EASTERN ATHABASCA REGIONAL MONITORING PROGRAM

2020/2021 COMMUNITY REPORT

FINAL REPORT

August 2021

Acknowledgments

The Eastern Athabasca Regional Monitoring Program (EARMP) is conducted in partnership with the Government of Saskatchewan, The Canadian Nuclear Safety Commission, and industry partners Cameco Corporation and Orano Canada Inc.

The Executive Summary Dene translation was provided by Rosalie Tsannie-Burseth.

The EARMP steering committee would like to thank the Athabasca residents and communities who have donated their time and traditional foods over the years and for their continued support for the program. Community member participation and local knowledge are essential to the success of the program.

For more information on the program and additional reports please visit us at www.earmp.com

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Above: Black Lake, Saskatchewan

Executive Summary

The Eastern Athabasca Regional Monitoring Program was established in 2011 under the Province of Saskatchewan's Boreal Watershed Initiative. The community component of the program partners with communities within the Athabasca Basin to monitor the safety of traditionally harvested country foods by collecting and testing representative water, fish, berry, and mammal tissue samples from the seven communities located in the region. Harvesting and consuming traditional foods are an important part of the culture in northern Saskatchewan which contributes to an overall healthy lifestyle through physical activity and healthy eating. Community members collected and submitted 50 fish samples, 18 ungulate samples, and 5 water samples for testing in late 2020 and early 2021. The current year's program results continue to show that country foods are safe for consumption with chemical profiles for water, fish, and mammal tissue samples similar to natural background.

Yati nedhe hots'ı ɔedırı yatí hılchú sı

Diri Eastern Athabasca Regional Monitoring Program hulye si 2011 bǫ́nı̨ther nı̨, ku diri Saskatchewan k'eyaghë Tu hodi basi si, Boreal Watershed hulye (Boreal -Yatthe NeNe nih ts'edi si. Tu bet'orë?a bodi ho?ą)- Diri ëritl'is holı̨ si, Yatthe Athabasca nene?ots'ı̨ Dene hël bër, tu, jié, tets'adie t'a bëghą shilyi si bëkol?ı̨, net'ı̨ ha. Nih hots'ı̨ bër nụhtth'i ha nezụ, bët'á naraíts'ër, hël tth'i nuhets'anı̨é si bet'orë?a ha. Ku diri Yatthe nene Dene hots'ı̨ nụhts'eranı̨ sı̨, solǫną lue ts'ı̨ asi nałtsı̨, ɟłk'edɟghɟ ts'adhel tets'adie beké ts'ı̨ asi nałtsı̨, sǫlaghe tth'ai tu ts'ı̨ hilcho-ú net'ı̨ ha 2020 k'e, ku tth'i 2021 k'eyaghë nih hulta hots'ı̨. Dụhụ nënę k'e hots'ı̨ nih ts'ı̨ bër ʔąłu nezụ henı̨. T'ąhą nih k'e ëghádálana si, nak'e tu nezụle, tth'i nak'e asi nezụle dëhtth'agh si bët'á bër nezụle dánı̨thën t'a bër-ú, tu, jié-ú, tets'adie hotié bodi sı̨.

INTRODUCTION

Background

The EARMP is a collaborative industry-government partnership, long-term environmental monitoring program established in 2011 under the Province of Saskatchewan's Boreal Watershed Initiative. The program is supported by contributions from several stakeholders including the Saskatchewan Ministry of Environment, the Canadian Nuclear Safety Commission, Cameco Corporation (Cameco), and Orano Canada Inc. (Orano). One of the primary goals of the Boreal Watershed Initiative was to assess the ecological integrity of Saskatchewan's northern watersheds to address potential environmental concerns, and to identify sustainable management practices in the region. The EARMP was designed to identify potential cumulative effects downstream of uranium mining and milling operations in the Eastern Athabasca region of northern Saskatchewan (*Figure 1*).

Figure 1 Study location.

Cumulative effects are defined as impacts on the environment that result from the impact of an action when added to other past, present, and foreseeable future actions (Joint Panel 1992). Cumulative effects might occur when projects overlap in an area (spatially), such as when two watersheds (rivers and streams), exposed to uranium mining and milling activities, converge. Cumulative effects may also occur overtime (temporally) if contaminants are emitted into the environment over extended periods. The EARMP was developed to establish baseline conditions and facilitate the examination of spatial and temporal changes over the long term.

This program is intended to supplement the extensive environmental monitoring completed

near each uranium mining and milling operation in northern Saskatchewan, which are regulated by federal and provincial agencies including the Canadian Nuclear Safety Commission, the Saskatchewan Ministry of Environment, and Environment and Climate Change Canada. In addition, community sampling has occurred through the Athabasca Working Group Environmental Monitoring Program for 18 years (2000-2017) and continues today as the Community-Based Environmental Monitoring Program under the Ya'Thi Néné Collaboration Agreement. The EARMP is designed to complement these monitoring programs and allows a more comprehensive evaluation of potential cumulative effects from industry in northern Saskatchewan. A full description of the EARMP study design is provided in Appendix A.

The EARMP framework includes two programs: a technical program and a community program. The technical monitoring program was established to monitor potential long-term changes in the aquatic environment far-downstream of uranium mining and milling operations in the Eastern Athabasca region. Sampling was last completed by CanNorth in 2015 and information from the technical monitoring program is presented in a separate report which can be viewed on the EARMP website (www.earmp.com). The community program monitors the safety of traditionally harvested country foods by collecting and testing water, fish, berry, mammal, and avian tissue samples from the seven communities located in the Athabasca region. The community program results for the last 10 years (2011-2020) can be viewed on the EARMP website.

The objective of this document is to present a summary of the results of the community program in 2020/2021.

> *"Gathering and eating traditional country foods can help reduce the risk of diabetes, heart disease, and obesity, especially when the foods are cooked in traditional ways."*
>
> *Dr. James Irvine – Saskatchewan Population Health Unit*

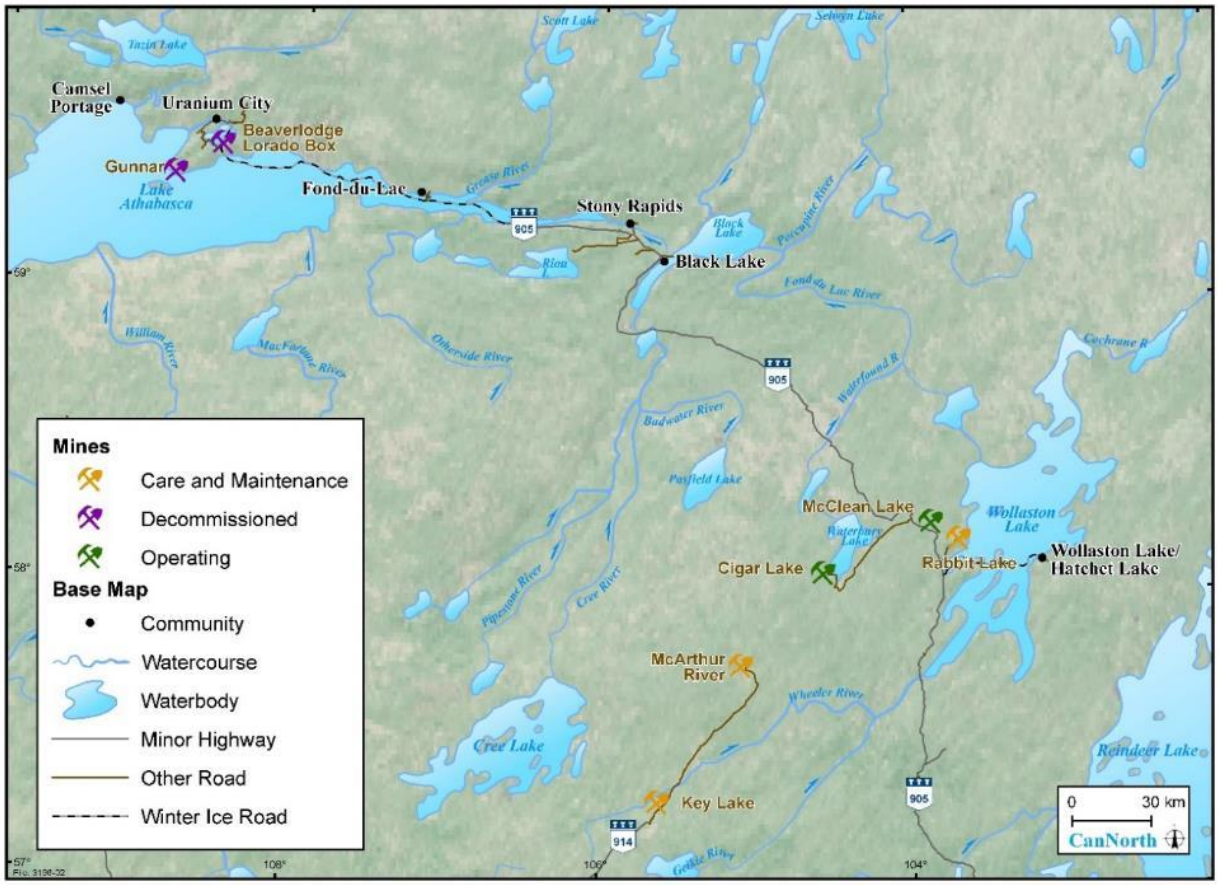
Uranium Mining and Milling Operations in the Region

As a result of the ongoing COVID-19 pandemic, both the active mine (Cigar Lake) and active mill (Mclean Lake) in the Eastern Athabasca region remained in a state of care and maintenance during the 2020 EARMP field season, re-opening in 2021. Additional mine and mill operations in the region (i.e., Key Lake, McArthur River, and Rabbit Lake) were previously placed into care and maintenance due to market forces. In addition, other closed, decommissioned, and/or abandoned uranium mine sites are located in the region and near the community of Uranium City.

The locations of these uranium mining and milling operations are presented in *Figure 2*. Extensive monitoring within the local study areas of each of the uranium mines/mills generally includes testing the air, soil, vegetation, water, sediment, benthic invertebrates, and fish (AREVA 2016; CanNorth 2016, 2018a, 2020a, 2020b, 2020c).

These monitoring programs are designed specifically for each mine and are a requirement under the provincial operating licence and the CNSC Licenses as documented in the facilities Licence Conditions Handbook.

Figure 2 Study area overview.



Communities in the Region

There are seven communities in the region, including Black Lake Denesuline First Nation, Fond du Lac Denesuline First Nation, Stony Rapids, Wollaston Lake, Hatchet Lake Denesuline First Nation, Camsell Portage, and Uranium City (*Figure 2*). For the community monitoring program, the communities of Wollaston Lake and Hatchet Lake Denesuline First Nation were assessed together for a total of six study areas.

Community Monitoring Program Objectives

The community monitoring program was developed to address potential concerns about the safety of traditional foods that community members routinely consume.

Above: George St. Pierre of Hatchet Lake First Nation fishing on Wollaston Lake, Saskatchewan.

A number of traditional food studies have been completed in communities across northern Saskatchewan including Hatchet Lake Denesuline First Nation, Uranium City, the Lac La Ronge Indian Band, and English River First Nation, and have established that fish, berries, and wild game are extremely important food sources for these northern communities (CanNorth 1999, 2011, 2014, 2017).

In 2018, a human health risk assessment was completed using all the available chemistry data collected from 2011 to 2017. The assessment determined that the level of chemicals of interest in the traditional foods were safe and do not pose health risks to members of the Athabasca Basin communities. The risk assessment is available in the 2017/2018 community monitoring report (CanNorth 2018b).

The community monitoring program objectives are to:

- Determine the safety of traditionally harvested food for local consumption.
- Establish long-term monitoring at community harvesting areas to assess changes over time.
- Foster confidence in the consumption of traditional foods as well as engage and involve community members in the gathering of information.
- Communicate monitoring results through reporting, meetings, and public media.

Summary of EARMP Community Monitoring Program Framework

Community Involvement

Above: Wayne and Chelsea Powder picking blueberry samples in Uranium City, Saskatchewan.

The community monitoring program relies on the participation of community members for the selection of sampling locations and for sample collection.

Community members play a role in every step of the process:

Community Representatives

In 2011, community members selected representatives from each community to carry out the annual country food sample collection.

The selected representatives were provided training in sample collection, storage, and shipping procedures.

Sample Locations

One water sample location was selected for each community for consistency. Fish, berry and mammal samples are collected from locations where community members routinely fish, gather and hunt.

Sample Collection

Each year, community representatives aim to collect five samples of each each food type from each community..

Sample Testing

Collected samples are shipped to CanNorth for laboratory testing by Saskatchewan Research Council. Results are analysed by CanNorth and compared to available guidelines, other data collected in the region, and the most recent human health risk assessment.

Sharing Results

Results are shared with the communities and are available to the public at www.earmp.com.

Sharing the monitoring results is one of the primary goals of the community program. To accomplish this, communication and engagement strategies are implemented and are summarized below:

WWW.EARMP.COM

In 2020 the EARMP website was updated to improve the ease at which communities can access information and encourage community engagement.

SOCIAL MEDIA

Social media will be used as a promotional tool starting in 2020 through:
@CanNorthEnviroServices
linkedin.com/company/cannorth

CALENDARS

Free EARMP calendars in English, Cree, and Dene are distributed to the Athabasca communities and other northern communities and circulated through the band offices, community health centers, post offices, and schools annually.

PRESENTATIONS

Results are presented annually to the northern Saskatchewan Environmental Quality Committee in La Ronge.

Study Design and Objectives of the 2020/2021 Program

The community monitoring program continues to follow the study design and objectives outlined in the EARMP Community Program Framework (Appendix A), and consists of comparison to baseline data, regional reference data, and the most recent human health risk assessment (CanNorth 2018b). The study focuses on key chemicals of interest including the metals; aluminum, arsenic, cadmium, cobalt, copper, iron, lead, molybdenum, nickel, selenium, uranium, vanadium, and zinc. Radionuclides including lead-210, polonium-210, radium-226, and thorium-230 are also a primary focus. Ammonia in water and mercury in fish are also addressed. Note, all of these are present naturally in the environment but can become elevated due to mining and other industrial development activities.

The program is completed annually with the core components of water and fish sampled each year. A traditional food item is also selected each year as an additional sampling component. This year's additional focal item was ungulates (hooved mammals). A portion of the budget is also set aside to support chemical analyses of opportunistic samples submitted by the community. These community-requested samples can range from additional core samples or may be uniquely harvested species or specimens not historically part of the program (berries or animals hunted) or involve samples which have generated some community concern or interest.

The 2020/2021 program collected the core elements (water and fish), with mammals (both organs and muscle) being the additional focal food for the year.

Results

The community monitoring report is subdivided into three sections:

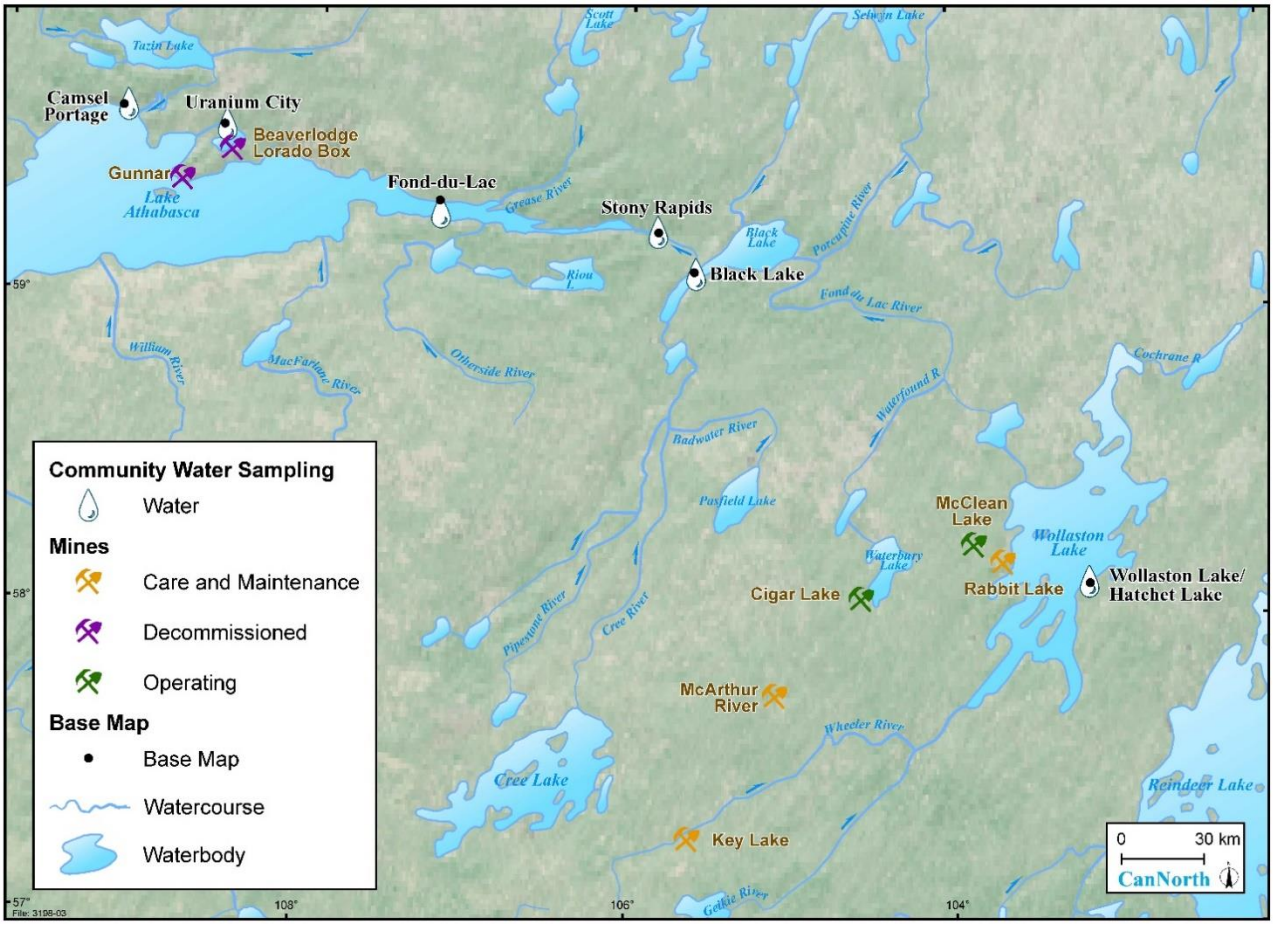
- Water (Tuîtàedi) Chemistry
- Fish (Łue) Chemistry
- Mammal (Ch'adi) Chemistry

Appendix A provides a description of the community monitoring program framework, Appendix B presents a summary of the chemistry results, and detailed results from all sampling years are provided in Appendix C.

WATER (TUÎTÅEDI) CHEMISTRY

Surface water samples were collected by hand at one waterbody of interest near each community by community members and CanNorth field staff, annually, since 2011 (baseline), with the exception of Camsell Portage in 2018 and 2020. Waterbodies assessed included Black Lake, Ellis Bay of Lake Athabasca near Camsell Portage, the Fond du Lac River near Fond du Lac, the Fond du Lac River near Stony Rapids, the Fredette River near Uranium City, and Welcome Bay of Wollaston Lake (*Figure 3*). All samples were preserved as required and kept refrigerated until chemical analysis was completed. All water samples were submitted to the Saskatchewan Research Council analytical laboratory for chemical analysis. The summary water quality data is presented in Appendix B, Figure 1; Table 1 and summarized below. The raw water quality data is presented in Appendix C, Table 1.

Figure 3 Water quality sampling areas, 2011 to 2020



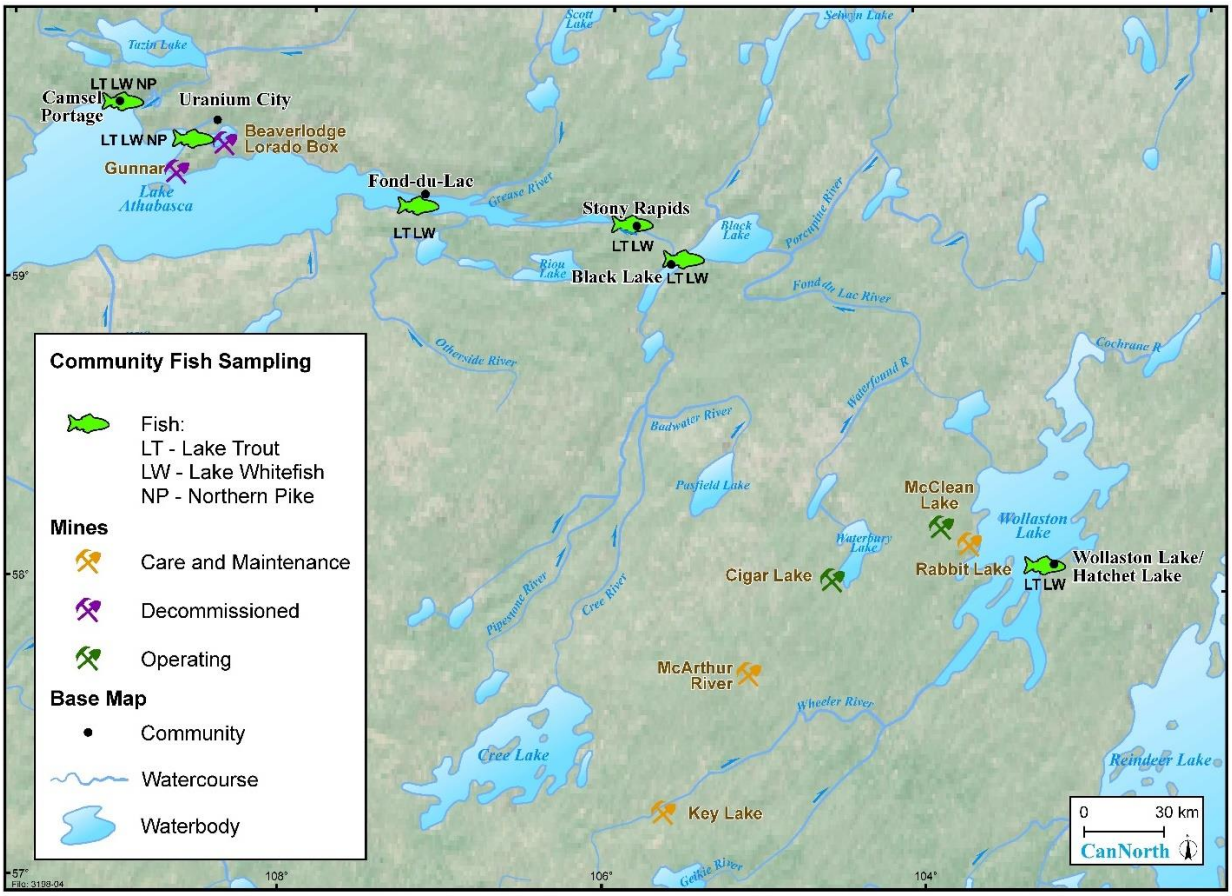
Concentrations of the chemicals in the water over the years are very low, with most chemicals at levels so low the laboratory could not measure them even with the use of laboratory techniques known for their ability to measure low levels of chemicals. Chemicals that were at measurable levels were all lower than the Canadian Drinking Water Quality guidelines (Health Canada 2017) and the Saskatchewan Environmental Quality Guidelines for the protection of freshwater aquatic life (GS 2021). In addition, the pH at all locations was within the guideline range. The majority of the chemical concentrations were within the range of concentrations expected for the region and the baseline assessment.

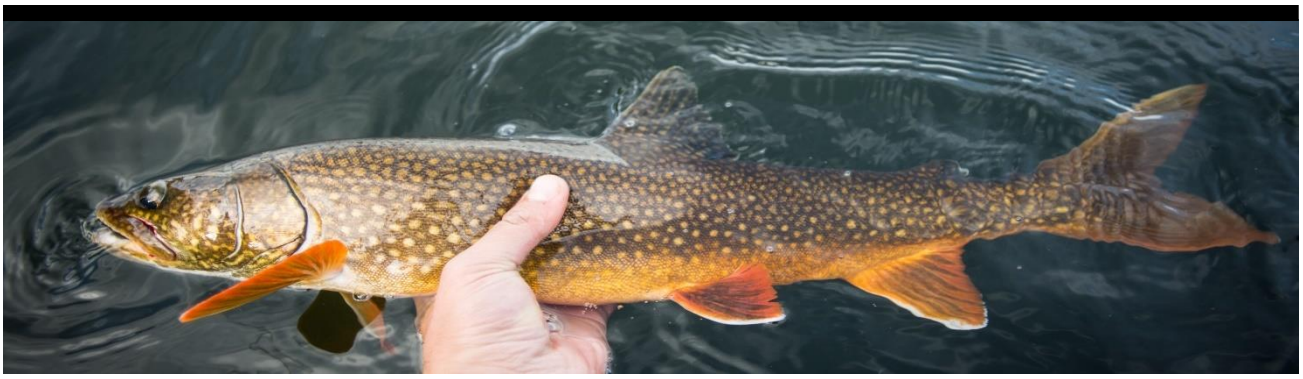
Overall, the concentrations of the chemicals assessed in the community water samples since the baseline sampling years (2011-2012) are very low and are not considered a concern to the environment or human health. Community members should note that drinking raw water from any source does carry a risk of ingesting natural parasites that can result in gastro-intestinal infections.

FISH (ŁUE) CHEMISTRY

Fish chemistry samples were collected by community members using gill nets set at waterbodies near their communities, or by angling. Fish collected have included lake trout (łuezané), lake whitefish (łú), and northern pike (oulday) (*Figure 4*). In 2020, lake trout and lake whitefish were collected from all communities except Camsell Portage, where sampling was not completed as a result of the ongoing COVID-19 pandemic. Ageing structures (fish scales and ear bones) were removed and submitted to a specialized laboratory to determine the age of the fish. The fish flesh was submitted to the Saskatchewan Research Council for chemical analysis. The data are summarized in detail in Appendix B, and raw data is provided in Appendix C, Table 2.

Figure 4 Fish chemistry sampling areas, 2011 to 2020

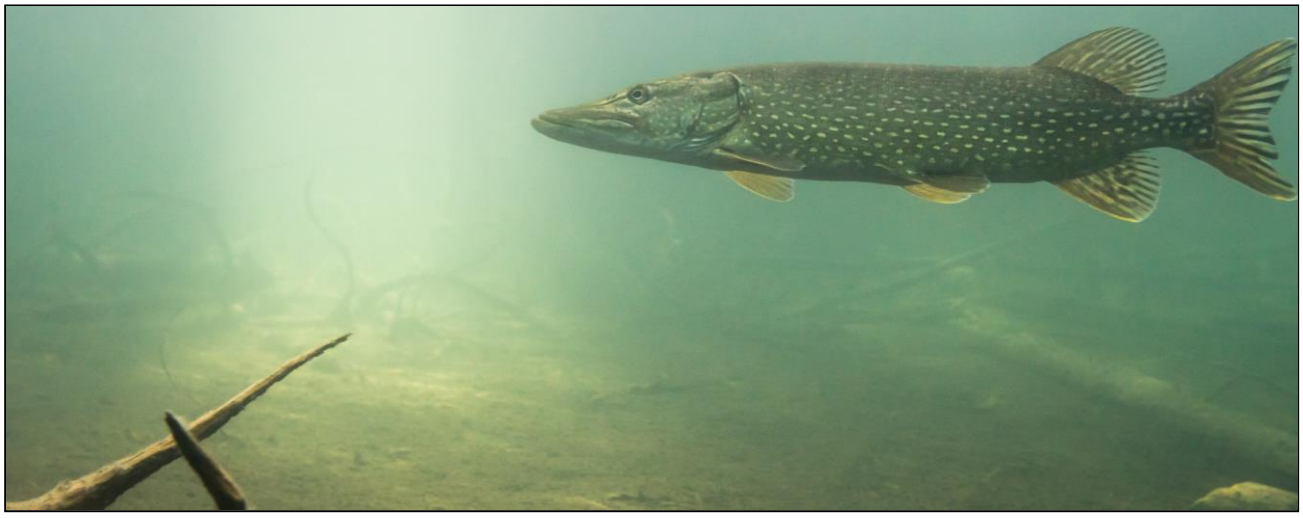




Similar to the water chemistry results, the levels of the chemicals in the fish continued to be very low in 2020, with most chemicals at levels so low the laboratory could not measure them even with the use of laboratory techniques known for their ability to measure low levels of chemicals. Chemicals that were measurable in 2020 were within the regional reference range and comparable to concentrations measured during previous monitoring years.

Overall, the levels of chemicals assessed in the fish collected from the communities since 2011 are considered low and similar to levels assessed in the 2018 human health risk assessment that determined fish do not present health risks to Athabasca Basin residents. Mercury levels were low in fish sampled in 2020; however, it is recommended that community members consult the Saskatchewan Mercury in Fish Guidelines for additional information:

https://publications.saskatchewan.ca/#/products/68781

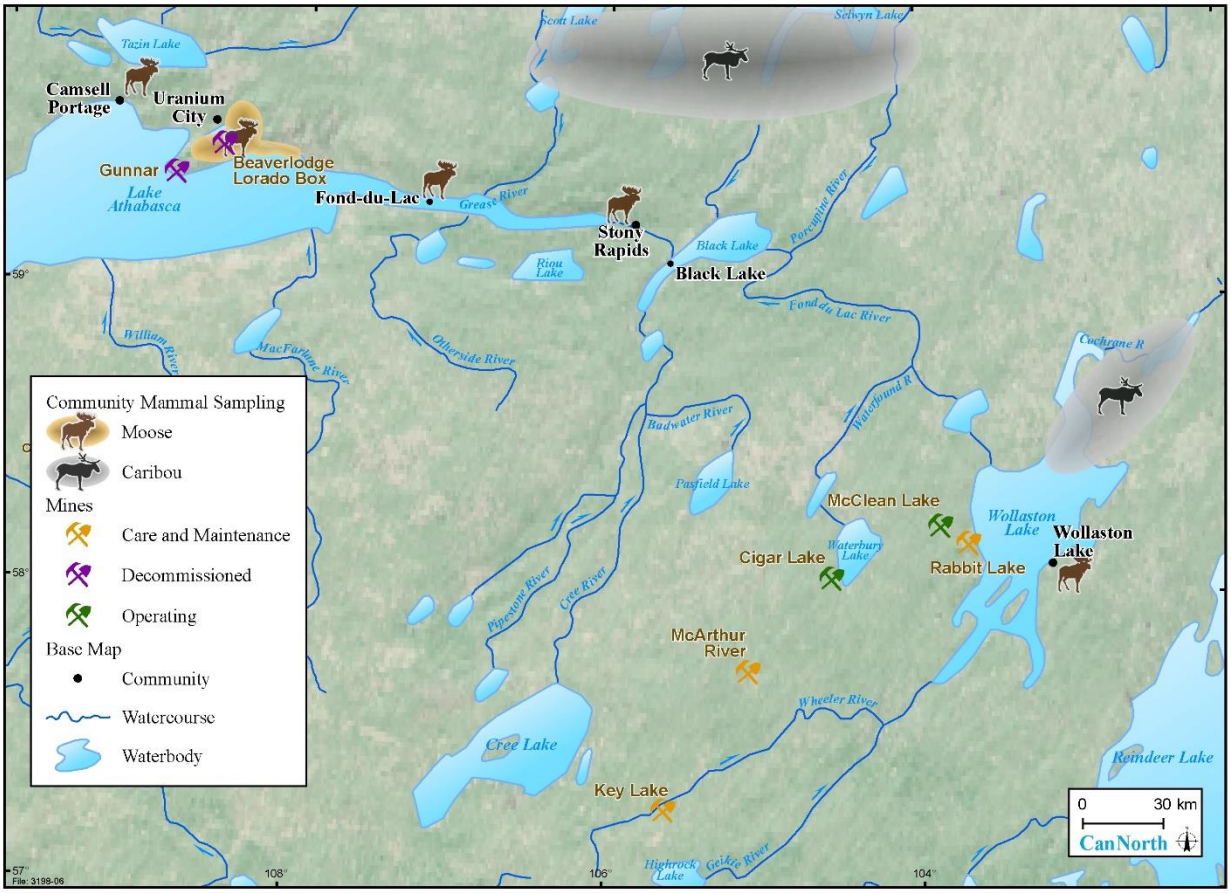


MAMMAL (CH'ADI) CHEMISTRY

The additional focal item of the 2020/2021 community monitoring program was mammal tissue, specifically hooved mammals. Two main species that are commonly hunted and consumed in northern Saskatchewan are tested; barren-ground caribou (ɔetthénttthén) and moose (denítthén). Samples of both species were generally collected from routine hunting activities at locations depicted in (*Figure 5*).

In 2020/2021, barren-ground caribou muscle and organ meat samples were sent in by community members from Hatchet Lake/Wollaston Lake. Moose muscle and organ meat samples were sent in by community members from Stony Rapids and Hatchet Lake/Wollaston Lake. The data are summarized in detail in Appendix B, while raw data are provided in Appendix C, Tables 3 and 4.

Figure 5 Ungulate sampling areas, 2011 to 2021



Similar to the water and fish chemistry results, the levels of the chemicals in barren-ground caribou and moose continued to be very low in 2020/2021, with most chemicals at levels so low the laboratory could not measure them even with the use of laboratory techniques known for their ability to measure low levels of chemicals. Chemicals that were measurable were within the regional reference range and comparable to concentrations measured during previous monitoring years.

Overall, the levels of chemicals assessed in ungulate muscle and organ meat collected from the communities are considered low, and based on the 2018 human health risk assessment, the consumption of this meat by Athabasca Basin residents is considered safe.

However, of note was the elevated level of lead in a few of the meat samples likely contaminated by lead shot. Lead ammunition continues to be used commonly for hunting large game in Saskatchewan. Consumers should be aware of the potential risk of eating game killed by lead shot. Studies have shown that lead gunshot undergoes fragmentation on impact with game and can contaminate the meat and increase exposure of lead to those eating it. It is recommended that hunters use ammunition alternatives that are not prone to fragment including steel or other high-weight retention ammunition alternatives.

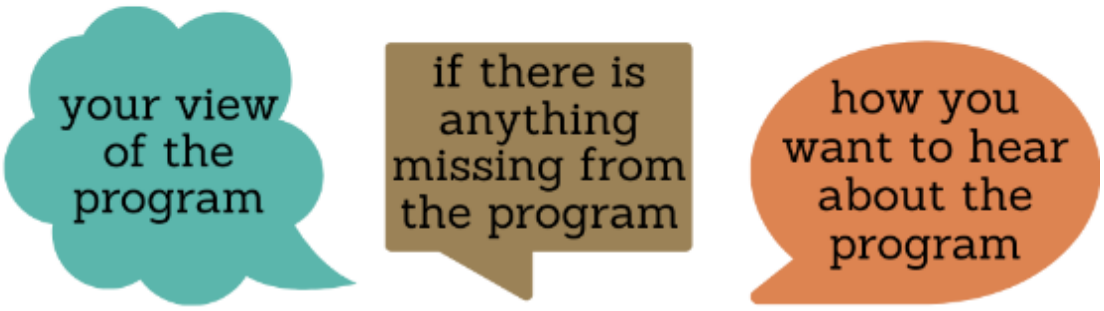
SUMMARY

The results indicate that the measured concentrations of chemicals of interest in water, fish, and mammal samples collected and tested in 2020-2021 community monitoring program were similar to baseline and regionally measured levels. The measured concentrations were also similar to those incorporated into the last human health risk assessment completed in 2018. These community traditional foods continue to be safe and a healthy dietary choice for residents of the Athabasca basin.

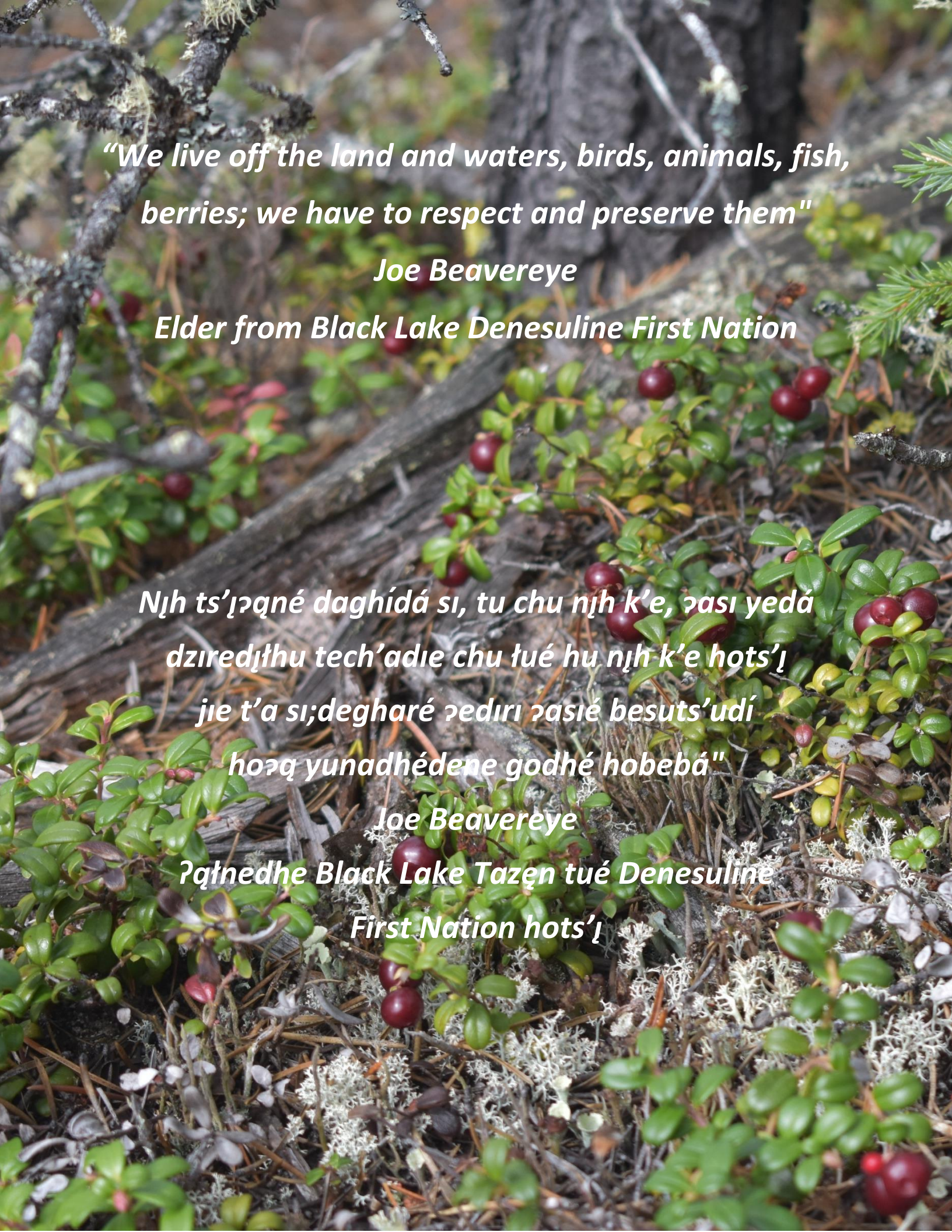
WE WANT TO HEAR FROM YOU!

Please contact us at info@earmp.com

Tell us . . .



If you have any comments or questions on the Eastern Athabasca Regional Monitoring Program please contact us info@earmp.com or visit our website at www.earmp.com



“We live off the land and waters, birds, animals, fish, berries; we have to respect and preserve them"

Joe Beavereye

Elder from Black Lake Denesuline First Nation

Nɻh ts’ɻɔqné daghídá sı, tu chu nɻh k’e, ɔası yedá dzıredɻłhu tech’adıe chu łué hu nɻh k’e hots’ɻ jıe t’a sı;degharé ɔedırı ɔasıé besuts’udí hoɔq yunadhédene godhé hobebá"

Joe Beavereye

ʔqłnedhe Black Lake Tazęn tué Denesuline First Nation hots’ɻ

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The report was prepared by:

CanNorth

Canada North Environmental Services (CanNorth) is a 100% Indigenous owned environmental consulting company based in Saskatoon, Saskatchewan. CanNorth has been providing environmental services to Canadian industry, government agencies, and First Nations and communities for over 30 years. For additional information visit us at www.cannorth.com

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APPENDICES

LIST OF APPENDICES

APPENDIX A

EARMP COMMUNITY PROGRAM FRAMEWORK

APPENDIX A: COMMUNITY MONITORING PROGRAM FRAMEWORK

1.0 INTRODUCTION

The Eastern Athabasca Regional Monitoring Program (EARMP) is a collaborative industry-government partnership, long-term environmental monitoring program established in 2011 under the Province of Saskatchewan's Boreal Watershed Initiative. The EARMP was designed to identify potential cumulative effects downstream of uranium mining and milling operations in the Eastern Athabasca region of northern Saskatchewan. It consists of two programs: a technical monitoring program and a community monitoring program. The technical program was established to monitor long-term changes in the aquatic environment far downstream of uranium mining and milling operations in the Eastern Athabasca region. The community program was established to monitor the safety of traditionally harvested country foods from the communities located in the Eastern Athabasca region.

The following document focuses entirely on the EARMP community program. The objective of the EARMP community program framework document is to provide detailed information related to the communities and mine sites located in the Eastern Athabasca region of northern Saskatchewan, the rationale for studying country foods, detailed information and rationale on the EARMP community program study design, and details of the data analyses and communication of the results.

2.0 STUDY AREA

2.1 Communities

There are seven communities in the region including Black Lake, Camsell Portage, Fond du Lac Denesuline First Nation, Hatchet Lake Denesuline First Nation/Wollaston Lake, Stony Rapids, and Uranium City. For the EARMP community program, the communities of Wollaston Lake and Hatchet Lake Denesuline First Nation were assessed together due to their close proximity to each other, creating a total of six community study areas. Provided below are brief descriptions of each community.

2.1.1 Black Lake

The Black Lake Denesuline First Nation is situated in northern Saskatchewan's Athabasca region approximately 1,180 km northwest of Prince Albert. Access to the community is by air to Stony Rapids and then by all-weather road approximately 20 km to Black Lake. Access to the Athabasca Seasonal Road (provincial highway 905) also lies between the two communities. The community currently maintains a total registered membership of 2,035 members, with 1,586 of those members residing on reserve and 442 members residing at locations off reserve (AANDC 2012).

The people of Black Lake initially settled at Stony Lake prior to relocating to the area currently occupied by the fishing camp on the banks of the Black Lake River. The current community of Black Lake was settled in the early 1950s after a new Roman Catholic church was constructed. The Dene language is still very strong and continues to be taught by the Elders to children and youth, both at home and within the school system. The people continue to maintain their traditional lifestyle: with hunting, fishing, and trapping very evident on a year-round basis as both commercial and private pursuits (PAGC 2008, 2012).

2.1.2 Camsell Portage

Camsell Portage is a small community located on the northern shoreline of Lake Athabasca, approximately 35 km from the community of Uranium City. It remains the most northern and isolated community in the province and is only accessible by boat in the open water season and by air year round.

Camsell Portage was settled by trappers who arrived during the 1900s from Lac La Biche, the Northwest Territories and Fort Fitzgerald, Alberta and who used it as a historical portage route to the north. During peak activities near Uranium City, Camsell Portage had a population of over 300 people (pers. comm. Philippe Steene). The population of Camsell Portage is currently 27 people. No mining activity has taken place in the area; however, currently there are operating hydroelectricity generating stations nearby the community of Camsell Portage on the Waterloo, Wellington, and Charlot River systems.

2.1.3 Fond du Lac

The Fond du Lac Denesuline First Nation is situated on the northeast shore of Lake Athabasca in the Athabasca region of northern Saskatchewan, approximately 60 km south of the Northwest Territories border and 1,275 km northwest of Prince Albert. It currently maintains a total

registered membership of 1,842 members, with 1,045 members residing on reserve and 796 members residing at locations off reserve (AANDC 2012). Members are primarily of Dene and Cree decent. Access to the community is by seasonal ice road in the winter and by boat during the summer. Two airline companies also provide year-round access to the community.

Founded over 150 years ago, Fond du Lac is one of the oldest and most remote northern communities in Saskatchewan. During Cultural Camp, the Elders share their cultural and traditional knowledge with the youth, including demonstrations in setting traps, tent raising, fire building, snow shoe racing, and preparing and smoking dry meat (PAGC 2008, 2012).

2.1.4 Hatchet Lake/Wollaston Lake

The Hatchet Lake Denesuline First Nation and the community of Wollaston Lake are situated on the south-eastern shoreline of Wollaston Lake (known in Dene as "Axe" Lake) in the Athabasca region of northern Saskatchewan, approximately 724 km northwest of Prince Albert (PAGC 2008). The Hatchet Lake Denesuline First Nation has total of 1,659 registered members, with 1,276 residing on the reserve and 377 members residing at locations off reserve (AANDC 2012). The northern settlement of Wollaston Lake has a population of 129 (SMMA 2012). Access to Hatchet Lake and Wollaston Lake is by ice road in the winter and by barge during the open water season. Year-round access is provided by two airline companies that operate scheduled flights to and from the surrounding communities and southern Saskatchewan.

Traditionally, the people lived as a hunting and gathering society, primarily barren-ground caribou. They still follow the seasonal caribou hunting patterns today. The majority of residents are Dene; however, during the 1950s some people of Cree-Metis ancestry moved to the northern settlement of Wollaston Lake (PAGC 2012).

2.1.5 Stony Rapids

Stony Rapids is a northern hamlet in Saskatchewan with a total population of 243 residents (SC 2012). The community is located on the shoreline of the Fond du Lac River, approximately 80 km south of the border to the Northwest Territories. The Fond du Lac River connects the community of Stony Rapids to the Fond du Lac Denesuline First Nation, Uranium City, and Camsell Portage. An all-weather road also connects the community to the Black Lake Denesuline First Nation.

2.1.6 Uranium City

The history of Uranium City area dates back to the late 1930s when uranium ore was first discovered in the area. It was not until 1952 that the town of Uranium City was established as a base for uranium mining in the Beaverlodge area. Operations at Saskatchewan's first uranium mine began in May of 1953 and continued until June of 1982, by which time rising costs and failing ore grade made it unprofitable. Within a year following the closure of the mine, Uranium City changed from a resource town of almost 2,500 inhabitants to a northern settlement with approximately 150 residents (Bone 1998). Uranium City continued to serve as the regional base for a number of services including education, health care, and the RCMP headquarters for a number of years following the mine closure. Many public institutions closed in 1983 and the hospital closed in 2003. The current population is approximately 101 residents.

2.2 Uranium Operations

There are currently five uranium mines/mills in the Eastern Athabasca region. These include Key Lake, McArthur River, McClean Lake, Rabbit Lake, and Cigar Lake. In addition, the decommissioned Beaverlodge uranium mine and mill site is located within the region and nearby the community of Uranium City.

