NSERC CREATE Program for Water and Sanitation Security in First Nations Communities

WATER RIGHTS RESEARCH CONSORTIUM

chrr.info/water-rights

EVERYONE DESERVES CLEAN DRINKING WATER

- The United Nations wants 75 per cent of the world's population to have access to a toilet by 2015. Yet here in Canada, only 39 per cent of the 10,000 residents of Manitoba's Island Lake region have toilets. Lack of running water in these communities likely contributed to the rapid spread of deadly H1N1 flu in 2009.
- Tap water in almost one in five First Nations communities across Canada is unfit to drink. More than 80 per cent have been living that way for more than a year.
- The cost of bringing drinking water and wastewater infrastructure for all Canadian First Nations reserves up to safe standards has been estimated at $4.7 billion over 10 years using conventional approaches. The alternative approaches developed and tested by the Water Rights Research Consortium could significantly reduce those costs.

"The right to safe and clean drinking water and sanitation is a human right that is essential for the full enjoyment of life and all human rights."

United Nations General Assembly, July 2010

WHO WE ARE

We are researchers from the University of Manitoba working with the Assembly of Manitoba Chiefs, the Centre for Indigenous Environmental Resources and other partners to develop research projects related to water as a human right, with the goal of increasing access to clean running water and sewage facilities.

IMPACT

- Fewer First Nations drinking water advisories and more First Nations homes with running water, first in Manitoba and then across Canada.
- Reduced rates of waterborne gastrointestinal disease, infectious respiratory disease and skin infections among First Nations residents and neighbouring communities.
- More First Nations youth testing water quality and reviving traditional practices to protect water sources.
- More university students trained to apply their technical skills in culturally relevant ways to tackle First Nations drinking water and sanitation challenges.
- Creation of a network with the capacity to tackle emerging drinking water and sanitation issues in a world of growing water shortages.

"I think water is the key of life. It's the most important thing you could ever have. We wouldn't live without it."

Arianna Rickard

A student from the Sapotaweyak Cree Nation, who learned to test water quality.

University of Manitoba

WHAT WE ARE WORKING ON IN 2012

- Pesticide expert Dr. Annemieke Farenhorst and her students spent the summer working with Sapotaweyak Cree Nation youth. Grade 9 and 10 students were given cameras to record and reflect on water resources important to their community. Students from Sapotaweyak and nearby communities also learned how to test community water for contaminants.
- University of Manitoba law students are speaking to Manitoba high school classes about water as a human right through the Student Speakers Bureau.
- A public seminar series on First Nations and the Right to Water runs until March 2013. For those who can't make it to campus, the series hosted by the Centre for Human Rights Research is podcasted. (chrr.info/resources/critical-conversations)

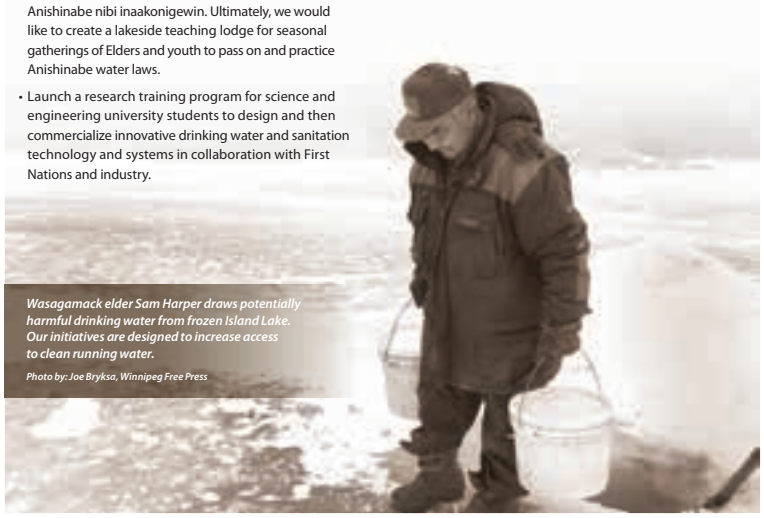
RESEARCH PLANS

- Organize annual summer gatherings of traditional knowledge carriers from across Manitoba and Northwestern Ontario on Ojibway water laws or Anishinabe nibi inaakonigewin. Ultimately, we would like to create a lakeside teaching lodge for seasonal gatherings of Elders and youth to pass on and practice Anishinabe water laws.
- Launch a research training program for science and engineering university students to design and then commercialize innovative drinking water and sanitation technology and systems in collaboration with First Nations and industry.
- Identify health risk monitoring measures for drinking water and sanitation services on First Nations. Youth will participate by producing a grassroots video that tells the story of water services in their communities.
- Confront government and public apathy by developing evidence-based advocacy strategies based on new economic and legal analyses.
- Apply the academic-Indigenous partnership model developed on Canadian water rights projects to help solve international drinking water and sanitation challenges, especially in Indigenous communities. Some work has already been done by consortium members with Carib communities in Dominica.

