
EASTERN ATHABASCA REGIONAL MONITORING PROGRAM



EASTERN ATHABASCA
REGIONAL MONITORING
PROGRAM

10-YEAR SUMMARY REPORT

2011 - 2021

EARMP.CA





barren-ground caribou (ᑭᑭᑭᑭ ᑎᑎᑎᑎ)



EASTERN ATHABASCA
REGIONAL MONITORING
PROGRAM

Acknowledgements

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 Dëne translation was provided by Rose Paquette.

The EARMP steering committee would like to thank the Athabasca Dënesųłiné First Nations, communities, and residents who have donated their time, knowledge, 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.ca.



Executive Summary

The Eastern Athabasca Regional Monitoring Program (EARMP) was established in 2011 under the Province of Saskatchewan's Boreal Watershed Initiative. The community component of the program partners with First Nations and communities within the Athabasca Basin to monitor the safety of traditionally harvested 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. Over the last ten years, community members have collected and submitted 431 fish samples, 121 moose/caribou samples, 47 water samples, 16 spruce grouse samples, 34 organ samples, and 28 snowshoe hare samples for testing. The results from the last ten years have shown that traditional foods are safe for consumption with chemical profiles for water, fish, and mammal tissue samples similar to natural background.

Diri eritłís t'aghā ahodi

Sayize ts'ask'ethe tu nedhé honáre asíe hoghedi (EARMP) húlye. Níh 2011 hultá k'e bonídher nį. Diri húldzai Saskatchewan húlye k'eyághe. Diri t'á yeghádálana si, yatthihot'ine hel eghádálana si. Kú diri t'a dáłtsi sį. Tu ú Dechen ú t'acháye ú luwe ú tth'i tich'adie horelyu nenánotah sį bet'á sughéna huto nezų híle bek'ója hha.

Kú dire t'ahį yenedáneta si Denesųłine tth'i yets'erani sį. Jíe tth'i hotiyé net'į. Kú diri asqt'á asíye nezų híle dé, kúdaņe Dene kołni ha. Diri asíye beghashułyi saná heni ha sį. Tich'adie sughéna híle dé tth'i Dene heł kódi ha.

Diri įłaisdıghı kęe hadayorela, tunedhé honáre yet'á daghena sí, sodághena bek'oja hats'edi. Kú yunih łona néné k'e Dene nuheba asílye zaze kadorıłı sį.

- 431 Luwe záze
- 121 Denie chu Etthen záze
- Tu, Gah, Dih tth'i horelyú net'į

Diri t'a asíye benanóta sí, horelyu dúwe hole sį. T'a danılı sí horelyú sughéna hoyı sį.

10-Year Summary of EARMP



10-year levels are similar to the baseline.



10-year levels to date are similar to the regional reference range.



Monitoring traditional foods and water



EARMP Shows That Water and Traditional Foods are Safe to Consume

INTRODUCTION

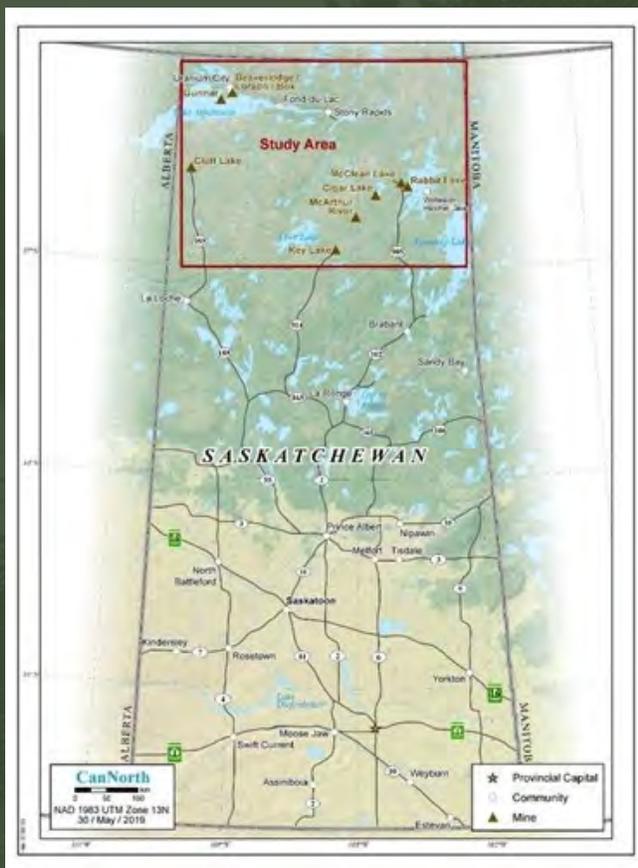
The Eastern Athabasca Regional Monitoring Program (EARMP) is a long-term environmental monitoring program that has run every year since it was established in 2011 under the Province of Saskatchewan's Boreal Watershed Initiative. The program is an industry-government partnership and is supported by contributions 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.

