



CanNorth

URANIUM CITY

Athabasca Working Group Environmental Monitoring Program 2007

The Athabasca Working Group (AWG) environmental monitoring program has been going on since 2000 and provides Northerners the opportunity to test the environment around their communities for contaminants that could come from active uranium mining and milling operations. Contaminants can potentially be spread by water flowing from lakes near the uranium operations, and small amounts may also be spread through the air. In order to address public concerns, lakes, rivers, plants, wildlife, and air quality are tested in northern Saskatchewan near the communities of Uranium City, Black Lake, Stony Rapids, Fond-du-Lac, Wollaston Lake, and Camsell Portage.



Wayne Powder

The goal is to protect a remote living community with a proud history and to safe guard the wildlife that also lives in the environment. Uranium City is on the north shore of Lake Athabasca, which is Canada's 8th largest lake.

Selection of the types of plants and animals sampled, the locations sampled, and the sample collections were carried out by, or with the help of, northern community members. The purpose of this brochure is to inform the public of the results from the 2007 environmental monitoring program completed in the Uranium City area.



Beverly Herd Caribou

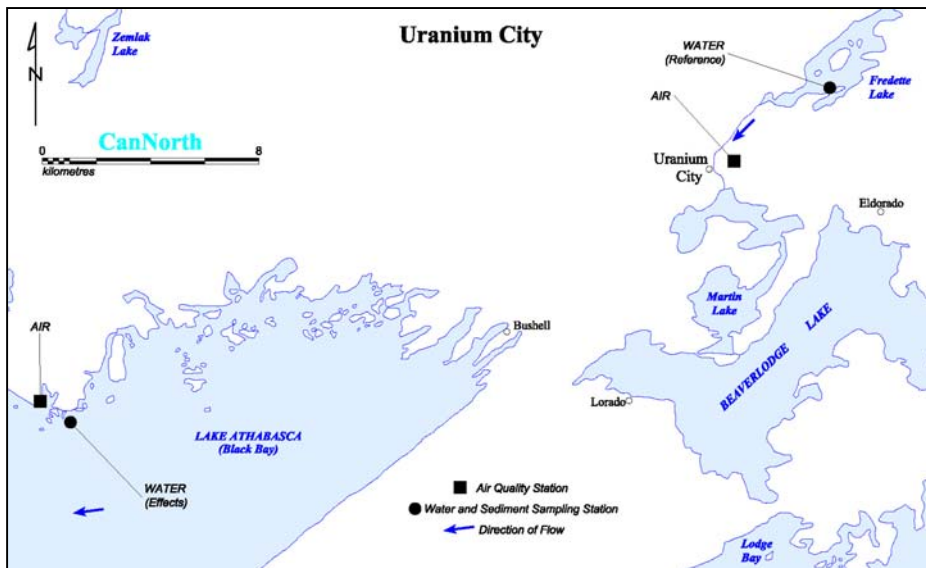


Ryan Washenfelder

STUDY AREA

Water, sediment, and fish are sampled from “reference” and potential “effects” sites near Uranium City. Lake Athabasca is sampled as the “effects” site because it is downstream of waterbodies that could carry contaminants from the upstream uranium mines. Fredette Lake, northeast of Uranium City, is sampled as the “reference” site because there is no link to upstream uranium mining operations.

Air quality is monitored at two locations near the community at Uranium City. Similarly, plant and wildlife samples are collected each year near the community.



KEY PARAMETERS

The focus is on certain contaminants related to uranium operations that are of concern to human and environmental health. These include: copper, lead, nickel, molybdenum, zinc, radium-226, uranium, selenium, and arsenic. All of these parameters occur naturally in the environment and in parts of northern Saskatchewan they can sometimes be found in high amounts. To help establish whether the key parameters found in samples are naturally occurring or whether they are from uranium operations, the amounts measured are compared: 1) between “reference” and potential “effects” sites, 2) between years, and 3) to available guidelines.

