



Supplementary Information

Renseignements supplémentaires

Presentation from Canada North Environmental Services (CanNorth)

Présentation de Canada North Environmental Services (CanNorth)

In the Matter of the

À l'égard de

Cameco Corporation, Beaverlodge Project

Cameco Corporation, le projet de Beaverlodge

Application for the Licence Revocation and
Transfer of Properties to Saskatchewan
Institutional Control Program

Demande de révocation de permis et de
transfert de propriétés au programme de
contrôle institutionnel de la Saskatchewan

Commission Public Hearing

Audience publique de la Commission

January 30, 2025

30 janvier 2025

Eastern Athabasca Regional Monitoring Program (EARMP)
Community-Based Environmental Monitoring Program (CBEMP)
Beaverlodge Long-Term Monitoring Program (LTMP)
Development



EASTERN ATHABASCA
REGIONAL MONITORING
PROGRAM

JANUARY 2025

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Canada North Environmental Services



CanNorth

CERTIFIED
Aboriginal Business

Canadian Council for
Aboriginal Business 



CanNorth

Who is CanNorth?



- CanNorth is a consulting company that provides environmental, heritage, and community services
- Since 2001, CanNorth has been 100% owned by Kitsaki Management Limited Partnership, the business arm of the Lac La Ronge Indian Band
- CanNorth has offices in Saskatoon, SK (head office), on reserve land in Lac La Ronge, SK, and in Markham, ON



Eastern Athabasca Regional Monitoring Program (EARMP)

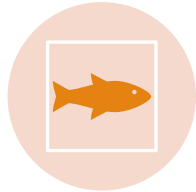
- Established in 2011 under the Saskatchewan Boreal Watershed Initiative
- Co-funded by industry partners, the Government of Saskatchewan, and the CNSC
- Designed to monitor potential cumulative effects downstream of uranium operations in northern Saskatchewan
- Community program was developed to address concerns about the safety of traditionally harvested foods

"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 Resident



EARMP Objectives



DETERMINE THE
SAFETY OF
TRADITIONALLY
HARVESTED FOODS



ESTABLISH LONG-TERM
MONITORING AT KEY
LOCATIONS TO ASSESS
CHANGES OVER TIME



BUILD RELATIONSHIPS
AND ENGAGE WITH
NATIONS AND
COMMUNITIES



COMMUNICATE
MONITORING RESULTS



PROVIDE PUBLIC
ACCESS TO ALL DATA AT
EARMP.CA



Sandy Powder of Uranium City

EARMP Samples Collected (2011-2024)

Sample Type	Species	Number of Samples (All Communities)	Number of Samples (Uranium City)
Water	n/a	64	12
Large mammals	Moose/caribou/organs	181	38
Small game	Snowshoe hare	41	10
Fish	Lake trout, lake whitefish, northern pike	607	113
Birds	Spruce grouse/ptarmigan	34	12
Berries	Blueberry/cranberry	212	30
Total		1,139	215



Wayne Powder of Uranium City

EARMP Data Evaluation and Results

- Samples tested for chemical endpoints that are naturally occurring in the environment but can become elevated from industrial activities
- To determine if each sample type is safe to eat, the results are compared to:
 - Available guidelines
 - Available regional reference range data
 - Available literature
- A Human Health Risk Assessment was conducted in 2018 and a 10-year data evaluation was completed using data from 2011-2021

The EARMP has highlighted that water and traditional foods are safe to eat and do not pose health risks to members of the Athabasca Basin communities



Community-Based Environmental Monitoring Program (CBEMP)

Background

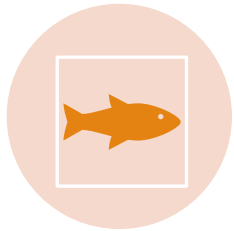
- The Athabasca Working Group (AWG) EMP was a community-based program conducted between 2000 and 2017
- In 2016, the Athabasca communities, Cameco, and Orano signed the Ya'thi Néné Collaboration Agreement
- The agreement established the Athabasca Joint Engagement and Environment Sub-committee (AJES)
- The AJES decided the new CBEMP would alternate each year between the Athabasca communities, and would focus on traditional foods use and safety
- The CBEMP began in 2018 and has completed one cycle of monitoring at each community