Cumulative effects are defined as impacts on the environment that result from the incremental impact of an action when added to other past, present, and foreseeable future actions (Joint Panel 1992). Cumulative effects might occur when projects overlap spatially, such as when two watersheds exposed to uranium mining and milling activities converge. Cumulative effects may also occur temporally if contaminants are emitted into the environment over extended periods of time.

The EARMP was developed to establish baseline conditions and facilitate the examination of spatial and temporal changes over the long term. It is intended to augment the extensive environmental monitoring completed near each uranium mining and milling operation in northern Saskatchewan, which are regulated by both federal and provincial agencies including the Canadian Nuclear Safety Commission, the Saskatchewan Ministry of Environment, and Environment and Climate Change Canada. Community sampling has also occurred through the Athabasca Working Group Environmental Monitoring Program for 18 years (2000-2018) and continues today as the Community-Based Environmental Monitoring Program (CBEMP) under the Ya'Thi Néné Collaboration Agreement.

The EARMP was designed to complement the industry and community monitoring programs and allows a more comprehensive evaluation of potential cumulative effects from uranium mines and mills in northern Saskatchewan. A full description of the EARMP community program study design is available in the annual community reports that are publicly available on the EARMP website (www.earmp.ca/reports).

The EARMP framework includes two programs: a community program and a technical program.



Study Location.

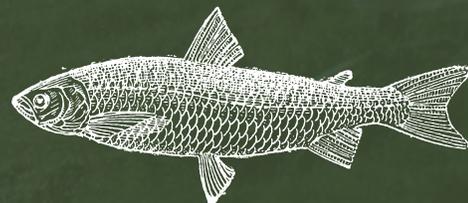
TECHNICAL PROGRAM

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. Information from the technical monitoring program is presented in a separate report and sampling was last completed in 2015 (www.earmp.ca/reports).

COMMUNITY PROGRAM

The community program monitors the safety of traditionally harvested foods by collecting and testing water, fish, berry, and mammal tissue samples from the seven communities located in the Athabasca region. The community annual reports and complete analytical database for the last 10 years (2011-2021) are available for download on the EARMP website (www.earmp.ca).

The objective of this report is to present a 10-year summary of the results of the community program from 2011 – 2021.



Whitefish (kú)

Uranium Mining and Milling in the Region

When the EARMP began in 2011 there were five active uranium mines and mills in the Eastern Athabasca Region: Key Lake, McArthur River, McClean Lake, Rabbit Lake, and Cigar Lake. The mill at McClean Lake has been in service since 1999 and processes ore from McClean Lake and Cigar Lake. Rabbit Lake was transitioned into safe care and maintenance in the second quarter of 2016. In January 2018 Production was suspended at the McArthur River and Key Lake operations and they were placed into a state of care and maintenance. During the COVID-19 pandemic Cigar Lake and McClean Lake were placed into care and maintenance in March 2020 and were reopened in 2021. In November 2022, McArthur River and Key Lake returned to production.

In addition to the active mines and mills there are other decommissioned and/or abandoned uranium mine sites located within the region and near the community of Uranium City.

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 as part of provincial and federal environmental monitoring programs. These monitoring programs are designed specifically for each operation are a requirement under the provincial operating licence and the CNSC Licenses as documented in the Licence Conditions Handbook.



Communities in the Region

There are three Indigenous Nations and four communities in the region:

- Black Lake Dënesuḡhné First Nation
- Fond du Lac Dënesuḡhné First Nation
- Hatchet Lake Dënesuḡhné First Nation
- Stony Rapids
- Wollaston Lake
- Camsell Portage
- Uranium City



For the community monitoring program, the communities of Wollaston Lake and Hatchet Lake Dënesuḡhné First Nation were assessed together for a total of six study areas.



Community Involvement

Community members play a key role in the EARMP. In 2011, community members selected representatives from each community to carry out the annual sample collection. The selected representatives from each community were provided training in sample collection, storage, and shipping procedures for the EARMP community sampling program. Community members' knowledge helped determine a location for water sampling for each community during the training sessions. This location has remained consistent over the years. The sample locations for fish, berries, and mammals are determined annually by community members and focus on areas where community members routinely fish, hunt, and gather. The collection of samples is carried out either independently by the community member or in conjunction with a representative from Canada North .