2.2.1 Key Lake

Cameco Corporation's (Cameco) Key Lake Operation is located in north-central Saskatchewan approximately 570 km north of Saskatoon. Mining at the Key Lake Operation began in 1982 with open pit mining of the Gaertner orebody followed by open pit mining of the Deilmann orebody beginning in 1986. The Once stockpiles from the Deilmann orebody were consumed in late 1999, the mill began processing ore from the McArthur River Operation and shifted from subaerial to subaqueous tailings management at the Deilmann Tailings Management Facility. Due to continue market weakness in uranium prices Cameco have suspended the production at McArthur River and Key Lake for an intermediate duration and placed both sites in a state of care and maintenance.

2.2.2 McArthur River

The McArthur River Operation is located approximately 270 km north of La Ronge and 80 km north of the Key Lake Operation. It is currently the world's largest, high-grade uranium deposit. McArthur River has been operational since 1999 and is managed and operated by Cameco. The operation includes underground mining, processing systems, an ore handling system, and camp

infrastructure. Specialized mining equipment is used to extract the high-grade uranium ore and mineralized wastes are blended with high-grade ore to produce a slurry, which is trucked to the Key Lake Operation for processing and resulting tailings management.

2.2.3 McClean Lake

The McClean Lake Operation is located approximately 15 km west of Wollaston Lake in northern Saskatchewan. Orano Canada Inc. (formerly AREVA) is the majority owner (70%) and operator of the McClean Lake Operation. Exploration activities started in the late 1970s, environmental assessment in the early 1990s, and the initiation of mining and mill operations in 1996 and 1999, respectively. The McClean Lake Operation currently comprises of three main areas: the JEB area, which includes the permanent camp and the McClean Lake mill and JEB tailing management facility; the Sue mining area, which includes the mined out Sue A/C, Sue B, and Sue E pits; and the Sink/Vulture Treated Effluent Management System (S/V TEMS).

2.2.4 Rabbit Lake

The Rabbit Lake Operation, owned and operated by Cameco, is the longest-operating uranium production facility in Saskatchewan (since 1975). It is located in northeastern Saskatchewan, on the west side of Wollaston Lake approximately 350 km north of La Ronge. The Rabbit Lake Operation includes the Eagle Point underground mine, Rabbit Lake mill, four mined-out open pit mines, of which the original Rabbit Lake pit is being used as the Rabbit Lake In-Pit Tailings Management Facility (RLTMF), the Rabbit Lake Above Ground Tailings Management Facility (AGTMF), overburden stockpiles, waste rock stockpiles, effluent treatment facilities, and camp infrastructure. Rabbit Lake was transitioned into care and maintenance in 2016.

2.2.5 Cigar Lake

The Cigar Lake Operation is located approximately 80 km west of Wollaston Lake and 40 km inside the eastern margin of the Athabasca Basin region of northern Saskatchewan. The Operation involves the construction, mining operation, and eventual decommissioning of what is currently the world's second largest known high-grade uranium deposit. The Operation is currently managed and operated by Cameco. The initial discovery of the Cigar Lake uranium deposit occurred in May 1981. Following the acquisition of the construction license in December 2004, underground construction activities commenced. Site construction activities were expected to take 24 months to 36 months; however, in 2006 and 2008 the mine experienced two inflow events that caused flooding of all underground workings of the Cigar Lake Project. Cigar Lake

became operational in July 2014 but was in a state of care and maintenance as a result of the COVID-19 pandemic through the 2020/2021 EARMP program.

2.2.6 Other Properties

The decommissioned Eldorado uranium mining and milling operation is located approximately 8 km east of Uranium City north-east of Beaverlodge Lake in northern Saskatchewan. The mine operated for almost 30 years between 1953 and 1982. Decommissioning of the site occurred from 1983 to 1985 and transition phase monitoring continues today. Upon its inception as a publicly traded company, Cameco was assigned responsibility for the management and reclamation of the decommissioned site. Post-decommissioning activities include the ongoing monitoring and maintenance of the site, regular water quality monitoring at stations within the area, and a variety of special investigations to assess specific environmental concerns.

In addition, Beaverlodge Lake is the receiving environment for the discharges from at least nine other abandoned uranium mine sites and one former uranium mill tailings area (the Lorado Uranium Mining Ltd. mill site), which are managed by the Saskatchewan Research Council (SRC). SRC is managing Project Cleans, which is also responsible for the assessment and reclamation of the Gunnar uranium mine and mill site and over 30 abandoned satellite mines in the Uranium City area.

3.0 RATIONALE FOR STUDYING COUNTRY FOODS

The uranium mining and milling operations in northern Saskatchewan complete extensive environmental monitoring that routinely test the air, soil, vegetation, water, sediment, benthic invertebrates, and fish in their local study areas. However, these monitoring programs do not answer the question of whether country foods that are fished, hunted, or gathered near communities located downstream of multiple uranium operations are safe to eat. Since country foods, such as fish, berries, and wild game are important food sources in northern communities, the EARMP community program was developed to conduct an extensive and long-term regional sampling program testing these foods. The following section further discusses some of the uses and benefits of traditional country foods by northern residents.

3.1 Traditional Use of Country Foods

Studies conducted across Canada have documented that harvesting, sharing, and preparing traditional country foods is an important part of the Aboriginal lifestyle (Wein et al. 1991; Wein and Freeman 1995; Kuhnlein and Receveur 1996; Receveur et al. 1997; AFN 2007). Traditional country food studies conducted in Hatchet Lake and Uranium City established that fish, berries, and wild game are important food sources for communities located in northern Saskatchewan (CanNorth 1999, 2011).

While fish is important to all of the communities, the relative importance of other meat sources varies. Studies have indicated that Hatchet Lake residents have a strong dependence on barren-ground caribou meat (especially during the winter months) whereas Uranium City residents rely more on moose and birds (CanNorth 1999, 2011). Uranium City residents have comparable meat/bird (grams per day) consumption values to the residents from similar regions such as Fort Smith, Northwest Territories and Fort Chipewyan, Alberta (CanNorth 2011). The more frequent caribou meat consumption in Hatchet Lake may be explained by availability, cultural differences, and/or preference of Hatchet Lake residents for caribou. A number of factors play a role in the differences in consumption patterns such as population size, road access, proximity to animal migration routes, presence of hunters, trappers, or fishermen, age and gender, costs and availability of market foods, and access to transportation with the south (Wein et al. 1991; Blanchet et al. 2000; Batal et al. 2005).

3.2 Health Benefits of Traditional Country Foods

Harvesting and consuming traditional foods are integral components of good health among Indigenous people, influencing both physical health and social well-being. The act of hunting and gathering traditional foods is an important aspect of physical activity. Hunting, fishing, and berry picking also provides socio-cultural benefits to community members including mental health, cultural identity, and morale (AFN 2007). Gathering and eating traditional country foods can help reduce the risk of diabetes, heart disease, and obesity, especially when the foods are cooked in traditional ways (PHU AHA 2005).

Several health benefits of consuming traditional country foods have been documented across northern Canada. Fish are an important part of a healthy diet containing high-quality protein, Vitamin B, Vitamin D, omega-3 fatty acids, other essential nutrients (NWT 2011; PHU AHA 2014). Fatty fish, such as lake trout, are especially high in omega 3 fatty acids and are considered important for heart health and brain and eye development. Compared to store bought chicken

breast and ground beef (0.10-0.31g/100g) northern Saskatchewan fresh water fish have much higher contents of omega 3 fatty acids (0.31-1.19g/100g). In addition, northern Saskatchewan fish have substantially lower levels of saturated fat, compared to store bought chicken and ground beef (PHU AHA 2014). Fish eggs are also an excellent source of protein, Vitamin C, B vitamins, and iron (NWT 2002; NWT 2011). The skin of the fish and soups cooked with fish head and bones are good sources of calcium (Receveur et al. 1997; NWT 2011).

Wild game meat such as moose and caribou are an important source of vitamins, minerals, and protein and has less saturated fats than store bought meats (PHU AHA 2005; 2014). The fat content of barren-ground caribou meat is very low (1%) compared to beef, pork, or poultry (12% to 40%) (NWT 2002). Wild game are also high in essential nutrients such as iron, zinc, copper, magnesium, and phosphorous (Kuhnlein et al 1995; Receveur et al. 1997).

Compared to store bought chicken breast and ground beef, the northern game meats have similar amounts of protein (21.4-25.6 g/100g), between 2 and 7 times higher levels of Iron (3.08-4.1 mg/100g) and fewer calories (98-123 kcal/ 100g). Overall, this indicates that northern Saskatchewan caribou, moose, and rabbit are low calorie, nutrient dense, healthy servings of meat and meat alternatives (PHU AHA, 2014). Soups and/or stews cooked with bones for broth are high in calcium (Receveur et al. 1997), while many organ meats including liver contain high levels of iron needed for healthy blood and Vitamin A needed for healthy bones, skin, and teeth (HWC 1987; NWT 2002).

Traditional plants such as cranberries, blueberries, and Labrador tea are often used in both food and medicine (CanNorth 1999, 2011) and may potentially offer additional health benefits. Wild plants are excellent sources of Vitamin C, fibre, and carbohydrates (Johnson et al. 1995; NWT 2002). For example, rose hips, consumed by many First Nations in a variety of medicinal and food preparations, are high in Vitamin C and demonstrate antibacterial and antioxidant properties (Yi et al. 2007).

3.3 Canada Food Guide – First Nations, Inuit, and Métis

In 2007, Health Canada introduced a newly tailored Canada Food Guide *"Eating Well with Canada's Food Guide - First Nations, Inuit and Métis"* (HC 2007) that includes both traditional country foods and store-bought foods that are generally available and accessible across Canada. This tailored food guide has recommendations for healthy eating based on science and recognizes the importance of traditional/country and store-bought foods for First Nations, Inuit, and Métis today. In addition, the government of Northwest Territories (NWT 2005) has also established a

food guide that is tailored towards traditional country foods. Both the Canada Food Guide and the Northwest Territories Food Guide contain recommendations on the number of servings[1] (grams per day) of wild meats, birds, plants, fish, and other staples such as bannock, wild rice, and traditional fats. Choosing the amount and type of food recommended in Canada's Food Guide will help:

- children and teens grow and thrive;
- meet needs for vitamins, minerals, and other nutrients; and,
- lower risk of obesity, type 2 diabetes, heart disease, certain types of cancer, and, osteoporosis (weak and brittle bones).

For more information on Canada's Food Guide please visit www.healthcanada.gc.ca/foodguide or *"Eating Well with Canada's Food Guide - First Nations, Inuit and Métis"* http://www.hc-sc.gc.ca/fn-an/pubs/fnim-pnim/index-eng.php. For more information on the Northwest Territories Food guide please visit http://www.hss.gov.nt.ca/publications/posters-flyers/nwt-food-guide.

4.0 STUDY DESIGN AND OBJECTIVES

The EARMP community monitoring program objectives are to:

1. determine the safety of traditionally harvested food for local consumption;
2. establish long-term monitoring at community sampling areas to assess variability and potential changes over time;
3. build mutually beneficial relationships and engage and involve community members in the gathering of information for the program; and
4. communicate monitoring results to community members and other stakeholders through reporting, public media, and meetings.

The 2011/2012 and 2012/2013 data were used to establish baseline/current conditions for each species sampled in each community area. Each subsequent monitoring year's data will be

[1] It should be noted that the food guide serving size for meat and alternatives has decreased over time and each serving size recommended is 75 g, which is likely less than what most people consider a serving size. For this study, actual intake amounts were used from the area to complete the Human Health Risk Assessment.

compared to this baseline in order to assess potential changes over time or temporal trends in chemical concentrations of country foods routinely eaten by residents of the Eastern Athabasca region.

The study design for the EARMP community program will remain consistent over time, to the extent possible, in order to collect a consistent long-term data set. However, the program is also adaptive and may be refined in response to new information or changes associated with the development in the region. Some things to consider moving forward include:

- Community Concerns: The EARMP community program monitors endpoints of highest concern to the communities. Sampling components may be refined or expanded based on the needs of the community members.
- Regional Development: The development of additional uranium mining and milling operations in the region may also influence the overall design of the program.
- EARMP Community Program Results: Changes to the design of the EARMP community program may occur based on results and conclusions from each monitoring year.

A key aspect of a successful community monitoring program is that the sampling locations and media are selected based on their importance to the communities and the sampling is completed by, or with, local residents. It also helps to build trust between the residents of communities and industrial operators in the region. Traditional Ecological Knowledge (TEK) is an essential part of the program. The approach of the program is summarized in Appendix A, Figure 1.

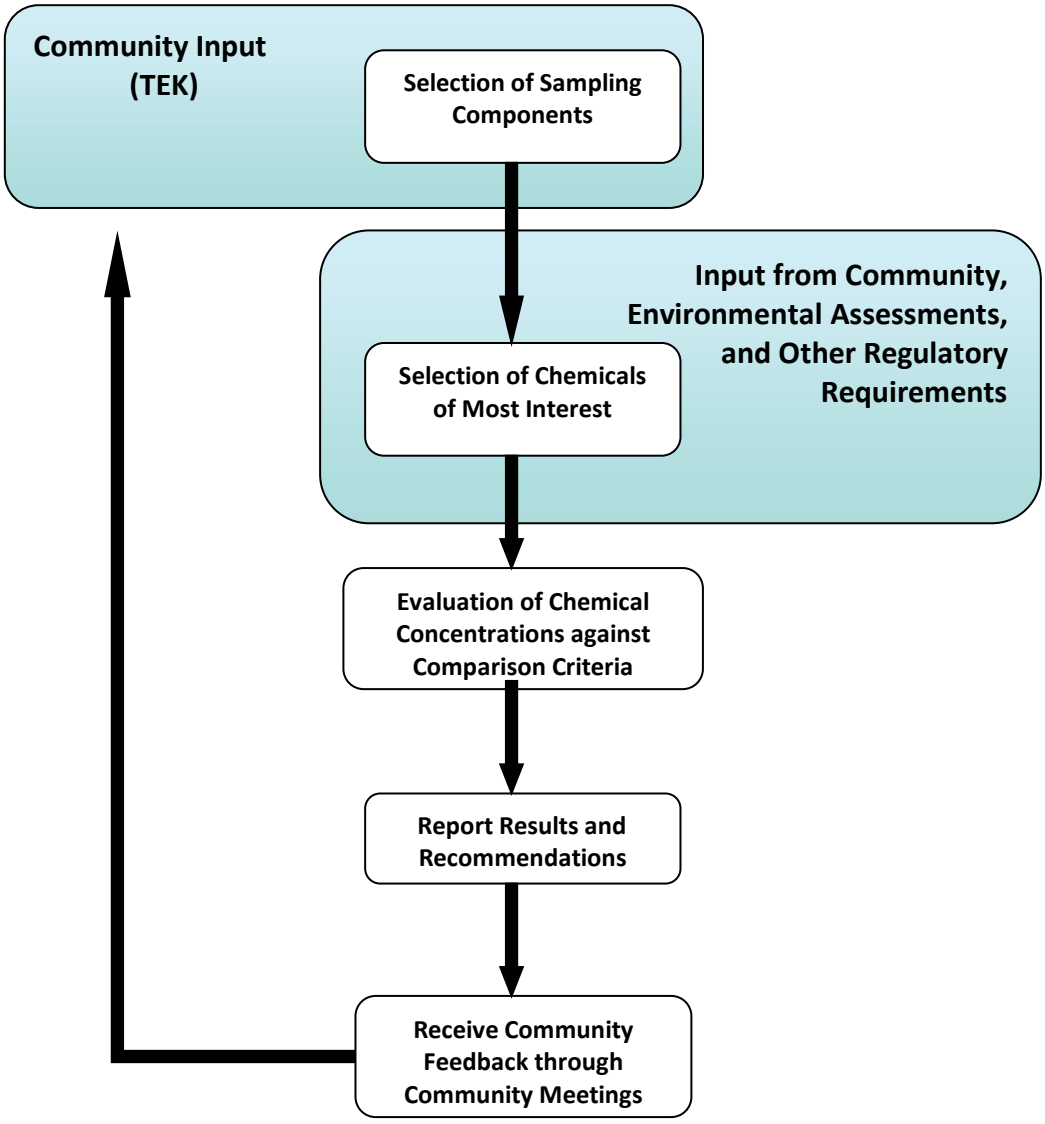
In addition to community input, chemicals of interest are selected based on those identified through the environmental assessment process and monitoring requirements in the region. Uranium mining and milling operations are subject to the *Canadian Environmental Assessment Act* and regulated by the Canadian Nuclear Safety Commission, the Saskatchewan Ministry of Environment, and Environment and Climate Change Canada.

4.1 Sampling Components

The program is completed annually with the core of the program involving annual sampling of water and fish along with a selected focus traditional food each year. A portion of the budget is set aside to support chemical analyses of additional samples beyond the core samples targeted for that sampling year. The country foods were selected in consultation with community members and currently include water, and fish (lake trout and lake whitefish). Berries (blueberry

and bog cranberry), and mammals (moose, barren-ground caribou, and snowshoe hare[2]) served as additional samples in years when they were abundant. Sampling components are meant to be representative of what community members are consuming; therefore, they vary from time to time throughout the long-term monitoring program to include other components (e.g., game birds, snow shoe hare, other).

Two dietary surveys have been completed for communities within the region: The Hatchet Lake Dietary Survey (CanNorth 1999) and the Uranium City Country Foods Study (CanNorth 2011). Country foods currently selected for the EARMP community program formed a large percentage of foods identified in these surveys.



Appendix A, Figure 1.

[2] New country food as of 2013/2014.

Summary of the EARMP community monitoring program approach.

4.2 Sampling Locations

Near each community, one station was established from which a water quality sample was obtained. The station locations were decided upon by the CanNorth staff member and the community members conducting the sampling and were determined by accessibility, water depth, and proximity to the community. Fish, berry, and mammal samples were obtained from locations that community members routinely fish, gather, and hunt their traditional country foods. This ensures the sampling program is testing the study areas most relevant to the communities.

4.3 Sampling Frequency

The EARMP community program is intended to be an annual sampling campaign (every fall/winter) for the first five years, after which the sampling frequency was re-evaluated as planned. Annual sampling has continued since the program began in order to maintain the community relationship. To manage long-term costs not all sample media continued to be sampled every year. The program has now standardized to the collection of water and fish each year with an extra focal component (e.g., increased fish sampling, berries, moose/caribou) added each year. This approach has proven to be the most efficient means of ensuring the collection of traditional foods across all the communities with adequate replication within a single sample year for the primary media of interest (water, fish, berries, meat). The target sample size is generally five samples from each community of each media type. However, some sampling components are harder to obtain, such as moose and barren-ground caribou; thus sample sizes may be lower at some communities in some years.

Additionally, each year a portion of the budget is set aside to allow the program the flexibility to respond to a limited number of “community request” samples. Community request samples can range from additional core samples or focus samples due to an especially abundant harvest, may include uniquely harvested species or specimens not historically a part of the program, or involve samples which have generated some community concern or interest (e.g., visible abnormalities or indicators of poor health).

4.4 Laboratory Analysis

All samples are analyzed by the Saskatchewan Research Council (SRC) in Saskatoon. The SRC Analytical Laboratories are certified and accredited by the Canadian Association for Laboratory

Accreditation Inc. (CALA). Accreditation ensures that procedures, facilities, and methods conform to ISO/IEC 17025, which is an internationally recognized standard. SRC has an extensive Quality Assurance/Quality Control (QA/QC) program to ensure reliable analytical results. With each set of samples run, SRC tests reference materials, duplicates, and spiked samples. Data results provided by SRC include full QA/QC reports for each sample submission.

Sample analyses completed by SRC included a full suite of parameters for each media type and are described Appendix A, Table 1.

Metals and trace elements analysis are completed by ICP-MS because it is a fast, multi-elemental technique similar to ICP-AES, but with better detection limits. For most elements, ICP-MS is able to achieve detection limits similar to or lower than Graphite Furnace AAS (Wolf 2005). The analysis of metals and trace elements with ICP-MS also meets Metal and Diamond Mining Effluent Regulations (MDMER) requirements (EC 2012). However, it should be noted that even with the use of ICP-MS, concentrations of many metals and trace elements in the EARMP sampling media are at levels below the Reporting Detection Limit (RDL). In addition, RDL for radionuclides tend to vary based on the mass of the sample. For values that were below the RDL, it is not possible to determine the actual concentration; therefore, all values were set equal to the RDL for computing averages and standard deviations. This is a conservative approach as the actual concentrations could be substantially lower than the RDL.

Appendix A, Table 1

List of chemicals and supportive parameters measured in traditional foods for the EARMP community program.

Parameter		Water	Berries	Fish	Mammals
Inorganic Ions	Bicarbonate, Calcium, Carbonate, Chloride, Magnesium, Potassium, Sodium, Sulphate, Hydroxide	x			
Metals and Trace Elements	Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Fluoride Iron, Lead, Manganese, Mercury*, Molybdenum, Nickel, Selenium, Silver, Strontium, Thallium, Tin, Titanium, Uranium, Vanadium, Zinc	x	x	x	x
Nutrients	Ammonia as N, Nitrate, Total Nitrogen, Total Kjeldahl Nitrogen, Total Organic Carbon, Phosphorus	x			
Radionuclides	Lead-210, Polonium-210, Throium-230, Radium-226	x	x	x	x
Physical Properties	pH, Specific Conductance, Sum of Ions, Total Alkalinity, Total Dissolved Solids, Total Hardness, Total Suspended Solids, Turbidity	x			
	% Moisture		x	x	x

*Water and fish only.

4.5 Data Assessment Approach

4.5.1 Endpoints

Although a full suite of chemical parameters were measured for each sample, this report focuses on a smaller list of chemicals, which have been identified as the chemicals of most interest for uranium operations by regulatory agencies, environmental assessments, as well as other monitoring programs. Appendix A, Table 2 summarizes the endpoints assessed for the EARMP Community Program. Supporting endpoints for the water quality assessment also included organic carbon, specific conductivity, total hardness, and pH.

While mercury is included in Appendix A, Table 2, it is not associated with uranium mining and milling operations. Monitoring programs completed in each mine site's local study area have repeatedly shown that mercury concentrations in the treated effluent are below the MDMER criteria for monitoring[3] (EcoMetrix 2010a, 2010b; SENES 2010, 2012; AREVA 2012). Mercury occurs naturally in the environment and can be found at low levels in most soils and rocks. In northern Saskatchewan, natural deposits associated with lead, zinc, copper, silver, and gold are likely the cause of higher levels of mercury in fish in some lakes (SE 2011). Since mercury has been identified as a concern to community members in the Athabasca Region, it has been included in the assessment.

Appendix A, Table 2
Chemical endpoints selected for the EARMP.

Reduced List of Chemicals	
Aluminum	Molybdenum
Ammonia as N*	Nickel
Arsenic	Polonium-210
Cadmium	Radium-226
Cobalt	Selenium
Copper	Thorium-230
Iron	Uranium
Lead	Vanadium
Lead-210	Zinc
Mercury**	

*For water only.
**Mercury is not associated with the uranium mining and milling process.

[3] If the concentrations of total mercury is less than 0.1 µg/L in 12 consecutive treated effluent samples, monitoring is not required (MDMER, Schedule 5, subsection 4(3)).

4.5.2 Comparison Criteria

To evaluate the community data, concentrations of the reduced list of chemicals are compared to:

- available guidelines;
- available regional reference data; and
- available literature and/or Human Health Risk Assessments.

The above comparison criteria is used for each media type to establish if the country foods sampled in each community are within the expected background concentrations for the region, are below guidelines, and are considered safe to eat based on a Human Health Risk Assessment. As additional monitoring phases are completed, assessing changes in potential chemical concentrations over time will be an important component of the program. Data sources for the information used are described below.

4.5.3 Data Sources

4.5.3.1 Guidelines

Federal and provincial guidelines are available for some media types assessed in the EARMP community program. These include the Canadian Drinking Water Quality Guidelines (CDWQGs; HC 2017), the Canadian Water Quality Guidelines (CWQGs) for the protection of freshwater aquatic life (CCME 2021), the Federal Environmental Quality Guidelines (FEQGs; GC 2019), and the Saskatchewan Environmental Quality Guidelines (SEQG) for the protection of freshwater aquatic life (GS 2021). For those chemicals where the values depend on hardness, the hardness concentration from each location was used to establish the guideline. Appendix A, Table 3 summarizes the guidelines used for comparison to the EARMP community data.

Appendix A, Table 3

Chemistry guidelines used for comparison to EARMP community data.

Chemical	Guideline			
	CDWQG (Drinking Water)	**CWQG (Environmental)**	**FEQG (Environmental)**	**SEQG (Environmental)**
Aluminum	0.2 mg/L	0.1[1] mg/L	-	0.1[1] mg/L
Ammonia as nitrogen	-	2.68-26.65[2] mg/L	-	2.68-26.65[2] mg/L
Arsenic	10 µg/L	5 µg/L	-	5 µg/L
Cadmium	0.005 mg/L	0.00004-0.0001[3]mg/L	-	0.00004-0.0001[3]mg/L

Chemical	Guideline			
	CDWQG (Drinking Water)	**CWQG (Environmental)**	**FEQG (Environmental)**	**SEQG (Environmental)**
Cobalt	-	-	0.00078-0.0018[3] mg/L	-
Copper	1.0 mg/L	0.002[3] mg/L	-	0.002[3] mg/L
Iron	0.3 mg/L	0.3 mg/L	-	0.3 mg/L
Lead	0.01 mg/L	0.001[3] mg/L	-	0.001[3] mg/L
Mercury	1 µg/L	0.026 µg/L	-	0.026 µg/L
Molybdenum	-	0.073 mg/L	-	31 mg/L
Nickel	-	0.025[3] mg/L	-	0.025[3] mg/L
Selenium	0.01 mg/L	0.001 mg/L	-	0.001 mg/L
Uranium	20 µg/L	15 µg/L	-	15 µg/L
Vanadium	-	-	0.120 mg/L	-
Zinc	5.0 mg/L	0.03 mg/L	-	0.03 mg/L
pH	6.5 to 8.5	6.5 to 9.0	-	6.5 to 9.0
Thorium-230	0.6			
Radium-226	0.5 Bq/L	-	-	0.11
Lead-210	0.2 Bq/L	-	-	-
Polonium-210	0.1	-	-	-

[1]Adjusted to a pH > 6.5.
[2]Adjusted according to water temperature and pH of each waterbody.
[3]Adjusted to water hardness in each waterbody.

4.5.3.2 Regional Reference Data

Regional reference data are available from a number of sources. Reference water and fish chemistry data are available from CanNorth's database. Water and fish chemistry data from a number of lakes north of Point's North sampled between 2005 and 2014 were utilized to generate the regional reference values (Appendix A, Table 4). This included 249 water samples, 69 lake whitefish samples, and 35 lake trout samples. In 2015, additional lake trout (24 samples) were also collected from reference areas (McKenzie Lake, Henday Lake, and Riou Lake) to improve the regional reference data set to 59 samples for this species. Water samples spanned a total of 39 lakes, while lake trout data spanned 6 lakes, and lake whitefish data spanned 12 lakes. As more data become available, the regional reference data set will become more robust, particularly for the lake trout data set.

Historical data (2008 to 2011) available from the Athabasca Working Group (AWG) Environment Monitoring Program and the Uranium City Country Foods Program (CanNorth and SENES 2012) were utilized to generate the regional reference values for the berry data (Appendix A, Table 5). Data from the AWG program were also used to establish regional reference ranges for the moose and barren-ground caribou data (Appendix A, Table 5). In most cases, data from 2000 to 2010 were included in order to have adequate samples sizes; however, there were some situations

where obvious and consistent changes in reporting detection limits (RDLs) precluded earlier data from being included.

Appendix A, Table 4

EARMP regional reference range data sources for water and fish chemistry.

Factor	Water		Lake Trout Flesh	Lake Whitefish Flesh
Years[1]	2006 to 2014		2005[2], 2010 to 2012 and 2015[3]	2006 to 2014
Areas[1]	Agent Lake	Lower Read Lake	Cree Lake	Alsask Lake
	Alsask Lake	Mad Dog Lake	Henday Lake	Cree Lake
	Bobby's Lake	McGowan Lake	Milliken Lake	Fredette Lake
	Brayden Lake	Milliken Lake	McKenzie Lake	Henday Lake
	Carys Lake	Moon Lake	Pasfield Lake	Lac Philip
	Colette Lake	Pasfield Lake	Riou Lake	Mallen Lake
	Cree Lake	Read Lake		Milliken Lake
	David Lake	Reference 2		Pasfield Lake
	East Spur Lake	Reference 3		Riou Lake
	Fredette Lake	Reference 4		Ryan Lake
	Kapesin Lake	Reference 5		Wapata Lake
	Kazz Lake	Riou Lake		West Spur Lake
	Lac Philip	Ryan Lake		
	Lake B	Shallow Lake		
	Lake C2	Slush Lake		
	Lake C3	Wapata Lake		
	Lake C4	West Spur Lake		
	Lake C5	White Lake		
	Lake C6	Yeoung Lake		
	Lake C7			

[1]Not all areas were sampled all years.

[2]Five additional lake trout from 2005 from Henday Lake were added to improve sample sizes (n) for parameters that were less than the reporting detection limit (<RDL), namely arsenic, copper, iron, selenium, and zinc. These additional lake trout samples could not be used for other parameters because of large differences in RDLs in 2005 compared to later years.

[3]An additional 24 samples from Cree Lake, Henday Lake, McKenzie Lake, and Riou Lake were later included in 2015.

Appendix A, Table 5

EARMP regional reference range data sources for berry and mammal chemistry.

Factor	Blueberries	Cranberries	Caribou Flesh	Moose Flesh	Snowshoe Hare Flesh
Years[1]	2000 to 2011	2000 to 2011	2000 to 2011	2000 to 2011	2011
Areas[1]	Black Lake	Black Lake	Black Lake	Black Lake	Camsell Portage
	Camsell Portage	Bushell Bay	Camsell Portage	Camsell Portage	
	Fond Du Lac	Camsell Portage	Fond Du Lac	Fond Du Lac	
	Stony Lake	Fond Du Lac	Stony Rapids	Stony Rapids	
	Stony Rapids	Stony Lake	Uranium City	Uranium City	
	Uranium City	Stony Rapids	Wollaston Lake	Wollaston Lake	
	Wollaston Lake	Uranium City			
		Wollaston Lake			

[1]Not all areas were sampled all years.

4.5.3.4 Human Health Risk Assessment

Human Health Risk Assessment is a scientific procedure that is used to assess the potential for adverse health effects to humans caused by a selected group of chemicals that are a concern. Risk assessments involve the application of a staged, formal, and reproducible process that incorporates procedures accepted by regulatory authorities. Through the completion of a Human Health Risk Assessment, it is possible to answer one of the primary questions of the EARMP community program: are country foods safe to eat?

The most recent Human Health Risk Assessment was completed in 2018 utilizing the 2011 to 2018 EARMP data and determined that the country foods were safe to eat in all communities assessed. In subsequent monitoring phases, if the levels of chemicals remain within the range of those measured during the baseline conditions, the Human Health Risk Assessment can be used as a basis for concluding if the country foods remain safe to eat. As more data become available, and potentially new types of country foods assessed, it may be necessary to complete a new Human Health Risk Assessment.

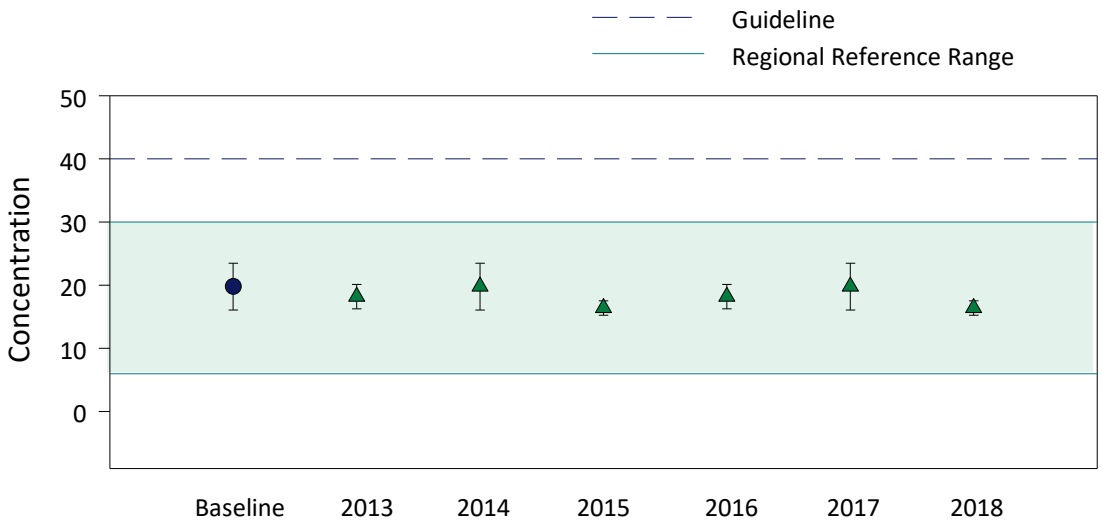
4.5.4 Data Presentation

The EARMP community data is presented using both summary tables and figures. Descriptive statistics (average, standard deviation, number of samples, and number of values below the RDL) are calculated and reported for each chemical, media, and study area. A graphical presentation of the data is used to compare chemical concentrations to guidelines, the regional reference range, and baseline levels. Data are only graphed if >50% of the values are above the RDL.

The regional reference range has been re-assessed as the range between the 2.5% to 97.5% of the regional reference distribution (where 95% of the regional reference data are expected to fall), since it was determined the majority of the chemistry data is not normally distributed. The highest and lowest 2.5% of the reference data were identified using regression analysis of the cumulative percent frequencies of the observed reference concentrations. After identification, the highest and lowest 2.5% of the data were excluded and the remainder were used as the reference ranges representative of natural conditions. As more regional reference data becomes available, the ranges will be further refined.

Appendix A, Figure 2 shows a hypothetical figure that will be used to assess levels of chemicals in country foods. This figure provides information on guidelines values, the regional reference

range, and temporal changes in a single image for each chemical in each sampling component. The blue line represents a guideline concentration (e.g., drinking water guidelines). The shaded area represents the regional reference range (i.e., reference average ± 2 standard deviations). The average concentration in the EARMP community sample is shown as a circle for the baseline year and a triangle for those sampling years following the baseline data collection. The error bars represent one standard deviation. The graph will be a very useful visual tool for assessing the EARMP community data against the comparison criteria at a glance. It will also allow for a qualitative assessment of increasing or decreasing concentrations of individual chemicals over time in each community.



Appendix A, Figure 2.
Example of how the EARMP community program results will be presented graphically during future monitoring campaigns.

5.0 REPORTING AND COMMUNICATION PLAN

A report will be completed to assess the EARMP community data following each monitoring year. The report will be structured so that the most relevant information is presented in the main document, with the detailed analysis presented in appendices. This will allow all potential audiences' access to the information most relevant to them. The report, along with the raw data, will be available for download from the EARMP website: www.earmp.ca

In addition to the report, community visits may be completed to present the results of the monitoring program. Community visits may include presentations, distribution of summary brochures/calendars, school visits, and/or ads. The community visits will be an opportunity to receive feedback on the program and encourage to further involvement from community members. Feedback on the program can also be provided through the EARMP website. Since 2012, the EARMP has taken the opportunity to engage communities at least annually about their environment while also distributing information about the project.

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APPENDIX B

DETAILED DATA ANALYSIS

APPENDIX B: DETAILED DATA ANALYSIS

1.0 WATER QUALITY

The 2020 water quality data were assessed as per the data assessment approach described in detail in the EARMP community program framework (see Appendix A. Concentrations of the reduced chemical list were compared to:

1. Canadian Drinking Water Quality Guidelines (CDWQG; HC 2017) and the Saskatchewan Environmental Quality Guidelines (SEQG) for the protection of freshwater aquatic life (GS 2021);
2. regional reference data; and
3. previous monitoring phases.

Summaries of available guidelines, regional reference data, and the 2011 to 2020 EARMP community data are presented in Appendix B, Figure 1 and Appendix B, Table 1. Data were graphed if concentrations of a certain chemical were above the Reportable Detection Limit (RDL) in at least one community. If available, the CDWQG are presented on the graphs, since the EARMP community program is most concerned with human health. If CDWQG are not available for a certain chemical, then the SEQG were included on the graph. The detailed water chemistry results are presented in Appendix C, Table 1.

In 2020, concentrations of most chemicals were very low and in the case of the following chemicals the concentrations were at or below the lowest concentrations at which the laboratory can measure to:

- Arsenic,
- Cadmium,
- Cobalt,
- Lead,
- Lead-210,
- Mercury,
- Polonium-210,
- Selenium,
- Thorium-230,
- Vanadium, and
- Zinc

All chemical concentrations measured near the communities were below available CDWQG or SEQG (Appendix B, Figure 1 and Appendix B, Table 1), with the exception of pH at all locations being within the guideline ranges but not exceeding it. In addition, all chemicals were within the expected range for the region or similar to those measured during the baseline years. As there has been no apparent increase in the concentrations of the chemicals assessed in the community water samples since the baseline sampling years and the last Human Health Risk Assessment (CanNorth 2018) indicated there was no risk, there are no concerns associated with the 2020 EARMP community water quality.

2.0 FISH CHEMISTRY

To evaluate the EARMP community fish chemistry data, concentrations of the reduced chemical list were compared to:

1. regional reference data; and

2. previous monitoring phases.

The data assessment followed the approach developed as part of the EARMP community framework (see Appendix A).

In 2020, five lake trout and five lake whitefish samples were targeted for collection from each community. Target fish samples were received all communities except Camsell Portage, where only 2 lake trout samples were obtained. Additionally, one less lake trout from Stony Rapids and one less lake whitefish from Uranium City were obtained. A summary of fish descriptive statistics (length, weight, and age) is provided in Appendix B, Figure 2 and Appendix B, Figure 3. Summaries of available chemical concentrations measured in regional reference data, baseline data, and the 2014 to 2020 EARMP community data are presented in Appendix B, Table 2. Data were graphed if >50% of the concentrations for a certain chemical were above the RDL in at least one community (Appendix B, Figure 4 and Appendix B, Figure 5). It is noted that one of the lake whitefish samples from Uranium City (LW09) was below the target sample weight for analysis. Although metals and some of radionuclides were assessed, there was insufficient material to confirm the results following SRC's internal QA/QC process as well as CanNorth's QA/QC process. Since the results could not be confirmed, this sample was not

incorporated into the summary statistics. The detailed fish chemistry results are presented in Appendix C, Table 2.

Chemical concentrations in the community fish samples from 2020 were often so low that the laboratory could not measure the level. This was the case for aluminum, cadmium, lead, molybdenum, nickel, uranium, vanadium, lead-210, polonium-210, radium-226, and thorium-230, in over half of the lake trout samples assessed in all of the communities. This was also the case for aluminum, cadmium, lead, molybdenum, nickel, vanadium, lead-210, radium-226, and thorium-230 in lake whitefish.

Those parameters that were above the RDL, were within the regional reference range and similar to concentrations measured during previous monitoring years. As there has been no apparent increase in the concentrations of the chemicals assessed in the lake trout or lake whitefish community samples since the baseline sampling years and the last Human Health Risk Assessment (CanNorth 2018) indicated there was no risk, there are no concerns associated with the 2020 EARMP community fish quality.

3.0 MAMMAL CHEMISTRY

To evaluate the EARMP community barren-ground caribou and moose flesh chemistry data, concentrations of the reduced chemical list were compared to:

1. regional reference data; and

2. previous monitoring phases.

Summaries of available caribou and moose chemical concentrations measured in regional reference data, baseline data, and the 2014 to 2021 community data are presented in Appendix B, Table 3 for caribou and Appendix B, Table 4 for moose. In 2020/2021, moose samples from Stony Rapids (n=3), Uranium City (n = 2), and Hatchet Lake/Wollaston Lake (n = 2) were submitted. Additionally, barren ground caribou samples were submitted from Hatchet Lake/Wollaston Lake (n = 4). Data were graphed if >50% of the concentrations for a certain chemical were above the RDL in at least one community (Appendix B, Figure 6 and Appendix B, Figure 7). The raw mammal chemistry results are presented in Appendix C, Tables 5 and 6.

Concentrations of chemicals that were too low for the laboratory to measure varied only slightly between the barren-ground caribou and moose flesh samples. Levels of aluminum, molybdenum, nickel, uranium, vanadium, lead-210, radium-226, and thorium-230 were below RDLs in more than half of the barren-ground caribou samples from Uranium City and moose samples from Stony Rapids, Uranium City, and Wollaston Lake/Hatchet Lake. Additionally, arsenic was less than RDLs in more than half of the moose samples.

For the most part, those chemicals measured above RDLs were similar to baseline concentrations or the regional reference range. One exception to this was lead concentrations in barren-ground caribou and moose meat from Wollaston Lake/Hatchet Lake. The levels of lead were higher than the regional reference range and other concentrations observed during previous years monitoring programs. The high levels are a result of a few samples containing unusually high lead concentrations (barren-ground caribou samples 3 and 4 and moose sample 1 from Wollaston Lake/Hatchet Lake; Appendix C, Tables 5 and 6). Re-analysis of the results confirmed these high concentrations and it is likely the sample was contaminated by lead shot. One barren-ground caribou sample (Sample 4) contained such high levels of lead it is likely that bullet fragments were present, and this sample was removed from the descriptive statistics for comparison as hunters discard this portion of the meat. Consumers should be aware of the potential risk of eating game killed by lead shot, and hunters should consider using steel or other alternatives, rather than lead shot to avoid exposure to lead that could be hazardous to both children and adults. Studies have shown that lead gunshot undergoes fragmentation on impact with game and that lead fragments cause contamination of meat and increased exposure of lead to human consumers of game (Tsuji et al. 2008; Iqbal et al. 2009; Pain et al. 2010).

4.0 OTHER CHEMISTRY

Beginning in 2014, the EARMP community program started collecting moose and barren-ground caribou organ samples (heart, liver, and kidney) as requested by some communities as they are also consumed. In 2020/2021, additional organ samples were submitted from Stony Rapids; two moose heart samples and one moose kidney sample. Additionally, from Hatchet Lake/Wollaston Lake, one barren-ground caribou heart and two liver samples were submitted. These data are presented in Appendix B, Table 5 and

the detailed data are presented in Appendix C, Table 7. Generally speaking, heavy metals follow a predictable pattern in mammals with the highest metal concentrations in kidney, less in the liver, and lowest in muscle tissue, and levels increase with the age of the animal (Gamberg 2005). Therefore, as was expected, the ungulate liver samples had higher average levels of chemicals than the heart and flesh samples.

