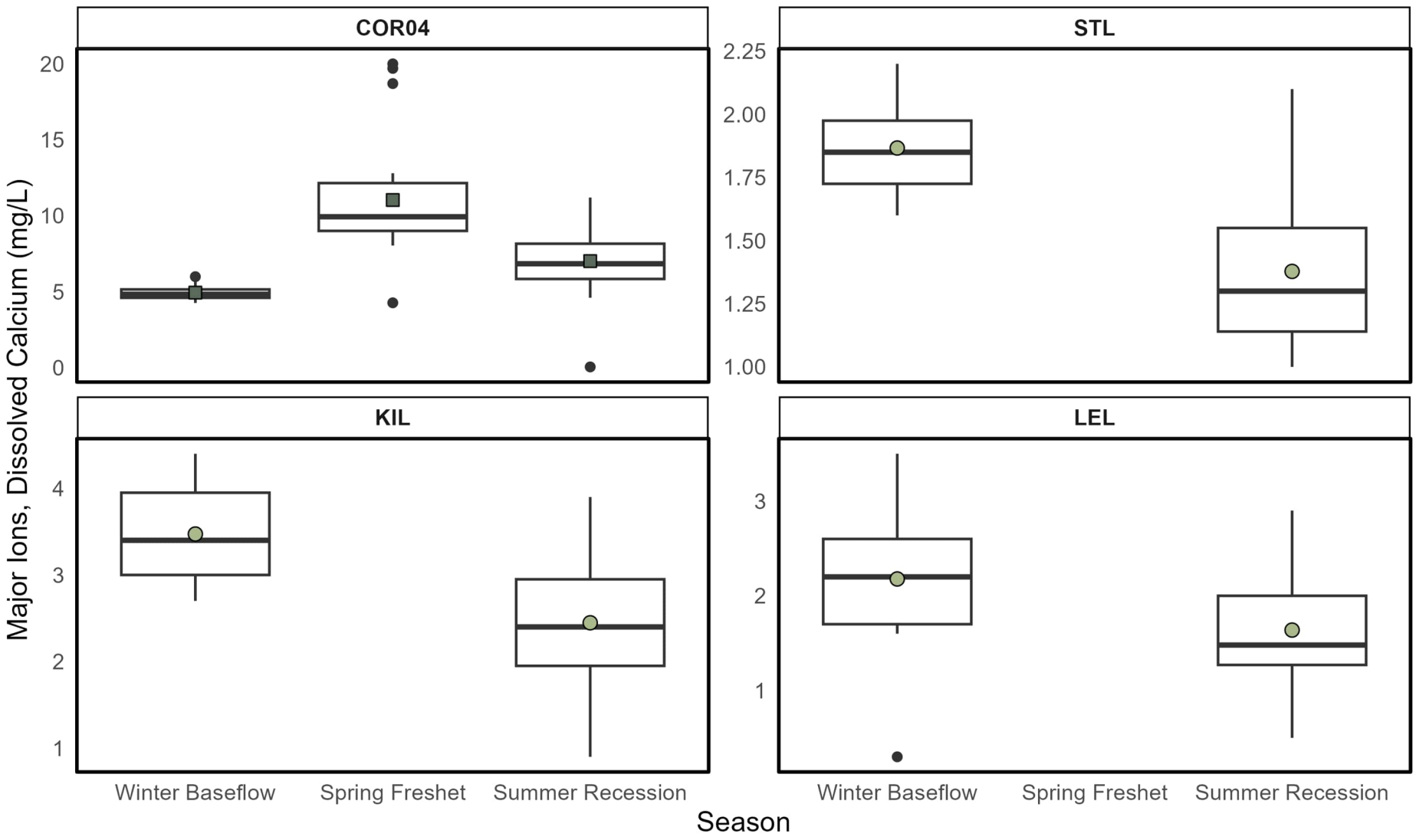
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FIGURE NO: **B.5.31**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

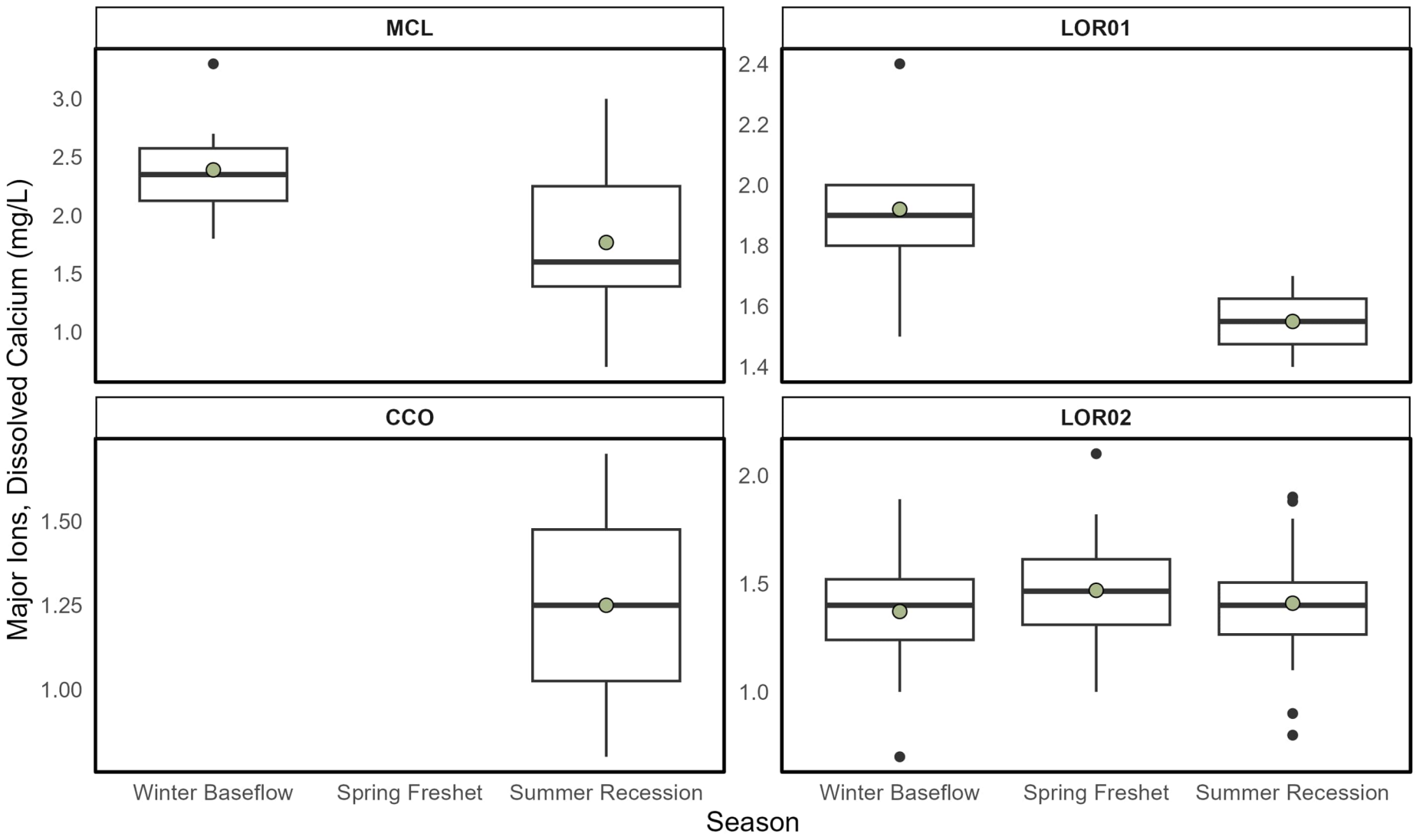
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FIGURE NO: **B.5.32**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

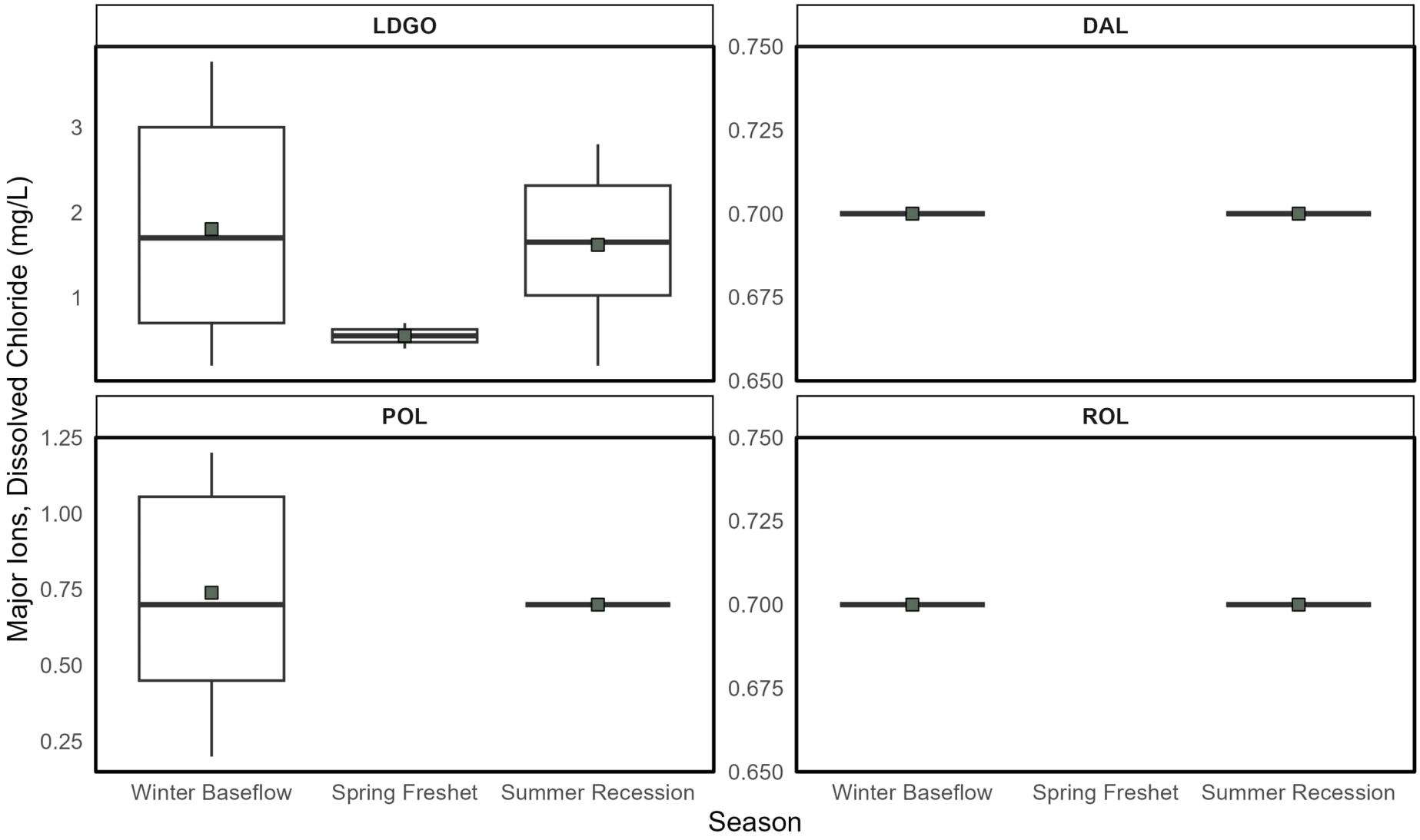
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FIGURE NO: **B.5.33**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

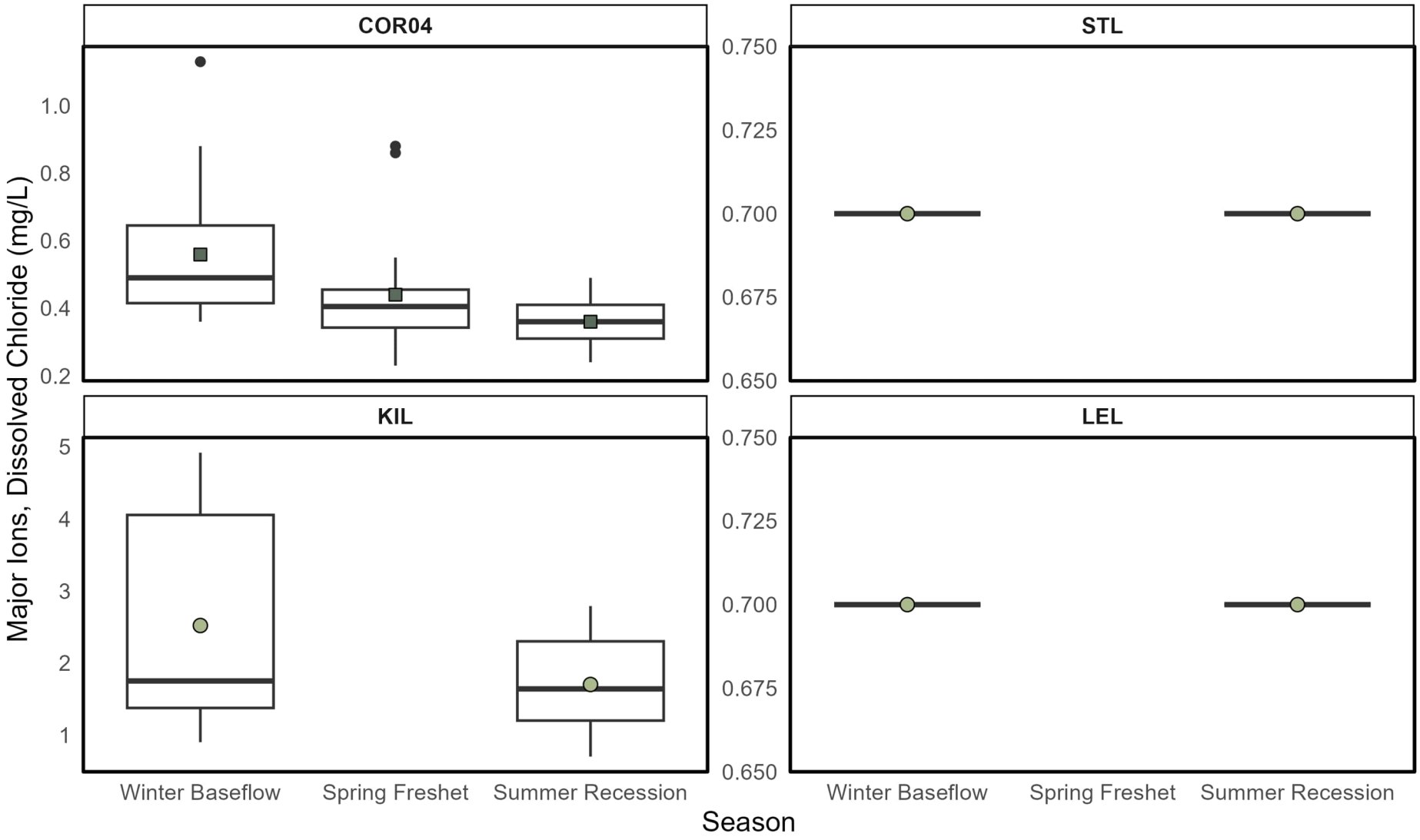
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FIGURE NO: **B.5.34**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

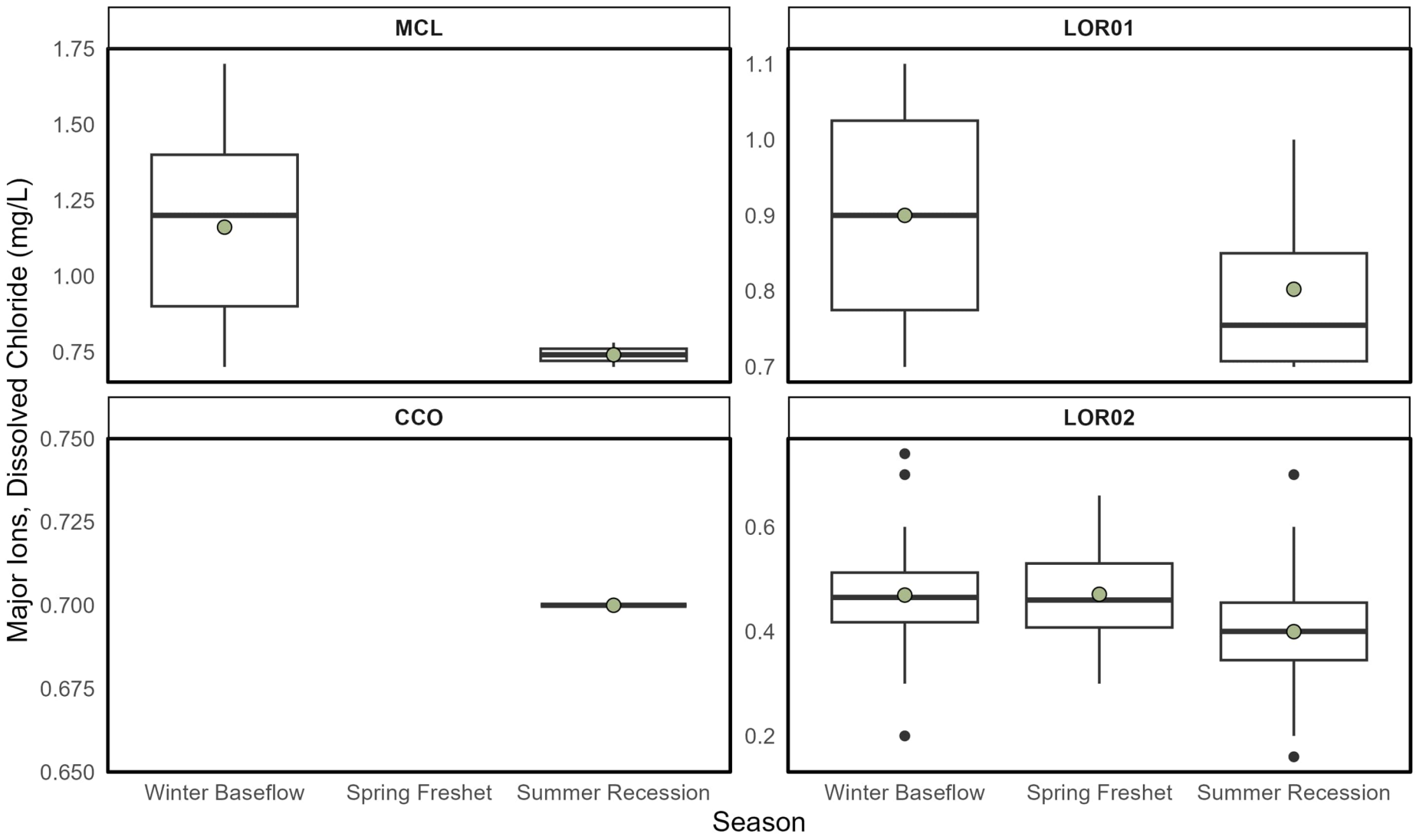
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FIGURE NO: **B.5.35**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

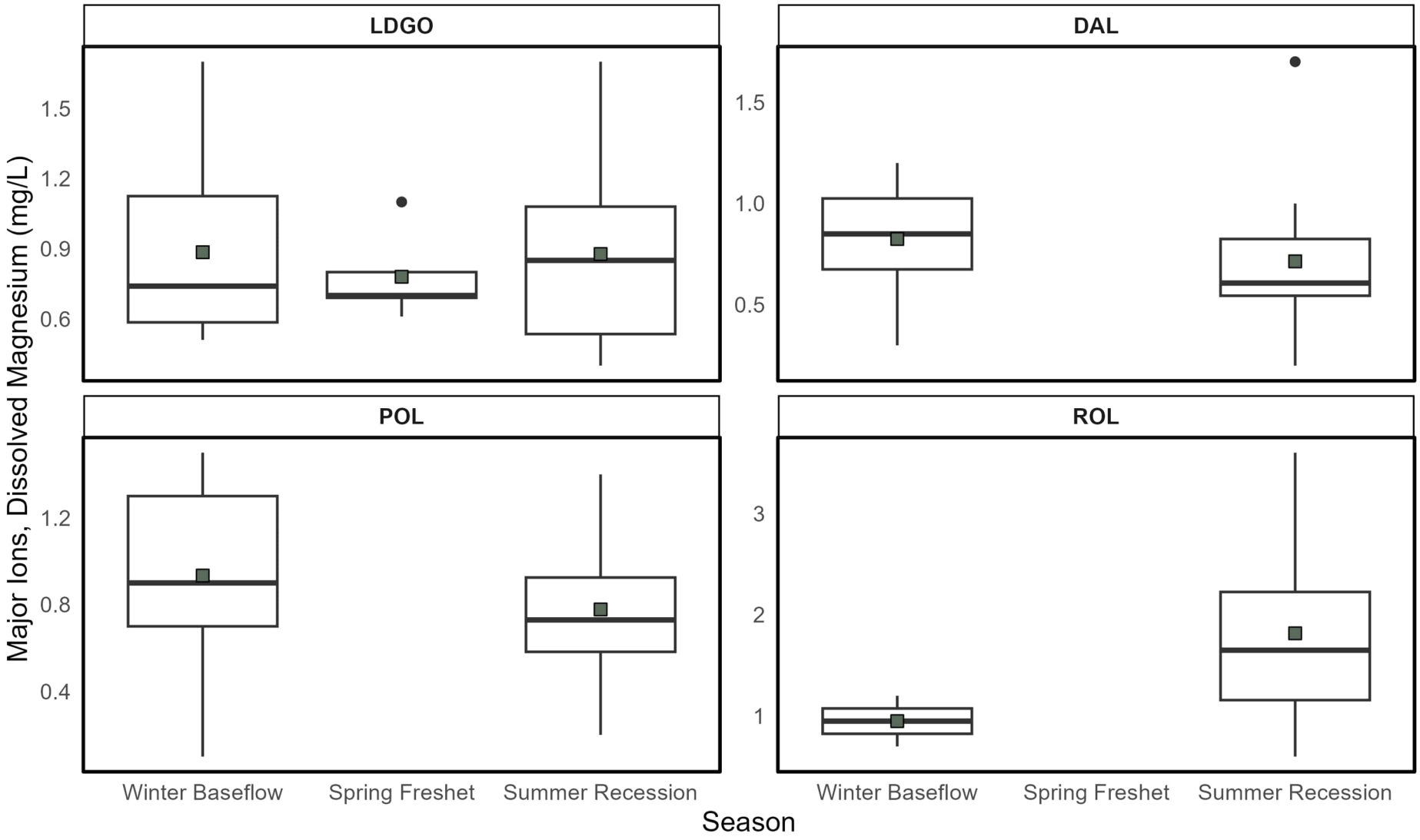
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FIGURE NO: **B.5.36**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

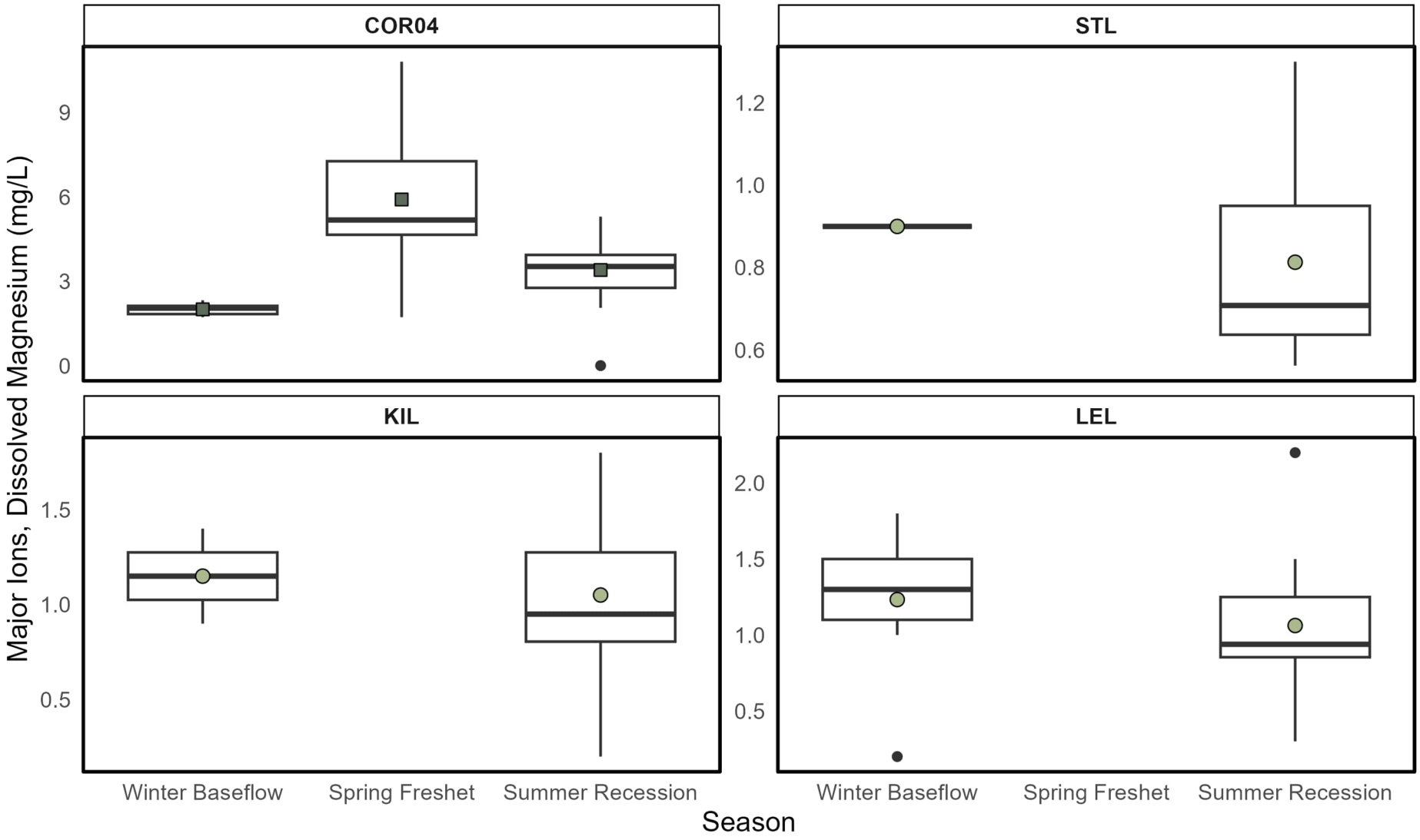
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FIGURE NO: **B.5.37**

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TITLE: **Water Quality Data**

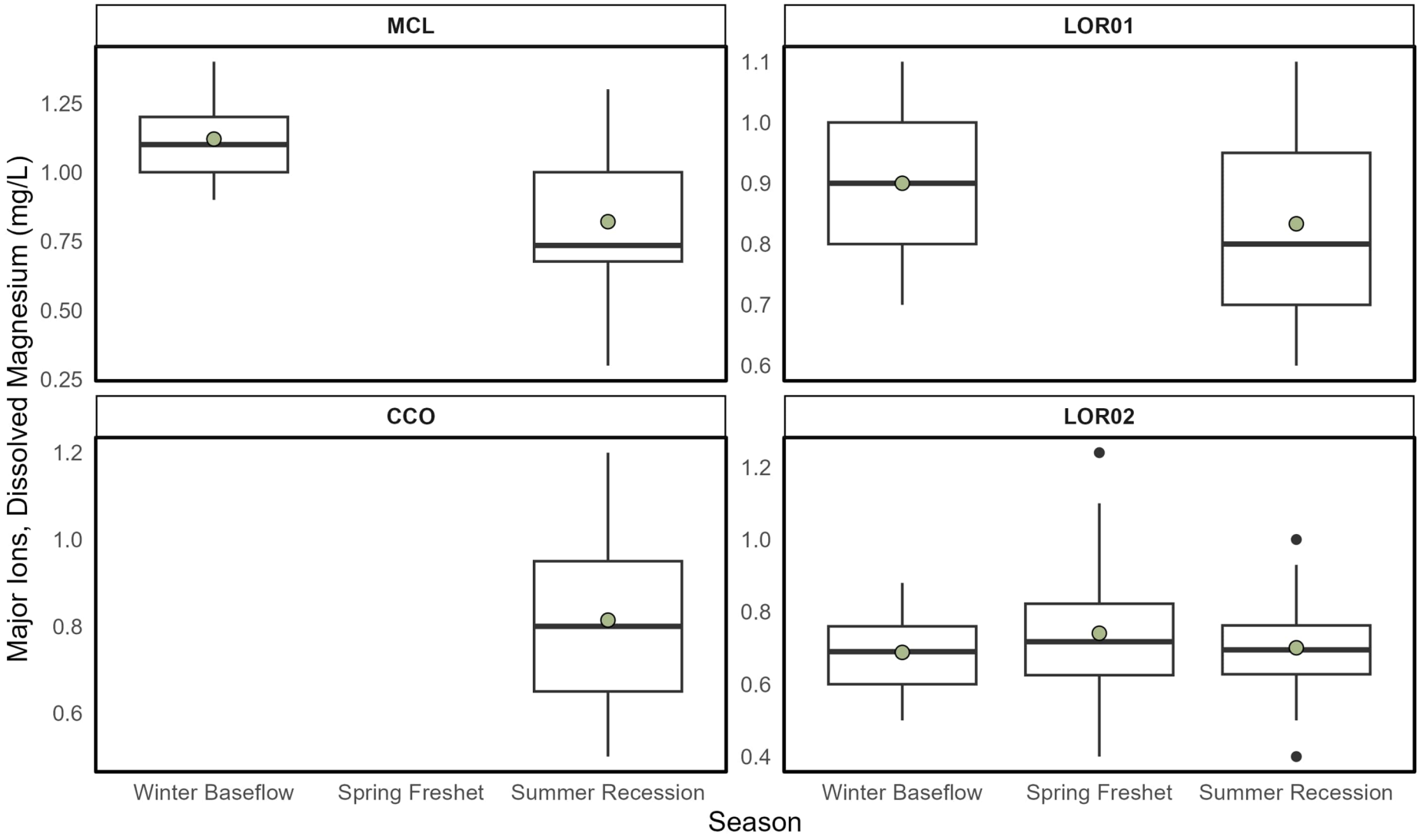
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FIGURE NO: **B.5.38**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

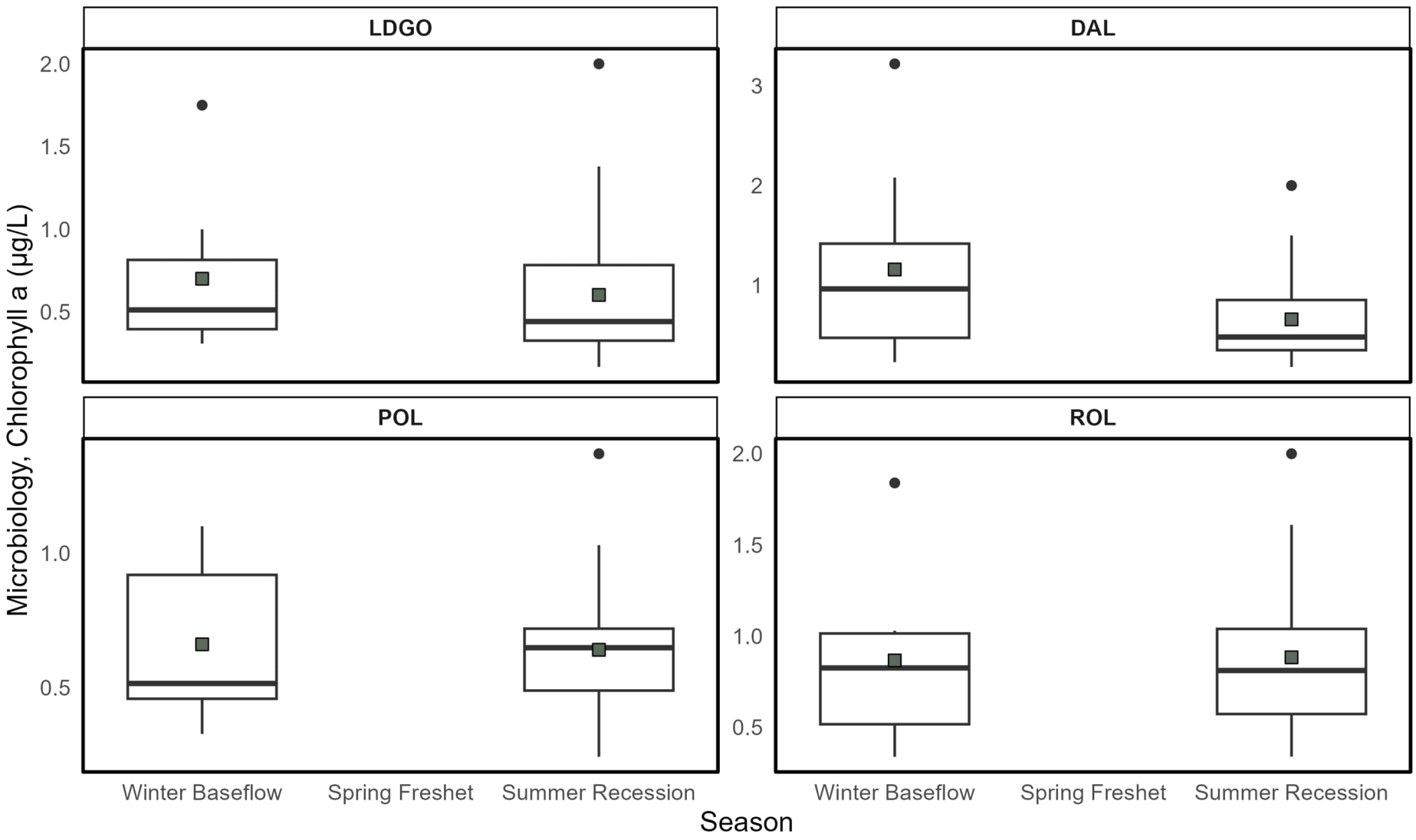
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FIGURE NO: **B.5.39**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

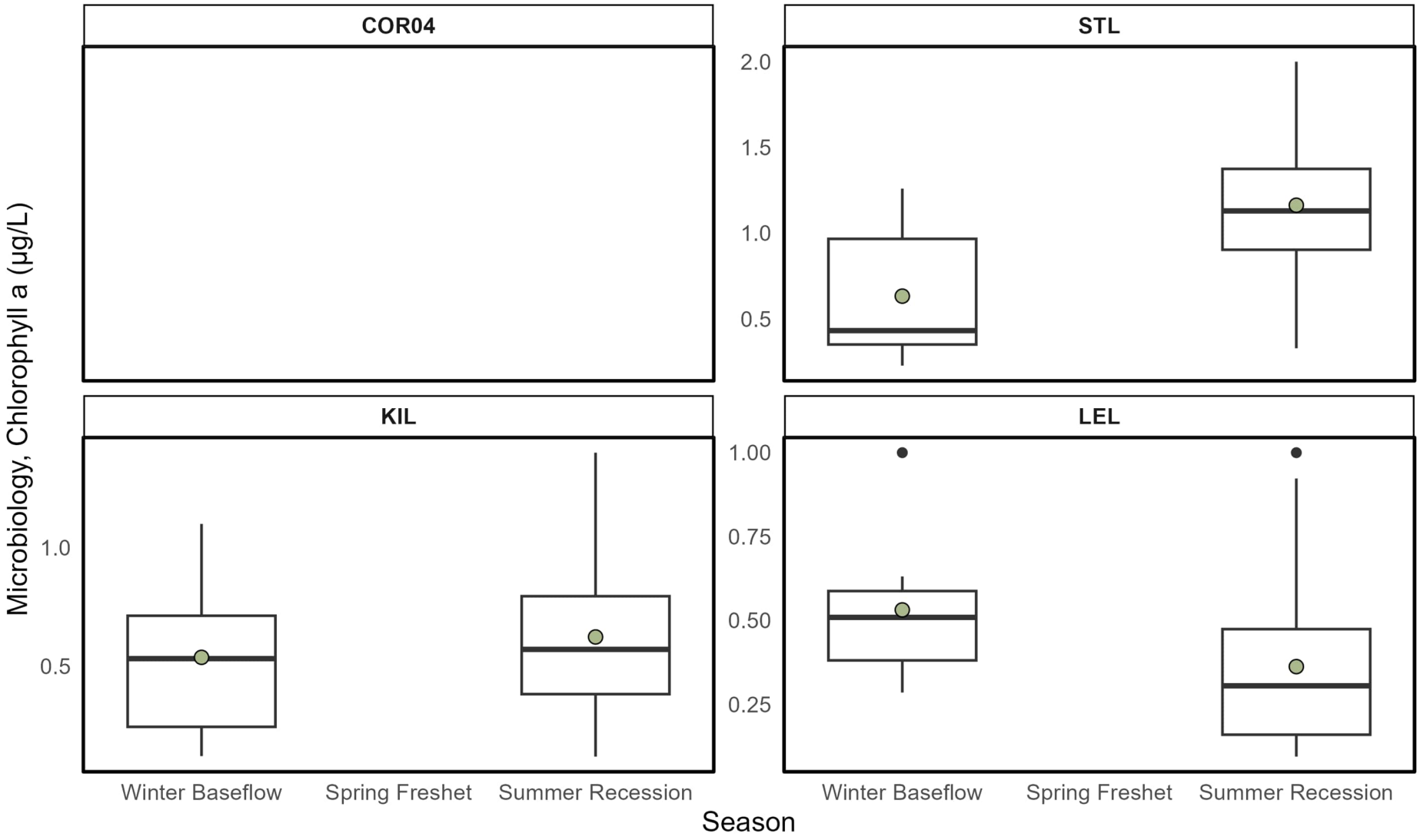
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FIGURE NO: **B.5.40**

DATE: February 20, 2026

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TITLE: **Water Quality Data**

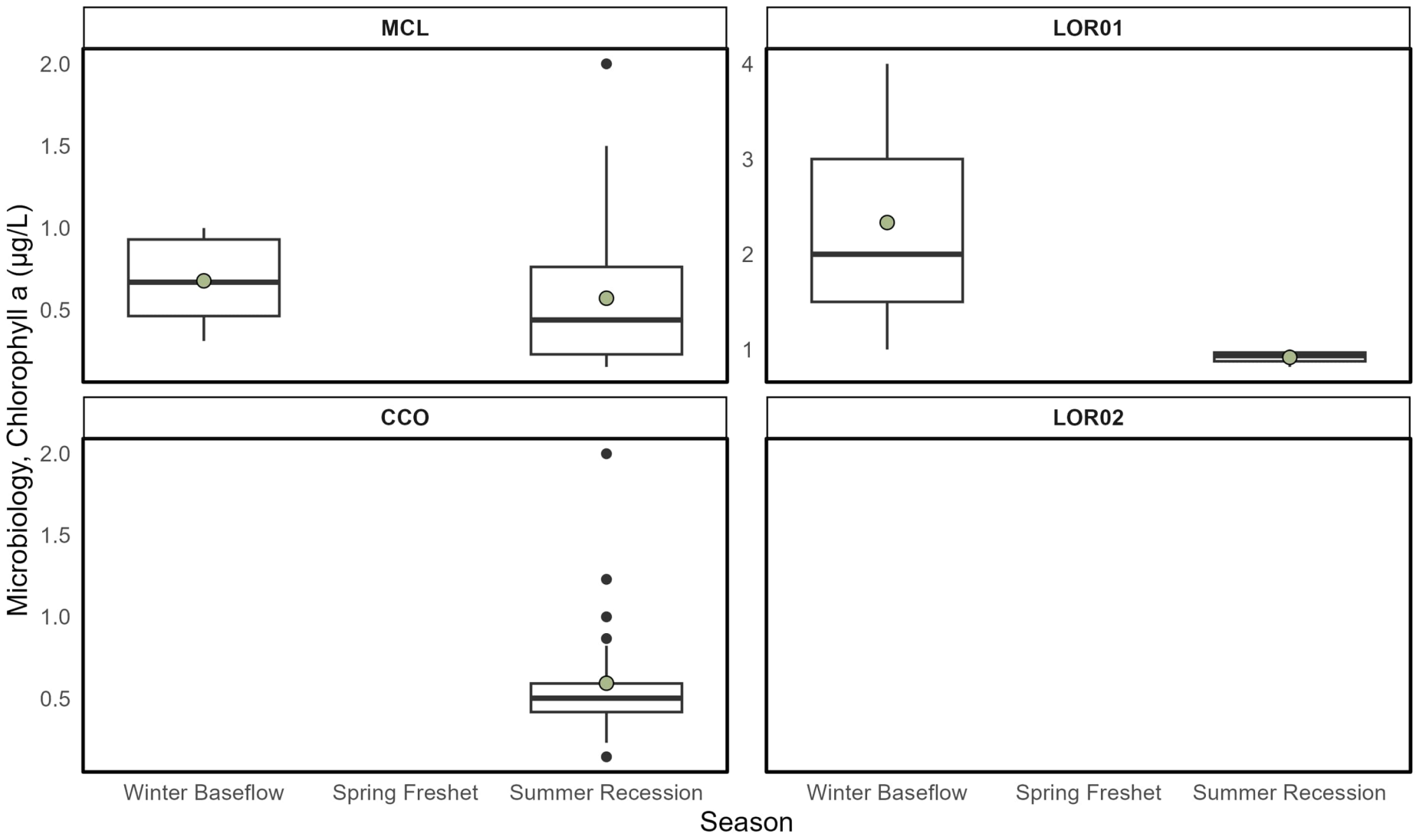
SLR

FIGURE NO: **B.5.41**

DATE: February 20, 2026

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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

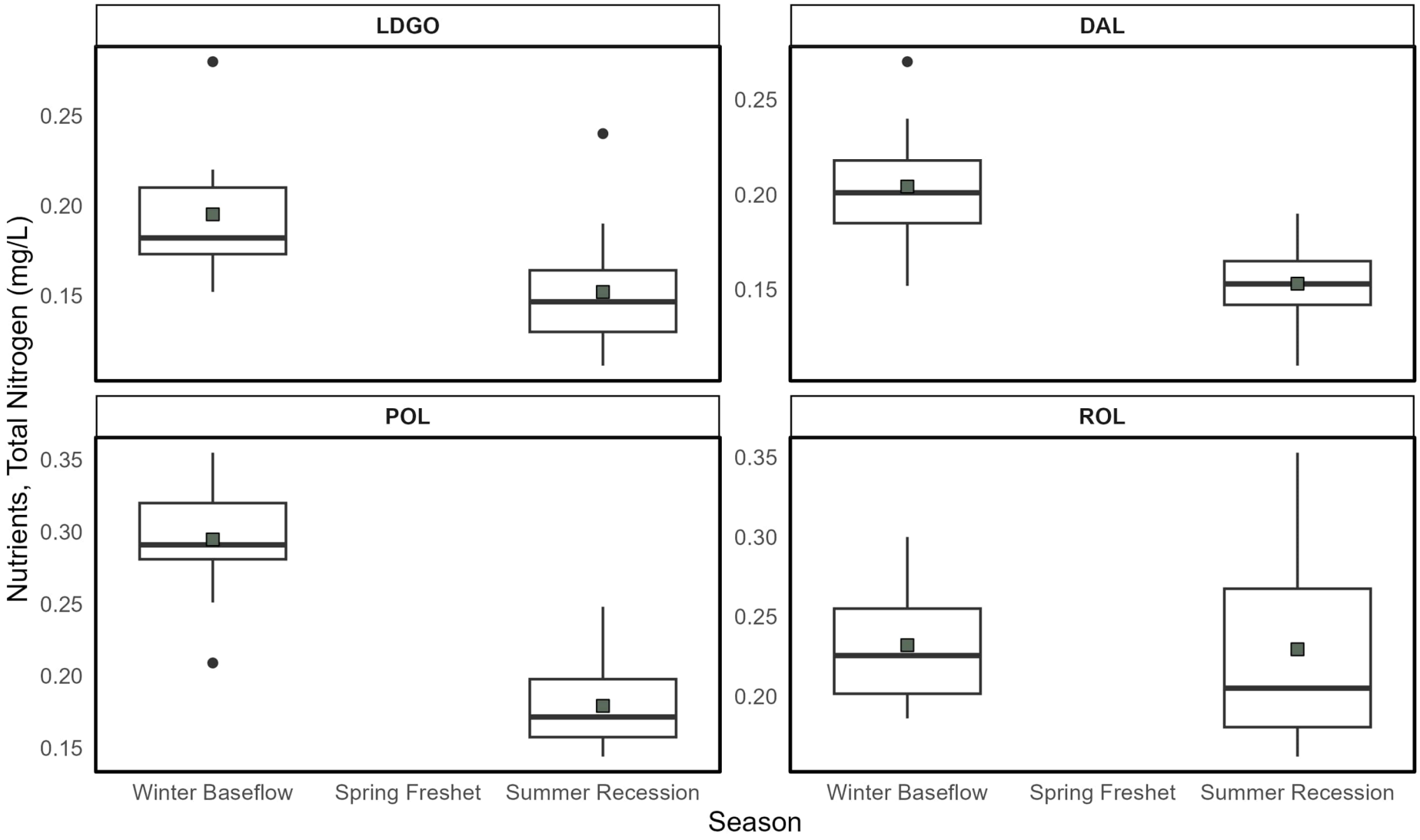
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FIGURE NO: **B.5.42**

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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

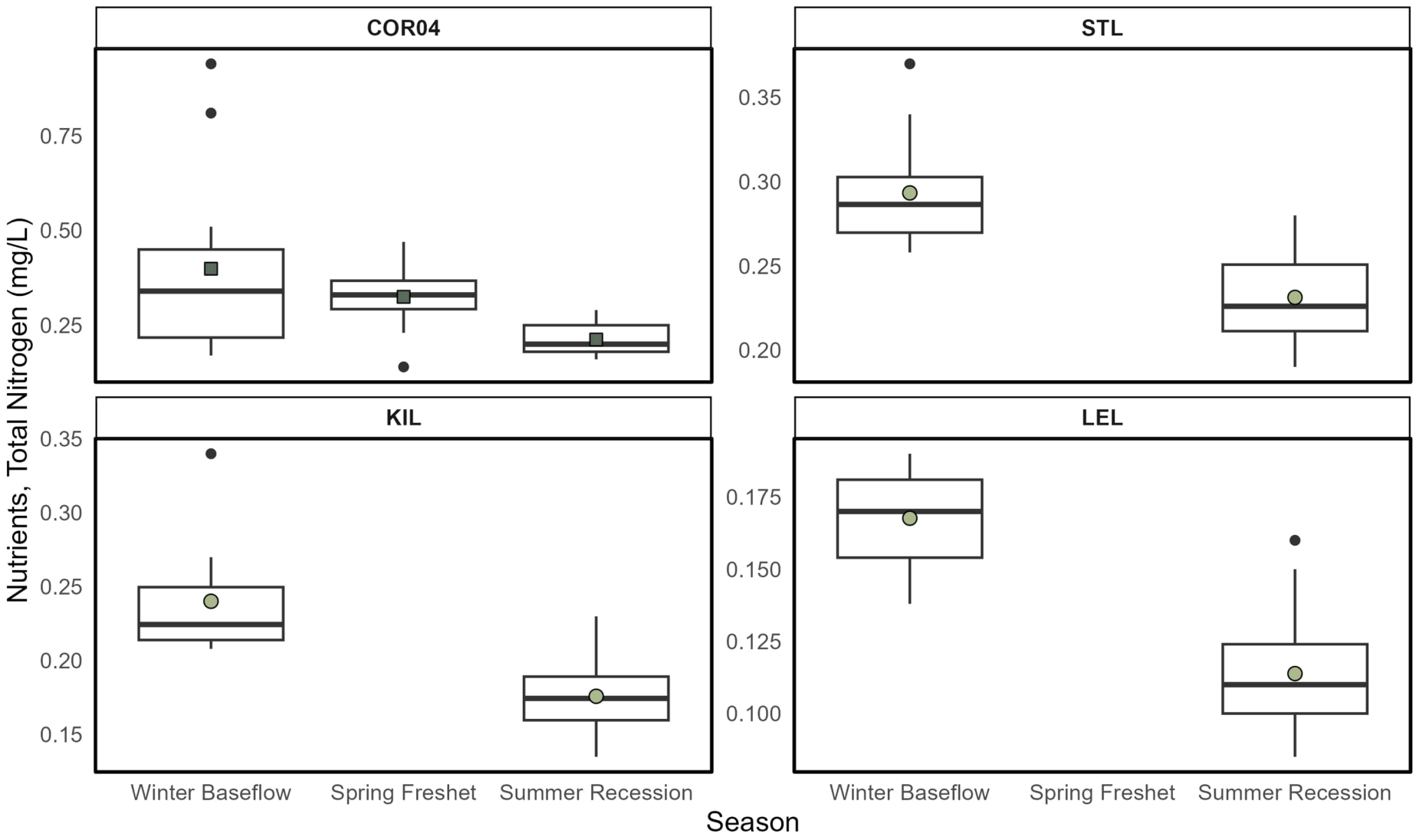
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FIGURE NO: **B.5.43**