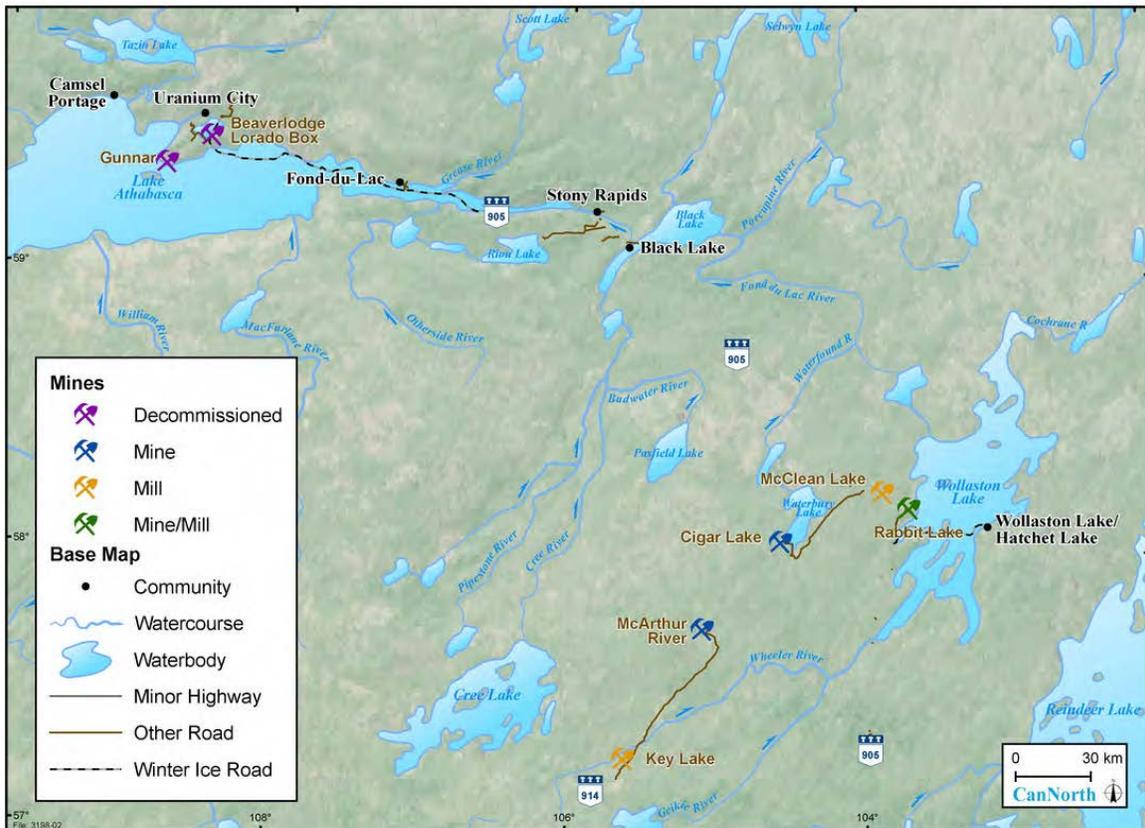
The EARMP Community Monitoring Program Framework can be found on the EARMP website at www.earmp.ca



Sandy Powder of Uranium City with a water sample.

Thank you to the following community members

Black Lake	Camsell Portage	Fond Du Lac	Stony Rapids	Uranium City	Wollaston Lake
Boniface Robillard	Dennis Larocque	Joe Marten	Billy-Joe Mercredi	Wayne Powder	George St. Pierre
	Claire Larocque	Bruce Martin		Sandy Powder	Noah St. Pierre
	Lawrence Larocque			Kevin Mercredi	Adam Benonie



Study Area Overview

Community Monitoring Program

The community monitoring program was developed to address potential concerns about the safety of traditional foods that community members routinely consume. A number of traditional food studies have been completed in communities across northern Saskatchewan including Hatchet Lake Dēnesųhné 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). The community monitoring program compares the chemistry of samples to the regional reference range and the baseline levels. The programs have all found these food sources remain safe for consumption.

The community monitoring program objectives are to:



Determine the safety of traditionally harvested food

Establish long-term monitoring at key locations to assess any changes over time



Build relationships and engage and involve community members in collecting information

Communicate monitoring results to First Nations, communities and other stakeholders.





What is a baseline?

The community monitoring program has been running for over 10 years, which allows for the monitoring of changes to the level of chemicals found in traditional foods over time. To do this, the level of chemicals found in each species sampled during the first two years of the program are considered “baseline conditions”. The levels of chemicals from the species sampled each year were compared to the baseline results to see if the levels are changing over time. The baseline years of the community program were meant to establish the short-term variability of chemicals in each species to form a point in time comparison for future monitoring years. Key chemical levels are now compared back to the baseline levels established in 2011 and 2012. Some changes are expected from year to year, but if they are higher one year and then fall back within the range of values seen during the baseline years we can demonstrate that no increasing or decreasing levels of key chemicals is occurring in the communities' traditional foods.

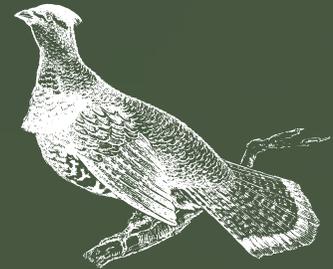


What is a regional reference range?

The regional reference range was developed using existing data from locations sampled north of Points North that were considered reference, and not influenced by industry activities. The regional reference range is used to put the EARMP community data into context of what the normal range of levels is in the region. This is a useful tool as not all key chemicals have available guidelines for comparison. The regional reference range has been periodically updated with new reference data throughout the program. In some cases, reference areas can have elevated values due to naturally existing conditions.