Lake trout samples from Donaldson Lake



CBEMP Objectives



GAIN A BETTER UNDERSTANDING OF TRADITIONAL FOODS USED BY COMMUNITY MEMBERS THROUGH INTERVIEWS AND MAPPING HARVESTING LOCATIONS



TRAIN AND EMPLOY COMMUNITY MEMBERS TO CONDUCT INTERVIEWS, MAP HARVESTING LOCATIONS, AND DOCUMENT QUANTITIES AND TYPES OF FOODS CONSUMED



CONDUCT A SAMPLING PROGRAM THAT TARGETS TRADITIONAL FOOD TYPES AND HARVESTING LOCATIONS IDENTIFIED BY COMMUNITY MEMBERSHIP



ASSESS CONSTITUENTS OF POTENTIAL CONCERN CONCENTRATIONS IN THE TRADITIONAL FOOD SAMPLES



COMMUNICATE RESULTS TO COMMUNITY MEMBERS

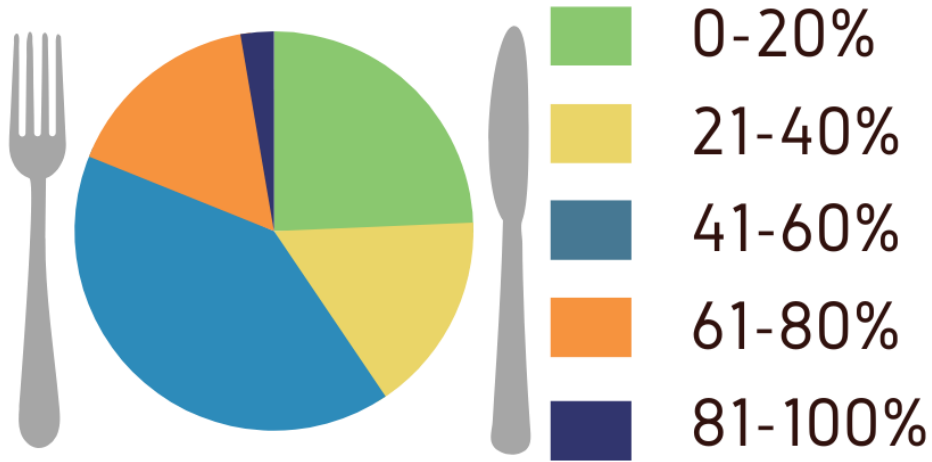


“We live off the land and waters, birds, animals, fish, berries; we have to respect and preserve them”

Joe Beavereye, Elder from Black Lake Denesuline First Nation

CBEMP – Uranium City and Camsell Portage (2021-2023)

- Over half of the 37 people interviewed indicated that over 41% of their diet was composed of traditional foods



Sample Type	Species	Total Number of Samples	Number of Samples Uranium City/Camsell Portage
Water	n/a	54	6
Large mammals	Moose/caribou/bear/organs	53	8
Small game	Snowshoe hare/lynx/porcupine/beaver	17	2
Fish	Lake trout/lake whitefish/northern pike/burbot/walleye/sucker sp.	140	24
Birds	Spruce grouse/ruffed grouse/willow ptarmigan/goose/common merganser	25	8
Berries/Medicinal vegetation	Blueberry/cranberry/raspberry/Labrador tea	68	2
Total		357	50

CBEMP – Human Health Risk Assessment (2023)

- Human Health Risk Assessment results concluded risks are negligible for people who eat a typical or high traditional food diet comprised of food harvested near Uranium City and Camsell Portage
- Community members should follow the healthy fish consumption guidelines as described by the Population Health Unit for northern Saskatchewan
- Health benefits of consuming traditional foods have been documented and the regular consumption of locally collected fish, meat, and vegetation is encouraged for residents of Uranium City and Camsell Portage



