



CanNorth

FOND-DU-LAC

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 Fond-du-Lac, Uranium City, Black Lake, Stony Rapids, Wollaston Lake, and Camsell Portage.



Joe Marten

The goal is to protect a remote living community with a rich history and to safe guard the wildlife that also lives in the environment. The people of Fond-du-Lac are proud to be a part of the majestic Canadian Shield.

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 Fond-du-Lac area.



Beverly Herd Caribou

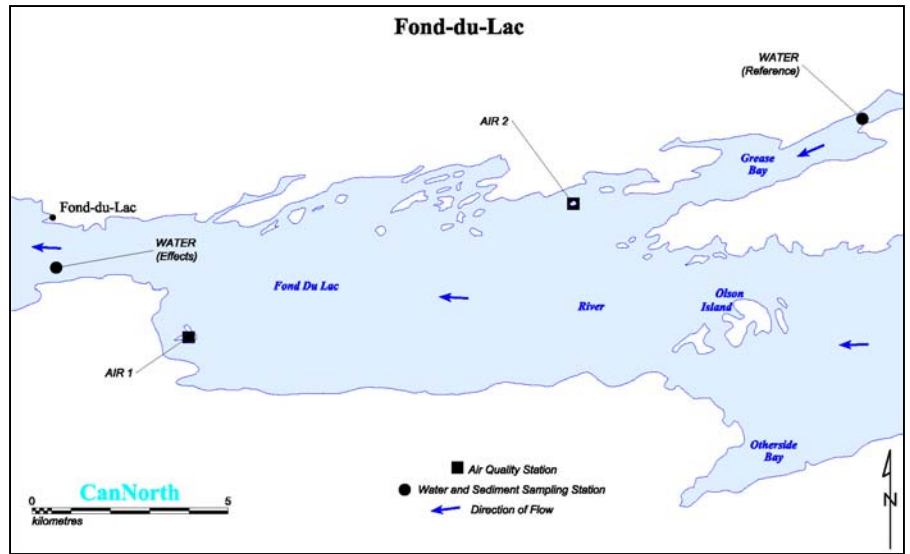


Ryan Washenfelder

STUDY AREA

Water, sediment, and fish are sampled from “reference” and potential “effects” sites. Grease Bay is referred to as the “reference” site because there is no influence from uranium operations. The Fond-du-Lac River is referred to as the potential “effects” site because it has the potential to receive contaminants from uranium operations located upstream.

Air quality is monitored at two locations near the community of Fond-du-Lac. Similarly, plants 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 large 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.

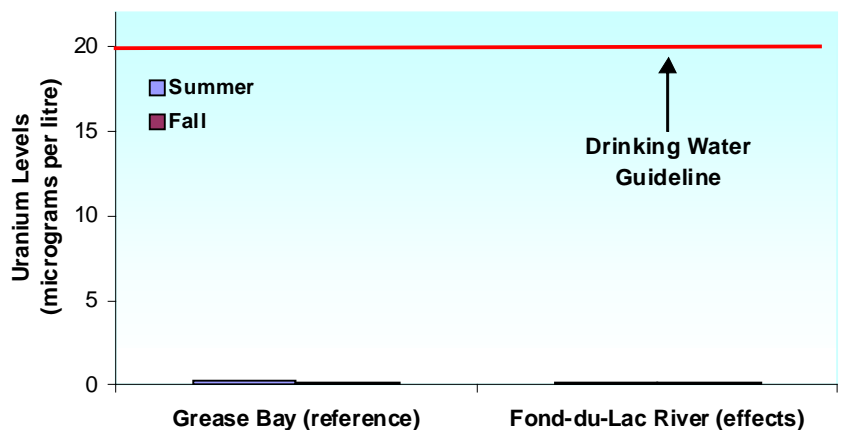


RESULTS

WATER

In 2007, water samples were collected at the Grease Bay “reference” site and at the Fond-du-Lac River potential “effects” site. All key parameters were below the provincial guidelines for the protection of aquatic life and drinking water quality in both the “reference” and “effects” sites (as seen in the graph showing uranium results). As in previous years, the levels of key parameters in the water samples from both sampling sites were very low. In fact, the levels were mostly too low for the laboratory to detect.