Sampling and Testing

Sampling focused on traditional foods that were identified by the communities. This includes water, fish (such as lake trout and lake whitefish), berries (such as blueberry and bog cranberry), and large mammals (moose, barren-ground caribou). Further, community members expressed concerns about the safety of other traditional foods that they regularly eat and asked that the program test these foods as well. Beginning in 2014, the program started collecting samples requested by community members which included large mammal organs, spruce grouse, and snowshoe hare.



Grouse (dih)

Sampling frequency

Water, fish, berries, and large mammals were collected every year for the first five years. After that, efforts were made to sample fish and water every year and one additional component was sampled as well (e.g. berries, fish, mammals, etc.)



Snowshoe Hare (gah)

Sampling locations

Samples are collected from areas near each community. A water station was established by each community. Fish, berry, and mammal samples were obtained from locations where community members routinely fish, gather, and hunt their traditional foods. This ensures the sampling program is testing the study areas most relevant to the communities.

All samples are sent to the independent and accredited lab of the Saskatchewan Research Council (SRC) for testing. SRC tests samples using techniques that are known for their ability to detect and measure low levels of chemicals.



All these chemicals are naturally found in the environment but can become elevated due to mining, milling, and other industrial development activities. The chemicals were chosen as they have been identified as being of particular interest when dealing with uranium mines by regulatory agencies, environmental assessments, as well as other monitoring programs.

Chemical endpoints selected for the EARMP

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

*For water only.

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

Each sample type is compared to specific criteria to establish that they are safe to eat. The criteria and comparison values are:

- sample values below available guidelines;
- sample values within the regional reference range; and
- are foods considered safe to eat compared to available literature and/or Human Health Risk Assessment.

Data sources for the information used is provided in [Appendix B](#) of the annual community reports publicly available at www.earmp.ca.

Human Health Risk Assessment

Human Health Risk Assessments (HHRA) were completed in 2013 and 2018 using all available chemistry data collected during the EARMP. The HHRA looked at the same chemicals of interest that are examined during the community food studies. The study looked at traditional foods, surface water, and supermarket foods that community members eat. It also looked at the levels of exposure to the chemicals in the general Canadian population.

The HHRA used two community dietary surveys that were completed independent of the EARMP. The community surveys for Hatchet Lake and Uranium City provided a list of traditional foods and asked community members to identify how much and how often they consume each food type. The HHRA used the surveys to understand the amounts of traditional foods that community members eat and the level of exposure to the chemicals of interest that occur through eating traditional foods.

The results of the HHRA show that the amount of chemicals that community members are exposed to because of their consumption of traditional foods is similar to the amount of exposure for the general Canadian population. These amounts are below the levels that are considered to be harmful and do not represent a cause for concern. Ultimately, the study illustrated that the level of key chemicals of interest in the traditional foods are safe and consuming traditional foods does not pose health risks to members of the Athabasca Basin communities. The full risk assessment is available in the 2017/2018 community monitoring report (CanNorth 2018) at www.earmp.ca.



Dennis Larocque of Camsell Portage

EARMP has highlighted that water and traditional foods are safe and consuming water and/or traditional foods does not pose health risks to members of the Athabasca Basin communities.

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

*- Joe Beavereye
Elder from
Black Lake Dēnesų́hné First Nation*

*"Niḥ ts'ıḥ ąné daghiđ á sı, tu chu niḥ k'e,
ḡası yedá dziredıḥ hu tech'adie chu hué hu
niḥ k'e hots'ı, jıe t'a sı;degharé ḡedırı
ḡasıé besuts'udı' hoḡa yunadhédene
godhé hobebá"*