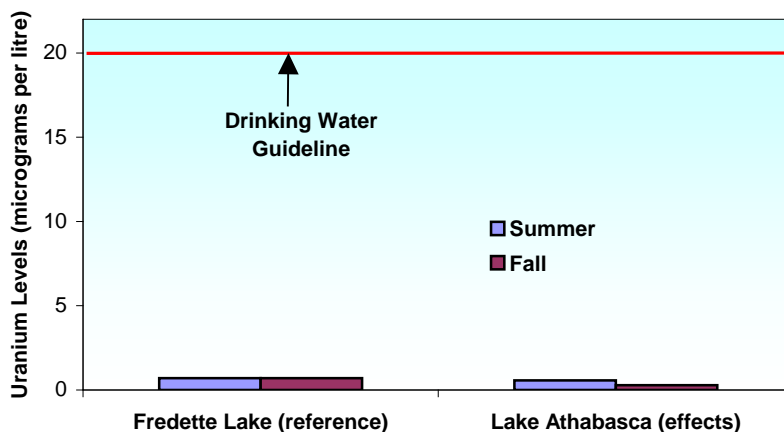


RESULTS

WATER

In the summer and fall of 2007, water samples were collected from the “reference” site in Fredette Lake and from the “effects” site in Lake Athabasca. All parameters were below provincial guidelines for the protection of aquatic life and drinking water quality in both lakes (see graph showing uranium level data). Similar to previous sampling years, the levels of key parameters in the water samples from both lakes were very low. In fact, the levels were mostly too low for the laboratory to detect.

2000-2007 Average Uranium Levels in Water

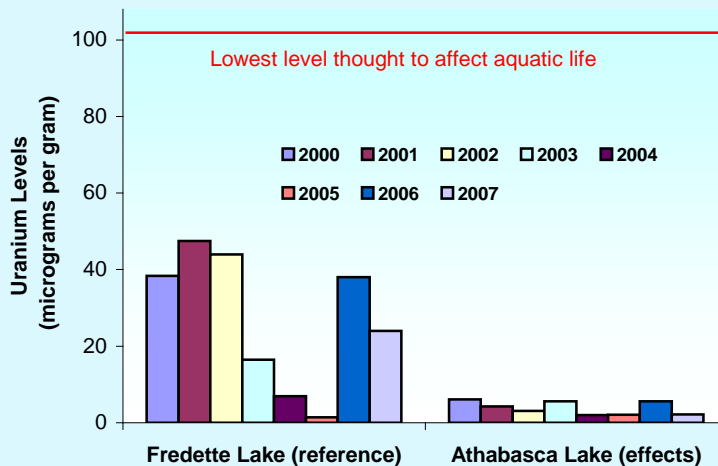


SEDIMENT

Sediment is the mud on the lake bottom. Contaminants from mine sites may be carried by flowing water to lakes where they can be left in the sediment. It is important to sample sediment, as many different types of small animals that live in the sediment are often eaten by fish. Sediment samples were collected from the same locations used for water sampling.

In the Uranium City area in 2007, the levels of arsenic, copper, lead, and zinc all stayed below the federal "probable effects level" guideline. Molybdenum, nickel, selenium, radium-226, and uranium (see graph) were also all below the "lowest effect level." Below this level no harmful effects to aquatic life are expected to occur.

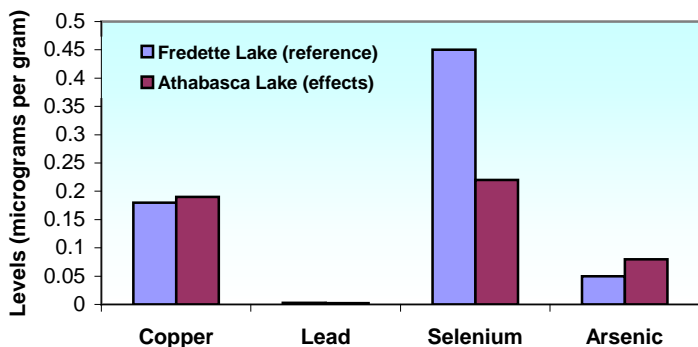
2000-2007 Uranium Levels in Sediment



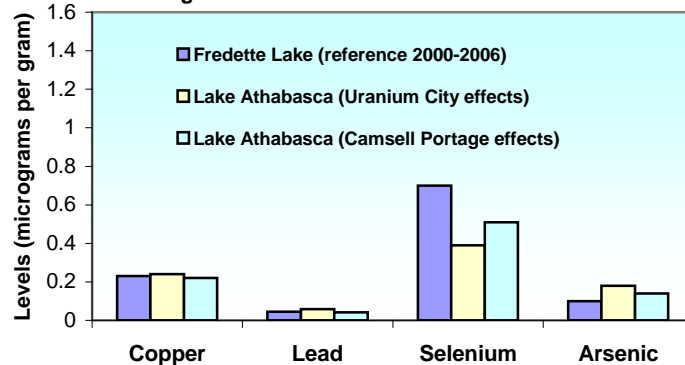
FISH

The levels of the key parameters measured in the 2007 northern pike flesh samples were similar between lakes (see graph) and were similar to levels measured in previous sampling years. No whitefish were caught in Fredette Lake in 2007, but the levels in samples collected near Camsell Portage in 2007 and in previous years (as seen in the graph) had expected levels of the key parameters for the area. Overall, the levels of key parameters were within the expected range for the area and are not a concern for northern residents.