Wayne Powder of Uranium City



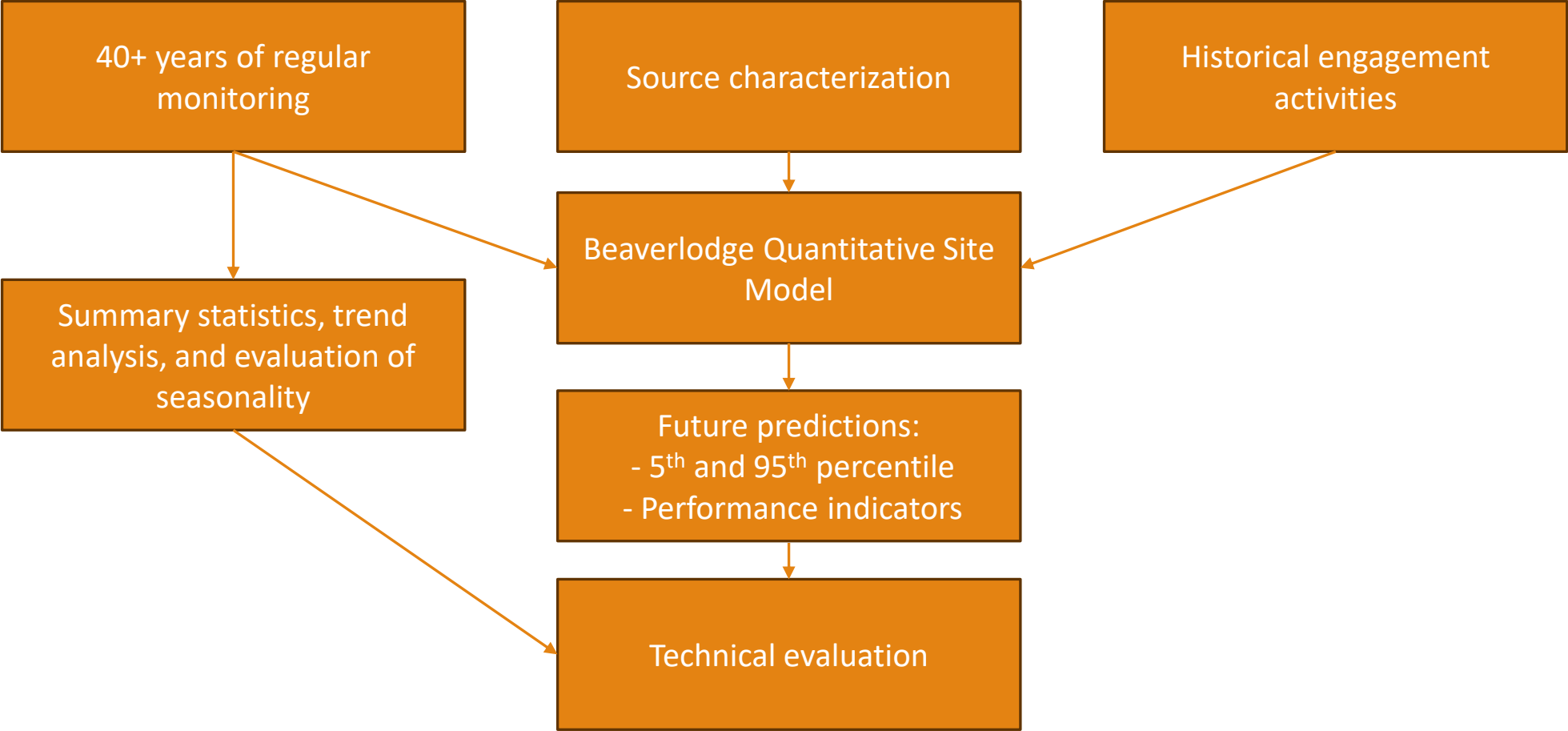
Gill net set in Milliken Lake

Beaverlodge Long-term Monitoring Program (LTMP) Development

- The purpose of the LTMP is to monitor ongoing natural recovery in immediate and downstream areas after all Beaverlodge properties are accepted into the Institutional Control (IC) Program
- CanNorth assisted with two key components of LTMP development