DATE: February 20, 2026

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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

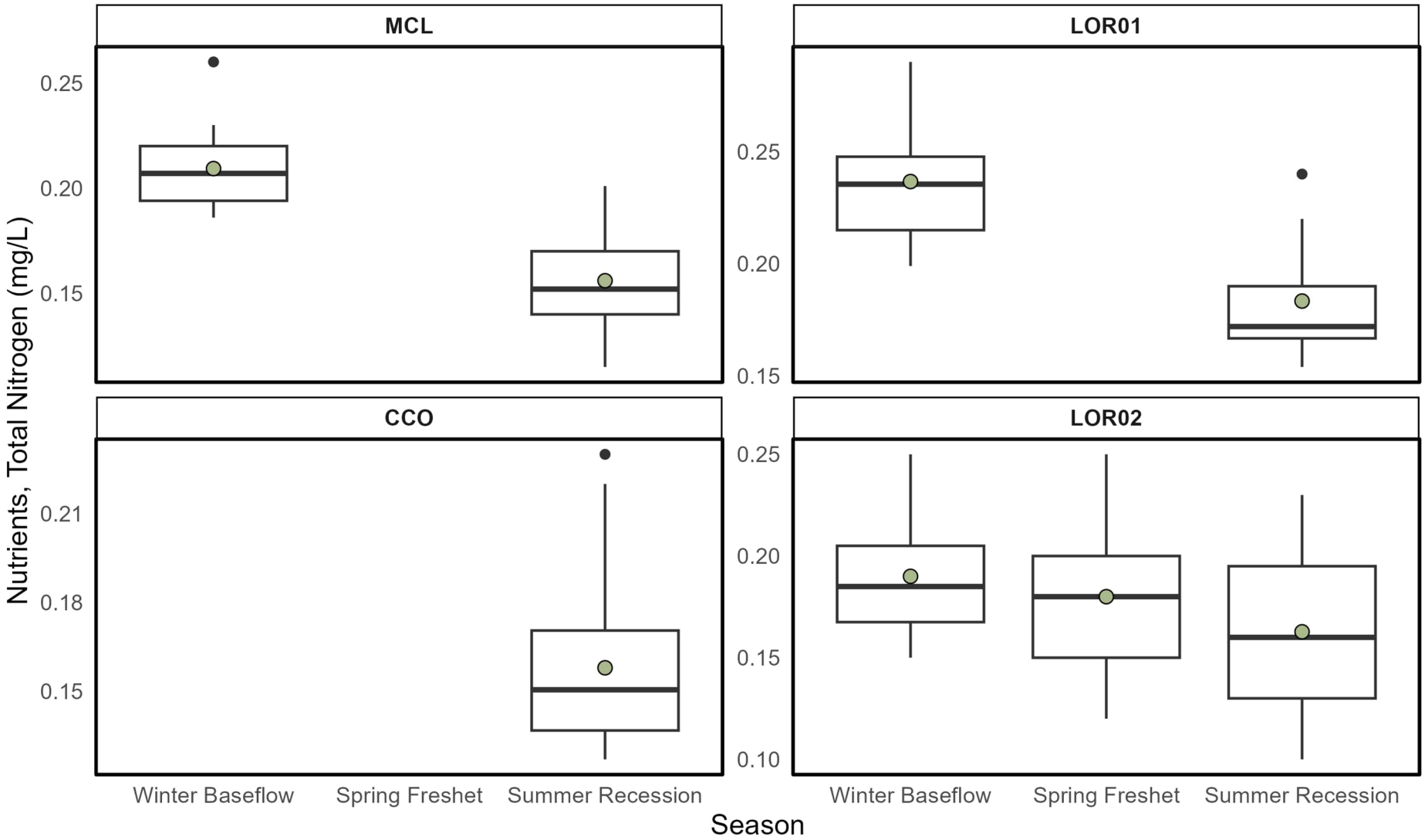
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FIGURE NO: **B.5.44**

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TITLE: **Water Quality Data**

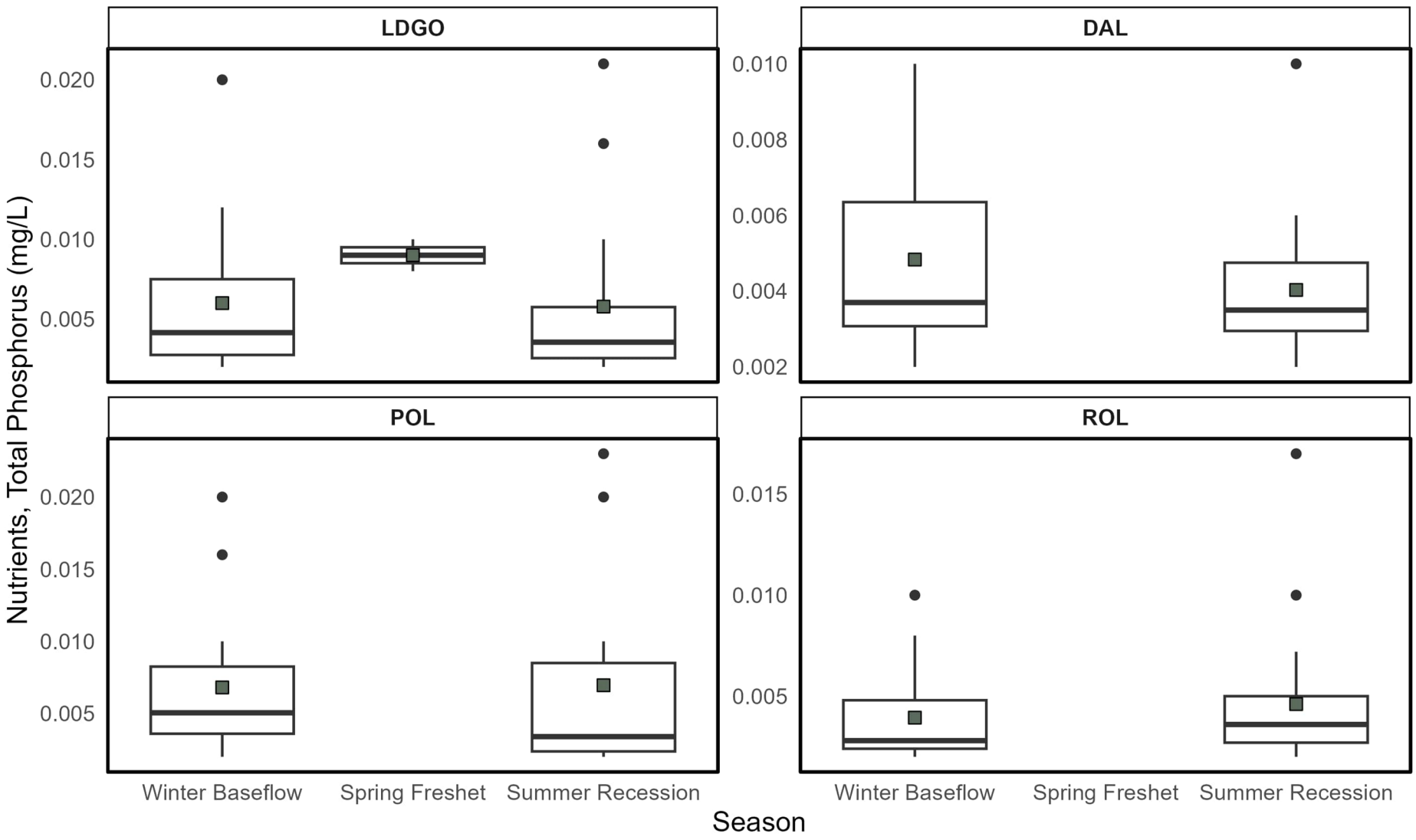
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FIGURE NO: **B.5.45**

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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

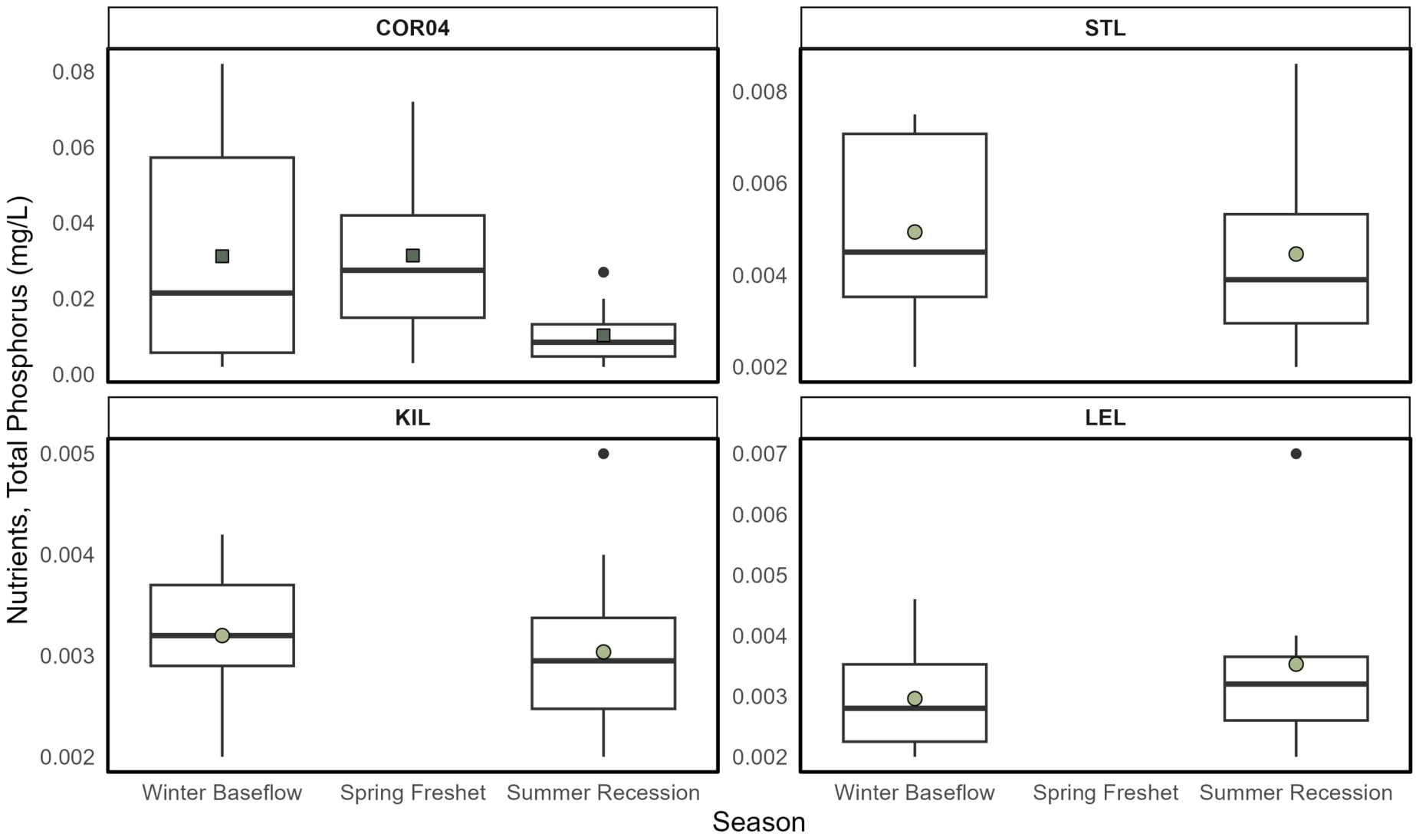
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FIGURE NO: **B.5.46**

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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

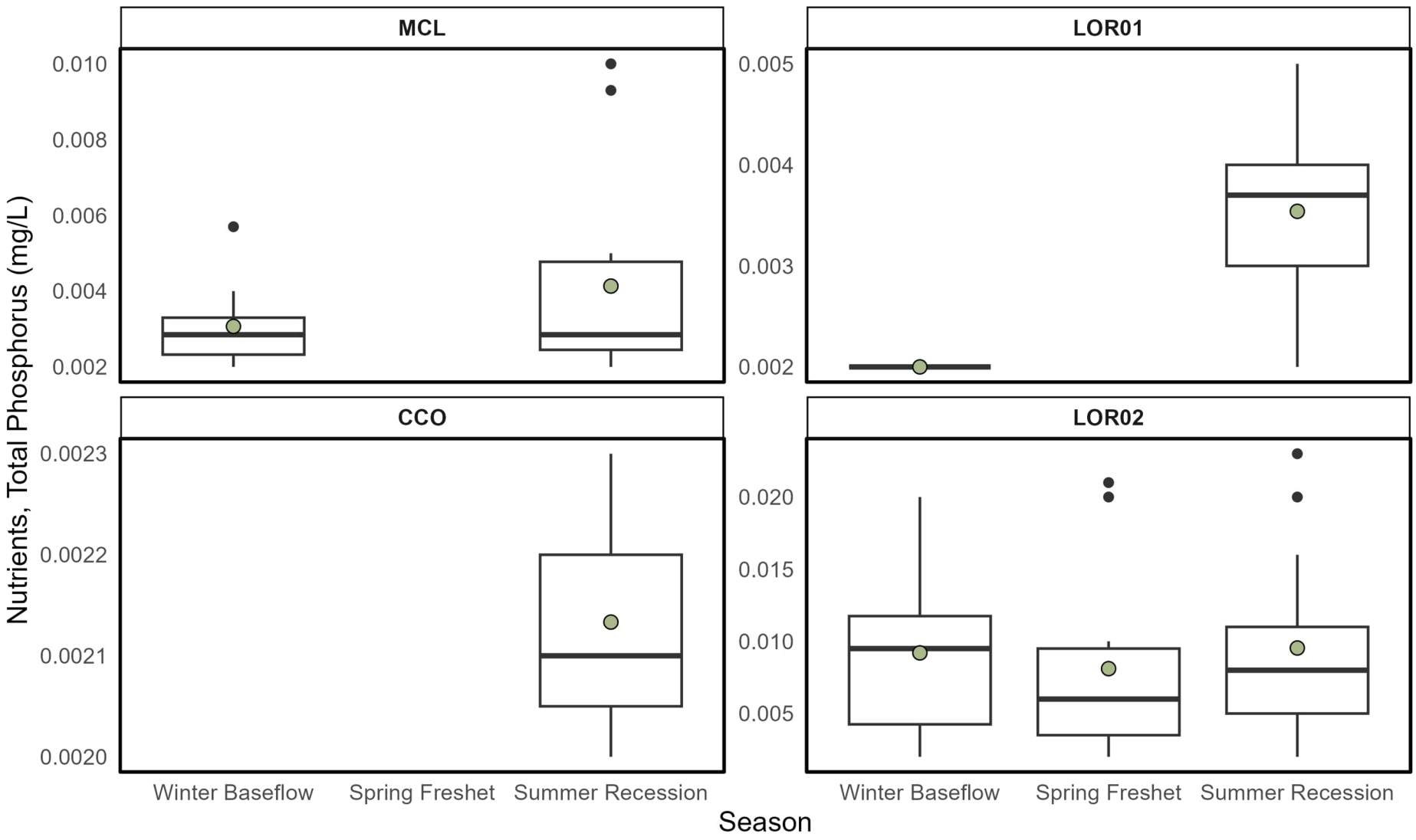
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FIGURE NO: **B.5.47**

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PROJECT NO: 205.030233.00001

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TITLE: **Water Quality Data**

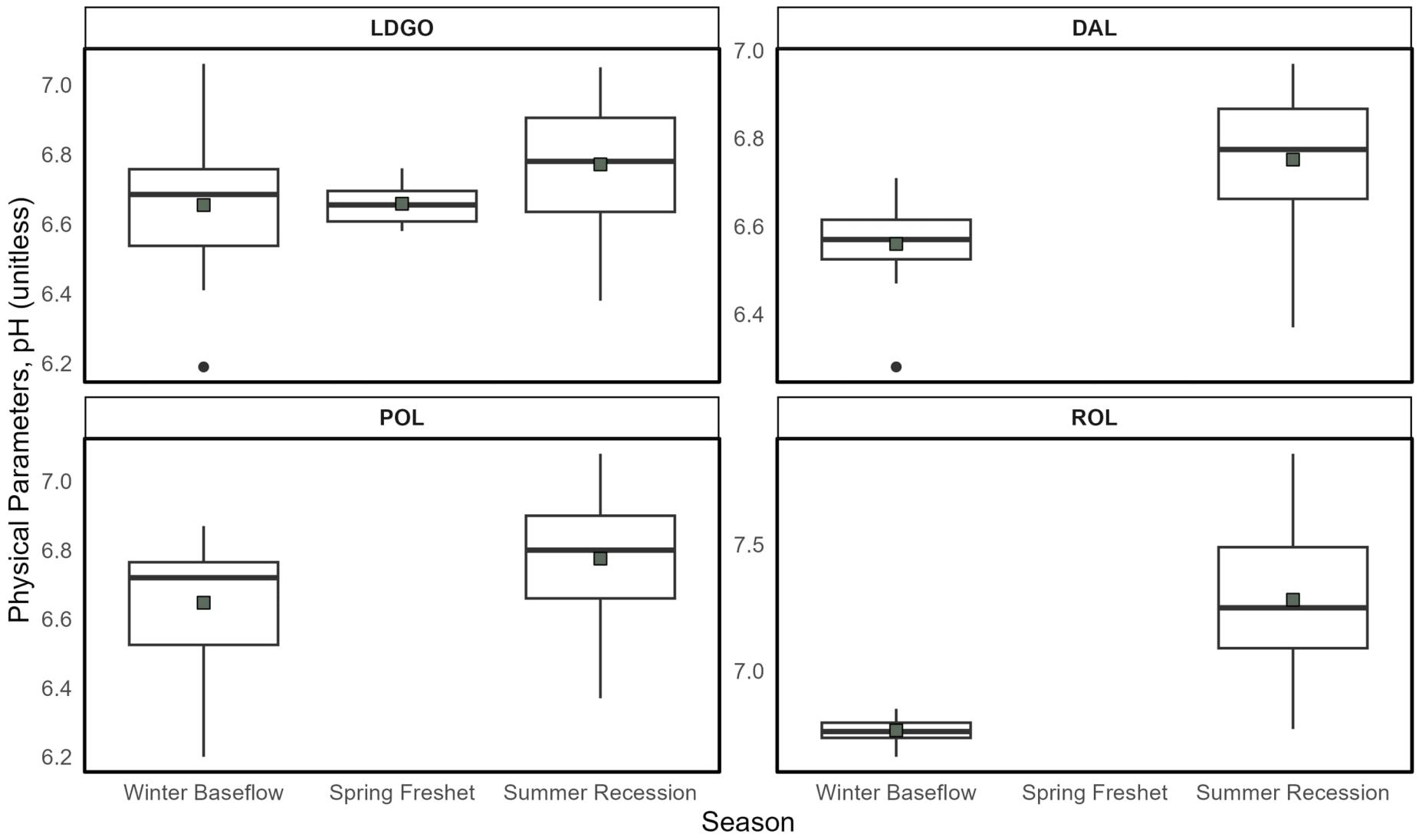
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FIGURE NO: **B.5.48**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

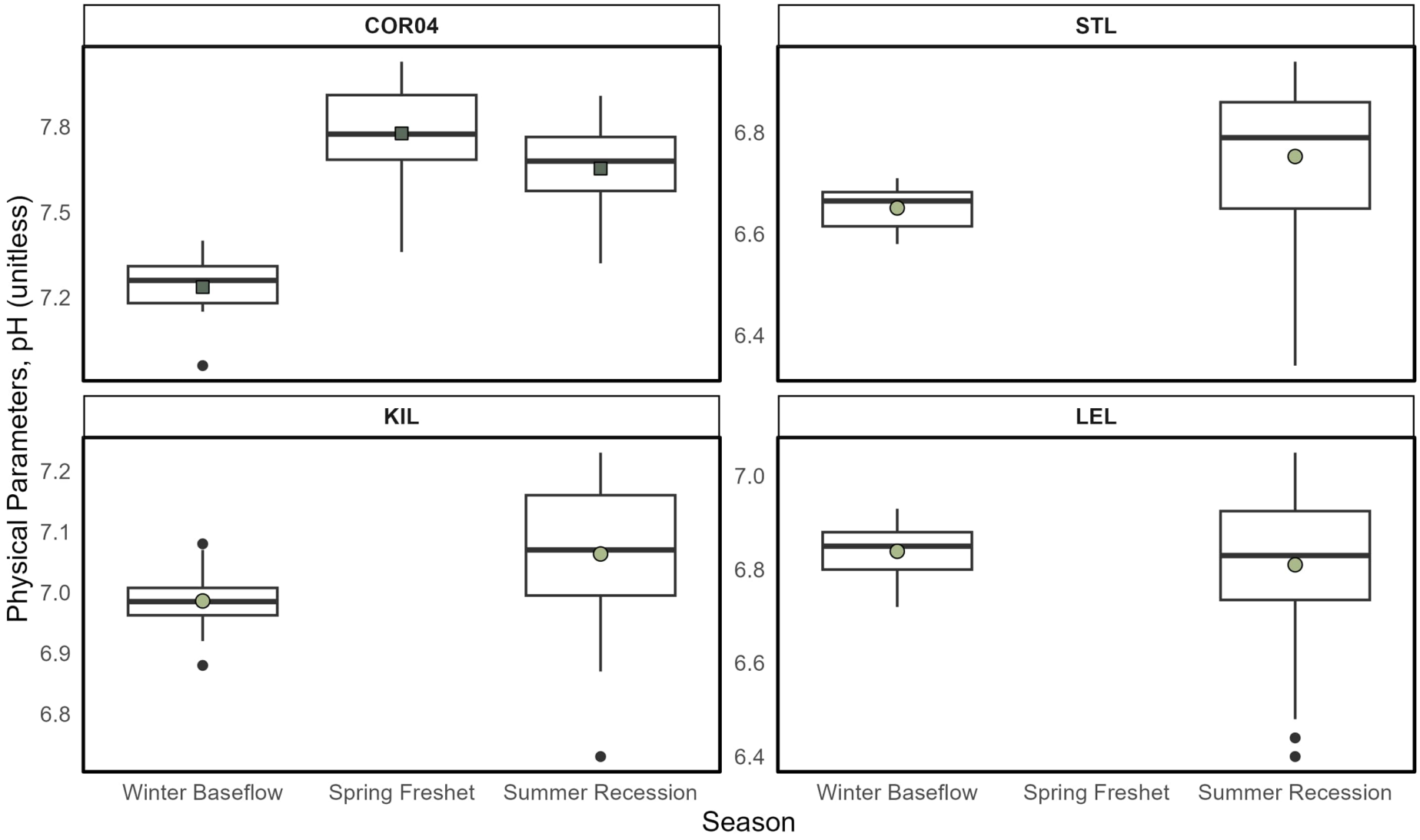
SLR

FIGURE NO: **B.5.55**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

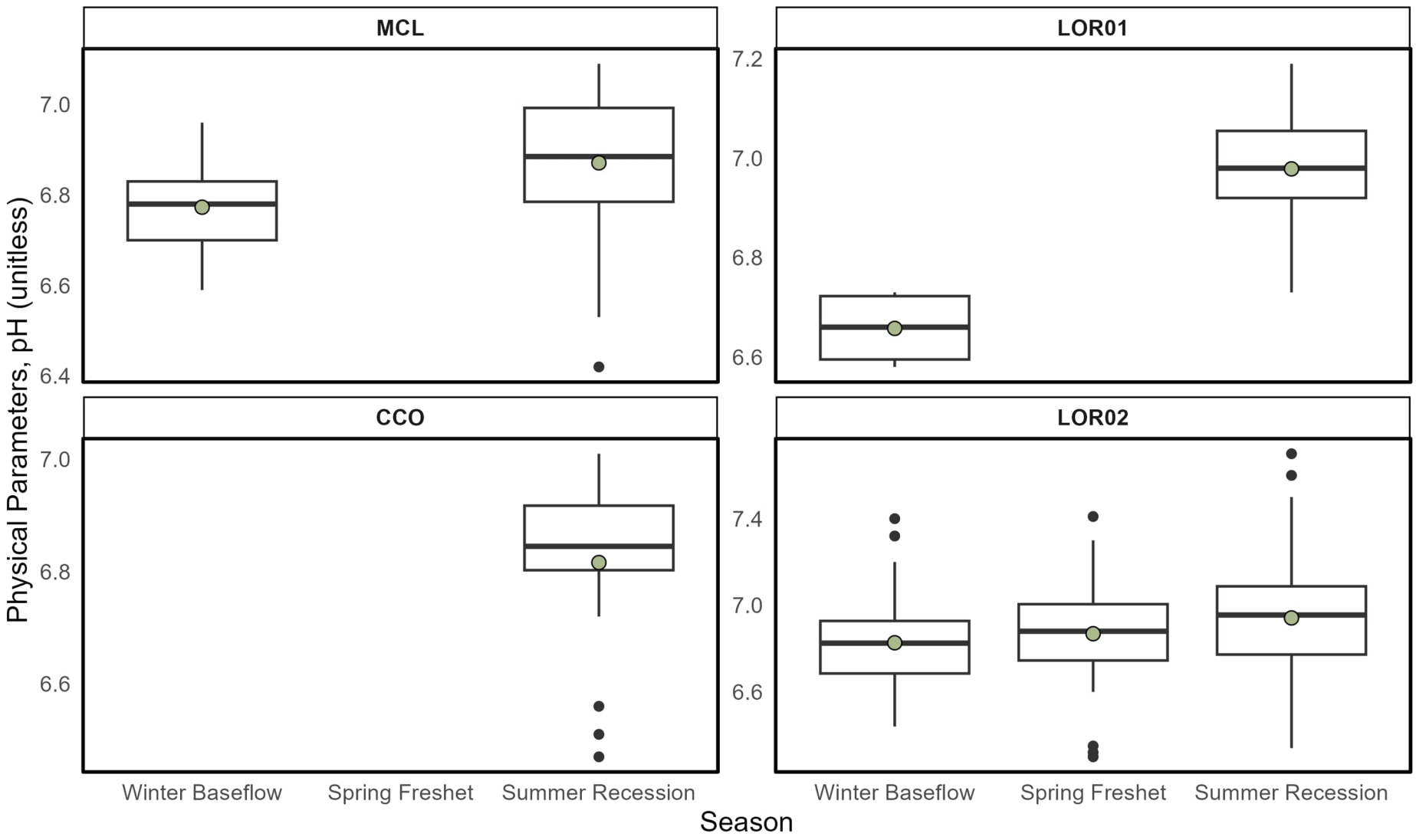
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FIGURE NO: **B.5.56**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

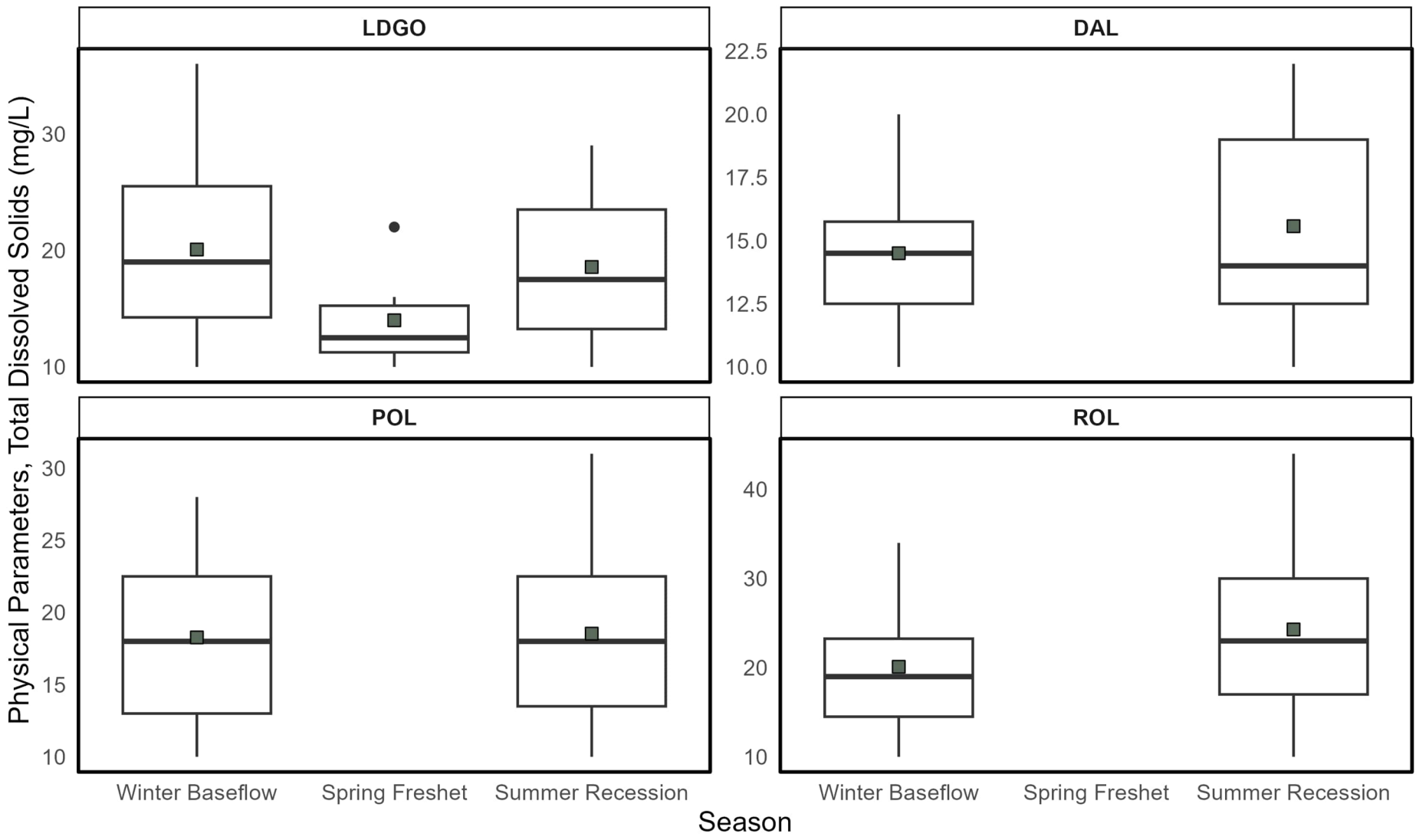
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FIGURE NO: **B.5.57**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

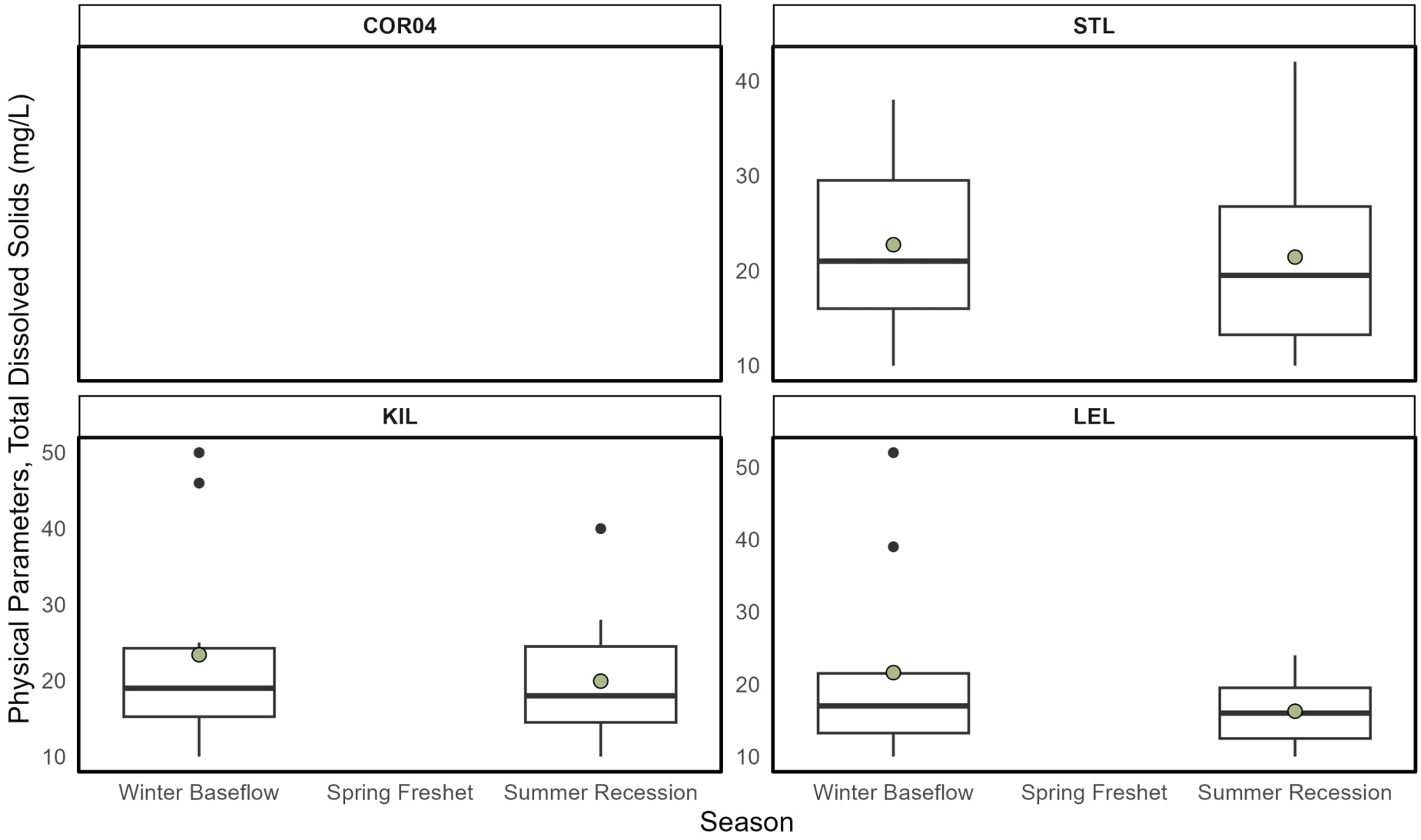
SLR

FIGURE NO: **B.5.49**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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Last Saved: Friday, February 20, 2026 2:35 PM by brodie.elder



LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

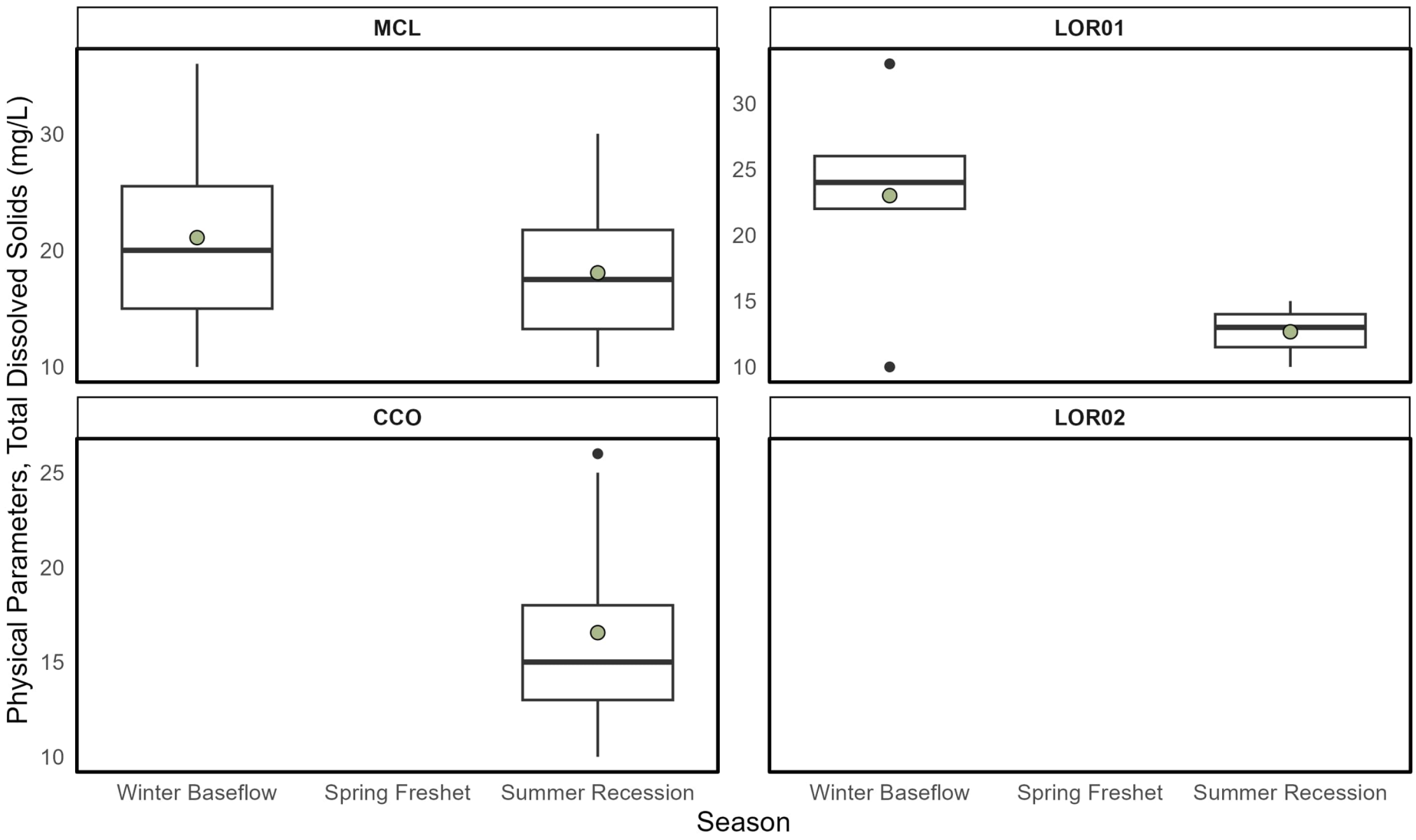
SLR

FIGURE NO: **B.5.50**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

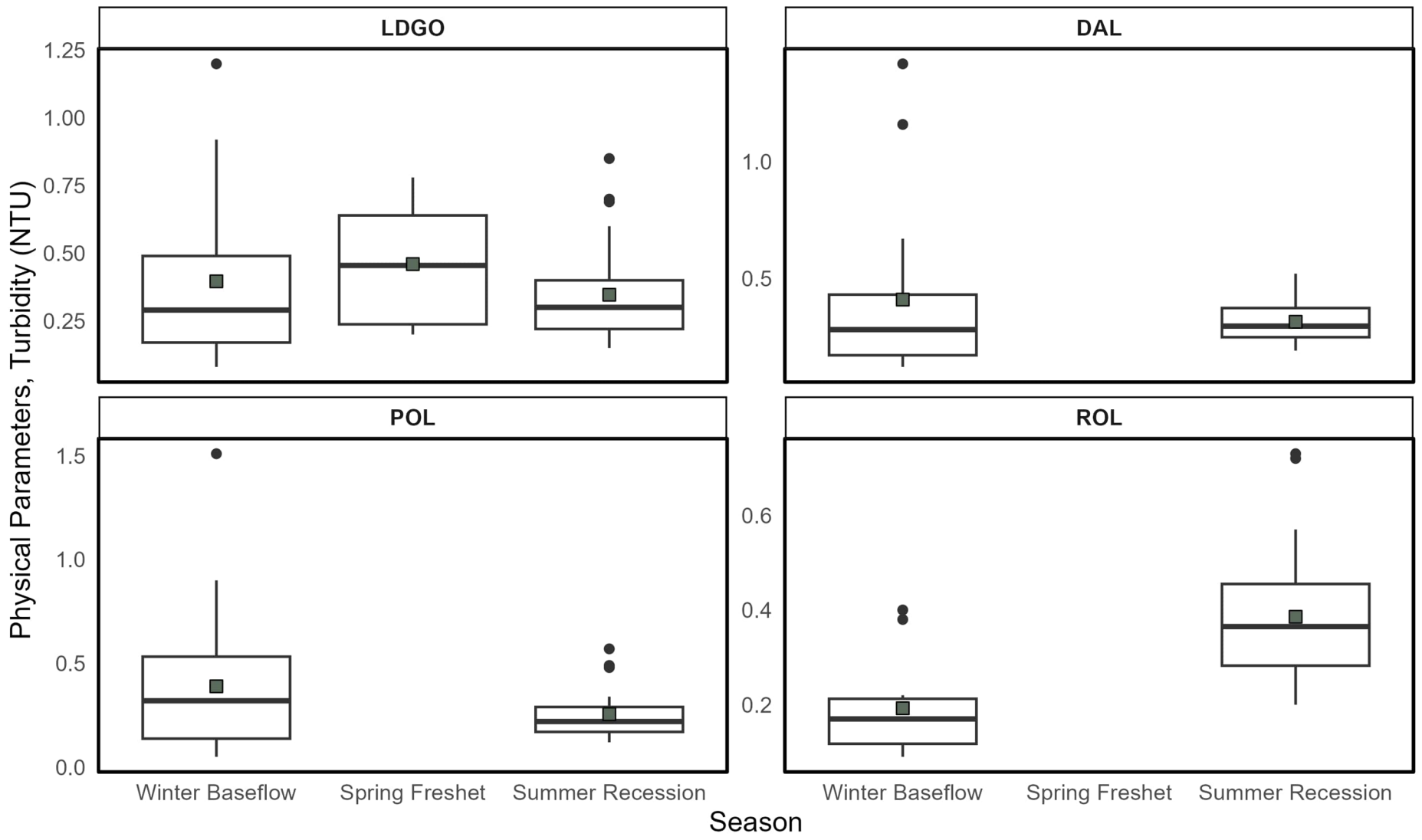
SLR

FIGURE NO: **B.5.51**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

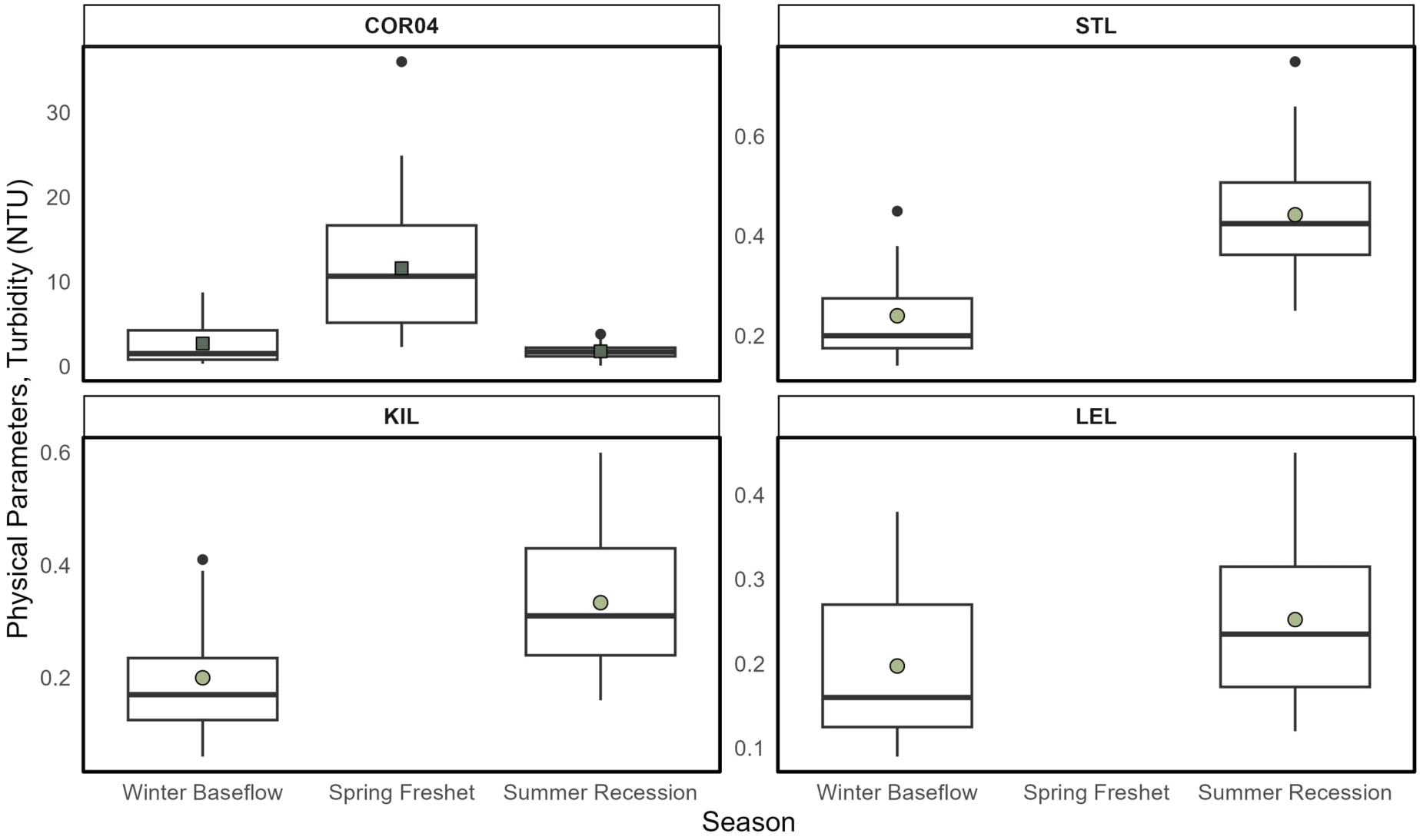
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FIGURE NO: **B.5.52**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