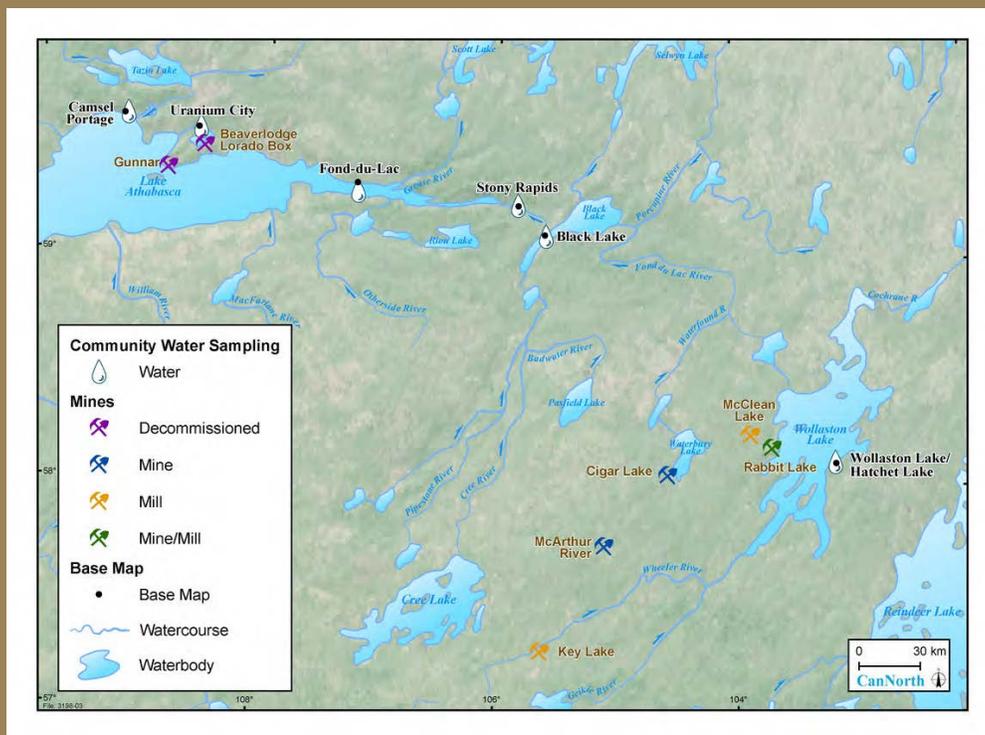
*- Joe Beavereye
ḡaḥnedhe Black Lake Tazęn tué
Dēnesų́hné
First Nation hots'ı,*

Results

Water (Tuîtãedi.)



Each year surface water samples area collected by hand at one waterbody of interest near each community by community members and CanNorth field staff. 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 below). In total, 47 water samples have been collected and tested.



Water quality sampling areas, 2011 to 2020

Concentrations of chemicals in water have remained very low throughout the program, with most chemicals at levels so low the laboratory could not measure them. Chemicals that were at measurable levels were 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) and are safe to consume.



Wayne Powder of Uranium City

Overall, the concentrations of chemicals assessed in community water samples have been very low and are not considered a concern to the environment or human health.

Summary of Water

Have any chemicals present drastically changed from the baseline study?



The levels are similar to the baseline.

Have any chemicals present drastically spiked outside of the regional reference range?



The levels are similar to the regional reference range.

Have any chemicals present drastically spiked outside of the guidelines?



The levels are within the guidelines.

Are there any other risks posed?

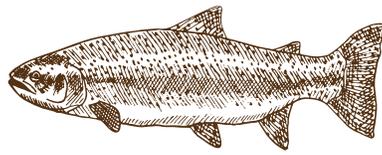


Levels are similar to both baseline and reference range, and within guidelines and the water is safe to drink.

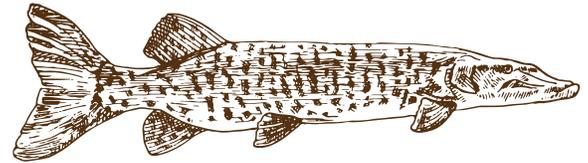
Water of the Eastern Athabasca Region is Safe to Drink*

*Note: drinking raw water from any source does carry a risk of ingesting natural parasites that can result in gastrointestinal infections.

Fish (Łue)