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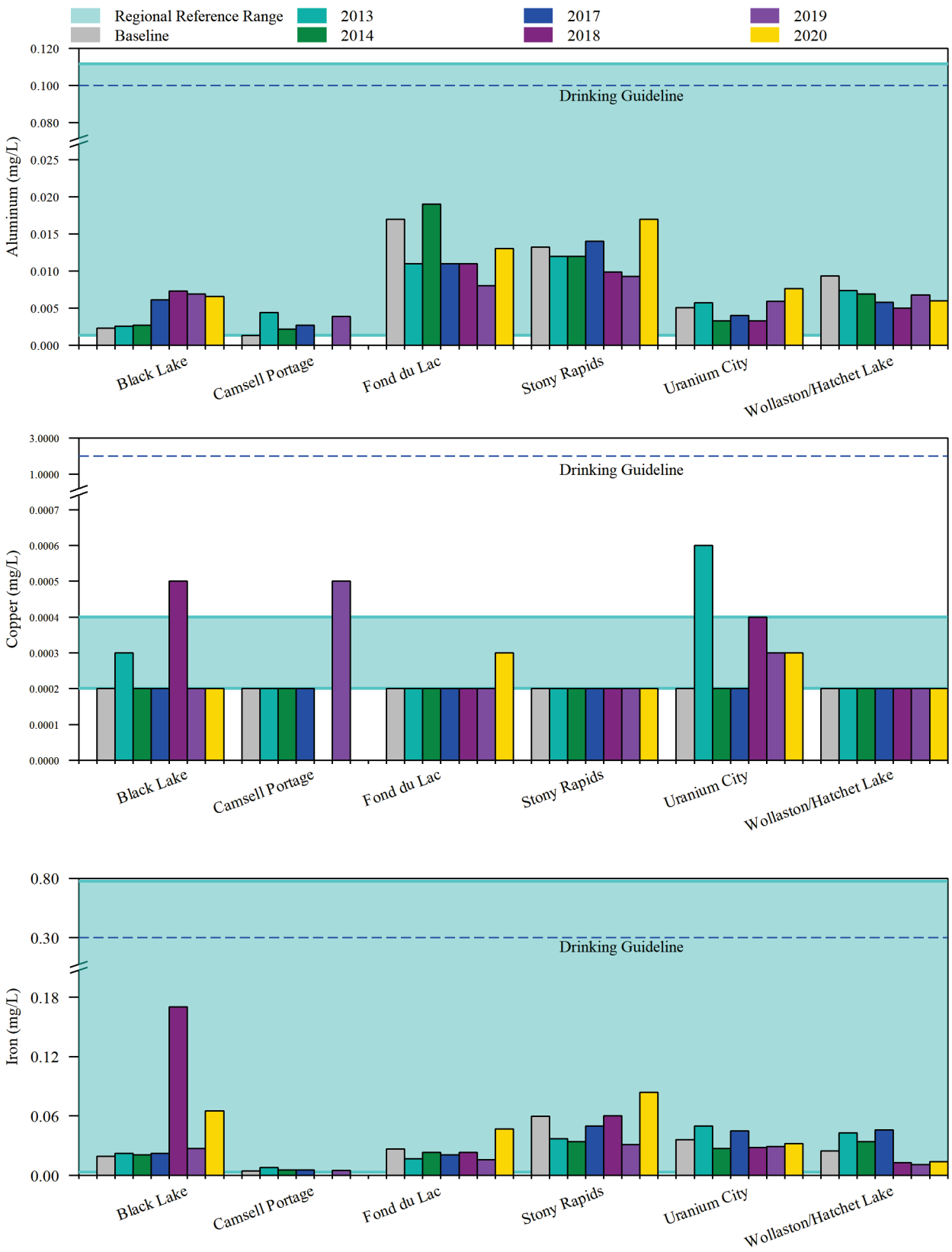
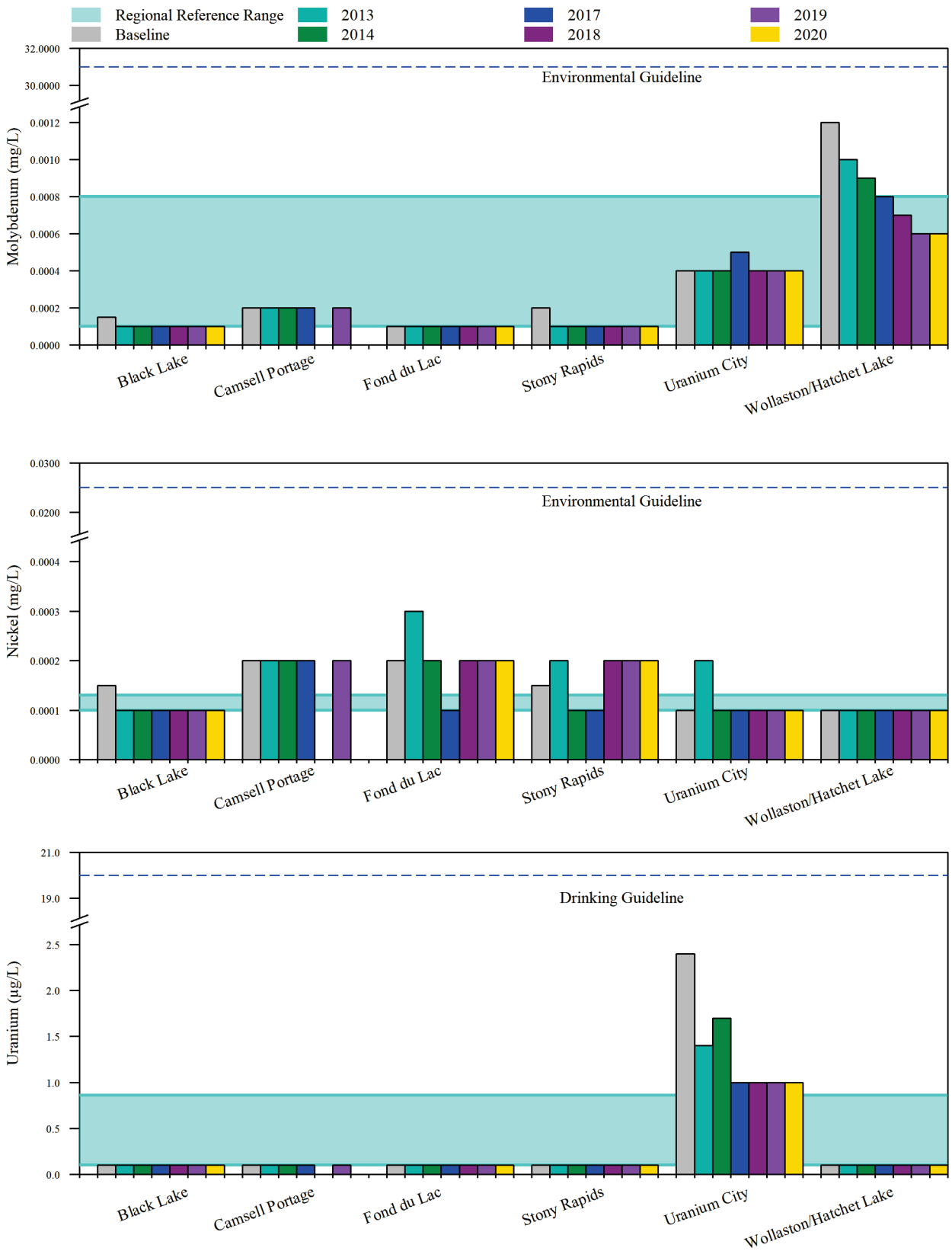
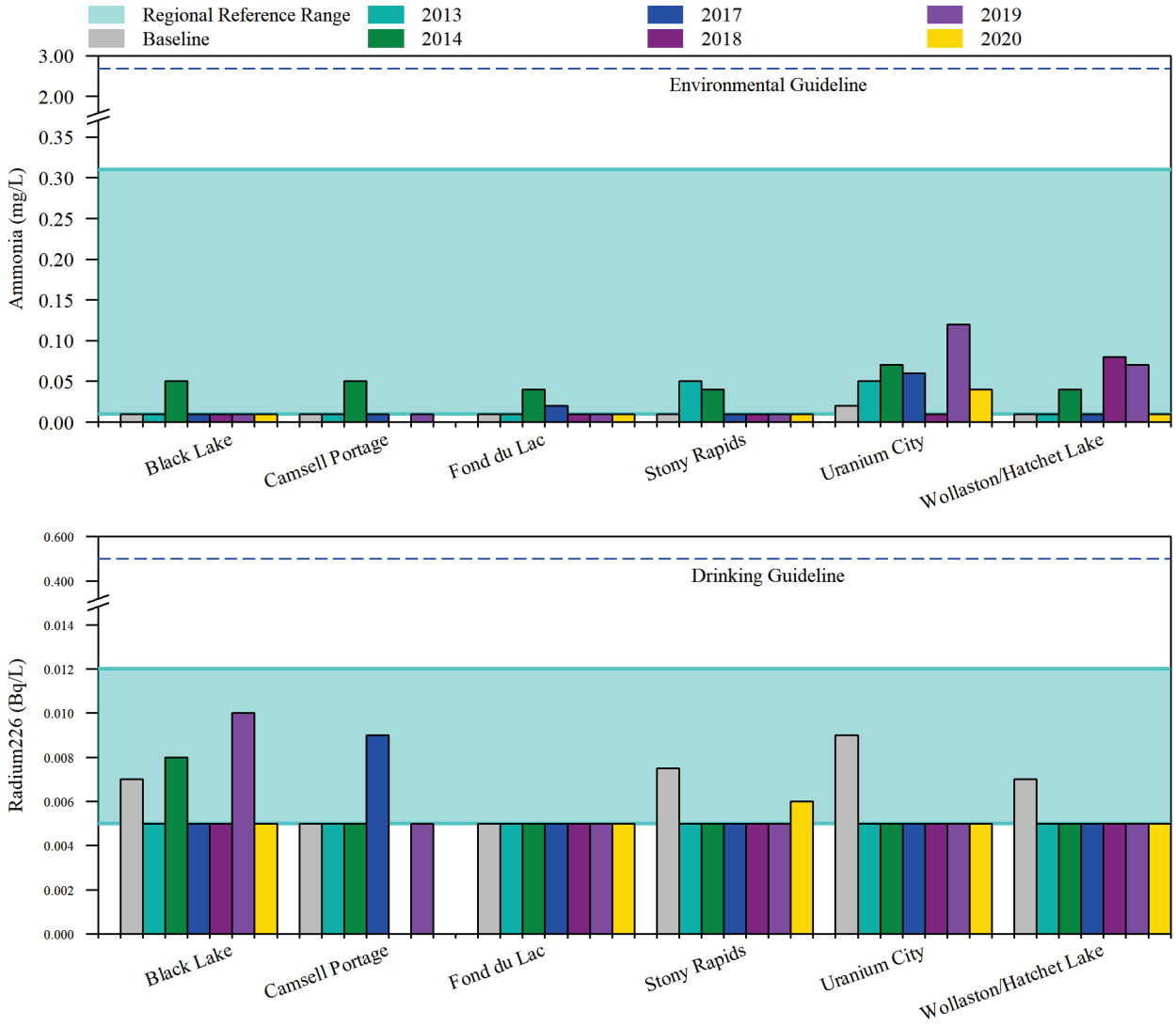


Appendix B, Figure 1
Chemicals in water from the EARMP community study area, 2011 to 2020.



Appendix B, Figure 1
Chemicals in water from the EARMP community study area, 2011 to 2020.



Appendix B, Figure 1
Chemicals in water from the EARMP community study area, 2011 to 2020.

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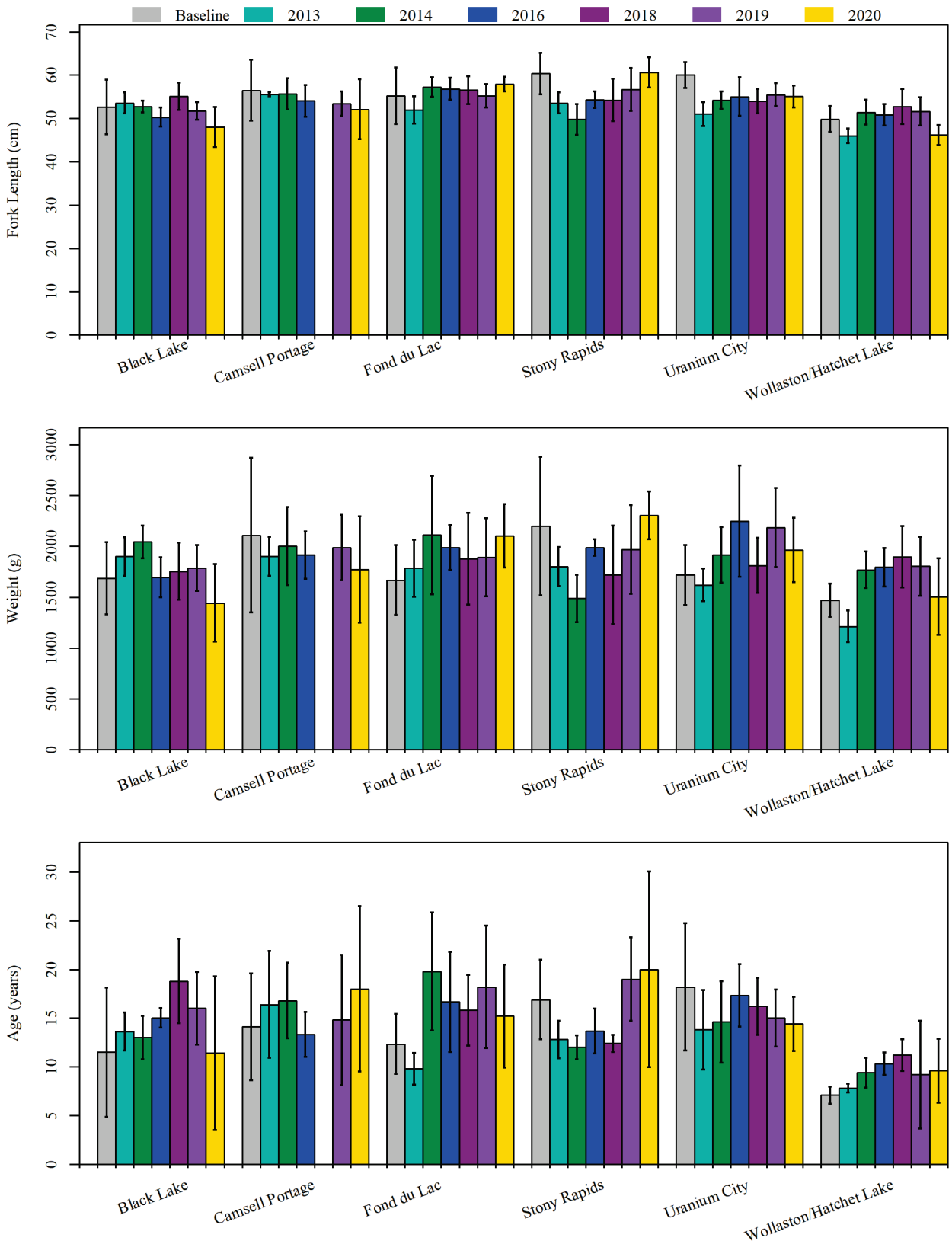
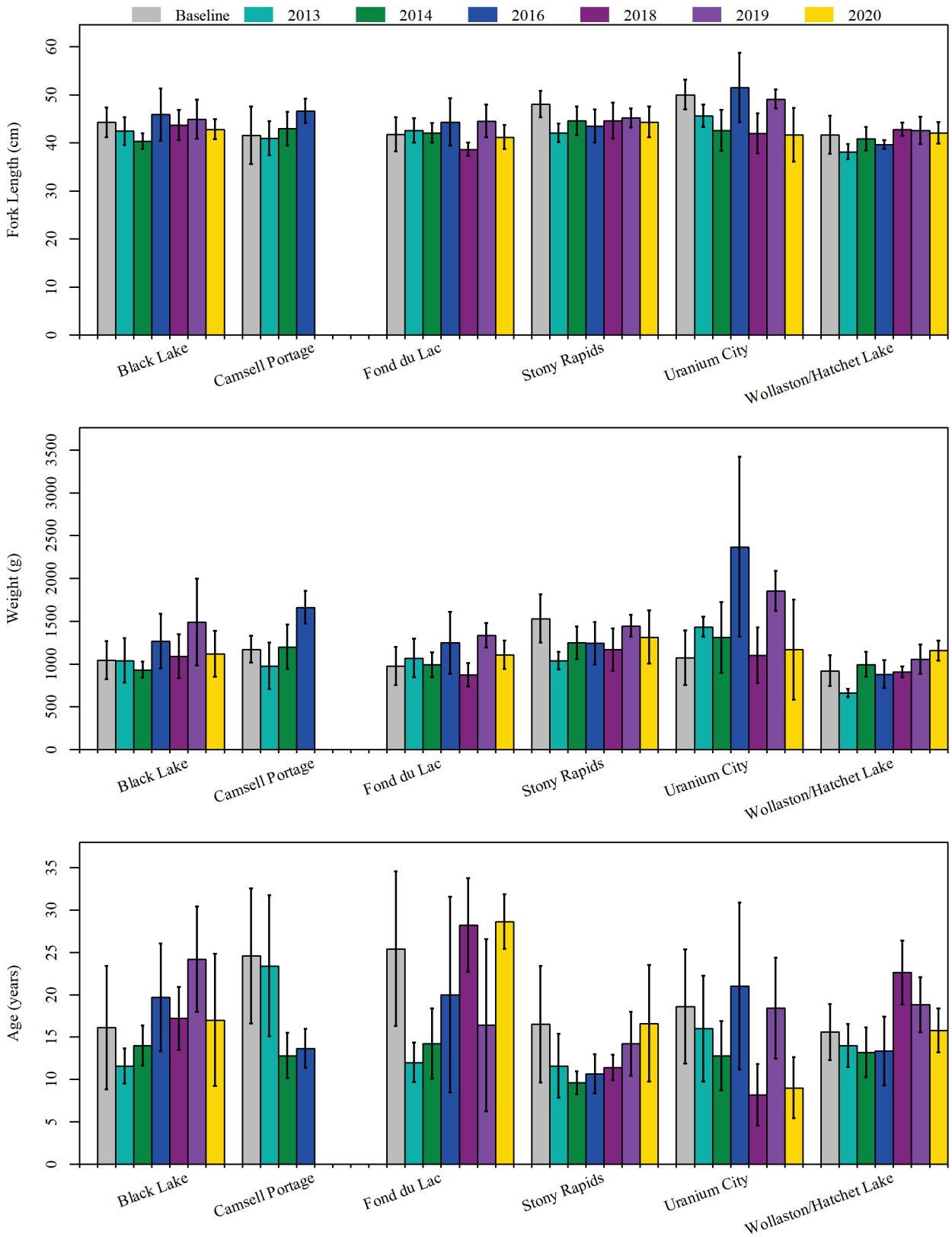
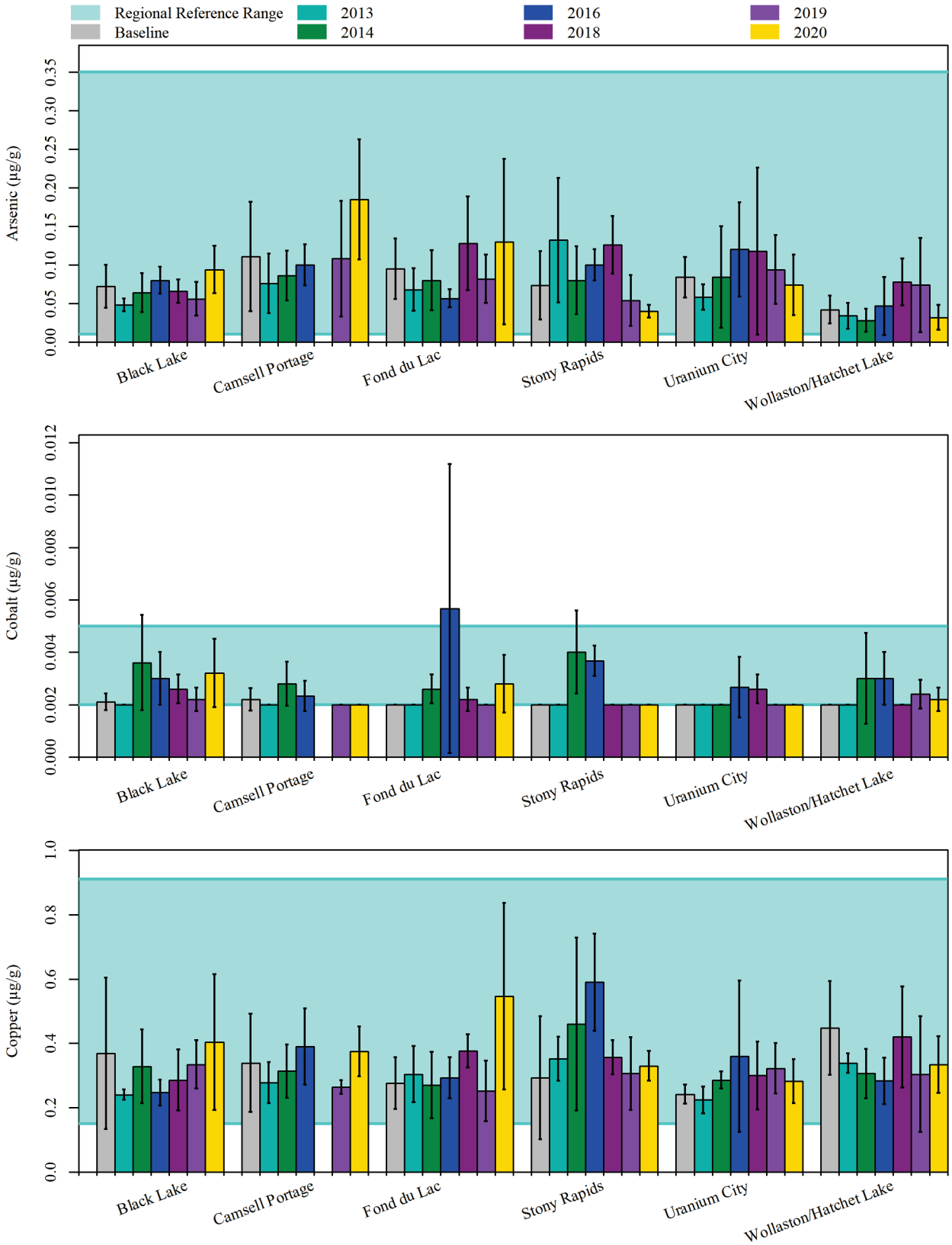


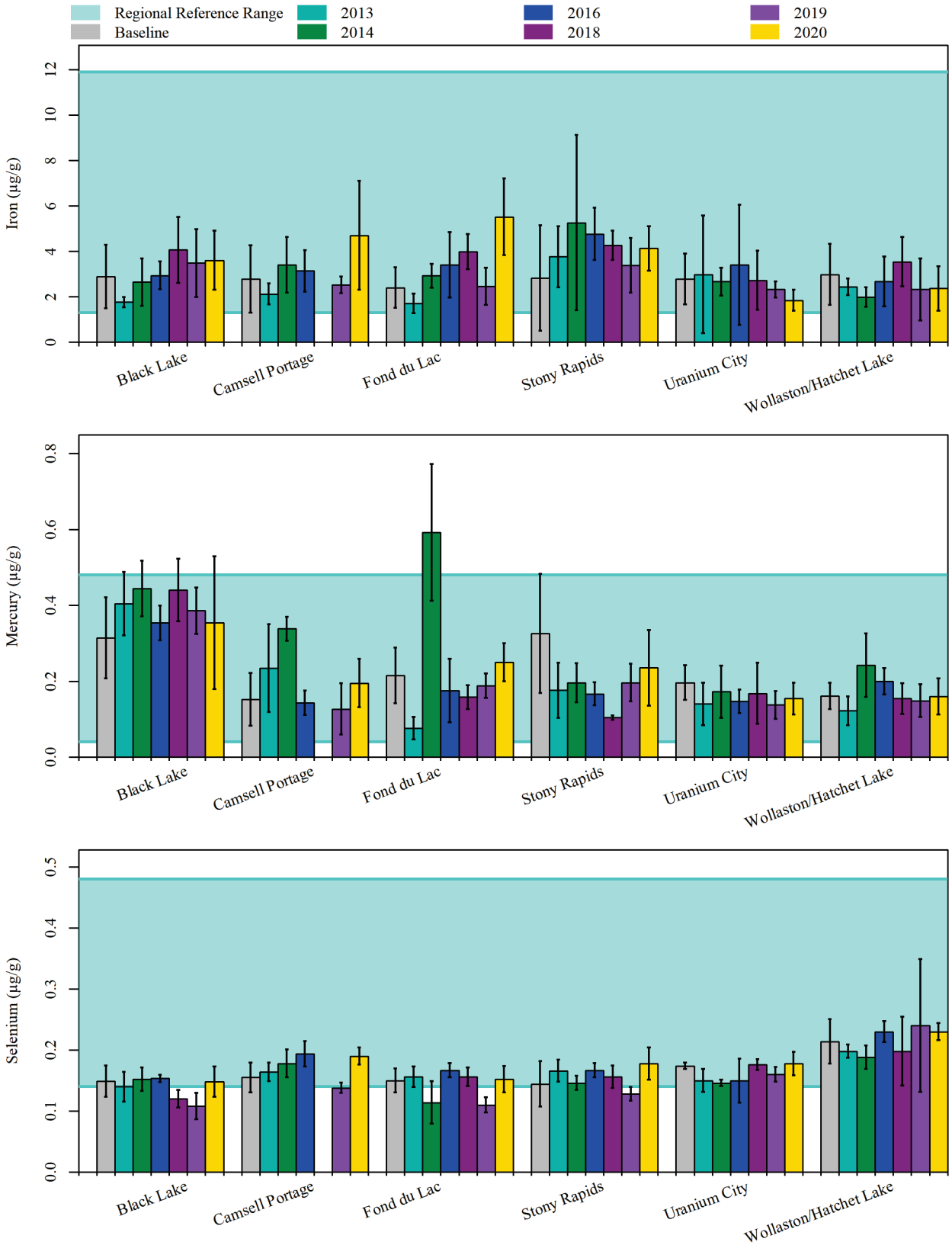
Appendix B, Figure 2
Length, weight, and age of lake trout assessed by EARMP, 2011 to 2020.



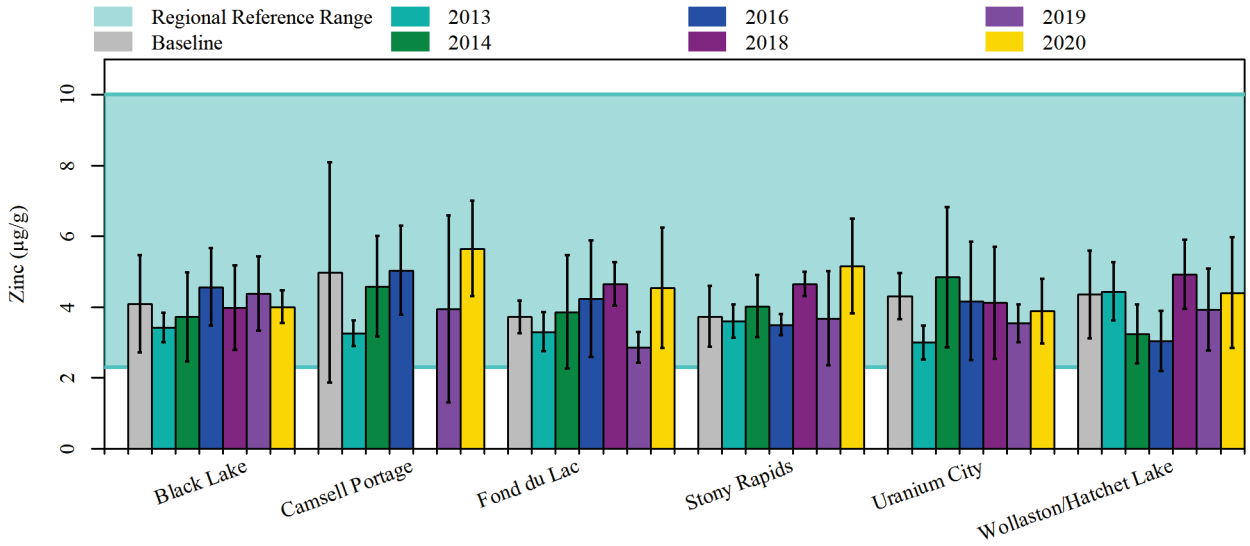
Appendix B, Figure 3
Length, weight, and age of lake whitefish assessed by EARMP, 2011 to 2020.



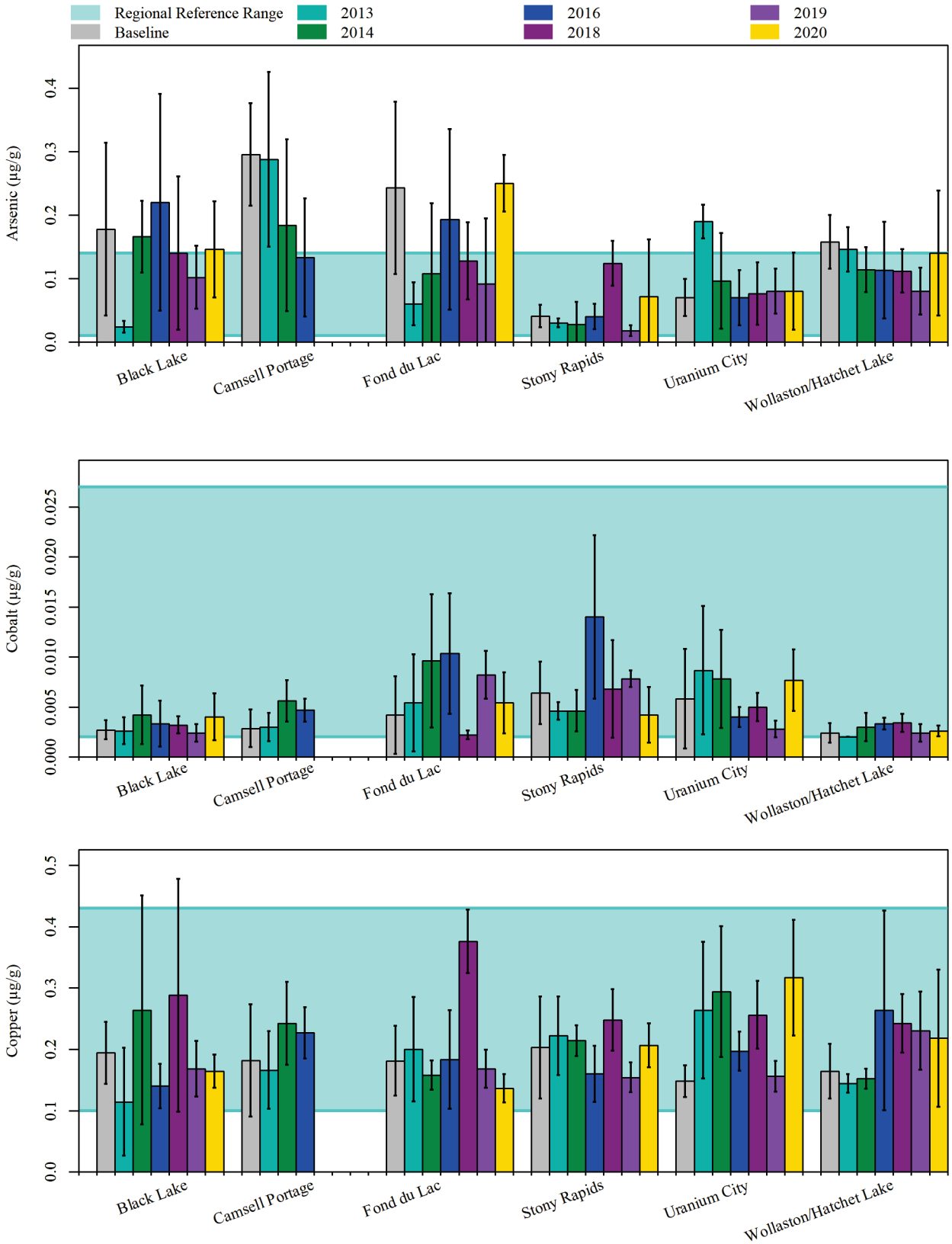
Appendix B, Figure 4
Chemicals in lake trout from the EARMP community study areas, 2011 to 2020.



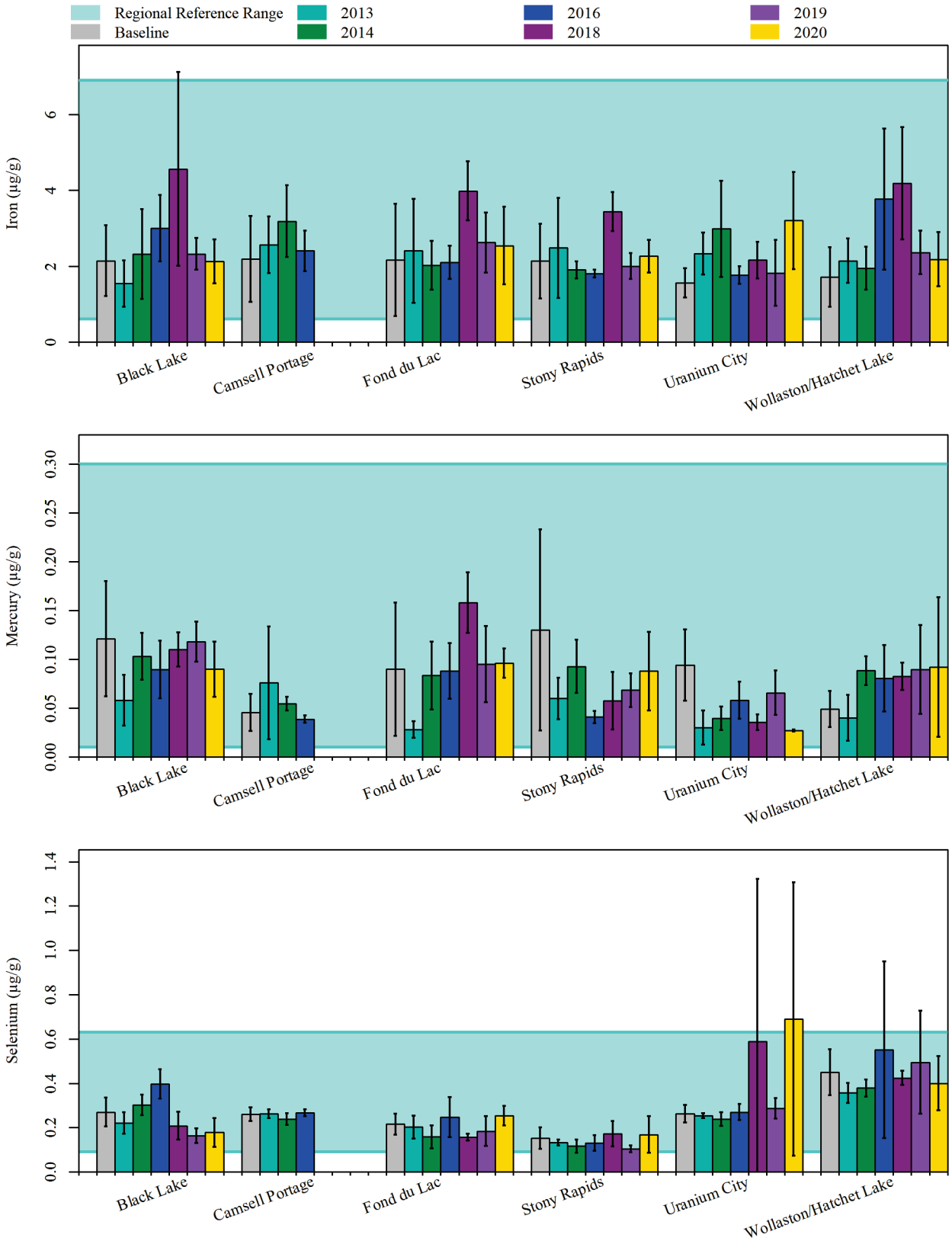
Appendix B, Figure 4
Chemicals in lake trout from the EARMP community study areas, 2011 to 2020.



Appendix B, Figure 4
Chemicals in lake trout from the EARMP community study areas, 2011 to 2020..



Appendix B, Figure 5
Chemicals in lake whitefish from the EARMP community study areas, 2011 to 2020.



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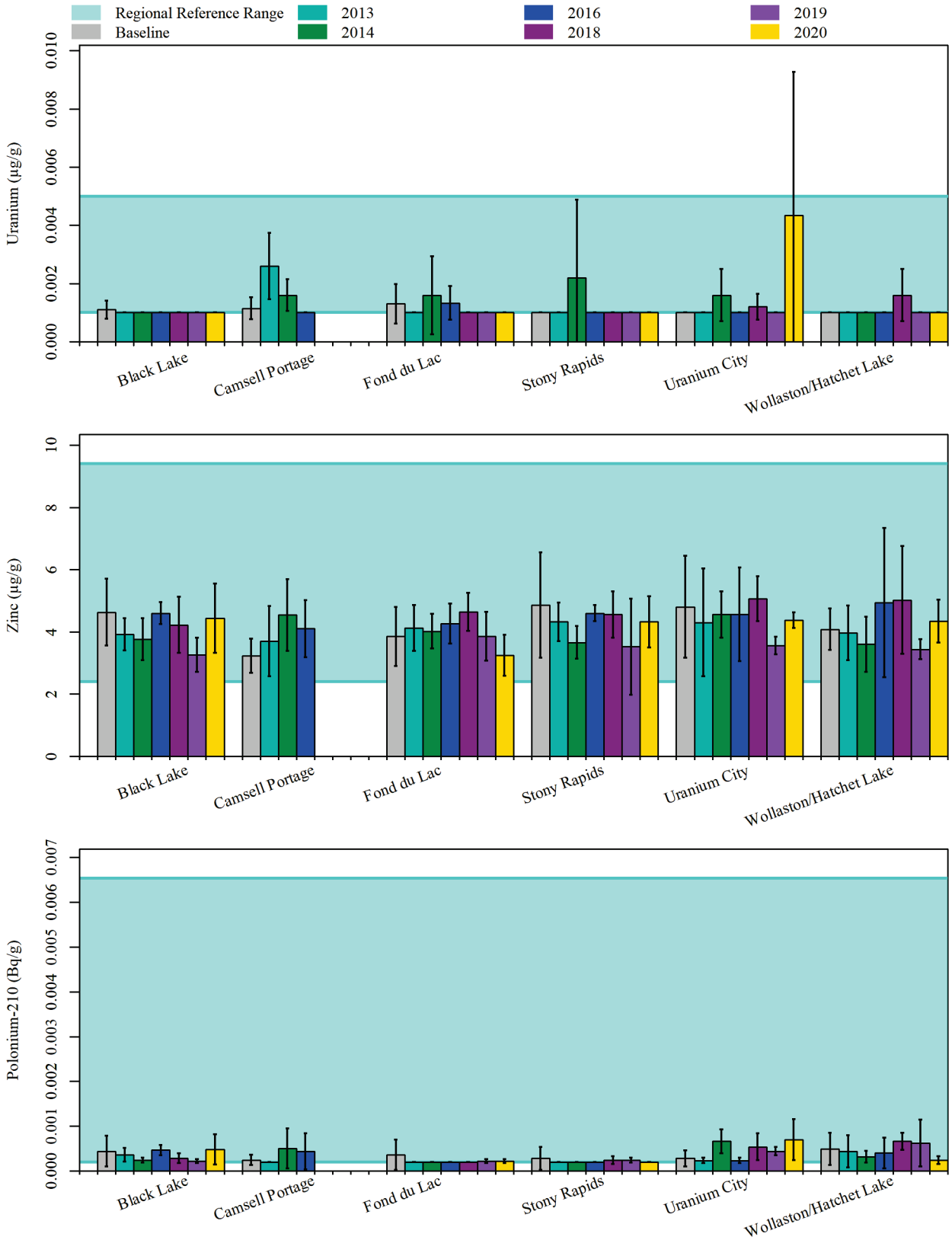
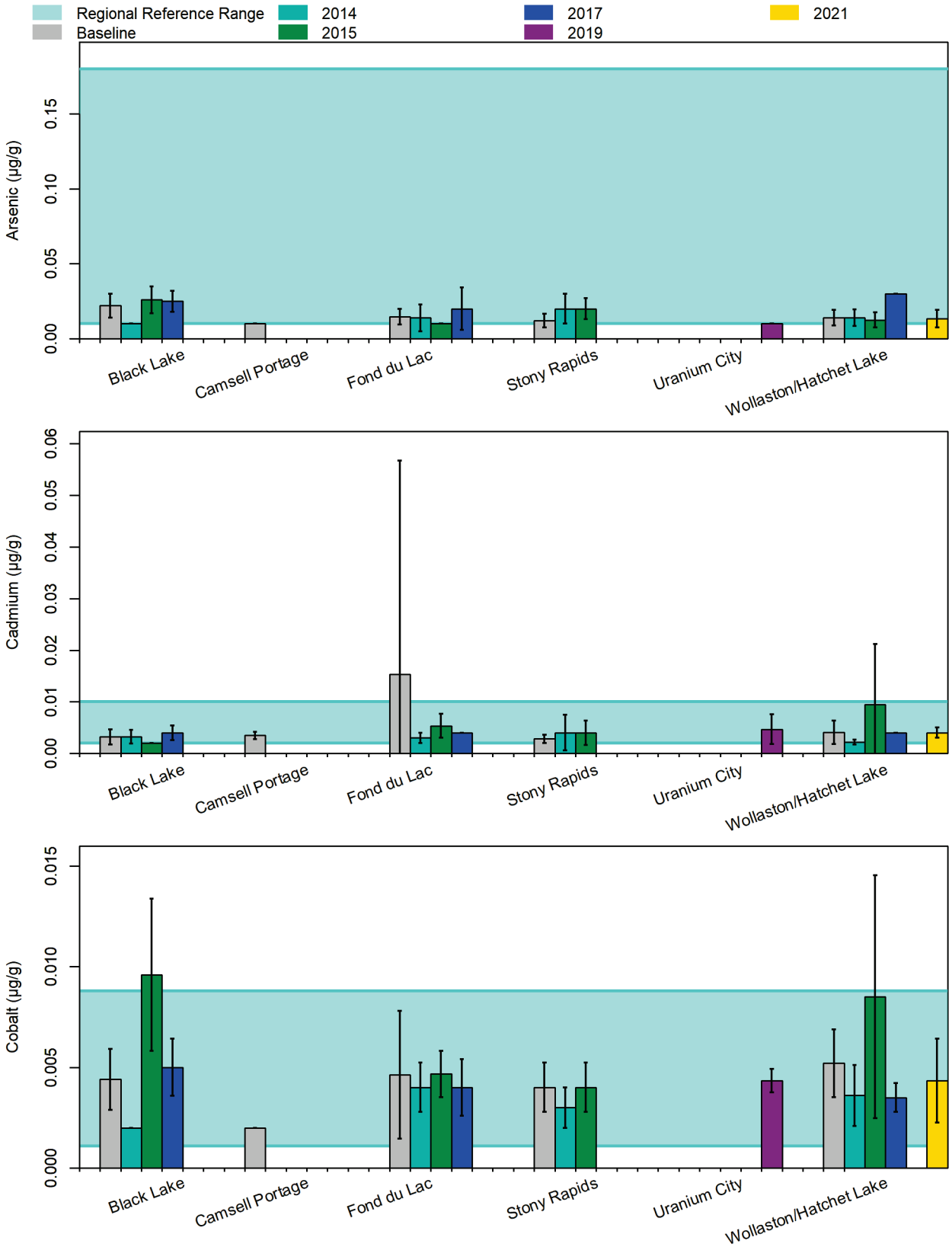
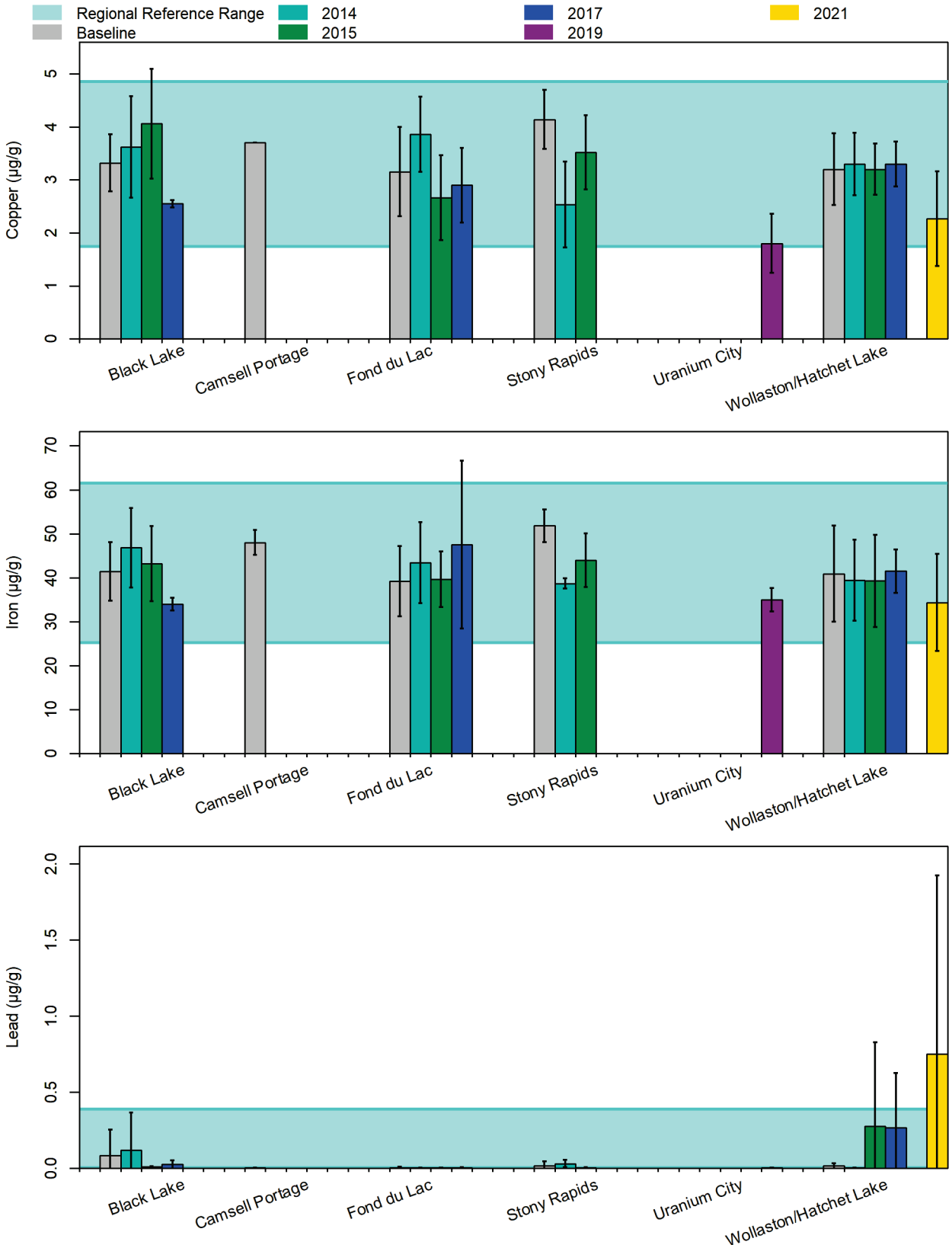
Chemicals in lake whitefish from the EARMP community study areas, 2011 to 2020.



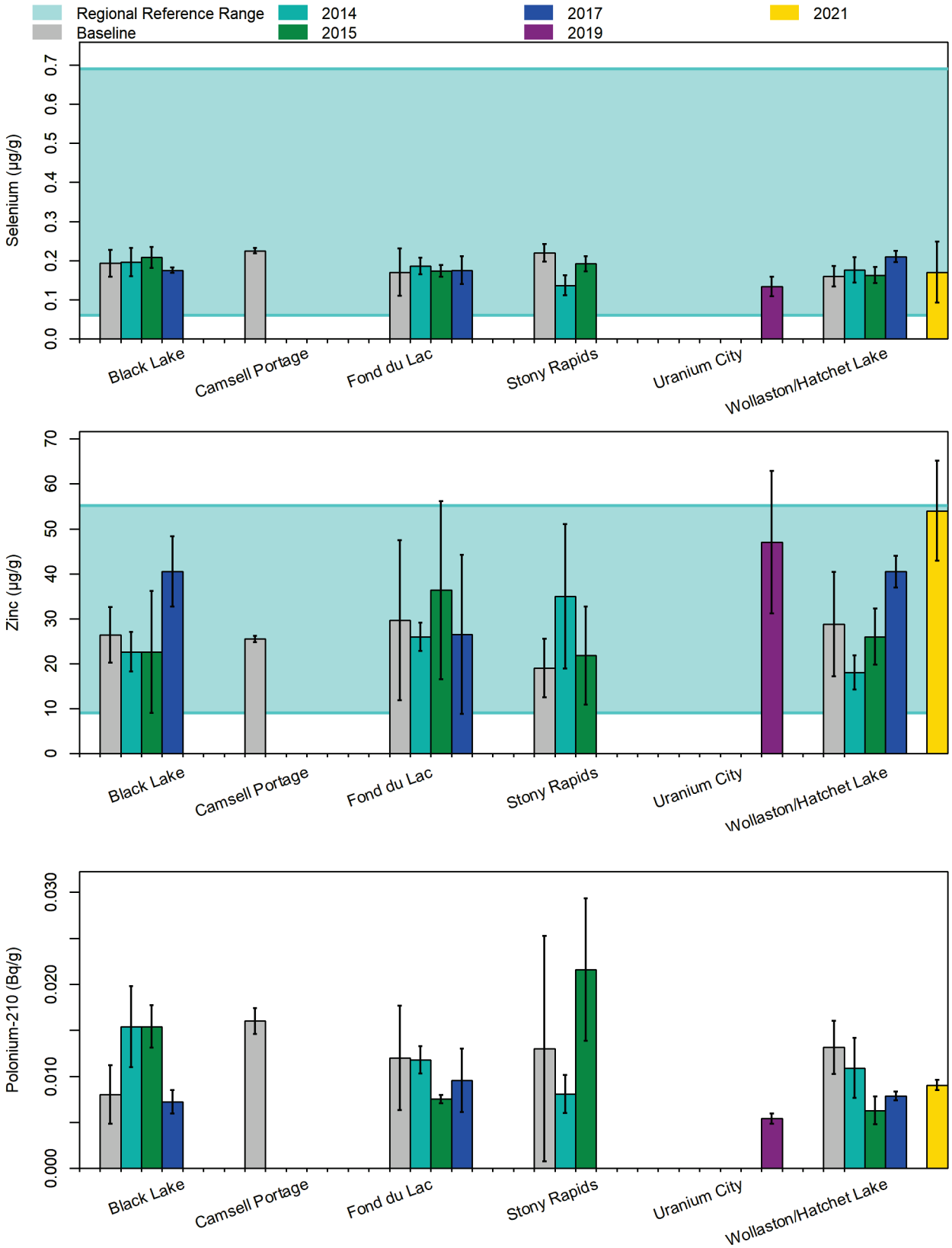
Appendix B, Figure 5
Chemicals in lake whitefish from the EARMP community study areas, 2011 to 2020.