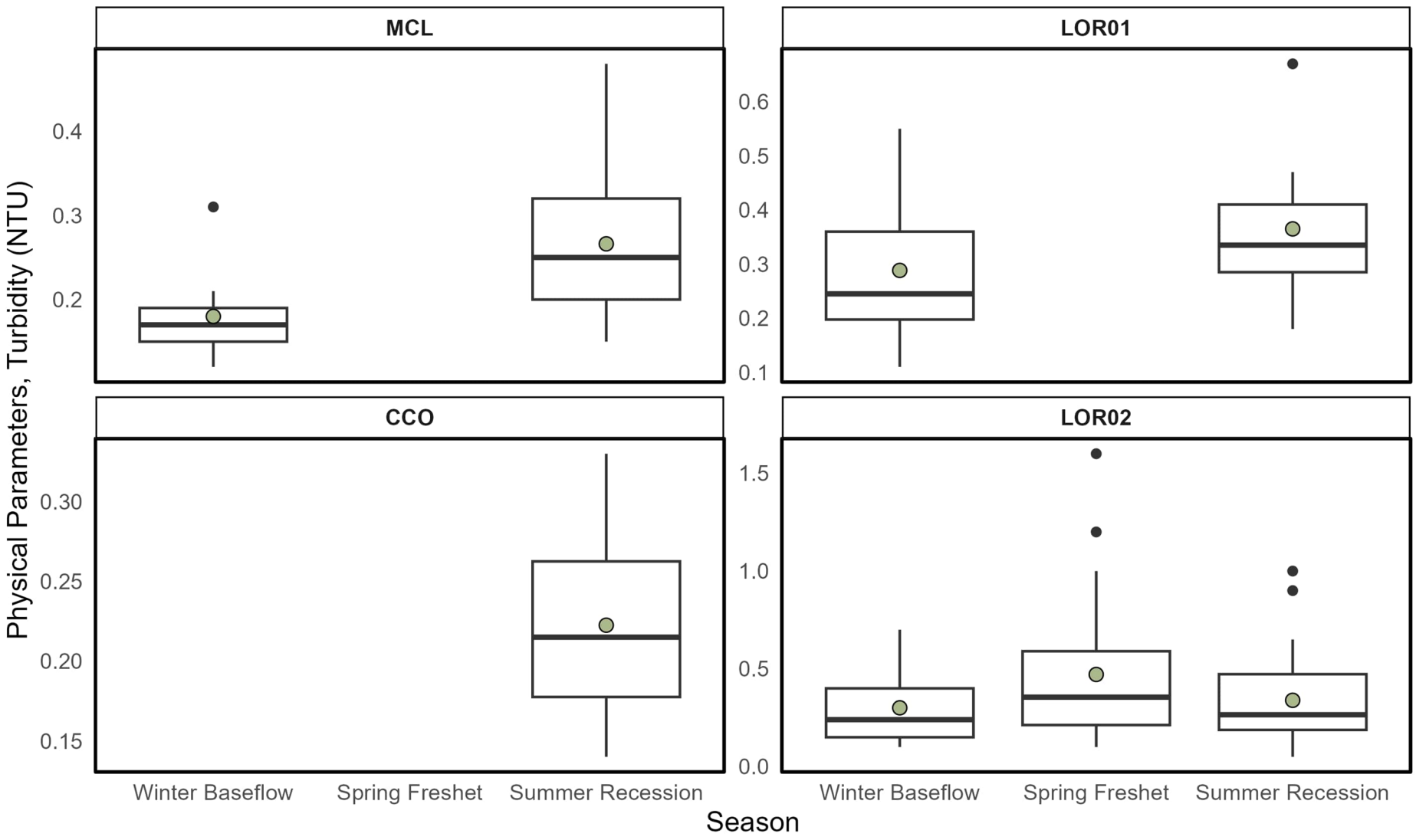
SLR

FIGURE NO: **B.5.53**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

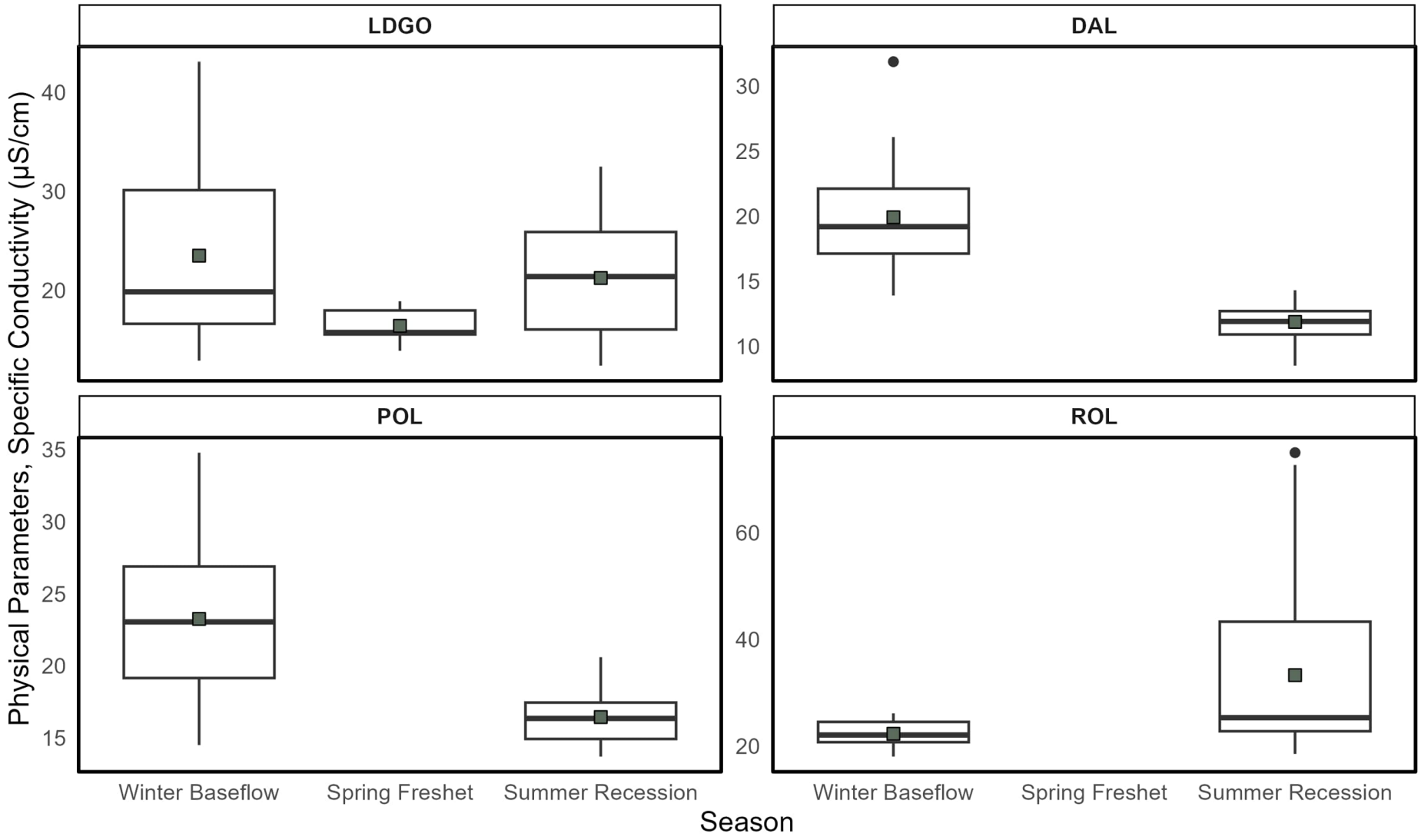
SLR

FIGURE NO: **B.5.54**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

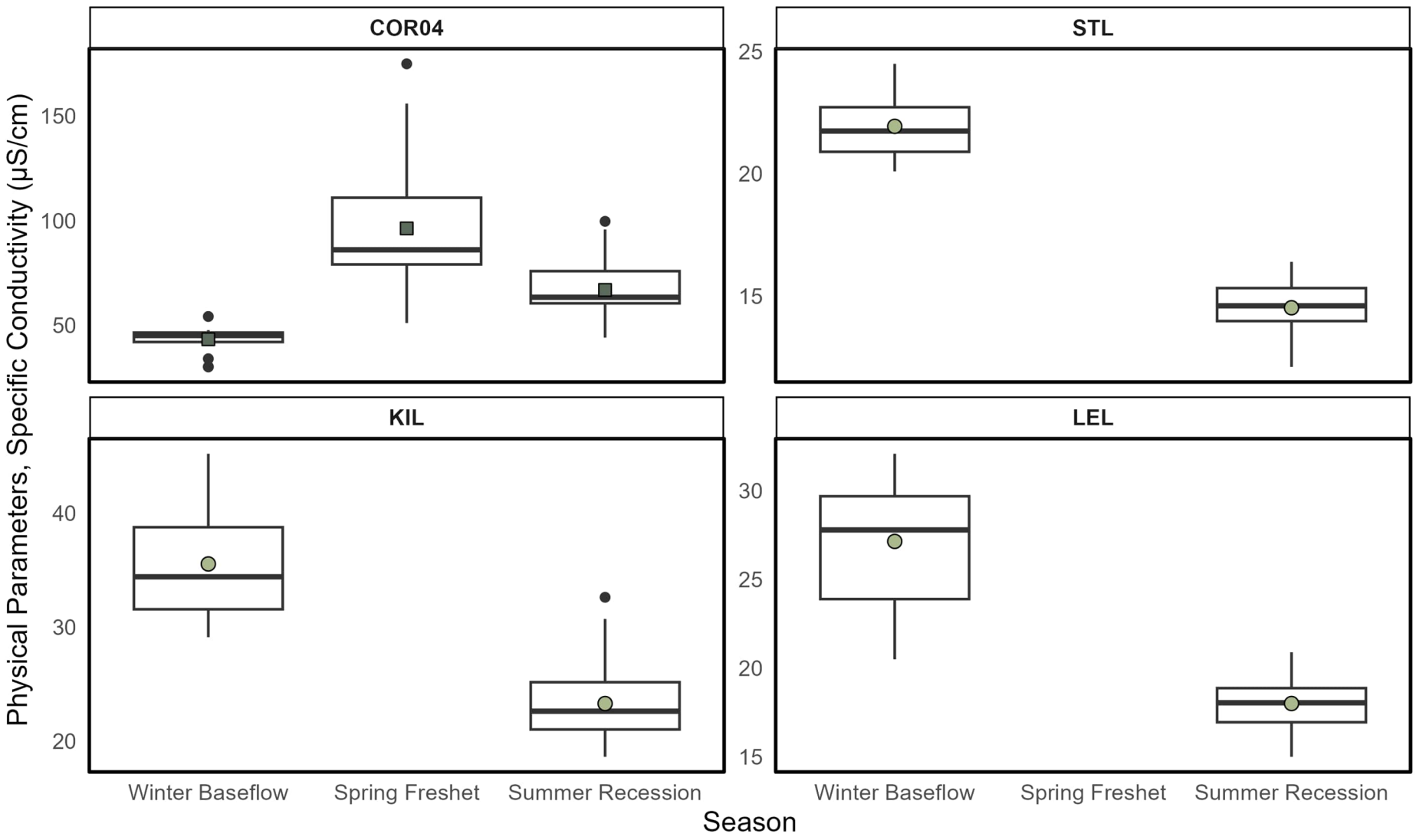
SLR

FIGURE NO: **B.5.58**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

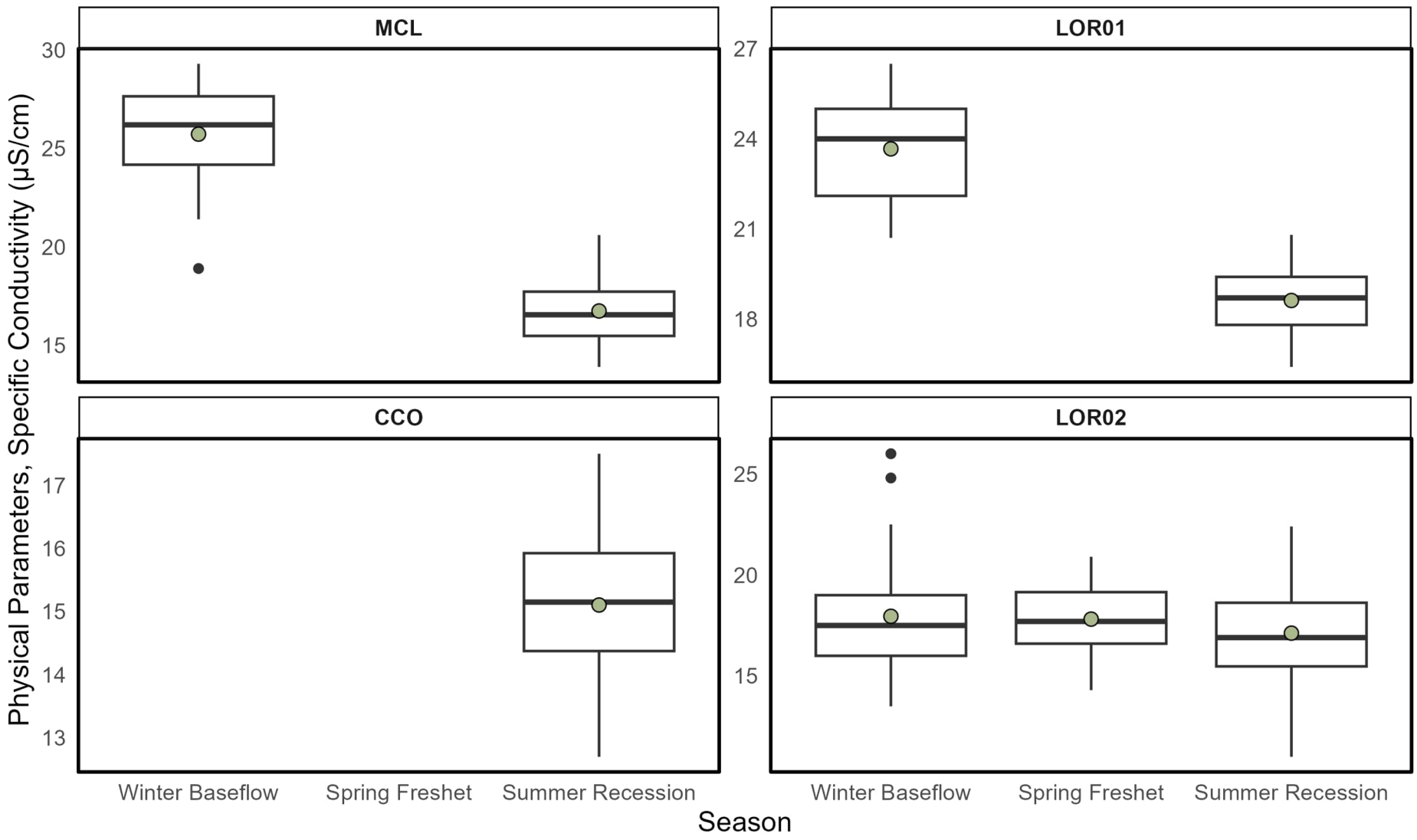
SLR

FIGURE NO: **B.5.59**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

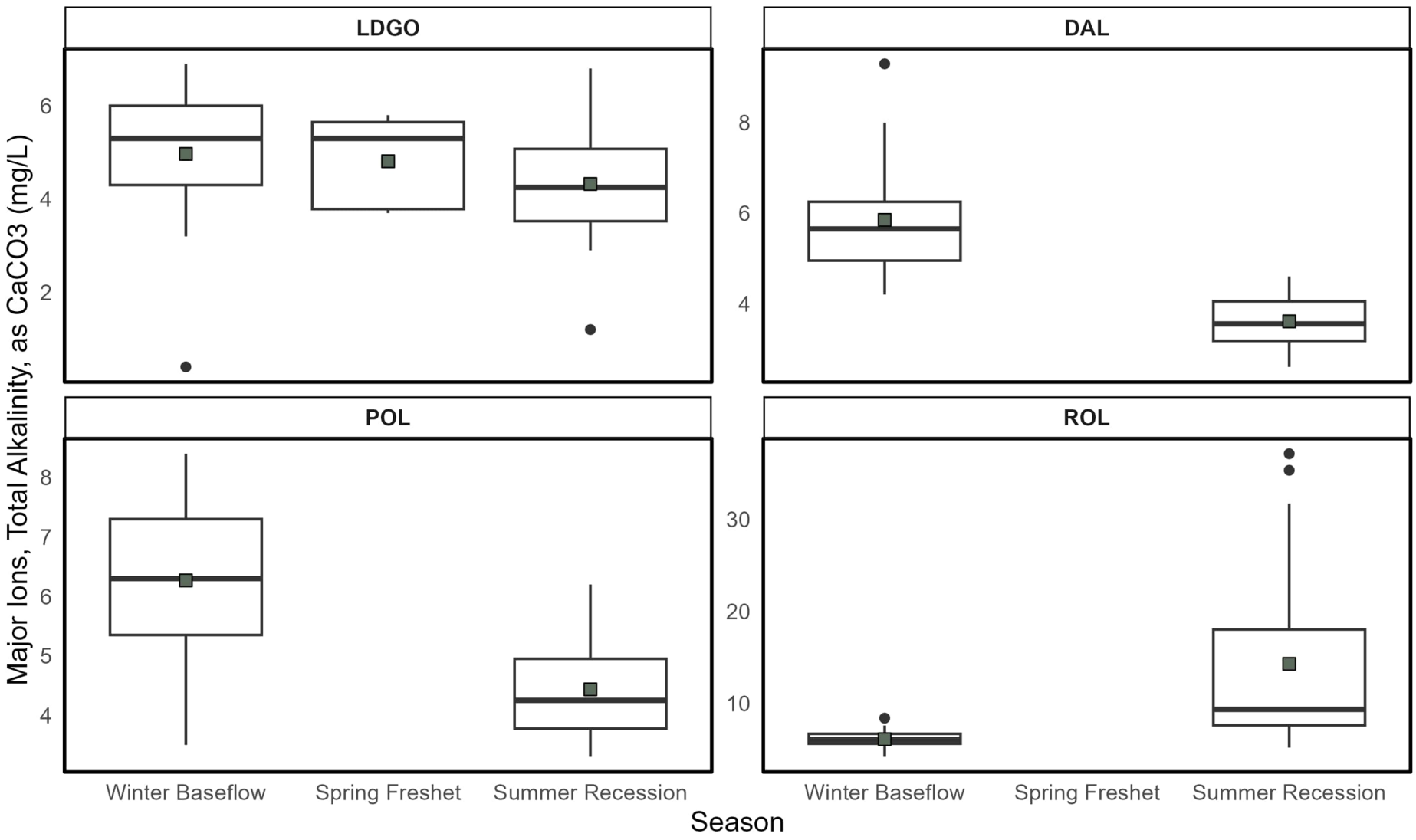
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FIGURE NO: **B.5.60**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

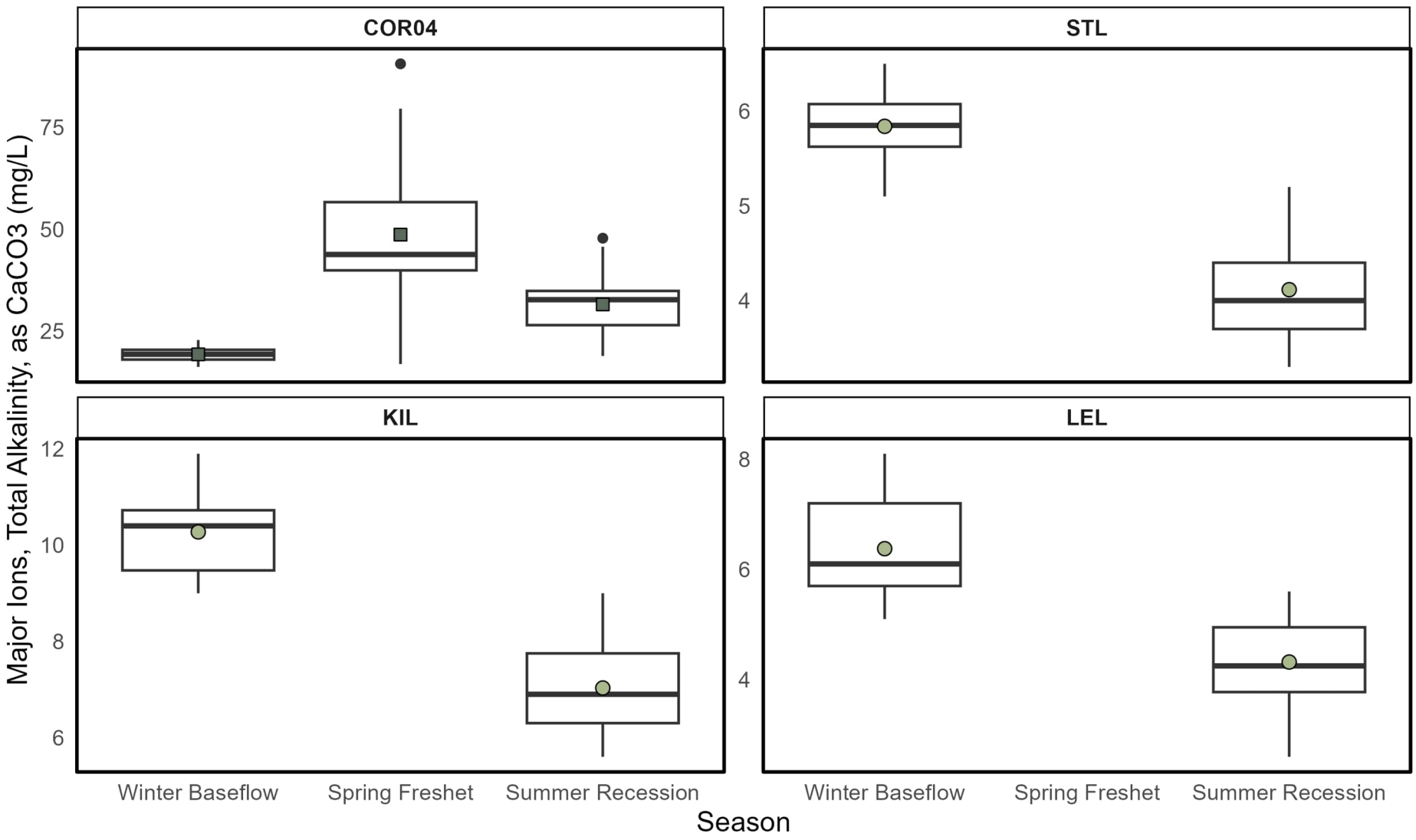
SLR

FIGURE NO: **B.5.61**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

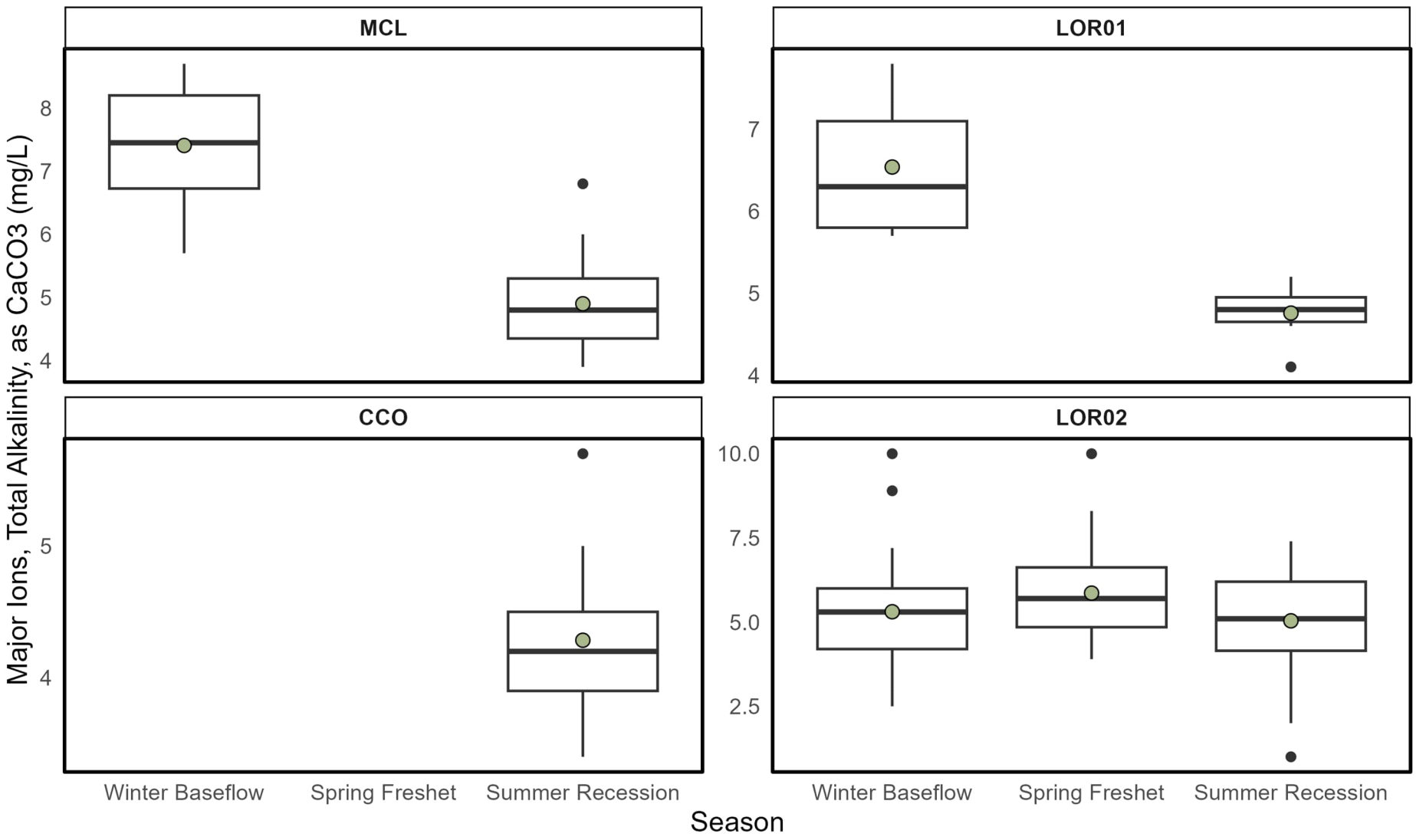
SLR

FIGURE NO: **B.5.62**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- **Coppermine**
- **Lockhart**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

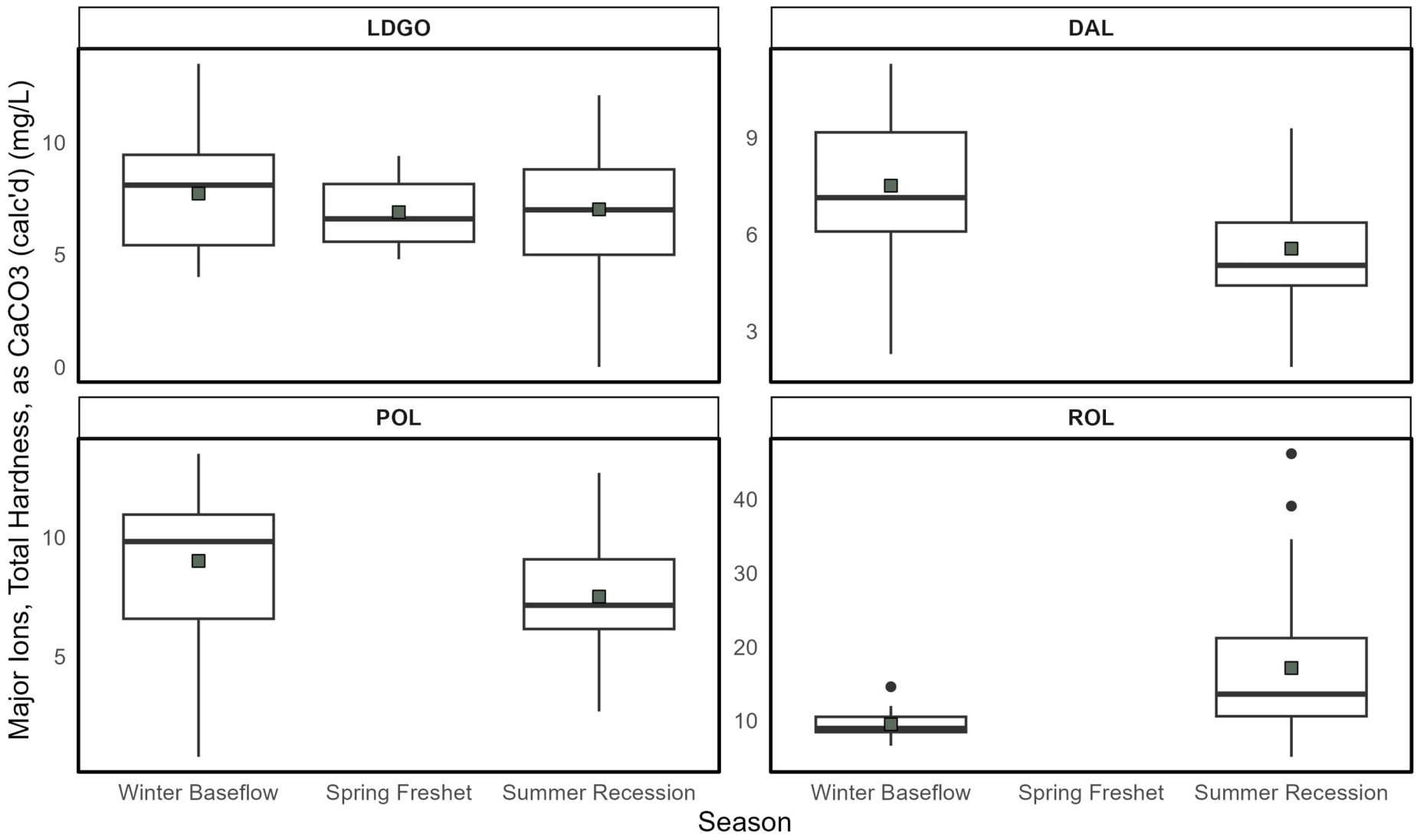
SLR

FIGURE NO: **B.5.63**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

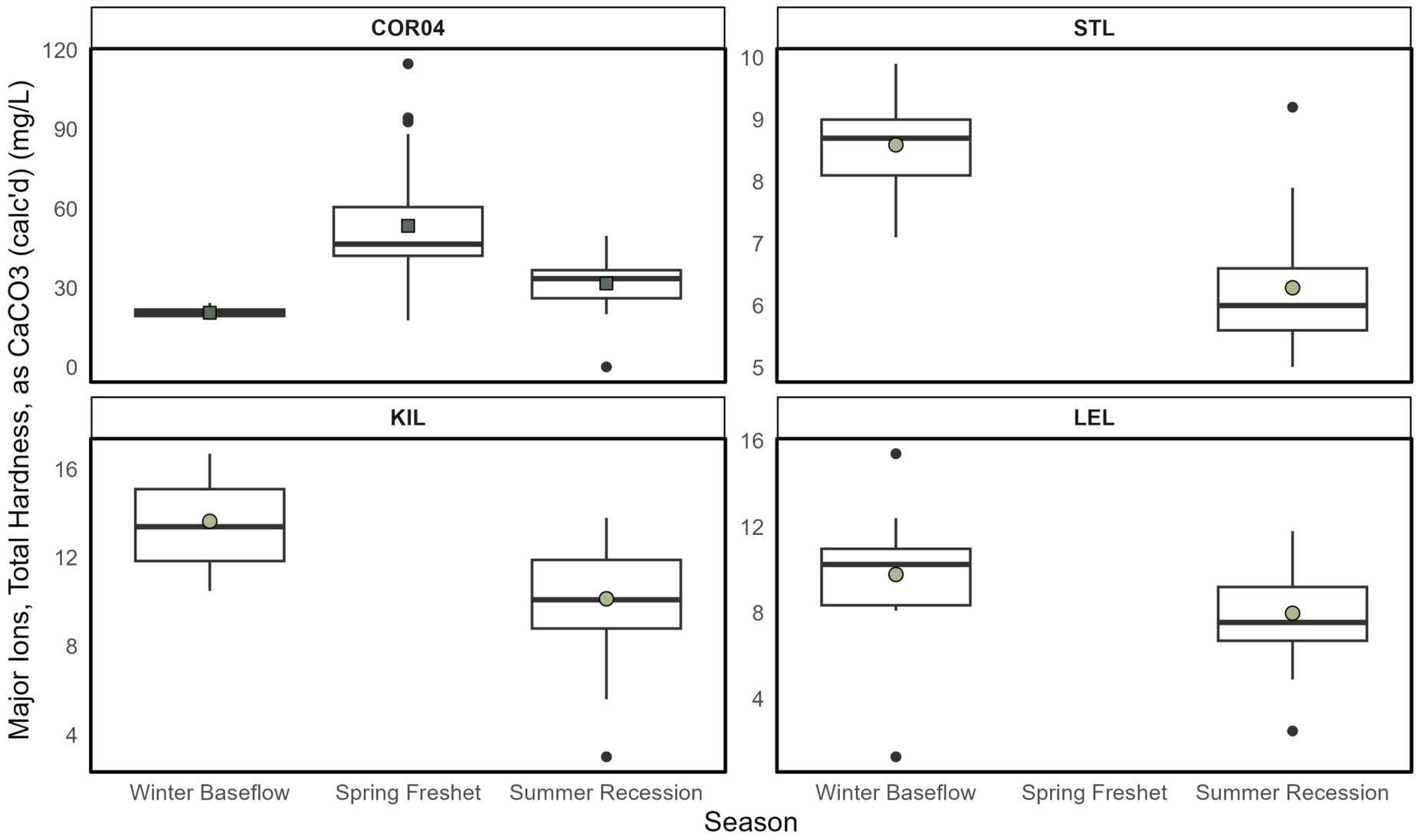
SLR

FIGURE NO: **B.5.64**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

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LEGEND

- Coppermine
- Lockhart

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

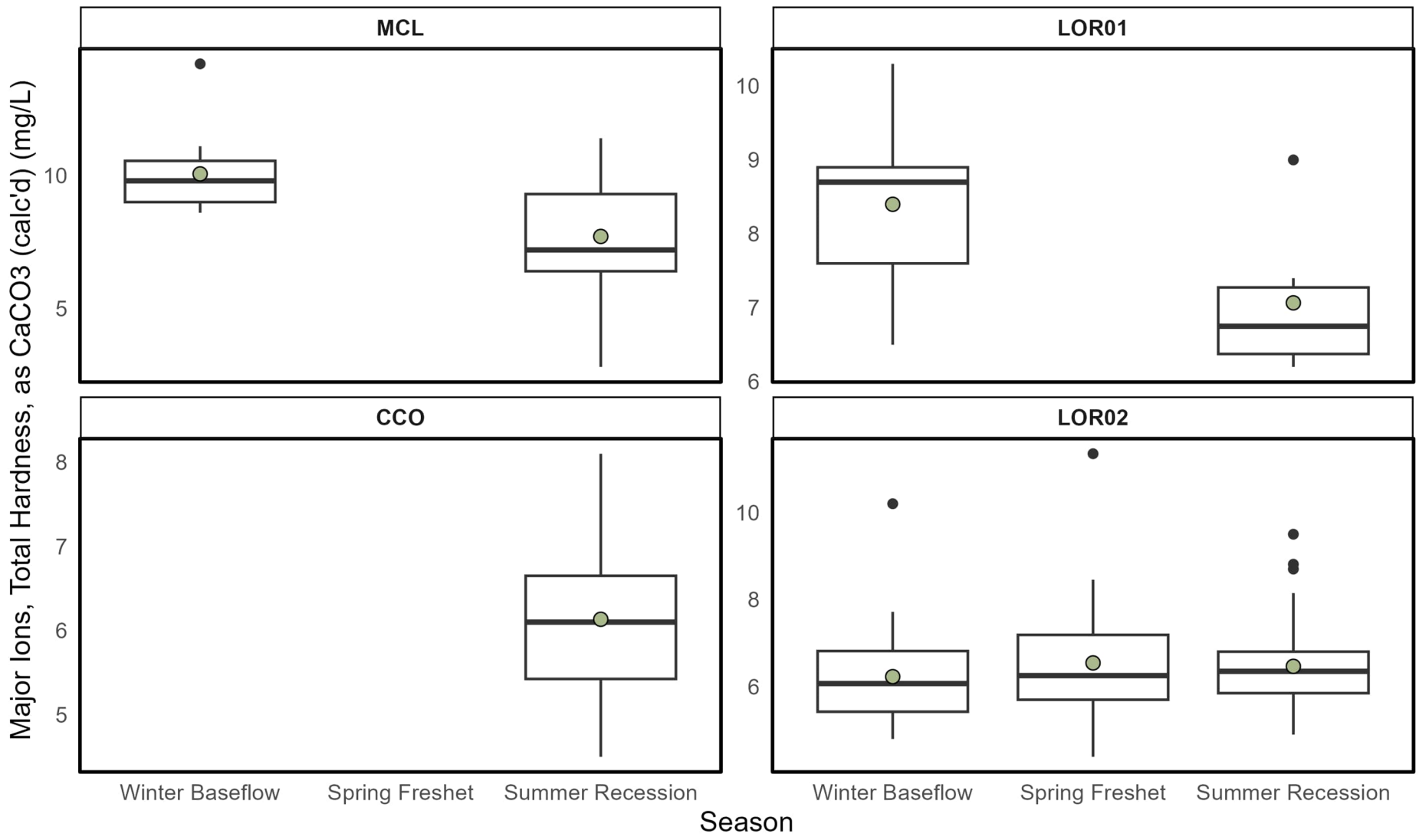
SLR

FIGURE NO: **B.5.65**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || B5_Layout_WQ
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LEGEND

- Coppermine
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

SLR

FIGURE NO: **B.5.66**

DATE: February 20, 2026

PROJECT NO: 205.030233.00001

B.6 Mann Kendall Trends Analysis and Loading Figures

Appendix B.6.1-1 Coppermine River Watershed - Entire Period of Record

Site Id	LDGO				DEL				DAL			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	20	-0.29	0.08	----	19	-0.26	0.12	----	20	-0.14	0.42	----
D-Calcium	26	0.52	0.00029	↑	24	0.36	0.017	↑	23	-0.24	0.13	----
D-Copper	20	-0.14	0.42	----	19	-0.15	0.40	----	20	-0.04	0.87	----
D-Magnesium	26	0.55	0.00010	↑	24	0.38	0.012	↑	23	-0.07	0.67	----
D-Nickel	20	0.06	0.74	----	19	0.03	0.91	----	20	0.02	0.94	----
D-Potassium	26	0.81	0.00000	↑	24	0.68	0.00001	↑	23	0.24	0.14	----
D-Sodium	26	0.90	0.00000	↑	24	0.82	0.00000	↑	23	0.30	0.064	----
D-Strontium	20	0.93	0.00000	↑	19	0.87	0.00000	↑	20	0.55	0.00088	↑
D-Chloride	26	**NA**	**NA**	**NA**	24	**NA**	**NA**	**NA**	23	**NA**	**NA**	**NA**
D-Sulphate	26	**NA**	**NA**	**NA**	24	**NA**	**NA**	**NA**	23	**NA**	**NA**	**NA**
Total Alkalinity	26	0.31	0.027	↑	24	0.17	0.25	----	23	0.13	0.41	----
Hardness	26	0.58	0.00004	↑	24	0.39	0.008	↑	23	-0.15	0.33	----
DOC	26	0.42	0.00372	↑	24	0.55	0.00026	↑	23	0.44	0.00453	↑
pH	26	0.38	0.007	↑	24	0.37	0.013	↑	23	0.19	0.22	----
Conductivity	26	0.87	0.00000	↑	24	0.76	0.00000	↑	23	0.24	0.12	----
Total Nitrogen	11	0.65	0.008	↑	10	0.58	0.025	↑	11	0.61	0.012	↑
Site Id	**POL**				**ROL**				**COR04**			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	20	0.03	0.8964	----	19	-0.29	0.09	----	19	-0.19	0.2778	----
D-Calcium	25	0.04	0.7969	----	20	-0.06	0.75	----	25	0.10	0.4982	----
D-Copper	20	-0.11	0.5521	----	19	-0.15	0.41	----	19	-0.42	0.0129	↓
D-Magnesium	25	0.19	0.2053	----	20	0.01	0.97	----	25	0.11	0.4409	----
D-Nickel	20	0.26	0.1515	----	19	0.01	1.00	----	19	-0.53	0.0018	↓
D-Potassium	25	0.28	0.0664	----	20	0.73	0.00002	↑	25	0.15	0.3031	----
D-Sodium	25	0.45	0.0031	↑	20	0.78	0.00001	↑	25	0.46	0.0016	↑
D-Strontium	20	0.84	0.0000	↑	19	0.64	0.00015	↑	19	0.32	0.0635	----
D-Chloride	25	0.50	0.0020	↑	19	**NA**	**NA**	**NA**	25	0.20	0.1700	----
D-Sulphate	25	0.15	0.3200	----	20	0.27	0.15	----	25	0.44	0.0020	↑
Total Alkalinity	25	0.12	0.4262	----	20	0.07	0.67	----	25	0.05	0.7261	----
Hardness	25	0.11	0.4406	----	20	-0.03	0.90	----	25	0.10	0.4982	----
DOC	25	0.25	0.0912	----	20	0.30	0.07	----	25	-0.11	0.4400	----
pH	25	0.15	0.2930	----	20	0.02	0.92	----	25	-0.06	0.6912	----
Conductivity	25	0.35	0.0141	↑	20	0.26	0.11	----	25	0.03	0.8701	----
Total Nitrogen	11	0.32	0.2064	----	11	0.48	0.051	----	18	-0.32	0.0744	----

----	Not Significant
↑	>0.05
↑	>0.01
↑	>0.001
↑	>0.0001
NA	Data Not Available

Appendix B.6.1-2: Lockhart River Watershed - Entire Period of Record

Site Id	KIL				LEL				MCL				LOR2			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	19	-0.19	0.26	----	19	-0.01	1.00	----	19	-0.40	0.019	↓	19	-0.15	0.3809	----
D-Calcium	20	0.27	0.10	----	20	-0.15	0.40	----	20	0.01	0.97	----	54	0.31	0.0011	↑
D-Copper	19	-0.17	0.38	----	19	0.10	0.59	----	19	-0.13	0.47	----	22	-0.52	0.0008	↓
D-Magnesium	20	0.12	0.49	----	20	-0.08	0.67	----	20	-0.06	0.74	----	45	0.59	0.0000	↑
D-Nickel	19	-0.07	0.75	----	19	0.21	0.27	----	19	-0.45	0.011	↓	19	-0.34	0.0486	↓
D-Potassium	20	0.76	0.00001	↑	20	0.46	0.008	↑	20	0.73	0.00002	↑	54	0.42	0.0000	↑
D-Sodium	20	0.87	0.00000	↑	20	0.64	0.00041	↑	20	0.72	0.00003	↑	54	0.43	0.0000	↑
D-Strontium	19	0.83	0.00000	↑	19	0.83	0.00000	↑	19	0.88	0.00000	↑	19	0.67	0.0001	↑
D-Chloride	20	**NA**	**NA**	**NA**	20	**NA**	**NA**	**NA**	20	**NA**	**NA**	**NA**	54	**NA**	**NA**	**NA**
D-Sulphate	20	**NA**	**NA**	**NA**	20	0.31	0.10	----	20	**NA**	**NA**	**NA**	55	0.45	0.0000	↑
Total Alkalinity	20	0.63	0.00013	↑	20	0.54	0.00112	↑	20	0.43	0.010	↑	54	0.48	0.0000	↑
Hardness	20	0.26	0.12	----	20	-0.10	0.56	----	20	-0.07	0.70	----	50	0.47	0.0000	↑
DOC	20	0.57	0.00063	↑	20	0.42	0.014	↑	20	0.42	0.014	↑	45	0.64	0.0000	↑
pH	20	0.10	0.58	----	20	-0.03	0.90	----	20	0.11	0.52	----	55	-0.11	0.2449	----
Conductivity	20	0.79	0.00000	↑	20	0.59	0.00035	↑	20	0.66	0.00006	↑	55	0.47	0.0000	↑
Total Nitrogen	11	0.53	0.029	↑	11	0.64	0.009	↑	11	0.47	0.058	----	35	0.37	0.0023	↑

----	Not Significant
↑	>0.05
↑	>0.01
↑	>0.001
↑	>0.0001
NA	Data Not Available

Appendix B.6.1-3: Coppermine River Watershed - Last 10 Years

Site ID	LDGO				DEL				DAL			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	11	-0.13	0.6384	----	10	-0.18	0.5296	----	11	-0.04	0.9378	----
D-Calcium	11	0.79	0.0013	↑	10	0.28	0.3180	----	11	0.25	0.3433	----
D-Copper	11	0.26	0.3299	----	10	0.65	0.0199	↑	11	0.71	0.0064	↑
D-Magnesium	11	0.34	0.1817	----	10	0.04	0.9284	----	11	0.12	0.6804	----
D-Nickel	11	0.46	0.0684	----	10	0.10	0.7721	----	11	0.54	0.0451	↑
D-Potassium	11	0.84	0.0009	↑	10	0.68	0.0107	↑	11	0.68	0.0076	↑
D-Sodium	11	0.94	0.00009	↑	10	0.81	0.0019	↑	11	0.67	0.0068	↑
D-Strontium	11	0.85	0.0003	↑	10	0.81	0.0017	↑	11	0.60	0.0164	↑
D-Chloride	11	0.79	0.00003	↑	10	0.74	0.0054	↑	11	**NA**	**NA**	**NA**
D-Sulphate	11	**NA**	**NA**	**NA**	10	**NA**	**NA**	**NA**	11	**NA**	**NA**	**NA**
Total Alkalinity	11	0.59	0.0178	↑	10	0.56	0.0318	↑	11	0.56	0.0251	↑
Hardness	11	0.44	0.0725	----	10	0.16	0.5915	----	11	0.02	1.0000	----
DOC	11	0.43	0.0823	----	10	-0.05	0.9279	----	11	0.50	0.0417	↑
pH	11	-0.37	0.1379	----	10	-0.20	0.4743	----	11	-0.39	0.1172	----
Conductivity	11	0.82	0.0006	↑	10	0.69	0.0073	↑	11	0.57	0.0188	↑
Total Nitrogen	11	0.65	0.0077	↑	10	0.58	0.0248	↑	11	0.61	0.0122	↑
Site ID	**POL**				**ROL**				**COR04**			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	11	0.27	0.2758	----	11	0.09	0.7555	----	10	-0.24	0.3711	----
D-Calcium	11	0.48	0.0509	----	11	0.22	0.3904	----	10	0.02	1.0000	----
D-Copper	11	0.67	0.0100	↑	11	0.71	0.0064	↑	10	-0.13	0.6534	----
D-Magnesium	11	0.30	0.2376	----	11	0.07	0.8148	----	10	0.02	1.0000	----
D-Nickel	11	0.48	0.0664	----	11	0.12	0.6857	----	10	-0.07	0.8580	----
D-Potassium	11	0.68	0.0076	↑	11	0.84	0.0009	↑	10	0.31	0.2430	----
D-Sodium	11	0.77	0.0022	↑	11	0.86	0.0006	↑	10	0.31	0.2430	----
D-Strontium	11	0.88	0.00024	↑	11	0.64	0.0081	↑	10	0.29	0.2831	----
D-Chloride	11	**NA**	**NA**	**NA**	11	**NA**	**NA**	**NA**	10	-0.02	1.0000	----
D-Sulphate	11	0.41	0.1200	----	11	0.19	0.4900	----	10	0.11	0.7200	----
Total Alkalinity	11	0.77	0.0016	↑	11	0.22	0.3904	----	10	-0.02	1.0000	----
Hardness	11	0.29	0.2415	----	11	0.13	0.6404	----	10	0.02	1.0000	----
DOC	11	0.38	0.1323	----	11	0.43	0.0849	----	10	-0.16	0.5844	----
pH	11	-0.44	0.0725	----	11	-0.16	0.5334	----	10	-0.16	0.5915	----
Conductivity	11	0.71	0.0031	↑	11	0.38	0.1195	----	10	-0.02	1.0000	----
Total Nitrogen	11	0.32	0.2064	----	11	0.48	0.0509	----	10	-0.31	0.2430	----