Beaverlodge LTMP Technical Evaluation



Beaverlodge LTMP 2023 Workshop

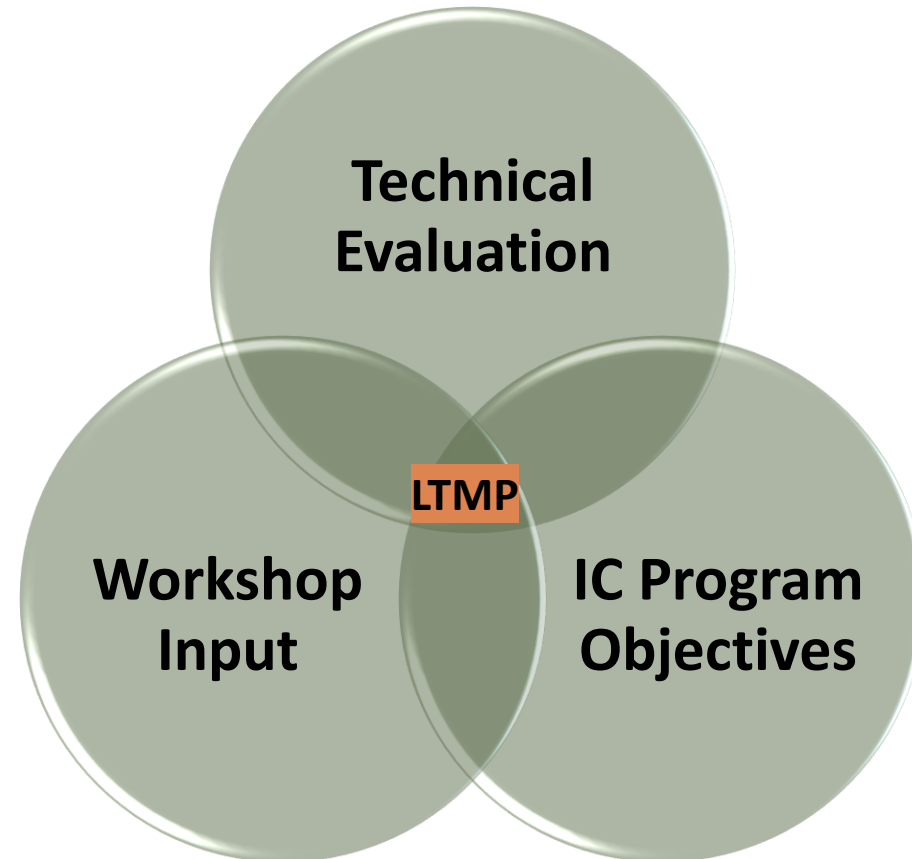
- In-person workshop was held in Saskatoon in June of 2023 to help inform LTMP development, facilitated by CanNorth
- Purpose: to exchange information about the status of the Beaverlodge properties and provide an opportunity for participants to identify their preferences for the long-term monitoring of water and fish once the Beaverlodge properties are transferred to the IC Program
- 37 Participants including
 - Indigenous rights holders
 - Residents/former residents of Uranium City and other northern communities
 - Northern stakeholder organizations
 - Provincial and federal regulatory agencies
 - Cameco staff



Beaverlodge LTMP

Program Component	Technical Evaluation	Long-term Monitoring Program
Water	Every 5 years	Every 3 years initially
Fish	Every 20 years	Every 10 years

At the request of community members, a fish chemistry program was completed in 2023 to support the LTMP



Summary and Conclusions

- There is no evidence of cumulative effects occurring downstream of uranium operations in northern Saskatchewan
- The EARMP and CBEMP will continue to enable community members of Uranium City and Camsell Portage to test the safety of their traditionally harvested foods
- The LTMP will evaluate natural on-going recovery of waterbodies surrounding Beaverlodge and downstream
- Overall, the environment in the Uranium City region will be continue to be monitored over the long-term





Thank you!