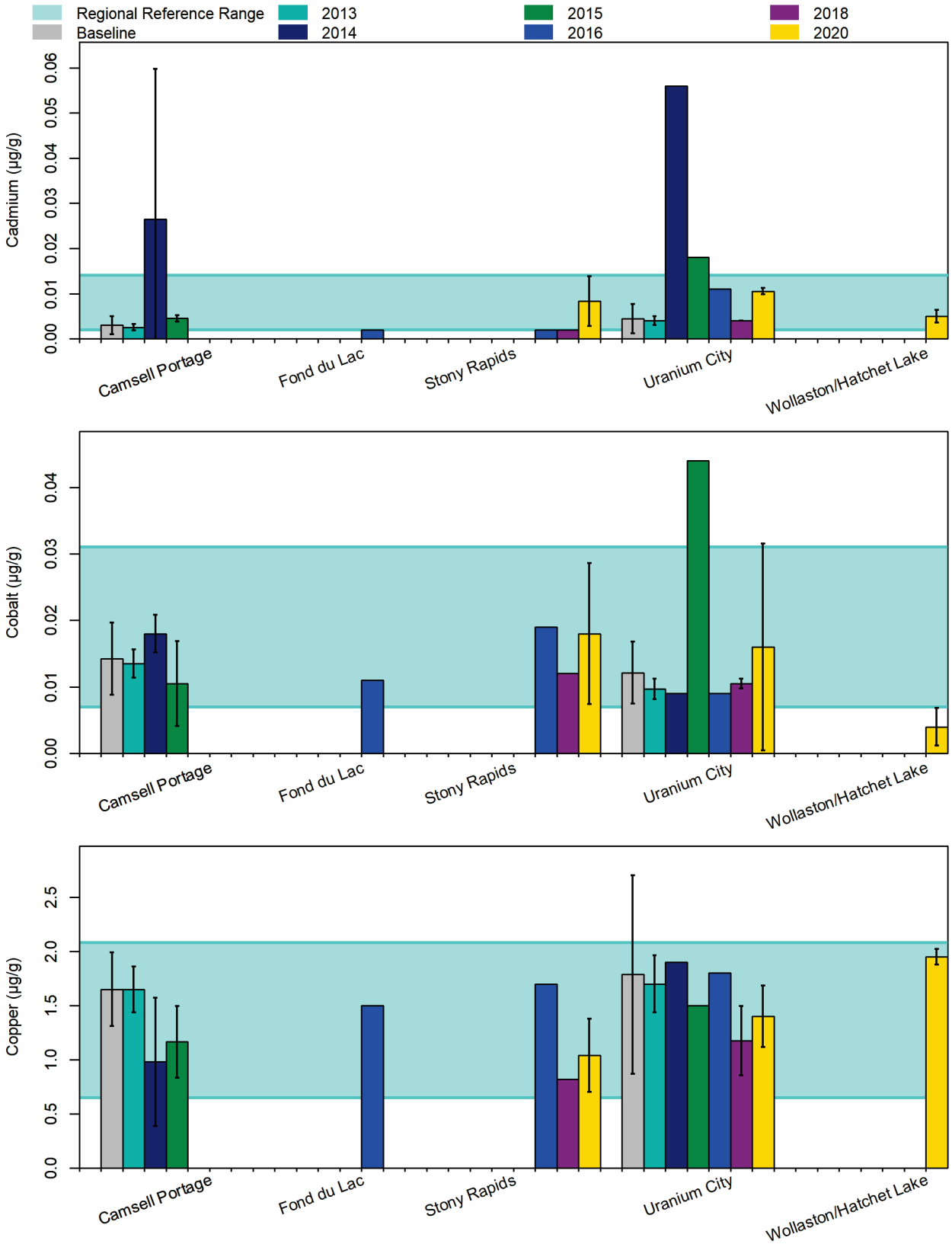
Appendix B, Figure 6
Chemicals in barren-ground caribou flesh from the EARMP community study areas, 2011 to 2021.



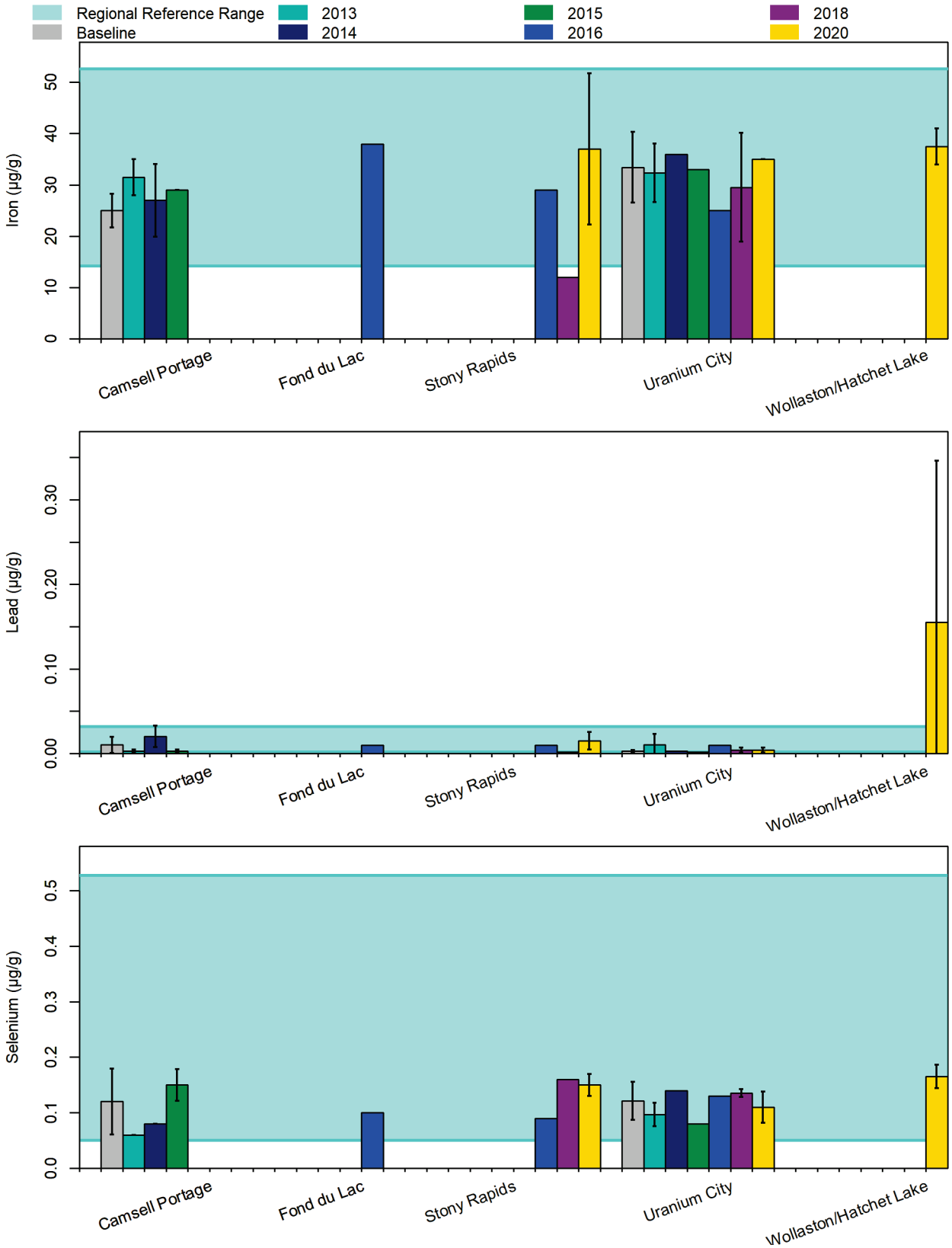
Appendix B, Figure 6
Chemicals in barren-ground caribou flesh from the EARMP community study areas, 2011 to 2021.



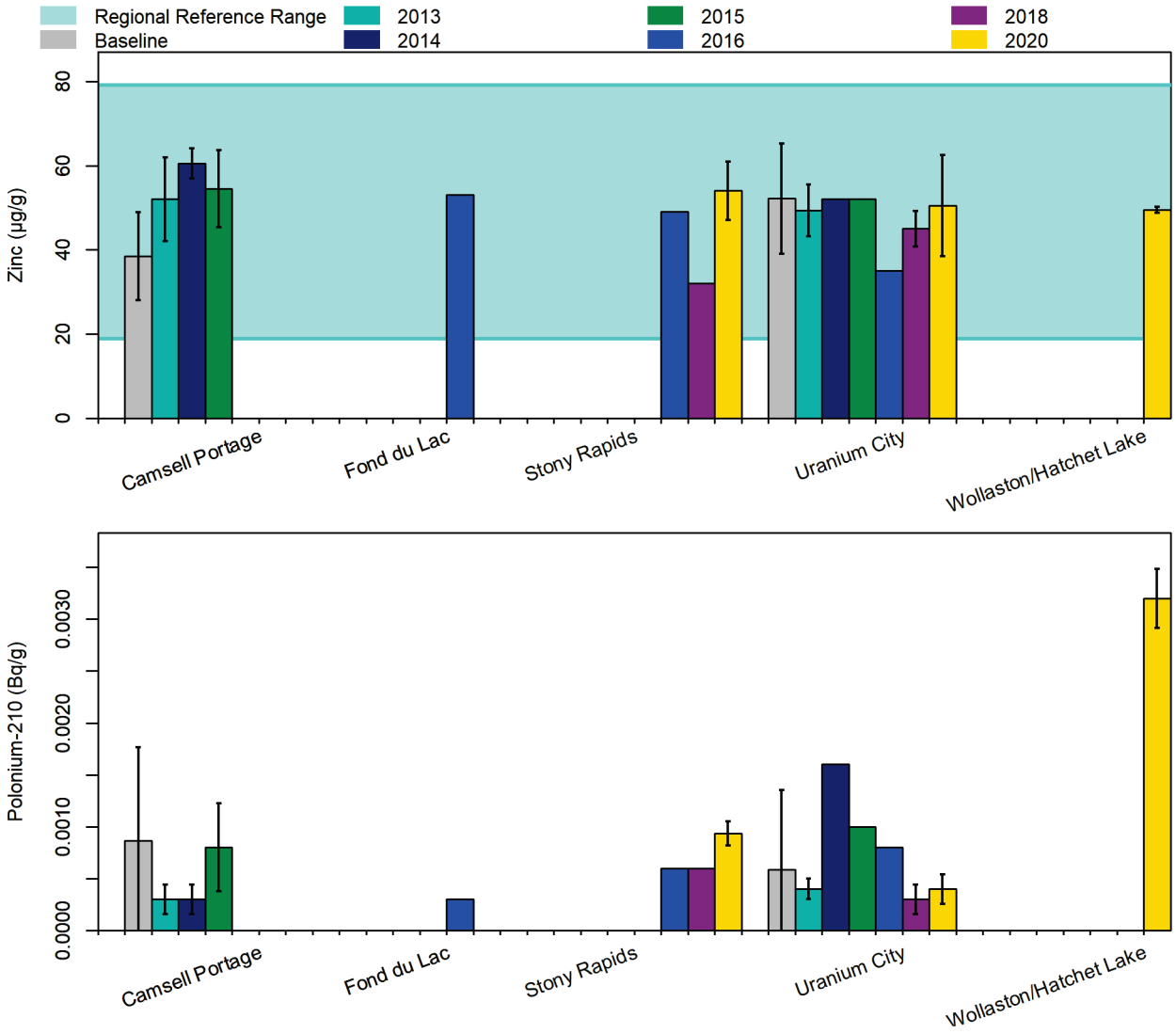
Appendix B, Figure 6
Chemicals in barren-ground caribou flesh from the EARMP community study areas, 2011 to 2021.



Appendix B, Figure 7
Chemicals in moose flesh from the EARMP community study areas, 2011 to 2020.



Appendix B, Figure 7
Chemicals in moose flesh from the EARMP community study areas, 2011 to 2021.



Appendix B, Figure 7
Chemicals in moose flesh from the EARMP community study areas, 2011 to 2020.

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Appendix B, Table 1
Fall water chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	SEQG[2]	CDWQ[3]	Black Lake								Camsell Portage					
			Black Lake								Ellis Bay, Lake Athabasca					
			2011	2012	2013	2014	2017	2018	2019	2020	2011	2012	2013	2014	2017	2019
Metals																
Aluminum[4]	0.1	0.1	0.002	0.0026	0.0026	0.0027	0.0061	0.0073	0.0069	0.0066	0.0016	0.001	0.0044	0.0022	0.0027	0.0039
Arsenic (µg/L)	5	10	0.1	0.1	0.2	0.2	<0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Cadmium[5]	0.00004 to 0.00006	0.005	0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00001	<0.00001	<0.00001	0.00001	<0.00001
Cobalt[6]	0.00078	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Copper[5]	0.002	1	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0005	<0.0005	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0002	0.0005
Iron	0.3	0.3	0.026	0.013	0.022	0.021	0.022	0.17	0.027	0.065	0.0049	0.0044	0.0078	0.0056	0.0054	0.0052
Lead[5]	0.001	0.01	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002
Mercury (µg/L)	0.026	1	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001
Molybdenum[7]	31	-	0.0002	0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Nickel[5]	0.025	-	0.0002	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Selenium	0.001	0.05	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Uranium (µg/L)	15	20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1
Vanadium[6]	0.12	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Zinc	0.03	5	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008
Nutrients																
Ammonia as N[8]	0.86 to 84	-	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01
Physical Properties																
pH (pH units)	6.5 to 9.0	7.0 to 10.5	7.12	7.18	7.38	6.76	7.34	7.48	7.08	7.05	7.46	7.50	7.71	7.26	7.70	7.49
Sp. Cond. (uS/cm)	-	-	40	38	38	43	29	28	31	26	66	69	69	73	66	63
Total Hardness	-	-	14	13	29	14	12	13	12	12	26	26	47	27	26	26
Radionuclides																
Lead-210 (Bq/L)	-	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02
Polonium-210 (Bq/L)	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Radium-226 (Bq/L)	0.11	0.5	<0.005	0.009	<0.005	0.008	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005
Thorium-230 (Bq/L)	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01

Appendix B, Table 1
Fall water chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	SEQG[2]	CDWQ[3]	Fond du Lac								Stony Rapids							
			Fond du Lac River								Fond du Lac River							
			2011	2012	2013	2014	2017	2018	2019	2020	2011	2012	2013	2014	2017	2018	2019	2020
Metals																		
Aluminum[4]	0.1	0.1	0.014	0.02	0.011	0.019	0.011	0.011	0.008	0.013	0.018	0.0084	0.012	0.012	0.014	0.0099	0.0093	0.017
Arsenic (µg/L)	5	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1
Cadmium[5]	0.00004 to 0.00006	0.005	0.00002	<0.00001	0.00001	<0.00001	0.00003	0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00001	<0.00001	0.00001	0.00001	<0.00001	<0.00001
Cobalt[6]	0.00078	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Copper[5]	0.002	1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
Iron	0.3	0.3	0.023	0.03	0.017	0.023	0.021	0.023	0.016	0.047	0.074	0.045	0.037	0.034	0.05	0.06	0.031	0.084
Lead[5]	0.001	0.01	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mercury (µg/L)	0.026	1	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001
Molybdenum[7]	31	-	0.0001	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Nickel[5]	0.025	-	0.0002	0.0002	0.0003	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002
Selenium	0.001	0.05	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Uranium (µg/L)	15	20	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium[6]	0.12	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Zinc	0.03	5	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.0008	<0.0005
Nutrients																		
Ammonia as N[8]	0.86 to 84	-	<0.01	<0.01	<0.01	0.04	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	0.04	0.01	<0.01	<0.01	<0.01
Physical Properties																		
pH (pH units)	6.5 to 9.0	7.0 to 10.5	7.22	7.14	6.86	6.88	7.32	7.48	7.15	7.16	7.30	7.30	7.38	6.89	7.39	7.53	7.13	7.08
Sp. Cond. (uS/cm)	-	-	39	44	42	44	32	28	32	27	39	40	36	38	28	25	27	25
Total Hardness	-	-	14	15	15	15	13	13	13	13	13	14	31	13	12	12	12	12
Radionuclides																		
Lead-210 (Bq/L)	-	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Polonium-210 (Bq/L)	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Radium-226 (Bq/L)	0.11	0.5	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.006
Thorium-230 (Bq/L)	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Appendix B, Table 1
Fall water chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	SEQG[2]	CDWQ[3]	Uranium City Fredette River								Wollaston Lake/Hatchet Lake Welcome Bay, Wollaston Lake							
			2011	2012	2013	2014	2017	2018	2019	2020	2011	2012	2013	2014	2017	2018	2019	2020
Metals																		
Aluminum[4]	0.1	0.1	0.0051	0.0051	0.0057	0.0033	0.004	0.0033	0.0059	0.0076	0.0047	0.014	0.0074	0.0069	0.0058	0.005	0.0068	0.006
Arsenic (µg/L)	5	10	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	0.1	<0.1
Cadmium[5]	0.00004 to 0.00014	0.005	0.00001	0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00014	<0.00001	<0.00001	<0.00001
Cobalt[6]	0.00078 to 0.00092	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Copper[5]	0.002	1	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	0.0004	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Iron	0.3	0.3	0.031	0.041	0.05	0.027	0.045	0.028	0.029	0.032	0.014	0.035	0.043	0.034	0.046	0.013	0.011	0.014
Lead[5]	0.001	0.01	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mercury (µg/L)	0.026	1	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001
Molybdenum[7]	31	-	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0012	0.0012	0.001	0.0009	0.0008	0.0007	0.0006	0.0006
Nickel[5]	0.025	-	0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0001	<0.0001
Selenium	0.001	0.05	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Uranium (µg/L)	15	20	3.5	1.3	1.4	1.7	1	1	1	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium[6]	0.12	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Zinc	0.03	5	0.0014	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005
Nutrients																		
Ammonia as N[8]	0.86 to 84	-	<0.01	0.03	0.05	0.07	0.06	<0.01	0.12	0.04	<0.01	<0.01	<0.01	0.04	<0.01	0.08	0.07	<0.01
Physical Properties																		
pH (pH units)	6.5 to 9.0	7.0 to 10.5	7.75	7.72	7.94	7.46	8.00	8.11	7.72	7.72	7.1	7.12	7.37	6.91	7.38	7.53	7.11	7.14
Sp. Cond. (uS/cm)	-	-	114	112	113	114	102	98	101	92	34	37	34	36	32	27	30	25
Total Hardness	-	-	49	52	80	53	49	52	49	49	13	13	28	12	12	12	12	12
Radionuclides																		
Lead-210 (Bq/L)	-	0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Polonium-210 (Bq/L)	-	-	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Radium-226 (Bq/L)	0.11	0.5	0.008	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	0.005	<0.005
Thorium-230 (Bq/L)	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

[1]All values are in mg/L, unless specified otherwise.

[2]SEQG = Saskatchewan Environmental Quality Guidelines for freshwater aquatic life (GS 2021).

[3]Guidelines for Canadian drinking water quality (HC 2017).

[4]Canadian Council of Ministers of the Environment (CCME) guidelines was used, as the SEQG is for dissolved aluminum. The Al guidelines are based on lab pH measurements (0.005 mg/L if pH < 6.5 or 0.1 mg/L if pH ≥ 6.5).

[5]Cadmium, copper, lead, and nickel guidelines were calculated using the site-specific hardness.

[6]No SEQG exists, therefore, the guideline is based on the Federal Environmental Quality Guidelines (GC 2018).

[7]Molybdenum guideline is based on the Saskatchewan Surface Water Quality Objectives (WSA 2018).

[8]A temperature of 10 °C and lab pH were used to derive guideline.

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Regional Reference Range[2, 3]							
	Lake Trout				Lake Whitefish			
	Lower Limit	Median	Upper Limit	n	Lower Limit	Median	Upper Limit	n
Metals								
Aluminum	0.05	0.2	0.7	10	<0.01	0.08	0.6	28
Arsenic	0.010	0.030	0.35	59	<0.01	0.034	0.14	69
Cadmium	-	-	-	54	-	-	-	69
Cobalt	<0.002	<0.002	0.005	54	0.002	0.002	0.03	69
Copper	0.15	0.29	0.91	59	0.10	0.20	0.43	69
Iron	1.3	3.5	12	59	0.56	2.4	6.9	69
Lead	<0.002	<0.002	0.01	54	<0.002	<0.002	0.02	69
Mercury	<0.04	0.2	0.5	44	<0.01	0.05	0.3	59
Molybdenum	-	-	-	54	-	-	-	69
Nickel	-	-	-	54	<0.01	<0.01	0.04	69
Selenium	0.14	0.22	0.48	59	0.091	0.27	0.63	69
Uranium	<0.001	<0.001	0.005	54	<0.001	<0.001	0.005	69
Vanadium	-	-	-	54	-	-	-	69
Zinc	2.3	4.2	10	59	2.4	4.2	9.4	69
Radionuclides								
Lead-210 (Bq/g)	<0.001	<0.001	0.03	54	-	-	-	69
Polonium-210 (Bq/g)	-	-	-	44	<0.0002	0.0009	0.007	42
Radium-226 (Bq/g)	0.00005	0.00006	0.0002	44	0.00005	0.00006	0.0001	64
Thorium-230 (Bq/g)	-	-	-	45	-	-	-	47

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake (Black Lake) Lake Trout													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	0.09	0.6	0.1	0.5	-	0.5	-	0.5	-
Arsenic	0.072	0.028	0.048	0.0084	0.064	0.025	0.080	0.017	0.066	0.015	0.056	0.022	0.094	0.030
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.002	0.0003	0.002	-	0.004	0.002	0.003	0.001	0.003	0.001	0.002	-	0.003	0.001
Copper	0.37	0.23	0.24	0.016	0.33	0.11	0.25	0.040	0.29	0.094	0.33	0.075	0.40	0.21
Iron	2.9	1.4	1.8	0.23	2.6	1.0	2.9	0.61	4.1	1.5	3.5	1.5	3.6	1.3
Lead	0.002	0.0008	0.002	-	0.003	0.002	0.004	0.001	0.002	0	0.002	-	0.003	0.001
Mercury	0.31	0.11	0.40	0.084	0.44	0.073	0.35	0.045	0.44	0.083	0.39	0.061	0.35	0.18
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	-	0.01	-	0.02	0.01	0.01	0.006	0.01	-	0.01	-	0.01	0.004
Selenium	0.15	0.026	0.14	0.024	0.15	0.019	0.15	0.0058	0.12	0.014	0.11	0.022	0.15	0.025
Uranium	0.001	0.0003	0.001	-	0.001	0	0.001	-	0.001	-	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.1	1.4	3.4	0.42	3.7	1.3	4.6	1.1	4.0	1.2	4.4	1.0	4.0	0.46
Radionuclides														
Lead-210 (Bq/g)	0.001	0.0004	0.001	-	0.001	0	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0002	0	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	0.00004
Radium-226 (Bq/g)	0.00006	0.00002	0.00007	0.00002	0.00005	-	0.00006	-	0.00006	0.000005	0.00006	0.000004	0.00006	0.00002
Thorium-230 (Bq/g)	0.00011	0.00003	0.0001	0.00004	0.00009	-	0.0001	-	0.0001	-	0.0001	-	0.0001	0.00005

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake (Black Lake) Lake Whitefish													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	-	0.5	-	0.5	0	0.5	-	0.5	-
Arsenic	0.18	0.14	0.024	0.0089	0.17	0.056	0.22	0.17	0.14	0.12	0.10	0.05	0.15	0.076
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.003	0.0009	0.003	0.001	0.004	0.003	0.003	0.002	0.003	0.001	0.002	0.001	0.004	0.002
Copper	0.19	0.051	0.11	0.088	0.26	0.19	0.14	0.036	0.29	0.19	0.17	0.045	0.16	0.027
Iron	2.1	0.93	1.5	0.61	2.3	1.2	3.0	0.87	4.6	2.6	2.3	0.41	2.1	0.6
Lead	0.002	0.0004	0.002	-	0.002	0.0004	0.003	0.001	0.002	-	0.002	-	0.002	-
Mercury	0.12	0.059	0.058	0.026	0.10	0.024	0.090	0.030	0.11	0.02	0.12	0.02	0.090	0.028
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0	0.01	-	0.01	0.005	0.02	0.02	0.01	-	0.01	-	0.01	-
Selenium	0.27	0.065	0.22	0.048	0.30	0.047	0.40	0.067	0.21	0.06	0.16	0.033	0.18	0.065
Uranium	0.001	0.0003	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.6	1.1	3.9	0.52	3.8	0.68	4.6	0.35	4.2	0.9	3.3	0.55	4.4	1.1
Radionuclides														
Lead-210 (Bq/g)	0.002	0.001	0.001	0	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0004	0.0003	0.0004	0.0002	0.0002	0.00005	0.0005	0.0001	0.0003	0.0001	0.00022	-	0.0005	0.0003
Radium-226 (Bq/g)	0.0004	0.0007	0.0002	0.0001	0.00009	0.00006	0.00006	-	0.000054	0.000005	0.00006	0.000005	0.00006	0.000005
Thorium-230 (Bq/g)	0.0005	0.0008	0.0001	0.00004	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage (Ellis Bay) Lake Trout											
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2019 (n = 5)		2020 (n = 2)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals												
Aluminum	0.5	-	0.5	-	0.5	0.09	0.5	-	0.5	-	0.5	-
Arsenic	0.11	0.071	0.076	0.038	0.086	0.032	0.10	0.027	0.11	0.075	0.19	-
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.002	0.0004	0.002	0	0.003	0.0008	0.002	0.0006	0.002	-	0.002	-
Copper	0.34	0.15	0.28	0.063	0.31	0.083	0.39	0.12	0.26	0.021	0.38	-
Iron	2.8	1.5	2.1	0.45	3.4	1.2	3.1	0.92	2.5	0.37	4.7	-
Lead	0.002	-	0.002	-	0.002	0.0009	0.003	0.001	0.002	-	0.002	-
Mercury	0.15	0.070	0.23	0.12	0.34	0.031	0.14	0.032	0.13	0.067	0.20	-
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0.006	0.02	0.02	0.02	0.02	0.01	0.006	0.01	-	0.01	-
Selenium	0.16	0.024	0.16	0.015	0.18	0.023	0.19	0.021	0.14	0.008	0.19	-
Uranium	0.002	0.004	0.001	-	0.001	0	0.001	0	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	5.0	3.1	3.3	0.36	4.6	1.4	5.0	1.3	3.9	2.6	5.7	-
Radionuclides												
Lead-210 (Bq/g)	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0003	0.0002	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-
Radium-226 (Bq/g)	0.0001	0.00005	0.00007	0.00002	0.00005	-	0.00006	-	0.00007	0.000009	0.00006	-
Thorium-230 (Bq/g)	0.0001	-	0.00010	0.00001	0.0001	-	0.0001	-	0.00012	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage (Ellis Bay) Lake Whitefish							
	Baseline (n = 7)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals								
Aluminum	0.5	-	0.5	-	0.7	0.3	0.5	-
Arsenic	0.30	0.081	0.29	0.14	0.18	0.14	0.13	0.093
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.003	0.002	0.003	0.001	0.006	0.002	0.005	0.001
Copper	0.18	0.092	0.17	0.063	0.24	0.068	0.23	0.042
Iron	2.2	1.1	2.6	0.75	3.2	0.95	2.4	0.53
Lead	0.002	0.0004	0.002	-	0.006	0.002	0.002	-
Mercury	0.050	0.019	0.08	0.058	0.055	0.0070	0.039	0.0038
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0.004	0.01	-	0.04	0.03	0.01	-
Selenium	0.26	0.030	0.26	0.019	0.24	0.026	0.27	0.015
Uranium	0.001	0.0004	0.003	0.001	0.002	0.0005	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	3.2	0.55	3.7	1.1	4.5	1.2	4.1	0.9
Radionuclides								
Lead-210 (Bq/g)	0.001	0.0004	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0002	0.0001	0.0002	-	0.0005	0.0004	0.0004	0.0004
Radium-226 (Bq/g)	0.0001	0.00010	0.00010	0.00006	0.00006	-	0.00006	-
Thorium-230 (Bq/g)	0.0001	-	0.0001	-	0.0001	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac (Fond du Lac River) Lake Trout													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	0.04	0.5	-	0.5	-	0.5	-	0.5	-
Arsenic	0.1	0.04	0.07	0.03	0.08	0.04	0.06	0.01	0.13	0.06	0.082	0.031	0.13	0.11
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.002	-	0.002	-	0.003	0.0005	0.0057	0.0055	0.0022	0.0004	0.002	-	0.003	0.001
Copper	0.28	0.081	0.30	0.087	0.27	0.10	0.29	0.064	0.38	0.05	0.25	0.094	0.55	0.29
Iron	2.4	0.90	1.7	0.43	2.9	0.53	3.4	1.4	4.0	0.8	2.5	0.81	5.5	1.7
Lead	0.002	0.0007	0.003	0.003	0.004	0.002	0.002	0.0006	0.0026	0.0013	0.002	-	0.002	-
Mercury	0.22	0.073	0.08	0.030	0.59	0.18	0.18	0.084	0.16	0.031	0.19	0.033	0.25	0.050
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	-	0.01	0.005	0.02	0.004	0.01	0.006	0.01	-	0.01	-	0.02	0.01
Selenium	0.15	0.019	0.16	0.017	0.11	0.035	0.17	0.012	0.16	0.015	0.11	0.012	0.15	0.022
Uranium	0.001	0.0003	0.001	-	0.001	0.0004	0.001	-	0.001	-	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	3.7	0.47	3.3	0.55	3.9	1.6	4.2	1.6	4.6	0.6	2.9	0.43	4.5	1.7
Radionuclides														
Lead-210 (Bq/g)	0.001	0.0004	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-
Radium-226 (Bq/g)	0.00006	-	0.00006	0.000004	0.00006	0.00001	0.00006	-	0.00006	0.000007	0.00006	0.000007	0.00006	0.000008
Thorium-230 (Bq/g)	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac (Fond du Lac River) Lake Whitefish													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.6	0.3	0.5	-	0.5	0.04	0.5	0.06	0.5	-	0.5	-	0.5	-
Arsenic	0.24	0.14	0.06	0.034	0.11	0.11	0.19	0.14	0.26	0.021	0.09	0.1	0.25	0.045
Cadmium	0.002	0.001	0.002	0	0.002	-	0.002	-	0.002	0	0.002	0.001	0.002	0.0004
Cobalt	0.0040	0.0039	0.0054	0.0049	0.010	0.0067	0.010	0.0060	0.003	0.001	0.008	0.002	0.005	0.003
Copper	0.18	0.057	0.20	0.085	0.16	0.024	0.18	0.080	0.23	0.073	0.17	0.031	0.14	0.023
Iron	2.2	1.5	2.4	1.4	2.0	0.64	2.1	0.44	3.2	0.61	2.6	0.79	2.5	1.0
Lead	0.002	0.0007	0.002	-	0.003	0.003	0.004	0.002	0.003	0.001	0.002	0.001	0.002	-
Mercury	0.090	0.068	0.028	0.0084	0.083	0.035	0.088	0.029	0.071	0.0046	0.10	0.039	0.10	0.015
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0.003	0.01	0	0.04	0.04	0.02	0.006	0.01	0	0.01	-	0.01	0.004
Selenium	0.22	0.048	0.20	0.052	0.16	0.052	0.25	0.090	0.26	0.039	0.18	0.067	0.25	0.044
Uranium	0.001	0.0007	0.001	-	0.002	0.001	0.001	0.0006	0.001	0.0004	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	3.9	0.94	4.1	0.74	4.0	0.55	4.3	0.64	3.4	0.3	3.9	0.78	3.2	0.66
Radionuclides														
Lead-210 (Bq/g)	0.004	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0004	0.0003	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.00022	-	0.0002	0.00004
Radium-226 (Bq/g)	0.0004	0.0007	0.00007	0.00002	0.00007	0.00001	0.00006	-	0.00006	-	0.00006	0.000004	0.00006	0.000008
Thorium-230 (Bq/g)	0.002	-	0.0001	-	0.0001	0.00004	0.0001	-	0.0001	-	0.0001	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids (Fond du Lac River) Lake Trout													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 4)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	-	0.5	-	0.5	-	0.5	-	0.5	-
Arsenic	0.07	0.044	0.13	0.080	0.080	0.044	0.10	0.020	0.13	0.037	0.054	0.033	0.04	0.008
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.002	0	0.002	-	0.004	0.002	0.004	0.0006	0.002	-	0.002	-	0.002	-
Copper	0.29	0.19	0.35	0.068	0.46	0.27	0.59	0.15	0.36	0.053	0.31	0.11	0.33	0.047
Iron	2.8	2.3	3.8	1.3	5.3	3.9	4.8	1.2	4.3	0.7	3.4	1.2	4.1	1.0
Lead	0.002	-	0.002	-	0.004	0.004	0.002	-	0.002	0	0.003	0.001	0.002	0.0005
Mercury	0.33	0.16	0.18	0.072	0.20	0.052	0.17	0.031	0.10	0.0057	0.20	0.050	0.24	0.099
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0	0.01	0	0.02	0.02	0.01	0.006	0.01	-	0.01	-	0.03	0.03
Selenium	0.14	0.037	0.17	0.018	0.15	0.011	0.17	0.012	0.16	0.018	0.13	0.011	0.18	0.026
Uranium	0.001	0.0003	0.001	-	0.001	-	0.001	-	0.001	-	0.001	0.0009	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	3.7	0.86	3.6	0.46	4.0	0.88	3.5	0.30	4.6	0.34	3.7	1.3	5.2	1.3
Radionuclides														
Lead-210 (Bq/g)	0.001	0	0.001	0	0.001	-	0.001	-	0.001	0.0004	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0002	0.00007	0.0002	0.00004	0.0002	-	0.0002	-	0.0002	0	0.0002	-	0.0002	-
Radium-226 (Bq/g)	0.00006	-	0.00007	0.00002	0.00007	-	0.00006	-	0.00006	0.000004	0.00006	0.000005	0.00005	0.000005
Thorium-230 (Bq/g)	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids (Fond du Lac River) Lake Whitefish													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.50	-	0.5	-	0.5	0.06	0.5	-	0.5	-	0.5	-
Arsenic	0.04	0.02	0.03	0.007	0.03	0.03	0.04	0.02	0.12	0.035	0.02	0.008	0.07	0.09
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.003	0.001	0.003	0.001	0.002	-
Cobalt	0.0060	0.0031	0.0046	0.00089	0.005	0.0021	0.014	0.0082	0.007	0.005	0.008	0.001	0.004	0.003
Copper	0.20	0.083	0.22	0.064	0.21	0.025	0.16	0.046	0.25	0.050	0.15	0.024	0.21	0.036
Iron	2.1	0.98	2.5	1.3	1.9	0.22	1.8	0.10	3.4	0.51	2.0	0.34	2.3	0.43
Lead	0.002	-	0.002	-	0.002	0.001	0.003	0.001	0.002	-	0.002	-	0.002	-
Mercury	0.13	0.10	0.06	0.021	0.093	0.027	0.041	0.0062	0.057	0.030	0.068	0.017	0.088	0.040
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0.01	0.01	-	0.01	0.004	0.02	0.02	0.01	-	0.01	-	0.01	-
Selenium	0.15	0.049	0.13	0.013	0.12	0.029	0.13	0.036	0.17	0.056	0.10	0.015	0.17	0.083
Uranium	0.001	0	0.001	-	0.002	0.003	0.001	-	0.001	-	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.9	1.7	4.3	0.61	3.7	0.53	4.6	0.26	4.6	0.74	3.5	1.5	4.3	0.82
Radionuclides														
Lead-210 (Bq/g)	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	0.0004
Polonium-210 (Bq/g)	0.0003	-	0.0002	0	0.0002	0	0.0002	-	0.0002	0.00009	0.00024	-	0.0002	-
Radium-226 (Bq/g)	0.0002	0.0003	0.00007	0.00002	0.00006	-	0.00006	-	0.00006	-	0.00006	0.000004	0.00007	0.00001
Thorium-230 (Bq/g)	0.0003	0.0006	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	0.00005

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City (Prospector Bay) Lake Trout													
	Baseline (n = 5)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	-	0.6	0.1	0.5	-	0.5	-	0.5	-
Arsenic	0.08	0.03	0.06	0.02	0.084	0.07	0.12	0.061	0.12	0.11	0.094	0.044	0.074	0.039
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.002	-	0.002	-	0.002	0	0.003	0.001	0.003	0.001	0.002	-	0.002	-
Copper	0.24	0.029	0.22	0.042	0.29	0.027	0.36	0.24	0.30	0.11	0.32	0.078	0.28	0.069
Iron	2.8	1.1	3.0	2.6	2.7	0.62	3.4	2.6	2.7	1.3	2.3	0.36	1.8	0.46
Lead	0.002	-	0.003	0.002	0.002	0.0005	0.002	0	0.002	-	0.002	-	0.003	0.0009
Mercury	0.20	0.046	0.14	0.056	0.17	0.069	0.15	0.031	0.17	0.080	0.14	0.037	0.15	0.042
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	-	0.01	0.004	0.01	0.004	0.01	-	0.01	-	0.01	-	0.01	-
Selenium	0.17	0.005	0.15	0.019	0.15	0.0055	0.15	0.036	0.18	0.0089	0.16	0.012	0.18	0.019
Uranium	0.001	-	0.001	-	0.002	0.002	0.001	-	0.001	-	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.3	0.65	3.0	0.48	4.8	2.0	4.2	1.7	4.1	1.6	3.5	0.53	3.9	0.91
Radionuclides														
Lead-210 (Bq/g)	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0002	-	0.0002	0	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-
Radium-226 (Bq/g)	0.00006	0.000004	0.00009	0.000061	0.00006	0.00001	0.00006	-	0.00006	0.00001	0.00006	0.000007	0.00007	0.00001
Thorium-230 (Bq/g)	0.0001	-	0.0001	0.00004	0.0001	-	0.0001	-	0.00012	0.00004	0.0001	-	0.0001	0.00005

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City (Prospector Bay) Lake Whitefish													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 3)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	0.04	0.5	0	0.5	-	0.5	-	0.5	-
Arsenic	0.07	0.029	0.19	0.026	0.10	0.075	0.070	0.044	0.076	0.049	0.080	0.035	0.080	0.061
Cadmium	0.002	-	0.002	0	0.002	0	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.006	0.005	0.009	0.006	0.008	0.005	0.004	0.001	0.005	0.001	0.003	0.001	0.01	0.003
Copper	0.15	0.026	0.26	0.11	0.29	0.11	0.20	0.032	0.26	0.055	0.16	0.025	0.32	0.09
Iron	1.6	0.38	2.3	0.55	3.0	1.3	1.8	0.23	2.2	0.5	1.8	0.87	3.2	1.3
Lead	0.002	-	0.002	0.0006	0.005	0.004	0.003	0.002	0.002	-	0.002	-	0.002	-
Mercury	0.090	0.036	0.03	0.017	0.039	0.012	0.058	0.019	0.036	0.0080	0.066	0.023	0.027	0.0010
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	-	0.01	0	0.02	0.02	0.01	-	0.01	-	0.01	-	0.01	-
Selenium	0.26	0.040	0.25	0.012	0.24	0.031	0.27	0.036	0.59	0.73	0.29	0.046	0.7	0.62
Uranium	0.001	-	0.001	-	0.002	0.0009	0.001	-	0.001	0.0004	0.001	-	0.004	0.005
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.8	1.6	4.3	1.7	4.6	0.74	4.6	1.5	5.1	0.7	3.6	0.29	4.4	0.25
Radionuclides														
Lead-210 (Bq/g)	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0003	0.0002	0.0002	0.00006	0.0007	0.0003	0.0002	0.0001	0.0005	0.0003	0.00044	-	0.0007	0.0005
Radium-226 (Bq/g)	0.00006	-	0.00006	0	0.00008	0.00002	0.00006	-	0.00006	-	0.00006	-	0.00006	0.000006
Thorium-230 (Bq/g)	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	0	0.0001	-	0.0001	-

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake (Wollaston Lake) Lake Trout													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.50	-	0.5	-	0.5	-	0.5	-	0.5	-	0.5	-
Arsenic	0.04	0.02	0.03	0.02	0.03	0.01	0.05	0.04	0.08	0.03	0.074	0.061	0.032	0.016
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-	0.002	-
Cobalt	0.002	-	0.002	-	0.003	0.002	0.003	0.001	0.002	-	0.002	0.001	0.002	0.0004
Copper	0.45	0.15	0.34	0.030	0.31	0.077	0.28	0.072	0.42	0.16	0.30	0.18	0.33	0.088
Iron	3.0	1.3	2.4	0.36	2.0	0.43	2.7	1.1	3.5	1.1	2.3	1.4	2.4	1.0
Lead	0.002	-	0.003	0.001	0.002	0.0009	0.002	-	0.002	0.0009	0.002	-	0.002	-
Mercury	0.16	0.035	0.12	0.038	0.24	0.083	0.20	0.035	0.15	0.041	0.15	0.043	0.16	0.047
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	0.003	0.01	-	0.02	0.02	0.01	-	0.01	-	0.01	-	0.01	-
Selenium	0.21	0.036	0.20	0.011	0.19	0.019	0.23	0.017	0.20	0.056	0.24	0.11	0.23	0.014
Uranium	0.001	-	0.001	0.0004	0.001	0	0.001	-	0.001	-	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.4	1.3	4.4	0.83	3.2	0.83	3.0	0.85	4.9	1.0	3.9	1.2	4.4	1.6
Radionuclides														
Lead-210 (Bq/g)	0.001	0	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0002	-	0.0004	0.0004	0.0002	-
Radium-226 (Bq/g)	0.00009	0.00008	0.00009	0.00006	0.00005	-	0.00006	-	0.00006	0.000004	0.00006	0.000004	0.00006	0.000009
Thorium-230 (Bq/g)	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	0.00004

Appendix B, Table 2
Summary fish flesh chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake (Wollaston Lake) Lake Whitefish													
	Baseline (n = 10)		2013 (n = 5)		2014 (n = 5)		2016 (n = 3)		2018 (n = 5)		2019 (n = 5)		2020 (n = 5)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals														
Aluminum	0.5	-	0.5	-	0.5	-	0.5	0	0.5	-	0.5	-	0.5	-
Arsenic	0.16	0.042	0.15	0.035	0.11	0.035	0.11	0.076	0.11	0.034	0.080	0.037	0.14	0.099
Cadmium	0.002	-	0.002	-	0.002	-	0.002	-	0.003	0.002	0.002	-	0.002	-
Cobalt	0.002	0.0010	0.002	0	0.003	0.001	0.003	0.0006	0.003	0.001	0.002	0.001	0.003	0.001
Copper	0.16	0.045	0.14	0.015	0.15	0.016	0.26	0.16	0.24	0.048	0.23	0.064	0.22	0.11
Iron	1.7	0.79	2.1	0.59	1.9	0.57	3.8	1.9	4.2	1.5	2.4	0.58	2.2	0.72
Lead	0.002	0	0.002	0	0.003	0.001	0.002	-	0.005	0.002	0.002	-	0.002	-
Mercury	0.050	0.019	0.040	0.023	0.088	0.015	0.081	0.034	0.083	0.014	0.090	0.045	0.092	0.072
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Nickel	0.01	-	0.01	0.004	0.01	0.004	0.01	0	0.01	0.004	0.01	-	0.01	-
Selenium	0.45	0.10	0.36	0.046	0.38	0.039	0.55	0.40	0.42	0.032	0.49	0.23	0.40	0.12
Uranium	0.001	-	0.001	-	0.001	0	0.001	-	0.002	0.0009	0.001	-	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-	0.02	-
Zinc	4.1	0.67	4.0	0.88	3.6	0.89	4.9	2.4	5.0	1.7	3.4	0.32	4.3	0.69
Radionuclides														
Lead-210 (Bq/g)	0.002	-	0.0009	0.0003	0.001	-	0.001	-	0.001	-	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.0005	0.0004	0.0004	0.0004	0.0003	0.0001	0.0004	0.0003	0.0007	0.0002	0.0006	0.0005	0.0002	0.0001
Radium-226 (Bq/g)	0.0005	0.0008	0.0003	0.0004	0.00007	0.00002	0.00006	-	0.00006	0.000005	0.00006	0.000007	0.00006	0.00001
Thorium-230 (Bq/g)	0.0007	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	-	0.0001	0.00004

[1]All concentrations are reported on a µg/g wet weight basis, except when specified otherwise.

[2]Regional reference data are from reference lakes north of Point's North sampled between 2006 and 2014. The median corresponds to the 50th percentile, while the lower and upper limits are the 2.5th and 97.5th percentiles that delimit the 95% range of the reference data.

[3]Regional reference ranges could not be computed when all or nearly all values were lower than the reported detection limit (RDL).

[4]Insufficient sample material available for one of the samples to be analysed for Thorium-230, thus n = 3 for this parameter.

S.D. = Standard deviation; standard deviations of 0 signify "no variance between samples", not "a very small variance"; while "-" indicates insufficient data to calculate S.D.

Values less than the RDL were set equal to the RDL when calculating summary statistics.