----	Not Significant
↑	>0.05
↑	>0.01
↑	>0.001
↑	>0.0001
NA	Data Not Available

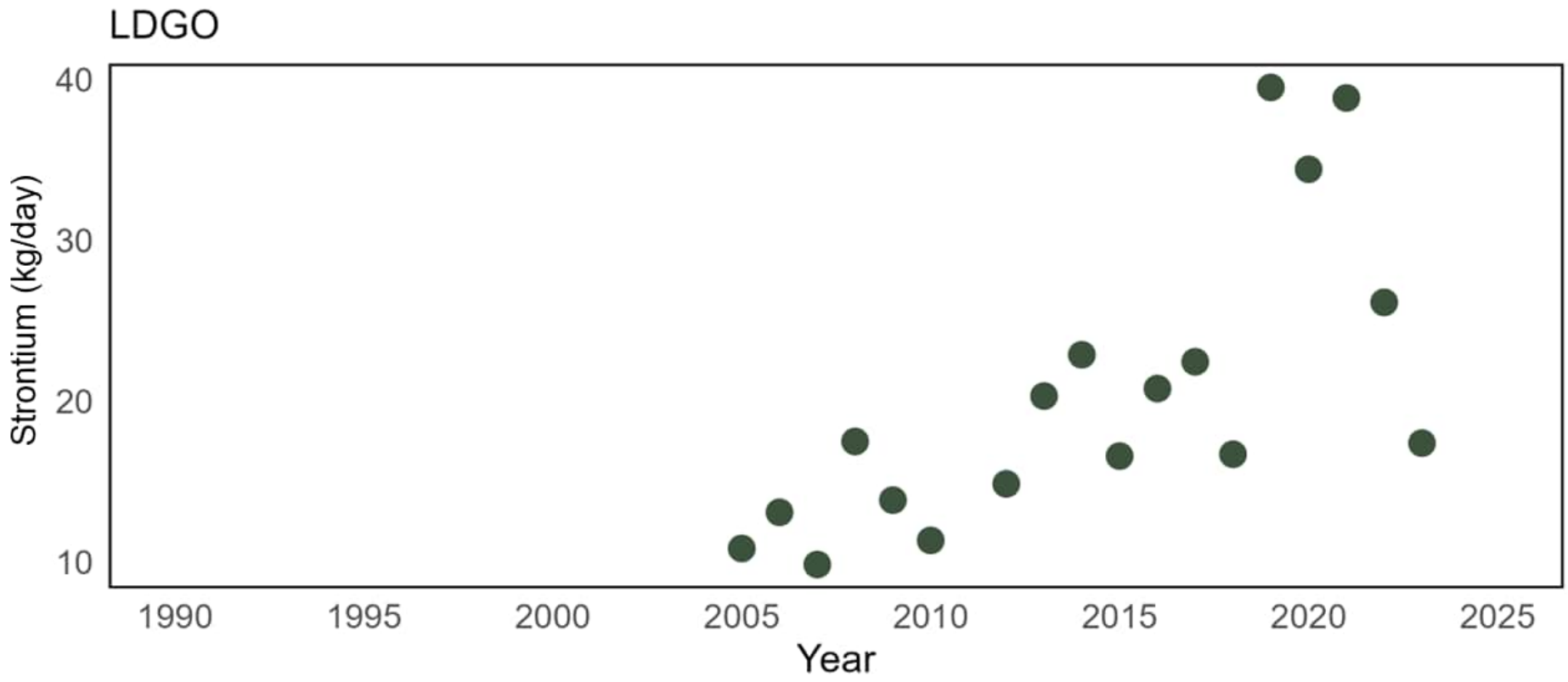
Appendix B.6.1-4: Lockhart River Watershed - Last 10 Years

Site ID	STL				KIL				LEL				MCL			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	11	0.09	0.7600	----	11	0.07	0.8148	----	11	0.28	0.2728	----	11	-0.27	0.2758	----
D-Calcium	11	0.64	0.0095	↑	11	0.82	0.0006	↑	11	0.30	0.2386	----	11	0.60	0.0149	↑
D-Copper	11	0.7	0.0045	↑	11	0.32	0.2681	----	11	0.88	0.0005	↑	11	0.47	0.0702	----
D-Magnesium	11	0.36	0.1550	----	11	0.13	0.6356	----	11	0.06	0.8745	----	11	0.00	1.0000	----
D-Nickel	11	0.15	0.6100	----	11	0.22	0.4750	----	11	0.54	0.0443	↑	11	-0.32	0.2064	----
D-Potassium	11	0.76	0.0020	↑	11	0.74	0.0031	↑	11	0.62	0.0115	↑	11	0.62	0.0115	↑
D-Sodium	11	0.58	0.0210	----	11	0.87	0.0003	↑	11	0.84	0.0013	↑	11	0.80	0.0016	↑
D-Strontium	11	0.41	0.0980	----	11	0.75	0.0018	↑	11	0.70	0.0045	↑	11	0.84	0.0004	↑
D-Chloride	11	-0.27	0.3160	----	11	**NA**	**NA**	**NA**	11	0.09	0.8100	----	11	**NA**	**NA**	**NA**
D-Sulphate	11	0.18	0.5200	----	11	**NA**	**NA**	**NA**	11	0.42	0.1200	----	11	**NA**	**NA**	**NA**
Total Alkalinity	11	0.27	0.2700	----	11	0.71	0.0036	↑	11	0.74	0.0027	↑	11	0.64	0.0081	↑
Hardness	11	0.24	0.3500	----	11	0.62	0.0100	↑	11	0.16	0.5334	----	11	0.13	0.6404	----
DOC	11	0.65	0.0077	↑	11	0.22	0.3904	----	11	0.33	0.2026	----	11	-0.12	0.6883	----
pH	11	-0.38	0.1200	----	11	-0.28	0.2728	----	11	-0.38	0.1195	----	11	-0.35	0.1611	----
Conductivity	11	0.35	0.1600	----	11	0.59	0.0155	↑	11	0.50	0.0417	↑	11	0.73	0.0023	↑
Total Nitrogen	11	0.7	0.0030	↑	11	0.53	0.0293	↑	11	0.64	0.0094	↑	11	0.47	0.0580	----

Site ID	LOR01				CCO				LOR02			
Parameter	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**	**n**	**tau**	**p_value**	**Category**
D-Aluminum	9	0.33	0.2500	----	9	-0.055	0.9200	----	10	0.49	0.0593	----
D-Calcium	9	0.44	0.1400	----	9	0.72	0.0100	↑	10	0.67	0.0092	↑
D-Copper	9	0.26	0.3900	----	9	0.65	0.0280	↑	10	0.00	1.0000	----
D-Magnesium	9	0.46	0.1100	----	9	0.059	0.9100	----	10	0.90	0.0005	↑
D-Nickel	9	0.2	0.5200	----	9	0.711	0.0160	----	10	-0.25	0.3672	----
D-Potassium	9	0.73	0.0100	↑	9	0.629	0.0350	----	10	0.52	0.0473	↑
D-Sodium	9	0.69	0.0180	↑	9	0.711	0.0160	----	10	0.54	0.0449	↑
D-Strontium	9	0.33	0.2500	----	9	0.36	0.2100	----	10	0.51	0.0491	↑
D-Chloride	9	**NA**	**NA**	**NA**	9	**NA**	**NA**	**NA**	10	0.41	0.1200	----
D-Sulphate	9	**NA**	**NA**	**NA**	9	-0.35	0.3300	----	10	0.49	0.0590	----
Total Alkalinity	9	0.42	0.1400	----	9	0.42	0.1400	----	10	0.54	0.0389	↑
Hardness	9	0.55	0.0600	----	9	0.48	0.0930	----	10	0.78	0.0024	↑
DOC	9	0.42	0.1400	----	9	0.11	0.7500	----	10	0.54	0.0389	↑
pH	9	-0.61	0.0290	↑	9	0.055	0.9200	----	10	-0.48	0.0713	----
Conductivity	9	0.33	0.2500	----	9	0.28	0.3500	----	10	0.31	0.2430	----
Total Nitrogen	9	0.72	0.0090	↑	9	0.76	0.0060	----	10	0.41	0.1413	----

----	Not Significant
↑	>0.05
↑	>0.01
↑	>0.001
↑	>0.0001
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PROJECT: Water Quality and Quantity Status and Trends

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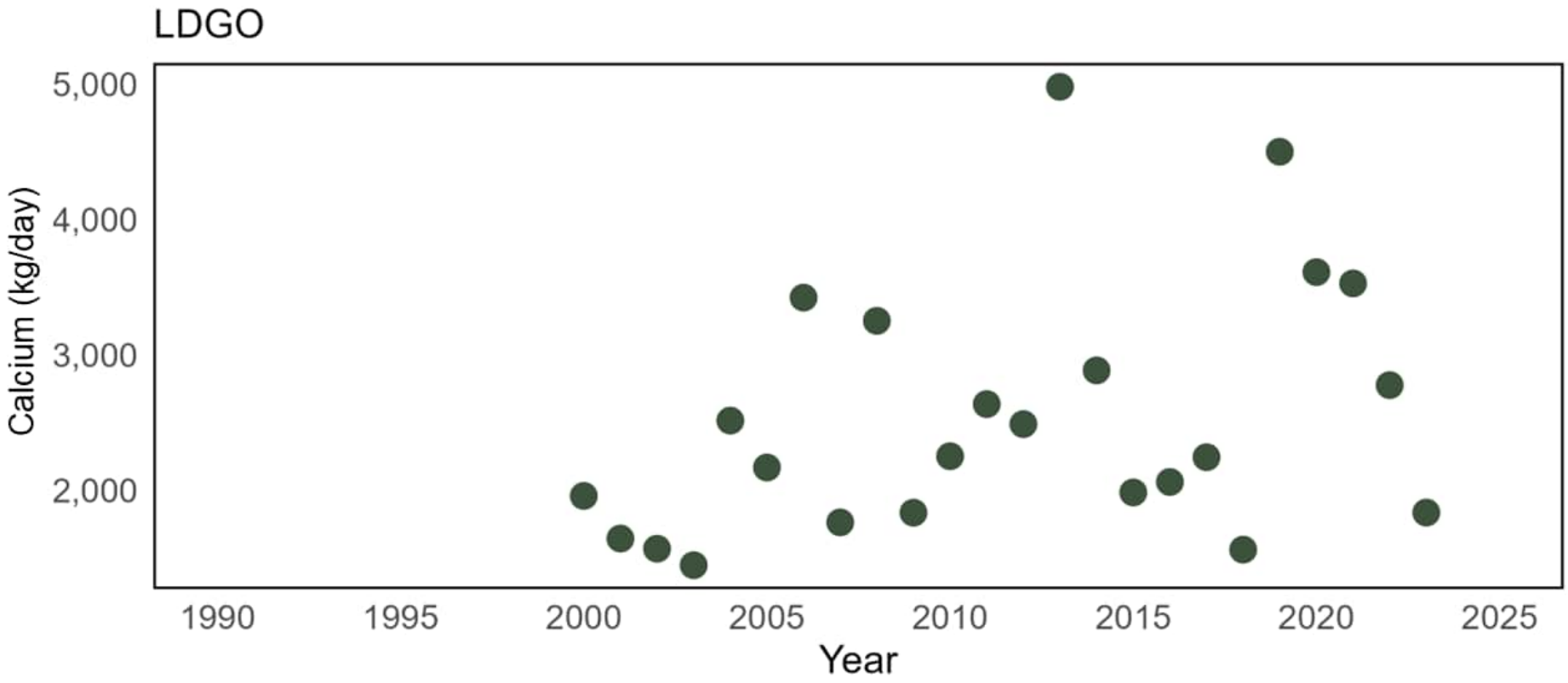
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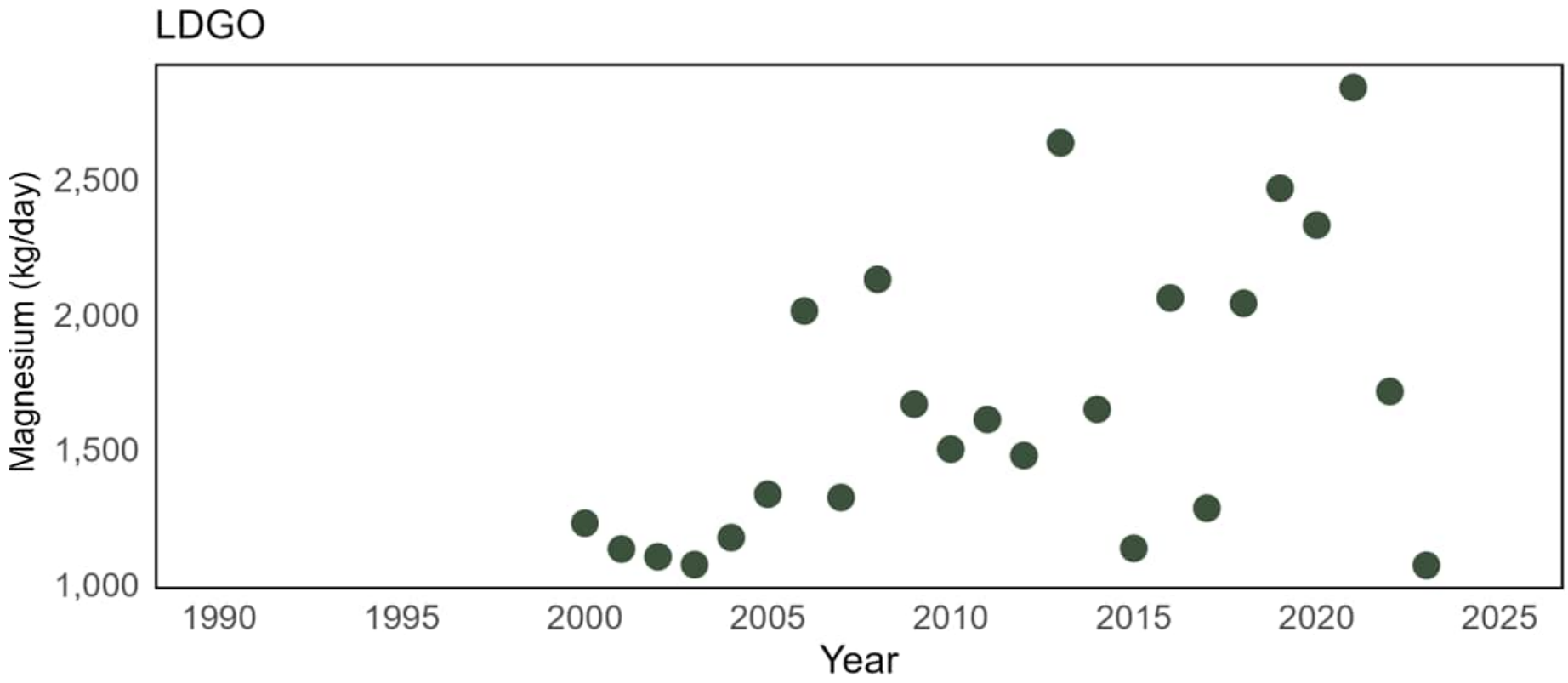
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PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Water Quality Data**

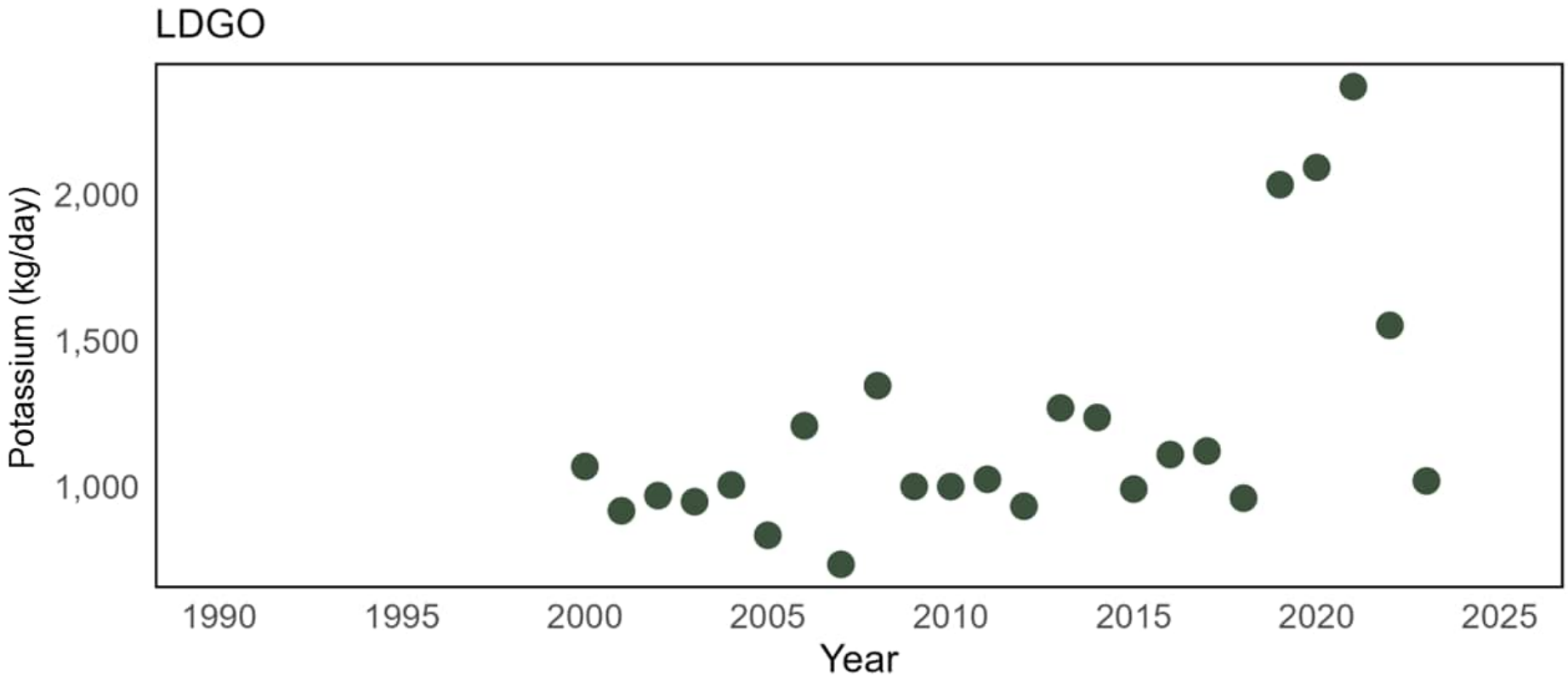
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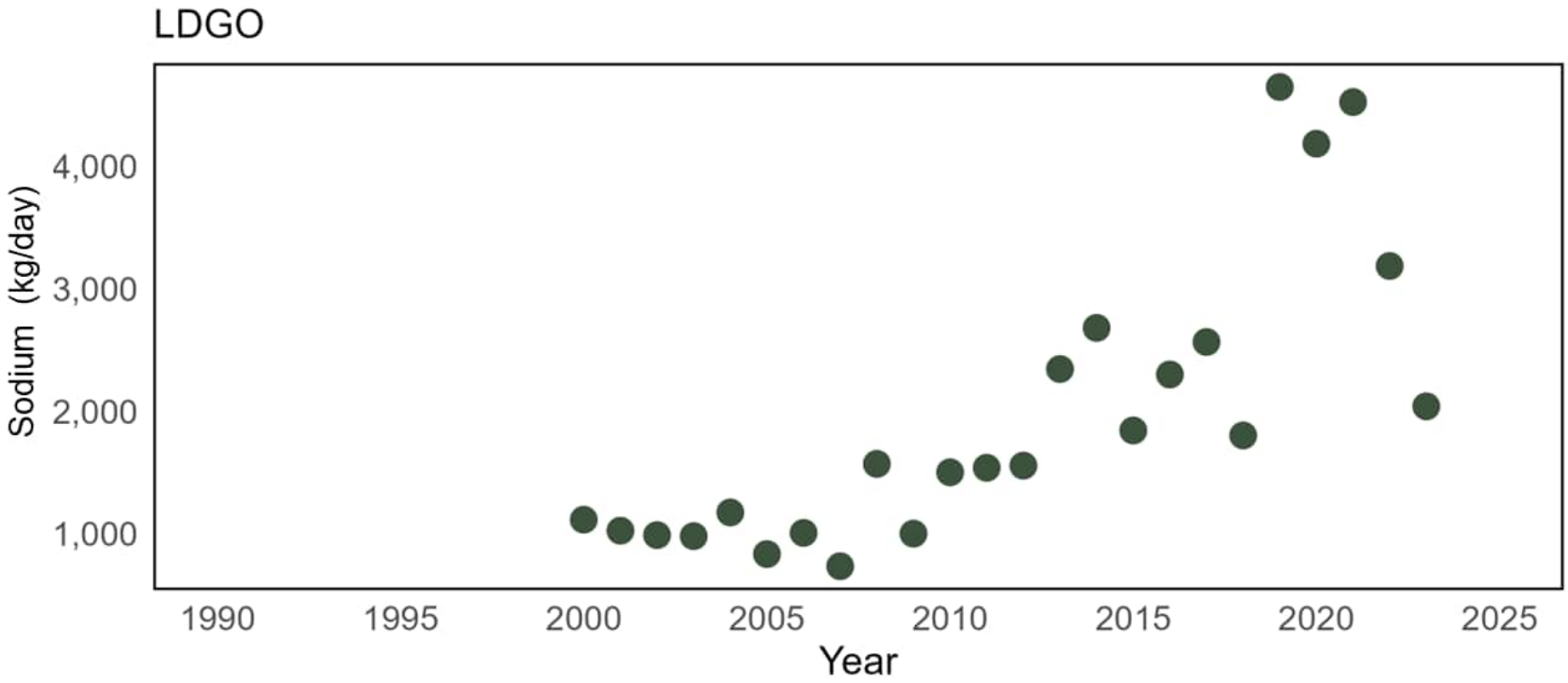
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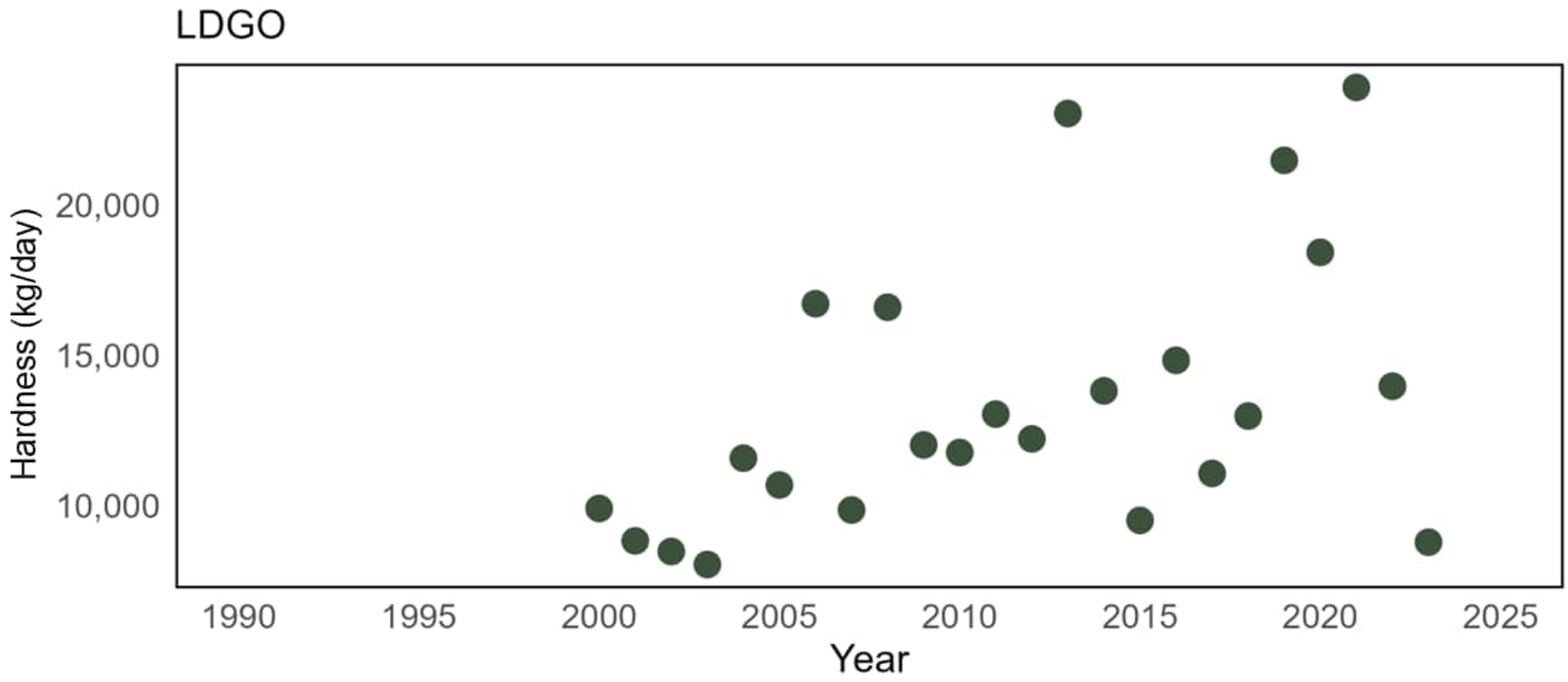
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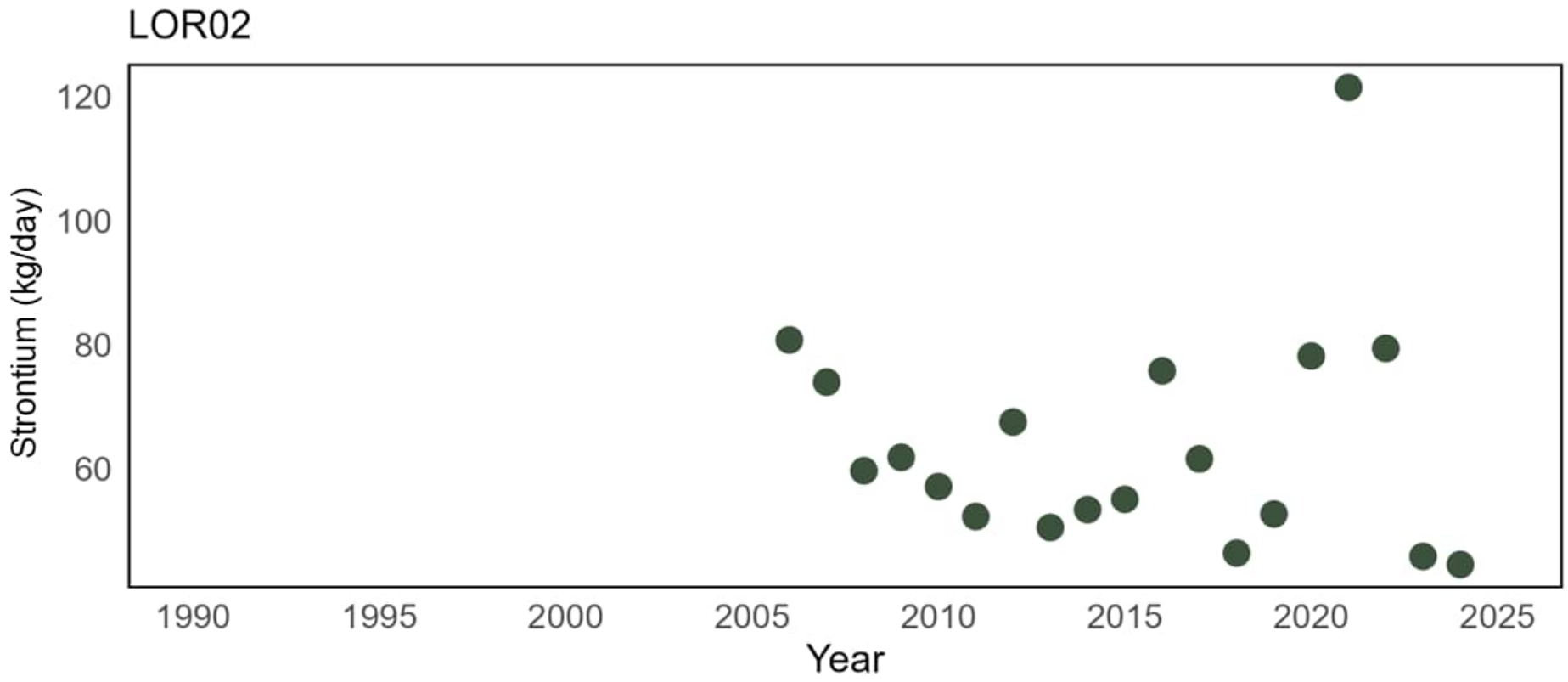
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TITLE: **Water Quality Data**

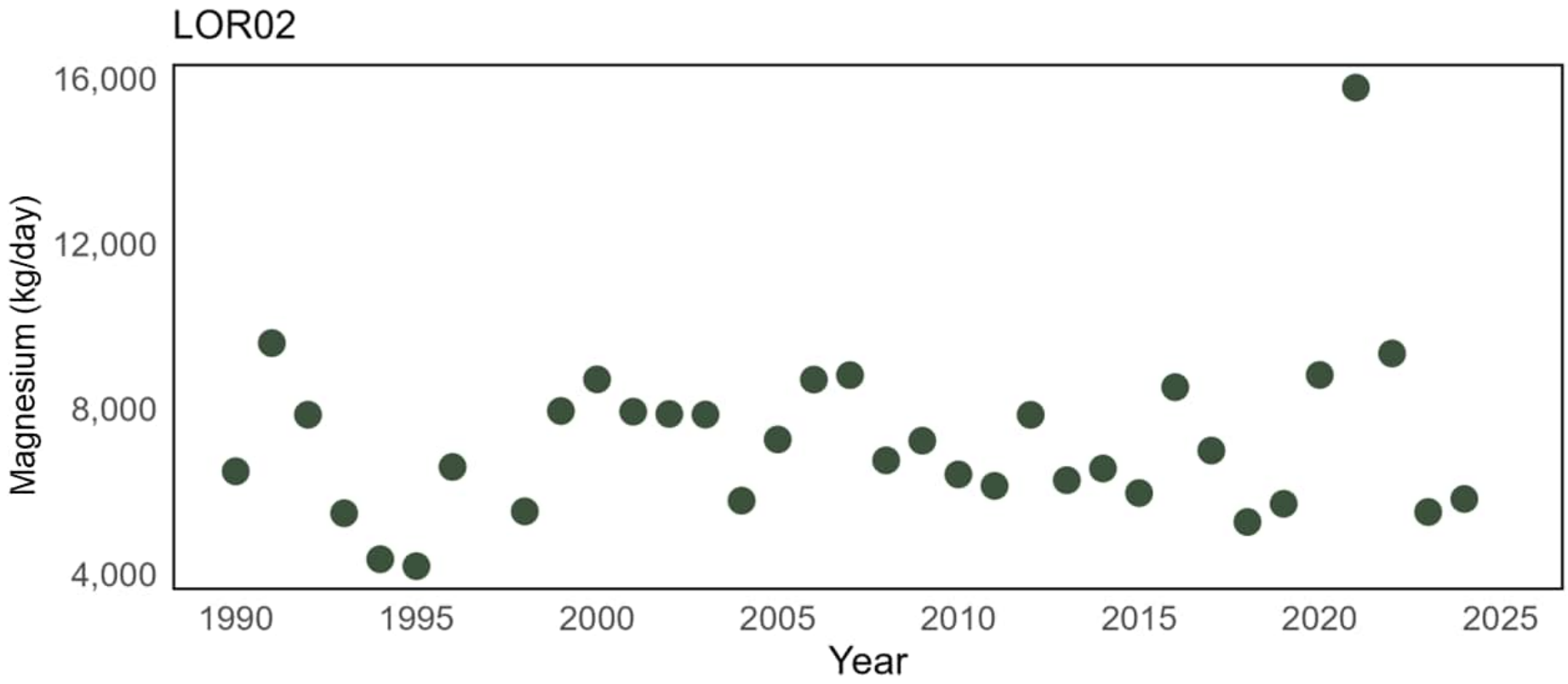
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TITLE
Water Quality Data

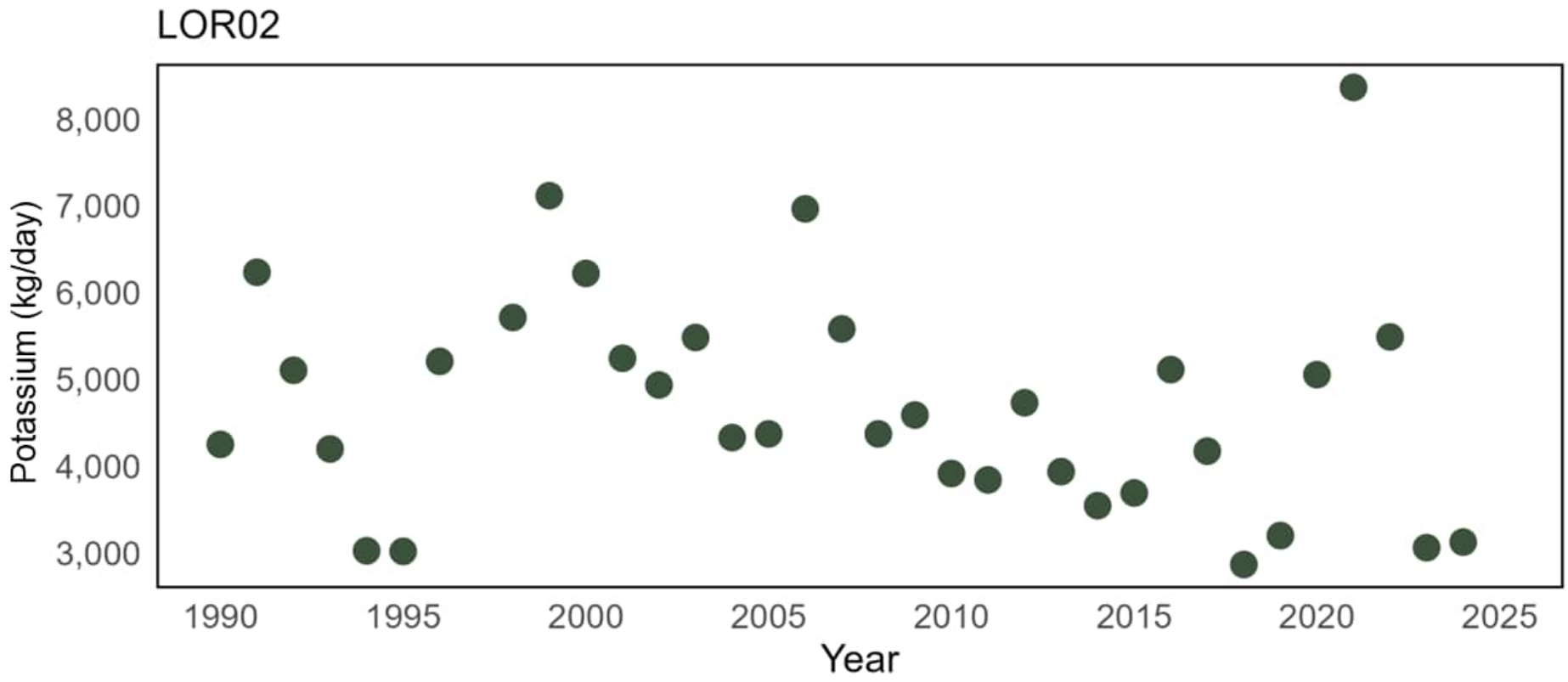
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FIGURE NO:
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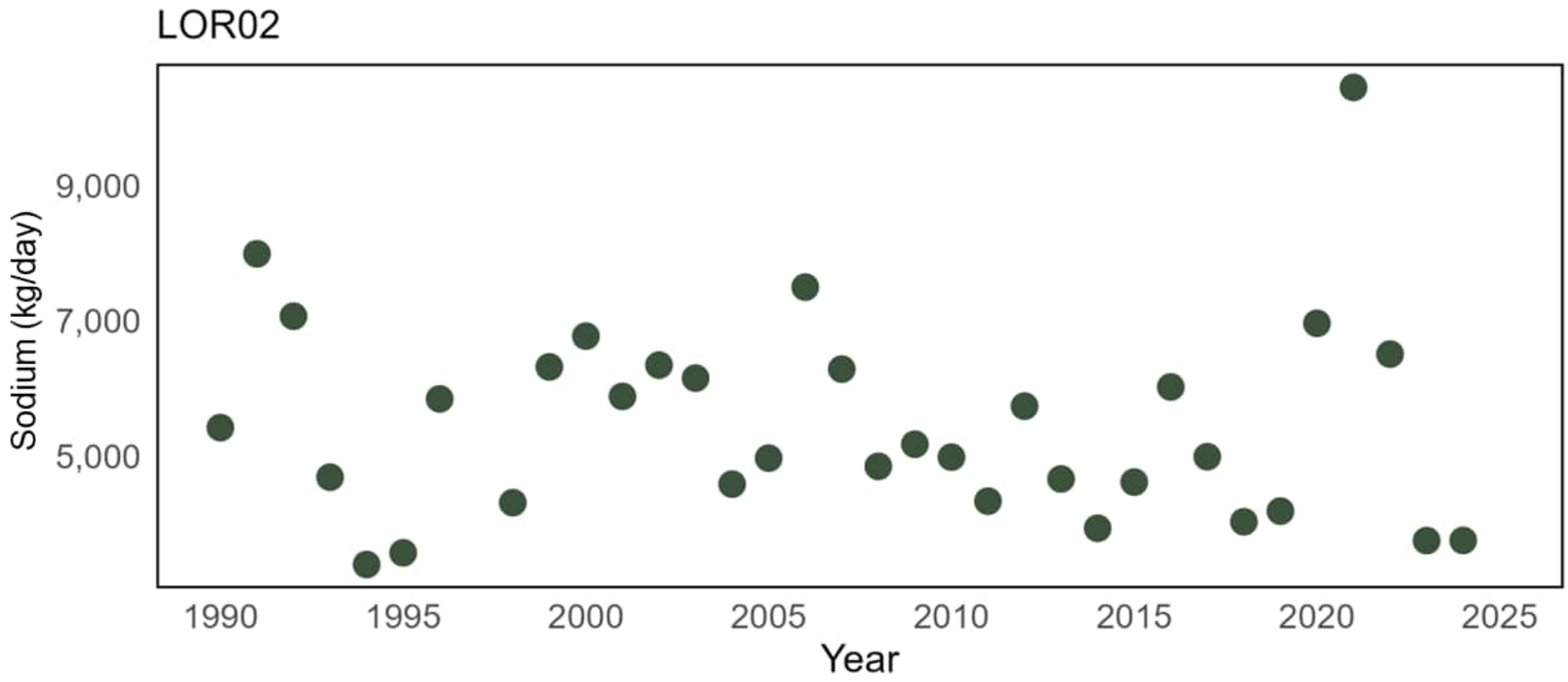
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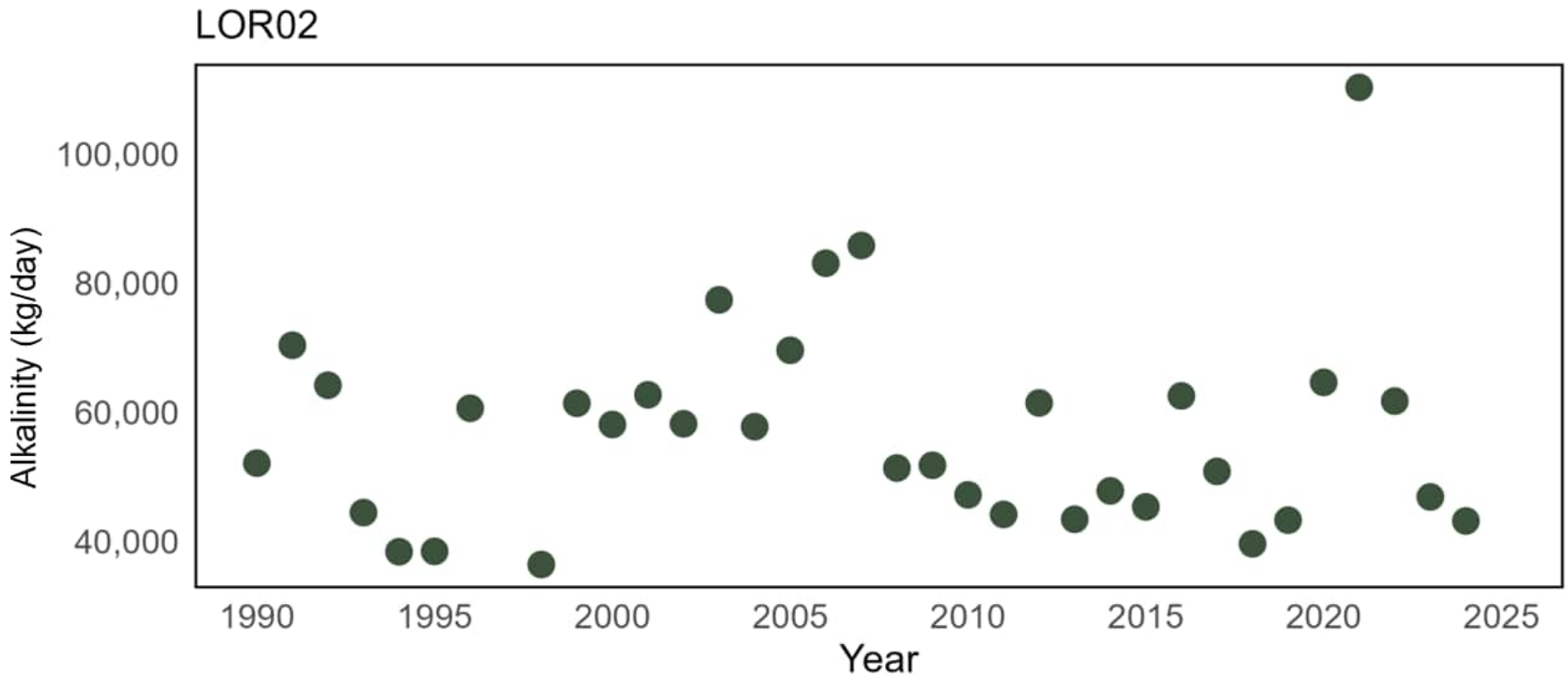
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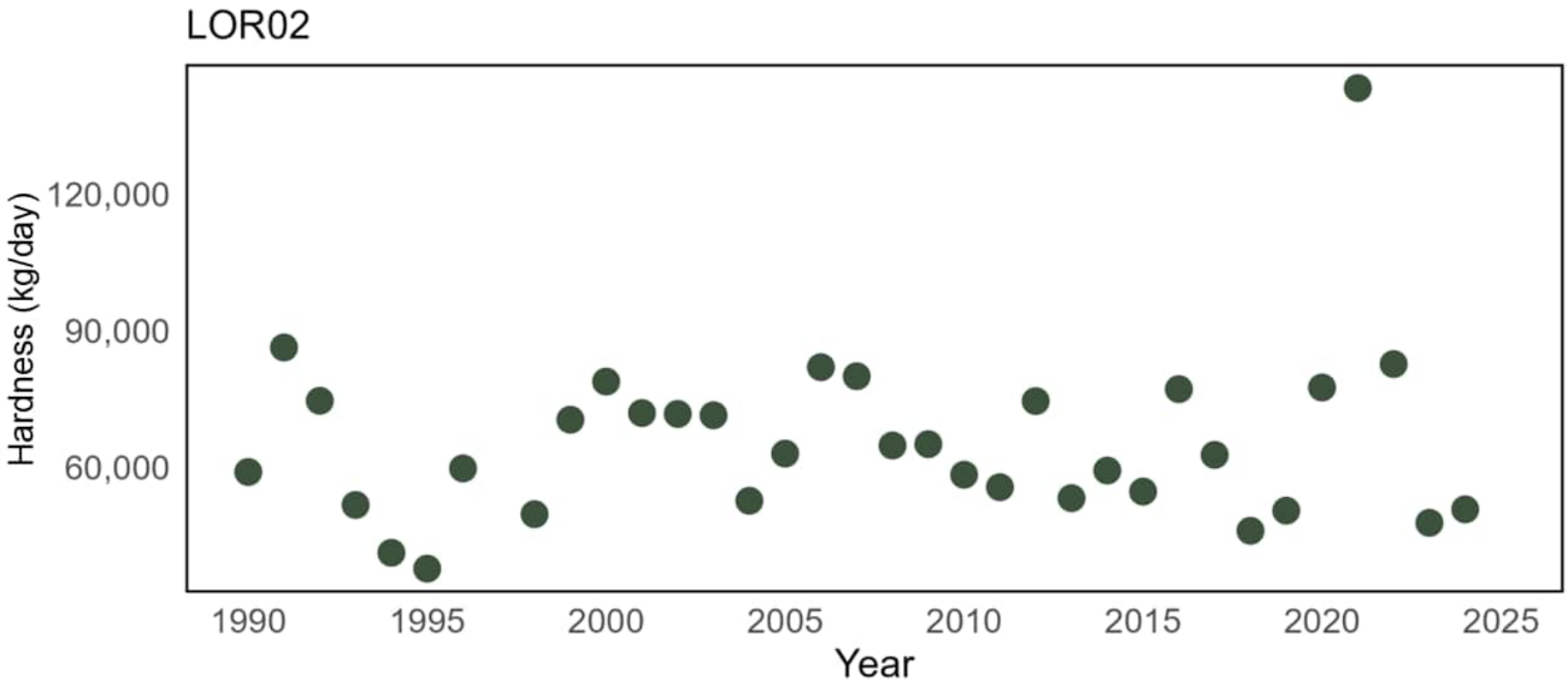
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FIGURE NO:
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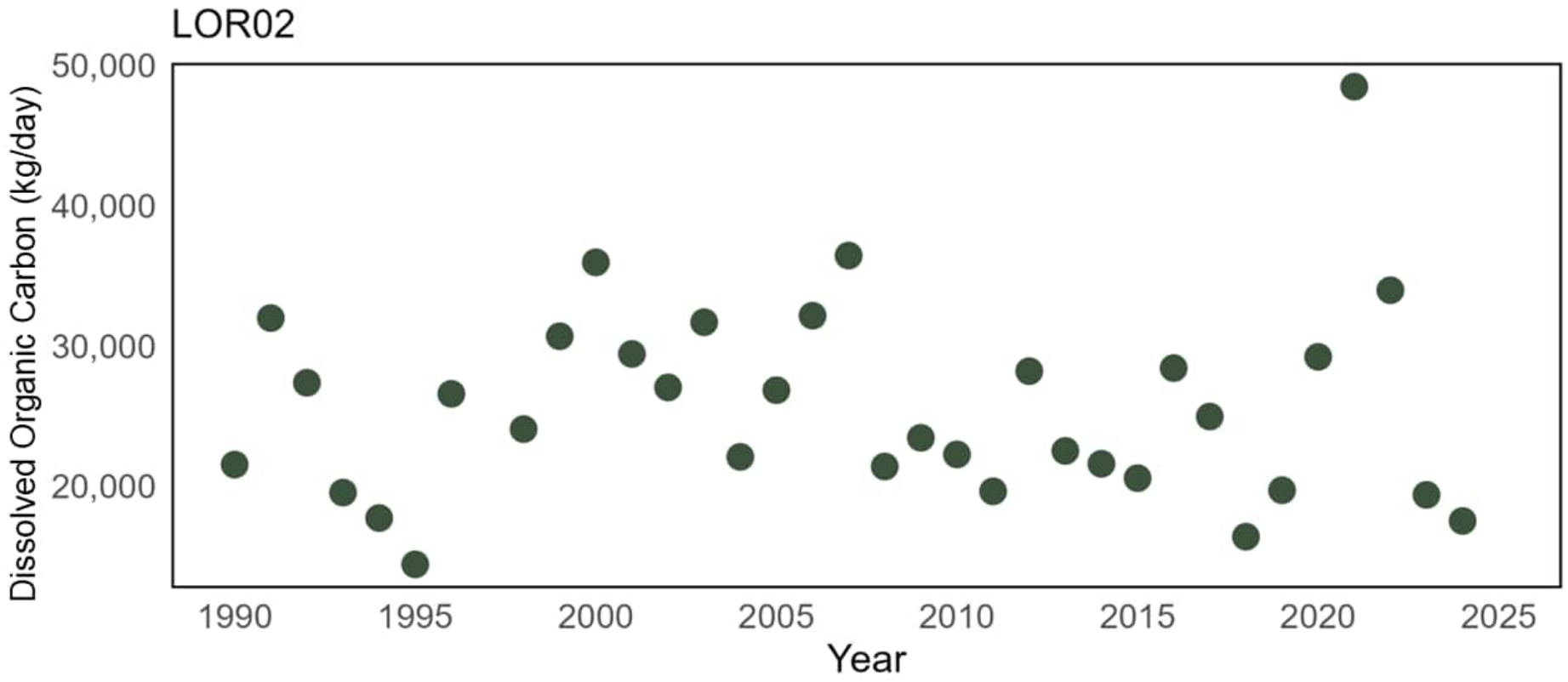
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PROJECT
Water Quality and Quantity
Status and Trends