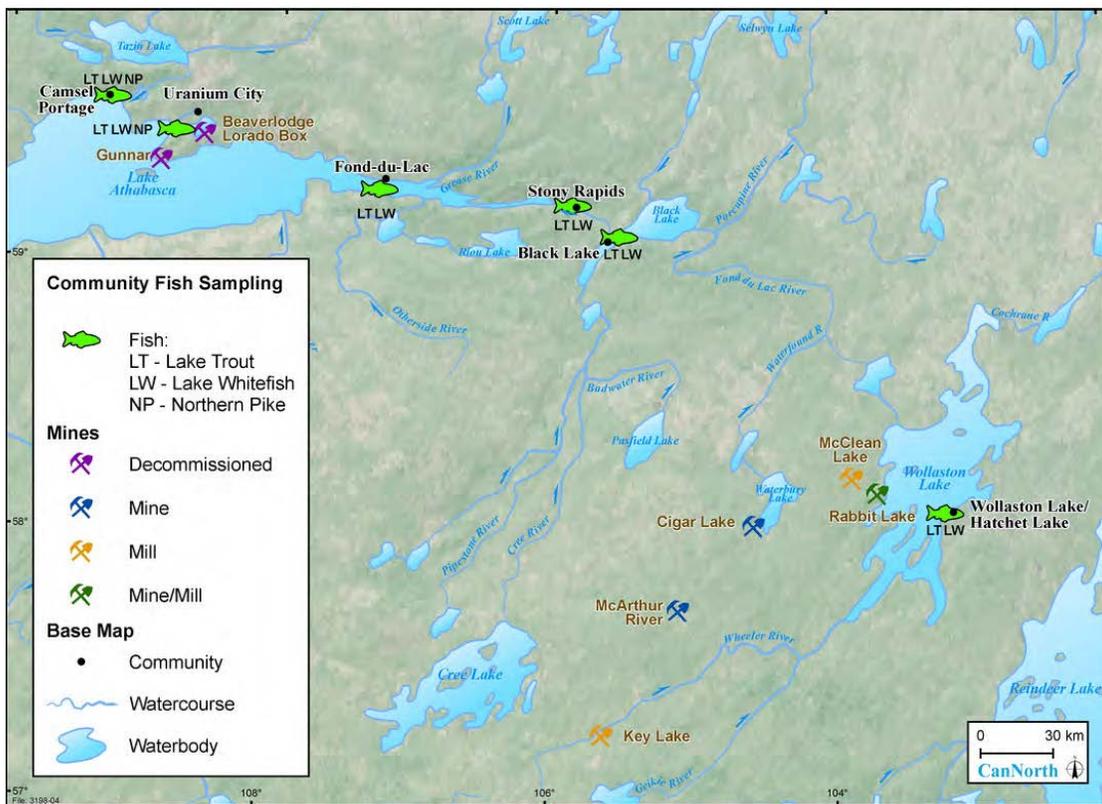


Lake Trout
(Łuezané)



Northern Pike
(Łuldai)

Each year fish samples are collected by community members using gill nets or by angling. Fish were collected at waterbodies near each community including Black Lake, Lake Athabasca near Camsell Portage, the Fond du Lac River near Fond du Lac, the Fond du Lac River near Stony Rapids, Lake Athabasca near Uranium City, and Wollaston Lake. Fish collected include lake trout (Łuezané), lake whitefish (Łú), and northern pike (Łuldai). In total, 431 fish samples have been collected and tested.



Fish chemistry sampling areas, 2011 to 2020

The chemical levels in fish flesh were very low throughout the program, with most chemicals at levels so low the laboratory could not measure them. Chemicals that were measurable were usually within the regional reference range and comparable to concentrations measured between monitoring years. The levels of chemical over the years are similar to the levels that were assessed in the 2018 HHRA. The HHRA determined that the fish in the Athabasca Regions is safe to consume and do not pose any health risks.



Joe Marten of Fond Du Lac

Summary of Fish

Have any chemicals present drastically changed from the baseline study?



The levels are similar to the baseline.

Have any chemicals present drastically spiked outside of the regional reference range?



The levels are similar to the regional reference range.

Are there any other risks posed?



The levels are similar to both baseline and reference range, and the fish is safe to eat.

Fish of the Eastern Athabasca Region are Safe to Eat

Mammals (Ch'âdî)

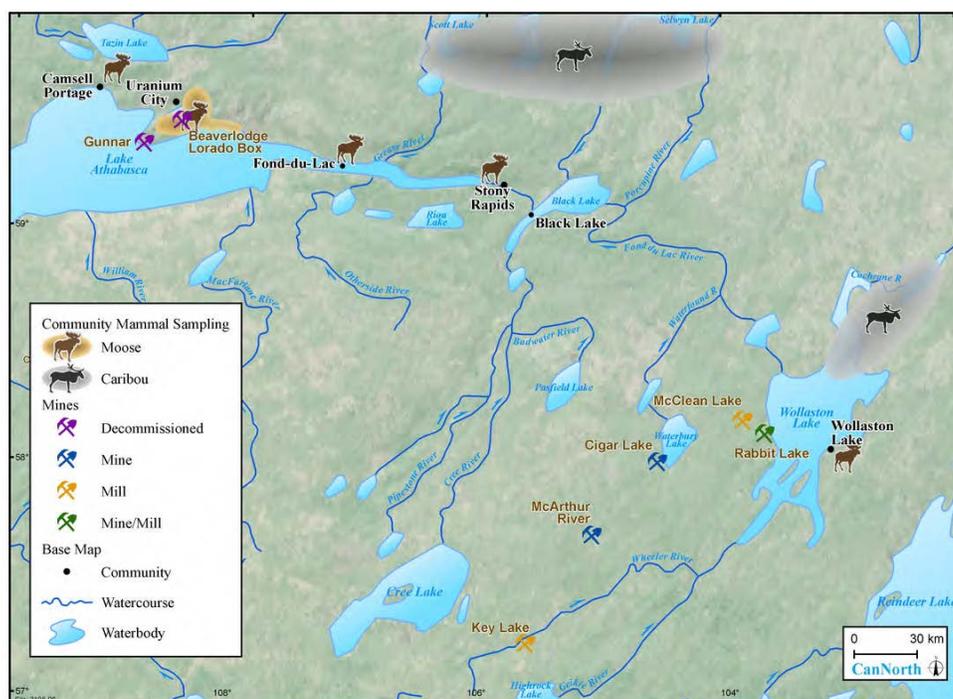


Barren- ground Caribou
(ʔetthe ńtthe ń)



Moose
(deni ńtthe ń)

Two main species of mammal that are commonly hunted and consumed in northern Saskatchewan are barren-ground caribou (ʔetthe ńtthe ń) and moose (deni ńtthe ń). Each year samples of these species were collected from routine hunting activities at locations utilized by community members. Due to local species abundance and hunting preferences, it was not possible to get samples from one or both species consistently across all communities. The species sampled near each community, therefore, depended on annual local abundance. In total, 121 mammal samples were collected and tested.