Appendix B, Table 3

Summary barren-ground caribou chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Regional Reference Range[2, 3]			
	Lower Limit	Median	Upper Limit	n
Metals				
Aluminum	0.02	0.3	1.1	11
Arsenic	0.01	0.04	0.2	32
Cadmium	0.002	0.004	0.01	13
Cobalt	0.001	0.004	0.009	13
Copper	1.7	2.9	4.9	30
Iron	25	39	62	32
Lead	0.003	0.003	0.39	13
Molybdenum	-	-	-	32
Nickel	0.01	0.02	0.04	32
Selenium	0.06	0.28	0.69	32
Uranium	0.001	0.001	0.003	32
Vanadium	-	-	-	32
Zinc	9.0	29	55	32
Radionuclides				
Lead-210 (Bq/g)	0.001	0.001	0.003	32
Polonium-210 (Bq/g)	-	-	-	0
Radium-226 (Bq/g)	0.00003	0.00006	0.00011	25
Thorium-230 (Bq/g)	-	-	-	0

Appendix B, Table 3
Summary barren-ground caribou chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake								
	Baseline (n = 10)		2013/2014 (n = 5)		2014/2015 (n = 5)		2016/2017		
	Average	S.D.	Average	S.D.	Average	S.D.	1	2	Average
Metals									
Aluminum	0.5	0	0.7	0.3	0.5	-	<0.5	<0.5	0.5
Arsenic	0.02	0.008	0.01	0	0.026	0.009	0.03	0.02	0.03
Cadmium	0.003	0.002	0.003	0.001	0.002	-	0.003	0.005	0.004
Cobalt	0.004	0.002	0.002	0	0.01	0.004	0.004	0.006	0.005
Copper	3.3	0.54	3.6	0.96	4.1	1.0	2.5	2.6	2.6
Iron	41	6.6	47	9.1	43	8.5	35	33	34
Lead	0.08	0.17	0.12	0.25	0.008	0.004	0.043	0.006	0.025
Molybdenum	0.02	-	0.02	-	0.02	-	<0.02	<0.02	0.02
Nickel	0.01	0.005	0.01	-	0.02	0.02	0.01	<0.01	0.01
Selenium	0.19	0.034	0.20	0.036	0.21	0.027	0.17	0.18	0.18
Uranium	0.001	0	0.001	-	0.001	-	<0.001	<0.001	0.001
Vanadium	0.02	-	0.02	-	0.02	-	<0.02	<0.02	0.02
Zinc	26	6.2	23	4.4	23	13.6	35	46	41
Radionuclides									
Lead-210 (Bq/g)	0.001	0	0.001	-	0.001	-	<0.001	<0.001	0.001
Polonium-210 (Bq/g)	0.0080	0.0032	0.015	0.0044	0.015	0.0023	0.0081	0.0063	0.0072
Radium-226 (Bq/g)	0.0028	0.0031	0.00016	0.00013	0.0001	0.0001	<0.00007	<0.00005	0.00006
Thorium-230 (Bq/g)	0.0001	-	0.0001	-	0.0001	0.0001	<0.0001	<0.0001	0.0001

Appendix B, Table 3
Summary barren-ground caribou chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac									
	Baseline (n = 11)		2013/2014 (n = 5)		2014/2015 (n = 3)		2015/2016 (n = 2)	2016/2017		
	Average	S.D.	Average	S.D.	Average	S.D.	Average	1	2	Average
Metals										
Aluminum	0.5	-	0.5	0	0.5	0.06	0.5	<0.5	<0.5	0.5
Arsenic	0.01	0.005	0.01	0.009	0.01	0	0.01	0.03	<0.01	0.02
Cadmium	0.02	0.04	0.003	0.001	0.005	0.002	0.01	0.004	0.004	0.004
Cobalt	0.005	0.003	0.004	0.001	0.005	0.001	0.005	0.005	0.003	0.004
Copper	3.2	0.84	3.9	0.71	2.7	0.80	2.8	2.4	3.4	2.9
Iron	39	8.0	43	9.2	40	6.4	42	34	61	48
Lead	0.005	0.004	0.002	0.0004	0.003	0.001	0.007	0.004	0.005	0.005
Molybdenum	0.02	-	0.02	-	0.02	-	0.02	<0.02	<0.02	0.02
Nickel	0.02	0.02	0.01	-	0.01	0	0.01	<0.01	<0.01	0.01
Selenium	0.17	0.060	0.19	0.021	0.17	0.015	0.16	0.15	0.20	0.18
Uranium	0.001	0.0004	0.001	-	0.001	-	0.001	< 0.001	<0.001	0.001
Vanadium	0.02	-	0.02	-	0.02	-	0.02	<0.02	<0.02	0.02
Zinc	30	18	26	3.2	36	20	36	39	14	27
Radionuclides										
Lead-210 (Bq/g)	0.002	0.002	0.001	-	0.001	-	0.001	<0.001	<0.001	0.001
Polonium-210 (Bq/g)	0.012	0.0057	0.012	0.0015	0.0075	0.00045	0.0016	0.0071	0.012	0.0096
Radium-226 (Bq/g)	0.00008	0.00004	0.00007	0.000009	0.00007	0.00001	0.00008	<0.00008	<0.00009	0.00008
Thorium-230 (Bq/g)	0.0001	0.00007	0.0001	-	0.0001	-	0.0001	<0.0002	<0.0002	0.0002

Appendix B, Table 3

Summary barren-ground caribou chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids						Uranium City	
	Baseline (n = 8)		2013/2014 (n = 3)		2014/2015 (n = 5)		2018 (n = 3)	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Metals								
Aluminum	0.6	0.31	0.5	-	0.5	-	0.5	-
Arsenic	0.01	0.004	0.02	0.01	0.02	0.006	0.01	0
Cadmium	0.003	0.0008	0.004	0.004	0.004	0.002	0.005	0.003
Cobalt	0.004	0.001	0.003	0.001	0.004	0.001	0.004	0.001
Copper	4.1	0.56	2.5	0.81	3.5	0.62	1.8	0.56
Iron	52	3.7	39	1.2	44	5.5	35	2.6
Lead	0.017	0.027	0.030	0.024	0.004	0.003	0.003	0.001
Molybdenum	0.02	-	0.020	-	0.02	-	0.020	-
Nickel	0.01	0	0.08	0.087	0.01	-	0.01	-
Selenium	0.22	0.022	0.14	0.025	0.19	0.017	0.13	0.025
Uranium	0.001	0.0004	0.001	-	0.001	0.0004	0.001	-
Vanadium	0.02	-	<0.02	-	0.02	-	0.02	-
Zinc	19	6.5	35	16.1	22	9.8	47	16
Radionuclides								
Lead-210 (Bq/g)	0.001	0.0004	0.001	0.0006	0.001	-	0.001	-
Polonium-210 (Bq/g)	0.013	0.0123	0.008	0.0021	0.022	0.0069	0.0054	0.00056
Radium-226 (Bq/g)	0.001	0.0005	0.00006	-	0.00008	0.00001	0.0002	-
Thorium-230 (Bq/g)	0.002	-	0.0001	-	0.0002	-	0.0005	-

Appendix B, Table 3
Summary barren-ground caribou results for the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake										
	Baseline (n = 10)		2013/2014 (n = 5)		2014/2015 (n = 4)		2016/2017			2020/2021 (n = 3)	
	Average	S.D.	Average	S.D.	Average	S.D.	1	2	Average	Average	S.D.
Metals											
Aluminum	0.52	0.063	0.5	0.04	0.5	-	<0.5	<0.5	0.	0.5	-
Arsenic	0.01	0.005	0.01	0.005	0.01	0.005	0.03	0.03	0.03	0.01	0.01
Cadmium	0.004	0.002	0.002	0.0004	0.010	0.012	0.004	0.004	0.004	0.004	0.001
Cobalt	0.005	0.002	0.004	0.002	0.009	0.006	0.003	0.004	0.004	0.004	0.002
Copper	3.2	0.68	3.3	0.59	3.2	0.48	3.0	3.6	3.3	2.3	0.90
Iron	41	11	39	9.2	39	11	45	38	42	34	11
Lead	0.015	0.018	0.003	0.001	0.28	0.55	0.52	0.014	0.27	0.75	1.2
Molybdenum	0.02	-	0.02	-	0.02	-	<0.02	<0.02	0.02	0.02	-
Nickel	0.01	0.003	0.01	-	0.01	-	<0.01	<0.01	0.01	0.01	-
Selenium	0.16	0.026	0.18	0.032	0.16	0.021	0.20	0.22	0.1	0.17	0.078
Uranium	0.001	-	0.001	-	0.001	-	<0.001	<0.001	0.001	0.001	-
Vanadium	0.02	-	0.02	-	0.02	-	<0.02	<0.02	0.02	0.02	-
Zinc	29	11.6	18	3.8	26	6.2	43	38	41	54	11
Radionuclides											
Lead-210 (Bq/g)	0.001	0.0003	0.001	-	0.001	-	<0.001	<0.001	0.001	0.001	0.0006
Polonium-210 (Bq/g)	0.013	0.0029	0.011	0.0032	0.0063	0.0015	0.0075	0.0082	0.0079	0.0090	0.0006
Radium-226 (Bq/g)	0.00007	0.00001	0.0001	0.00006	0.00007	0.00002	<0.00007	<0.00007	0.00007	0.0001	0.00002
Thorium-230 (Bq/g)	0.0001	-	0.0001	0.00005	0.0001	-	<0.0001	<0.0001	0.0001	0.0001	0.00006

[1] All concentrations are reported in µg/g wet weight basis, except when specified otherwise.

[2] Regional reference data are from the AWG program (2000 to 2010) and the Uranium City Country Foods program (2011). Data are not available from all communities in all years. The median corresponds to the 50th percentile, while the lower and upper limits are the 2.5th and 97.5th percentiles that delimit the 95% range of the reference data.

[3] Regional reference ranges could not be computed when all or nearly all values were lower than the reported detection limit (RDL).

[4] One of the caribou flesh samples was significantly contaminated by lead shot and removed from the calculation of descriptive statistics. Detailed data are provided in Appendix C.

S.D. = Standard deviation; S.D. of 0 signify "no variance between samples"; "- " indicates insufficient data to calculate S.D.
<RDL = less than the laboratory reported detection limit.

Values less than the RDL were set equal to the RDL when calculating summary statistics.

Appendix B, Table 4

Summary moose chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Regional Reference Range[2,3]			
	Lower Limit	Median	Upper Limit	n
Metals				
Aluminum	0.2	0.5	10.9	40
Arsenic	001	0.02	0.21	37
Cadmium	0.002	0.004	0.014	10
Cobalt	0.007	0.015	0.031	10
Copper	0.7	1.3	2.1	40
Iron	14	30	53	40
Lead	0.002	0.010	0.032	10
Molybdenum	-	-	-	-
Nickel	0.01	0.01	0.10	38
Selenium	0.05	0.23	0.53	37
Uranium	0.001	0.001	0.011	36
Vanadium	-	-	-	-
Zinc	19	48	79	40
Radionuclides				
Lead-210 (Bq/g)	0.0001	0.0002	0.0013	35
Polonium-210 (Bq/g)	-	-	-	-
Radium-226 (Bq/g)	0.00005	0.00005	0.00009	35
Thorium-230 (Bq/g)	-	-	-	-

Appendix B, Table 4
Summary moose chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage								Fond Du Lac	Stony Rapids			
	Baseline (n = 4)		2013/2014 (n = 2)		2014/2015 (n = 2)		2015/2016 (n = 2)		2016 (n = 1)	2016 (n = 1)	2018 (n = 1)	2020/2021 (n = 3)	
	Average	S.D.	Average	<RDL	Average	<RDL	Average	<RDL				Average	S.D.
Metals													
Aluminum	2.2	1.5	0.5	2	2.5	0	2.8	0	0.6	0.5	<0.5	0.7	0.2
Arsenic	0.01	-	0.01	2	0.01	2	0.01	2	<0.01	0.01	<0.01	0.01	-
Cadmium	0.003	0.002	0.003	0	0.027	0	0.005	0	0.002	0.002	<0.002	0.008	0.006
Cobalt	0.014	0.0054	0.014	0	0.018	0	0.011	0	0.011	0.019	0.012	0.018	0.011
Copper	1.7	0.34	1.7	0	1.0	0	1.2	0	1.5	1.7	0.82	1.0	0.34
Iron	25	3.3	32	0	27	0	29	0	38	29	12	37	15
Lead	0.010	0.010	0.003	1	0.020	0	0.003	0	0.01	0.01	<0.002	0.02	0.01
Molybdenum	0.02	-	0.02	2	0.02	2	0.02	2	<0.02	<0.02	<0.02	0.02	-
Nickel	0.02	0.006	0.01	2	0.01	2	0.02	1	<0.01	0.02	<0.01	0.01	-
Selenium	0.12	0.059	0.06	0	0.08	0	0.15	0	0.1	0.09	0.16	0.15	0.020
Uranium	0.001	-	0.001	2	0.002	1	0.002	1	<0.001	<0.001	<0.001	0.001	-
Vanadium	0.02	-	0.02	2	0.02	2	0.02	2	<0.02	<0.02	<0.02	0.02	-
Zinc	39	10	52	0	61	0	55	0	53	49	32	54	6.9
Radionuclides													
Lead-210 (Bq/g)	0.0008	-	0.001	2	0.001	2	0.001	2	<0.001	<0.001	<0.001	0.001	-
Polonium-210 (Bq/g)	0.0009	0.0009	0.0003	1	0.0003	1	0.0008	0	0.0003	0.0006	0.0006	0.0009	0.0001
Radium-226 (Bq/g)	0.0001	0.00007	0.00007	0	0.00006	2	0.00007	0	<0.00005	<0.00007	<0.00007	0.0001	0.00003
Thorium-230 (Bq/g)	0.0001	0.00006	0.0001	2	0.0001	2	0.00010	2	<0.0001	<0.0001	<0.0001	0.0003	0.0001

Appendix B, Table 4
Summary moose chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City										
	Baseline (n = 7)		2013/2014 (n = 3)		2014/2015 (n = 1)	2015/2016 (n = 1)	2016 (n = 1)	2018 (n = 2)	2020/2021 (n = 2)		
	Average	S.D.	Average	S.D.				Average	1	2	Average
Metals											
Aluminum	0.8	0.76	0.5	0.1	0.6	<0.5	0.5	<0.5	<0.5	0.9	0.7
Arsenic	0.01	0	0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Cadmium	0.005	0.003	0.004	0.001	0.056	0.018	0.011	0.004	0.011	0.010	0.011
Cobalt	0.012	0.0047	0.010	0.0015	0.009	0.044	0.009	0.011	0.027	0.005	0.016
Copper	1.8	0.92	1.7	0.26	1.9	1.5	1.8	1.2	1.6	1.2	1.4
Iron	33	6.9	32	5.7	36	33	25	30	35	35	35
Lead	0.003	0.001	0.01	0.01	0.003	0.002	0.01	0.004	<0.002	0.006	0.004
Molybdenum	0.02	-	0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02
Nickel	0.01	0.005	0.01	-	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.01
Selenium	0.12	0.034	0.10	0.021	0.14	0.08	0.13	0.14	0.13	0.09	0.11
Uranium	0.001	0.0008	0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Vanadium	0.02	-	0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02
Zinc	52	13	49	6.1	52	52	35	45	59	42	51
Radionuclides											
Lead-210 (Bq/g)	0.0007	0.0007	0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Polonium-210 (Bq/g)	0.0006	0.0008	0.0004	0.0001	0.0016	0.001	0.0008	0.0003	0.0003	0.0005	0.0004
Radium-226 (Bq/g)	0.00007	-	0.00008	0.00003	<0.00005	0.00006	<0.00009	<0.00007	<0.00006	<0.00006	0.00006
Thorium-230 (Bq/g)	0.0001	0.00005	0.0001	-	<0.0001	<0.0001	<0.0002	<0.0003	<0.0001	<0.0001	0.0001

Appendix B, Table 4
Summary moose chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/ Hatchet Lake		
	2020/2021 (n = 2)		
	1	2	Average
Metals			
Aluminum	<0.5	<0.5	0.5
Arsenic	<0.01	0.01	0.01
Cadmium	0.006	0.004	0.005
Cobalt	0.006	<0.002	0.004
Copper	1.9	2.0	2.0
Iron	40	35	38
Lead	0.29	0.020	0.16
Molybdenum	<0.02	<0.02	0.02
Nickel	<0.01	<0.01	0.01
Selenium	0.18	0.15	0.17
Uranium	<0.001	<0.001	0.001
Vanadium	<0.02	<0.02	0.02
Zinc	50	49	50
Radionuclides			
Lead-210 (Bq/g)	<0.001	0.002	0.002
Polonium-210 (Bq/g)	0.0030	0.0034	0.0032
Radium-226 (Bq/g)	<0.0001	<0.0001	0.0001
Thorium-230 (Bq/g)	<0.0002	<0.0002	0.0002

1 All concentrations are reported on a µg/g wet weight basis, except when specified otherwise.
2 Regional reference data are from the AWG program. Data used are from 2000 to 200. However, data are not available from all communities in all years.
3 Regional reference ranges could not be computed when all or nearly all values were lower than the reported detection limit (RDL).

S.D. = Standard deviation; S.D. of 0 signify "no variance between samples"; "- " indicates insufficient data to calculate S.D.
<RDL = less than the laboratory reported detection limit.

Values less than the RDL were set equal to the RDL when calculating summary statistics.

Appendix B, Table 5

Summary barren-ground caribou and moose organ chemistry results for the EARMP community program, 2014 to 2021.

Chemical[1]	Caribou													
	Black Lake			Fond du Lac				Uranium City				Wollaston Lake		
	Heart (n = 1)	Kidney (n = 2)		Heart (n = 1)	Kidney (n = 5)		Liver (n = 1)	Heart (n = 3)		Liver (n = 3)		iver (n = 5)		Heart (n = 1)
		Average	<RDL		Average	<RDL		Average	<RDL	Average	<RDL	Average	<RDL	
Metals														
Aluminum	<0.5	0.6	1	<0.5	0.5	5	<0.5	0.5	3	0.5	3	0.6	2	<0.5
Arsenic	0.01	0.02	0	0.01	0.01	2	<0.01	0.01	3	0.01	2	0.01	1	<0.01
Cadmium	0.004	5.8	0	0.002	8.0	0	0.004	0.003	1	1.2	0	1.6	0	0.005
Cobalt	0.014	0.049	0	0.02	0.036	0	0.013	0.011	0	0.061	0	0.075	0	0.017
Copper	4.5	4.3	0	4.5	4.2	0	3.3	4.5	0	30	0	35	0	4.1
Iron	55	31	0	59	46	0	37	62	0	243	0	194	0	69
Lead	0.005	0.056	0	0.01	0.086	0	0.003	0.002	2	0.07	0	0.098	0	0.31
Molybdenum	<0.02	0.18	0	<0.02	0.13	0	<0.02	0.02	3	0.37	0	0.76	0	<0.02
Nickel	<0.01	0.02	1	0.01	0.01	3	0.02	0.01	3	0.01	3	0.01	3	<0.01
Selenium	0.27	0.97	0	0.26	1.3	0	0.18	0.25	0	0.30	0	0.39	0	0.27
Uranium	<0.001	0.001	2	<0.001	0.001	5	<0.001	0.001	3	0.001	3	0.003	5	<0.001
Vanadium	<0.02	0.02	2	<0.02	0.02	5	<0.02	0.02	3	0.02	3	0.02	5	<0.02
Zinc	19	24	0	20	26	0	37	18	0	24	0	33	0	20
Radionuclides														
Lead-210 (Bq/g)	<0.001	0.036	0	<0.001	0.064	0	<0.001	0.002	3	0.084	0	0.063	1	<0.001
Polonium-210 (Bq/g)	0.012	0.070	0	0.0092	0.081	0	0.0088	0.012	0	0.18	0	0.22	0	0.015
Radium-226 (Bq/g)	<0.00006	0.0003	1	<0.00007	0.0005	0	<0.00006	0.0005	3	0.001	3	0.0001	2	<0.0001
Thorium-230 (Bq/g)	<0.0001	0.0003	2	<0.0001	0.0004	4	<0.0001	0.001	3	0.002	3	0.0002	5	<0.0002

Appendix B, Table 5

Summary barren-ground caribou and moose organ chemistry results for the EARMP community program, 2014 to 2021.

Chemical[1]	Moose											
	Camsell Portage				Stony Rapids				Uranium City			
	Liver (n = 3)		Kidney (n = 4)		Kidney (n = 2)		Heart (n = 2)		Liver (n = 3)		Kidney (n = 3)	
	Average	<RDL	Average	<RDL	Average	< RDL	Average	<RDL	Average	<RDL	Average	<RDL
Metals												
Aluminum	0.7	1	0.7	3	0.5	2	0.5	2	0.8	2	0.5	3
Arsenic	0.01	3	0.01	4	0.01	1	0.01	2	0.01	2	0.01	2
Cadmium	1.2	0	6.7	0	0.92	0	0.01	0	0.64	0	12.2	0
Cobalt	0.21	0	0.14	0	0.24	0	0.12	0	0.067	0	0.15	0
Copper	33	0	3.1	0	16.9	0	3.8	0	18.9	0	2.7	0
Iron	137	0	61	0	121	0	57	0	313	0	35	0
Lead	0.003	1	0.003	2	0.003	1	0.009	1	0.009	1	0.005	1
Molybdenum	1.0	0	0.33	0	0.77	0	0.02	0	0.49	1	0.20	0
Nickel	0.01	3	0.05	0	0.03	0	0.01	2	0.01	3	0.05	0
Selenium	0.45	0	0.87	0	0.59	0	0.21	0	0.30	0	0.69	0
Uranium	0.007	3	0.001	4	0.001	2	0.003	1	0.004	3	0.001	3
Vanadium	0.02	3	0.02	4	0.02	2	0.02	2	0.02	3	0.02	3
Zinc	18	0	21	0	24	0	23	0	17	0	24	0
Radionuclides												
Lead-210 (Bq/g)	0.001	2	0.002	2	0.004	1	0.001	2	0.001	1	0.001	0
Polonium-210 (Bq/g)	0.011	0	0.010	0	0.011	0	0.0012	0	0.0032	0	0.0044	0
Radium-226 (Bq/g)	0.0001	1	0.0002	1	0.00008	2	0.0001	2	0.0002	0	0.0001	2
Thorium-230 (Bq/g)	0.0002	3	0.0002	4	0.0004	2	0.0004	1	0.0001	3	0.0001	3

[1] All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

<RDL = less than the laboratory reported detection limit.

Values less than the RDL were set equal to the RDL when calculating summary statistics.

APPENDIX C

DETAILED DATA

LIST OF TABLES

APPENDIX C, TABLE 1

Fall water chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake								Camsell Portage						Fond du Lac							
	Black Lake								Ellis Bay, Lake Athabasca						Fond du Lac River							
	2011	2012	2013	2014	2017	2018	2019	2020	2011	2012	2013	2014	2017	2019	2011	2012	2013	2014	2017	2018	2019	2020
Inorganic Ions																						
Bicarbonate	20	26	16	15	28	16	18	15	35	30	34	38	35	37	18	27	28	17	8	8	20	12
Calcium	3.5	3.3	3.4	3.4	2.7	3.1	3.1	2.9	6.9	7.1	7.4	7.3	7	7.1	3.7	3.9	3.8	3.7	3.1	3.2	3.4	3.2
Carbonate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	3.6	2	4	4.2	1.8	3.2	3.6	3.2	3.1	2.9	3.4	3	3.1	3.6	2.8	2.8	2.9	2.9	2.2	2.1	3	2.1
Hydroxide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	1.3	1.2	1.3	1.3	1.2	1.2	1.1	1.1	2.1	2.1	2.1	2.2	2.1	2	1.3	1.4	1.4	1.4	1.2	1.2	1.2	1.2
Potassium	0.8	0.7	0.8	0.6	0.8	0.7	0.7	0.6	0.9	0.9	0.8	0.7	1	0.8	0.8	0.8	0.8	0.6	0.8	0.8	0.7	0.7
Sodium	1.8	1.5	1.7	1.8	1.4	1.6	1.6	1.6	2.5	2.5	2.6	2.6	2.7	2.6	1.6	1.7	1.7	1.6	1.5	1.5	1.6	1.4
Sulphate	1.4	1	1.2	1.1	1.3	1.1	1.1	0.9	3.6	3.3	3.7	3.8	3.7	3.7	1.5	1.5	1	1.4	1.3	1.3	1.4	1.3
Metals																						
Aluminum	0.002	0.0026	0.0026	0.0027	0.0061	0.0073	0.0069	0.0066	0.0016	0.001	0.0044	0.0022	0.0027	0.0039	0.014	0.02	0.011	0.019	0.011	0.011	0.008	0.013
Antimony	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic (µg/L)	0.1	0.1	0.2	0.2	<0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Barium	0.0044	0.0044	0.0043	0.0043	0.0048	0.0038	0.0046	0.0048	0.01	0.01	0.011	0.011	0.011	0.011	0.0051	0.0055	0.0052	0.0053	0.0046	0.0045	0.0045	0.0049
Beryllium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Boron	0.01	<0.01	<0.01	0.01	<0.01	0.02	<0.0001	0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Cadmium	0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.01	<0.00001	0.00001	0.00001	<0.00001	<0.00001	0.00001	<0.00001	0.00002	<0.00001	0.00001	<0.00001	0.00003	0.00001	<0.00001	<0.00001
Chromium	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.00001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cobalt	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Copper	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0005	<0.0005	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	0.0002	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	0.0003
Iron	0.026	0.013	0.022	0.021	0.022	0.17	0.027	0.02	0.0049	0.0044	0.0078	0.0056	0.0054	0.0052	0.023	0.03	0.017	0.023	0.021	0.023	0.016	0.05
Fluoride	0.04	0.07	0.07	0.06	0.03	0.07	0.05	0.065	0.06	0.07	0.08	0.07	0.04	0.07	0.05	0.07	0.05	0.06	0.06	0.07	0.06	0.047
Lead	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Manganese	0.036	0.0068	0.021	0.017	0.017	0.032	0.016	0.023	0.0008	0.0008	0.0006	0.0006	0.0008	0.0007	0.003	0.0027	0.0034	0.0037	0.0036	0.003	0.0032	0.0049
Mercury (µg/L)	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001
Molybdenum	0.0002	0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001
Nickel	0.0002	0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0002	0.0001	0.0002	0.0002	0.0002
Selenium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Silver	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Strontium	0.047	0.033	0.049	0.058	0.031	0.066	0.043	0.041	0.051	0.05	0.054	0.059	0.052	0.053	0.043	0.04	0.042	0.045	0.034	0.032	0.038	0.03
Thallium	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Tin	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	0.0008	0.0008	0.0004	0.0016	0.0008	0.0004	0.0003	0.0006
Uranium (µg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Zinc	0.0018	<0.0005	<0.0005	<0.0005	<0.0005	0.0019	0.0007	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0009	<0.0005	<0.0005
Nutrients																						
Ammonia as nitrogen	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.02	<0.01	<0.01	<0.01
Nitrate	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.04	<0.04	0.09	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Nitrate+Nitrite as nitrogen	-	-	-	-	<0.01	<0.01	<0.01	0.01	-	-	-	-	<0.01	<0.01	-	-	-	-	<0.01	<0.01	<0.01	<0.01
Organic carbon	2.5	3.8	2.9	3	3.6	3.6	3	3.8	2.8	3.5	3.2	3.4	3.3	3.1	2.7	1.9	3.2	3.4	3.6	4	3.3	4.4
Phosphorus	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.24
Total Kjeldahl nitrogen	0.27	0.2	0.26	0.22	0.19	0.31	0.24	0.23	0.23	0.21	0.22	0.19	0.17	0.14	0.26	0.22	0.21	0.13	0.18	0.22	0.12	0.24
Total nitrogen	0.27	0.2	0.26	0.22	0.19	0.31	0.24	<0.01	0.23	0.23	0.22	0.19	0.17	0.14	0.26	0.22	0.21	0.13	0.18	0.22	0.12	<0.01
Physical Properties																						
P. alkalinity	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (pH units)	7.12	7.18	7.38	6.76	7.34	7.48	7.08	7.05	7.46	7.5	7.71	7.26	7.7	7.49	7.22	7.14	6.86	6.88	7.32	7.48	7.15	7.16
Specific conductivity (µS/cm	40	38	38	43	29	28	31	26	66	69	69	73	66	63	39	44	42	44	32	28	32	27
Sum of ions	32	36	28	28	37	27	29	25	54	49	54	58	55	57	30	39	40	29	18	18	31	22
Total alkalinity	16	21	13	12	23	13	15	12	29	25	28	31	29	30	15	22	23	14	7	7	16	10
Total dissolved solids	30	30	14	31	26	32	30	29	40	44	27	46	41	44	28	32	34	33	25	29	35	28
Total hardness	14	13	29	14	12	13	12	12	26	26	47	27	26	26	14	15	15	15	13	13	13	13
Total suspended solids	<1	1	2	1	<1	2	<1	1	<1	<1	<1	1	<1	<1	<1	2	1	2	<1	1	<1	1
Turbidity (NTU)	0.6	0.7	0.7	0.7	0.5	0.5	0.6	0.9	0.3	0.4	0.4	0.4	0.4	0.4	1	1.1	0.8	1.1	0.6	0.4	0.7	0.9
Radionuclides																						
Lead-210 (Bq/L)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Polonium-210 (Bq/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Radium-226 (Bq/L)	<0.005	0.009	<0.005	0.008	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005
Thorium-230 (Bq/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

APPENDIX C, TABLE 1

Fall water chemistry results for the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids Fond du Lac River								Uranium City Fredette River								Wollaston Lake/Hatchet Lake Welcome Bay, Wollaston Lake							
	2011	2012	2013	2014	2017	2018	2019	2020	2011	2012	2013	2014	2017	2018	2019	2020	2011	2012	2013	2014	2017	2018	2019	2020
Inorganic Ions																								
Bicarbonate	21	20	16	16	12	15	17	15	63	60	63	65	61	57	60	55	17	20	15	15	17	10	21	15
Calcium	3.4	3.4	3.3	3.2	2.9	3	3	3	15	16	17	16	15	16	15	15	3.4	3.5	3.5	3.3	3.3	3.3	3.2	3.2
Carbonate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	3.2	2.8	2.8	2.4	1.5	1.6	2	2.5	1.5	1.2	2.3	1.2	1.1	1.2	1.6	1.2	0.4	0.5	0.4	0.3	0.4	0.3	0.5	0.3
Hydroxide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Magnesium	1.1	1.3	1.2	1.2	1.1	1.2	1	1.1	2.9	3	3.2	3.2	2.9	3	2.8	2.8	1.1	1.1	1	1	0.9	1	0.9	1
Potassium	0.8	0.7	0.8	0.6	0.7	0.7	0.6	0.6	0.9	1	1.1	0.9	1.1	1	0.9	0.9	0.7	0.6	0.7	0.5	0.7	0.6	0.6	0.6
Sodium	1.7	1.6	1.6	1.5	1.3	1.4	1.4	1.5	1.9	1.6	1.8	1.7	1.6	1.6	1.6	1.6	1.4	1.4	1.4	1.3	1.4	1.3	1.3	1.3
Sulfate	1.4	1.2	1.4	1.3	1.2	1.2	1.3	1	4.5	3.8	4.1	5.5	4.3	4.2	4.1	3.9	4	4	3.9	4	4	4	3.5	3.4
Metals																								
Aluminum	0.018	0.0084	0.012	0.012	0.014	0.0099	0.0093	0.017	0.0051	0.0051	0.0057	0.0033	0.004	0.0033	0.0059	0.0076	0.0047	0.014	0.0074	0.0069	0.0058	0.005	0.0068	0.006
Antimony	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Arsenic (µg/L)	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	0.1	<0.1
Barium	0.0046	0.0043	0.0044	0.0043	0.0045	0.0041	0.0044	0.0048	0.032	0.031	0.032	0.028	0.03	0.026	0.029	0.029	0.0041	0.0042	0.0042	0.0039	0.0043	0.004	0.0039	0.0042
Beryllium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Boron	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium	0.00002	<0.00001	0.00001	<0.00001	0.00001	0.00001	<0.00001	<0.00001	0.00001	0.00001	0.00002	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00014	<0.00001	<0.00001	<0.00001
Chromium	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Cobalt	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Copper	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	0.0004	0.0003	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Iron	0.074	0.045	0.037	0.034	0.05	0.06	0.031	0.03	0.031	0.041	0.05	0.027	0.045	0.028	0.029	0.09	0.014	0.035	0.043	0.034	0.046	0.013	0.011	0.05
Fluoride	0.04	0.06	0.08	0.06	0.03	0.07	0.06	0.084	0.1	0.13	0.12	0.12	0.09	0.14	0.12	0.032	0.05	0.07	0.08	0.07	0.03	0.08	0.06	0.014
Lead	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Manganese	0.027	0.013	0.014	0.01	0.015	0.014	0.012	0.017	0.014	0.024	0.026	0.017	0.023	0.012	0.015	0.01	0.0047	0.0087	0.0066	0.0053	0.0068	0.0047	0.0037	0.0041
Mercury (µg/L)	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001
Molybdenum	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0012	0.0012	0.001	0.0009	0.0008	0.0007	0.0006	0.0006
Nickel	0.0002	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0001	<0.0001
Selenium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Silver	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Strontium	0.044	0.04	0.039	0.04	0.027	0.028	0.03	0.034	0.049	0.045	0.047	0.049	0.043	0.042	0.045	0.041	0.012	0.012	0.012	0.013	0.012	0.012	0.012	0.011
Thallium	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Tin	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium	0.0016	0.0007	0.0012	0.0006	0.0006	0.0005	<0.0002	0.0007	0.0003	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Uranium (µg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	3.5	1.3	1.4	1.7	1	1	1	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vanadium	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Zinc	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.0005	0.0008	<0.0005	0.0014	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0008	<0.0005
Nutrients																								
Ammonia as nitrogen	<0.01	<0.01	0.05	0.04	0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.05	0.07	0.06	<0.01	0.12	0.04	<0.01	<0.01	<0.01	0.04	<0.01	0.08	0.07	<0.01
Nitrate	<0.04	<0.04	<0.04	0.09	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	0.18	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Nitrate+Nitrite as nitrogen	-	-	-	-	0.01	<0.01	<0.01	<0.01	-	-	-	-	0.01	<0.01	<0.01	<0.01	-	-	-	-	<0.01	<0.01	<0.01	<0.01
Organic carbon	2.7	3.8	4.1	3.4	3.8	4.2	3.5	4.2	7.4	9.9	7.6	7.7	7.4	2.8	7.4	8.4	2.5	3	2.8	2.8	2.8	8.1	2.8	2.9
Phosphorus	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.22	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.33	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.17
Total Kjeldahl nitrogen	0.28	0.23	0.49	0.18	0.21	0.22	0.24	0.22	0.41	0.37	0.43	0.32	0.29	0.15	0.4	0.33	0.28	0.21	0.2	0.17	0.33	0.31	0.12	0.17
Total nitrogen	0.28	0.23	0.49	0.2	0.22	0.22	0.24	<0.01	0.41	0.37	0.46	0.36	0.3	0.15	0.4	<0.01	0.28	0.21	0.2	0.17	0.33	0.31	0.12	<0.01
Physical Properties																								
P. alkalinity	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
pH (pH units)	7.3	7.3	7.38	6.89	7.39	7.53	7.13	7.08	7.75	7.72	7.94	7.46	8	8.11	7.72	7.72	7.1	7.12	7.37	6.91	7.38	7.53	7.11	7.14
Specific conductivity (µS/cm	39	40	36	38	28	25	27	25	114	112	113	114	102	98	101	92	34	37	34	36	32	27	30	25
Sum of ions	33	31	27	26	21	24	26	25	90	87	93	94	87	84	86	80	28	31	26	25	28	21	31	25
Total alkalinity	17	16	13	13	10	12	14	12	52	49	52	53	50	47	49	45	14	16	12	12	14	8	17	12
Total dissolved solids	32	33	13	28	21	34	31	31	72	76	56	83	67	81	84	71	24	28	13	25	24	33	21	21
Total hardness	13	14	31	13	12	12	12	12	49	52	80	53	49	52	49	49	13	13	28	12	12	12	12	12
Total suspended solids	5	2	2	2	2	2	<1	2	2	1	<1	<1	<1	1	<1	<1	<1	2	2	1	<1	2	<1	<1
Turbidity (NTU)	1.3	1.2	1	0.7	0.6	0.5	0.7	1.3	0.3	0.6	0.4	0.3	0.5	0.3	0.4	0.8	0.3	0.8	0.7	0.4	0.3	0.3	0.4	0.9
Radionuclides																								
Lead-210 (Bq/L)	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Polonium-210 (Bq/L)	<0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Radium-226 (Bq/L)	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	0.008	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	0.005	<0.005
Thorium-230 (Bq/L)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

[1]All values are in mg/L (total), unless specified otherwise.

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake (Black Lake)																			
	Lake Trout																			
	2011					2012					2013					2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.05	0.06	0.07	0.05	0.1	0.06	0.14	0.07	0.06	0.06	0.05	0.04	0.04	0.05	0.06	0.07	0.1	0.04	0.04	0.07
Barium	0.02	0.03	0.01	<0.01	0.03	<0.01	0.01	0.01	0.02	0.01	0.01	<0.01	<0.01	0.01	0.02	0.01	0.03	0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	<0.002	0.002	0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	0.003	0.002	0.006	<0.002
Copper	0.27	0.41	0.31	0.22	1	0.31	0.31	0.43	0.18	0.25	0.22	0.24	0.26	0.25	0.23	0.42	0.35	0.19	0.45	0.23
Iron	1.9	3.3	2	4.5	6	2.2	2	2.6	1.5	2.9	1.7	2	2	1.6	1.5	3.9	3.3	1.4	2.8	1.8
Lead	<0.002	0.004	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.007	<0.002	<0.002	<0.002
Manganese	0.06	0.08	0.08	0.08	0.09	0.08	0.06	0.05	0.07	0.1	0.08	0.06	0.09	0.09	0.06	0.1	0.12	0.07	0.08	0.09
Mercury	0.45	0.41	0.37	0.33	0.37	0.16	0.16	0.18	0.36	0.35	0.42	0.5	0.45	0.37	0.28	0.37	0.53	0.37	0.45	0.5
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.04	0.01	<0.01	<0.01
Selenium	0.11	0.15	0.15	0.11	0.13	0.15	0.18	0.17	0.18	0.16	0.13	0.11	0.13	0.17	0.16	0.18	0.14	0.13	0.15	0.16
Silver	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.1	0.07	0.09	0.05	0.13	0.07	0.21	0.27	0.2	0.8	0.05	0.03	0.23	0.27	0.07	0.15	0.12	0.08	0.3	0.06
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.09	0.08	0.07	0.08	0.07	0.07	0.08	0.07	0.08	0.01	0.01	0.01	0.02	0.01	0.09	0.09	0.08	0.07	0.08
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	2.9	4.7	2.5	2.2	5.9	3.6	4.7	4.4	3.6	6.3	3	3.2	4.1	3.5	3.3	5.5	4.1	2.5	4	2.5
Physical Properties																				
Moisture (%)	77.19	77.72	73.93	76.78	77.42	73.79	71.07	77.81	77.02	76.28	75.03	76.5	74.42	74.85	72.4	73.77	75.34	76.29	75.02	73.38
Length (cm)	44.9	51.2	48.7	48.3	50.5	51.3	52.7	51.2	62.5	65.2	54	56	53.2	54.8	49.6	52.6	53.2	53.5	50.5	54
Weight (g)	1730	1710	1480	1450	1740	1360	1740	1180	2060	2410	1940	2200	1720	1880	1760	1920	2240	1965	1900	2190
Sex	F	M	M	F	M	F	M	M	F	M	F	F	M	M	M	M	F	F	M	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	12	10	7	10	10	7	7	6	27	19	12	17	13	13	13	14	14	9	14	14
Radionuclides																				
Lead-210 (Bq/g)	0.002	<0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00004	<0.00006	<0.00007	<0.00005	<0.00006	<0.00006	<0.0001	<0.00005	0.00005	<0.00006	<0.00006	0.0001	<0.00008	<0.00006	<0.00006	<0.00006	<0.00004	<0.00005	<0.00003	<0.00005
Thorium-230 (Bq/g)	<0.00009	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.00009	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.00007	<0.0001	<0.00007	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake (Black Lake)																	
	Lake Trout																	
	2016			2018					2019					2020				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT06	LT07	LT08	LT09	LT10
Metals																		
Aluminum	0.7	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.1	0.07	0.07	0.07	0.06	0.06	0.09	0.05	0.06	0.02	0.06	0.08	0.06	0.12	0.07	0.13	0.09	0.06
Barium	0.04	0.16	0.18	0.04	0.09	<0.01	0.05	0.04	0.01	0.03	0.01	0.02	0.02	0.02	<0.01	0.02	0.02	0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	0.004	<0.002	0.003	0.002	<0.002	0.003	0.003	<0.002	0.002	0.002	0.003	<0.002	0.004	0.002	0.002	0.003	0.005
Copper	0.29	0.24	0.21	0.35	0.39	0.24	0.3	0.15	0.39	0.28	0.25	0.43	0.32	0.4	0.21	0.31	0.76	0.34
Iron	3.6	2.8	2.4	3.1	6.1	2.3	4.4	4.4	2.4	3.9	2.3	5.9	2.9	5.7	2.3	2.8	3.8	3.4
Lead	0.003	0.004	0.005	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.005
Manganese	0.12	0.14	0.08	0.09	0.1	0.09	0.1	0.09	0.09	0.09	0.1	0.12	0.09	0.09	0.08	0.07	0.08	0.08
Mercury	0.4	0.31	0.35	0.48	0.37	0.56	0.36	0.43	0.3	0.45	0.44	0.37	0.37	0.22	0.59	0.44	0.15	0.37
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01
Selenium	0.15	0.16	0.15	0.1	0.12	0.12	0.12	0.14	0.09	0.09	0.1	0.14	0.12	0.19	0.15	0.13	0.14	0.13
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.19	0.68	0.1	0.44	0.11	0.07	0.2	0.07	0.19	0.26	0.26	0.28	0.32	0.37	0.23	0.27	0.34	0.18
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.01	0.03	0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.02	0.01	0.01	<0.01	0.06	0.06	0.04	0.05	0.04
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	5.8	4.2	3.7	4.5	5.4	2.6	4.5	2.9	4	4.6	3.5	6.1	3.7	4.3	3.6	4	4.6	3.5
Physical Properties																		
Moisture (%)	76.61	69.74	66.98	80.57	78.5	79.94	79.39	76.88	77.98	81.02	79.47	79.31	76.58	74.34	79.34	77.52	74.8	80.15
Length (cm)	48	52.4	50.5	53.3	51.2	55	56.5	59.5	49.1	51.4	50.9	54.4	52.7	46.0	54.2	49.7	41.7	48.5
Weight (g)	1580	1920	1580	1610	1680	1640	1590	2250	1600	1500	1900	2040	1880	1210	1980	1650	1010	1360
Sex	M	M	M	F	M	F	F	M	M	M	F	M	M	M	F	F	M	F
Maturity	A	A	A	A	A	A	A	U	A	A	A	A	A	A	A	A	A	A
Age (years)	15	14	16	12	18	19	23	22	10	17	15	19	19	6	25	11	6	9
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00007	<0.00005	<0.00006	<0.00006	<0.00005	<0.00006	<0.00006	<0.00006	<0.00006	<0.00007	<0.00006	<0.00006	<0.00007	<0.00007	0.00008	<0.00004
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.00009

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake (Black Lake)																			
	Lake Whitefish																			
	2011					2012					2013					2014				
	GN1-1 LW06	GN1-1 LW07	GN1-1 LW08	GN1-1 LW09	GN1-1 LW10	GN1-1 LW06	GN1-1 LW07	GN1-1 LW08	GN1-1 LW09	GN1-1 LW10	GN1-1 LW06	GN1-1 LW07	GN1-1 LW08	GN1-1 LW09	GN1-1 LW10	GN1-1 LW06	GN1-1 LW07	GN1-1 LW08	GN1-1 LW09	GN1-1 LW10
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.25	0.27	0.4	0.14	0.37	0.04	0.05	0.08	0.14	0.04	0.01	0.03	0.03	0.03	0.02	0.2	0.16	0.2	0.07	0.2
Barium	0.06	0.13	0.09	<0.01	0.02	0.02	0.01	0.02	<0.01	0.02	0.02	0.02	0.02	0.01	0.01	<0.01	0.02	<0.01	<0.01	0.02
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	0.005	<0.002	0.003	0.003	<0.002	0.002	<0.002	<0.002	0.003	<0.002	0.002	<0.002	0.005	0.002	<0.002	<0.002	0.005	0.003	0.009
Copper	0.24	0.21	0.12	0.17	0.14	0.16	0.19	0.25	0.28	0.18	0.06	0.27	0.09	0.08	0.07	0.14	0.12	0.58	0.27	0.21
Iron	2.3	2.9	2.5	1.4	1.5	1	2	2.7	4	1.1	1.8	2.5	1.2	1.1	1.1	1.1	1.3	4	2.8	2.4
Lead	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.003	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003
Manganese	0.18	0.39	0.22	0.06	0.09	0.06	0.07	0.11	0.06	0.06	0.08	0.07	0.07	0.05	0.04	0.08	0.11	0.09	0.09	0.1
Mercury	0.16	0.13	0.14	0.06	0.21	0.13	0.16	0.15	0.02	0.05	0.05	0.09	0.03	0.04	0.08	0.097	0.13	0.068	0.1	0.12
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02
Selenium	0.3	0.35	0.25	0.36	0.31	0.28	0.24	0.26	0.15	0.2	0.2	0.23	0.3	0.18	0.19	0.27	0.34	0.29	0.25	0.36
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.79	0.24	1.2	0.28	0.22	0.27	0.31	0.25	0.16	0.17	0.55	0.45	0.47	0.47	0.42	0.27	0.49	0.25	0.21	0.28
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.09	0.08	0.08	0.08	0.07	0.08	0.09	0.08	0.08	0.02	0.01	0.02	0.01	<0.01	0.07	0.08	0.07	0.09	0.08
Uranium	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3.9	4.6	3.5	4.7	3.3	6.7	6.2	4.6	4.4	4.4	3.4	4.7	4	3.5	4	3.6	3.1	4.9	3.5	3.7
Physical Properties																				
Moisture (%)	75.22	76.01	76.93	75.27	75.79	74.3	72.89	75.74	78.39	76.9	79.98	78.5	79.92	79.2	78.64	75.64	76.94	77.68	75.67	75.1
Length (cm)	38.3	41.8	45.5	48	45.2	46	45.7	45.5	40.2	46.2	43.9	41.5	38	43.2	45.6	39.5	42.4	38	41	40.7
Weight (g)	840	1060	1360	890	1450	980	1020	920	760	1140	1200	920	660	1100	1320	950	1060	805	895	950
Sex	F	M	M	F	F	M	M	M	M	F	M	M	F	F	F	F	F	M	M	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	21	21	26	10	27	9	15	15	7	10	12	10	10	11	15	15	16	10	14	15
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.004	<0.004	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.0002	<0.0002	0.0005	0.0007	<0.0002	<0.0002	<0.0002	<0.001	<0.001	<0.0002	0.0004	0.0006	0.0003	0.0003	0.0002	0.0003	<0.0002	0.0003	<0.0002	0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	0.00009	<0.00007	<0.00006	<0.00006	<0.00006	0.001	0.002	<0.00006	0.0002	<0.00007	0.0004	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	0.0002
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.002	<0.002	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Black Lake (Black Lake)																	
	Lake Whitefish																	
	2016			2018					2019					2020				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW01	LW02	LW03	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05
Metals																		
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.04	0.38	0.24	0.02	0.17	0.33	0.06	0.12	0.03	0.17	0.11	0.1	0.1	0.13	0.12	0.22	0.22	0.04
Barium	0.06	0.06	0.01	0.04	0.02	0.04	0.24	0.14	0.02	0.06	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.006	0.002	0.002	<0.002	0.003	0.004	0.003	0.004	0.002	<0.002	<0.002	0.002	0.004	0.008	0.003	0.003	0.004	<0.002
Copper	0.1	0.17	0.15	0.36	0.18	0.59	0.17	0.14	0.16	0.21	0.22	0.12	0.13	0.19	0.12	0.17	0.18	0.16
Iron	2.4	4	2.6	7	2.9	7.6	3.3	2	1.8	2.3	2.9	2.5	2.1	2.9	1.5	2.4	2.2	1.6
Lead	0.002	0.004	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.1	0.17	0.13	0.14	0.1	0.13	0.12	0.1	0.07	0.11	0.08	0.08	0.12	0.09	0.1	0.1	0.08	0.09
Mercury	0.061	0.12	0.088	0.11	0.14	0.1	0.1	0.1	0.12	0.12	0.1	0.1	0.15	0.06	0.12	0.1	0.11	0.06
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	0.02	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.32	0.44	0.43	0.13	0.26	0.2	0.17	0.28	0.13	0.2	0.19	0.17	0.13	0.09	0.18	0.24	0.24	0.14
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.69	0.15	0.31	0.27	0.15	0.12	0.15	0.22	0.28	0.3	0.17	0.16	0.13	0.23	0.4	0.16	0.22	0.24
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.02	<0.01	0.01	<0.01	<0.01	0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	0.06	0.04	0.05	0.04
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4.8	4.2	4.8	4.5	4.8	5.2	3	3.6	3.4	3.2	3.9	2.4	3.4	6.1	3.2	4.2	4.9	3.8
Physical Properties																		
Moisture (%)	75.55	80.28	76.47	76.92	82.85	80.16	80.48	80.51	77.49	78.97	77.39	76.72	78.46	78.9	78.96	79.76	79.07	76.91
Length (cm)	50.6	47.1	39.9	47	44.5	39	42.2	45.7	49.5	45	38.8	43.6	47.6	43.3	42.5	40.4	41.7	46.0
Weight (g)	1580	1280	940	1420	1170	720	1000	1140	1920	1420	880	1140	2080	1240	1040	900	890	1520
Sex	F	F	M	F	M	M	F	F	F	F	F	F	F	F	F	F	F	F
Maturity	A	A	A	A	U	U	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	16	27	16	18	18	21	11	18	20	31	20	19	31	8	24	18	25	10
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Polonium-210 (Bq/g)	0.0004	0.0004	0.0006	<0.0002	0.0004	0.0002	0.0004	0.0002	<0.0002	0.0002	0.0003	<0.0002	<0.0002	0.0002	0.0002	0.0003	0.0009	0.0008
Radium-226 (Bq/g)	<0.00006	<0.00005	<0.00006	<0.00006	<0.00005	<0.00005	<0.00006	<0.00005	<0.00006	<0.00006	<0.00007	<0.00006	<0.00007	<0.00006	<0.00006	<0.00007	<0.00007	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

GN = gill net; LT = lake trout; LW = lake whitefish; M = male; F = female; A = adult, U = unknown.