TITLE
Water Quality Data

SLR

FIGURE NO:
B.6.2.13

DATE: November 24, 2025

PROJECT NO: 205.030233.00001

B.7 Water Quality Guideline Screening

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Laboratory pH				
Clinton-Colden Outlet	2021-07-07	6.4	6.5	----
Clinton-Colden Outlet	2024-09-06	6.4	6.5	----
Coppermine River below Desteffany Lake	2024-04-26	6.4	6.5	----
Coppermine River below Desteffany Lake	2024-10-02	6.3	6.5	----
Coppermine River below Desteffany Lake	2025-05-05	6.1	6.5	----
Daring Lake	2010-03-23	6.3	6.5	----
Daring Lake	2015-03-27	6.1	6.5	----
Daring Lake	2024-09-06	6.4	6.5	----
Daring Lake	2025-03-17	6.1	6.5	----
Desteffany Lake	2010-03-23	6.3	6.5	----
Desteffany Lake	2024-09-06	6.4	6.5	----
King Lake	2025-03-17	6.3	6.5	----
Lac de Gras Outlet	2010-03-23	6.4	6.5	----
Lac de Gras Outlet	2021-03-25	4.8	6.5	----
Lac de Gras Outlet	2024-09-06	6.4	6.5	----
Lac de Gras Outlet	2025-03-17	6.2	6.5	----
Lake of the Enemy	2024-09-06	6.4	6.5	----
Lake of the Enemy	2025-03-17	6.2	6.5	----
Lockhart River ABOVE Outram Lakes	2021-06-14	6.4	6.5	----
Lockhart River ABOVE Outram Lakes	2025-04-07	6.1	6.5	----
Lockhart River at Outlet of Artillery Lake	2007-06-21	6.3	6.5	----
Lockhart River at Outlet of Artillery Lake	2024-09-03	6.4	6.5	----
MacKay Lake	2024-09-06	6.4	6.5	----
MacKay Lake	2025-03-17	6.2	6.5	----
Point Lake	2024-08-06	6.4	6.5	----
Point Lake	2024-09-06	6.4	6.5	----
Point Lake	2025-03-17	6.2	6.5	----
Rocknest Lake	2010-03-23	6.4	6.5	----
Rocknest Lake	2025-03-17	6.2	6.5	----
Starfish Lake	2024-09-06	6.3	6.5	----
Starfish Lake	2025-03-17	6.1	6.5	----
Dissolved Fluoride (mg/L)				
King Lake	2019-09-05	0.20	0.12	1.67
Lac de Gras Outlet	2018-03-13	0.20	0.12	1.67
Lockhart River ABOVE Outram Lakes	2022-10-04	0.43	0.12	3.57
Rocknest Lake	2009-08-05	0.30	0.12	2.50
Rocknest Lake	2018-08-02	0.20	0.12	1.67
Nitrite-N (mg/L)				
Coppermine River above Copper Creek	2007-04-19	0.06	0.060	1.00
Daring Lake	2008-07-07	0.12	0.060	2.00
Daring Lake	2008-08-06	0.12	0.060	2.00
Desteffany Lake	2007-07-04	1.00	0.060	16.67
Desteffany Lake	2008-07-07	0.12	0.060	2.00
Desteffany Lake	2008-08-06	0.11	0.060	1.83
Fairy Lake	2008-07-07	0.49	0.060	8.17
Fairy Lake	2008-08-06	0.53	0.060	8.83
King Lake	2008-07-07	0.17	0.060	2.83
Lac de Gras Outlet	2007-07-04	1.00	0.060	16.67
Lac de Gras Outlet	2008-07-28	0.13	0.060	2.17
Lake of the Enemy	2008-07-07	0.12	0.060	2.00
Lake of the Enemy	2008-08-06	0.14	0.060	2.33
Lockhart River at Outlet of Artillery Lake	2018-02-22	0.10	0.060	1.67
MacKay Lake	2008-07-07	0.15	0.060	2.50
MacKay Lake	2008-08-06	0.08	0.060	1.33
Point Lake	2008-07-07	0.12	0.060	2.00
Point Lake	2008-08-06	0.12	0.060	2.00
Rocknest Lake	2008-07-07	0.23	0.060	3.83
Rocknest Lake	2008-08-06	0.40	0.060	6.67
Total Aluminum (µg/L)				
Coppermine River above Copper Creek	2020-10-02	466	452	1.03

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Total Cadmium (µg/L)				
Coppermine River above Copper Creek	2005-04-21	0.59	0.04	14.87
Coppermine River above Copper Creek	2007-04-19	0.21	0.04	4.93
Coppermine River above Copper Creek	2007-06-14	0.11	0.07	1.49
Coppermine River above Copper Creek	2008-04-18	0.17	0.04	3.97
Coppermine River above Copper Creek	2008-06-03	0.09	0.08	1.18
Coppermine River above Copper Creek	2009-04-09	0.17	0.04	3.91
Coppermine River above Copper Creek	2013-04-17	0.10	0.05	2.07
Coppermine River above Copper Creek	2014-01-27	0.10	0.05	2.15
Coppermine River above Copper Creek	2014-04-10	0.14	0.05	3.02
Coppermine River above Copper Creek	2017-09-12	0.12	0.07	1.68
Daring Lake	2024-08-06	0.06	0.04	1.50
Desteffany Lake	2018-03-13	0.11	0.04	2.75
King Lake	2009-07-16	0.09	0.04	2.25
Lake of the Enemy	2009-07-16	0.12	0.04	3.00
Lockhart River ABOVE Outram Lakes	2025-04-07	0.06	0.04	1.50
Lockhart River at Outlet of Artillery Lake	2006-04-28	0.11	0.04	2.70
Lockhart River at Outlet of Artillery Lake	2006-08-24	0.08	0.04	2.08
Lockhart River at Outlet of Artillery Lake	2007-09-27	0.07	0.04	1.68
Lockhart River at Outlet of Artillery Lake	2012-06-06	0.30	0.04	7.50
Rocknest Lake	2010-09-01	0.16	0.04	4.00
Rocknest Lake	2015-07-02	0.07	0.04	1.75
Dissolved Cadmium (µg/L)				
Coppermine River above Copper Creek	2005-06-09	0.122	0.071	1.73
Coppermine River above Copper Creek	2013-06-11	0.118	0.107	1.10
Coppermine River above Copper Creek	2014-09-07	0.133	0.074	1.79
Coppermine River above Copper Creek	2019-06-14	0.221	0.064	3.43
Coppermine River above Copper Creek	2020-10-02	0.186	0.065	2.86
Lake of the Enemy	2021-03-25	0.071	0.027	2.64
Lake of the Enemy	2021-07-07	0.029	0.027	1.07
Lake of the Enemy	2021-09-08	0.081	0.027	2.99
Lake of the Enemy	2022-07-07	0.052	0.028	1.87
Lake of the Enemy	2024-03-26	0.045	0.027	1.65
Lake of the Enemy	2024-07-02	0.031	0.028	1.09
Lockhart River ABOVE Outram Lakes	2017-03-08	0.043	0.029	1.49
Lockhart River ABOVE Outram Lakes	2017-08-16	0.041	0.033	1.24
Lockhart River at Outlet of Artillery Lake	2011-09-14	0.165	0.066	2.50
Lockhart River at Outlet of Artillery Lake	2013-06-13	0.117	0.073	1.61
Total Chromium (µg/L)				
Desteffany Lake	2006-07-04	12.7	8.9	1.43
Lac de Gras Outlet	2006-07-04	15.2	8.9	1.71
Total Cobalt (µg/L)				
Coppermine River below Desteffany Lake	2022-04-20	0.80	0.43	1.86
Lockhart River ABOVE Outram Lakes	2021-06-14	0.60	0.32	1.87
Total Copper (µg/L)				
Coppermine River above Copper Creek	2005-04-21	2.46	2.00	1.23
Coppermine River above Copper Creek	2007-04-19	2.24	2.00	1.12
Desteffany Lake	2006-03-22	2.75	2.00	1.38
King Lake	2008-08-06	2.25	2.00	1.13
Lac de Gras Outlet	2006-03-22	2.60	2.00	1.30
Lockhart River ABOVE Outram Lakes	2025-04-07	3.45	2.00	1.73
Dissolved Copper (µg/L)				
Clinton-Colden Outlet	2015-08-06	0.40	0.3	1.33
Clinton-Colden Outlet	2016-09-07	0.50	0.3	1.67
Clinton-Colden Outlet	2017-08-09	0.60	0.3	2.00
Clinton-Colden Outlet	2017-09-06	0.50	0.4	1.25
Clinton-Colden Outlet	2018-07-11	0.40	0.3	1.33
Clinton-Colden Outlet	2018-08-02	0.50	0.3	1.67
Clinton-Colden Outlet	2019-07-10	0.50	0.2	2.50
Clinton-Colden Outlet	2019-09-05	0.40	0.3	1.33
Clinton-Colden Outlet	2021-07-07	0.50	0.4	1.25
Clinton-Colden Outlet	2022-07-07	0.50	0.4	1.25
Clinton-Colden Outlet	2022-09-07	0.60	0.4	1.50
Clinton-Colden Outlet	2023-07-04	0.50	0.4	1.25

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Clinton-Colden Outlet	2023-08-03	0.80	0.4	2.00
Clinton-Colden Outlet	2024-07-02	0.50	0.2	2.50
Clinton-Colden Outlet	2024-08-06	0.60	0.4	1.50
Clinton-Colden Outlet	2024-09-06	0.50	0.4	1.25
Coppermine River above Copper Creek	2006-08-15	0.92	0.6	1.53
Coppermine River above Copper Creek	2007-04-19	3.26	0.9	3.62
Coppermine River above Copper Creek	2008-04-18	2.85	0.7	4.07
Coppermine River above Copper Creek	2009-04-09	2.28	0.8	2.85
Coppermine River above Copper Creek	2010-04-17	0.89	0.4	2.23
Coppermine River above Copper Creek	2013-04-17	2.84	1.0	2.84
Coppermine River above Copper Creek	2014-01-27	1.41	0.7	2.01
Coppermine River above Copper Creek	2014-04-10	3.09	0.9	3.43
Coppermine River above Copper Creek	2014-09-07	1.97	1.8	1.09
Coppermine River above Copper Creek	2015-04-14	1.01	0.5	2.02
Coppermine River above Copper Creek	2018-04-09	0.92	0.5	1.84
Coppermine River above Copper Creek	2019-04-16	0.80	0.6	1.33
Coppermine River above Copper Creek	2020-10-02	1.00	0.9	1.11
Coppermine River above Copper Creek	2021-04-13	1.07	0.5	2.14
Coppermine River at outlet of Point Lake	2016-09-22	0.60	0.3	2.00
Coppermine River at outlet of Point Lake	2021-03-04	0.80	0.4	2.00
Coppermine River at outlet of Point Lake	2021-06-15	0.80	0.2	4.00
Coppermine River at outlet of Point Lake	2022-08-18	0.70	0.5	1.40
Coppermine River at outlet of Point Lake	2023-04-12	1.10	0.4	2.75
Coppermine River at outlet of Point Lake	2023-07-06	0.70	0.3	2.33
Coppermine River at outlet of Point Lake	2024-07-30	0.80	0.2	4.00
Coppermine River at outlet of Point Lake	2024-09-21	0.70	0.4	1.75
Coppermine River below Desteffany Lake	2016-09-15	0.50	0.4	1.25
Coppermine River below Desteffany Lake	2020-07-18	0.70	0.6	1.17
Coppermine River below Desteffany Lake	2021-03-12	0.60	0.4	1.50
Coppermine River below Desteffany Lake	2021-06-14	1.00	0.8	1.25
Coppermine River below Desteffany Lake	2022-04-20	1.00	0.3	3.33
Coppermine River below Desteffany Lake	2022-06-30	0.70	0.4	1.75
Coppermine River below Desteffany Lake	2022-09-12	0.60	0.4	1.50
Coppermine River below Desteffany Lake	2023-03-07	0.70	0.4	1.75
Coppermine River below Desteffany Lake	2023-07-07	0.60	0.4	1.50
Coppermine River below Desteffany Lake	2024-04-26	0.70	0.2	3.50
Coppermine River below Desteffany Lake	2024-07-29	0.70	0.2	3.50
Coppermine River below Desteffany Lake	2024-10-02	0.70	0.2	3.50
Coppermine River below Desteffany Lake	2025-05-05	1.40	0.2	7.00
Coppermine River Downstream of Fairy Lake River	2005-07-27	0.80	0.6	1.33
Daring Lake	2005-07-27	0.50	0.3	1.67
Daring Lake	2006-03-22	0.40	0.3	1.33
Daring Lake	2006-07-26	0.40	0.2	2.00
Daring Lake	2006-09-19	0.70	0.2	3.50
Daring Lake	2007-07-06	4.50	0.3	15.00
Daring Lake	2007-08-17	0.50	0.3	1.67
Daring Lake	2007-09-13	0.50	0.2	2.50
Daring Lake	2008-03-31	0.80	0.3	2.67
Daring Lake	2008-07-07	0.40	0.3	1.33
Daring Lake	2010-07-06	0.40	0.2	2.00
Daring Lake	2013-07-09	0.80	0.3	2.67
Daring Lake	2013-09-06	0.40	0.3	1.33
Daring Lake	2014-03-21	0.50	0.4	1.25
Daring Lake	2017-03-23	0.70	0.2	3.50
Daring Lake	2018-08-02	0.40	0.3	1.33
Daring Lake	2019-03-18	0.40	0.2	2.00
Daring Lake	2020-03-16	0.40	0.3	1.33
Daring Lake	2020-09-09	0.30	0.2	1.50
Daring Lake	2021-03-25	0.50	0.2	2.50
Daring Lake	2021-07-07	0.40	0.2	2.00
Daring Lake	2021-09-08	0.40	0.3	1.33
Daring Lake	2022-03-29	0.70	0.6	1.17
Daring Lake	2023-03-30	0.70	0.3	2.33
Daring Lake	2023-07-04	0.40	0.3	1.33

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Daring Lake	2023-08-03	0.40	0.3	1.33
Daring Lake	2024-03-26	0.40	0.2	2.00
Daring Lake	2024-08-06	0.40	0.2	2.00
Daring Lake	2024-09-06	0.40	0.2	2.00
Daring Lake	2025-03-17	0.50	0.4	1.25
Desteffany Lake	2005-07-27	0.90	0.4	2.25
Desteffany Lake	2006-03-22	0.60	0.2	3.00
Desteffany Lake	2006-07-04	2.40	0.6	4.00
Desteffany Lake	2006-09-19	1.00	0.3	3.33
Desteffany Lake	2007-07-04	0.90	0.4	2.25
Desteffany Lake	2007-08-17	0.80	0.3	2.67
Desteffany Lake	2007-09-13	0.70	0.2	3.50
Desteffany Lake	2008-03-31	1.00	0.2	5.00
Desteffany Lake	2008-07-07	0.70	0.4	1.75
Desteffany Lake	2009-08-05	0.60	0.4	1.50
Desteffany Lake	2010-07-06	0.80	0.4	2.00
Desteffany Lake	2013-07-09	0.40	0.2	2.00
Desteffany Lake	2013-09-06	0.70	0.4	1.75
Desteffany Lake	2014-07-08	1.00	0.3	3.33
Desteffany Lake	2014-09-09	0.50	0.4	1.25
Desteffany Lake	2015-03-27	0.70	0.4	1.75
Desteffany Lake	2015-07-02	0.40	0.3	1.33
Desteffany Lake	2015-08-06	0.50	0.3	1.67
Desteffany Lake	2015-09-03	0.50	0.3	1.67
Desteffany Lake	2016-03-23	0.50	0.4	1.25
Desteffany Lake	2016-09-07	0.50	0.4	1.25
Desteffany Lake	2017-03-23	0.40	0.2	2.00
Desteffany Lake	2017-08-09	0.60	0.4	1.50
Desteffany Lake	2017-09-06	0.60	0.3	2.00
Desteffany Lake	2018-03-13	0.60	0.4	1.50
Desteffany Lake	2018-07-11	0.60	0.4	1.50
Desteffany Lake	2018-08-02	0.70	0.4	1.75
Desteffany Lake	2018-09-05	0.60	0.5	1.20
Desteffany Lake	2019-03-18	0.60	0.2	3.00
Desteffany Lake	2019-07-10	0.70	0.6	1.17
Desteffany Lake	2019-08-08	0.50	0.3	1.67
Desteffany Lake	2019-09-05	0.60	0.3	2.00
Desteffany Lake	2020-03-16	0.60	0.2	3.00
Desteffany Lake	2020-08-06	0.70	0.6	1.17
Desteffany Lake	2020-09-09	0.60	0.3	2.00
Desteffany Lake	2021-03-25	0.70	0.4	1.75
Desteffany Lake	2021-07-07	0.90	0.4	2.25
Desteffany Lake	2021-09-08	0.60	0.4	1.50
Desteffany Lake	2022-03-29	0.80	0.2	4.00
Desteffany Lake	2022-07-07	0.60	0.5	1.20
Desteffany Lake	2022-08-03	0.60	0.5	1.20
Desteffany Lake	2022-09-07	0.50	0.4	1.25
Desteffany Lake	2023-03-30	0.70	0.4	1.75
Desteffany Lake	2023-07-04	0.80	0.4	2.00
Desteffany Lake	2023-08-03	0.70	0.4	1.75
Desteffany Lake	2024-03-26	0.60	0.2	3.00
Desteffany Lake	2024-07-02	0.70	0.2	3.50
Desteffany Lake	2024-08-06	0.60	0.2	3.00
Desteffany Lake	2024-09-06	0.60	0.2	3.00
Fairy Lake	2006-09-19	0.60	0.4	1.50
Fairy Lake	2007-07-06	6.20	0.6	10.33
Fairy Lake River Upstream of Coppermine River	2005-07-27	0.60	0.5	1.20
King Lake	2006-07-26	0.80	0.3	2.67
King Lake	2006-09-19	1.00	0.3	3.33
King Lake	2007-07-06	0.60	0.4	1.50
King Lake	2007-08-17	0.70	0.5	1.40
King Lake	2007-09-13	0.70	0.4	1.75
King Lake	2008-07-07	0.70	0.3	2.33
King Lake	2009-08-05	0.50	0.4	1.25

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
King Lake	2010-07-06	0.60	0.3	2.00
King Lake	2013-09-06	0.60	0.4	1.50
King Lake	2014-03-21	0.70	0.6	1.17
King Lake	2014-07-08	0.50	0.4	1.25
King Lake	2015-08-06	4.60	0.6	7.67
King Lake	2015-09-03	0.60	0.4	1.50
King Lake	2018-03-13	0.70	0.6	1.17
King Lake	2018-07-11	1.00	0.6	1.67
King Lake	2019-03-19	0.60	0.4	1.50
King Lake	2019-09-05	0.50	0.4	1.25
King Lake	2020-09-09	0.50	0.4	1.25
King Lake	2023-03-30	0.60	0.4	1.50
King Lake	2023-08-03	0.50	0.2	2.50
King Lake	2024-07-02	0.50	0.4	1.25
King Lake	2024-08-06	0.50	0.2	2.50
King Lake	2024-09-06	0.50	0.2	2.50
King Lake	2025-03-17	0.60	0.2	3.00
Lac de Gras Outlet	2005-06-09	0.90	0.3	3.00
Lac de Gras Outlet	2005-07-27	0.70	0.3	2.33
Lac de Gras Outlet	2006-03-22	0.50	0.3	1.67
Lac de Gras Outlet	2006-07-04	2.80	0.3	9.33
Lac de Gras Outlet	2006-09-19	1.00	0.2	5.00
Lac de Gras Outlet	2007-07-04	0.70	0.2	3.50
Lac de Gras Outlet	2007-09-20	0.60	0.2	3.00
Lac de Gras Outlet	2008-03-31	0.80	0.3	2.67
Lac de Gras Outlet	2008-06-13	0.80	0.3	2.67
Lac de Gras Outlet	2008-07-28	0.50	0.3	1.67
Lac de Gras Outlet	2009-08-05	0.60	0.2	3.00
Lac de Gras Outlet	2010-07-06	0.60	0.2	3.00
Lac de Gras Outlet	2013-07-09	0.40	0.2	2.00
Lac de Gras Outlet	2013-09-06	0.50	0.2	2.50
Lac de Gras Outlet	2014-03-21	0.80	0.4	2.00
Lac de Gras Outlet	2014-07-08	0.50	0.3	1.67
Lac de Gras Outlet	2014-09-09	0.40	0.2	2.00
Lac de Gras Outlet	2015-03-27	0.80	0.4	2.00
Lac de Gras Outlet	2015-08-06	0.60	0.3	2.00
Lac de Gras Outlet	2016-03-23	0.40	0.3	1.33
Lac de Gras Outlet	2016-09-07	0.40	0.3	1.33
Lac de Gras Outlet	2017-03-23	0.40	0.2	2.00
Lac de Gras Outlet	2017-08-09	0.50	0.3	1.67
Lac de Gras Outlet	2017-09-06	0.50	0.3	1.67
Lac de Gras Outlet	2018-03-13	0.80	0.4	2.00
Lac de Gras Outlet	2018-07-11	1.60	0.3	5.33
Lac de Gras Outlet	2018-08-02	0.60	0.3	2.00
Lac de Gras Outlet	2018-09-05	0.50	0.4	1.25
Lac de Gras Outlet	2019-03-18	0.60	0.3	2.00
Lac de Gras Outlet	2019-07-10	0.50	0.3	1.67
Lac de Gras Outlet	2019-08-08	0.40	0.3	1.33
Lac de Gras Outlet	2019-09-05	0.50	0.3	1.67
Lac de Gras Outlet	2020-03-16	0.70	0.3	2.33
Lac de Gras Outlet	2020-08-06	0.50	0.3	1.67
Lac de Gras Outlet	2020-09-09	0.50	0.2	2.50
Lac de Gras Outlet	2021-03-25	0.70	0.4	1.75
Lac de Gras Outlet	2021-07-07	0.50	0.2	2.50
Lac de Gras Outlet	2021-09-08	0.60	0.3	2.00
Lac de Gras Outlet	2022-03-29	0.70	0.4	1.75
Lac de Gras Outlet	2022-07-07	0.50	0.3	1.67
Lac de Gras Outlet	2022-08-03	0.50	0.4	1.25
Lac de Gras Outlet	2022-09-07	0.70	0.4	1.75
Lac de Gras Outlet	2023-03-30	0.80	0.4	2.00
Lac de Gras Outlet	2023-07-04	0.50	0.3	1.67
Lac de Gras Outlet	2023-08-03	0.60	0.3	2.00
Lac de Gras Outlet	2024-03-26	0.60	0.2	3.00
Lac de Gras Outlet	2024-07-02	0.50	0.2	2.50

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Lac de Gras Outlet	2024-08-06	0.60	0.2	3.00
Lac de Gras Outlet	2024-09-06	0.50	0.4	1.25
Lac de Gras Outlet	2025-03-17	0.70	0.4	1.75
Lake of the Enemy	2006-07-26	0.60	0.2	3.00
Lake of the Enemy	2006-09-19	0.70	0.2	3.50
Lake of the Enemy	2007-07-06	0.50	0.2	2.50
Lake of the Enemy	2007-08-17	0.70	0.2	3.50
Lake of the Enemy	2007-09-13	0.60	0.2	3.00
Lake of the Enemy	2008-07-07	0.60	0.2	3.00
Lake of the Enemy	2009-08-05	0.40	0.2	2.00
Lake of the Enemy	2010-07-06	0.50	0.2	2.50
Lake of the Enemy	2013-09-06	0.40	0.2	2.00
Lake of the Enemy	2014-03-21	0.50	0.3	1.67
Lake of the Enemy	2014-07-08	0.40	0.2	2.00
Lake of the Enemy	2015-03-27	0.60	0.3	2.00
Lake of the Enemy	2015-08-06	0.30	0.2	1.50
Lake of the Enemy	2016-03-23	0.40	0.3	1.33
Lake of the Enemy	2016-07-07	0.30	0.2	1.50
Lake of the Enemy	2016-09-07	0.60	0.3	2.00
Lake of the Enemy	2017-08-09	0.50	0.3	1.67
Lake of the Enemy	2017-09-06	0.40	0.3	1.33
Lake of the Enemy	2018-03-13	0.50	0.3	1.67
Lake of the Enemy	2018-07-11	0.40	0.2	2.00
Lake of the Enemy	2018-08-02	0.50	0.3	1.67
Lake of the Enemy	2018-09-05	0.40	0.2	2.00
Lake of the Enemy	2019-03-19	0.60	0.3	2.00
Lake of the Enemy	2019-07-10	0.40	0.2	2.00
Lake of the Enemy	2019-08-08	0.30	0.2	1.50
Lake of the Enemy	2019-09-05	0.40	0.2	2.00
Lake of the Enemy	2020-03-16	0.60	0.3	2.00
Lake of the Enemy	2020-08-06	0.40	0.2	2.00
Lake of the Enemy	2020-09-09	0.40	0.2	2.00
Lake of the Enemy	2021-03-25	0.60	0.3	2.00
Lake of the Enemy	2021-07-07	0.40	0.3	1.33
Lake of the Enemy	2021-09-08	0.50	0.3	1.67
Lake of the Enemy	2022-03-29	0.50	0.3	1.67
Lake of the Enemy	2022-07-07	0.50	0.3	1.67
Lake of the Enemy	2022-08-03	0.50	0.3	1.67
Lake of the Enemy	2022-09-07	0.50	0.3	1.67
Lake of the Enemy	2023-03-30	0.80	0.3	2.67
Lake of the Enemy	2023-07-04	0.40	0.2	2.00
Lake of the Enemy	2023-08-03	0.50	0.2	2.50
Lake of the Enemy	2024-03-26	0.70	0.3	2.33
Lake of the Enemy	2024-07-02	0.50	0.2	2.50
Lake of the Enemy	2024-08-06	0.50	0.3	1.67
Lake of the Enemy	2024-09-06	0.50	0.3	1.67
Lake of the Enemy	2025-03-17	0.60	0.2	3.00
Lockhart River ABOVE Outram Lakes	2017-03-08	1.20	0.4	3.00
Lockhart River ABOVE Outram Lakes	2017-10-05	0.50	0.4	1.25
Lockhart River ABOVE Outram Lakes	2018-04-23	1.90	0.6	3.17
Lockhart River ABOVE Outram Lakes	2018-09-27	0.50	0.3	1.67
Lockhart River ABOVE Outram Lakes	2019-03-05	0.70	0.4	1.75
Lockhart River ABOVE Outram Lakes	2019-10-28	0.50	0.4	1.25
Lockhart River ABOVE Outram Lakes	2021-03-16	1.00	0.6	1.67
Lockhart River ABOVE Outram Lakes	2021-06-14	0.90	0.2	4.50
Lockhart River ABOVE Outram Lakes	2022-05-19	0.90	0.5	1.80
Lockhart River ABOVE Outram Lakes	2022-10-04	0.60	0.4	1.50
Lockhart River ABOVE Outram Lakes	2023-03-09	0.80	0.2	4.00
Lockhart River ABOVE Outram Lakes	2024-07-26	0.50	0.4	1.25
Lockhart River ABOVE Outram Lakes	2025-04-07	3.30	0.6	5.50
Lockhart River at Outlet of Artillery Lake	2006-04-28	0.76	0.3	2.53
Lockhart River at Outlet of Artillery Lake	2006-06-20	0.80	0.3	2.67
Lockhart River at Outlet of Artillery Lake	2006-08-24	0.91	0.2	4.55
Lockhart River at Outlet of Artillery Lake	2007-06-21	0.77	0.2	3.85

Table B.7 Water Quality Guideline Screening Summary

		Screening Data		
Sample Site	**Sample Date**	**Value**	**WQG**	**HQ**
Lockhart River at Outlet of Artillery Lake	2007-09-27	0.94	0.4	2.35
Lockhart River at Outlet of Artillery Lake	2008-06-23	0.67	0.3	2.23
Lockhart River at Outlet of Artillery Lake	2008-09-22	0.82	0.4	2.05
Lockhart River at Outlet of Artillery Lake	2009-07-03	1.29	0.3	4.30
Lockhart River at Outlet of Artillery Lake	2009-08-20	1.33	0.3	4.43
Lockhart River at Outlet of Artillery Lake	2010-01-12	1.07	0.3	3.57
Lockhart River at Outlet of Artillery Lake	2010-06-16	1.44	0.3	4.80
Lockhart River at Outlet of Artillery Lake	2010-09-09	0.56	0.3	1.87
Lockhart River at Outlet of Artillery Lake	2011-01-19	0.49	0.3	1.63
Lockhart River at Outlet of Artillery Lake	2011-06-18	0.59	0.3	1.97
Lockhart River at Outlet of Artillery Lake	2011-09-14	0.54	0.4	1.35
Lockhart River at Outlet of Artillery Lake	2012-01-19	2.04	0.3	6.80
Lockhart River at Outlet of Artillery Lake	2012-06-06	1.45	0.4	3.63
Lockhart River at Outlet of Artillery Lake	2012-08-27	0.72	0.5	1.44
Lockhart River at Outlet of Artillery Lake	2013-06-13	1.21	0.3	4.03
Lockhart River at Outlet of Artillery Lake	2013-09-07	0.61	0.3	2.03
Lockhart River at Outlet of Artillery Lake	2014-03-19	0.71	0.3	2.37
Lockhart River at Outlet of Artillery Lake	2014-06-16	0.94	0.3	3.13
Lockhart River at Outlet of Artillery Lake	2014-09-17	0.58	0.3	1.93
Lockhart River at Outlet of Artillery Lake	2015-01-13	0.68	0.3	2.27
Lockhart River at Outlet of Artillery Lake	2015-10-06	0.53	0.3	1.77
Lockhart River at Outlet of Artillery Lake	2016-03-21	0.59	0.5	1.18
Lockhart River at Outlet of Artillery Lake	2016-07-08	0.56	0.4	1.40
Lockhart River at Outlet of Artillery Lake	2017-07-18	0.58	0.5	1.16
Lockhart River at Outlet of Artillery Lake	2017-09-07	0.52	0.3	1.73
Lockhart River at Outlet of Artillery Lake	2018-02-22	0.73	0.3	2.43
Lockhart River at Outlet of Artillery Lake	2018-06-29	0.53	0.3	1.77
Lockhart River at Outlet of Artillery Lake	2018-09-13	0.53	0.4	1.33
Lockhart River at Outlet of Artillery Lake	2019-06-12	0.62	0.3	2.07
Lockhart River at Outlet of Artillery Lake	2019-09-19	0.53	0.3	1.77
Lockhart River at Outlet of Artillery Lake	2020-03-10	0.59	0.3	1.97
Lockhart River at Outlet of Artillery Lake	2020-10-01	0.56	0.3	1.87
Lockhart River at Outlet of Artillery Lake	2021-06-30	0.48	0.4	1.20
Lockhart River at Outlet of Artillery Lake	2022-04-12	0.63	0.3	2.10
Lockhart River at Outlet of Artillery Lake	2023-02-28	0.69	0.4	1.73
Lockhart River at Outlet of Artillery Lake	2024-04-18	0.62	0.2	3.10
Lockhart River at Outlet of Artillery Lake	2024-07-04	0.57	0.2	2.85
Lockhart River at Outlet of Artillery Lake	2024-09-03	1.63	0.2	8.15
MacKay Lake	2006-07-26	0.60	0.2	3.00
MacKay Lake	2006-09-19	0.90	0.3	3.00
MacKay Lake	2007-07-06	0.70	0.3	2.33
MacKay Lake	2007-08-17	0.80	0.3	2.67
MacKay Lake	2007-09-13	0.70	0.3	2.33
MacKay Lake	2008-03-31	1.20	0.3	4.00
MacKay Lake	2008-07-07	0.60	0.2	3.00
MacKay Lake	2009-08-05	0.50	0.4	1.25
MacKay Lake	2010-07-06	0.80	0.2	4.00
MacKay Lake	2013-09-06	0.50	0.4	1.25
MacKay Lake	2014-03-21	0.90	0.6	1.50
MacKay Lake	2014-07-08	0.60	0.4	1.50
MacKay Lake	2014-09-09	0.50	0.4	1.25
MacKay Lake	2015-03-27	0.80	0.6	1.33
MacKay Lake	2016-03-23	0.50	0.3	1.67
MacKay Lake	2017-08-09	0.50	0.4	1.25
MacKay Lake	2017-09-06	37.30	0.4	93.25
MacKay Lake	2018-03-13	0.60	0.4	1.50
MacKay Lake	2018-08-02	0.50	0.4	1.25
MacKay Lake	2019-03-19	2.80	0.2	14.00
MacKay Lake	2019-07-10	0.40	0.3	1.33
MacKay Lake	2019-09-05	0.40	0.3	1.33
MacKay Lake	2020-03-16	0.50	0.4	1.25
MacKay Lake	2021-03-25	0.80	0.4	2.00
MacKay Lake	2021-07-07	0.50	0.3	1.67
MacKay Lake	2022-03-29	0.70	0.6	1.17

Table B.7 Water Quality Guideline Screening Summary

		Screening Data		
Sample Site	**Sample Date**	**Value**	**WQG**	**HQ**
MacKay Lake	2023-03-30	0.70	0.4	1.75
MacKay Lake	2023-08-03	0.50	0.4	1.25
MacKay Lake	2024-03-26	0.50	0.4	1.25
MacKay Lake	2024-07-02	0.50	0.2	2.50
MacKay Lake	2024-08-06	0.50	0.4	1.25
MacKay Lake	2024-09-06	0.40	0.2	2.00
MacKay Lake	2025-03-17	0.60	0.4	1.50
Point Lake	2005-07-27	2.60	0.2	13.00
Point Lake	2006-03-22	0.70	0.2	3.50
Point Lake	2006-07-26	0.80	0.2	4.00
Point Lake	2006-09-19	1.10	0.3	3.67
Point Lake	2007-07-06	9.60	0.3	32.00
Point Lake	2007-08-17	0.80	0.3	2.67
Point Lake	2007-09-13	0.80	0.3	2.67
Point Lake	2008-03-31	1.10	0.2	5.50
Point Lake	2008-07-07	0.60	0.3	2.00
Point Lake	2009-08-05	0.80	0.2	4.00
Point Lake	2010-07-06	0.80	0.3	2.67
Point Lake	2012-08-08	0.50	0.4	1.25
Point Lake	2012-09-05	0.50	0.3	1.67
Point Lake	2013-07-09	0.40	0.3	1.33
Point Lake	2013-08-07	0.50	0.3	1.67
Point Lake	2013-09-06	0.80	0.2	4.00
Point Lake	2014-03-21	1.40	0.5	2.80
Point Lake	2014-07-08	0.70	0.2	3.50
Point Lake	2014-09-09	0.50	0.2	2.50
Point Lake	2015-03-27	0.90	0.4	2.25
Point Lake	2015-07-02	0.30	0.2	1.50
Point Lake	2015-08-06	0.50	0.3	1.67
Point Lake	2015-09-03	0.50	0.2	2.50
Point Lake	2016-03-23	0.80	0.3	2.67
Point Lake	2016-07-07	0.50	0.3	1.67
Point Lake	2016-09-07	0.60	0.3	2.00
Point Lake	2017-03-23	1.50	0.6	2.50
Point Lake	2017-08-09	0.60	0.4	1.50
Point Lake	2017-09-06	0.60	0.4	1.50
Point Lake	2018-03-13	1.30	0.6	2.17
Point Lake	2018-07-11	0.60	0.3	2.00
Point Lake	2018-08-02	0.70	0.3	2.33
Point Lake	2018-09-05	0.70	0.5	1.40
Point Lake	2019-03-18	0.80	0.3	2.67
Point Lake	2019-07-10	0.70	0.3	2.33
Point Lake	2019-08-08	0.50	0.3	1.67
Point Lake	2019-09-05	0.60	0.2	3.00
Point Lake	2020-03-16	0.90	0.4	2.25
Point Lake	2020-08-06	0.60	0.3	2.00
Point Lake	2020-09-09	0.60	0.2	3.00
Point Lake	2021-03-25	1.00	0.6	1.67
Point Lake	2021-07-07	0.70	0.4	1.75
Point Lake	2021-09-08	0.60	0.3	2.00
Point Lake	2022-03-29	1.20	0.5	2.40
Point Lake	2022-07-07	0.60	0.4	1.50
Point Lake	2022-08-03	0.60	0.4	1.50
Point Lake	2022-09-07	0.60	0.4	1.50
Point Lake	2023-03-30	1.00	0.3	3.33
Point Lake	2023-07-04	0.60	0.3	2.00
Point Lake	2023-08-03	0.70	0.2	3.50
Point Lake	2024-03-26	1.00	0.6	1.67
Point Lake	2024-07-02	0.60	0.2	3.00
Point Lake	2024-08-06	0.70	0.4	1.75
Point Lake	2025-03-17	1.10	0.6	1.83
Rocknest Lake	2006-09-19	1.20	0.3	4.00
Rocknest Lake	2007-07-06	14.50	1.4	10.36
Rocknest Lake	2007-08-17	0.90	0.5	1.80

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Rocknest Lake	2007-09-13	0.70	0.5	1.40
Rocknest Lake	2008-03-31	1.30	0.4	3.25
Rocknest Lake	2008-07-07	0.80	0.7	1.14
Rocknest Lake	2010-07-06	0.70	0.6	1.17
Rocknest Lake	2012-09-05	0.80	0.6	1.33
Rocknest Lake	2013-08-07	0.50	0.4	1.25
Rocknest Lake	2013-09-06	0.80	0.3	2.67
Rocknest Lake	2014-03-21	0.70	0.6	1.17
Rocknest Lake	2014-09-09	0.50	0.4	1.25
Rocknest Lake	2015-07-02	0.90	0.6	1.50
Rocknest Lake	2017-03-23	0.50	0.2	2.50
Rocknest Lake	2017-08-09	0.90	0.5	1.80
Rocknest Lake	2018-03-13	0.60	0.4	1.50
Rocknest Lake	2018-08-02	1.00	0.6	1.67
Rocknest Lake	2019-03-18	1.70	0.4	4.25
Rocknest Lake	2020-03-16	0.70	0.2	3.50
Rocknest Lake	2020-09-09	0.60	0.4	1.50
Rocknest Lake	2021-03-25	0.70	0.4	1.75
Rocknest Lake	2022-03-29	0.80	0.6	1.33
Rocknest Lake	2022-09-07	0.60	0.5	1.20
Rocknest Lake	2023-03-30	0.70	0.3	2.33
Rocknest Lake	2024-03-26	0.70	0.4	1.75
Rocknest Lake	2024-09-06	0.70	0.5	1.40
Rocknest Lake	2025-03-17	0.70	0.4	1.75
Starfish Lake	2015-08-06	15.80	0.4	39.50
Starfish Lake	2015-09-03	0.70	0.3	2.33
Starfish Lake	2016-03-23	1.00	0.4	2.50
Starfish Lake	2016-07-07	0.80	0.4	2.00
Starfish Lake	2016-08-09	0.60	0.3	2.00
Starfish Lake	2016-09-07	0.80	0.5	1.60
Starfish Lake	2017-03-23	1.00	0.8	1.25
Starfish Lake	2017-08-09	0.90	0.7	1.29
Starfish Lake	2017-09-06	0.80	0.4	2.00
Starfish Lake	2018-07-11	0.80	0.5	1.60
Starfish Lake	2018-08-02	0.90	0.5	1.80
Starfish Lake	2018-09-05	0.90	0.6	1.50
Starfish Lake	2019-03-18	1.00	0.3	3.33
Starfish Lake	2019-07-10	1.00	0.7	1.43
Starfish Lake	2019-08-08	0.80	0.4	2.00
Starfish Lake	2019-09-05	0.80	0.7	1.14
Starfish Lake	2020-03-16	1.40	1.0	1.40
Starfish Lake	2020-08-06	0.90	0.4	2.25
Starfish Lake	2020-09-09	1.10	0.7	1.57
Starfish Lake	2021-07-07	1.00	0.8	1.25
Starfish Lake	2021-09-08	0.90	0.5	1.80
Starfish Lake	2022-03-29	1.40	0.6	2.33
Starfish Lake	2022-07-07	1.00	0.7	1.43
Starfish Lake	2022-08-03	0.90	0.7	1.29
Starfish Lake	2022-09-07	0.90	0.7	1.29
Starfish Lake	2023-07-04	0.80	0.6	1.33
Starfish Lake	2023-08-03	1.10	0.6	1.83
Starfish Lake	2024-03-26	0.90	0.7	1.29
Starfish Lake	2024-07-02	1.00	0.7	1.43
Starfish Lake	2024-08-06	1.00	0.2	5.00
Starfish Lake	2024-09-06	0.90	0.7	1.29
Starfish Lake	2025-03-17	1.20	0.2	6.00
Total Iron (µg/L)				
Coppermine River above Copper Creek	2005-06-09	949	300	3.16
Coppermine River above Copper Creek	2007-06-14	397	300	1.32
Coppermine River above Copper Creek	2008-06-03	481	300	1.60
Coppermine River above Copper Creek	2009-06-17	644	300	2.15
Coppermine River above Copper Creek	2010-06-08	615	300	2.05
Coppermine River above Copper Creek	2011-06-03	484	300	1.61
Coppermine River above Copper Creek	2012-06-05	428	300	1.43

Table B.7 Water Quality Guideline Screening Summary

Sample Site	Sample Date	Screening Data		
		Value	WQG	HQ
Coppermine River above Copper Creek	2014-06-03	327	300	1.09
Coppermine River above Copper Creek	2016-06-07	457	300	1.52
Coppermine River above Copper Creek	2018-06-15	603	300	2.01
Coppermine River above Copper Creek	2019-06-14	681	300	2.27
Coppermine River above Copper Creek	2020-10-02	633	300	2.11
Coppermine River below Desteffany Lake	2022-04-20	504	300	1.68
Total Lead (µg/L)				
Coppermine River above Copper Creek	2005-04-21	1.8	1.0	1.8
Coppermine River above Copper Creek	2008-04-18	10.8	1.0	10.8
Daring Lake	2006-07-26	17.2	1.0	17.2
Desteffany Lake	2006-07-04	53.1	1.0	53.1
Desteffany Lake	2010-09-01	1.0	1.0	1.0
King Lake	2006-07-26	2.5	1.0	2.5
King Lake	2009-07-16	4.7	1.0	4.7
Lac de Gras Outlet	2006-07-04	62.6	1.0	62.6
Lake of the Enemy	2009-07-16	7.4	1.0	7.4
Lake of the Enemy	2013-03-25	17.8	1.0	17.8
MacKay Lake	2010-07-06	1.1	1.0	1.1
Rocknest Lake	2010-09-01	9.1	1.0	9.1
Dissolved Lead (µg/L)				
Coppermine River above Copper Creek	2008-04-18	13.1	6.2	2.1
Daring Lake	2006-07-26	8.5	2.7	3.2
Desteffany Lake	2006-07-04	51.9	5.3	9.8
Lac de Gras Outlet	2006-07-04	65.3	4.0	16.4
Lake of the Enemy	2006-07-26	2.8	2.4	1.2
Total Mercury (µg/L)				
Lockhart River ABOVE Outram Lakes	2018-04-23	0.0307	0.0260	1.2
Total Selenium (µg/L)				
Daring Lake	2007-07-06	1.8	1	1.8
Desteffany Lake	2007-07-04	1.7	1	1.7
Fairy Lake	2007-07-06	1.3	1	1.3
King Lake	2007-07-06	2.4	1	2.4
Lac de Gras Outlet	2007-07-04	2.1	1	2.1
Lake of the Enemy	2007-07-06	1.8	1	1.8
MacKay Lake	2007-07-06	1.7	1	1.7
Point Lake	2007-07-06	1.7	1	1.7
Rocknest Lake	2007-07-06	1.7	1	1.7
Total Silver (µg/L)				
King Lake	2013-09-06	0.3	0.25	1.2
Lac de Gras Outlet	2013-09-06	0.3	0.25	1.2
Dissolved Zinc (µg/L)				
MacKay Lake	2015-03-27	6.6	6.5	1.0
Point Lake	2005-07-27	4.7	4.5	1.0
Lockhart River ABOVE Outram Lakes	2021-03-16	6.3	5.9	1.1
Coppermine River above Copper Creek	2013-04-17	11.6	10.5	1.1
Lac de Gras Outlet	2005-07-27	4.3	3.8	1.1
Daring Lake	2008-03-31	5.4	4.7	1.1
Lockhart River at Outlet of Artillery Lake	2012-01-19	4.3	3.4	1.2
Lac de Gras Outlet	2006-07-04	7.7	4.1	1.9
Daring Lake	2005-07-27	3.5	1.8	1.9
Lac de Gras Outlet	2009-08-05	3.5	1.7	2.1
Lac de Gras Outlet	2005-06-09	7.3	3.4	2.1
Coppermine River above Copper Creek	2007-04-19	20.8	7.2	2.9
Point Lake	2018-03-13	2.6	0.6	4.5
Starfish Lake	2015-08-06	25.6	3.6	7.2
MacKay Lake	2017-09-06	22.3	3.0	7.4

Appendix C Hydrology

Status and Trends in Streamflow and Water Chemistry

Coppermine River and Lockhart River Watersheds

Government of Northwest Territories

SLR Project No.: 205.030233.00001

February 23, 2026

C.1 Summary Hydrometric Statistics

Table C.1-1 Coppermine River Downstream of Desteffany Lake (10PA001) Streamflow (m^3/s)

Month	Mean	Median	Maximum	Minimum	5th	25th	75th	95th
January	16	16	26	8	10	14	19	22
February	15	15	23	8	9	13	18	20
March	14	13	21	7	8	11	16	20
April	13	12	19	7	9	11	14	18
May	23	19	66	10	10	13	29	47
June	68	60	157	26	30	49	81	111
July	43	38	122	17	24	31	52	69
August	32	29	73	13	19	24	37	50
September	30	28	56	12	16	22	37	51
October	29	28	57	12	14	20	36	49
November	22	22	38	10	13	17	26	37
December	19	18	34	9	11	16	22	29
Annual	28	27	41	14	15	22	33	40

Table C.1-2 Yamba River Downstream of Daring Lake (10PA002) Streamflow (m^3/s)

Month	Mean	Median	Maximum	Minimum	5th	25th	75th	95th
January	4	4	12	1	1	2	6	10
February	2	2	8	0	0	0	5	6
March	1	0	5	0	0	0	3	4
April	1	0	6	0	0	0	1	5
May	4	2	19	0	0	0	6	15
June	30	28	57	12	15	22	41	47
July	47	43	104	15	23	38	55	90
August	35	33	82	11	18	29	39	57
September	23	22	39	10	13	18	27	35
October	17	14	41	8	9	12	21	28
November	11	10	24	4	4	7	14	22
December	7	7	15	2	2	4	9	13
Annual	16	15	27	7	9	13	21	25

Table C.1-3 Coppermine River Coppermine River at Outlet of Point Lake (10PB001) Streamflow (m^3/s)

Month	Mean	Median	Maximum	Minimum	5th	25th	75th	95th
January	65	62	108	26	40	52	74	91
February	51	51	79	20	30	42	59	73
March	42	43	62	15	24	35	49	60
April	36	38	52	12	18	31	42	49
May	40	39	68	16	24	32	45	60
June	125	109	267	58	65	80	157	213
July	218	210	476	74	112	161	253	372
August	199	190	457	62	102	161	220	324
September	164	156	435	56	85	132	181	231
October	134	132	348	52	72	106	151	204
November	107	101	225	46	58	83	124	163
December	84	78	158	36	46	67	101	120
Annual	107	105	178	42	64	91	121	162

Table C.1-4 Fairy Lake River Near Outlet of Napaktulik Lake (10PC005) Streamflow (m3/s)