Ungulate sampling areas, 2011 to 2021

The levels of the chemicals in barren-ground caribou and moose that were collected were very low throughout the program, with most chemicals at levels so low the laboratory could not measure them. Chemicals that were measurable were usually within the regional reference range and comparable to concentrations measured between monitoring years.

Overall, the levels of chemicals assessed in moose and barren-ground caribou muscle meat collected from the communities are considered low, and based on the 2018 HHRA, the consumption of this meat by Athabasca Basin residents is considered safe.

However, elevated levels of lead were found in a few of the meat samples and these high levels were likely caused by lead ammunition. Lead ammunition



Dennis and Lawrence Larocque of Camsell Portage

continues to be used commonly for hunting large game in Saskatchewan. Community members should be aware of the potential risk of eating game killed by lead shot. Studies have shown that lead gunshot fragments when it hits the game and can contaminate the meat, increasing potential exposure to lead for those eating the meat. It is recommended that hunters use ammunition alternatives that are not prone to fragment including steel or other high-weight retention ammunition alternatives.

Summary of Mammals

Have any chemicals present drastically changed from the baseline study?



The the levels are similar to the baseline.

Have any chemicals present drastically spiked outside of the regional reference range?



The levels are similar to the regional reference range.

Are there any other risks posed?



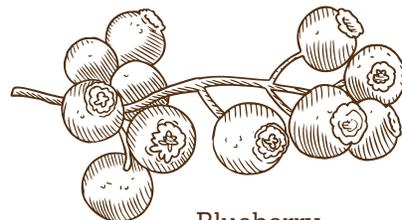
The levels are similar to both baseline and reference range, and the meat is safe to eat.

Mammals of the Eastern Athabasca Region are Safe to Eat

Berries (Jíe)

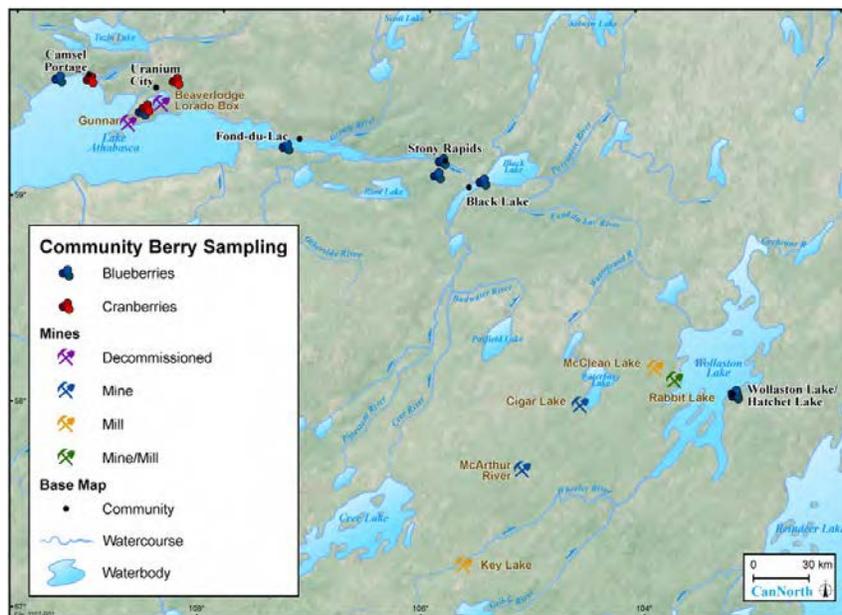


Bog Cranberry
(nantlhe'ér)



Blueberry
(tsatchóth)

Each year berries are hand-collected by local community members independently or with help from CanNorth staff near each study community. Sampling is conducted at locations typically used for berry collection by community members. Depending on accessibility and availability, the type of berry selected for collection was either blueberry (tsatchóth) or bog cranberry (nantlhe'ér). Due to seasonal habitat and annual variations in seasonal abundances for these berries it was not possible to get samples from one or both species consistently across all communities. The species sampled near each community, therefore, depended on local abundance. In total, 192 berry samples were collected and tested.



Berry sampling areas, 2011 to 2021

The levels of the chemicals in blueberries and cranberries were very low throughout the program, with most chemicals at levels so low the laboratory could not measure them. Chemicals that were measurable were usually within the regional reference range and comparable to concentrations measured between monitoring years.

Overall, the levels of chemicals assessed in blueberries and bog cranberries collected from the communities are considered low, and based on previous human health risk assessment, the consumption of berries by Athabasca Basin residents is considered safe.



Blueberries (tsatchóth).

Summary of Berries

Have any chemicals present drastically changed from the baseline study?



The levels are similar to the baseline.