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City (Prospectors Bay)														
	Lake Trout														
	2012					2013					2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals															
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.07	0.07	0.08	0.07	0.13	0.07	0.04	0.04	0.07	0.07	0.06	0.04	0.07	0.05	0.2
Barium	0.01	0.03	0.02	0.02	0.03	<0.01	<0.01	<0.01	0.04	0.01	0.03	0.06	0.02	0.03	0.04
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.002	0.002
Copper	0.27	0.21	0.21	0.26	0.26	0.18	0.19	0.22	0.28	0.25	0.29	0.27	0.3	0.25	0.32
Iron	2.2	4.5	2	3.3	1.9	1.2	1.6	2.7	7.5	1.9	2.1	2.1	2.7	3.6	2.8
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.004	0.002	0.006	0.003	0.003	<0.002	<0.002	<0.002
Manganese	0.08	0.07	0.05	0.05	0.05	0.07	0.06	0.07	0.12	0.08	0.08	0.08	0.08	0.07	0.06
Mercury	0.17	0.24	0.23	0.21	0.13	0.13	0.15	0.23	0.09	0.1	0.16	0.11	0.14	0.29	0.16
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.01	0.02	<0.01
Selenium	0.18	0.17	0.17	0.18	0.17	0.15	0.14	0.18	0.15	0.13	0.15	0.15	0.14	0.15	0.14
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.17	0.11	0.13	0.25	0.32	0.05	0.04	0.07	0.18	0.16	0.15	0.12	0.26	0.08	0.16
Thallium	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.07	0.07	0.07	0.07	0.06	0.04	0.02	0.03	0.03	0.03	0.08	0.08	0.1	0.08	0.07
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4.3	4	3.7	5.4	4.1	2.7	2.7	3.1	3.8	2.7	7.2	3.4	3.6	3.2	6.8
Physical Properties															
Moisture (%)	74.73	78.66	78.14	75.87	76.3	76.09	74.75	77.52	77.24	77.69	74.48	72.13	75.17	78.5	73.75
Length (cm)	55.6	60.2	59.1	61.8	63.4	46.8	50.1	52.3	51.5	54.2	54.9	52	52.1	56.7	55.1
Weight (g)	1380	1700	1520	1840	2140	1500	1580	1580	1540	1900	1940	1710	1605	2305	2010
Sex	M	M	M	M	M	F	M	F	M	F	F	M	M	F	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	12	24	25	19	11	12	11	21	13	12	13	12	13	13	22
Radionuclides															
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00005	<0.00006	<0.00006	<0.00006	0.00006	<0.00006	0.0002	<0.00006	0.00009	<0.00006	<0.00006	<0.00006	0.00008	<0.00005	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City (Prospectors Bay)																	
	Lake Trout																	
	2016			2018					2019					2020				
	AN1-1	AN1-1	AN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals																		
Aluminum	0.6	0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.09	0.08	0.19	0.06	0.04	0.04	0.16	0.29	0.15	0.12	0.1	0.04	0.06	0.11	0.06	0.03	0.05	0.12
Barium	0.01	0.04	0.03	0.04	0.06	0.04	0.05	0.03	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	0.004	0.003	0.003	<0.002	0.003	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Copper	0.25	0.2	0.63	0.23	0.43	0.23	0.4	0.21	0.35	0.35	0.42	0.27	0.22	0.22	0.31	0.36	0.2	0.32
Iron	2.4	1.4	6.4	2.4	5	1.7	2.4	2.1	2	2.2	2.9	2.4	2.1	1.4	1.8	1.8	1.6	2.6
Lead	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.004	<0.002	<0.002
Manganese	0.05	0.08	0.11	0.1	0.08	0.09	0.08	0.08	0.06	0.05	0.07	0.06	0.06	0.05	0.1	0.05	0.09	0.08
Mercury	0.12	0.14	0.18	0.12	0.24	0.1	0.11	0.27	0.076	0.13	0.15	0.17	0.16	0.18	0.17	0.12	0.2	0.1
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.11	0.16	0.18	0.17	0.19	0.17	0.18	0.17	0.17	0.17	0.14	0.16	0.16	0.16	0.18	0.17	0.21	0.17
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.3	0.08	0.14	0.14	0.14	0.12	0.14	0.2	0.29	0.1	0.1	0.14	0.08	0.26	0.04	0.22	0.2	0.57
Thallium	<0.01	0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	0.02	0.01	0.01	<0.01	<0.01	0.01	<0.01	0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.03	0.04	0.04	0.04	0.07
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3.2	3.2	6.1	2.9	6.6	3.8	4.6	2.7	3.7	3.6	3.2	4.3	2.9	4.4	3.1	3.1	3.6	5.2
Physical Properties																		
Moisture (%)	70.91	72.53	72.2	75.87	78.1	76.49	75.43	77.39	72.75	71.4	75.39	75.42	73.01	73.91	73.37	75.05	77.99	75.76
Length (cm)	59.6	50.7	54.7	56.3	57.4	51.6	53.5	51	53.5	53.8	58.1	58.6	53.4	58.9	54.3	56.0	54.1	52.1
Weight (g)	2840	1760	2140	2120	2060	1500	1750	1620	1820	2040	2460	2720	1880	2360	2220	1880	1740	1620
Sex	F	M	M	F	M	M	M	F	M	M	F	M	M	F	M	M	M	M
Maturity	A	A	A	U	U	U	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	15	16	21	18	19	13	13	18	10	17	15	17	16	17	17	11	15	12
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00008	<0.00006	<0.00006	<0.00005	<0.00006	<0.00007	<0.00006	<0.00008	<0.00006	<0.00006	<0.00007	<0.00008
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0002

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City (Prospectors Bay)												
	Lake Whitefish												
	2012					2013			2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW06	LW07	LW08	LW09	LW10	LW01	LW02	LW03	LW01	LW02	LW03	LW04	LW05
Metals													
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.08	0.03	0.09	0.05	0.1	0.17	0.18	0.22	0.23	0.06	0.07	0.05	0.07
Barium	0.01	0.02	0.01	0.01	0.01	0.02	<0.01	0.02	0.01	0.1	0.02	0.09	0.03
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	0.003	0.013	0.009	<0.002	0.004	0.006	0.016	0.004	0.004	0.007	0.016	0.008
Copper	0.12	0.13	0.17	0.18	0.14	0.22	0.18	0.39	0.48	0.22	0.28	0.26	0.23
Iron	1	2	1.8	1.6	1.4	2.3	1.8	2.9	4.3	1.8	2	4.4	2.4
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.003	<0.002	0.003	<0.002	0.005	0.011
Manganese	0.07	0.06	0.07	0.07	0.12	0.1	0.06	0.11	0.09	0.12	0.12	0.1	0.08
Mercury	0.05	0.13	0.06	0.12	0.11	0.05	0.02	0.02	0.051	0.033	0.053	0.026	0.034
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.01	0.01	0.05	0.02
Selenium	0.28	0.22	0.23	0.32	0.26	0.26	0.24	0.26	0.24	0.27	0.23	0.19	0.26
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.22	0.19	0.4	0.4	0.25	0.25	0.23	0.25	0.26	1.8	0.29	0.65	0.31
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01
Titanium	0.08	0.07	0.08	0.08	0.08	0.03	0.03	0.04	0.08	0.1	0.08	0.11	0.11
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.002	<0.001	0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4.3	4.5	7.6	4.3	3.3	3.2	3.4	6.3	4	4.1	4.7	5.8	4.2
Physical Properties													
Moisture (%)	79.31	78.4	75.72	73.83	76.89	79.25	76.91	72.22	74.04	74.06	76.04	75.15	76.82
Length (cm)	46.7	49.6	48.8	55	50	46.9	47	42.9	47.2	41.5	45.9	41.7	36.5
Weight (g)	640	980	1140	1520	1080	1480	1520	1300	1780	1090	1620	1310	750
Sex	M	M	F	F	F	M	M	F	M	F	M	F	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	12	29	14	17	21	23	14	11	19	10	15	10	10
Radionuclides													
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0006	0.0005	0.0004	0.0011	0.0007
Radium-226 (Bq/g)	<0.00006	<0.00007	<0.00005	<0.00006	<0.00008	0.00006	<0.00006	<0.00006	0.0001	<0.00006	<0.00006	<0.00007	0.0001
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0002

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Uranium City (Prospectors Bay)																
	Lake Whitefish																
	2016			2018					2019					2020			
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW01	LW02	LW03	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05	LW06	LW07	LW08	LW09
Metals																	
Aluminum	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.04	0.12	0.05	0.08	0.16	0.05	0.04	0.05	0.06	0.07	0.05	0.08	0.14	0.15	0.05	0.04	0.05
Barium	0.11	0.04	0.02	0.05	0.1	0.05	0.05	0.09	<0.01	<0.01	0.02	<0.01	<0.01	0.02	<0.01	<0.01	0.1
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.005	0.003	0.004	0.004	0.004	0.004	0.006	0.007	0.002	0.003	0.004	0.002	0.003	0.005	0.007	0.011	0.018
Copper	0.21	0.22	0.16	0.23	0.3	0.21	0.33	0.21	0.18	0.13	0.18	0.13	0.16	0.39	0.21	0.35	1.4
Iron	1.9	1.5	1.9	2	2.6	2.3	2.5	1.4	1.7	1	3.3	1.5	1.6	4.3	1.8	3.5	10
Lead	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.01
Manganese	0.09	0.1	0.09	0.08	0.09	0.13	0.07	0.14	0.14	0.09	0.09	0.08	0.1	0.1	0.11	0.08	0.37
Mercury	0.063	0.037	0.074	0.041	0.04	0.043	0.026	0.028	0.083	0.038	0.094	0.061	0.052	0.027	0.026	0.028	0.027
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03
Selenium	0.28	0.3	0.23	0.26	0.26	0.26	1.9	0.26	0.33	0.28	0.27	0.22	0.33	0.39	1.4	0.28	2.1
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.21	0.48	0.31	0.24	0.31	0.33	0.4	0.4	0.24	0.24	0.3	0.22	0.24	0.29	0.25	0.18	0.92
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.04	0.05	0.05
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.001	0.01	0.033
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	6.3	3.8	3.6	5.7	4.1	4.5	5.4	5.6	3.5	3.2	3.8	3.4	3.9	4.1	4.6	4.4	11
Physical Properties																	
Moisture (%)	68.43	76.07	73.75	75.53	75.03	73.1	78.38	77.34	75.21	73.42	75.93	76.37	74.76	74.64	77.98	74.98	76.71
Length (cm)	57.8	43.6	53.1	41.1	38.4	37.7	46	46.5	48.3	46.3	50.8	49	51.1	48.1	38.5	38.4	29.6
Weight (g)	3380	1280	2440	1010	800	810	1520	1360	1840	1520	2060	1760	2080	1840	860	800	320
Sex	M	M	F	F	M	M	F	M	F	F	F	M	M	M	U	M	F
Maturity	A	A	A	U	U	U	U	U	A	A	A	A	A	A	A	A	A
Age (years)	18	13	32	11	5	5	13	7	12	14	26	23	17	13	6	8	5
Radionuclides																	
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	0.0003	<0.0002	0.0002	0.0006	0.0004	0.0005	0.001	0.0004	0.0004	0.0004	0.0004	0.0006	0.0006	0.0012	0.0003	0.0004
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00007	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	-

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

GN = gill net; LT = lake trout; LW = lake whitefish; M = male; F = female; A = adult, U = unknown.

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage (Ellis Bay)														
	Lake Trout														
	2011					2012					2013				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals															
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.12	0.08	0.12	0.08	0.12	0.06	0.14	0.04	0.06	0.29	0.07	0.12	0.11	0.05	0.03
Barium	0.04	0.01	<0.01	<0.01	<0.01	0.05	0.08	0.02	0.04	0.02	<0.01	0.01	<0.01	0.22	0.04
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	0.003	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002
Copper	0.52	0.52	0.11	0.32	0.28	0.24	0.28	0.33	0.58	0.21	0.22	0.28	0.38	0.23	0.28
Iron	4.5	3	1	2.2	2	1.5	2.7	3.5	5.8	1.6	1.4	2.1	2.1	2.6	2.4
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.1	0.09	0.09	0.07	0.08	0.06	0.09	0.6	0.08	0.06	0.09	0.06	0.08	0.08	0.09
Mercury	0.13	0.2	0.28	0.07	0.18	0.17	0.08	0.06	0.21	0.14	0.19	0.24	0.09	0.41	0.24
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.03	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01
Selenium	0.14	0.18	0.15	0.16	0.18	0.15	0.16	0.15	0.18	0.1	0.17	0.14	0.16	0.17	0.18
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.3	0.19	0.26	0.2	0.15	0.06	0.13	0.07	0.68	0.65	0.1	0.09	0.21	0.09	0.12
Thallium	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	0.02	0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.07	0.15	0.06	0.07	0.06	0.01	0.02	0.02	0.01	<0.01	0.03	0.08	0.06	0.04	0.05
Uranium	0.014	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	11	3.8	2.9	3.8	3.5	2.6	3.2	2.6	10	6.3	3	2.8	3.6	3.3	3.6
Physical Properties															
Moisture (%)	73.73	71.7	74.1	70.34	67.36	73.93	76.07	75.33	76.29	72.6	69.45	68.65	72.36	78.67	79.54
Length (cm)	49.8	48.6	53.9	48.5	55.6	62.2	69.1	53	60.3	63.5	55	56.1	55.2	55.9	55.6
Weight (g)	1490	1480	1920	1420	2480	3640	2920	1420	1760	2560	2200	1920	1720	1920	1740
Sex	M	M	F	F	F	F	M	M	M	F	M	F	M	M	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	12	8	23	8	11	19	13	9	20	18	15	15	10	25	17
Radionuclides															
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0007	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00007	<0.00006	0.0002	0.00009	0.0001	<0.00007	<0.00007	<0.00006	<0.00005	<0.00004	0.0001	<0.00004	<0.00006	<0.00006	0.00009
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00008	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage (Ellis Bay)														
	Lake Trout														
	2014					2016			2019					2020	
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	AN1-1	AN1-1	AN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT01	LT02	LT03	LT04	LT05	LT01	LT02
Metals															
Aluminum	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.06	0.07	0.13	0.11	0.06	0.11	0.07	0.12	0.13	0.07	0.23	0.05	0.06	0.24	0.13
Barium	<0.01	<0.01	0.04	0.02	0.02	0.02	0.03	0.04	0.02	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	<0.002	0.003	<0.002	0.004	0.002	<0.002	0.003	0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.002
Copper	0.29	0.2	0.39	0.29	0.4	0.49	0.26	0.42	0.26	0.27	0.28	0.28	0.23	0.43	0.32
Iron	4.7	1.5	3	3.8	4	2.6	2.6	4.2	2.8	2.3	2.9	2	2.6	3	6.4
Lead	<0.002	<0.002	0.002	<0.002	0.004	<0.002	0.004	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.08	0.06	0.07	0.08	0.07	0.07	0.13	0.07	0.1	0.07	0.07	0.07	0.07	0.11	0.12
Mercury	0.37	0.33	0.32	0.37	0.3	0.12	0.13	0.18	0.08	0.086	0.078	0.16	0.23	0.15	0.24
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.01	<0.01	0.03	<0.01	0.06	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.17	0.15	0.19	0.21	0.17	0.21	0.17	0.2	0.15	0.13	0.14	0.14	0.13	0.18	0.2
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.12	0.08	0.15	0.31	0.14	0.18	0.43	0.26	0.2	0.05	0.27	0.21	0.12	0.28	0.19
Thallium	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	<0.01	0.01	<0.01	<0.01	0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.08	0.08	0.09	0.09	<0.01	<0.01	0.01	0.04	<0.01	<0.01	<0.01	<0.01	0.04	0.05
Uranium	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4	2.5	5	5.1	6.3	3.7	5.2	6.2	2.8	2.3	8.6	2.5	3.5	4.7	6.6
Physical Properties															
Moisture (%)	78.57	74.76	75.37	77.41	77.04	71.7	72.13	74.82	75.97	72.58	74.83	76.43	78.91	75.34	78.21
Length (cm)	58.8	56.8	51.5	52.2	59.1	56.2	49.8	56.1	52.8	52.5	49.7	54.7	57.3	47.2	57.0
Weight (g)	2245	2200	1750	1450	2360	2120	1660	1960	1840	2040	1580	2020	2460	1400	2140
Sex	M	M	M	M	M	M	M	M	M	M	M	M	F	M	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	23	17	13	14	17	12	12	16	11	11	10	16	26	12	24
Radionuclides															
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00003	<0.00003	<0.00005	<0.00006	<0.00006	<0.00006	<0.00006	<0.00007	<0.00008	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.00007	<0.00006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage (Ellis Bay)											
	Lake Whitefish											
	2011					2012		2013				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW06	LW07	LW08	LW09	LW10	LW06	LW07	LW06	LW07	LW08	LW09	LW10
Metals												
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.38	0.24	0.36	0.31	0.17	0.37	0.24	0.14	0.31	0.34	0.17	0.48
Barium	<0.01	0.04	0.06	<0.01	<0.01	0.03	0.02	0.04	0.05	0.05	0.02	0.02
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	0.007	0.002	0.002	<0.002	0.003	0.004	0.005	0.002	<0.002	<0.002
Copper	0.12	0.15	0.38	0.11	0.15	0.18	0.18	0.27	0.14	0.13	0.18	0.11
Iron	1.5	1.2	3.6	1.1	2.2	1.8	3.9	2.9	2.5	3.6	1.6	2.2
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.12	0.19	0.13	0.12	0.1	0.11	0.11	0.17	0.32	0.14	0.1	0.13
Mercury	0.07	0.06	0.03	0.03	0.02	0.05	0.06	0.17	0.07	0.04	0.02	0.08
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.29	0.25	0.25	0.22	0.25	0.31	0.25	0.27	0.26	0.24	0.29	0.25
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.15	0.74	1	0.18	0.24	0.15	0.23	0.51	0.64	0.43	0.2	0.25
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.07	0.07	0.06	0.06	0.07	0.02	<0.01	0.04	0.03	0.04	0.04	0.05
Uranium	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.003	0.002	<0.001	0.003
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3	2.8	4.4	3.3	3.1	2.8	3.2	5.5	3.3	2.5	3.9	3.3
Physical Properties												
Moisture (%)	74.81	78.24	73.86	77.91	76.16	74.12	74.97	77.14	77.18	76.99	75.03	77.45
Length (cm)	32	43.2	40	39.5	38.6	49.1	48.5	40.2	44.8	37.9	37.4	44.6
Weight (g)	1250	1260	1380	1120	880	1180	1120	840	1120	820	720	1380
Sex	M	M	F	F	F	M	M	F	F	F	M	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	31	27	22	18	11	30	33	30	25	25	9	28
Radionuclides												
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.0002	<0.00006	0.0003	<0.00007	<0.00006	0.0001	<0.00006	<0.00006	<0.00008	0.0002
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0003	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Camsell Portage (Ellis Bay)												
	Lake Whitefish								Northern Pike				
	2014					2016			2012				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	AN1-1	AN1-1	AN1-1	AN1-1	AN1-1
	LW06	LW07	LW08	LW09	LW10	LW06	LW07	LW08	NP01	NP02	NP03	NP04	NP05
Metals													
Aluminum	0.8	0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.25	0.26	0.33	0.03	0.05	0.24	0.09	0.07	0.09	0.15	0.09	0.12	0.1
Barium	0.09	0.02	0.04	0.02	<0.01	0.02	0.01	0.03	0.02	0.02	0.02	0.02	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.006	0.004	0.007	0.008	0.003	0.006	0.004	0.004	0.003	0.003	<0.002	<0.002	0.003
Copper	0.36	0.23	0.19	0.21	0.22	0.26	0.24	0.18	0.39	0.45	0.16	0.17	0.28
Iron	4.5	2.3	3.8	2.4	2.9	2.8	2.6	1.8	2.8	3.2	1.3	0.6	3.2
Lead	0.008	0.005	0.008	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.16	0.07	0.1	0.07	0.08	0.11	0.09	0.07	0.08	0.09	0.08	0.08	0.08
Mercury	0.051	0.06	0.06	0.044	0.058	0.037	0.043	0.036	0.19	0.13	0.08	0.17	0.24
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.05	0.03	0.08	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.25	0.23	0.27	0.2	0.24	0.28	0.27	0.25	0.2	0.17	0.22	0.18	0.19
Silver	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.92	0.24	0.28	0.71	0.21	0.24	0.22	0.27	0.16	0.2	0.18	0.11	0.14
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.11	0.11	0.16	0.1	0.12	<0.01	<0.01	<0.01	0.02	0.02	0.02	0.01	0.01
Uranium	0.002	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4.9	3.6	6.4	3.8	4	3.9	3.3	5.1	4.2	9.8	5.4	4.9	6.5
Physical Properties													
Moisture (%)	75.83	74.78	76.26	77.59	74.18	72.23	74.17	76.38	76.89	77.35	76.06	77.29	79.91
Length (cm)	41.3	44	47.6	38.2	43.5	45.4	45	49.6	76	67.7	67.8	72.3	89.5
Weight (g)	980	1280	1460	880	1400	1560	1540	1880	2800	2760	1660	2760	4860
Sex	F	F	F	F	F	M	M	F	F	M	F	F	F
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	14	14	14	8	14	15	15	11	6	9	5	7	16
Radionuclides													
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.0002	<0.0002	0.0002	0.0007	0.0012	<0.0002	0.0009	0.0002	0.0002	0.0004	0.0008	0.0003	0.0003
Radium-226 (Bq/g)	<0.00006	<0.00007	<0.00006	<0.00005	<0.00005	<0.00006	<0.00006	<0.00006	<0.00006	<0.00007	<0.00008	<0.00006	0.00008
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.003

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

GN = gill net, AN = angling; LT = lake trout; LW = lake whitefish, NP = northern pike; M = male; F = female; A = adult.

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac (Fond du Lac River)																			
	Lake Trout																			
	2011					2012					2013					2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT06	LT07	LT08	LT09	LT10	LT06	LT07	LT08	LT09	LT10	LT06	LT07	LT08	LT09	LT10
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.17	0.08	0.1	0.05	0.12	0.05	0.06	0.1	0.14	0.08	0.05	0.04	0.08	0.11	0.06	0.07	0.04	0.11	0.13	0.05
Barium	<0.01	0.02	0.01	0.66	0.01	0.02	0.02	0.02	<0.01	<0.01	<0.01	0.01	0.01	<0.01	0.01	0.01	<0.01	0.01	0.01	0.04
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	0.003	0.002	0.003
Copper	0.17	0.31	0.4	0.19	0.4	0.31	0.26	0.23	0.28	0.21	0.36	0.25	0.24	0.43	0.24	0.2	0.17	0.4	0.22	0.36
Iron	2.1	2.1	3.2	1.8	2.8	3.4	1.8	1.4	4	1.4	2.2	1.3	1.6	2.1	1.3	2.6	2.3	3.3	2.8	3.6
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.008	<0.002	<0.002	0.003	<0.002	0.002	0.004	0.007
Manganese	0.09	0.08	0.09	0.1	0.08	0.07	0.04	0.07	0.06	0.08	0.05	0.06	0.07	0.07	0.05	0.09	0.04	0.12	0.14	0.1
Mercury	0.26	0.3	0.24	0.1	0.23	0.17	0.14	0.14	0.26	0.31	0.09	0.11	0.09	0.05	0.04	0.83	0.46	0.49	0.74	0.44
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.02	<0.01	<0.01	0.02	<0.01	0.02	0.02	0.02
Selenium	0.17	0.12	0.16	0.16	0.13	0.16	0.14	0.18	0.15	0.13	0.18	0.14	0.14	0.16	0.16	0.13	0.07	0.16	0.09	0.12
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.11	0.16	0.18	0.2	0.18	0.12	0.09	0.21	0.16	0.15	0.1	0.09	0.11	0.04	0.08	0.19	0.05	0.13	0.15	0.13
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.01	0.01	<0.01	0.01	0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.09	0.09	0.1	0.08	0.08	0.07	0.08	0.08	0.08	0.01	<0.01	0.01	0.01	<0.01	0.09	0.04	0.1	0.08	0.09
Uranium	<0.001	0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3	3.7	4.2	3.2	3.9	4.2	3.4	3.8	4.4	3.4	4.2	3.3	2.9	3.3	2.8	3.8	1.8	3.6	6.3	3.8
Physical Properties																				
Moisture (%)	76.91	76.77	74.35	75.75	71.88	77.01	75.5	69.03	77.64	68.66	74.35	74.57	75.49	72.33	73.93	81.13	73.27	76.95	79.64	74.4
Length (cm)	49.6	46.4	53.9	49.1	49.2	60.5	55.6	61.2	63.4	63.5	48.5	52.7	56.8	51.5	50.1	54.5	57.1	60.2	55.7	58.5
Weight (g)	1430	1310	2020	1230	1530	1680	1420	1940	1840	2280	1520	1940	2200	1640	1620	1405	2205	2860	1670	2410
Sex	M	F	F	F	M	M	M	F	F	F	M	M	M	M	M	F	M	F	F	F
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	12	10	15	9	8	17	11	15	-	14	9	11	12	9	8	29	20	16	21	13
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00005	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00004	0.00007	<0.00005	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00008	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac (Fond du Lac River)																	
	Lake Trout																	
	2016			2018					2019					2020				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT06	LT07	LT08	LT09	LT10
Metals																		
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.05	0.05	0.07	0.16	0.1	0.12	0.21	0.05	0.09	0.05	0.06	0.08	0.13	0.06	0.02	0.09	0.2	0.28
Barium	0.03	0.06	0.07	0.61	0.36	0.22	0.25	0.44	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	0.003	0.012	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.004	0.004	0.002	<0.002
Copper	0.22	0.33	0.33	0.41	0.34	0.45	0.35	0.33	0.22	0.22	0.2	0.42	0.2	0.27	0.36	0.65	1	0.45
Iron	3	2.2	5	4	3	4.4	3.5	5	2	1.5	2.3	3.6	2.9	3.8	5.9	6	7.9	4
Lead	0.002	0.002	0.003	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.07	0.08	0.08	0.07	0.09	0.1	0.08	0.09	0.08	0.05	0.07	0.07	0.06	0.07	0.06	0.1	0.11	0.1
Mercury	0.19	0.085	0.25	0.15	0.19	0.11	0.16	0.18	0.21	0.17	0.22	0.14	0.2	0.32	0.28	0.2	0.24	0.21
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01
Selenium	0.16	0.18	0.16	0.17	0.14	0.16	0.14	0.17	0.1	0.11	0.1	0.13	0.11	0.12	0.15	0.18	0.16	0.15
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.08	0.14	0.09	0.57	0.33	0.28	0.47	0.51	0.16	0.09	0.08	0.06	0.36	0.12	0.08	0.25	0.38	0.14
Thallium	<0.01	<0.01	0.02	0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	<0.01	<0.01	0.01	0.01	0.01	0.01	<0.01	0.01	<0.01	0.01	0.02	<0.01	<0.01	0.03	0.04	0.06	0.04	0.04
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	6.1	3	3.6	5.6	4.3	4.1	4.9	4.3	2.8	2.2	2.8	3.2	3.3	3.2	4.3	3.9	7.5	3.8
Physical Properties																		
Moisture (%)	77.54	71.06	72.59	73.29	74.63	77.43	64.88	76.64	74.46	73.12	74.54	76.15	75.12	77.69	81.82	71.29	79.87	75.5
Length (cm)	58.9	57.6	54	55.9	58.2	51.1	59.3	58	58.5	52.7	55.3	52.4	57.2	59.5	56.0	59.8	56.7	57.5
Weight (g)	2160	2060	1740	1790	1950	1150	2300	2190	2240	1440	1900	1580	2300	1900	1740	2500	2040	2340
Sex	F	F	M	M	F	M	F	M	F	M	F	M	F	U	M	U	M	M
Maturity	A	A	A	U	A	U	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	18	11	21	15	17	11	15	21	20	9	22	15	25	12	24	13	11	16
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00007	<0.00006	<0.00007	<0.00006	<0.00006	<0.00005	<0.00005	<0.00007	<0.00006	<0.00005	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac (Fond du Lac River)																			
	Lake Whitefish																			
	2011					2012					2013					2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW06	LW07	LW08	LW09	LW10	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.4	0.19	0.2	0.52	0.29	0.02	0.22	0.22	0.18	0.19	0.04	0.04	0.11	0.08	0.03	0.16	0.02	0.04	0.28	0.04
Barium	0.06	0.04	0.02	<0.01	0.03	0.02	0.04	0.01	0.07	0.02	0.01	<0.01	0.02	0.03	0.01	0.14	<0.01	0.04	0.06	0.05
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.002	<0.002	<0.002	<0.002	0.006	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	0.005	0.003	0.003	0.015	0.003	0.002	0.003	0.003	<0.002	0.004	0.014	0.003	0.004	<0.002	0.007	0.006	0.02	0.003	0.012
Copper	0.14	0.18	0.12	0.22	0.28	0.27	0.16	0.16	0.15	0.13	0.22	0.16	0.15	0.34	0.13	0.13	0.14	0.19	0.16	0.17
Iron	1.7	2.9	1.3	2.6	6	2	1	1.4	1.4	1.3	2.1	3.1	1.3	4.4	1.1	1.8	1.4	3.1	1.8	2
Lead	<0.002	0.002	<0.002	<0.002	<0.002	0.003	0.004	0.003	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.008	<0.002	<0.002
Manganese	0.17	0.13	0.07	0.14	0.08	0.05	0.08	0.14	0.19	0.08	0.08	0.09	0.06	0.1	0.07	0.21	0.07	0.19	0.1	0.1
Mercury	0.14	0.12	0.14	0.18	0.18	0.02	0.05	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.04	0.086	0.14	0.051	0.081	0.059
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	0.02	0.04	<0.01	0.1
Selenium	0.25	0.15	0.22	0.2	0.29	0.17	0.28	0.2	0.16	0.23	0.22	0.13	0.27	0.21	0.18	0.15	0.11	0.12	0.24	0.17
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	1	0.88	0.55	0.15	0.36	0.51	0.24	0.27	1.6	0.2	0.19	0.26	0.19	0.61	0.15	2.2	0.33	1.2	0.68	0.33
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.08	0.09	0.07	0.1	0.07	0.08	0.07	0.08	0.07	0.02	0.01	0.02	0.02	0.02	0.1	0.09	0.1	0.07	0.09
Uranium	0.002	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3	4.2	3.2	3	4.2	6.2	3.8	3.5	4	3.4	3.8	4	3.9	5.4	3.5	3.3	4.6	4.4	4.2	3.6
Physical Properties																				
Moisture (%)	73.98	78.34	76.86	75.56	75.69	75.73	71.01	74.93	73.77	76.15	75.67	78.03	73.18	76.28	78.04	78.86	77.96	76.51	77.23	76.57
Length (cm)	38.5	44.9	36.4	41.1	42.2	44.4	43.8	46.6	42.8	36.5	46.5	43.4	40.5	40.1	42.3	42.5	45	41.3	41.9	39.4
Weight (g)	900	1340	805	1100	1120	940	1040	1100	860	520	1420	1120	980	820	1000	965	1240	910	965	875
Sex	M	M	F	F	M	M	F	M	F	M	F	M	F	M	M	F	F	M	F	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	30	26	31	33	38	7	27	20	15	27	14	12	13	13	8	19	9	15	17	11
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.004	<0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.001	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00008	<0.00006	<0.00006	<0.00006	<0.00007	<0.00007	<0.00008	<0.00009	<0.001	0.002	<0.00009	0.0001	<0.00006	<0.00006	<0.00006	0.00008	<0.00006	<0.00007	<0.00006	<0.00006
Thorium-230 (Bq/g)	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.002	<0.002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Fond du Lac (Fond du Lac River)																	
	Lake Whitefish																	
	2016			2018					2019					2020				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW04	LW05	LW06	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05
Metals																		
Aluminum	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.03	0.29	0.26	0.16	0.1	0.12	0.21	0.05	0.02	0.02	0.24	0.02	0.16	0.24	0.26	0.2	0.23	0.32
Barium	0.06	0.21	0.01	0.61	0.36	0.22	0.25	0.44	<0.01	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.003	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.003
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.016	0.011	0.004	<0.002	<0.002	<0.002	0.003	<0.002	0.005	0.011	0.007	0.01	0.008	0.009	0.002	0.003	0.005	0.008
Copper	0.19	0.1	0.26	0.41	0.34	0.45	0.35	0.33	0.19	0.2	0.13	0.18	0.14	0.12	0.11	0.17	0.14	0.14
Iron	1.8	1.9	2.6	4	3	4.4	3.5	5	3	3.4	3	2.3	1.4	3.8	1.2	2.1	2.3	3.3
Lead	0.004	0.005	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.08	0.22	0.09	0.07	0.09	0.1	0.08	0.09	0.05	0.12	0.08	0.14	0.19	0.09	0.08	0.09	0.08	0.09
Mercury	0.079	0.12	0.065	0.15	0.19	0.11	0.16	0.18	0.15	0.11	0.095	0.046	0.075	0.11	0.08	0.11	0.1	0.08
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.02	<0.01	0.01	<0.01	<0.01
Selenium	0.34	0.24	0.16	0.17	0.14	0.16	0.14	0.17	0.12	0.14	0.24	0.15	0.27	0.27	0.24	0.26	0.19	0.31
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.21	1.4	0.31	0.57	0.33	0.28	0.47	0.51	0.3	0.36	0.25	0.24	0.26	0.24	0.19	0.17	0.26	0.19
Thallium	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.02	0.01	<0.01	0.01	0.01	0.01	<0.01	0.01	0.07	<0.01	<0.01	<0.01	<0.01	0.03	0.03	0.04	0.04	0.03
Uranium	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	5	4	3.8	5.6	4.3	4.1	4.9	4.3	3.5	4.8	3.1	4.6	3.3	4	2.6	2.9	2.8	3.9
Physical Properties																		
Moisture (%)	74.6	81.27	73.88	73.29	74.63	77.43	64.88	76.64	78.08	79.05	79.37	76.69	77.22	79.02	79.31	79.99	80.97	79.37
Length (cm)	47	38.6	47.4	38	40.6	39.3	37	38.3	49.3	44.5	40	45.4	43.5	39.5	39.4	40.6	45.5	40.9
Weight (g)	1540	840	1360	840	1110	850	800	760	1460	1260	1140	1480	1340	1000	960	1100	1380	1080
Sex	F	M	F	M	M	M	M	M	F	F	M	M	M	M	M	F	F	F
Maturity	A	A	A	U	U	U	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	11	33	16	25	30	23	37	26	16	11	34	9	12	33	25	30	26	29
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00007	<0.00006	<0.00006	<0.00005	<0.00006	<0.00006	<0.00006	<0.00005	<0.00005	<0.00006	<0.00007
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

GN = gill net; LT = lake trout; LW = lake whitefish; M = male; F = female; A = adult, U = unknown, - = data not available.

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids (Fond du Lac River)																			
	Lake Trout																			
	2011					2012				2013					2014					
	GN1-1	GN1-1	GN1-1	GN1-1	SP01-01	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT06	LT07	LT08	LT09	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.02	0.06	0.05	0.06	0.09	0.07	0.18	0.06	0.07	0.06	0.18	0.25	0.09	0.08	0.14	0.11	0.04	0.07	0.04
Barium	<0.01	<0.01	0.01	<0.01	0.01	0.01	0.01	0.02	0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.1	0.09	<0.01	0.07	0.03
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.006	0.005	<0.002	0.004	0.003
Copper	0.28	0.2	0.22	0.22	0.17	0.21	0.78	0.2	0.36	0.39	0.45	0.32	0.32	0.28	0.43	0.93	0.34	0.3	0.3
Iron	1.9	1.7	1.5	1.6	1.2	2.3	8.6	2.6	4	3.6	3.3	6.1	3.1	2.7	10	8.9	3	2.3	2.1
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.011	0.003	<0.002	0.004	<0.002
Manganese	0.09	0.09	0.08	0.12	0.06	0.09	0.08	0.1	0.07	0.11	0.07	0.06	0.06	0.07	0.13	0.09	0.06	0.07	0.06
Mercury	0.27	0.46	0.57	0.38	0.49	0.12	0.19	0.18	0.27	0.17	0.12	0.13	0.3	0.16	0.11	0.24	0.23	0.21	0.19
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.06	<0.01	<0.01	0.01	<0.01
Selenium	0.1	0.11	0.09	0.14	0.16	0.15	0.19	0.17	0.19	0.16	0.19	0.15	0.18	0.15	0.13	0.15	0.16	0.15	0.14
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.1	0.09	0.21	0.23	0.09	0.13	0.14	0.14	0.14	0.08	0.14	0.3	0.14	0.1	0.26	0.15	0.2	0.34	0.28
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.02	<0.01	0.01	0.01	0.01	<0.01	0.02	0.01	<0.01	0.01	0.01	0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.07	0.08	0.08	0.08	0.07	0.08	0.08	0.08	0.04	0.03	0.04	0.03	0.03	0.14	0.09	0.09	0.09	0.08
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4.7	3.1	3.4	3.3	2.5	3.8	5.4	3.6	3.8	3.1	4	4	3.8	3.1	3.3	5.2	4.3	4.3	3
Physical Properties																				
Moisture (%)	77.77	77.9	77.43	76.77	73.64	78.8	76.77	78.11	78.05	73.56	74.02	75.29	75.06	73.99	73.76	75.09	76.3	76.67	75.55
Length (cm)	54.9	55.9	57.2	64.9	69.6	57.2	62.8	61	59.8	52	52.5	55	57	51.2	49.5	51.9	44.7	54	48.7
Weight (g)	1750	2060	2180	2840	3720	1520	2060	1840	1820	1720	1680	1940	2060	1600	1580	1640	1100	1670	1440
Sex	F	F	F	F	M	M	M	M	M	F	M	F	M	F	F	M	M	M	F
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	10	15	16	17	15	14	22	21	22	12	12	11	16	13	11	14	12	12	11
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00007	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00007	<0.00006	<0.00008	<0.00006	0.0001	<0.00006	<0.00006	<0.00008	<0.00006	<0.00007
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids (Fond du Lac River)																
	Lake Trout																
	2016			2018					2019					2020			
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT06	LT07	LT08	LT09
Metals																	
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.1	0.12	0.08	0.11	0.14	0.12	0.08	0.18	0.03	0.05	0.11	0.05	0.03	0.04	0.04	0.05	0.03
Barium	0.02	0.05	0.03	0.11	0.15	0.06	0.1	0.19	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.02	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.004	0.004	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002
Copper	0.43	0.73	0.61	0.28	0.41	0.4	0.36	0.33	0.28	0.25	0.32	0.19	0.49	0.29	0.36	0.38	0.29
Iron	4	6.1	4.2	3.2	5	4.4	4.4	4.3	4.5	3.6	2.8	1.6	4.4	3	4	4.1	5.4
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	0.005	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.003	<0.002
Manganese	0.05	0.05	0.08	0.08	0.07	0.06	0.08	0.06	0.06	0.06	0.11	0.06	0.06	0.15	0.08	0.1	0.08
Mercury	0.14	0.2	0.16	0.1	0.11	0.1	0.11	0.099	0.24	0.25	0.19	0.17	0.13	0.17	0.13	0.32	0.32
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01
Selenium	0.18	0.16	0.16	0.15	0.14	0.17	0.18	0.14	0.14	0.12	0.14	0.12	0.12	0.19	0.2	0.18	0.14
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.22	0.25	0.17	0.3	0.24	0.21	0.24	0.14	0.19	0.12	0.72	0.08	0.33	0.67	0.39	0.55	0.18
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.02	<0.01	0.01	0.02	0.02	0.01	0.02	0.05	0.02	<0.01	<0.01	<0.01	<0.01	0.04	0.04	0.05	0.05
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3.5	3.8	3.2	5.1	4.4	4.9	4.3	4.5	3.7	2.9	5.8	2.3	3.7	3.7	5.3	6.9	4.7
Physical Properties																	
Moisture (%)	70.53	75.35	72.93	77.9	76.77	74.99	78.64	74.12	79.89	79.11	76.18	77.07	79.64	76	75.89	79.24	81.49
Length (cm)	55	55.7	52.1	47.6	53.9	56.2	52.5	61	61.8	59.7	50.8	59.2	52	65.2	61.2	58.7	57.2
Weight (g)	2080	1960	1920	1130	1640	1680	1660	2480	2180	2500	1560	2120	1480	2520	2290	2420	1980
Sex	F	F	F	F	F	M	F	F	M	M	M	M	M	M	M	F	M
Maturity	A	A	A	U	U	U	U	U	A	A	A	A	A	A	A	A	A
Age (years)	15	11	15	13	13	13	12	11	21	25	16	19	14	12	11	26	31
Radionuclides																	
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00005	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00007	<0.00007	<0.00006	<0.00006	<0.00005	<0.00005	<0.00005	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids (Fond du Lac River)																			
	Lake Whitefish																			
	2011					2012					2013					2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW06	LW07	LW08	LW09	LW10	LW01	LW02	LW03	LW04	LW05	LW06	LW07	LW08	LW09	LW10	LW06	LW07	LW08	LW09	LW10
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.06	0.03	0.03	0.07	0.02	0.02	0.06	0.05	0.03	0.04	0.03	0.02	0.04	0.03	0.03	0.01	0.01	0.01	0.02	0.09
Barium	0.01	0.01	0.09	<0.01	0.02	0.01	0.05	0.01	0.01	0.02	<0.01	0.02	<0.01	<0.01	0.02	0.07	<0.01	0.08	0.03	0.04
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.005	0.009	0.012	0.004	0.008	<0.002	0.009	0.005	0.007	0.003	0.004	0.004	0.006	0.004	0.005	0.003	0.005	0.003	0.004	0.008
Copper	0.36	0.15	0.14	0.26	0.19	0.24	0.14	0.3	0.14	0.11	0.31	0.15	0.17	0.23	0.25	0.19	0.2	0.25	0.23	0.2
Iron	3.5	2	2	2.2	1.7	1.3	1.4	4.2	1.9	1.1	4.7	1.9	1.2	2.2	2.4	1.9	1.8	1.6	2.2	2
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004
Manganese	0.09	0.1	0.18	0.08	0.1	0.08	0.22	0.08	0.1	0.1	0.09	0.12	0.08	0.12	0.19	0.09	0.09	0.1	0.18	0.09
Mercury	0.23	0.06	0.15	0.37	0.06	0.05	0.05	0.14	0.06	0.13	0.09	0.04	0.04	0.07	0.06	0.13	0.098	0.08	0.1	0.056
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.05	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01
Selenium	0.13	0.1	0.15	0.27	0.12	0.18	0.12	0.14	0.18	0.13	0.14	0.13	0.15	0.12	0.12	0.11	0.08	0.11	0.12	0.16
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.23	0.26	2	0.12	0.24	0.28	1.8	0.3	0.23	0.24	0.27	0.22	0.17	0.22	0.25	0.36	0.1	0.18	0.3	0.29
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.07	0.08	0.08	0.07	0.09	0.06	0.07	0.07	0.06	0.06	0.03	0.03	0.03	0.03	0.03	0.09	0.06	0.09	0.09	0.08
Uranium	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4	4	4.1	8.3	4.7	6.1	7	3.6	3.4	3.4	4	4.6	3.4	4.9	4.7	3.8	2.8	3.6	4.2	3.9
Physical Properties																				
Moisture (%)	76.78	78.07	78.94	77.19	75.5	74.99	80.97	76.82	80.22	79.53	76.95	78.07	73.93	75.51	76.73	74.28	79.2	76.81	75.18	76.08
Length (cm)	47.8	44.8	48.1	51.4	42.5	48	47	50.6	50.8	49.5	44.5	42.2	43.3	39.9	40.5	44	43.2	44.2	41.8	49.6
Weight (g)	1490	1640	1730	2060	1410	1420	980	1680	1360	1520	1180	940	1100	1000	960	1300	1120	1120	1130	1560
Sex	F	F	F	F	M	F	F	M	F	F	M	F	F	M	M	F	F	F	M	F
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	27	14	13	29	8	9	14	18	15	18	18	8	11	11	10	11	9	9	8	11
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00008	0.0001	0.00006	0.0001	<0.00006	<0.00005	0.001	<0.00006	<0.00007	<0.00005	<0.00006	<0.00006	0.0001	0.00009	<0.00006	<0.00007	<0.00006	<0.00006	<0.00006	<0.00006
Thorium-230 (Bq/g)	<0.0002	<0.00009	<0.00008	<0.0002	<0.0001	<0.0001	<0.002	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Stony Rapids (Fond du Lac River)																	
	Lake Whitefish																	
	2016			2018					2019					2020				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW04	LW05	LW06	LW01	LW02	LW03	LW04	LW05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals																		
Aluminum	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.02	0.06	0.04	0.14	0.13	0.17	0.1	0.08	0.01	0.03	0.01	0.02	0.02	0.23	0.06	0.02	0.03	0.02
Barium	<0.01	0.04	0.05	0.03	0.22	0.07	0.14	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.012	0.023	0.007	0.009	0.014	0.003	0.006	<0.002	0.008	0.008	0.007	0.009	0.007	0.002	0.004	0.003	0.009	0.003
Copper	0.17	0.11	0.2	0.18	0.26	0.24	0.24	0.32	0.16	0.17	0.14	0.12	0.18	0.22	0.18	0.2	0.26	0.17
Iron	1.9	1.7	1.8	3	3.2	3.2	4.3	3.5	1.6	2.4	1.7	2.1	2.2	2.4	1.8	2.6	2.7	1.8
Lead	0.004	0.004	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.12	0.08	0.08	0.1	0.11	0.11	0.11	0.08	0.09	0.1	0.06	0.09	0.1	0.15	0.08	0.14	0.09	0.15
Mercury	0.036	0.048	0.039	0.03	0.032	0.052	0.073	0.1	0.043	0.066	0.087	0.064	0.082	0.15	0.09	0.04	0.07	0.09
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	0.02	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.12	0.17	0.1	0.08	0.16	0.19	0.22	0.21	0.08	0.12	0.1	0.11	0.11	0.31	0.13	0.11	0.12	0.17
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.5	0.5	0.34	0.28	0.45	0.4	0.46	0.29	0.29	0.36	0.13	0.34	0.25	0.3	0.29	0.3	0.38	0.4
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	<0.01	<0.01	0.01	0.01	0.02	0.01	0.02	0.03	0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.03	0.04	0.04	0.03
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4.5	4.9	4.4	4.6	4.6	5.6	3.5	4.5	3.4	6.2	2.4	3	2.6	4.2	3.1	4.2	5.3	4.8
Physical Properties																		
Moisture (%)	76.94	75.08	76.91	79.48	75.79	73.45	77.61	78.27	77.7	77.03	80.34	75.85	74.44	79.89	78.62	77.46	78.42	73.15
Length (cm)	42	47.4	41	41.4	48.7	44	40.6	48.2	46.4	43.7	47.3	45.8	42.6	39.3	46.8	44.4	47.4	43.8
Weight (g)	1160	1520	1040	1070	1420	1080	850	1420	1560	1460	1540	1420	1240	800	1520	1350	1600	1300
Sex	F	F	F	F	F	M	M	F	F	F	F	M	M	M	F	M	F	M
Maturity	A	A	A	U	U	U	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	8	12	12	10	11	13	13	10	8	15	18	16	14	24	21	6	15	17
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	0.0003	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00007	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00008	<0.00008	<0.00007
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

GN = gill net; LT = lake trout; LW = lake whitefish; M = male; F = female; A = adult, U = unknown.