Month	Mean	Median	Maximum	Minimum	5th	25th	75th	95th
January	30	32	42	15	22	26	35	41
February	27	27	37	14	20	23	31	37
March	25	26	33	13	18	22	28	33
April	23	24	32	15	15	20	27	28
May	25	25	47	9	18	21	27	33
June	41	39	58	30	31	36	46	55
July	50	47	82	31	34	43	58	67
August	54	50	97	29	36	44	61	87
September	54	52	87	32	37	44	62	74
October	49	46	73	28	32	41	57	67
November	40	38	62	25	25	36	45	56
December	35	35	52	19	23	29	39	47
Annual	38	39	60	27	28	34	42	50

Table C.1-5 Coppermine River Above Copper Creek (10PC004) Streamflow (m^3/s)

Month	Mean	Median	Maximum	Minimum	5th	25th	75th	95th
January	111	105	170	65	70	90	130	159
February	89	87	136	54	57	74	103	131
March	76	75	116	46	51	62	87	110
April	66	66	104	41	45	55	75	92
May	172	85	637	43	54	71	209	562
June	713	711	1339	312	453	582	816	1026
July	466	438	932	194	240	356	529	754
August	384	356	912	155	213	303	441	658
September	361	329	696	188	217	275	409	612
October	281	254	573	146	194	209	328	451
November	194	178	337	101	126	152	234	286
December	145	134	226	78	92	116	176	213
Annual	260	239	460	151	176	228	288	360

Table C.1-6 Lockhart River at Outlet of Artillery Lake (07RD001) Streamflow (m^3/s)

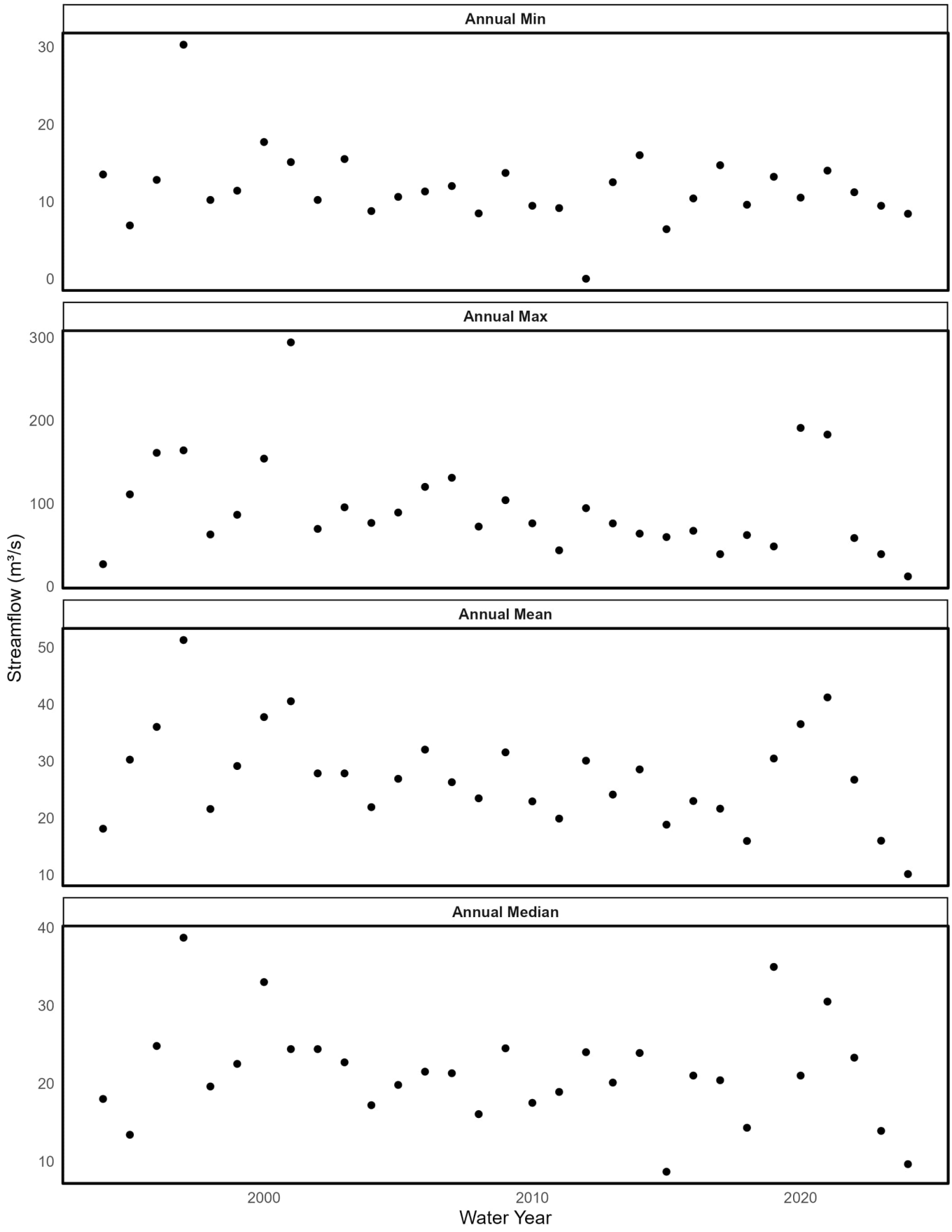
Month	Mean	Median	Maximum	Minimum	5th	25th	75th	95th
January	116	111	192	55	76	97	134	160
February	103	101	164	51	70	87	119	142
March	92	91	146	48	62	78	106	125
April	83	82	130	45	56	71	94	111
May	82	81	118	48	54	70	96	111
June	109	107	208	65	71	90	121	159
July	135	130	266	76	86	110	151	198
August	153	146	318	76	95	119	174	216
September	156	157	326	71	97	123	182	231
October	149	148	301	62	91	116	175	234
November	138	130	268	54	83	108	161	206
December	128	122	231	51	79	104	147	181
Annual	122	120	220	71	79	101	140	175

Table C.1-7 Lockhart River Above Outram Lake (07RB001) Streamflow (m3/s)

Month	Mean	Median	Maximum	Minimum	10th	90th
January	9	3.8	31	0	0	28
February	8	3.3	27	0	0	27
March	8	3.8	26	0	0	25
April	10	7.2	24	0	0	24
May	19	19	34	2.2	10	29
June	40	31	115	21	24	96
July	53	43	113	22	26	108
August	52	49	111	14	20	101
September	45	42	99	10	14	84
October	33	25	86	4.4	10	77
November	19	7.8	72	2.2	3.7	59
December	12	4.6	47	0.7	1.6	38
Annual	28	24	115	0.0	1.7	59

C.2 Time Series Figures

Coppermine River Downstream of Desteffany Lake (10PA001)



Last Saved: Tuesday, November 25, 2025 2:31 PM by brodie.elder
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

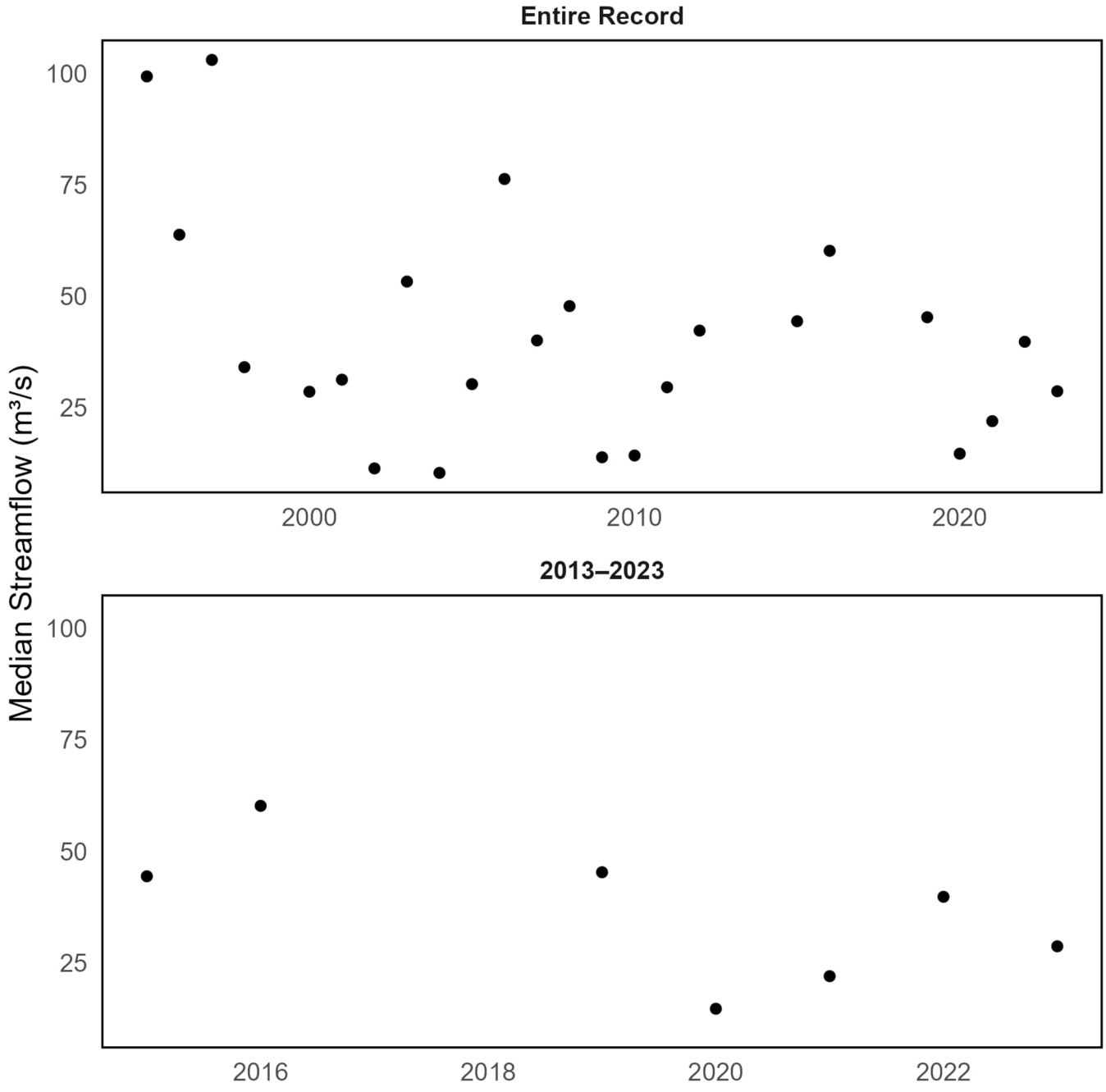
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FIGURE NO: **C.1.1**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Coppermine River Downstream of Desteffany Lake (10PA001) Spring Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

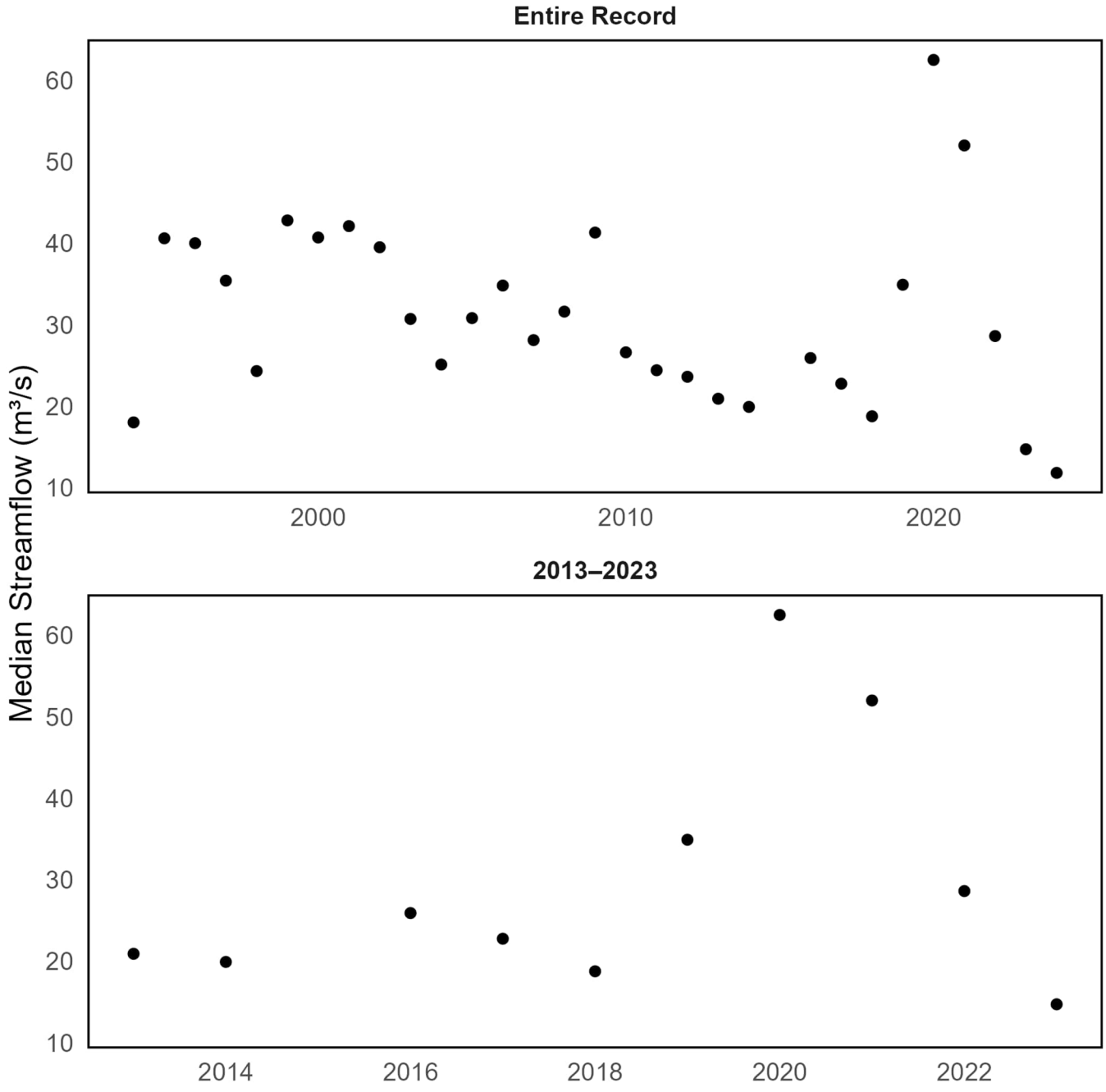
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FIGURE NO: **C.1.3**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Coppermine River Downstream of Desteffany Lake (10PA001) Summer Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

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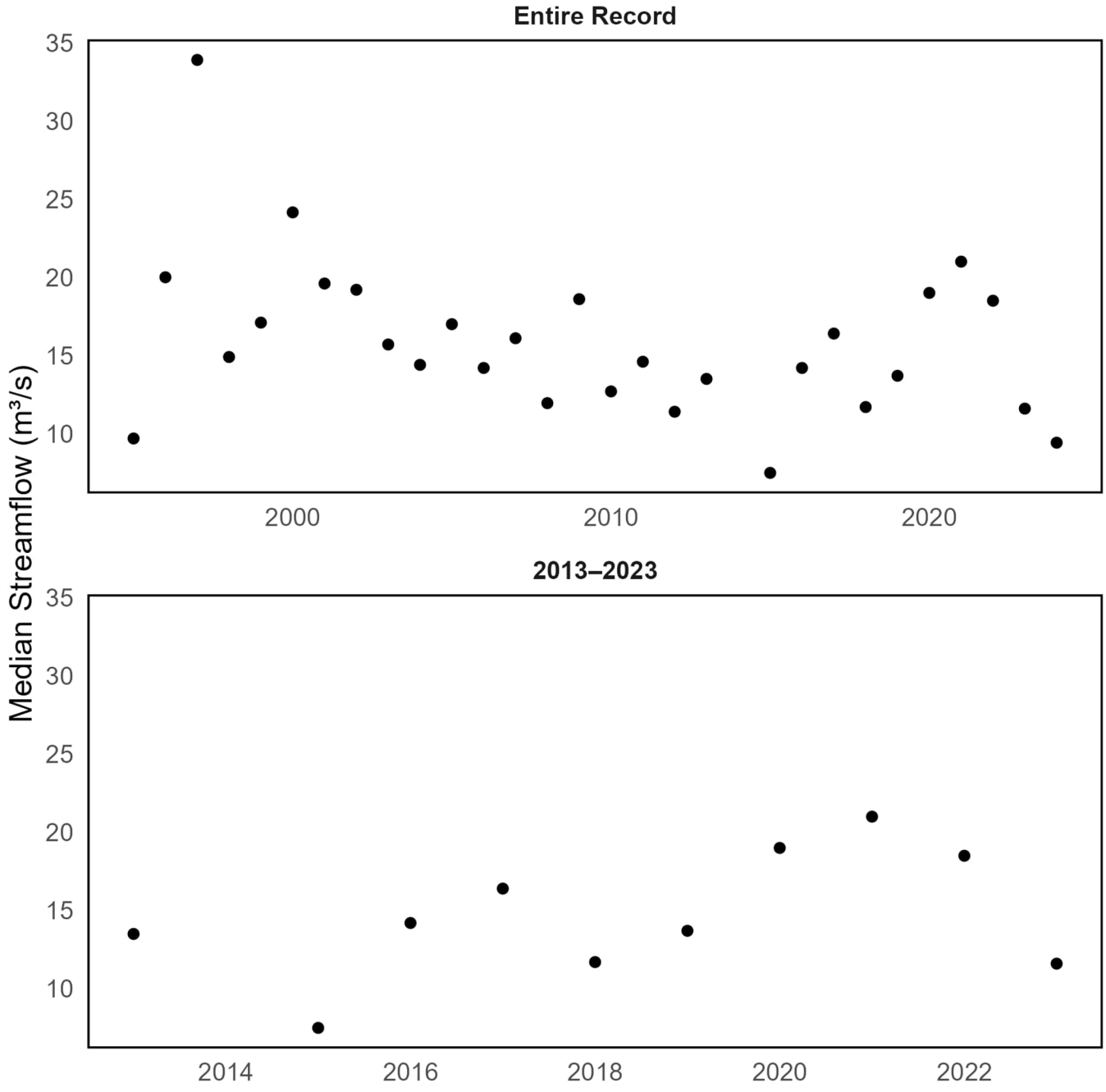
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FIGURE NO: **C.1.4**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Coppermine River Downstream of Desteffany Lake (10PA001) Winter Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

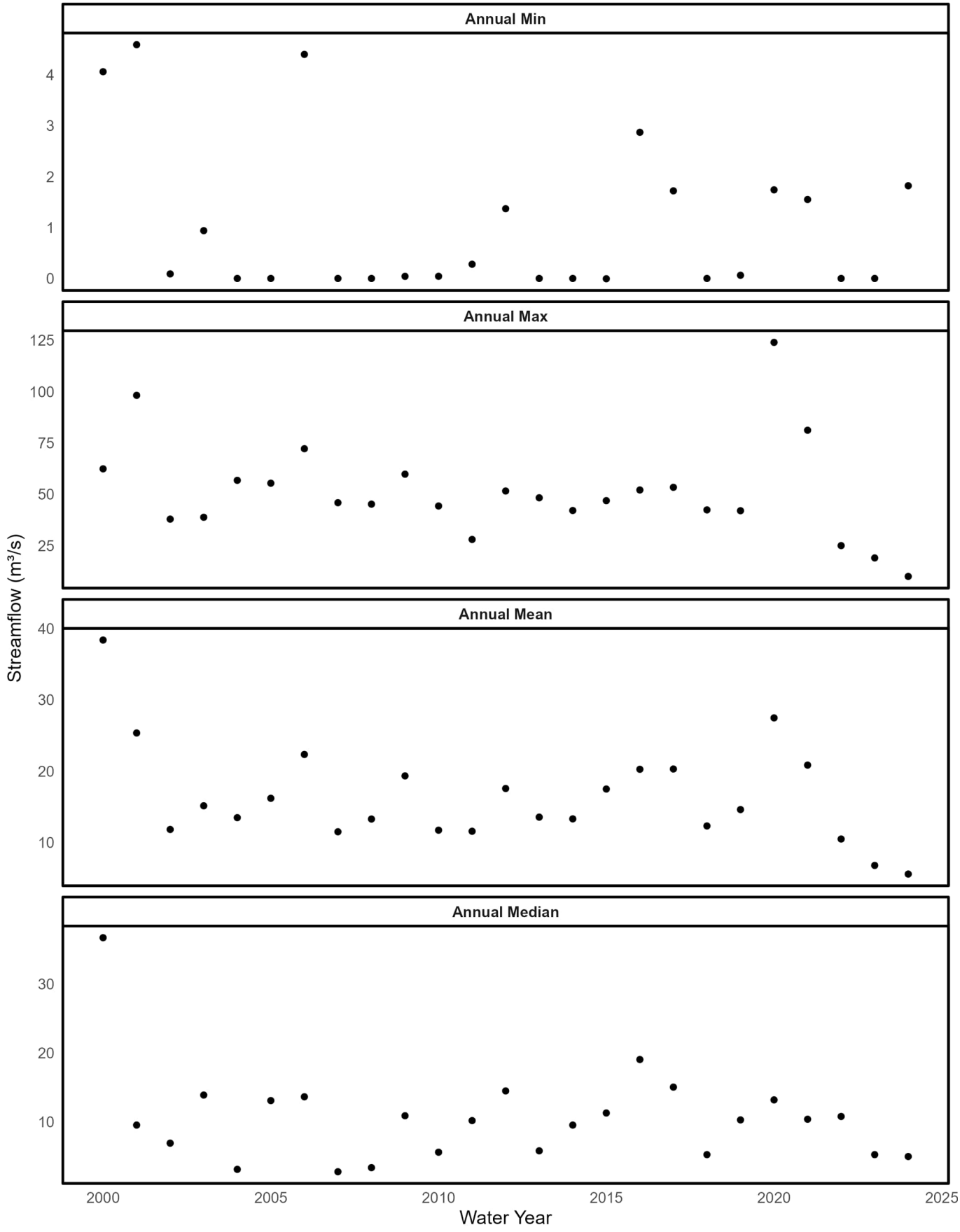
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FIGURE NO: **C.1.5**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Yamba River Downstream of Daring Lake (10PA002)



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.2.1**

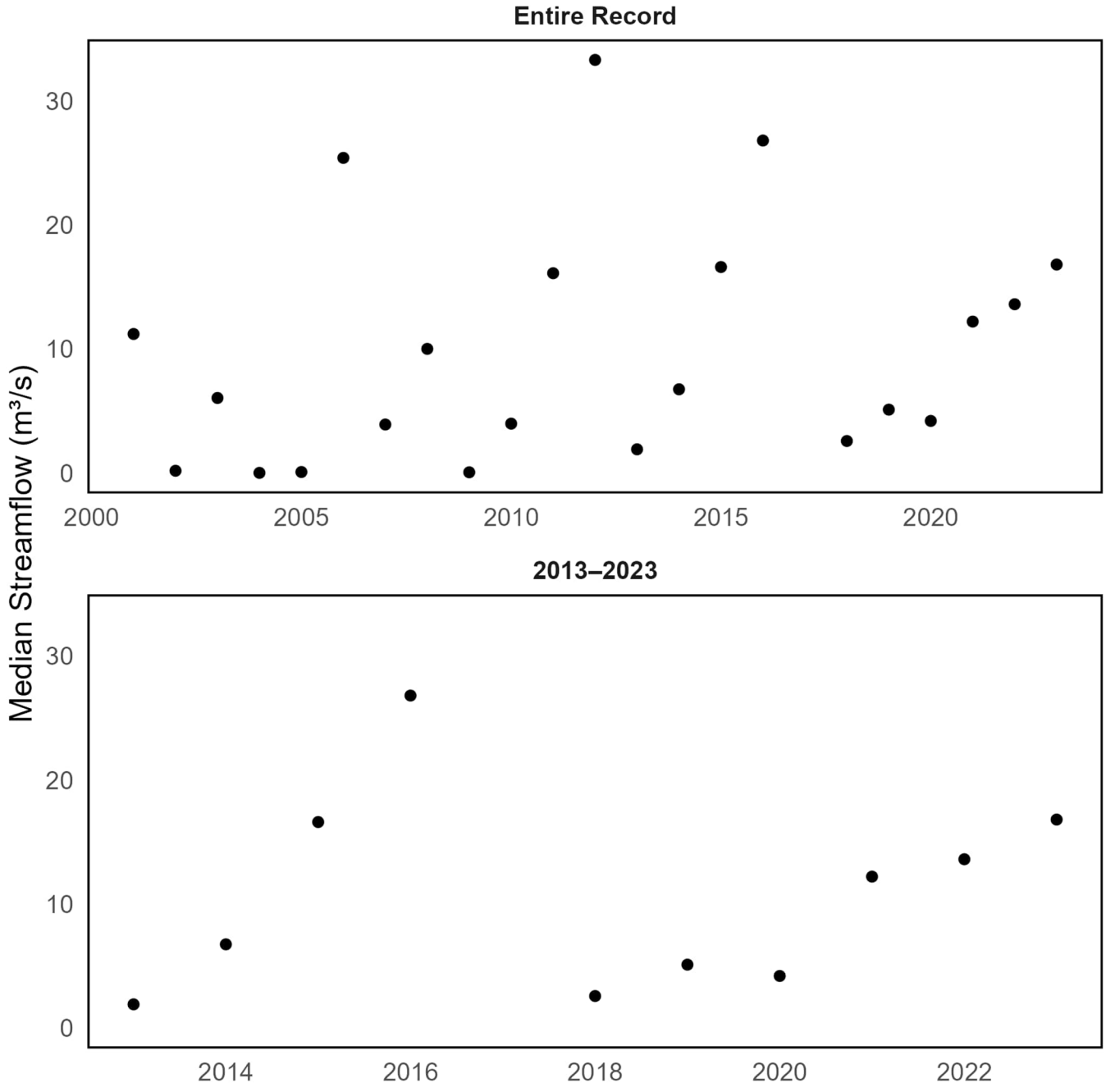
DATE: November 25, 2025

PROJECT NO: 205.030233.00001

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Yamba River Downstream of Daring Lake (10PA002) Spring Streamflow



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.2.3**

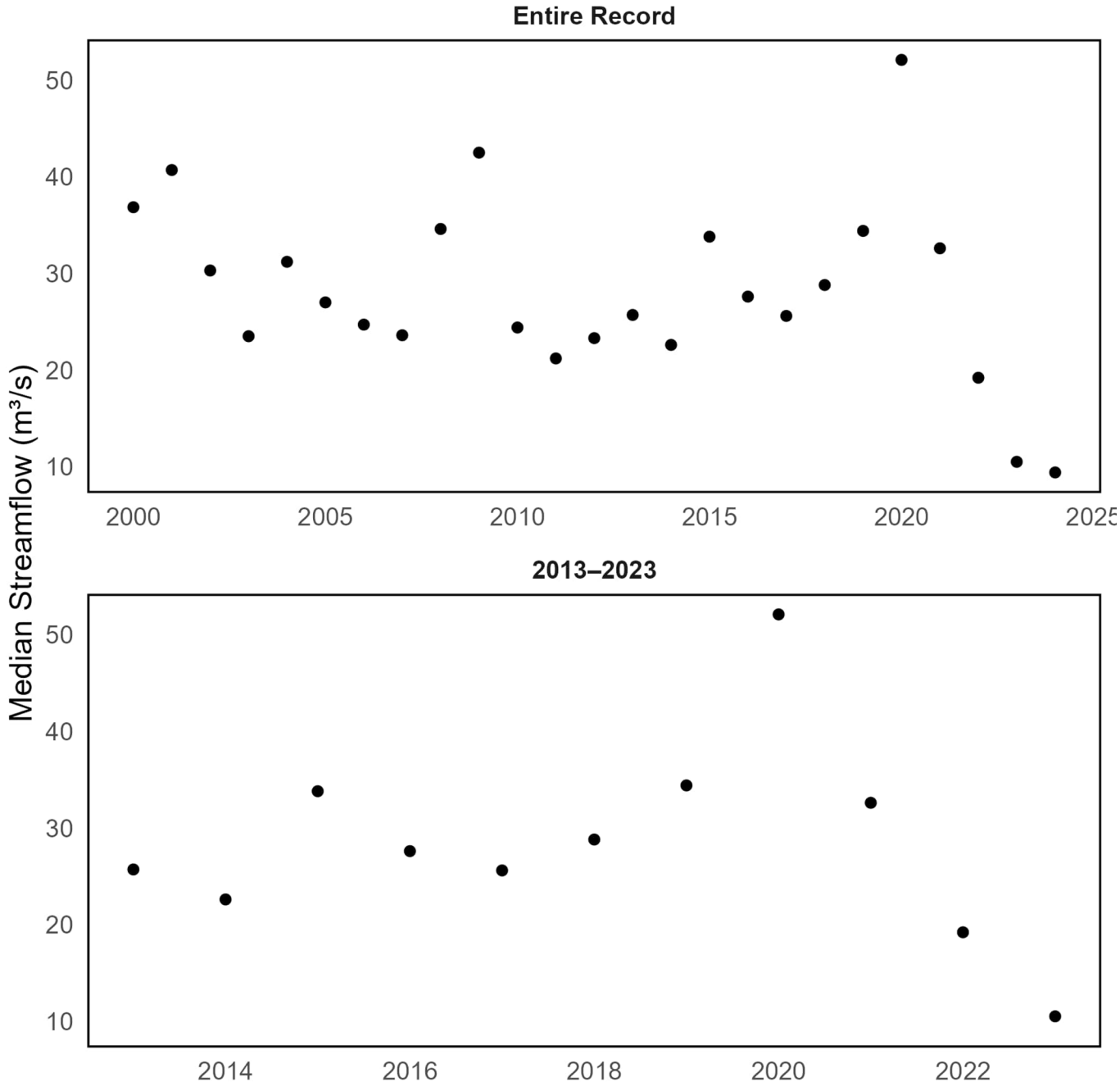
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Yamba River Downstream of Daring Lake (10PA002) Summer Streamflow



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.2.4**

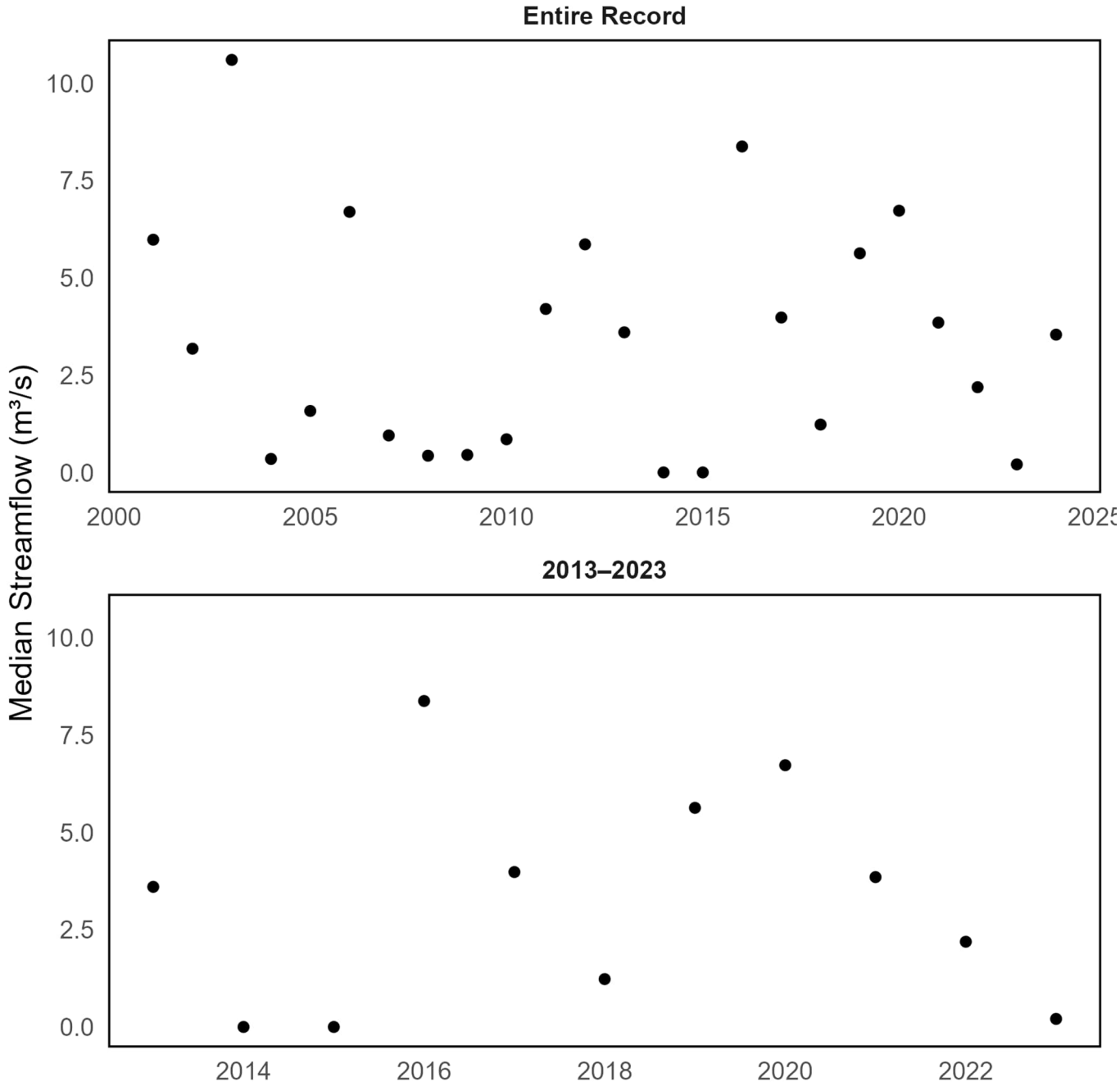
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Yamba River Downstream of Daring Lake (10PA002) Winter Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

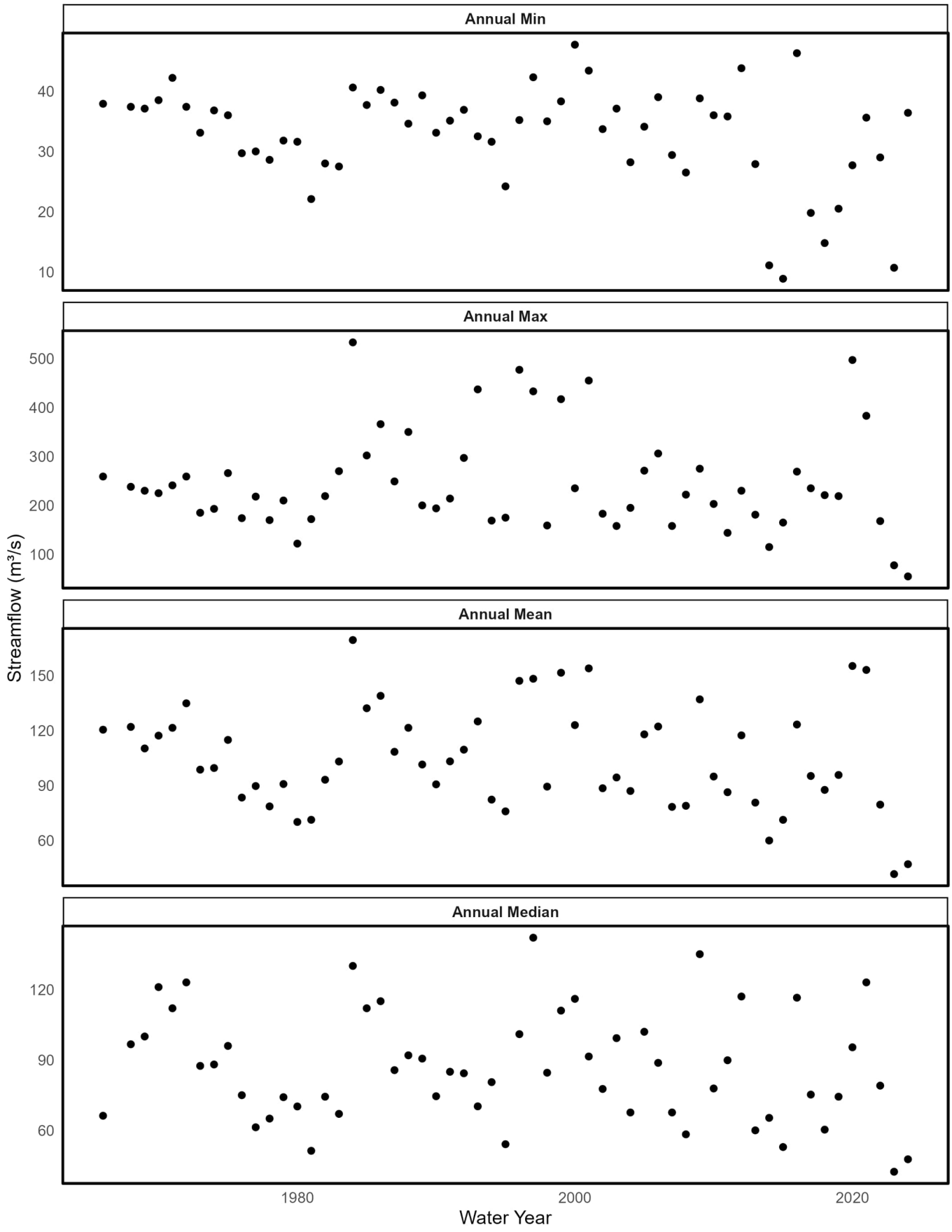
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FIGURE NO: **C.2.5**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Coppermine River at Outlet of Point Lake (10PB001)



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

FIGURE NO: **C.3.1**

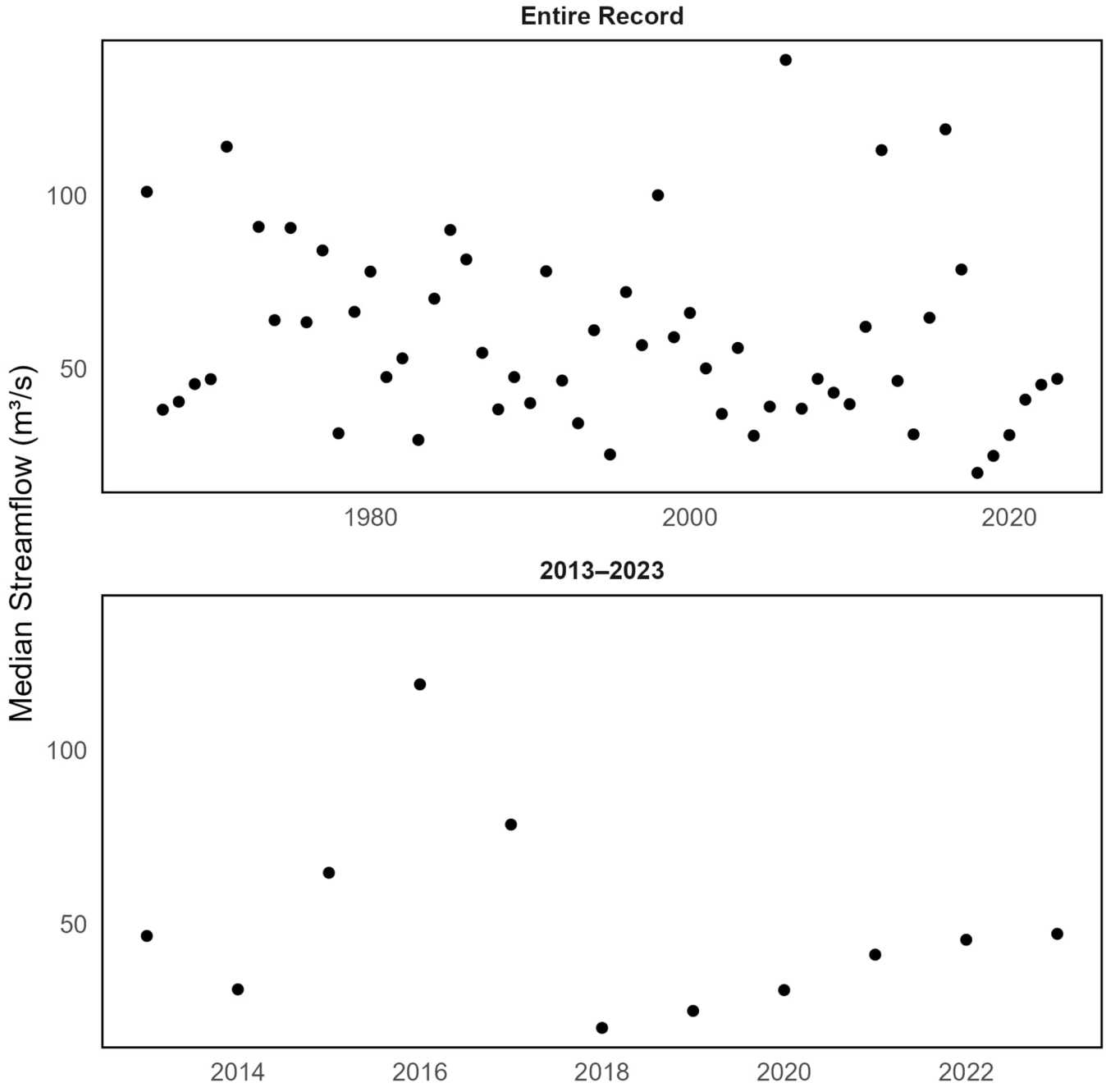
DATE: November 27, 2025

PROJECT NO: 205.030233.00001

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Coppermine River at Outlet of Point Lake (10PB001) Spring Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

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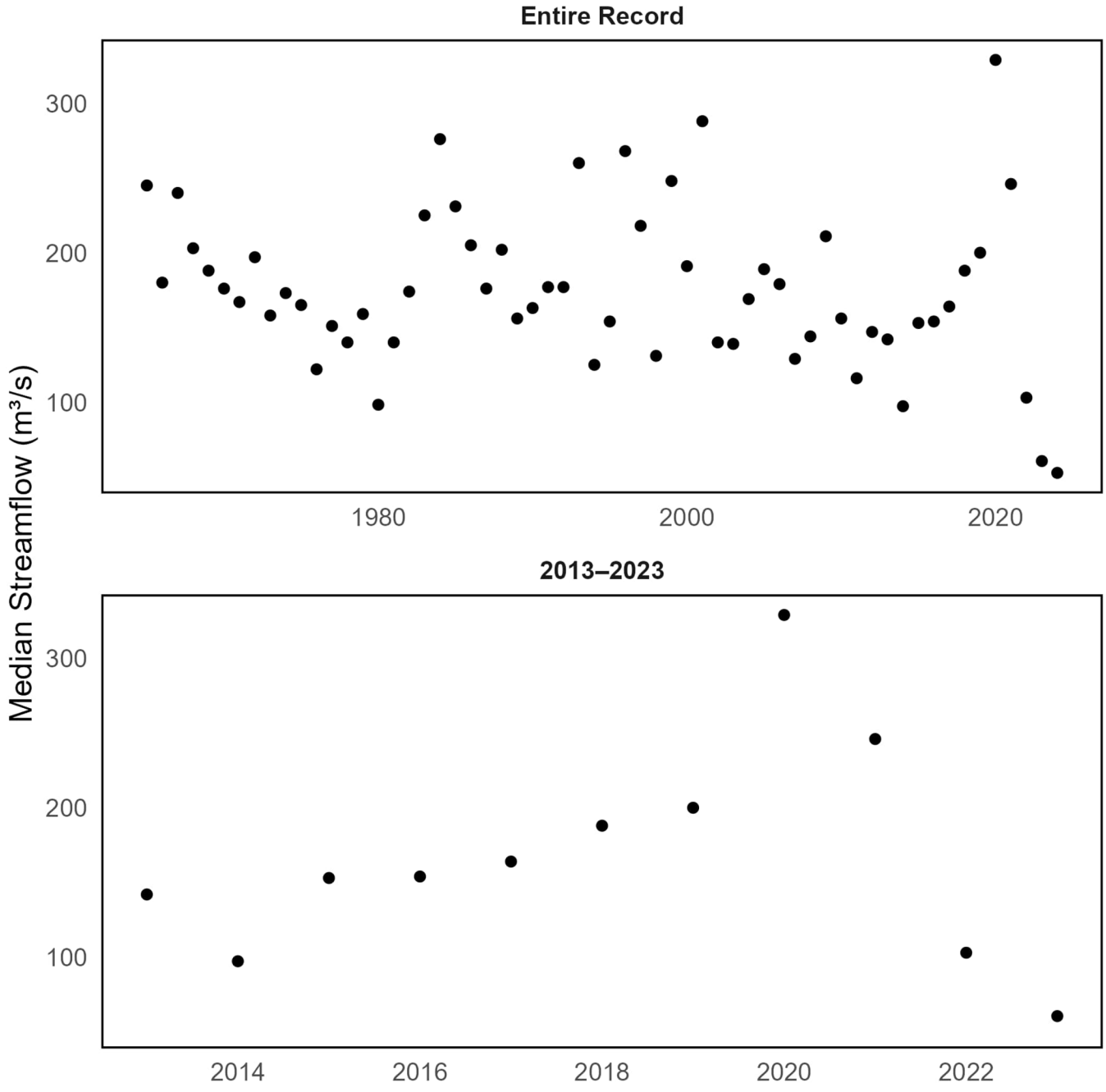
FIGURE NO: **C.3.3**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Coppermine River at Outlet of Point Lake (10PB001) Summer Streamflow

Last Saved: Thursday, November 27, 2025 5:07 PM by brodie.elder



GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

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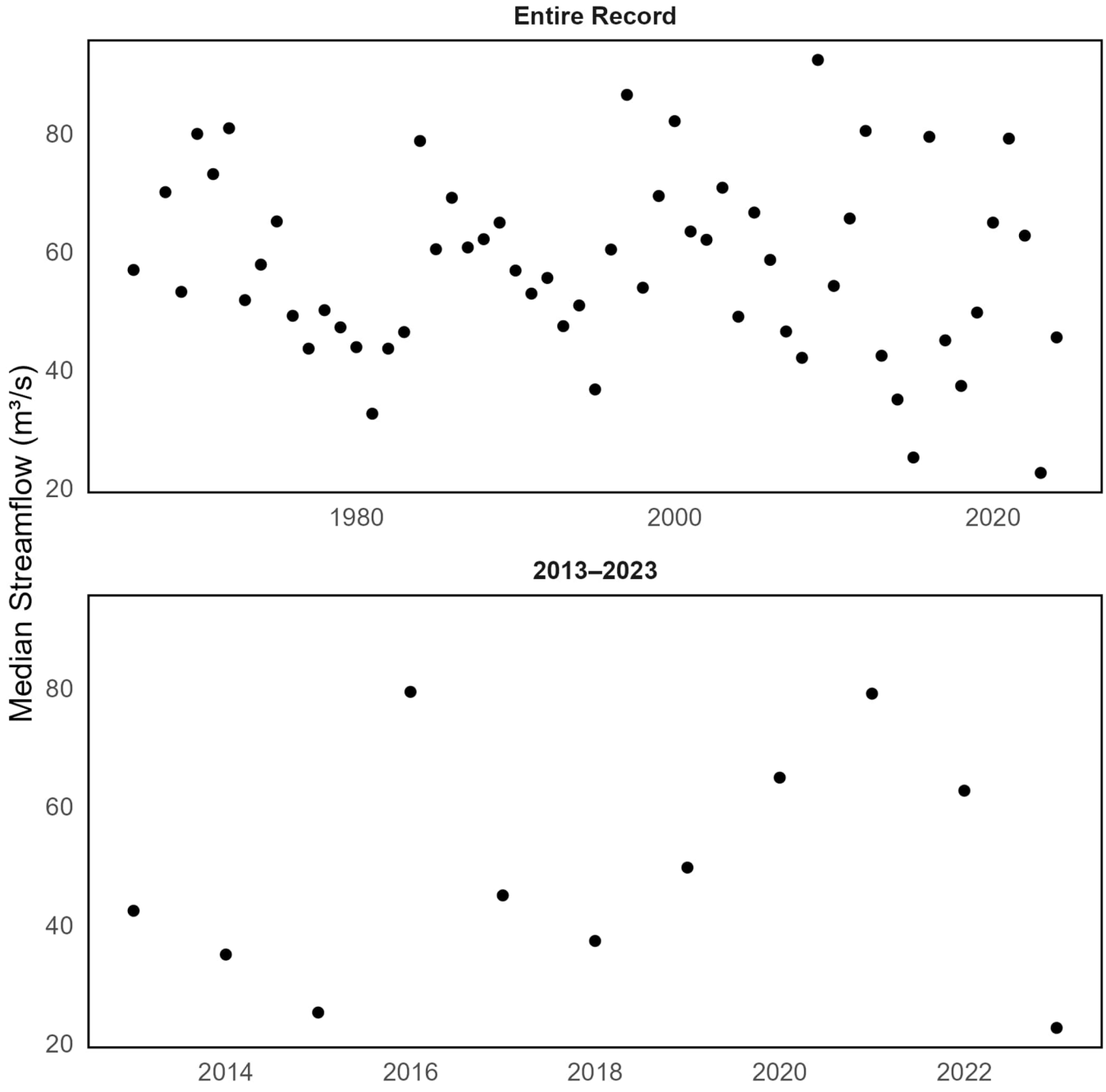
FIGURE NO: **C.3.4**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Coppermine River at Outlet of Point Lake (10PB001) Winter Streamflow