Northern Pike 2007



Average 2000-2007 Levels in Lake Whitefish

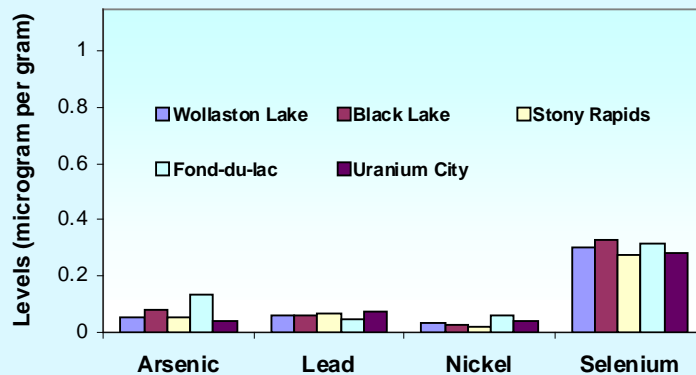


WILDLIFE

No caribou or moose samples were collected from the Uranium City area in 2007. Moose and caribou samples collected near other northern communities in 2007 had expected levels of the key parameters for the area (as seen in the graph for moose).



Average 2000-2007 Levels in Moose

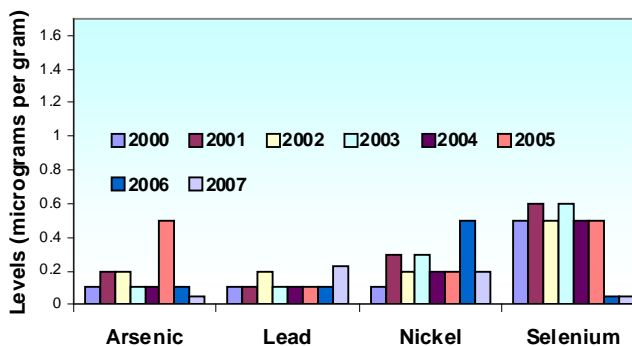


PLANTS

Samples of Labrador tea were collected near the community of Uranium City in 2007. The levels of key parameters in the plants were generally similar between sampling years (as seen in the graph) and were similar to levels measured in plants collected near other northern communities.



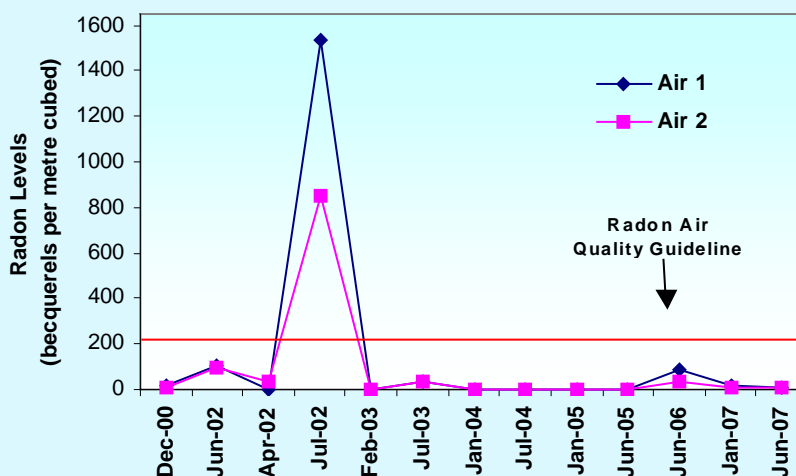
2000-2007 Levels in Labrador Tea



RADON

Air quality was monitored at two locations near the community of Uranium City by measuring radon levels. Radon is an odourless, tasteless gas produced naturally by the breakdown of uranium and radium-226 in the soil and water. As a result, radon levels are naturally higher in areas where uranium is found in the ground, especially in the summer months when the ground can thaw and release the gas into the air. Radon levels have remained low since 2003 and show natural seasonal changes (as seen in the graph).

Radon Levels 2000-2007



CONCLUSION

Lake Athabasca is one of the largest lakes in Canada and is far downstream from the uranium mines that are currently operating in northern Saskatchewan. The levels of all key parameters in the water, sediment, fish, plants, and air samples near Uranium City have remained similar between years since the AWG program began. The 2007 results of the AWG program do not indicate any environmental concerns near the community of Uranium City as a result of the active uranium mining and milling projects in the area.

THANK YOU

The involvement of community members is very important in planning and conducting the AWG program. Thank you to the AWG members, who include representatives from the seven northern communities and the industrial partners, Cameco Corporation and AREVA Resources Canada Inc. The AWG program thanks all the northern residents who participated in the AWG sample collections over the past years, especially Wayne Powder who has done a great job collecting the samples from the Uranium City area.



This project was managed by CanNorth, an aboriginal environmental services company owned by Kitsaki Management. If you have any questions or comments please contact Peter Vanriel at (306) 652-4432.