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake (Welcome Bay, Wollaston Lake)																			
	Lake Trout																			
	2011					2012					2013					2014				
	GN1-1	GN1-1	GN1-1	SP01-01	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT04	LT05	LT06	LT07	LT08	LT09	LT10	LT07	LT08	LT09	LT10	LT11	LT07	LT08	LT09	LT10	LT11
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.06	0.03	0.04	0.02	0.04	0.05	0.04	0.04	0.08	0.02	0.02	0.04	0.03	0.06	0.02	0.01	0.03	0.02	0.03	0.05
Barium	0.02	0.02	0.02	0.02	<0.01	0.02	0.01	<0.01	0.02	<0.01	<0.01	0.02	<0.01	<0.01	0.02	0.02	0.03	0.02	0.01	0.03
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	0.006	0.002
Copper	0.62	0.48	0.53	0.31	0.3	0.52	0.39	0.4	0.69	0.24	0.35	0.38	0.34	0.3	0.32	0.44	0.25	0.29	0.26	0.29
Iron	6	4	2.6	1.8	1.9	3.1	2.8	2.2	3.8	1.6	2.3	3	2.6	2.2	2.1	2	1.9	1.7	1.6	2.7
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	0.004	<0.002	<0.002
Manganese	0.1	0.1	0.07	0.06	0.07	0.08	0.06	0.08	0.07	0.05	0.08	0.09	0.1	0.1	0.09	0.08	0.11	0.06	0.1	0.09
Mercury	0.15	0.16	0.16	0.2	0.12	0.24	0.15	0.13	0.16	0.14	0.14	0.1	0.09	0.1	0.18	0.18	0.26	0.2	0.19	0.38
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	<0.01	0.01	<0.01
Selenium	0.17	0.28	0.19	0.18	0.19	0.27	0.21	0.22	0.22	0.21	0.21	0.2	0.2	0.18	0.2	0.19	0.18	0.2	0.21	0.16
Silver	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.09	0.22	0.09	0.15	0.05	0.19	0.09	0.07	0.11	0.03	0.19	0.1	0.05	0.04	0.05	0.12	0.24	0.08	0.04	0.16
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.09	0.09	0.09	0.09	0.07	0.07	0.07	0.07	0.08	0.07	0.03	0.03	0.03	0.07	0.04	0.08	0.08	0.07	0.08	0.08
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	5.5	6.6	3.9	3.1	3.3	5.8	3.6	3.8	4.8	3.1	5.7	4.2	3.8	4.8	3.7	3.6	3	2.5	2.6	4.5
Physical Properties																				
Moisture (%)	78.93	75.5	76.46	75.65	75.48	75.41	73.15	73.02	79.09	75.73	76.78	72.75	72.82	71.52	74.12	78.37	75.48	75.05	77.38	74.92
Length (cm)	51.5	46.3	46.8	47.9	46.6	55.6	50.5	50.8	50.5	52	45.3	46.5	44.1	45.4	48.5	48.4	49.8	52.2	50.6	55.9
Weight (g)	1730	1220	1440	1410	1430	1760	1420	1360	1400	1520	1200	1340	1060	1060	1400	1580	1610	1850	1780	2020
Sex	F	M	M	F	M	M	M	M	M	M	M	M	F	F	F	M	F	M	M	F
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	7	7	7	8	6	6	7	7	9	7	8	7	8	8	8	8	9	9	9	12
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	0.0003	0.00009	<0.00006	<0.00006	<0.00005	<0.00007	<0.00005	0.0002	0.00007	<0.00006	<0.00006	0.00008	<0.00004	<0.00006	<0.00005	<0.00005	<0.00005
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00009	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.00008	<0.0001	<0.00009	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake (Welcome Bay, Wollaston Lake)																	
	Lake Trout																	
	2016			2018					2019					2020				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	SP01-01	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LT01	LT02	LT03	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05	LT01	LT02	LT03	LT04	LT05
Metals																		
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.03	0.02	0.09	0.08	0.09	0.04	0.12	0.06	0.1	0.03	0.03	0.04	0.17	0.02	0.03	0.02	0.03	0.06
Barium	<0.01	<0.01	<0.01	0.13	0.14	0.09	0.03	0.01	0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.004	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	0.002	0.003	<0.002	<0.002	<0.002	<0.002	0.003	0.002
Copper	0.32	0.33	0.2	0.62	0.31	0.32	0.29	0.56	0.25	0.26	0.18	0.62	0.21	0.31	0.33	0.31	0.24	0.48
Iron	3.2	3.4	1.4	4.6	2.3	3.4	4.7	2.7	2.2	1.8	1.3	4.7	1.6	1.9	1.9	2	1.9	4.1
Lead	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.11	0.09	0.1	0.09	0.1	0.08	0.11	0.12	0.1	0.07	0.06	0.08	0.09	0.08	0.11	0.08	0.07	0.07
Mercury	0.16	0.22	0.22	0.22	0.14	0.14	0.11	0.16	0.072	0.17	0.17	0.17	0.16	0.13	0.19	0.1	0.22	0.16
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.21	0.24	0.24	0.17	0.19	0.14	0.2	0.29	0.43	0.18	0.21	0.22	0.16	0.22	0.22	0.24	0.22	0.25
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.06	0.03	0.02	0.24	0.3	0.36	0.1	0.14	0.14	0.05	0.06	0.21	0.1	0.11	0.14	0.15	0.1	0.24
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.01	<0.01	0.01	0.02	0.01	0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.04	0.05	0.07	0.08
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	4	2.7	2.4	6.2	5.4	5	4.3	3.7	3.1	2.9	3.7	5.8	4.1	4.7	3.3	3.7	3.3	7
Physical Properties																		
Moisture (%)	75.2	77.38	77.09	76.68	75.09	76.32	76.31	76.97	75.27	74.33	73.39	77.05	73.18	75.29	73.85	75.24	74.46	77.26
Length (cm)	48	52	52.4	58	47	53.4	54.1	51	49.1	50	56.8	52.7	49.4	46.1	48.1	43.3	44.5	48.7
Weight (g)	1600	1800	1980	2360	1520	1860	1840	1900	1680	1560	2260	1920	1600	1300	1440	1220	2160	1400
Sex	F	F	F	F	M	F	F	F	F	F	F	M	F	M	M	M	M	M
Maturity	A	A	A	A	U	A	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	11	9	11	13	12	12	10	9	9	10	14	-	13	7	9	7	15	10
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.001	<0.0002	<0.0002	0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00005	<0.00007	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00008	<0.00006	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake (Welcome Bay, Wollaston Lake)																			
	Lake Whitefish																			
	2011					2012					2013					2014				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW06	LW07	LW08	LW09	LW10	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW05	LW06	LW01	LW02	LW03	LW05	LW06
Metals																				
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.24	0.13	0.17	0.09	0.18	0.19	0.12	0.17	0.16	0.13	0.15	0.18	0.17	0.09	0.14	0.14	0.15	0.11	0.11	0.06
Barium	0.11	0.01	0.01	0.02	0.02	0.02	0.02	0.04	0.02	0.02	0.02	0.01	0.12	0.05	0.03	0.02	0.02	0.04	0.08	0.02
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	<0.002	<0.002	<0.002	0.005	<0.002	<0.002	<0.002	0.002	<0.002	0.003	<0.002	<0.002	<0.002	0.002	<0.002	0.004	0.002	0.005	<0.002	0.002
Copper	0.26	0.16	0.18	0.12	0.14	0.12	0.18	0.13	0.14	0.21	0.13	0.16	0.16	0.14	0.13	0.17	0.17	0.14	0.14	0.14
Iron	2.2	1.3	1.5	3.1	1.4	1.1	1	1.5	1	3	1.8	1.7	2.5	3	1.7	1.7	1.5	2	2.9	1.6
Lead	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.002	0.004	0.004	<0.002	<0.002
Manganese	0.15	0.09	0.09	0.12	0.1	0.09	0.07	0.14	0.1	0.13	0.11	0.09	0.1	0.25	0.11	0.12	0.1	0.11	0.24	0.1
Mercury	0.06	0.05	0.05	0.05	0.08	0.03	0.02	0.07	0.03	0.05	0.02	0.02	0.06	0.07	0.03	0.086	0.094	0.11	0.07	0.082
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.01	<0.01	0.01	0.02	0.01	0.01	<0.01
Selenium	0.39	0.41	0.34	0.38	0.38	0.5	0.53	0.38	0.68	0.51	0.31	0.34	0.32	0.41	0.4	0.44	0.34	0.36	0.39	0.36
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.47	0.08	0.11	0.24	0.14	0.11	0.13	0.25	0.15	0.18	0.16	0.12	0.14	0.62	0.21	0.15	0.15	0.16	0.54	0.11
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.07	0.08	0.08	0.11	0.08	0.07	0.07	0.07	0.07	0.07	0.04	0.04	0.03	0.03	0.04	0.1	0.07	0.08	0.09	0.08
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	5.1	3	3.8	4.7	4.3	3.7	4.5	3.2	4.5	4	3.7	3.7	5.5	3.3	3.6	4.9	3.3	4.1	2.8	2.9
Physical Properties																				
Moisture (%)	73.6	75.29	75.27	76.01	73.6	73.9	70.19	74.68	71.83	76.61	73.91	73.39	75.49	79.53	78.4	71.26	72.78	76.4	76.45	79.18
Length (cm)	36.5	38	40.6	36.9	39.2	47.9	43.3	46.2	44.4	43.6	36.2	37.4	37.5	39.5	40.1	43.4	37.9	42.4	38.6	41.9
Weight (g)	780	820	940	810	825	1380	880	1060	860	840	620	620	640	700	720	1230	850	930	950	1010
Sex	M	M	M	M	F	M	F	F	F	M	M	F	F	F	M	M	F	M	F	M
Maturity	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Age (years)	16	16	14	12	17	19	11	21	12	18	12	12	15	13	18	12	13	18	13	10
Radionuclides																				
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.004	<0.001	<0.004	<0.004	0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.0003	0.0004	<0.0002	0.0002	0.0004	<0.0002	<0.001	<0.0002	<0.001	<0.001	<0.001	<0.0002	<0.0002	0.0002	0.0006	0.0005	<0.0002	0.0004	0.0002	0.0003
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00008	<0.00006	<0.00006	<0.00006	0.001	<0.00005	0.002	0.002	<0.001	0.0001	<0.0001	0.0001	0.0001	<0.00006	<0.00006	<0.00006	<0.00006	0.0001
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.002	<0.0001	<0.002	<0.002	<0.00002	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 2

Detailed fish flesh chemistry data from the EARMP community program, 2011 to 2020.

Chemical[1]	Wollaston Lake/Hatchet Lake (Welcome Bay, Wollaston Lake)																	
	Lake Whitefish																	
	2016			2018					2019					2019				
	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	SP01-01	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1	GN1-1
	LW04	LW05	LW06	LW01	LW02	LW03	LW04	LW05	LW01	LW02	LW03	LW04	LW05	LW06	LW07	LW08	LW09	LW10
Metals																		
Aluminum	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.13	0.18	0.03	0.13	0.08	0.11	0.16	0.08	0.02	0.1	0.11	0.07	0.1	0.02	0.18	0.24	0.05	0.21
Barium	<0.01	<0.01	<0.01	0.26	0.29	0.28	0.23	0.16	<0.01	<0.01	0.01	<0.01	0.02	<0.01	0.03	0.07	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.006	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	0.004	0.003	0.004	0.004	0.002	0.004	0.003	<0.002	0.004	<0.002	0.002	<0.002	<0.002	0.003	0.002	0.003	0.003
Copper	0.15	0.45	0.19	0.27	0.29	0.22	0.26	0.17	0.32	0.21	0.18	0.27	0.17	0.12	0.2	0.17	0.19	0.41
Iron	2.9	5.9	2.5	3.3	5.5	4.2	5.7	2.2	2	3.2	2.3	2.6	1.7	1.1	1.8	2.6	2.6	2.8
Lead	<0.002	<0.002	<0.002	0.007	0.004	0.008	0.004	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Manganese	0.12	0.11	0.1	0.29	0.09	0.11	0.14	0.13	0.07	0.1	0.08	0.07	0.09	0.08	0.1	0.14	0.06	0.06
Mercury	0.063	0.059	0.12	0.061	0.086	0.093	0.078	0.095	0.17	0.064	0.08	0.065	0.069	0.22	0.06	0.06	0.06	0.06
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	1	0.41	0.24	0.38	0.45	0.45	0.4	0.44	0.18	0.77	0.63	0.54	0.35	0.24	0.43	0.55	0.32	0.46
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.1	0.09	0.14	1.1	0.2	0.28	0.41	0.38	0.08	0.12	0.13	0.08	0.16	0.07	0.16	0.32	0.1	0.15
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.02	0.01	0.01	0.02	0.02	0.03	0.02	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.05	0.06	0.06	0.07	0.06
Uranium	<0.001	<0.001	<0.001	0.003	0.002	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	3.5	3.6	7.7	3.9	7.6	4.6	5.8	3.2	3.1	3.6	3.9	3.2	3.4	3.2	4.7	5	4.5	4.3
Physical Properties																		
Moisture (%)	77.36	76.23	77.69	79.62	80.94	81.17	82.01	79	74.45	74.87	75.99	77.04	72.64	78.76	74.54	74.78	77.17	76.73
Length (cm)	38.7	40.5	39.7	42.8	42	41	44.2	44	41.6	46.8	42	43.4	39	45.0	39.7	40.0	43.0	42.8
Weight (g)	700	920	1020	880	820	910	940	980	1020	1300	1040	1100	820	1240	1020	1060	1160	1300
Sex	M	M	M	F	F	M	M	M	F	F	F	M	F	F	M	F	F	F
Maturity	A	A	A	U	U	U	U	U	A	A	A	A	A	A	A	A	A	A
Age (years)	17	14	9	17	22	25	27	22	18	19	18	24	15	14	15	19	13	18
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Polonium-210 (Bq/g)	0.0008	<0.0002	0.0002	0.0008	0.0004	0.0008	0.0005	0.0008	<0.0002	0.0009	0.0004	0.0014	<0.0002	<0.0002	0.0002	0.0004	<0.0002	0.0002
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00005	<0.00006	<0.00005	<0.00006	<0.00006	<0.00005	<0.00007	<0.00006	<0.00006	<0.00006	<0.00008	<0.00006	<0.00005	<0.00007	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

GN = gill net; LT = lake trout; LW = lake whitefish; M = male; F = female; A = adult, U = Unknown.

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Black Lake														
	2011					2012					2013				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Metals															
Aluminum	6	8.6	7.9	8.6	6	13	6	7.1	7.9	7.7	11	7.1	11	8.9	7.8
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	12	15	13	11	15	13	14	17	15	15	11	12	14	14	7
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	6	5	5	3	5	6	8	5	5	7	8	4	7	5	13
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.05	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Copper	3.3	3.2	2.5	2.6	3.1	2.8	3.8	3.5	3.4	3.8	3.2	1.8	1.8	1.8	1.6
Iron	8.4	11	8.6	11	10	20	10	8.1	8.8	9.8	10	6	8	8	5
Lead	0.07	0.02	0.02	0.07	<0.01	0.03	<0.01	<0.01	0.02	<0.01	0.02	0.02	<0.01	0.02	<0.01
Manganese	160	130	120	180	220	100	100	170	170	120	160	220	200	250	160
Molybdenum	0.2	0.2	0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	0.2	0.1	<0.1
Nickel	0.66	0.68	0.54	0.56	0.38	0.32	0.56	0.58	0.66	0.54	0.58	0.38	0.41	0.37	0.34
Selenium	<0.05	0.08	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	2.1	4.4	3.5	2.1	1.2	1.1	1.7	1.7	2	1.8	1.7	1.8	3	2	2
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	<0.05	0.08	0.06	0.1	0.15	0.1	0.05	0.05	0.08	<0.05	0.11	<0.05	0.12	0.07	0.06
Uranium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	4.8	6.1	5	3.9	5.5	3.9	6.1	6	5.3	6.4	5.8	6.2	6.7	7	3.6
Physical Properties															
Moisture (%)	86.24	86.69	85.12	86.04	87.39	86.19	85.89	84.95	84.99	84.86	84.23	83.47	84.32	83.26	84.73
Radionuclides															
Lead-210 (Bq/g)	0.009	0.005	0.007	0.009	0.012	0.002	0.002	<0.001	0.002	<0.001	0.002	<0.001	0.002	<0.001	<0.001
Polonium-210 (Bq/g)	0.001	0.002	0.001	0.002	<0.0009	0.0015	0.002	0.0024	0.0014	0.0012	0.0008	0.0008	0.0005	0.0008	0.0008
Radium-226 (Bq/g)	0.002	0.004	0.004	0.002	0.002	<0.00003	0.0012	<0.00003	0.0028	0.001	0.0025	0.0042	0.0029	0.0028	0.0022
Thorium-230 (Bq/g)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	0.002	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Black Lake										
	2014					2015			2016		
	1	2	3	4	5	1	2	3	1	2	3
Metals											
Aluminum	19	16	12	12	12	45	19	5.7	6.8	13	7.7
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	21	18	24	22	24	14	15	12	16	18	12
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	4	4	4	4	4	4	4	6	5	4	3
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.02	0.02	0.01	0.01	0.01	0.03	0.02	<0.01	0.02	0.02	0.01
Copper	3.7	3.6	4	3.6	4	3.5	3.4	3.4	2.7	3.6	2.6
Iron	31	21	18	18	17	51	22	10	11	16	12
Lead	0.03	0.03	0.02	0.02	<0.01	0.02	0.01	<0.01	0.13	0.02	<0.01
Manganese	220	200	89	98	83	300	390	200	150	139	182
Molybdenum	<0.1	<0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.2
Nickel	0.47	0.55	0.78	0.59	0.72	0.69	0.6	0.28	0.49	0.68	0.46
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	3.7	3.6	11	9.8	9.9	1.5	1.6	0.9	1.5	3	1.2
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	0.69	0.52	0.23	0.22	0.34	3.4	0.98	0.2	0.1	0.29	0.1
Uranium	<0.01	0.01	0.03	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	8.8	7.1	6.2	5.7	5.7	5.6	5.1	4.8	6.4	6.7	5.8
Physical Properties											
Moisture (%)	85.74	85.93	87.13	86.97	87.28	85.47	85.47	84.86	84.76	85.97	84.71
Radionuclides											
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	0.002	<0.001	0.003	0.001	0.002	<0.001	0.002	0.001
Polonium-210 (Bq/g)	0.0007	0.0007	0.0011	0.0005	0.0007	0.0017	0.0014	0.0014	0.0008	0.0006	0.0007
Radium-226 (Bq/g)	0.002	0.0008	0.001	0.001	0.002	0.0059	0.0066	0.0022	0.002	0.002	0.001
Thorium-230 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	0.0009	<0.0005	<0.0005	<0.001	<0.001	<0.001

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Fond du Lac																			
	2011					2012					2013					2014				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Metals																				
Aluminum	4.4	9.5	6.2	7	6.2	14	20	7.3	13	5.9	10	21	13	14	15	29	13	33	12	39
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	12	12	13	13	12	12	9.9	14	11	11	14	14	16	18	15	20	16	22	14	29
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	8	6	7	8	6	14	6	5	8	5	6	4	5	4	6	6	7	6	5	7
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
Cobalt	0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.02	<0.01	<0.01	0.02	0.02	0.02	0.01	0.05	0.03	0.05	0.03	0.06
Copper	2.7	3	3.6	3.2	3.9	2.8	3.9	3.3	3.9	2.8	1.8	2.4	2.8	1.8	2.1	5.2	5	5.6	5.2	5.6
Iron	10	8.2	9.7	11	9.3	14	21	12	16	10	10	23	17	17	10	48	23	40	22	44
Lead	<0.01	0.02	<0.01	0.03	0.01	0.03	0.01	<0.01	0.01	<0.01	0.04	0.02	0.02	0.01	0.02	0.02	0.03	0.17	0.14	0.04
Manganese	140	150	140	140	130	280	460	240	370	310	460	410	660	700	460	400	380	400	390	390
Molybdenum	0.4	0.2	0.4	0.4	0.4	0.2	0.2	<0.1	0.2	<0.1	0.2	0.3	0.3	0.3	0.2	0.5	0.5	0.6	0.4	0.6
Nickel	0.97	0.67	0.75	0.8	0.74	0.48	0.55	0.54	0.6	0.5	0.4	0.7	0.62	0.53	0.48	2.2	0.89	2.3	0.89	2.1
Selenium	<0.05	<0.05	<0.05	0.08	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	1.3	1.3	1.4	1.6	1.3	2.8	1.8	1.8	2.6	1.6	1.8	2.4	1.8	1.8	2	6.4	2.5	6.3	1.9	5
Thallium	1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05
Titanium	1.3	0.08	0.08	0.08	0.1	0.35	0.88	0.07	0.42	0.05	0.21	0.86	0.43	0.4	0.21	1.5	0.46	2	0.33	1.7
Uranium	1.3	0.02	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.01	0.01	0.01
Vanadium	1.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	1.3	6	7.5	7	7.1	4.4	5.1	10	5.4	5.8	6.7	6.2	7.1	8.4	6.4	7.7	7.7	8.6	6.5	8.2
Physical Properties																				
Moisture (%)	87.1	85.5	86.68	84.6	86.31	83.99	83.87	84.56	83.79	84.11	84.33	83.47	84.18	84.47	83.71	84.83	82.79	84.76	82.2	84.79
Radionuclides																				
Lead-210 (Bq/g)	<0.004	0.007	0.01	0.011	0.006	<0.001	<0.001	<0.001	<0.001	<0.001	<0.004	0.002	<0.001	0.009	0.005	<0.001	<0.001	0.001	0.001	<0.001
Polonium-210 (Bq/g)	0.001	0.002	0.001	0.004	0.002	0.0012	0.0009	0.0015	0.0012	0.0014	0.001	0.0066	0.0008	0.002	<0.001	0.001	0.001	0.0008	0.0007	0.0018
Radium-226 (Bq/g)	0.002	0.004	0.003	0.001	0.005	0.0023	0.0018	0.0026	0.0021	0.0026	0.003	0.0033	0.0038	0.006	0.005	0.001	0.004	<0.0005	0.002	0.003
Thorium-230 (Bq/g)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0004	<0.001	<0.0003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0009	<0.0009	<0.0009

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Fond du Lac															
	2015			2016			2018					2019				
	1	2	3	1	2	3	1	2	3	4	5	1	2	3	4	5
Metals																
Aluminum	47	18	23	34	15	11	16	10	9.5	8.9	9	7.8	6.8	6	7.8	6
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Barium	18	14	18	16	27	19	14	15	15	16	17	15	16	13	8.8	16
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Boron	5	5	6	4	5	4	7	5	6	5	6	6	6	6	3	6
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Cobalt	0.03	0.02	0.02	0.03	0.01	<0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	< 0.01
Copper	3.9	3.8	3.1	4.6	4.2	3.7	2.8	2.3	2.4	2.3	2.4	2.6	2.4	2.4	3.2	2.3
Iron	54	18	22	30	20	14	11	10	10	10	9.8	9.2	8.9	7.9	11	7.2
Lead	0.04	0.01	0.03	0.03	0.02	0.02	0.03	0.02	0.06	0.03	0.02	0.02	< 0.01	< 0.01	< 0.01	< 0.01
Manganese	290	340	480	336	94	113	227	202	210	197	204	195	172	174	389	223
Molybdenum	0.3	0.3	0.2	0.4	1.4	1.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.1
Nickel	1.3	0.69	0.77	1.7	1.2	0.96	0.77	0.51	0.55	0.55	0.55	1	0.99	0.94	0.82	0.79
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Strontium	4.4	2.6	2.5	3.1	3.8	2.5	1.4	1.2	1.2	1.2	1.2	1.4	1.5	1.4	1.8	1.4
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Titanium	3.3	0.76	0.77	1.2	0.49	0.19	0.08	0.14	0.11	0.19	0.08	0.09	0.08	0.06	0.12	0.06
Uranium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Zinc	6.6	6.6	7.4	7.9	7.9	6.5	6.1	5.2	5.4	5.6	5.7	5.9	5.7	5.3	5.3	4.8
Physical Properties																
Moisture (%)	86.12	86.14	86.17	83.54	82.53	82.76	85.32	84.42	84.34	84.54	84.55	85	84.77	85.04	85.53	85.1
Radionuclides																
Lead-210 (Bq/g)	0.003	0.004	0.004	0.002	<0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001	0.003	0.004	0.01	0.004	< 0.001
Polonium-210 (Bq/g)	0.001	0.0021	0.0032	0.0012	0.0007	0.0005	0.0018	0.0011	0.0011	0.0012	0.0017	0.0008	0.001	0.0008	0.0009	0.0008
Radium-226 (Bq/g)	0.0022	0.0031	0.0038	0.003	0.002	0.004	0.0046	0.0034	0.0032	0.0026	0.0052	0.0044	0.0051	0.0041	0.0026	0.0066
Thorium-230 (Bq/g)	0.002	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Stony Rapids														
	2011					2012					2013				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Metals															
Aluminum	21	8	27	37	10	9.6	8.9	7	11	7.6	300	180	250	240	250
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	15	15	16	8.9	13	14	12	12	10	13	10	9	13	14	13
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	12	5	4	3	4	5	4	11	14	6	4	4	4	5	5
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.01	0.07	0.01	0.02	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	2.9	3.2	3	2.4	2.9	1.9	2	2.3	2.1	2	2.4	2.8	2.1	2.5	2.4
Iron	16	12	23	32	11	12	12	11	10	9.9	9.9	10	10	11	12
Lead	0.01	<0.01	0.02	0.04	<0.01	0.1	<0.01	0.03	0.03	<0.01	<0.01	0.02	<0.01	<0.01	0.01
Manganese	140	100	130	70	180	290	250	230	240	260	210	200	270	340	300
Molybdenum	0.1	0.2	<0.1	<0.1	<0.1	0.1	<0.1	0.4	0.3	0.3	0.2	0.1	<0.1	<0.1	0.1
Nickel	0.75	0.68	0.84	0.82	0.74	0.39	0.48	0.47	0.37	0.4	0.38	0.42	0.24	0.3	0.29
Selenium	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	2.6	1.7	2.9	2.5	2	1.7	1.5	2.9	2.6	2.4	3.4	3	3.5	4.5	3.8
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	0.26	0.12	1.6	1.4	0.19	0.2	0.23	0.09	0.26	0.11	0.08	0.14	0.07	0.06	0.06
Uranium	<0.01	<0.01	0.02	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	5.8	6.4	5.1	4.9	5.3	3.3	3.7	4.9	3.4	4	5.9	5.8	5.9	7.6	6.4
Physical Properties															
Moisture (%)	85.84	85.47	84.14	85.08	86.57	85.35	85.14	84.42	85.08	84.82	85.92	85.78	86.59	86.18	86.45
Radionuclides															
Lead-210 (Bq/g)	<0.004	0.005	0.012	0.006	<0.004	<0.01	<0.01	<0.01	<0.01	<0.01	0.007	<0.004	<0.004	<0.004	<0.004
Polonium-210 (Bq/g)	0.002	0.002	0.002	0.003	0.002	0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.001
Radium-226 (Bq/g)	0.003	0.006	0.001	<0.0009	0.001	0.003	<0.001	0.003	0.003	0.004	0.015	0.014	0.016	0.012	0.015
Thorium-230 (Bq/g)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Stony Rapids											
	2014					2015			2016			2019
	1	2	3	4	5	1	2	3	1	2	3	1
Metals												
Aluminum	7.8	9.3	10	8.3	8.9	22	18	9.5	13	16	18	6.8
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	< 0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05
Barium	22	21	21	18	21	13	15	15	14	15	15	17
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01
Boron	4	5	5	5	16	5	5	7	12	5	5	6
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5
Cobalt	0.01	0.02	0.1	<0.01	0.02	<0.01	<0.01	0.01	0.01	0.01	0.01	< 0.01
Copper	4.5	4.2	4.2	4	4.4	3.6	3.3	3.2	3	3.4	3.4	2.9
Iron	14	15	14	13	15	19	19	13	22	17	18	9.1
Lead	<0.01	0.01	<0.01	0.02	0.01	0.26	0.02	0.02	0.06	0.01	0.03	< 0.01
Manganese	130	150	140	270	140	130	150	220	229	337	357	226
Molybdenum	0.2	0.2	0.2	0.2	0.2	<0.1	<0.1	0.1	0.1	0.1	0.1	0.2
Nickel	1.1	1.1	1.4	0.54	1	0.68	0.65	0.8	0.68	0.57	0.57	0.58
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01
Strontium	2.5	2.5	2.2	5.3	2.6	1.6	1.7	3.1	3	1.7	1.8	1.6
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	< 0.05
Titanium	0.12	0.3	0.17	0.08	0.26	0.7	0.81	0.28	0.29	0.37	0.47	0.07
Uranium	0.03	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	< 0.1
Zinc	5.2	5.2	5.5	6.1	5.3	5.2	5.4	5.6	5.5	6.7	6.6	6.4
Physical Properties												
Moisture (%)	86.37	86.04	86.1	86.52	86.16	86.67	86.62	86.11	85.76	83.59	83.88	84.52
Radionuclides												
Lead-210 (Bq/g)	0.001	0.001	<0.001	<0.001	<0.001	0.003	0.002	0.002	0.002	<0.001	0.002	0.004
Polonium-210 (Bq/g)	<0.0002	0.0008	0.0007	0.0008	0.0006	0.0012	0.0014	0.0012	0.0011	0.0009	0.001	0.0012
Radium-226 (Bq/g)	0.003	0.002	0.002	0.013	0.002	0.004	0.0039	0.0018	0.002	0.002	0.001	0.0016
Thorium-230 (Bq/g)	<0.0009	<0.001	<0.001	<0.001	<0.001	<0.0005	0.0007	<0.0005	<0.0009	<0.0009	<0.001	< 0.0007

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Wollaston Lake/Hatchet Lake														
	2011					2012					2013				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Metals															
Aluminum	6.1	3.9	8.7	6.2	5.9	14	20	12	26	22	7.4	6.8	6.8	6.7	7.3
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	16	17	15	14	15	10	9.9	7.7	16	16	13	13	11	12	10
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	7	4	7	13	6	5	7	17	7	8	4	5	4	5	5
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.02	0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01
Copper	2.9	1.7	3	3	2.6	3.4	2.9	2.5	2.6	3.5	1.8	1.7	2.1	1.6	1.6
Iron	6.8	5.4	12	9.5	9	17	17	15	21	20	10	9	10	9	9
Lead	0.04	<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.03	0.02	0.02	0.03	<0.01	0.02	<0.01	<0.01
Manganese	270	290	300	290	260	150	160	110	180	190	150	140	150	140	150
Molybdenum	<0.1	<0.1	<0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.2	0.1	<0.1	0.2	<0.1	<0.1
Nickel	0.66	0.28	0.59	0.5	0.59	0.66	0.44	0.68	0.5	0.68	0.23	0.19	0.24	0.19	0.24
Selenium	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	3.4	1.2	3.1	3.8	3.6	1.3	1.2	1.1	1.4	2.8	1.8	2.3	1.6	1.8	1.5
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	<0.05	0.07	0.13	0.09	0.09	0.38	1.3	0.4	0.91	0.51	0.1	0.05	0.05	0.11	0.09
Uranium	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	5.7	3	5.5	5.1	4.4	6.6	7.7	4.7	6.7	8	6.4	6	6.2	5.6	5.3
Physical Properties															
Moisture (%)	85.31	84.46	84.79	84.44	85.11	84.44	84.81	84.13	85.4	84.17	85.61	85.47	85.66	85.56	85.51
Radionuclides															
Lead-210 (Bq/g)	0.005	0.009	0.008	0.01	0.004	<0.001	0.001	0.001	<0.001	<0.01	0.008	0.002	<0.002	0.012	<0.004
Polonium-210 (Bq/g)	0.002	0.002	0.004	0.004	0.004	0.0012	0.0012	0.0008	0.0017	<0.001	<0.001	<0.001	<0.001	<0.001	0.002
Radium-226 (Bq/g)	<0.001	0.001	<0.001	0.006	<0.001	0.0024	0.0032	0.0032	0.0057	0.004	0.008	0.005	0.006	0.009	0.004
Thorium-230 (Bq/g)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0009	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

APPENDIX BC, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Wollaston Lake/Hatchet Lake										
	2014					2015			2016		
	1	2	3	4	5	1	2	3	1	2	3
Metals											
Aluminum	11	11	10	12	12	28	13	16	13	10	15
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	21	19	15	22	18	17	13	14	20	13	22
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	5	5	8	6	5	6	7	6	5	4	6
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.02	0.01	0.2	0.03	0.14	0.03	0.01	0.01	0.01	0.02	0.01
Copper	4.5	4.4	4.5	4.8	4.5	3.5	3.3	3.6	3.4	3.9	3.2
Iron	17	18	18	17	17	29	15	17	12	14	12
Lead	<0.01	0.02	0.02	<0.01	0.02	0.02	0.02	0.03	0.02	0.01	0.05
Manganese	100	81	90	84	59	160	170	180	88	317	118
Molybdenum	0.3	0.4	0.3	0.4	0.4	0.2	0.1	0.1	0.2	0.3	0.2
Nickel	1.1	0.92	1.2	1.3	1.5	1.6	0.82	0.94	0.69	0.59	0.56
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	2.6	3.7	1.5	2.6	5.4	3.1	1.4	1.6	5.4	2.6	4.2
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	0.16	0.17	0.14	0.17	0.25	1.1	0.34	0.88	0.1	0.19	0.14
Uranium	<0.01	0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	7.3	8.1	7.3	7.5	7.4	6	6.8	7	5.8	5.3	5.8
Physical Properties											
Moisture (%)	86.34	86.99	86.93	87.01	86.51	88	84.22	84.43	85.72	86.66	86.27
Radionuclides											
Lead-210 (Bq/g)	0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.002	<0.001	0.004	0.004	0.003
Polonium-210 (Bq/g)	0.0006	0.001	0.0005	0.0008	0.0007	0.0016	0.001	0.0014	0.0018	0.0011	0.0015
Radium-226 (Bq/g)	0.004	0.002	0.004	0.005	0.004	0.006	0.0046	0.0045	0.002	<0.0005	0.003
Thorium-230 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.0009	<0.0006	<0.0005	<0.0005	<0.0009	<0.001	<0.001

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Camsell Portage												
	2012					2013					2014		
	1	2	3	4	5	1	2	3	4	5	1	2	3
Metals													
Aluminum	7.2	7.3	7	7.4	6	6.8	7.7	6.7	7.1	7.2	10	13	8.6
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	12	24	20	22	20	11	13	12	12	13	22	24	20
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	5	8	8	8	6	4	4	4	4	4	5	6	5
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01
Copper	3.5	3	3.4	3.5	2.6	2.2	2.2	2.2	2.2	2.4	3.8	3.8	3.5
Iron	11	8.7	9.7	18	13	8	10	10	13	9	15	17	16
Lead	<0.01	0.04	<0.01	<0.01	<0.01	0.03	0.02	0.03	<0.01	0.02	0.01	0.02	0.01
Manganese	280	490	490	480	580	350	390	360	380	360	430	470	370
Molybdenum	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Nickel	0.44	0.37	0.6	0.79	0.44	0.12	0.17	0.16	0.14	0.14	0.36	0.36	0.39
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	1.4	1.4	1.4	1.6	1.5	0.9	1	1	1	1.1	1.9	1.8	2
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	0.15	0.21	0.14
Uranium	0.01	0.08	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	13	6.5	8.9	8	5.9	6	6.7	5.6	8.4	6.2	7.6	7.8	6.9
Physical Properties													
Moisture (%)	83.98	85.16	84.3	84.62	85.57	84.78	84.99	84.99	84.76	84.82	84.37	84.9	83.77
Radionuclides													
Lead-210 (Bq/g)	0.001	0.004	<0.001	0.001	0.002	<0.004	0.013	0.004	0.008	<0.004	0.002	0.002	0.002
Polonium-210 (Bq/g)	0.0014	0.0017	0.0013	0.001	0.0016	<0.001	0.001	<0.001	<0.001	<0.001	0.0018	0.0013	0.0012
Radium-226 (Bq/g)	0.0025	0.0028	0.0025	0.0049	0.0045	0.003	0.002	0.002	0.004	0.003	0.003	0.004	0.003
Thorium-230 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.0009	<0.001

APPENDIX C, TABLE 3

Detailed blueberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Uranium City												
	2012					2014			2018			2019	
	1	2	3	4	5	1	2	3	1	2	3	1	2
Metals													
Aluminum	5.3	5.6	8.7	4.4	5.4	9.2	7.7	11	4.6	4.2	4.8	7.7	6.3
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	< 0.1	< 0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05
Barium	12	11	12	12	9.9	14	14	14	11	11	11	12	11
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01
Boron	8	8	9	6	7	3	4	3	6	5	5	5	6
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	< 0.5	< 0.5
Cobalt	0.01	<0.01	0.01	<0.01	0.02	<0.01	<0.01	0.06	0.01	0.01	0.02	0.02	0.02
Copper	3.9	3.4	3.7	3.5	2.9	4.1	4.1	4.1	3.3	3.4	3.3	3.5	3.1
Iron	11	9.7	10	12	8.7	14	14	14	9.4	9.2	9	12	9.7
Lead	0.01	0.01	0.02	0.01	<0.01	<0.01	0.06	0.01	<0.01	0.01	0.07	< 0.01	< 0.01
Manganese	280	330	280	200	140	430	440	450	530	460	550	680	640
Molybdenum	0.2	0.2	0.3	0.4	<0.1	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.3
Nickel	0.54	0.47	0.58	0.44	0.51	0.37	0.41	0.5	0.32	0.3	0.32	0.46	0.34
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01
Strontium	1.3	1.1	1.4	1.3	1.6	1.3	1.3	1.4	1.5	1.5	1.5	1.6	1.6
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	< 0.05	< 0.05
Titanium	<0.05	<0.05	<0.05	0.05	0.05	0.17	0.13	0.21	<0.05	<0.05	<0.05	0.16	0.08
Uranium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	< 0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	< 0.1	< 0.1
Zinc	6.3	5.9	6.2	6.3	4.2	6.7	6.5	6.4	5.1	4.9	4.7	4.9	4.3
Physical Properties													
Moisture (%)	84.4	83.99	84.04	85.06	84.43	89.62	89.29	89.56	81.8	81.73	81.57	84.16	84.46
Radionuclides													
Lead-210 (Bq/g)	0.002	0.004	0.003	0.002	0.02	0.001	0.005	0.002	<0.001	<0.001	<0.001	0.002	0.002
Polonium-210 (Bq/g)	0.0021	0.005	0.0032	0.0015	0.002	0.0031	0.003	0.0028	0.001	0.0009	0.0008	0.0014	0.0016
Radium-226 (Bq/g)	0.0014	0.006	0.0016	0.1	0.001	0.0007	0.003	0.001	<0.0003	<0.0003	<0.0003	0.0005	< 0.0002
Thorium-230 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.0007	<0.0007	<0.0007	< 0.0005	< 0.0005

[1]All concentrations are in µg/g dry weight, unless specified otherwise.

APPENDIX C, TABLE 4

Detailed bog cranberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Camsell Portage															
	2011					2014		2015			2016			2018		
	1	2	3	4	5	1	2	1	2	3	1	2	3	1	2	3
Metals																
Aluminum	17	17	19	19	16	17	16	16	19	21	22	21	22	20	25	22
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	14	13	14	15	9.1	15	15	18	19	19	7.6	8.5	8.6	8.1	9	8.2
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	9	8	8	10	9	6	5	10	6	6	6	7	6	9	8	9
Cadmium	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01	<0.01	0.01	0.02	<0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	4.5	4.2	4.8	4.9	3.6	4	4.3	4.3	3.8	4.8	3.6	3.6	3.7	3.3	3.5	3.2
Iron	9.7	9.7	10	10	11	15	14	16	12	13	9.3	8.8	9	9	9.6	8.7
Lead	<0.01	<0.01	<0.01	0.01	0.02	0.02	<0.01	0.03	<0.01	<0.01	<0.01	0.02	0.01	0.04	0.01	0.01
Manganese	110	120	100	100	80	170	170	140	200	220	171	124	155	116	126	127
Molybdenum	0.1	0.1	0.2	0.2	<0.1	<0.1	<0.1	0.2	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	0.46	0.46	0.49	0.65	0.37	0.54	0.52	0.36	0.36	0.41	0.23	0.32	0.27	0.36	0.34	0.31
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	2.3	2	2.1	2.5	1.8	2.3	2.3	3.1	3.8	4.5	1	1.2	1.1	1.5	1.7	1.5
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.9	<0.05	1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	0.06	0.06	<0.05	0.08	0.17	0.08	0.08	0.1	0.11	0.12	0.07	0.22	<0.05	0.07	0.11	0.08
Uranium	0.01	<0.01	0.01	<0.01	0.02	<0.01	0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	6.6	6.4	6.5	6.7	5.3	6.2	6.2	7.8	7.8	8	7.2	7	6.9	6.5	7.2	6.5
Physical Properties																
Moisture (%)	87.53	87.36	87.13	86.87	86.78	86.06	86.2	87.73	87.24	87.37	85.66	85.54	85.58	84.77	84.84	84.79
Radionuclides																
Lead-210 (Bq/g)	0.007	0.006	0.02	0.013	0.018	0.001	<0.001	0.002	0.002	0.002	0.002	0.004	0.003	0.001	0.001	0.002
Polonium-210 (Bq/g)	0.003	0.002	0.001	0.002	0.003	0.0011	0.0011	0.0015	0.0014	0.0015	0.0009	0.0011	0.001	0.0024	0.0021	0.0019
Radium-226 (Bq/g)	0.004	0.002	0.006	0.004	0.002	0.0008	<0.0005	0.0016	0.0017	0.0007	0.002	0.002	0.002	0.0014	0.0016	0.0009
Thorium-230 (Bq/g)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0006	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.0007	<0.0007	<0.0007

APPENDIX C, TABLE 4

Detailed bog cranberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Black Lake		Fond du Lac						Stony Rapids				Wollaston Lake					
	2019		2018			2018			2019				2018		2019			
	1	2	1	2	3	1	2	3	1	2	3	4	1	2	1	2	3	4
Metals																		
Aluminum	110	33	25	25	25	87	90	97	110	51	49	56	84	28	35	36	32	33
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	11	14	9.7	10	9.7	16	16	16	10	10	8.7	12	16	10	12	11	12	11
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	8	8	10	11	5	16	14	9	7	5	6	7	8	9	6	5	6	6
Cadmium	<0.01	0.03	<0.01	<0.01	<0.01	0.03	0.04	0.03	<0.01	<0.01	<0.01	<0.01	0.06	0.03	0.02	0.02	0.04	0.03
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.01	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	3.5	3.6	2.9	2.9	2.9	3	3.2	3.2	3.2	2.9	2.9	2.8	3.9	2.8	3.8	3.1	4	3.9
Iron	68	15	12	13	13	45	45	47	67	29	31	32	44	10	14	15	14	16
Lead	0.04	0.03	<0.01	0.01	0.03	0.09	0.13	0.13	0.04	0.03	0.02	0.02	0.06	0.02	<0.01	0.02	0.04	0.01
Manganese	192	148	157	164	157	133	129	127	164	192	163	174	139	114	83	138	132	101
Molybdenum	0.5	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.4	0.1	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	0.47	0.36	0.23	0.22	0.23	0.46	0.48	0.65	0.49	0.38	0.28	0.31	0.68	0.32	0.7	0.4	0.72	0.9
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	1.5	2.7	1.8	1.8	1.9	3.9	3.7	3.2	1.6	2	1.2	1.4	2.6	2.1	2.4	1.9	2	2.4
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Titanium	4.4	0.49	0.38	0.36	0.37	2.2	2.4	2.9	4.1	1.5	1.7	1.9	2.6	0.41	0.52	0.71	0.55	0.56
Uranium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	6.7	5.8	6.7	6.9	7.2	7.2	7	6.8	6.6	7.4	6.3	6.1	11	5.9	6	5.1	6.4	5.8
Physical Properties																		
Moisture (%)	87.22	84.62	84.4	84.42	84.37	86.12	86.09	85.23	85.39	86.37	85.83	86.01	85.36	84.56	84.84	85	84.51	85.14
Radionuclides																		
Lead-210 (Bq/g)	0.007	0.004	0.001	0.001	0.001	<0.001	0.004	0.005	0.004	0.003	85.83	0.004	0.004	0.003	0.003	0.004	0.002	0.002
Polonium-210 (Bq/g)	0.002	0.0039	0.0015	0.0008	0.0013	0.0015	0.0035	0.0049	0.0022	0.0018	0.003	0.0028	0.0034	0.0023	0.002	0.0039	0.0012	0.0022
Radium-226 (Bq/g)	0.0078	0.0046	0.0013	0.0009	0.001	0.0019	0.0017	0.0014	0.01	0.0031	0.0028	0.0067	0.0021	0.0031	0.0013	0.0014	0.0017	0.0026
Thorium-230 (Bq/g)	<0.0005	<0.0005	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0005	<0.0007	0.0064	<0.0005	<0.0007	<0.0007	<0.0005	<0.0005	<0.0005	<0.0007

APPENDIX C, TABLE 4

Detailed bog cranberry chemistry results from the EARMP community program, 2011 to 2019.