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

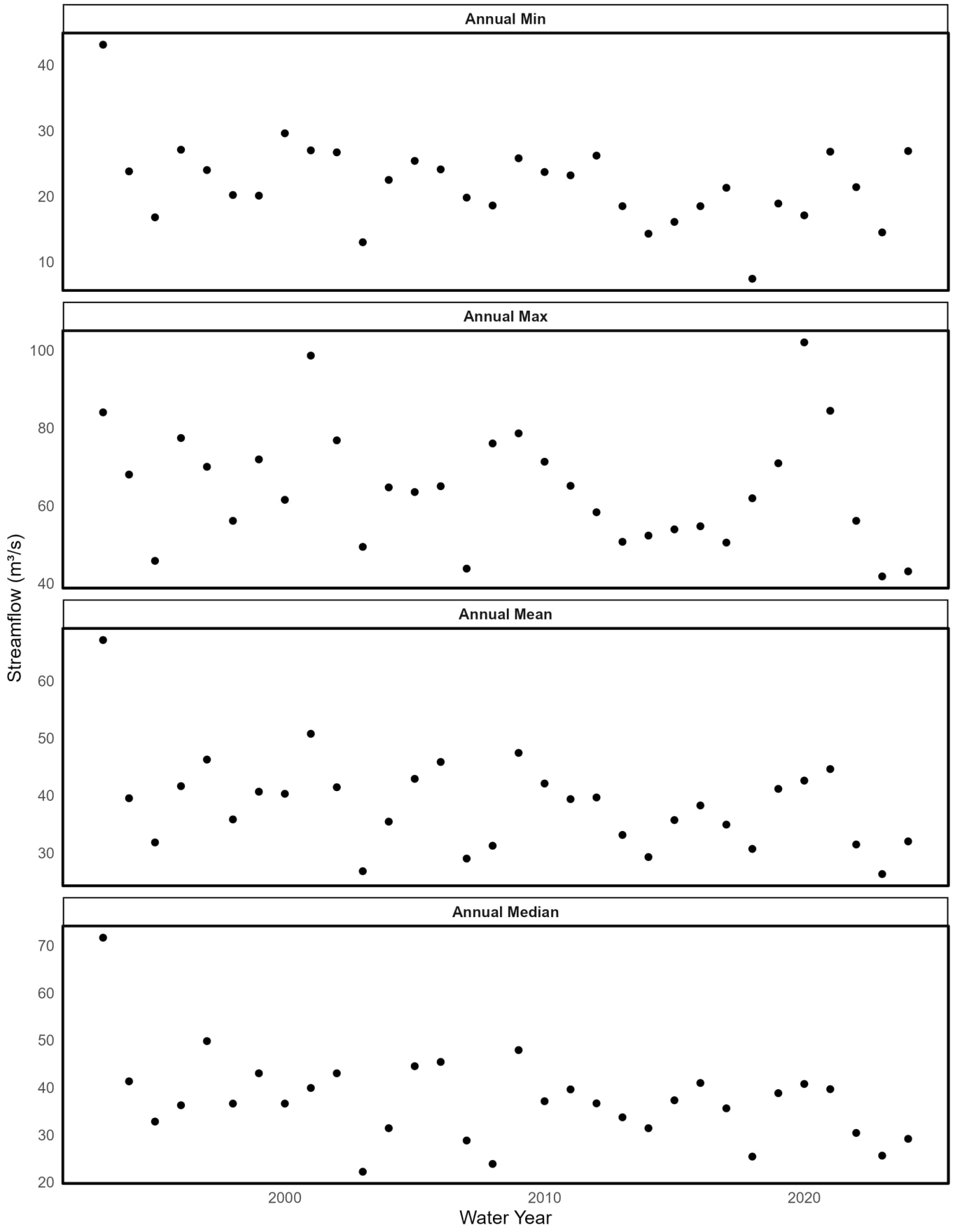
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FIGURE NO: **C.3.5**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Fairy Lake River Near Outlet of Napaktulik Lake (10PC005)



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.4.1**

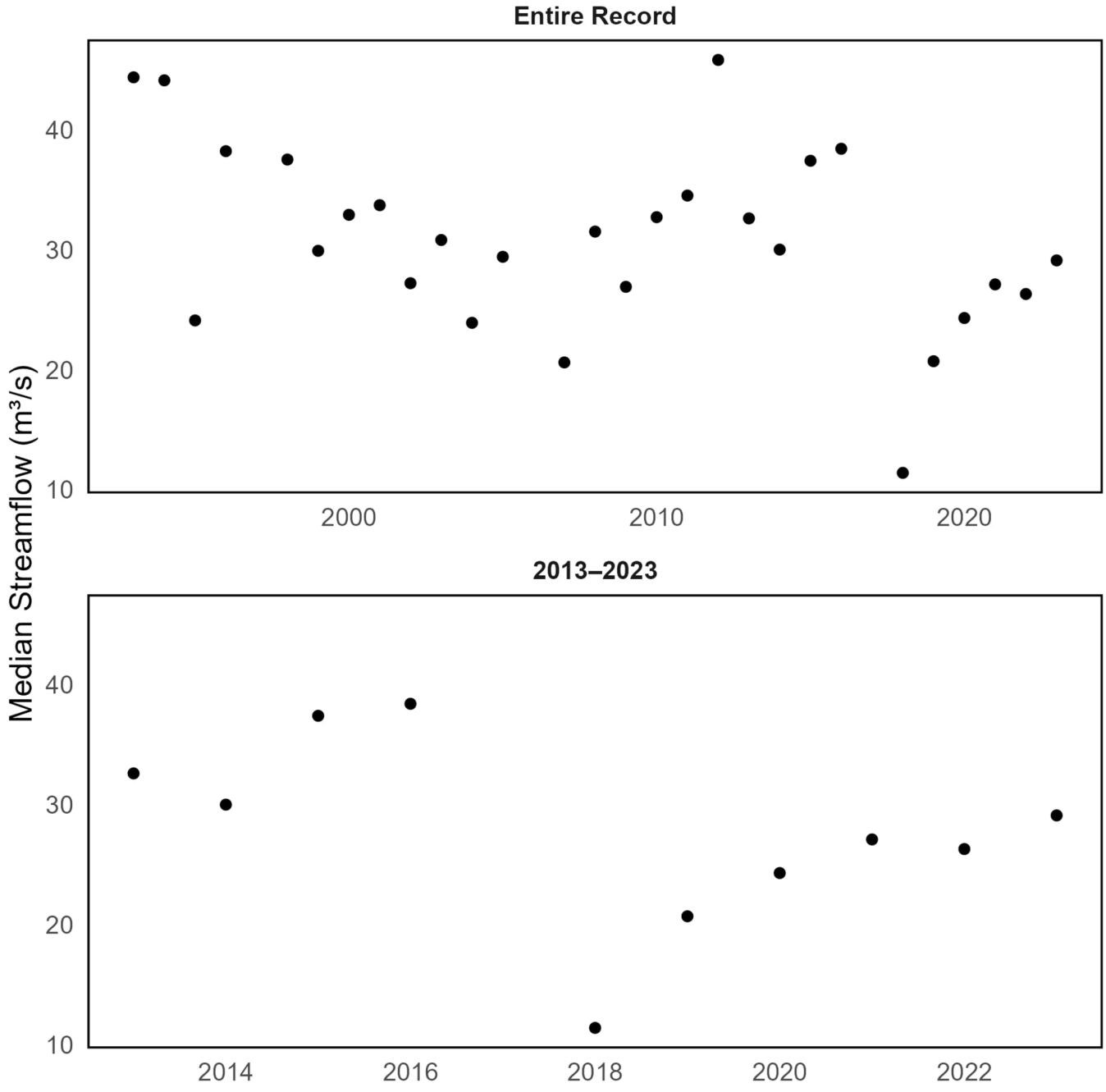
DATE: November 27, 2025

PROJECT NO: 205.030233.00001

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Fairy Lake River Near Outlet of Napaktulik Lake (10PC005) Spring Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

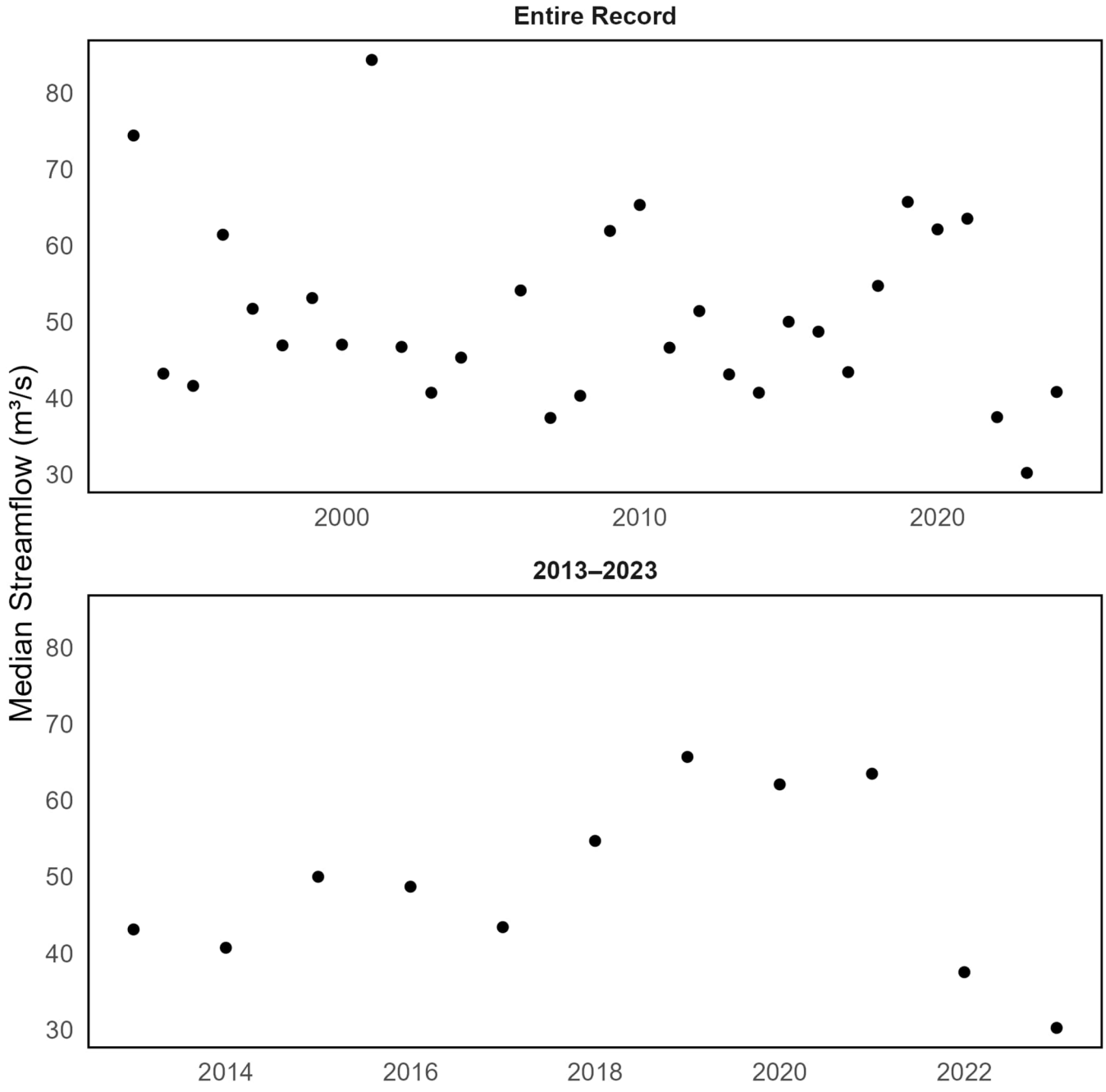
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FIGURE NO: **C.4.3**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Fairy Lake River Near Outlet of Napaktulik Lake (10PC005) Summer Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

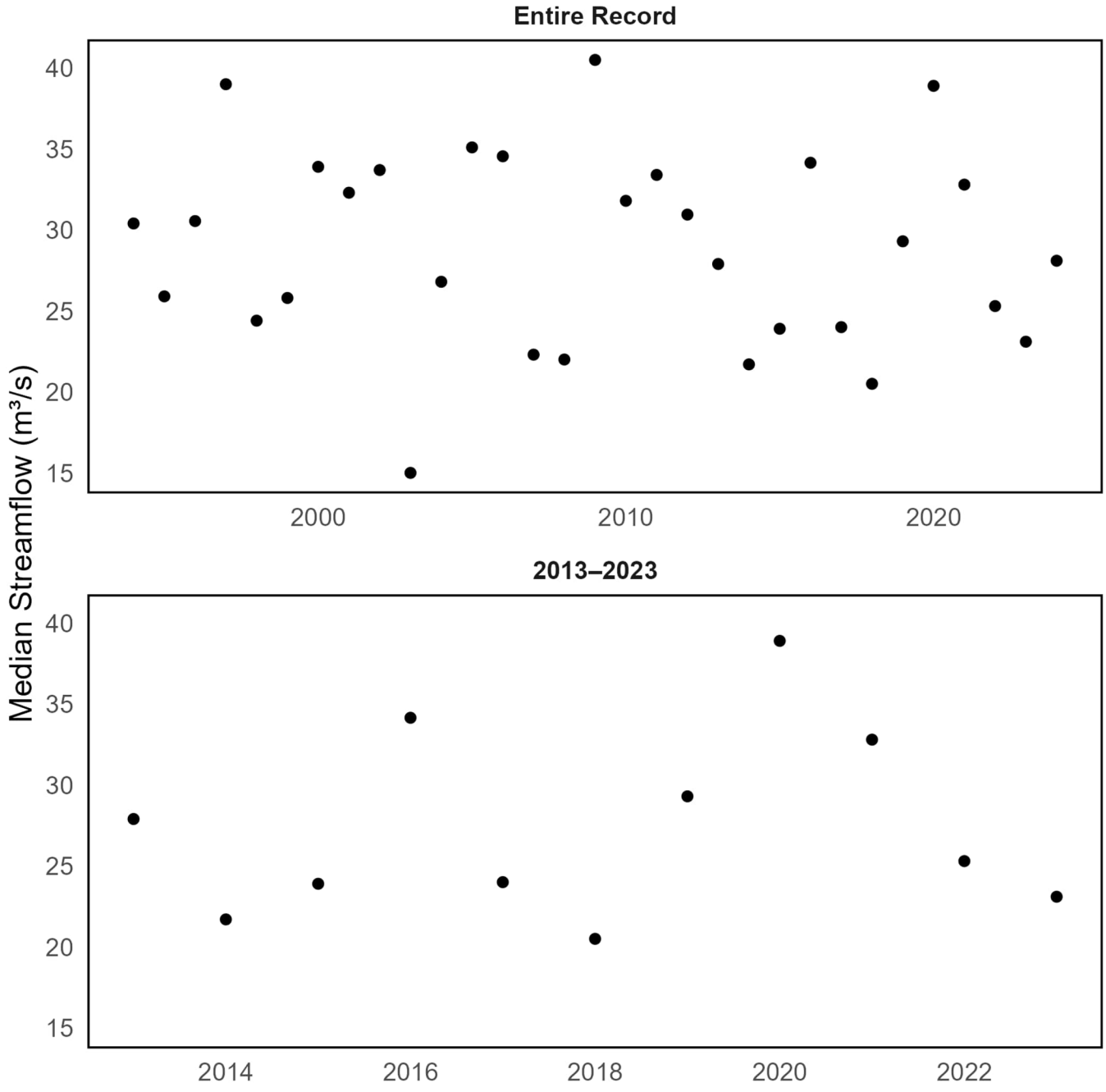
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FIGURE NO: **C.4.4**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Fairy Lake River Near Outlet of Napaktulik Lake (10PC005) Winter Streamflow



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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

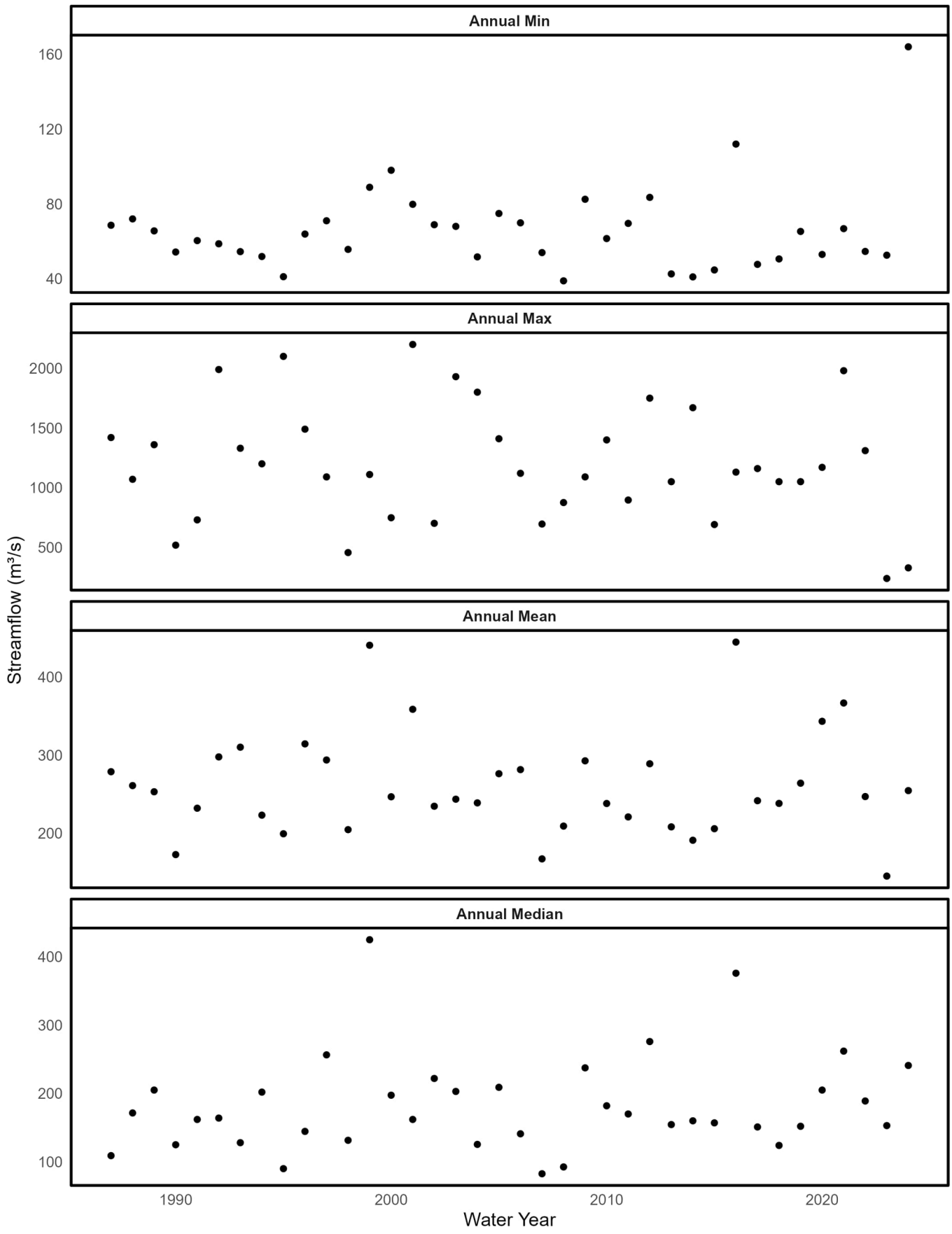
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FIGURE NO: **C.4.5**

DATE: November 27, 2025

PROJECT NO: 205.030233.00001

Coppermine River Above Copper Creek (10PC004)



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.5.1**

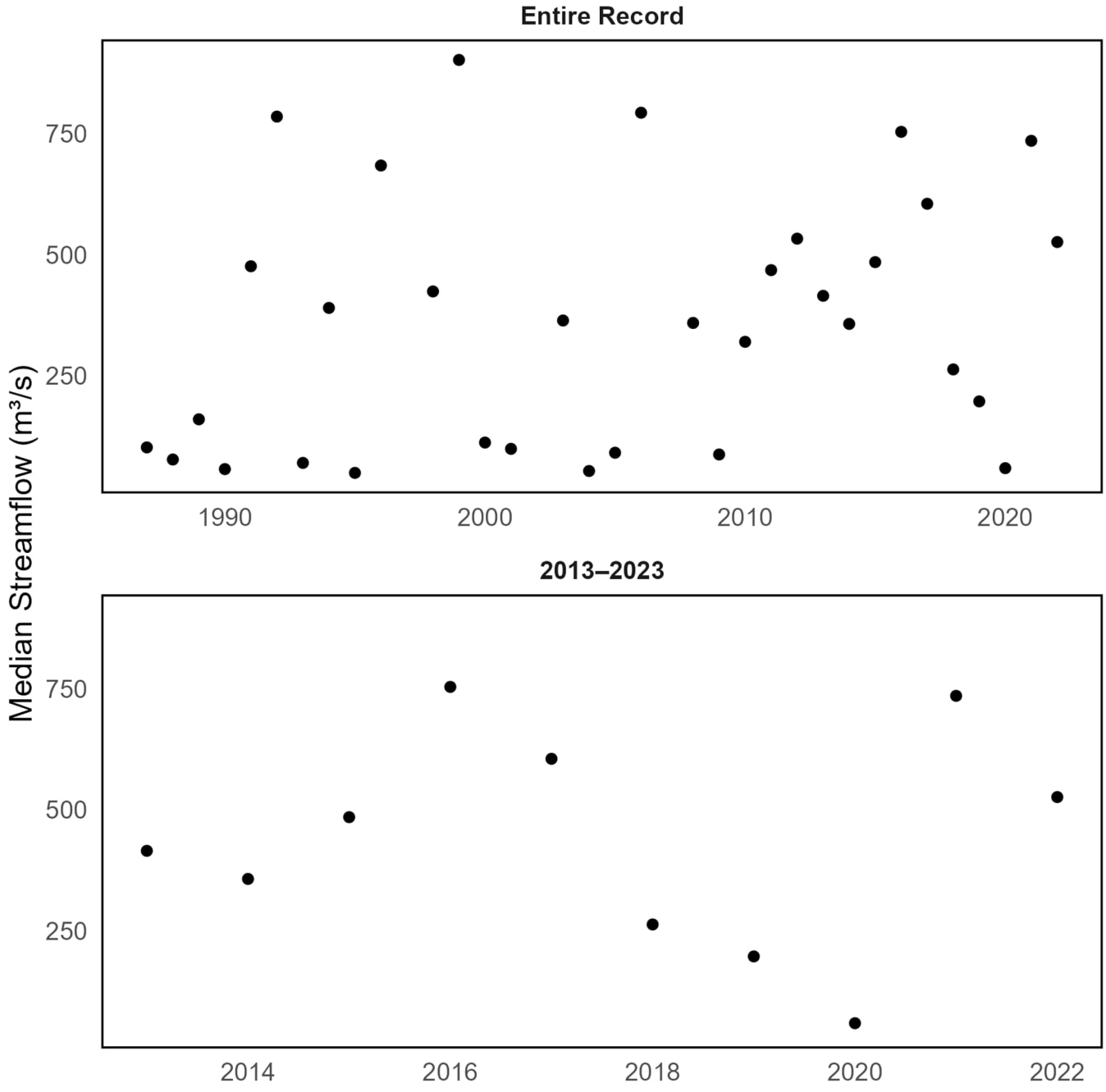
DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder

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Coppermine River Above Copper Creek (10PC004) Spring Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
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CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

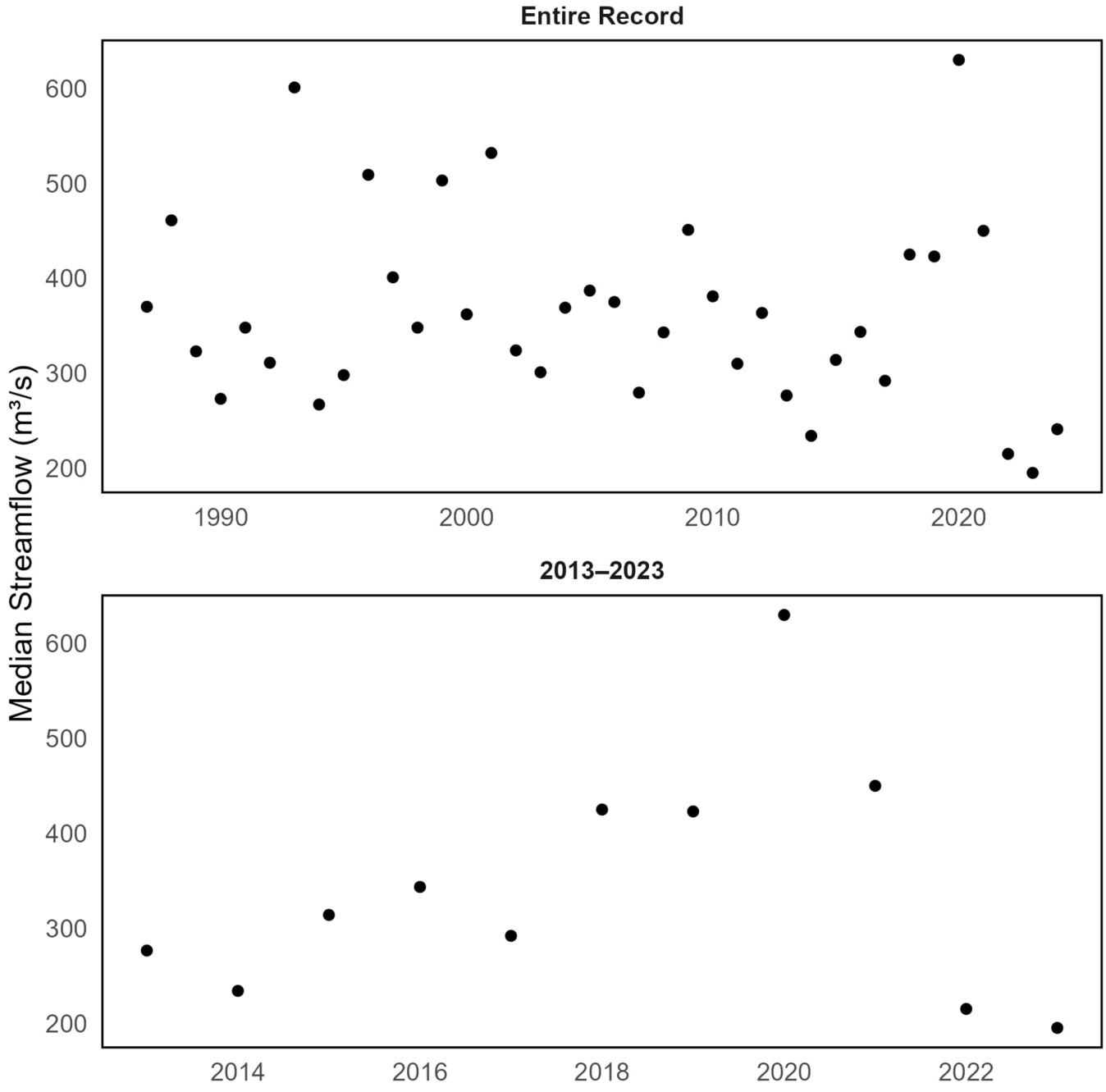
FIGURE NO: **C.5.3**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Coppermine River Above Copper Creek (10PC004) Summer Streamflow

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GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

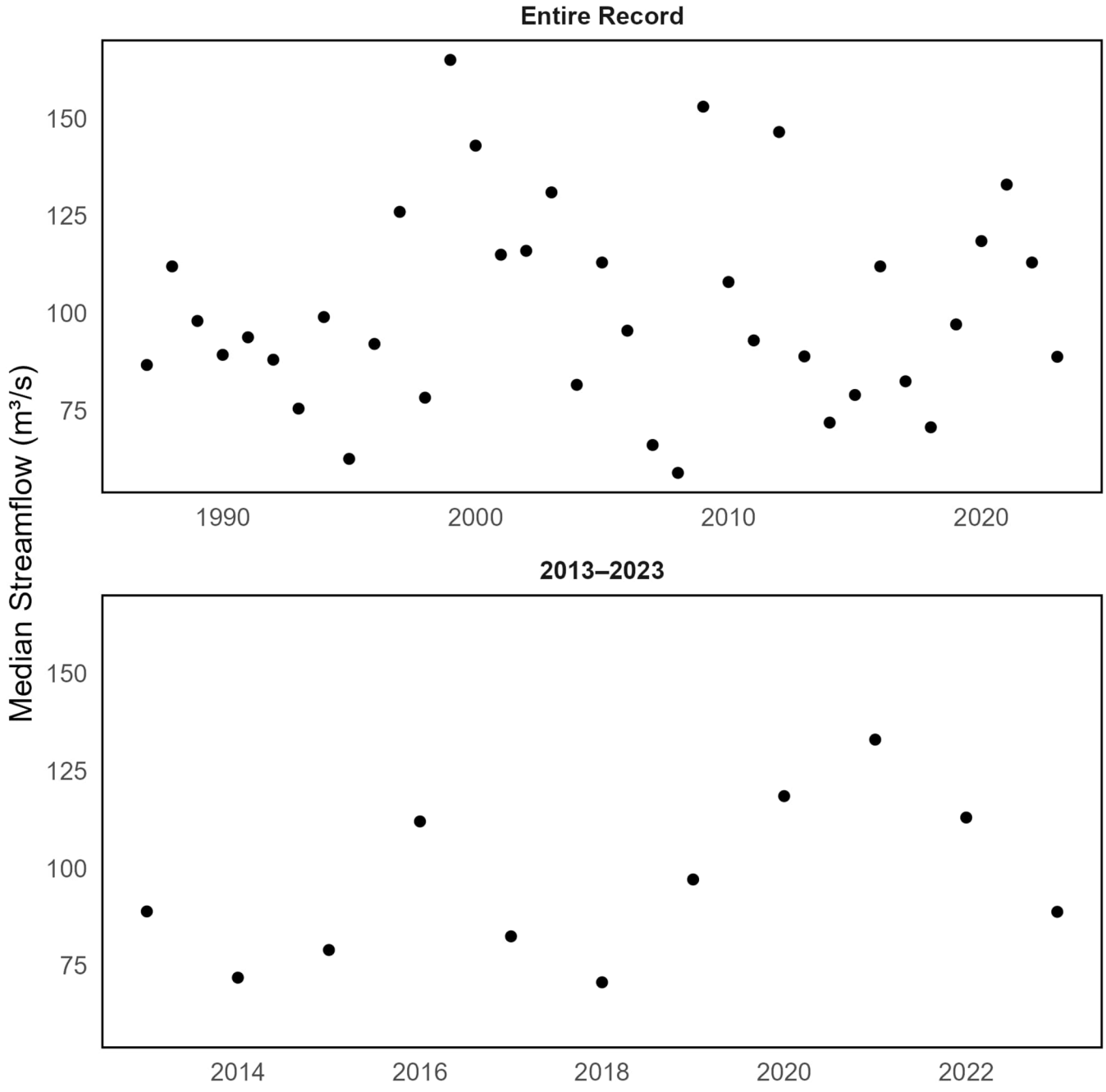
SLR

FIGURE NO: **C.5.4**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Coppermine River Above Copper Creek (10PC004) Winter Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

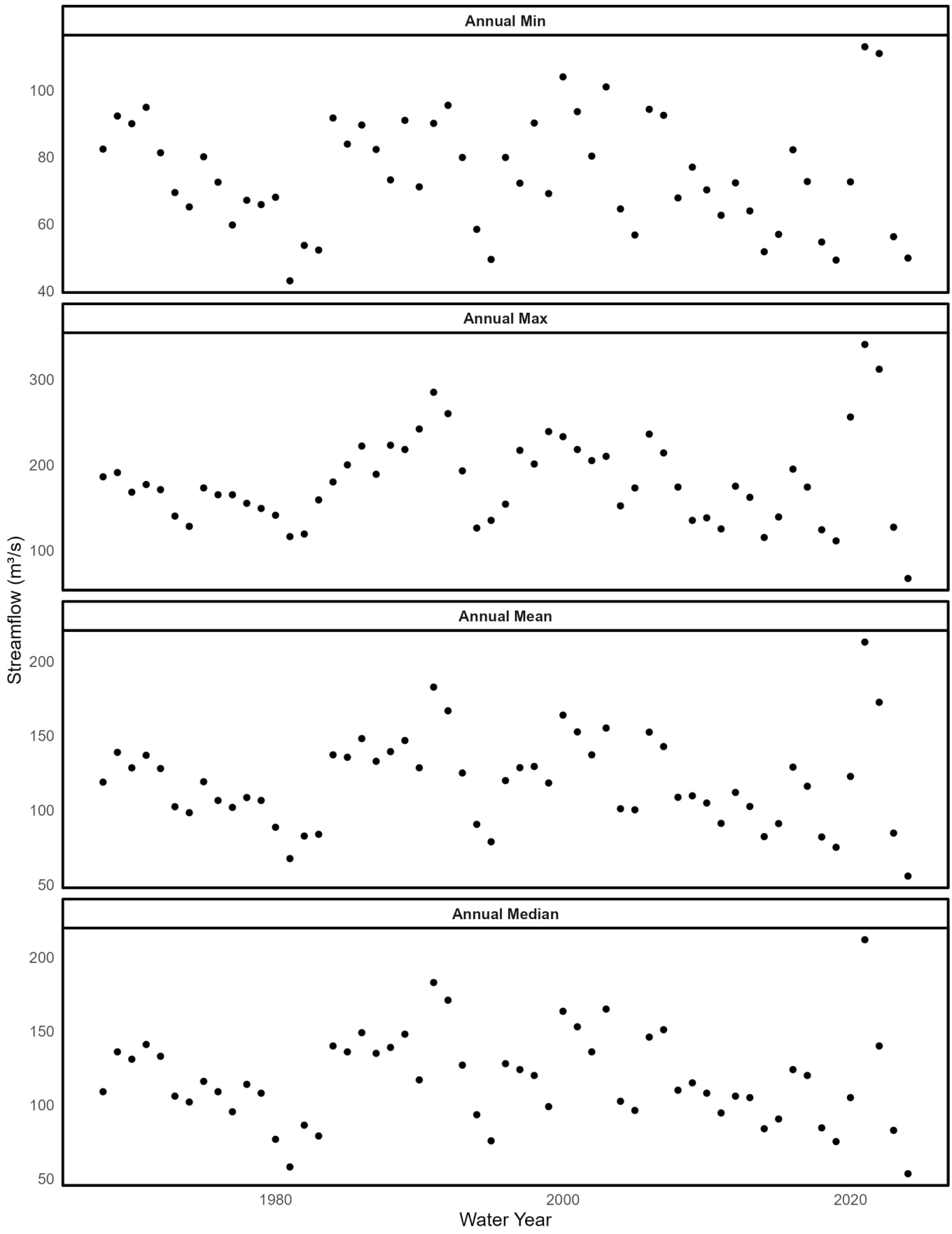
SLR

FIGURE NO: **C.5.5**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Lockhart River Above Outram Lake (07RB001)



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.6.1**

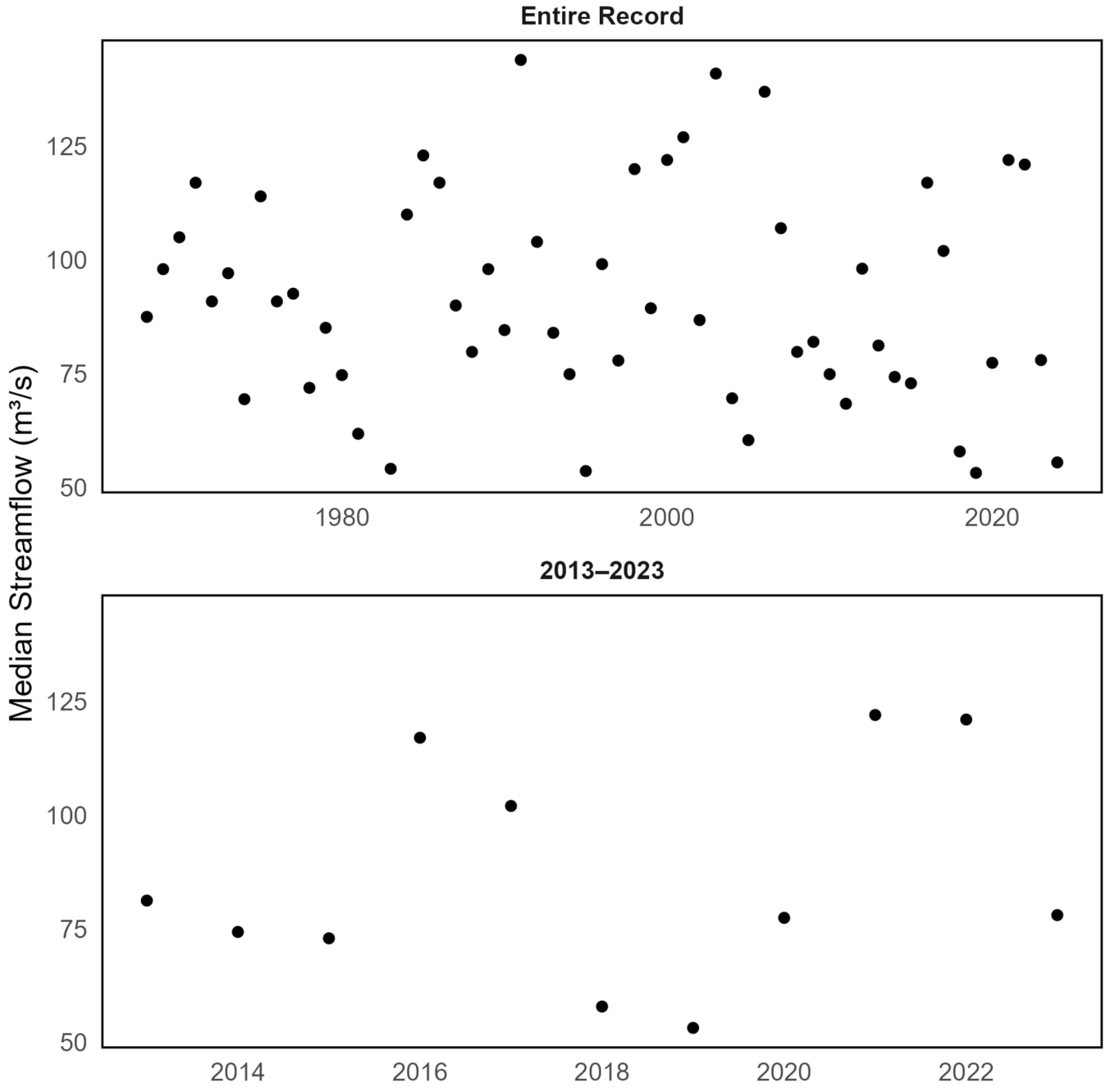
DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C1_Layout_Hydro

Lockhart River Above Outram Lake (07RB001) Spring Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

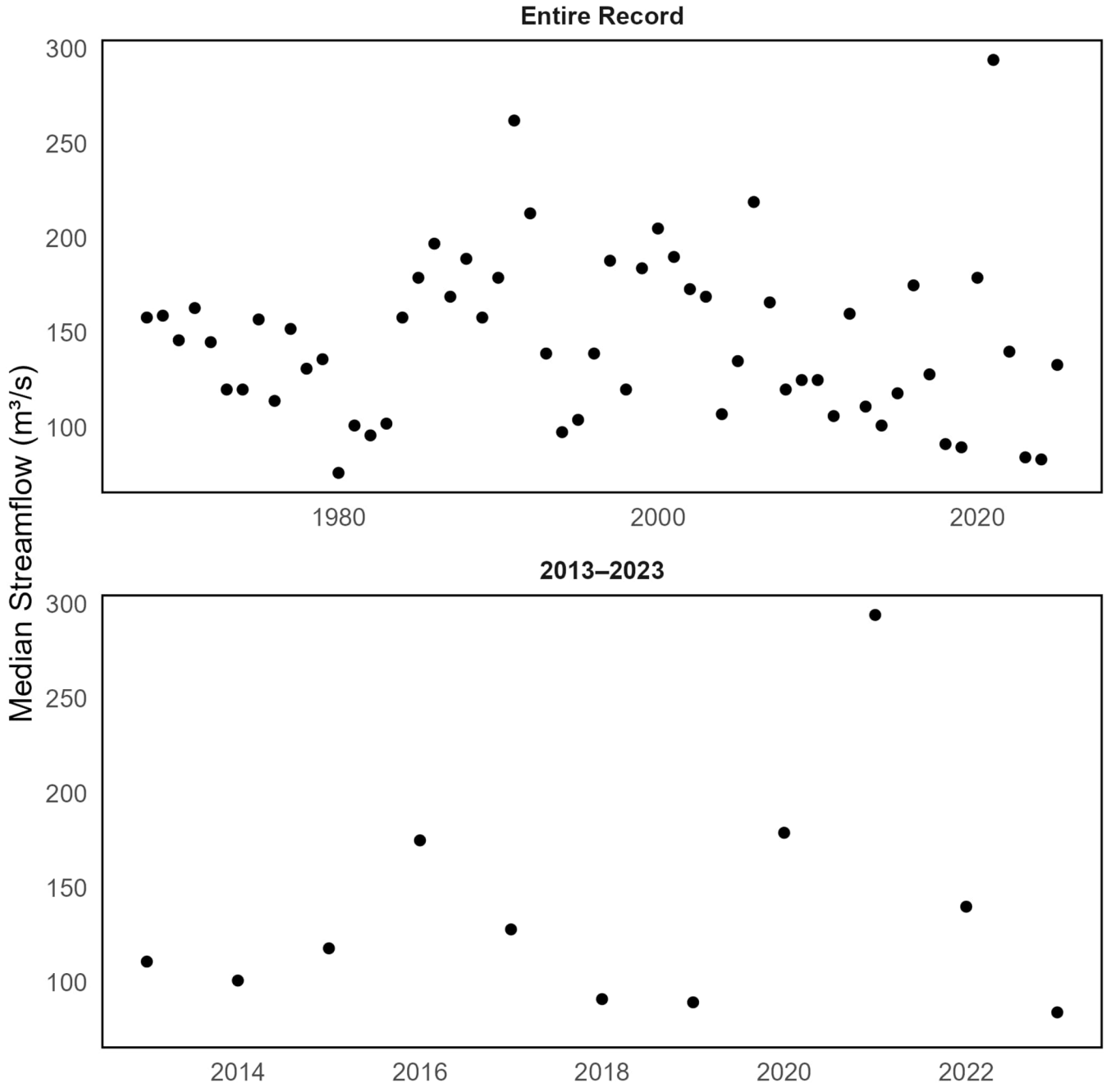
SLR

FIGURE NO: **C.6.3**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Lockhart River Above Outram Lake (07RB001) Summer Streamflow



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.6.4**

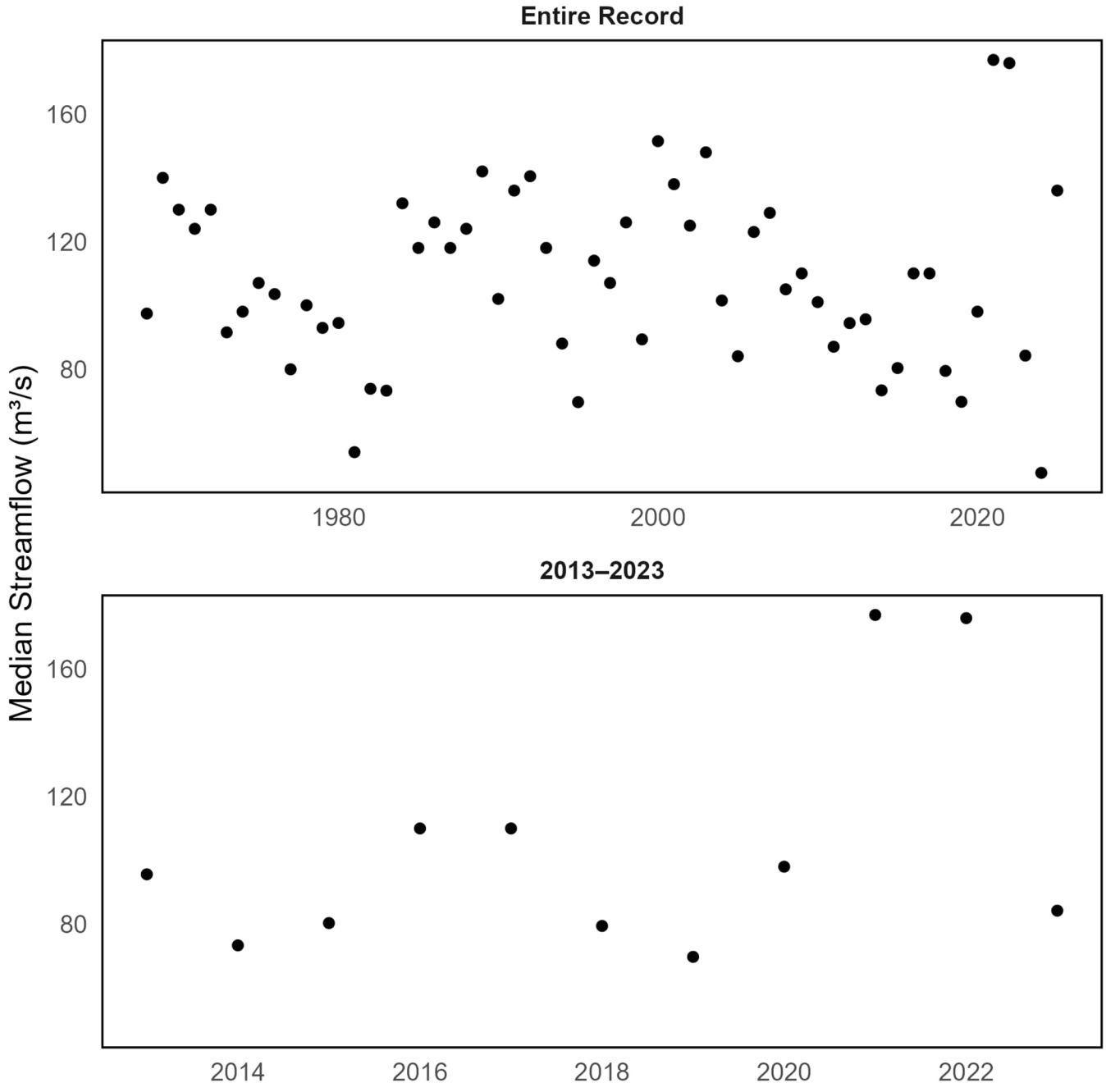
DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_APaprx || C1_Layout_Hydro

Lockhart River Above Outram Lake (07RB001) Winter Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