Have any chemicals present drastically spiked outside of the regional reference range?



The levels are similar to the regional reference range.

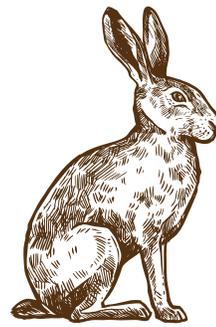
Are there any other risks posed?



The levels are similar to both baseline and reference range, and the berries are safe to eat.

Berries of the Eastern Athabasca Region are Safe to Eat

Additional Samples Requested By Community Members



Snowshoe Hare
(gah)



Grouse (dih)

Beginning in 2014, the EARMP community program started collecting samples requested by community members. Community members expressed concerns about the safety of other traditional foods that they regularly eat and asked that the program test these foods as well. This included the organs of moose and barren-ground caribou as well as snowshoe hare and spruce grouse. In total, 34 organs, 28 snowshoe hare, and 16 spruce grouse samples were collected and tested.

Moose and barren-ground caribou hearts, livers, and kidneys were tested. Generally, chemicals are higher in organs compared to muscle tissue and the organ samples from EARMP also had higher concentrations of chemicals than the flesh tissue samples. The chemical levels in organ samples were comparable between monitoring years. It is recommended that community members eat more moose and barren-ground caribou meat tissue than organ tissue.



Grouse (dih)

Spruce grouse and snowshoe hare are also important traditional foods for Athabasca basin residents, and limited chemistry data were available for the region. Spruce grouse and snowshoe hare samples were acquired from local residents who obtained these samples during routine hunting activities in and surrounding their communities. No comparisons are available to regional reference or baseline levels due to the limited number of samples available for the region. Generally, the samples had low levels of most chemicals (near or below detection limits) and levels were similar between the communities.

Elevated lead levels in multiple spruce grouse samples illustrate the importance of using steel shot for hunting, rather than lead, to limit exposure to lead contamination. Contamination of traditional foods by lead-based ammunition was also identified as an issue by the First Nations Food, Nutrition and Environment study (Chan et al. 2021). Lead shot for hunting most migratory game birds (waterfowl) is banned in Saskatchewan; however, lead shot remains legal for grouse, ptarmigan, and other upland species, and lead ammunition continues to be used commonly for hunting large game in Saskatchewan. It is recommended that hunters use ammunition alternatives that are not prone to fragment (non-lead) including steel, copper or bismuth, or other high-weight retention ammunition alternatives.

Based on the HHRA completed in 2018 the consumption of moose and barren-ground caribou organs, snowshoe hare, and spruce grouse submitted by community members do not present health risks to Athabasca Basin residents and are safe to eat.

Potential risks and hazards with the use of lead ammunition

Exposure to lead can result in health risks including

- neurotoxicity;
- neurodegenerative;
- cardiovascular; and
- renal and reproductive effects.

For example, consuming game meat containing lead ammunition fragments even once a week could impact a child's development.



Summary

The EARMP has collected and tested 869 water and traditional food samples from the Athabasca Region for the last ten years (2011-2021). The results indicate that the measured concentrations of chemicals in the samples are similar to baseline levels and are similar to the regional reference range. The measured concentrations are also similar to the levels used in the human health risk assessment (2018) which illustrated that traditional foods are safe to consume.

Two of the main objectives of the community program are communications and involvement. The EARMP continues to hire community members to collect samples. All of the results and raw data are available at www.earmp.ca.

The EARMP has also contributed to community awareness of the dangers of using lead shot; traditional foods that are hunted with lead shot show elevated levels of lead due to the shrapnel of the ammunition. Community members have been encouraged to use steel shot to decrease lead exposure.

Results from ten years of sampling have consistently demonstrated that water and traditional foods remain safe for consumption, and that they continue to be safe and a healthy dietary choice for residents of the Athabasca basin

10 Year Summary of EARMP



10-year levels to date are similar to the baseline study



10-year levels to date are similar to the regional reference range.



Monitoring traditional foods and water



EARMP shows that water and traditional foods continue to be safe to consume and are part of a healthy diet for Athabasca Residents

We Want To Hear From You!

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

"We, the people of the north rely on the animals, birds, fish, and berries to provide us with traditional foods. That's why it's good to have EARMP to monitor everything from animals, air, plants, fish and birds. It is important for us to keep our traditional ways alive, but at the same time respecting the land, water and the wildlife."

*- Dennis Larocque,
Camsell Portage*

"Nuhnı ja yutthé néné k'e náidé sí, Łuwe ú ıyeze ú tıch'ádiye ú tth'i Jıe nuheda'né heıı sı. Eyi á EARMP yogheııı sıghá sı. T'a bet'á ghıda sí huhıa besdoıé hha horıı?ı hıle thh'i nıh besudı heı boghıııı sı."

*- Dennis Larocque,
Camsell Portage*



EASTERN ATHABASCA
REGIONAL MONITORING
PROGRAM



EARM.P.CA