2007 Uranium Levels in Water

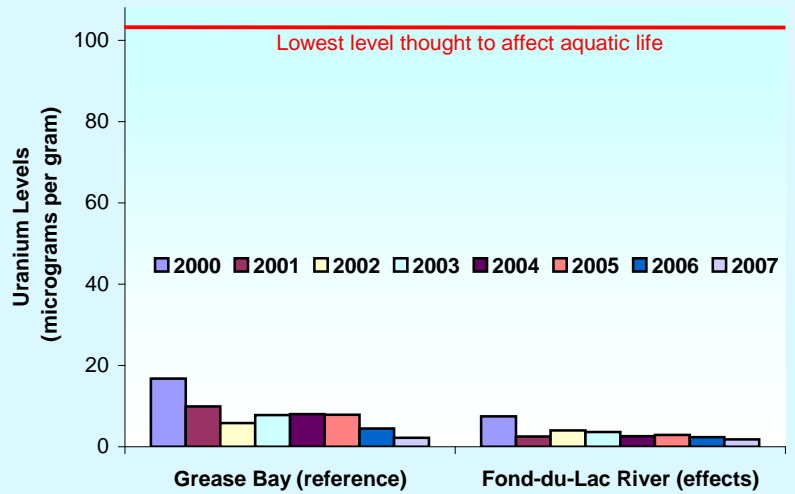


SEDIMENT

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 the 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 Fond-du-Lac area in 2007, the levels of arsenic, copper, lead, and zinc all stayed well below the federal "probable effects level" guideline. Molybdenum, nickel, selenium, radium-226, and uranium were also all below the suggested "lowest effect level." Below this level no harmful effects to aquatic life are expected to occur.

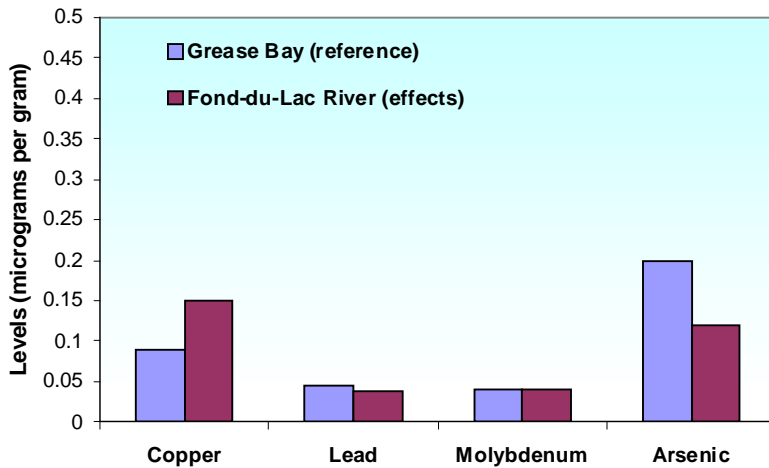
2000 - 2007 Uranium Levels in Sediment



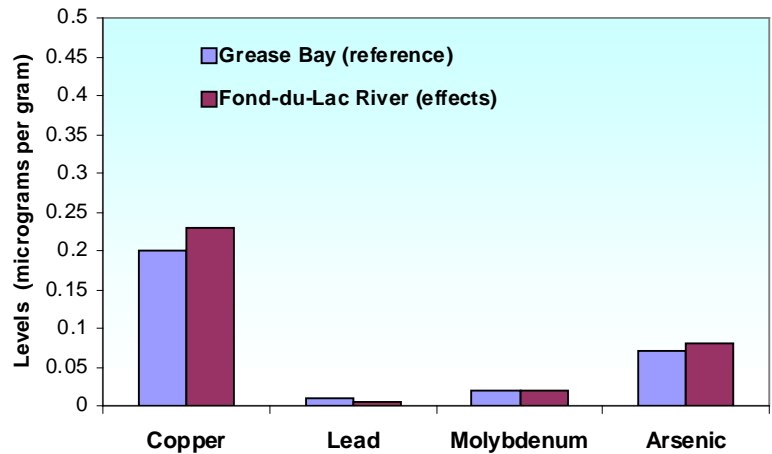
FISH

The levels of the majority of key parameters measured in the 2007 fish flesh samples were similar between lakes and were similar to levels measured in previous sampling years. In the fish from both sites, the levels of several key parameters were too low to be detected by the laboratory. However, copper in 2007 was higher in lake whitefish sampled from the "effect" site (as seen in the graph), although higher levels have been measured in "reference" samples during previous years. Overall, the levels of key parameters were within an expected range for the area and are not a concern for northern residents.