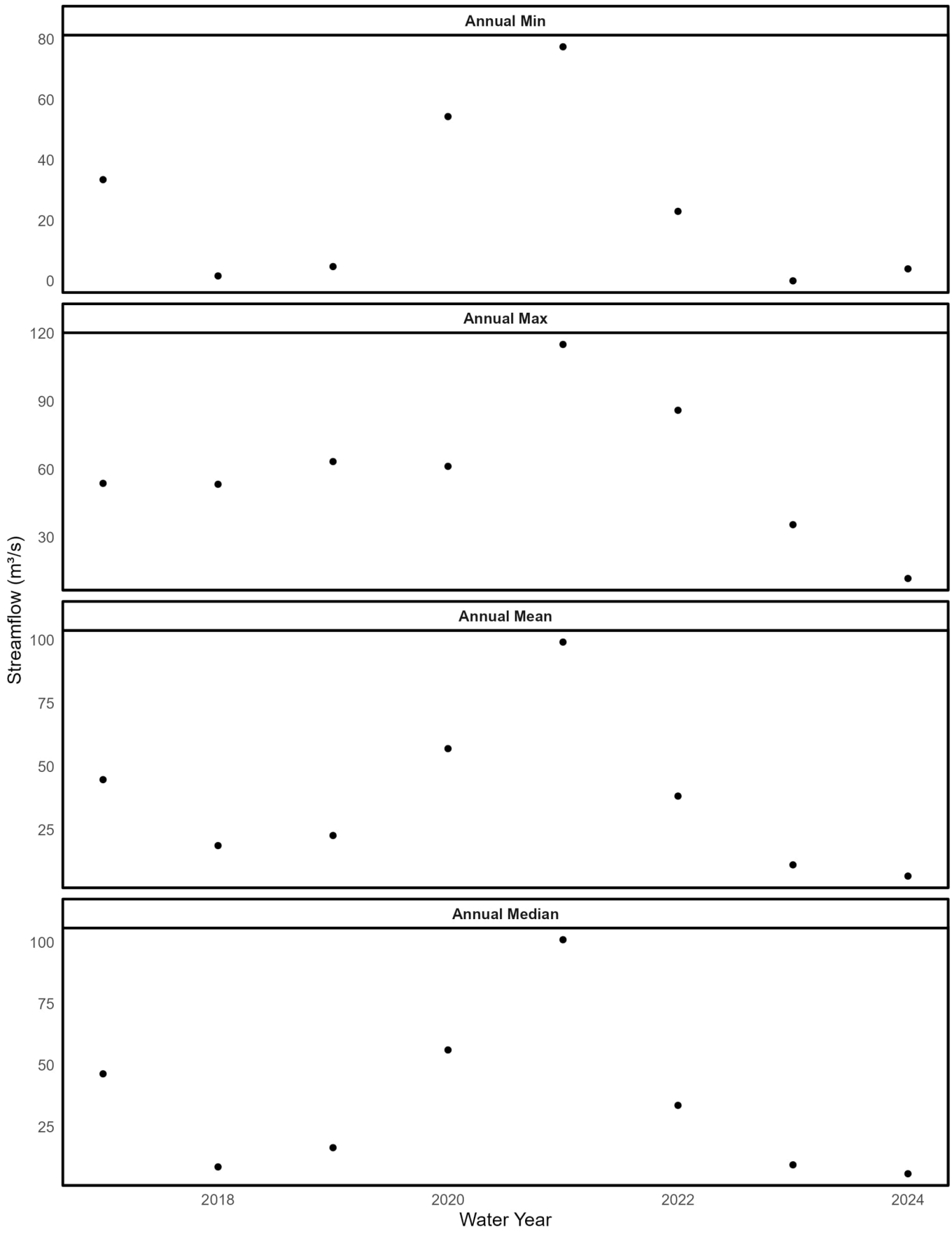
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FIGURE NO: **C.6.5**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Lockhart River at Outlet of Artillery Lake (07RD001)



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.7.1**

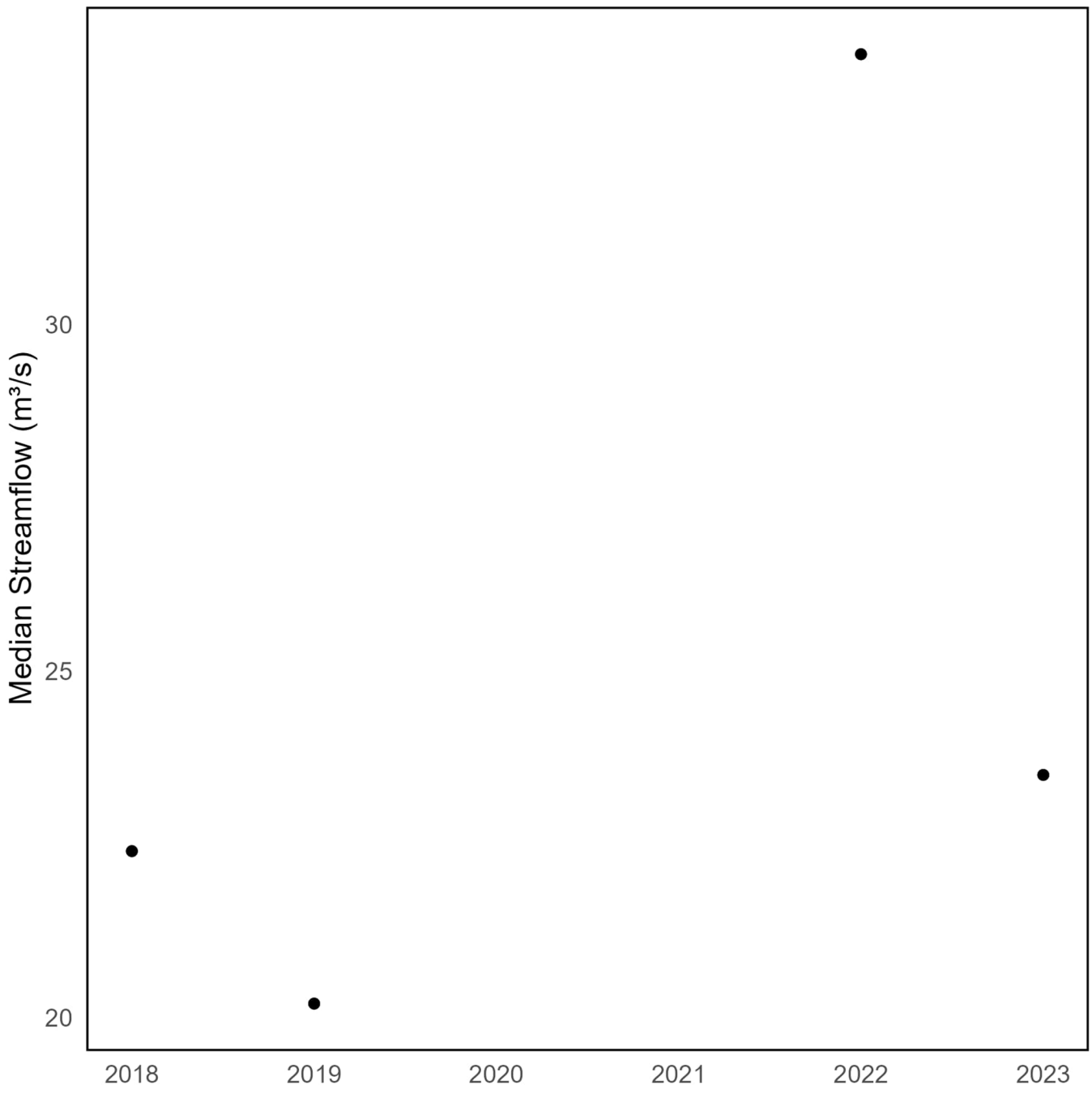
DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder

GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C1_Layout_Hydro

Lockhart River at Outlet of Artillery Lake (07RD001) Spring Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

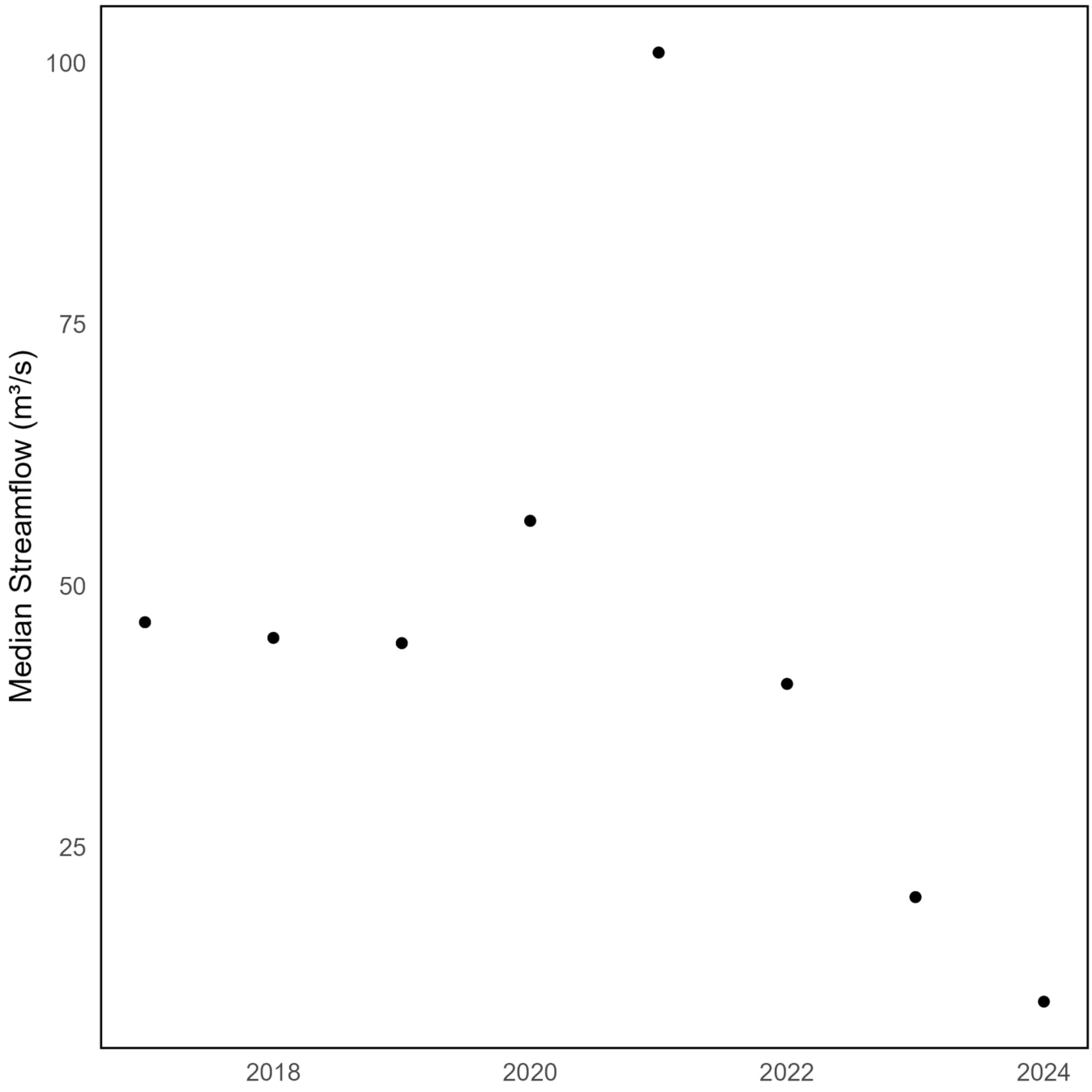
SLR

FIGURE NO: **C.7.2**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Lockhart River at Outlet of Artillery Lake (07RD001) Summer Streamflow



Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder
GIS PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C1_Layout_Hydro

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

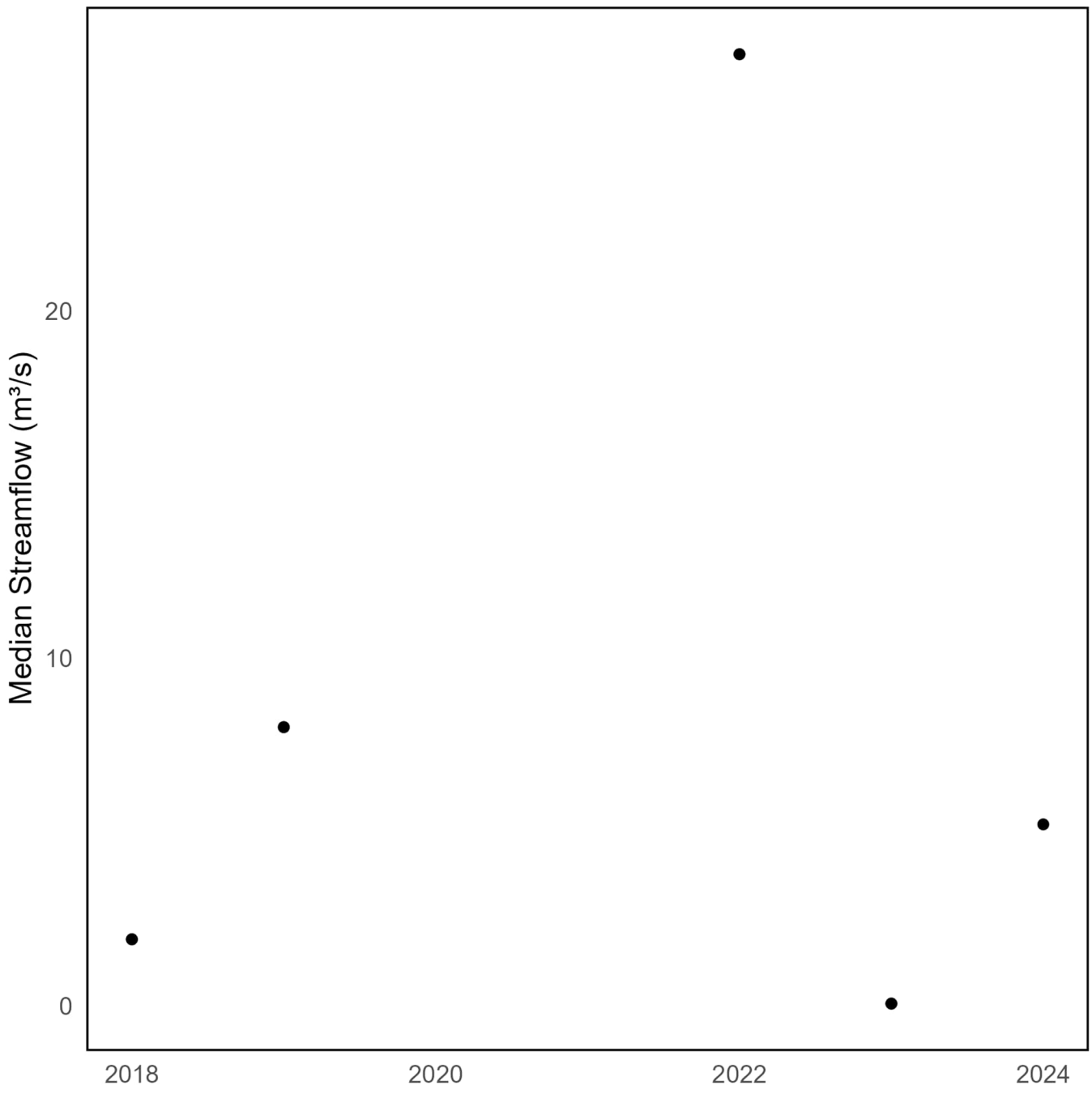
SLR

FIGURE NO: **C.7.3**

DATE: November 25, 2025

PROJECT NO: 205.030233.00001

Lockhart River at Outlet of Artillery Lake (07RD001) Winter Streamflow



CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.7.4**

DATE: November 25, 2025

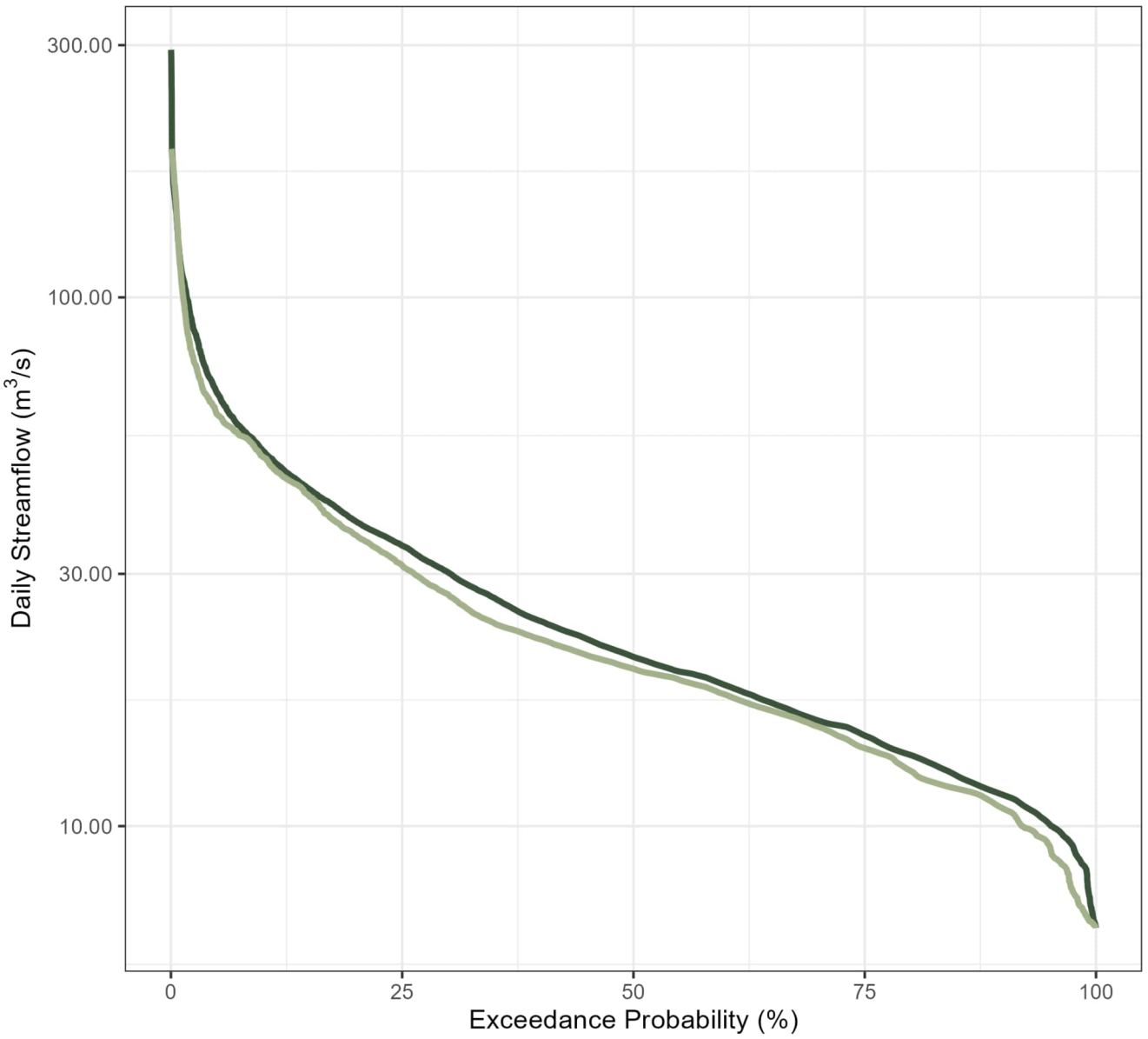
PROJECT NO: 205.030233.00001

Last Saved: Tuesday, November 25, 2025 2:17 PM by brodie.elder

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C.3 Flow Duration Curves

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.apnx || C3_Layout_Hydro
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Coppermine River
Downstream of Desteffany
Lake (10PA001)

LEGEND

Entire Record

2013-2023

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity
Status and Trends

TITLE: **Hydrology Data**

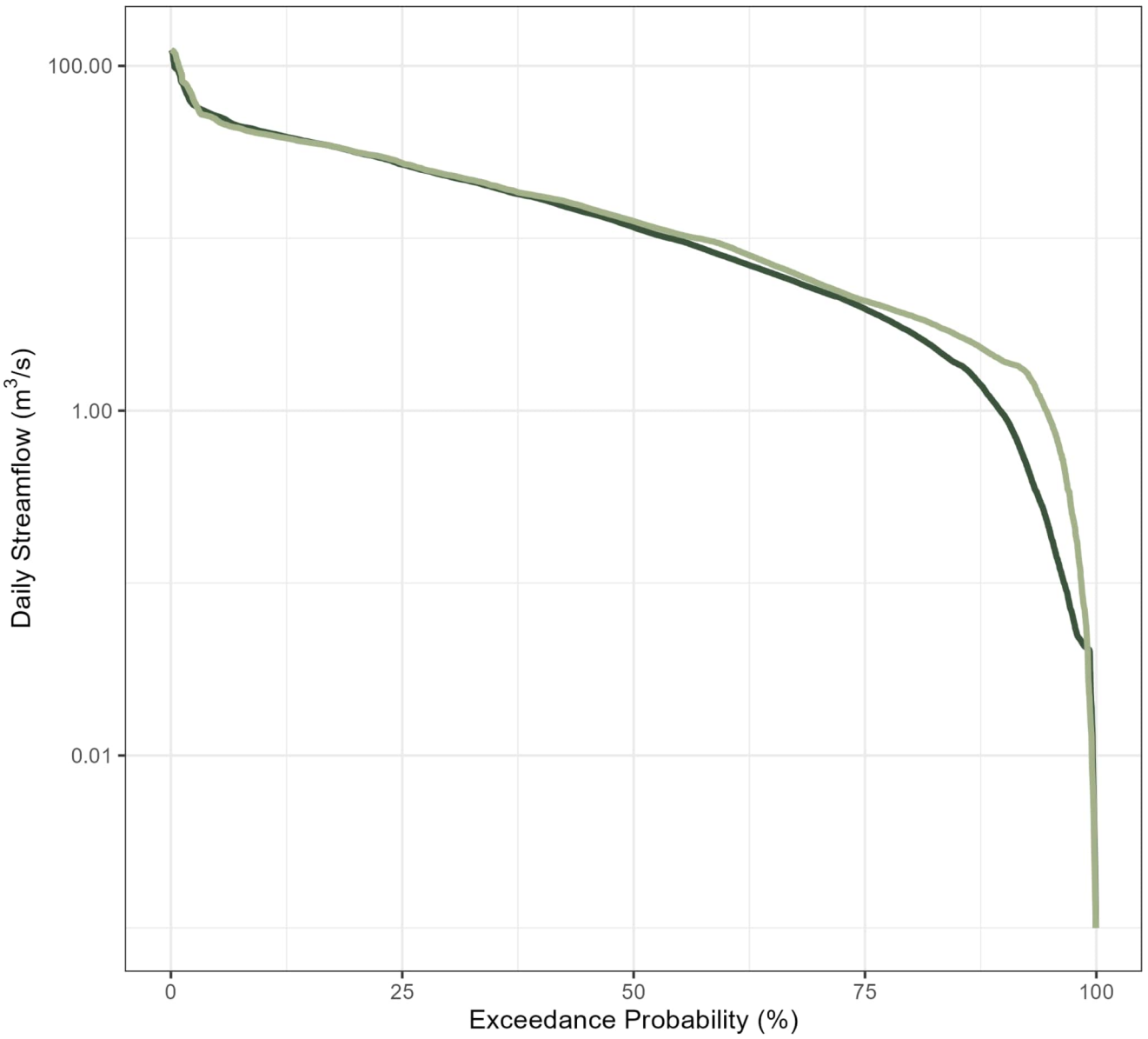
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FIGURE NO:
C.3.1

DATE: January 13, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C3_Layout_Hydro
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LEGEND

Entire Record

2013-2023

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

SLR

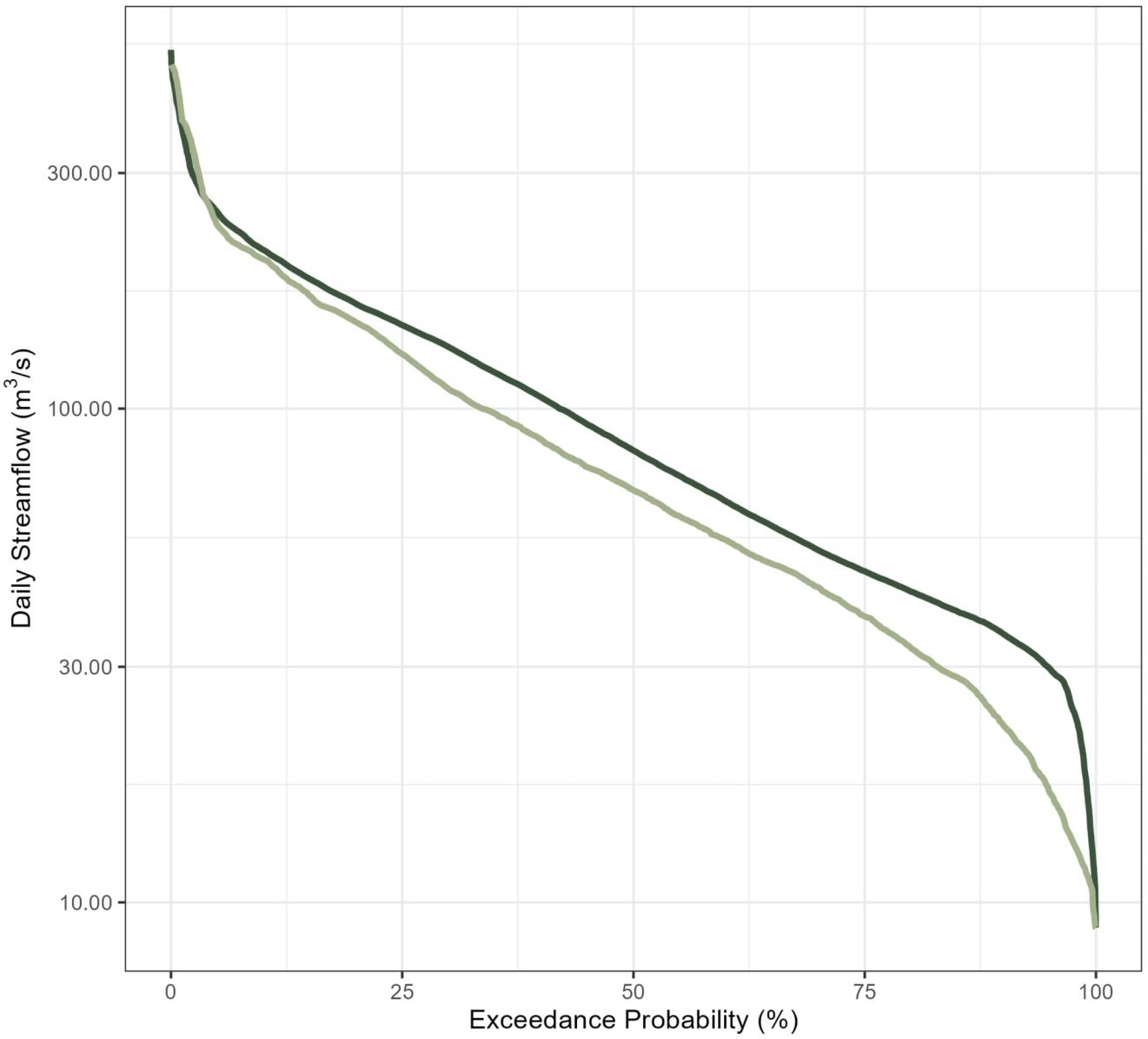
FIGURE NO: **C.3.2**

DATE: January 13, 2026

PROJECT NO: 205.030233.00001

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Coppermine River at Outlet of Point Lake (10PB001)



LEGEND

- **Entire Record**
- **2013-2023**

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

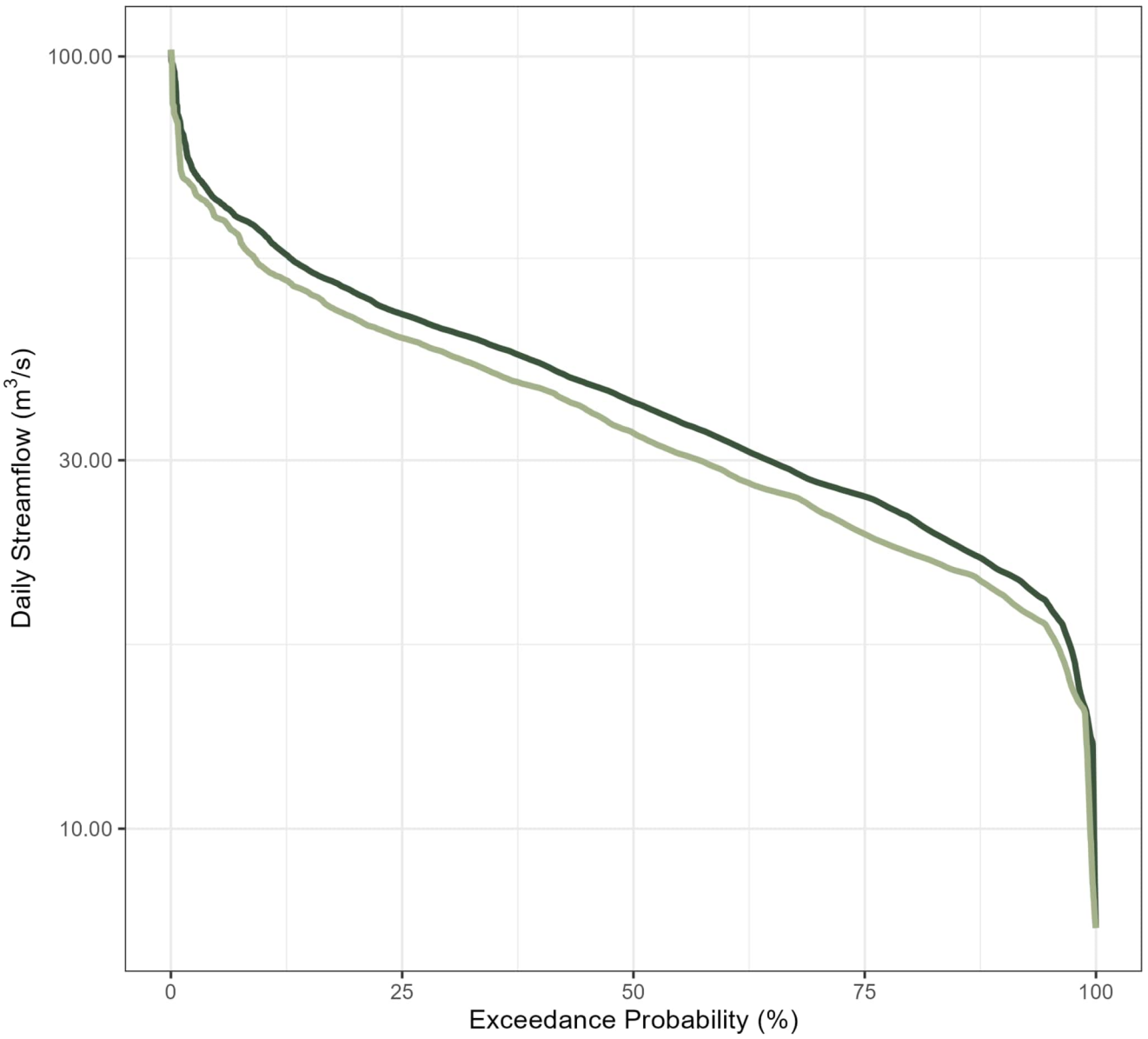
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FIGURE NO: **C.3.3**

DATE: January 13, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.apnx || C3_Layout_Hydro
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LEGEND

Entire Record

2013-2023

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity
Status and Trends

TITLE: **Hydrology Data**

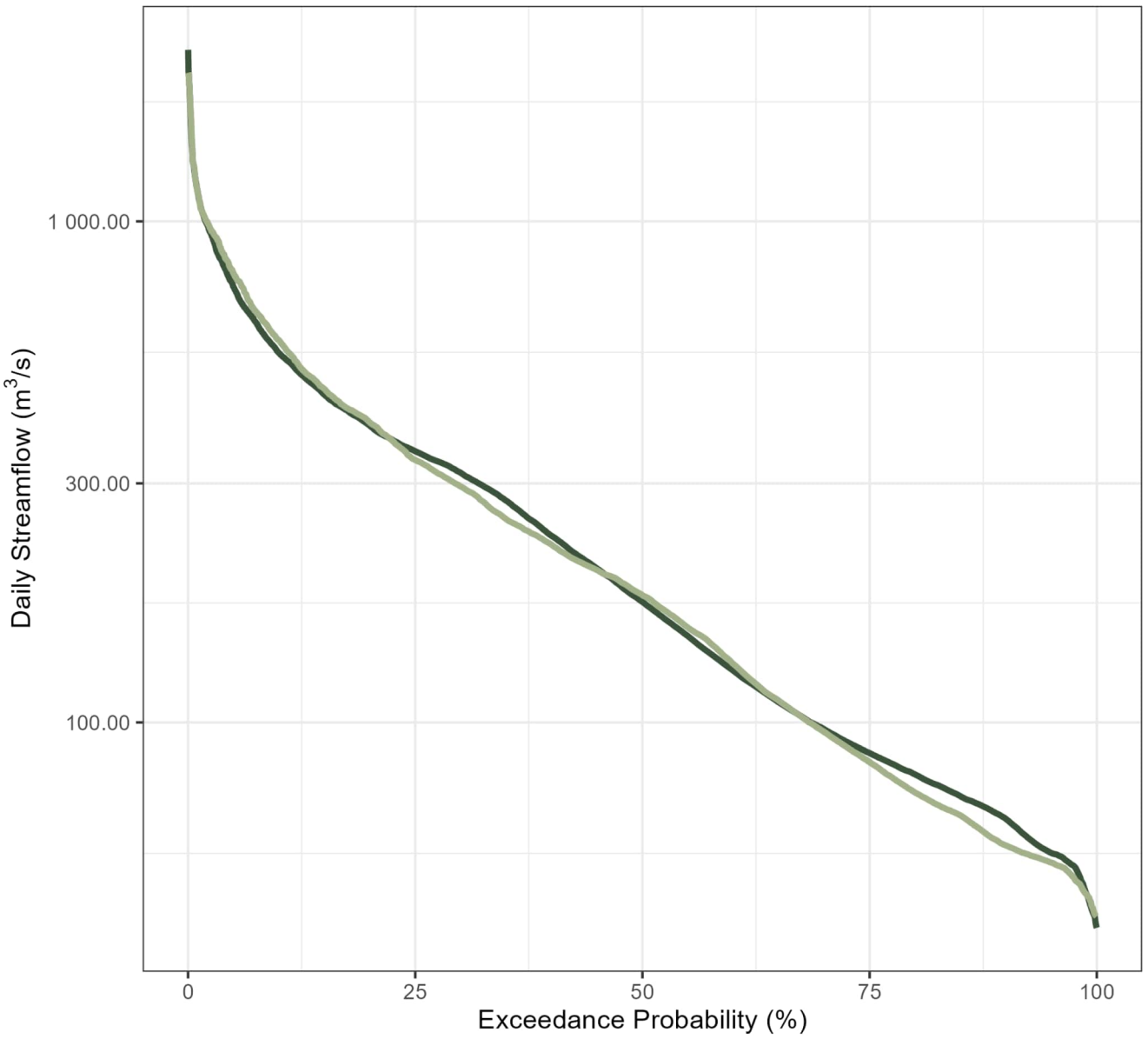
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FIGURE NO: **C.3.4**

DATE: January 13, 2026

PROJECT NO: 205.030233.00001

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Coppermine River Above Copper Creek (10PC004)

LEGEND

Entire Record

2013-2023

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

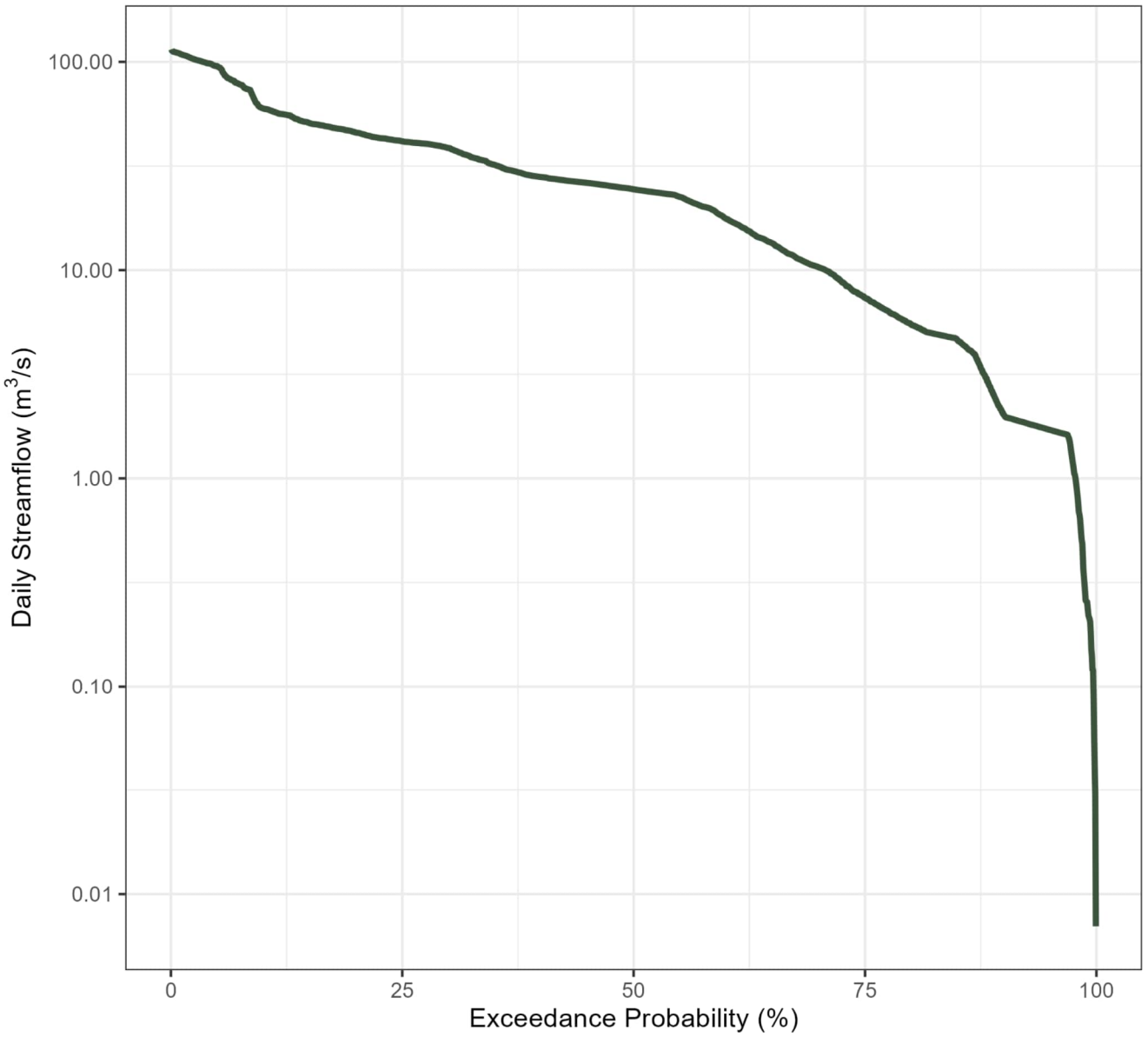
SLR

FIGURE NO: **C.3.5**

DATE: January 13, 2026

PROJECT NO: 205.030233.00001

PATH: G:_Projects\205\205_030233_GNWT_Hydro_Monitoring\1_Workspace\2_Processing\202509_WQ_Plots\GNWT_WQ_Plots_AP\GNWT_WQ_Plots_AP.aprx || C3_Layout_Hydro
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Lockhart River Above Outram Lake (07RB001)

LEGEND

Entire Record

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

TITLE: **Hydrology Data**

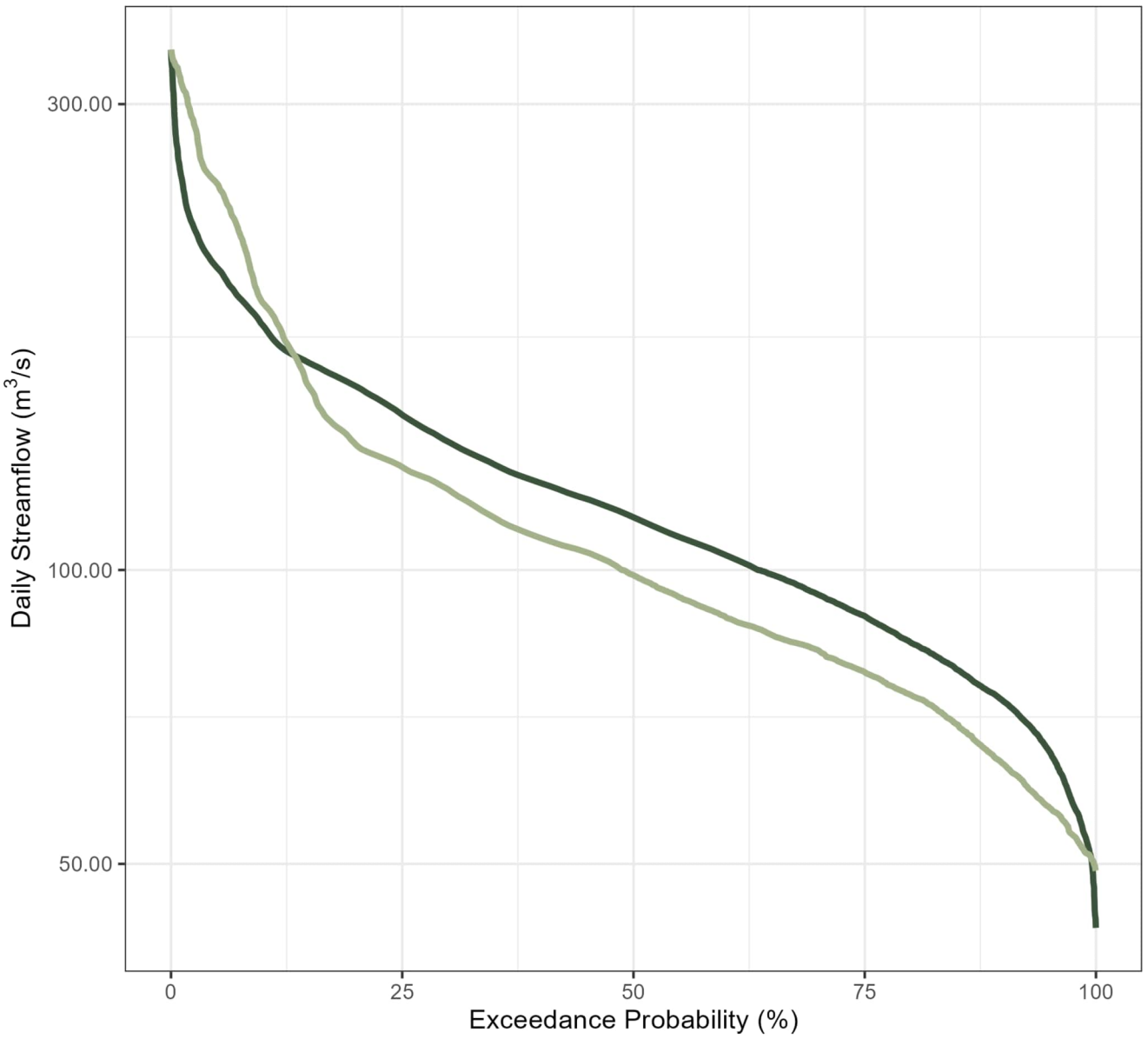
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FIGURE NO: **C.3.6**

DATE: January 13, 2026

PROJECT NO: 205.030233.00001

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LEGEND

Entire Record

2013-2023

CLIENT: Government of Northwest Territories, Canada

PROJECT: Water Quality and Quantity Status and Trends

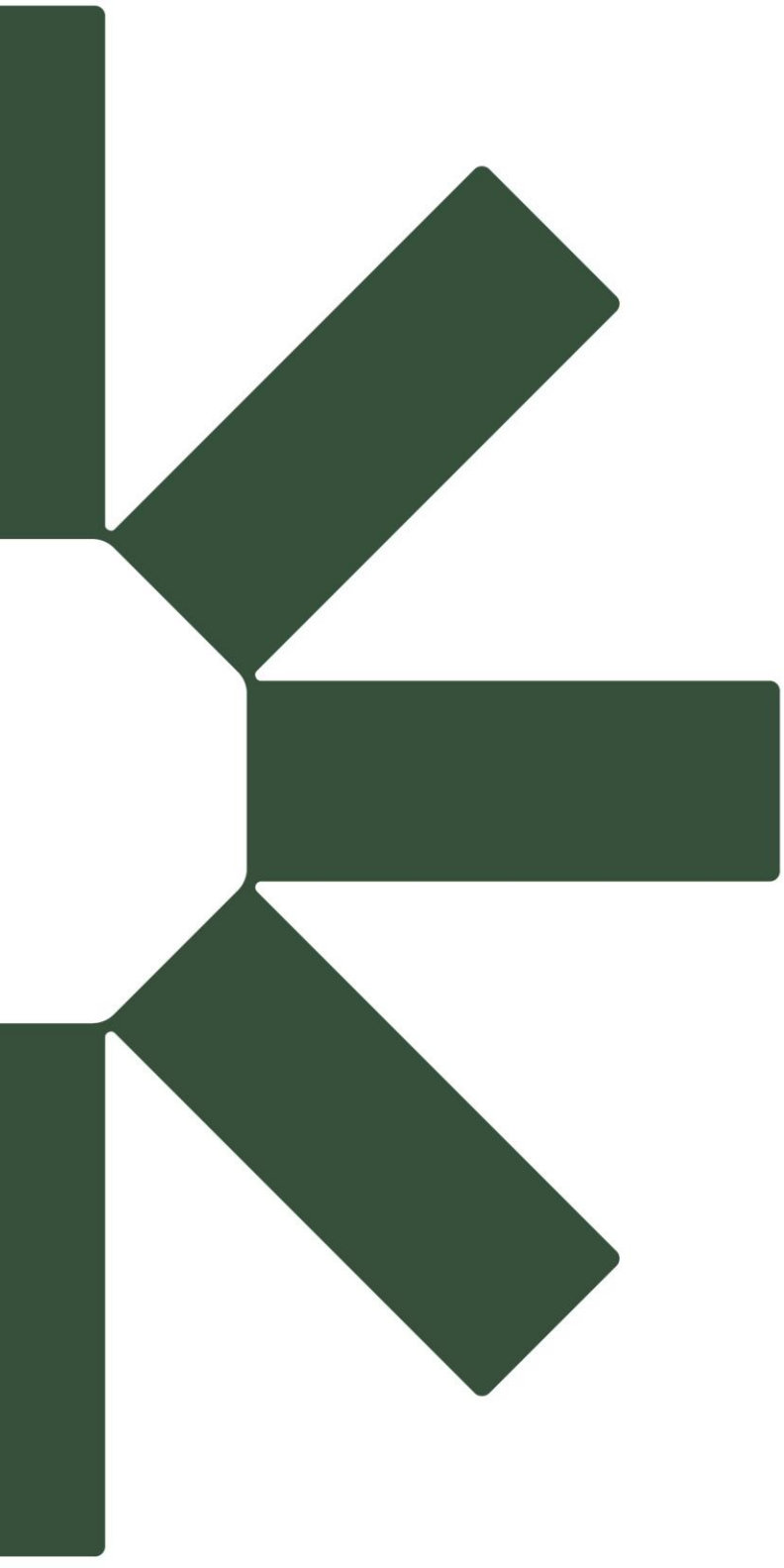
TITLE: **Hydrology Data**

SLR

FIGURE NO: **C.3.7**

DATE: January 13, 2026

PROJECT NO: 205.030233.00001



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