Chemical[1]	Uranium City																
	2011					2013					2014		2015	2016			2019
	1	2	3	4	5	1	2	3	4	5	1	2	1	1	2	3	1
Metals																	
Aluminum	20	29	15	19	27	21	56	50	45	28	22	23	20	18	25	17	9.9
Antimony	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	13	9.1	11	9.4	13	10	12	14	12	10	13	12	15	11	10	10	11
Beryllium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	10	9	8	14	10	18	16	15	7	5	6	6	9	6	4	7	6
Cadmium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.02	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Chromium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cobalt	0.02	0.14	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.05	0.04	<0.01	0.02	0.03	0.02	<0.01
Copper	5.9	3.6	2.6	2.6	3.2	2.6	2.1	2.3	2.4	3.2	5.6	6.4	3.4	4.2	5.4	4.2	2.7
Iron	16	20	9.5	13	14	13	12	26	26	14	12	14	12	11	14	10	7.3
Lead	0.01	0.01	0.01	0.01	0.02	0.02	0.2	0.03	0.02	0.03	0.04	0.03	0.02	0.11	0.04	0.01	<0.01
Manganese	150	110	300	210	220	210	150	100	81	100	160	160	90	158	103	120	200
Molybdenum	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.7	0.1	0.7	<0.1
Nickel	1.1	0.8	0.28	0.5	0.42	0.2	0.28	0.42	0.46	0.36	0.59	0.59	0.74	0.34	0.72	0.38	0.21
Selenium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Strontium	3.4	2.5	2.5	2.4	1.8	2.1	2.2	2.2	2.1	1.5	1.6	1.5	3.7	1.9	1.3	2	2.1
Thallium	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tin	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Titanium	0.07	0.47	0.06	0.18	0.14	0.11	0.56	0.6	0.7	0.33	0.16	0.11	0.19	0.1	0.14	<0.05	0.06
Uranium	0.01	0.02	<0.01	0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	8.9	7.3	5.7	5.2	6.8	7.2	8.9	7.4	7	7	6.2	7.1	5.3	6.7	7.6	6.6	4.5
Physical Properties																	
Moisture (%)	88.39	87.69	87.22	86.9	87.44	84.89	85.4	85.63	85.57	85.84	86.38	86.63	85.92	85.2	86.48	84.88	84.02
Radionuclides																	
Lead-210 (Bq/g)	0.005	0.005	0.016	0.01	0.016	0.016	0.009	<0.004	<0.004	<0.004	0.005	0.002	0.003	0.005	0.002	0.003	0.004
Polonium-210 (Bq/g)	0.003	0.003	0.013	0.002	0.005	0.002	0.001	0.001	<0.001	0.001	0.0039	0.0036	0.0027	0.0024	0.0015	0.0013	0.0012
Radium-226 (Bq/g)	0.002	0.007	<0.0009	<0.0009	<0.0009	<0.001	0.002	0.003	0.002	0.003	0.003	0.002	0.0034	0.0008	0.0008	0.0009	0.0013
Thorium-230 (Bq/g)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.0007

[1]All concentrations are in µg/g dry weight, unless specified otherwise.

APPENDIX C, TABLE 5

Detailed barren-ground caribou flesh chemistry results from the EARMP community program, 2012 to 2021.

Chemical[1]	Black Lake																					
	2012					2013					2014					2015					2017	
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2
Metals																						
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	0.06	0.04	0.38	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.02	0.01	0.02	0.02	0.02	0.04	0.02	0.03	0.02	0.02	0.01	0.01	0.01	<0.01	<0.01	0.02	0.03	0.02	0.04	0.02	0.03	0.02
Barium	0.2	0.03	0.04	0.03	0.25	0.04	0.02	0.02	0.01	<0.01	0.02	0.05	0.11	0.33	0.02	0.04	0.03	0.02	0.03	0.02	0.21	0.17
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	0.7	0.2	0.6	<0.2	0.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.002	0.004	0.002	<0.002	<0.002	0.004	0.003	0.002	0.006	0.005	0.002	<0.002	0.003	0.005	0.004	0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.005
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Cobalt	0.005	0.004	0.003	0.003	0.003	0.008	0.005	0.004	0.004	0.005	<0.002	0.002	0.002	<0.002	0.002	0.009	0.006	0.009	0.008	0.016	0.004	0.006
Copper	4.3	2.6	3	3	3.3	3.3	4.2	3.4	3	3.1	4.6	3.3	3.2	2.4	4.6	4.9	3.5	4.6	4.8	2.5	2.5	2.6
Iron	43	29	40	38	45	33	49	44	50	43	49	38	58	37	52	46	32	53	48	37	35	33
Lead	0.013	<0.002	0.008	<0.002	0.005	0.003	0.31	0.003	0.48	0.013	<0.002	0.008	0.56	0.028	0.004	0.015	0.009	0.007	0.005	0.006	0.043	0.006
Manganese	0.45	0.29	0.35	0.38	0.42	0.28	0.53	0.34	0.3	0.26	0.48	0.56	0.48	0.34	0.42	0.49	0.34	0.54	0.48	0.3	0.24	0.32
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.01	<0.01	<0.01	0.02	0.02	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	0.04	0.04	0.01	<0.01
Selenium	0.15	0.2	0.21	0.19	0.2	0.15	0.27	0.18	0.2	0.18	0.24	0.15	0.21	0.17	0.21	0.22	0.18	0.24	0.22	0.18	0.17	0.18
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.03	0.03	0.02	0.02	0.03	0.05	0.04	0.03	0.03	0.03	0.03	0.06	0.12	0.27	0.05	0.04	0.03	0.02	0.02	0.03	0.07	0.04
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.08	0.07	0.07	0.08	0.09	0.11	0.08	0.08	0.08	0.06	0.1	0.07	0.1	0.09	0.07	0.07	0.07	0.07	0.06	<0.01	<0.01
Uranium	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	17	31	21	16	29	26	29	33	30	32	19	21	23	30	20	14	23	15	15	46	35	46
Physical Properties																						
Moisture (%)	74.06	74.11	74.21	73.58	72.53	76.52	73.84	75.07	75.5	74.1	70.87	67.93	65.21	69.85	71.08	73.58	73.63	72.12	72.03	73.79	75.45	72.45
Radionuclides																						
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.011	0.0095	0.0083	0.01	0.011	0.0007	0.0052	0.0065	0.0085	0.0094	0.023	0.014	0.013	0.015	0.012	0.019	0.014	0.015	0.016	0.013	0.0081	0.0063
Radium-226 (Bq/g)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	0.008	<0.005	<0.005	<0.005	<0.005	<0.00006	0.0003	<0.00006	0.0003	0.0001	0.0002	0.0002	<0.00008	0.0001	<0.00006	<0.00007	<0.00005
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001

APPENDIX C, TABLE 5

Detailed barren-ground caribou flesh chemistry results from the EARMP community program, 2012 to 2021.

Chemical[1]	Fond du Lac																				
	2012					2013						2014					2015			2017	
	1	2	3	4	5	1	2	3	4	5	6	1	2	3	4	5	1	2	3	1	2
Metals																					
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	0.6	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	<0.01	<0.01	<0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.01	<0.01	<0.01	0.03	<0.01	<0.01	0.01	<0.01	0.01	0.03	<0.01
Barium	0.08	0.02	0.03	0.04	0.02	0.05	0.14	0.11	0.08	0.12	0.32	0.01	<0.01	0.02	0.02	0.04	<0.01	<0.01	0.18	0.04	0.17
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	0.4	0.5	0.3	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.004	0.002	0.003	0.002	<0.002	0.004	0.002	0.005	<0.002	0.003	0.14	0.004	0.004	<0.002	0.003	0.002	0.004	0.004	0.008	0.004	0.004
Chromium	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.004	0.006	0.006	0.003	0.003	0.003	<0.002	0.003	0.002	0.006	0.013	0.005	0.004	0.005	0.004	<0.002	0.004	0.004	0.006	0.005	0.003
Copper	3.9	2.3	2.2	4.1	3.1	1.8	2.6	3.2	3.3	3.9	4.3	4.2	4.3	2.6	4	4.2	3.5	2.6	1.9	2.4	3.4
Iron	48	31	29	48	32	30	36	43	50	39	45	46	47	27	48	49	47	36	36	34	61
Lead	0.008	<0.002	<0.002	<0.002	<0.002	0.006	0.006	0.008	<0.002	0.014	0.004	0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	0.004	0.004	0.005
Manganese	0.39	0.26	0.25	0.43	0.32	0.24	0.26	0.33	0.37	0.53	0.8	0.38	0.35	0.32	0.39	0.44	0.41	0.33	0.29	0.21	0.31
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.08	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
Selenium	0.15	0.15	0.15	0.18	0.15	0.12	0.13	0.16	0.2	0.14	0.34	0.19	0.17	0.17	0.18	0.22	0.19	0.17	0.16	0.15	0.2
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.07	0.05	0.06	0.05	0.03	0.06	0.07	0.07	0.05	0.08	0.14	0.04	0.04	0.03	0.05	0.05	0.03	0.04	0.07	0.04	0.09
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin						0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.08	0.07	0.08	0.09	0.08	0.05	0.09	0.08	0.08	0.08	0.06	0.13	0.12	0.05	0.13	0.07	0.07	0.08	<0.01	0.02
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	22	56	59	16	49	40	15	23	12	16	18	28	22	30	26	24	22	28	59	39	14
Physical Properties																					
Moisture (%)	71.24	76.19	74.05	73.91	73.77	71.94	71.95	72.9	73.46	71.99	68.45	62.73	71.46	75.61	72.28	70.81	73.17	73	71.99	76.17	73.17
Radionuclides																					
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.002	0.002	<0.001	<0.001	0.008	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.0042	0.0084	0.0098	0.0096	0.0021	0.015	0.015	0.015	0.016	0.016	0.021	0.012	0.012	0.011	0.01	0.014	0.0071	0.008	0.0075	0.0071	0.012
Radium-226 (Bq/g)	<0.00005	0.0002	0.0001	<0.00004	0.00008	<0.00006	<0.00006	<0.00006	<0.00007	<0.00007	0.00009	<0.00006	<0.00006	<0.00006	0.00007	0.00008	<0.00006	0.00008	<0.00006	<0.00008	<0.00009
Thorium-230 (Bq/g)	<0.0001	0.0003	<0.0002	<0.00008	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002

APPENDIX C, TABLE 5

Detailed barren-ground caribou flesh chemistry results from the EARMP community program, 2012 to 2021.

Chemical[1]	Camsell Portage		Stony Rapids													Uranium City		
	2013		2013					2014			2015					2019		
	1	2	1	2	3	4	5	1	2	3	1	2	3	4	5	1	2	3
Metals																		
Aluminum	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	<0.01	<0.01	0.01	0.01	0.01	0.02	0.01	0.03	0.02	0.01	0.02	0.02	0.03	0.02	0.01	<0.01	<0.01	0.01
Barium	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.04	0.12	0.03	0.01	0.02	0.02	0.01	0.05	0.1	0.03
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	0.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.004	0.003	0.003	0.004	0.002	0.003	0.002	<0.002	0.002	0.008	0.007	<0.002	<0.002	0.006	0.003	0.003	0.008	0.003
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1
Cobalt	0.002	<0.002	0.006	0.003	0.004	0.004	0.003	0.004	0.002	0.003	0.005	0.004	0.002	0.005	0.004	0.004	0.004	0.005
Copper	3.7	3.7	4	4.6	4.7	3.3	4.1	2.4	3.4	1.8	2.4	4.3	3.6	3.8	3.5	1.7	1.3	2.4
Iron	50	46	52	55	46	51	55	38	38	40	34	43	46	47	50	37	32	36
Lead	<0.002	<0.002	0.002	0.065	0.009	0.003	0.004	0.005	0.052	0.032	0.004	0.002	<0.002	0.009	<0.002	<0.002	0.004	<0.002
Manganese	0.35	0.26	0.46	0.55	0.42	0.44	0.44	0.3	0.28	0.36	0.21	0.47	0.41	0.42	0.51	0.21	0.17	0.32
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.18	<0.01	0.06	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.23	0.22	0.21	0.26	0.21	0.21	0.21	0.16	0.14	0.11	0.17	0.18	0.22	0.2	0.19	0.13	0.11	0.16
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.04	0.04	0.02	0.03	0.02	<0.02	<0.02	0.05	0.04	0.17	0.03	0.02	0.03	0.04	0.03	0.04	0.06	0.04
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.07	0.03	0.12	0.2	0.09	0.11	0.13	0.04	0.08	0.07	0.07	0.06	0.08	0.07	<0.01	<0.01	0.01
Uranium	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	26	25	22	13	16	29	15	40	17	48	41	15	15	18	20	53	29	59
Physical Properties																		
Moisture (%)	72.15	72.11	70.86	70.2	70	70.4	71	74.41	74.78	67.52	73.27	73.71	72.62	72.05	71.78	75.66	66.73	75.99
Radionuclides																		
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	0.001	<0.002	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.017	0.015	0.026	0.001	<0.001	0.012	0.025	0.0083	0.01	0.0059	0.013	0.017	0.025	0.033	0.02	0.0055	0.0059	0.0048
Radium-226 (Bq/g)	<0.00008	<0.0001	0.002	<0.001	<0.001	0.002	0.001	<0.00006	<0.00006	<0.00005	<0.00007	0.0001	0.00008	<0.00007	0.0001	<0.0002	<0.0002	<0.0002
Thorium-230 (Bq/g)	<0.0002	<0.0002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0002	<0.0005	<0.0005	<0.0005

APPENDIX C, TABLE 5

Detailed barren-ground caribou flesh chemistry results from the EARMP community program, 2012 to 2021.

Chemical[1]	Wollaston Lake/Hatchet Lake																									
	2012					2013					2014					2015				2017		2021			
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	1	2	1	2	3	4
Metals																										
Aluminum	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	25
Arsenic	<0.01	<0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	<0.01	0.02	<0.01	0.01	0.02	<0.01	<0.01	0.01	0.02	<0.01	0.03	0.03	0.02	0.01	<0.01	0.34
Barium	0.04	0.09	0.03	0.04	0.09	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.05	0.09	0.05	0.11	0.16
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	0.4	<0.2	0.4	0.3	0.4	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.005	0.008	0.002	0.004	0.002	0.008	0.003	<0.002	0.004	0.003	0.002	0.002	<0.002	<0.002	0.003	0.003	0.003	0.005	0.027	0.004	0.004	0.003	0.005	0.004	0.005
Chromium	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.003	0.003	0.007	0.005	0.004	0.008	0.006	0.006	0.004	0.006	0.003	0.006	<0.002	0.003	0.004	0.017	0.006	0.003	0.008	0.003	0.004	<0.002	0.005	0.006	0.005
Copper	3.1	3.2	2.5	3.9	3.1	4.4	2.3	2.4	3.6	3.5	3.6	3.3	2.3	3.8	3.5	3.1	3	2.8	3.9	3	3.6	1.7	3.3	1.8	3
Iron	37	35	26	45	29	63	36	43	52	43	42	43	23	44	45	42	36	27	52	45	38	24	46	33	64
Lead	0.013	0.002	<0.002	0.046	0.051	0.006	0.003	0.013	0.014	<0.002	<0.002	<0.002	0.003	0.005	<0.002	<0.002	1.1	<0.002	<0.002	0.52	0.014	0.15	0.003	2.1	910
Manganese	0.35	0.29	0.25	0.53	0.33	0.46	0.27	0.29	0.5	0.44	0.31	0.37	0.21	0.37	0.41	0.39	0.29	0.29	0.4	0.33	0.39	0.24	0.42	0.21	0.37
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.008	0.012	0.006	0.006
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.15	0.17	0.17	0.19	0.13	0.18	0.13	0.12	0.19	0.17	0.21	0.13	0.16	0.2	0.18	0.14	0.16	0.16	0.19	0.2	0.22	0.12	0.26	0.13	0.17
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.048
Strontium	0.04	0.03	0.03	0.02	0.03	0.05	0.03	0.03	0.02	<0.02	0.02	0.04	0.05	0.03	0.04	0.02	0.03	0.02	0.03	0.04	<0.02	0.07	0.03	0.06	0.05
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.36
Tin	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.07	0.07	0.07	0.07	0.07	0.11	0.09	0.11	0.08	0.09	0.03	0.06	0.06	0.07	0.11	0.06	0.06	0.06	0.06	0.01	<0.01	0.04	0.03	0.03	0.04
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	33	30	30	20	29	16	52	42	20	16	16	20	18	13	23	33	29	23	19	43	38	56	42	64	45
Physical Properties																										
Moisture (%)	74.5	73.6	75.2	74.14	75.2	72.82	78.45	77.45	73.98	72.58	75.58	74.52	75	74.43	73.43	76.77	73.74	74.44	68.86	74.15	74.87	76.29	71.75	74.47	73.57
Radionuclides																										
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.002
Polonium-210 (Bq/g)	0.016	0.013	0.011	0.015	0.011	0.011	0.012	0.0095	0.019	0.014	0.0082	0.0083	0.012	0.016	0.01	0.0079	0.0072	0.0047	0.0053	0.0075	0.0082	0.0084	0.0093	0.0094	0.012
Radium-226 (Bq/g)	<0.00006	<0.00007	<0.00006	<0.00006	<0.00005	<0.00008	<0.00006	<0.00006	0.0001	<0.00007	<0.00008	<0.00009	0.0002	<0.00006	0.00007	<0.00006	<0.00005	<0.00006	0.0001	<0.00007	<0.00007	<0.00007	<0.00007	<0.0001	<0.00007
Thorium-230 (Bq/g)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

- = data not available

APPENDIX C, TABLE 6

Detailed moose flesh chemistry results from the EARMP community program, 2011 to 2021.

Chemical[1]	Camsell Portage Study Area										Fond du Lac	Stony Rapids				
	2011				2013		2014		2015		2017	2017	2018	2020		
	1	2	3	4	1	2	1	2	1	2	1	1	1	1	2	3
Metals																
Aluminum	1.5	3	<0.5	3.8	<0.5	<0.5	0.6	4.4	5.1	0.5	0.6	0.5	<0.5	0.6	1	0.6
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01
Barium	0.04	0.15	0.03	0.02	0.05	0.02	0.07	0.04	0.05	0.02	0.05	0.06	0.02	0.04	0.04	0.03
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	0.3	0.3	<0.2
Cadmium	<0.002	0.006	0.002	<0.002	0.002	0.003	0.003	0.05	0.005	0.004	0.002	0.002	<0.002	0.011	0.012	<0.002
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.014	0.011	0.022	0.01	0.012	0.015	0.02	0.016	0.015	0.006	0.011	0.019	0.012	0.03	0.014	0.01
Copper	2	1.2	1.8	1.6	1.5	1.8	0.56	1.4	0.93	1.4	1.5	1.7	0.82	0.99	1.4	0.73
Iron	21	25	25	29	29	34	22	32	29	29	38	29	12	45	46	20
Lead	0.018	0.019	<0.002	0.002	0.004	<0.002	0.029	0.011	0.004	<0.002	0.01	0.01	<0.002	0.027	0.009	0.009
Manganese	0.2	0.18	0.21	0.13	0.13	0.16	0.38	0.27	0.2	0.18	0.22	0.24	0.15	0.26	0.3	0.18
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	0.002	0.003	0.003
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
Selenium	0.2	0.06	0.1	0.12	0.06	0.06	0.08	0.08	0.17	0.13	0.1	0.09	0.16	0.15	0.17	0.13
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002
Strontium	0.1	0.06	0.03	0.02	0.06	0.04	0.06	0.09	0.06	0.02	0.06	0.03	0.03	0.16	0.15	0.08
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.09	0.25	0.09	0.08	0.07	0.07	0.1	0.22	0.14	<0.01	0.05	0.06	0.02	0.06	0.07	0.07
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	24	38	47	45	59	45	63	58	61	48	53	49	32	50	62	50
Physical Properties																
Moisture (%)	75.01	73.92	75.02	75.12	73.27	72.65	73.14	70.99	73.2	74.63	75.66	73.9	74.12	70.99	67.02	73.25
Radionuclides																
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.0003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	0.0019	0.0004	0.0003	-	0.0004	0.0002	0.0004	<0.0002	0.0011	0.0005	0.0003	0.0006	0.0006	0.001	0.0008	0.001
Radium-226 (Bq/g)	<0.00008	<0.00007	0.0002	<0.00006	0.00006	0.00007	<0.00006	<0.00006	0.00005	0.00008	<0.00005	<0.00007	<0.00007	<0.00005	0.0001	<0.00006
Thorium-230 (Bq/g)	<0.0002	<0.0001	<0.0001	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.00009	<0.0001	<0.0001	<0.0001	<0.0001	<0.0004	-	<0.0002

APPENDIX C, TABLE 6

Detailed moose flesh chemistry results from the EARMP community program, 2011 to 2021.

Chemical[1]	Uranium City Study Area																
	2011				2012			2013			2014	2015	2017	2018		2020	
	Mackintosh Bay	Deadman Channel	Melville Lake	Orbit Bay	Ace Creek	Gunnar	Milliken Lake	1	2	3	1	1	1	1	2	1	2
Metals																	
Aluminum	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.6	<0.5	0.5	<0.5	<0.5	<0.5	0.9
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	0.03	0.02	<0.01	0.02	0.04	0.22	0.08	0.02	0.09	0.02	<0.01	0.04	0.1	0.03	0.04	0.02	0.1
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2
Cadmium	0.003	<0.002	0.002	0.004	0.011	0.006	0.003	0.004	0.005	0.003	0.056	0.018	0.011	0.004	0.004	0.011	0.01
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.013	0.014	0.003	0.017	0.016	0.01	0.012	0.01	0.011	0.008	0.009	0.044	0.009	0.01	0.011	0.027	0.005
Copper	1.3	1.8	3.8	1.7	1.2	1.4	1.3	1.6	2	1.5	1.9	1.5	1.8	1.4	0.95	1.6	1.2
Iron	30	25	42	42	35	34	26	34	37	26	36	33	25	37	22	35	35
Lead	<0.002	<0.002	<0.002	<0.002	0.005	0.004	0.003	0.003	0.025	0.003	0.003	0.002	0.01	<0.002	0.006	<0.002	0.006
Manganese	0.16	0.16	0.33	0.14	0.17	0.18	0.15	0.14	0.24	0.14	0.22	0.23	0.16	0.19	0.2	0.19	0.16
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.003	0.002
Molybdenum	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.01	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
Selenium	0.11	0.16	0.18	0.09	0.1	0.11	0.1	0.09	0.12	0.08	0.14	0.08	0.13	0.14	0.13	0.13	0.09
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	<0.02	<0.02	0.04	0.03	0.08	0.05	0.05	0.02	0.03	0.03	0.04	0.03	0.06	0.04	0.02	0.02	0.06
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.14	0.08	0.1	0.13	0.08	0.08	0.06	0.06	0.06	0.06	0.09	0.01	0.11	0.02	0.03	0.04	0.11
Uranium	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	50	49	31	49	75	56	55	44	48	56	52	52	35	48	42	59	42
Physical Properties																	
Moisture (%)	74.42	72.36	72.74	73.84	69.87	74.09	74.28	74.01	71.23	74.71	75.54	76.93	76.46	75.89	76.73	74.72	78.09
Radionuclides																	
Lead-210 (Bq/g)	0.002	<0.001	<0.001	<0.001	<0.00002	<0.00001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Polonium-210 (Bq/g)	<0.0002	0.0005	0.0023	0.0003	0.0002	0.0004	<0.0002	0.0004	0.0005	0.0003	0.0016	0.001	0.0008	0.0004	0.0002	0.0003	0.0005
Radium-226 (Bq/g)	<0.00006	<0.0001	<0.00006	<0.00007	<0.00009	<0.00006	<0.00008	0.00008	0.0001	<0.00005	<0.00005	0.00006	<0.00009	<0.00006	<0.00007	<0.00006	<0.00006
Thorium-230 (Bq/g)	<0.0001	<0.0002	<0.0001	<0.0001	<0.0002	0.0001	<0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0005	<0.0001	<0.0001

APPENDIX C, TABLE 6

Detailed moose flesh chemistry results from the EARMP community program, 2011 to 2021.

Chemical[1]	Wollaston Lake/Hatchet Lake	
	2021	
	1	2
Metals		
Aluminum	<0.5	<0.5
Antimony	<0.02	<0.02
Arsenic	<0.01	0.01
Barium	0.07	0.07
Beryllium	<0.002	<0.002
Boron	<0.2	<0.2
Cadmium	0.006	0.004
Chromium	0.2	0.2
Cobalt	0.006	<0.002
Copper	1.9	2
Iron	40	35
Lead	0.29	0.02
Manganese	0.2	0.26
Mercury	0.034	0.016
Molybdenum	<0.02	<0.02
Nickel	<0.01	<0.01
Selenium	0.18	0.15
Silver	<0.002	<0.002
Strontium	0.05	0.05
Thallium	<0.01	<0.01
Tin	<0.01	<0.01
Titanium	0.05	0.04
Uranium	<0.001	<0.001
Vanadium	<0.02	<0.02
Zinc	50	49
Physical Properties		
Moisture (%)	74.93	73.61
Radionuclides		
Lead-210 (Bq/g)	<0.001	0.002
Polonium-210 (Bq/g)	0.003	0.0034
Radium-226 (Bq/g)	<0.0001	<0.0001
Thorium-230 (Bq/g)	<0.0002	<0.0002

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

APPENDIX C, TABLE 7

Detailed barren-ground caribou and moose organ chemistry results from the EARMP community program, 2014 to 2021.

Chemical[1]	Black Lake			Camsell Portage							Fond du Lac						
	Barren-ground Caribou			Moose							Barren-ground Caribou						
	Kidney		Heart	Liver			Kidney				Kidney					Heart	Liver
	2016	2018	2018	2014		2015	2014		2015		2014			2015		2018	2018
	1	1	1	1	2	1	1	2	1	2	1	2	3	1	2	1	1
Metals																	
Aluminum	<0.5	0.6	<0.5	<0.5	1.1	0.6	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.01	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	0.01	<0.01	0.01	<0.01
Barium	0.2	1	0.11	0.1	0.12	0.11	0.23	0.44	0.12	0.13	0.58	0.45	0.41	0.43	0.43	0.06	0.12
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	6.9	4.7	0.004	1.7	1.1	0.66	8.6	6.5	6.8	4.9	6.2	9.6	6.8	10	7.3	0.002	0.004
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1
Cobalt	0.035	0.062	0.014	0.25	0.2	0.18	0.12	0.2	0.18	0.058	0.029	0.044	0.046	0.036	0.025	0.02	0.013
Copper	5	3.5	4.5	38	47	15	2.1	3.8	3.8	2.6	3.6	4.9	4.3	4.4	3.6	4.5	3.3
Iron	37	24	55	100	150	160	70	90	52	30	40	60	60	28	40	59	37
Lead	0.07	0.041	0.005	<0.002	0.003	0.003	<0.002	0.002	<0.002	0.004	0.073	0.068	0.078	0.12	0.089	0.01	0.003
Manganese	1.8	1.4	0.55	1.3	2.2	2.1	1.2	2	2.7	1.5	1.8	2	1.8	1.7	1.5	0.52	0.33
Mercury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	0.15	0.21	<0.02	0.9	1	1.1	0.21	0.42	0.45	0.25	0.12	0.11	0.14	0.16	0.12	<0.02	<0.02
Nickel	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	0.05	0.06	0.03	0.04	<0.01	0.01	0.01	<0.01	<0.01	0.01	0.02
Selenium	1	0.94	0.27	0.22	0.21	0.92	0.71	0.78	1.2	0.78	1.3	1.6	1.4	1.2	1.1	0.26	0.18
Silver	<0.002	<0.002	<0.002	0.009	0.014	0.033	<0.002	<0.002	<0.002	<0.002	0.003	0.003	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.1	0.11	0.05	0.06	0.07	0.05	0.17	0.13	0.11	0.09	0.18	0.18	0.16	0.11	0.12	0.04	0.06
Thallium	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.02	<0.01	0.03	0.01	0.02	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.02	0.08	<0.01	<0.5	<0.5	0.03	0.03	0.08	<0.01	<0.01	0.06	0.08	0.07	0.05	0.04	<0.01	0.01
Uranium	<0.001	<0.001	<0.001	<0.01	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	24	24	19	15	20	20	16	23	26	20	23	28	27	26	25	20	37
Physical Properties																	
Moisture (%)	69.25	76.39	75	74.05	70.38	68.14	76.94	78.33	78.43	82.17	48.56	66.49	42.82	54.43	54	74.89	71.08
Radionuclides																	
Lead-210 (Bq/g)	0.049	0.023	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.002	0.002	0.072	0.054	0.042	0.077	0.073	<0.001	<0.001
Polonium-210 (Bq/g)	0.064	0.076	0.012	0.0036	0.0024	0.026	0.0018	0.0023	0.027	0.0076	0.088	0.081	0.086	0.083	0.066	0.0092	0.0088
Radium-226 (Bq/g)	0.0005	<0.0001	<0.00006	0.0001	<0.0001	0.0002	<0.00006	0.0005	0.0001	0.0003	0.0003	0.0009	0.0005	0.0003	0.0003	<0.00007	<0.00006
Thorium-230 (Bq/g)	<0.0003	<0.0002	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0004	<0.0001	<0.0001	<0.0003	<0.0006	<0.0005	0.0005	<0.0003	<0.0001	<0.0001

APPENDIX C, TABLE 7

Detailed barren-ground caribou and moose organ chemistry results from the EARMP community program, 2014 to 2021.

Chemical[1]	Stony Rapids				Uranium City											
	Moose				Moose						Barren-ground Caribou					
	Kidney		Heart		Liver			Kidney			Heart			Liver		
	2017	2020	2020		2014	2015	2017	2014	2015	2017	2019			2019		
	1	1	1	2	1	1	1	1	1	1	1	2	3	1	2	3
Metals																
Aluminum	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Barium	0.14	0.08	0.07	0.04	0.1	0.48	0.14	0.27	0.16	0.26	0.08	0.1	0.04	0.18	0.24	0.17
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.73	1.1	0.009	0.003	0.48	0.054	1.4	8	20	8.6	0.004	<0.002	0.002	1.3	0.96	1.3
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.29	0.19	0.13	0.1	0.054	0.068	0.078	0.097	0.25	0.11	0.008	0.012	0.012	0.06	0.07	0.052
Copper	13.2	3.7	3.6	4	28	0.55	28.1	3	2.2	2.9	4.4	4.5	4.7	38.8	24	26.6
Iron	200	42	50	63	120	680	140	41	33	31	56	79	52	380	200	150
Lead	0.004	<0.002	0.016	<0.002	0.008	<0.002	0.018	0.002	<0.002	0.012	<0.002	0.003	<0.002	0.074	0.067	0.072
Manganese	4.1	3.6	0.45	0.52	1.4	0.09	2.4	1	0.8	1.2	0.53	0.64	0.57	2.5	2.9	3.3
Mercury	-	0.08	0.002	0.002	-	-	-	-	-	-	-	-	-	-	-	-
Molybdenum	1.1	0.44	0.02	0.02	0.65	<0.02	0.81	0.24	0.17	0.2	<0.02	<0.02	<0.02	0.31	0.38	0.43
Nickel	0.02	0.04	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	0.02	0.08	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	0.24	0.93	0.17	0.24	0.2	0.18	0.53	0.67	0.53	0.88	0.23	0.26	0.26	0.34	0.26	0.31
Silver	0.014	<0.002	<0.002	<0.002	0.01	<0.002	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.34	0.18	0.17
Strontium	0.08	0.15	0.14	0.06	0.1	0.06	0.04	0.11	0.1	0.08	0.05	0.05	0.04	0.07	0.07	0.06
Thallium	<0.01	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.02	0.04	0.04	0.05	<0.5	<0.01	0.02	0.04	<0.01	0.02	0.02	<0.01	<0.01	0.03	0.03	0.03
Uranium	<0.001	<0.001	0.004	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	27	21	22	24	14	15	23	25	24	23	18	19	18	31	18	24
Physical Properties																
Moisture (%)	68.77	78.39	75.94	77.01	58.58	72.88	61.03	78.25	83.14	82.38	76.88	77.14	76.74	70.63	72.87	72.64
Radionuclides																
Lead-210 (Bq/g)	0.001	<0.007	<0.001	<0.001	0.001	0.002	<0.001	0.001	0.002	<0.001	<0.002	<0.002	<0.002	0.082	0.086	0.085
Polonium-210 (Bq/g)	0.0042	0.018	0.0008	0.0015	0.0021	0.0018	0.0057	0.0032	0.0037	0.0063	0.012	0.014	0.011	0.22	0.16	0.15
Radium-226 (Bq/g)	<0.00008	<0.00008	<0.00006	<0.00005	0.00007	0.0003	0.0001	<0.00006	0.00007	0.0003	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001
Thorium-230 (Bq/g)	<0.0002	<0.0005	<0.0004	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.001	<0.001	<0.001	<0.002	<0.002	<0.002

APPENDIX C, TABLE 7

Detailed barren-ground caribou and moose organ chemistry results from the EARMP community program, 2014 to 2021.

Chemical[1]	Wollaston Lake/Hatchet Lake					
	Barren-ground Caribou					
	Liver					Heart
	2015	2018		2021		2021
	1	1	2	1	2	1
Metals						
Aluminum	0.7	0.5	<0.5	0.6	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.02	0.02	0.01	0.01	<0.01	<0.01
Barium	0.02	0.36	0.27	0.2	0.15	0.11
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	0.7	<0.2	<0.2	<0.2	<0.2
Cadmium	0.65	1.8	1.6	1.9	2.2	0.005
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.075	0.1	0.071	0.06	0.069	0.017
Copper	26	54.6	31.7	27	33.6	4.1
Iron	140	190	170	300	170	69
Lead	0.097	0.076	0.055	0.15	0.11	0.31
Manganese	3.6	3.3	3.8	2.7	3.6	0.59
Mercury	-	-	-	0.25	0.26	0.004
Molybdenum	1	0.74	0.57	0.77	0.7	<0.02
Nickel	<0.01	0.02	<0.01	0.01	<0.01	<0.01
Selenium	0.4	0.4	0.4	0.41	0.33	0.27
Silver	0.12	0.19	0.097	0.16	0.21	<0.002
Strontium	0.04	0.07	0.05	0.07	0.05	0.05
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	<0.5	0.08	0.03	0.11	0.06	0.04
Uranium	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	24	36	41	29	33	20
Physical Properties						
Moisture (%)	71.23	70.73	71.4	66.6	67.42	73.6
Radionuclides						
Lead-210 (Bq/g)	<0.001	0.056	0.04	0.12	0.10	<0.001
Polonium-210 (Bq/g)	0.0093	0.24	0.18	0.34	0.33	0.015
Radium-226 (Bq/g)	0.0002	<0.00007	<0.00007	0.00006	0.00006	<0.0001
Thorium-230 (Bq/g)	<0.0001	<0.0005	<0.0001	<0.0001	<0.0001	<0.0002

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.
RDL for chromium decreased from 0.5 µg/g to 0.1 µg/g between 2014 and 2015.

APPENDIX C, TABLE 8

Detailed snowshoe hare flesh chemistry results from the EARMP community program, 2011 to 2018.

Chemical[1]	Black Lake				Camsell Portage								Fond Du Lac		
	2017				2011					2014			2017		
	1	2	3	4	1	2	3	4	5	1	2	3	1	2	3
Metals															
Aluminum	0.9	<0.5	<0.5	1.4	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	<0.01	<0.01	<0.01	<0.01	0.09	0.04	0.08	0.03	0.08	0.18	0.1	0.12	0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.2
Cadmium	0.038	0.004	0.002	0.005	0.003	0.004	0.01	<0.002	0.002	<0.002	0.004	0.006	0.008	0.009	0.003
Chromium	0.2	<0.1	0.1	0.2	0.003	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.6	0.2	0.1
Cobalt	0.011	0.011	0.013	0.007	0.003	0.006	0.007	0.003	0.004	<0.002	0.005	0.032	0.021	0.014	0.019
Copper	2.2	4	1.8	1.9	0.003	2.4	1.5	1.8	1.5	1.9	2.1	1.8	1.4	2	2.6
Iron	44	38	30	31	0.003	28	24	22	24	19	25	20	36	35	38
Lead	0.005	0.003	0.003	0.004	0.003	<0.002	0.006	<0.002	<0.002	0.003	0.002	0.002	0.004	0.003	0.002
Manganese	1.7	0.91	0.21	0.54	0.003	0.46	0.32	0.22	0.22	0.36	0.28	0.39	0.46	0.64	0.44
Mercury	0.007	0.002	0.002	0.002	-	-	-	-	-	-	-	-	0.002	<0.001	0.001
Molybdenum	<0.02	<0.02	<0.02	<0.02	0.003	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.06	<0.01	0.06	0.06	0.003	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	0.07	0.08	0.05
Selenium	0.44	0.28	0.23	0.34	0.003	0.03	0.13	0.02	0.06	0.03	0.08	0.14	0.3	0.19	0.16
Silver	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.08	0.07	0.07	0.1	0.003	0.07	0.22	0.05	0.09	0.2	0.1	0.29	0.11	0.06	0.08
Thallium	<0.01	<0.01	<0.01	<0.01	0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	0.003	<0.01	0.04	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.1	0.08	0.08	0.003	0.07	0.05	0.08	0.04	0.09	0.06	0.09	0.07	0.05	0.01
Uranium	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	0.003	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	19	13	22	17	0.003	11	23	13	13	13	11	16	23	16	21
Physical Properties															
Moisture (%)	75.64	76.72	77.46	78.3	77.61	76.53	75.79	77.6	78.45	71.24	75.39	73.89	74.03	75.58	77.68
Radionuclides															
Lead-210 (Bq/g)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.001	<0.001
Polonium-210 (Bq/g)	0.001	0.0009	0.0011	0.0007	0.0011	0.0018	0.0021	0.0013	0.0012	0.0017	0.002	0.0018	0.0006	0.0012	0.0008
Radium-226 (Bq/g)	<0.0002	<0.0002	0.0003	<0.0002	0.0001	<0.00007	0.0001	0.0001	0.0002	0.0001	<0.00006	0.0001	<0.0002	<0.0002	<0.0002
Thorium-230 (Bq/g)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0005	<0.0005	<0.0005

APPENDIX C, TABLE 8

Detailed snowshoe hare flesh chemistry results from the EARMP community program, 2011 to 2018.

Chemical[1]	Stony Rapids			Uranium City							Wollaston Lake		
	2017			2011					2014		2017		
	1	2	3	1	2	3	4	5	1	2	1	2	3
Metals													
Aluminum	1.6	<0.5	<0.5	0.6	<0.5	<0.5	0.5	<0.5	<0.5	0.5	0.6	<0.5	<0.5
Antimony	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Arsenic	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01
Barium	<0.01	<0.01	<0.01	0.27	0.05	0.09	0.04	0.05	0.13	0.28	<0.01	<0.01	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	0.14	0.014	0.008	0.004	<0.002	0.003	0.003	<0.002	<0.002	0.005	0.009	0.014	0.012
Chromium	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1
Cobalt	0.013	0.005	0.022	0.007	0.005	0.004	0.004	0.006	0.005	0.004	0.006	0.009	0.01
Copper	1.8	1.8	1.1	1.5	1.5	1	1.4	1.1	2.4	2.1	1.8	2.1	2.5
Iron	57	36	25	27	22	22	14	20	21	31	24	36	31
Lead	0.008	0.005	<0.002	<0.002	0.003	<0.002	<0.002	0.003	0.002	<0.002	0.007	0.009	<0.002
Manganese	0.42	0.25	0.21	0.27	0.2	0.37	0.29	0.18	0.24	1.1	0.26	0.57	0.33
Mercury	0.004	0.001	0.002	-	-	-	-	-	-	-	0.002	<0.001	0.002
Molybdenum	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	0.04	<0.01	0.03	0.01	0.02	<0.01	<0.01	<0.01	0.02	0.05	0.03	<0.01	0.04
Selenium	0.14	0.21	0.22	0.13	0.05	0.1	0.12	0.06	0.15	0.07	0.15	0.14	0.13
Silver	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.07	0.06	0.06	0.39	0.1	0.28	0.1	0.19	0.14	0.19	0.03	0.04	0.04
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	0.02	<0.01	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.08	0.05	0.03	0.07	0.04	0.07	0.08	0.15	0.05	0.1	0.06	0.01	0.02
Uranium	0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	21	32	19	25	24	17	10	19	10	16	16	17	16
Physical Properties													
Moisture (%)	76.38	75.35	75.67	77.55	77.14	77.49	78.65	78.51	70.07	65.8	73.26	75.8	73.05
Radionuclides													
Lead-210 (Bq/g)	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	<0.001	0.002	<0.001
Polonium-210 (Bq/g)	0.0026	0.0012	0.001	0.0014	0.0013	0.0015	0.00003	0.0016	0.0022	0.0015	0.0008	0.0008	0.0016
Radium-226 (Bq/g)	<0.0002	<0.0002	<0.0002	<0.00006	0.00009	0.0001	0.0001	0.00009	0.0001	0.00007	<0.0002	<0.0002	<0.0002
Thorium-230 (Bq/g)	<0.0005	<0.0005	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0005	<0.0005	<0.0005

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.

- = data not available

APPENDIX C, TABLE 9

Detailed spruce grouse flesh chemistry results from the EARMP community program, 2017.

Chemical[1]	Black Lake			Fond Du Lac			Stony Rapids				Uranium City			Wollaston Lake		
	1	2	3	1	2	3	1	2	3	4	1	2	3	1	2	3
Metals																
Aluminum	3.6	1.8	<0.5	1.3	0.5	0.6	4.9	2.8	1.4	1.5	1.7	0.6	0.8	0.7	0.6	<0.5
Antimony	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.23	<0.02	<0.02	<0.02	0.03	<0.02
Arsenic	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	0.04	0.02	<0.01	0.04	<0.01	0.03	0.06	0.08	0.02	0.02	0.18	<0.01	<0.01	0.05	0.03	<0.01
Beryllium	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Boron	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	0.4	0.4	0.2	<0.2	<0.2	0.3	<0.2	<0.2
Cadmium	0.006	0.009	0.005	0.013	0.006	0.028	0.005	0.009	0.004	0.026	0.004	0.014	0.003	0.006	0.002	<0.002
Chromium	0.2	<0.1	<0.1	0.1	<0.1	<0.1	0.1	<0.1	0.3	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cobalt	0.005	0.036	0.019	0.006	0.004	0.009	0.004	0.002	0.005	0.004	0.003	0.004	<0.002	0.006	0.002	0.004
Copper	2.5	3.6	3.3	2.5	4.1	2.9	2	1	2.2	2.3	2.2	2.8	0.98	1.7	2.9	1.7
Iron	50	99	49	54	64	46	34	41	43	46	59	52	33	33	41	26
Lead	4.2	0.36	0.9	0.34	0.027	0.004	4	0.046	0.22	0.084	2.4	0.19	0.1	0.006	0.35	0.08
Manganese	0.51	0.74	0.4	1.2	1.2	3.4	1.6	1.1	2.8	10	0.87	0.42	0.34	0.71	0.42	0.4
Mercury	0.001	0.001	0.002	<0.001	0.002	0.002	0.001	<0.001	<0.001	<0.001	0.002	0.001	<0.001	<0.001	0.001	<0.001
Molybdenum	<0.02	0.06	0.03	0.03	0.07	0.02	0.04	0.08	<0.02	0.03	0.05	0.02	0.03	<0.02	<0.02	<0.02
Nickel	0.07	0.03	0.02	0.04	<0.01	0.01	0.03	0.04	0.02	<0.01	0.02	<0.01	<0.01	0.03	<0.01	0.01
Selenium	0.28	0.27	0.24	0.24	0.36	0.29	0.2	0.18	0.16	0.18	0.32	0.16	0.1	0.29	0.22	0.26
Silver	<0.002	<0.002	<0.002	0.004	<0.002	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Strontium	0.09	0.06	0.03	0.08	0.05	0.13	0.14	0.15	0.14	0.09	0.52	0.03	0.03	0.05	0.08	0.12
Thallium	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Titanium	0.11	0.11	0.02	0.06	0.03	0.04	0.23	0.13	0.05	0.04	0.08	0.03	0.04	0.05	0.04	0.02
Uranium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.002	0.001	<0.001	<0.001	<0.001
Vanadium	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	13	18	7.5	13	18	23	10	22	14	27	19	7	13	7.2	7.3	7
Physical Properties																
% Moisture	76.49	74.28	77.38	72.2	73.87	73.88	77.87	74.13	73.9	72.95	73.35	72.07	74.9	72.63	72.86	74.13
Radionuclides																
Polonium-210 (Bq/g)	0.0004	0.0003	0.0003	0.0007	0.001	0.0007	0.0003	<0.0002	0.0002	0.0004	0.0003	0.0006	<0.0002	<0.0002	0.0006	<0.0002
Radium-226 (Bq/g)	<0.0002	<0.0002	0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Thorium-230 (Bq/g)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005

[1]All concentrations are presented on a µg/g wet weight basis, unless specified otherwise.