2007 Levels in Lake Whitefish



2007 Levels in Northern Pike

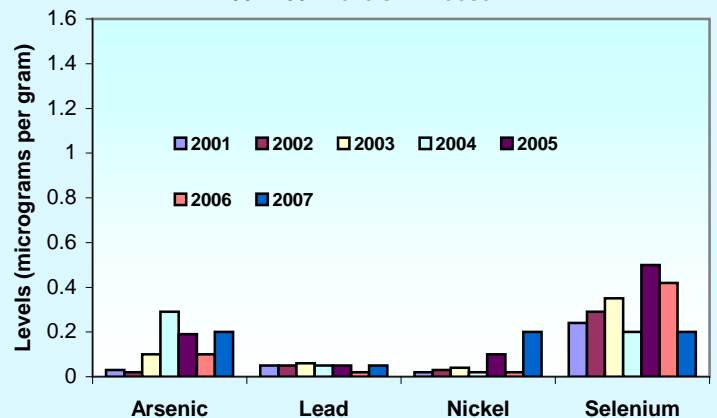


WILDLIFE

Moose, caribou, and lynx samples were collected from the Fond-du-Lac area in 2007. In general, none of the contaminants measured appear to be increasing from year to year. The graph shows the average levels measured in moose samples from the Fond-du-Lac area from 2001 to 2007.



2001-2007 Levels in Moose

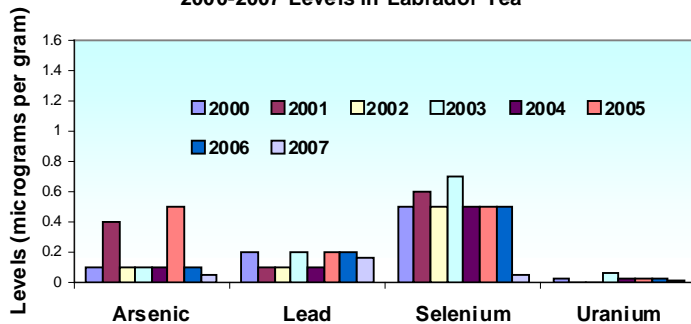


PLANTS

Samples of blueberries, Labrador tea, and bog cranberries were collected near the community of Fond-du-Lac 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.



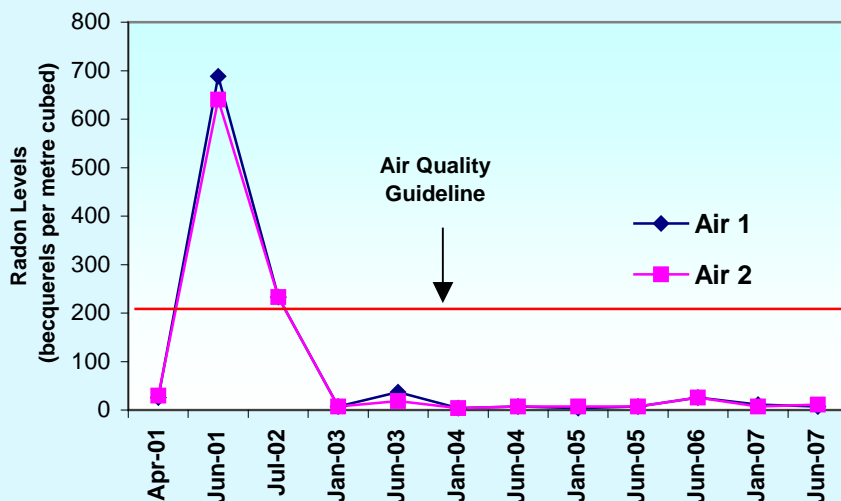
2000-2007 Levels in Labrador Tea



RADON

Air quality was monitored at two locations near the community of Fond-du-Lac 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 thaws and releases the gas into the air. Radon levels have remained low since 2003 and show natural seasonal changes (as seen in the graph).

Radon Levels from 2001-2007



CONCLUSION

The information collected in 2007 was very similar to previous years. The levels of key parameters measured in the water and sediment samples were below guideline levels and were similar between “reference” and potential “effects” sites. Similarly, the levels of key parameters in fish, plant, and wildlife samples were all low and comparable to previous sampling years. The results of the 2007 AWG environmental monitoring program do not indicate that there are any environmental or human health concerns in the Fond-du-Lac area as a result of the operational uranium mining and milling projects.



Joe Marten



THANK YOU

The involvement of community members was 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 Joe Marten who has done a great job collecting the samples from the Fond-du-Lac 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.