FUNDING

$3 million of applications approved or under adjudication, mainly from federal research granting agencies. Seeking matching funds of $3 million from the private sector for projects planned until 2019.

Contact the Centre for Human Rights Research at: **fallding@cc.umanitoba.ca**



Wasagamack elder Sam Harper draws potentially harmful drinking water from frozen Island Lake. Our initiatives are designed to increase access to clean running water.

Photo by: Joe Bryksa, Winnipeg Free Press

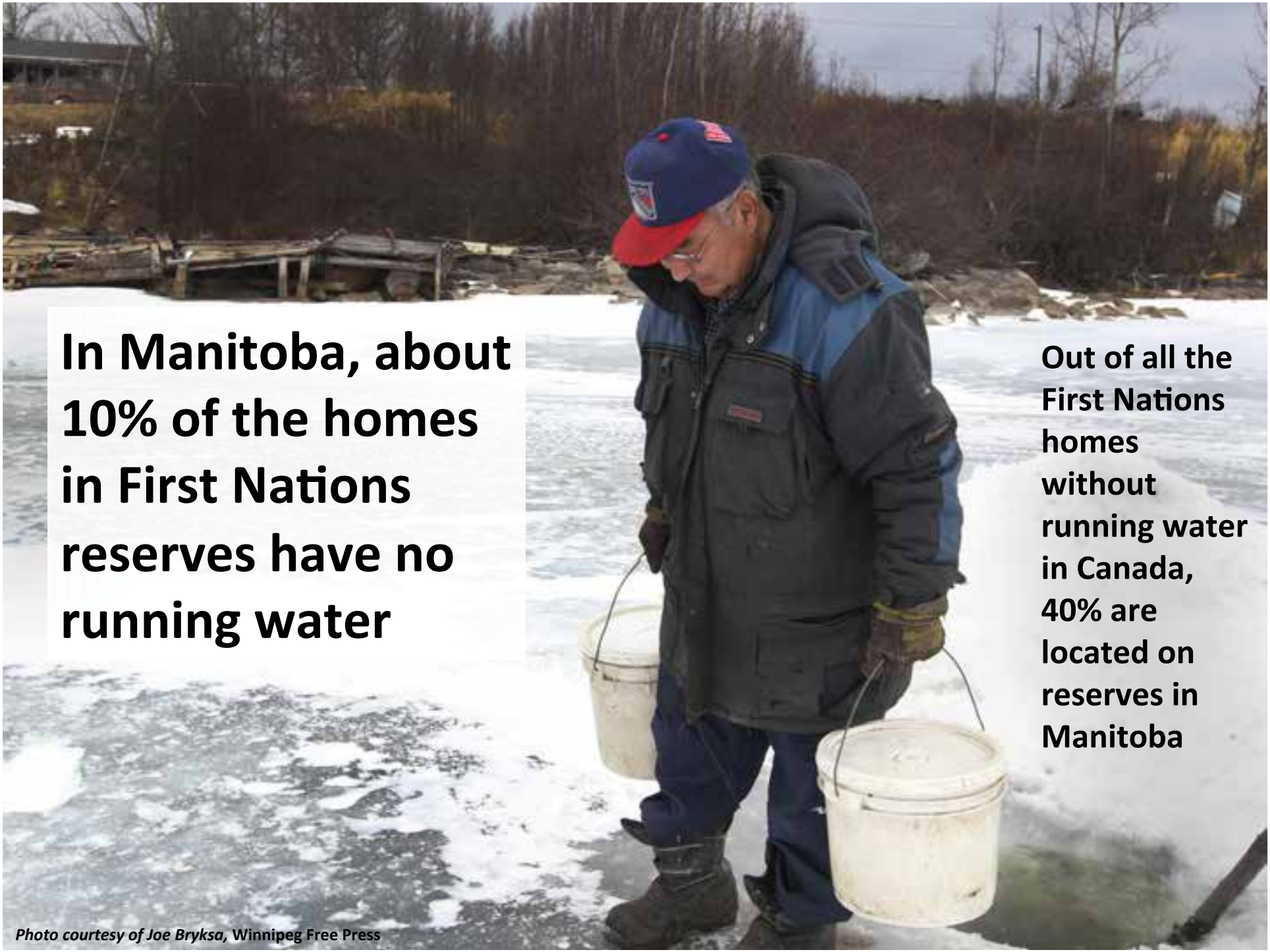
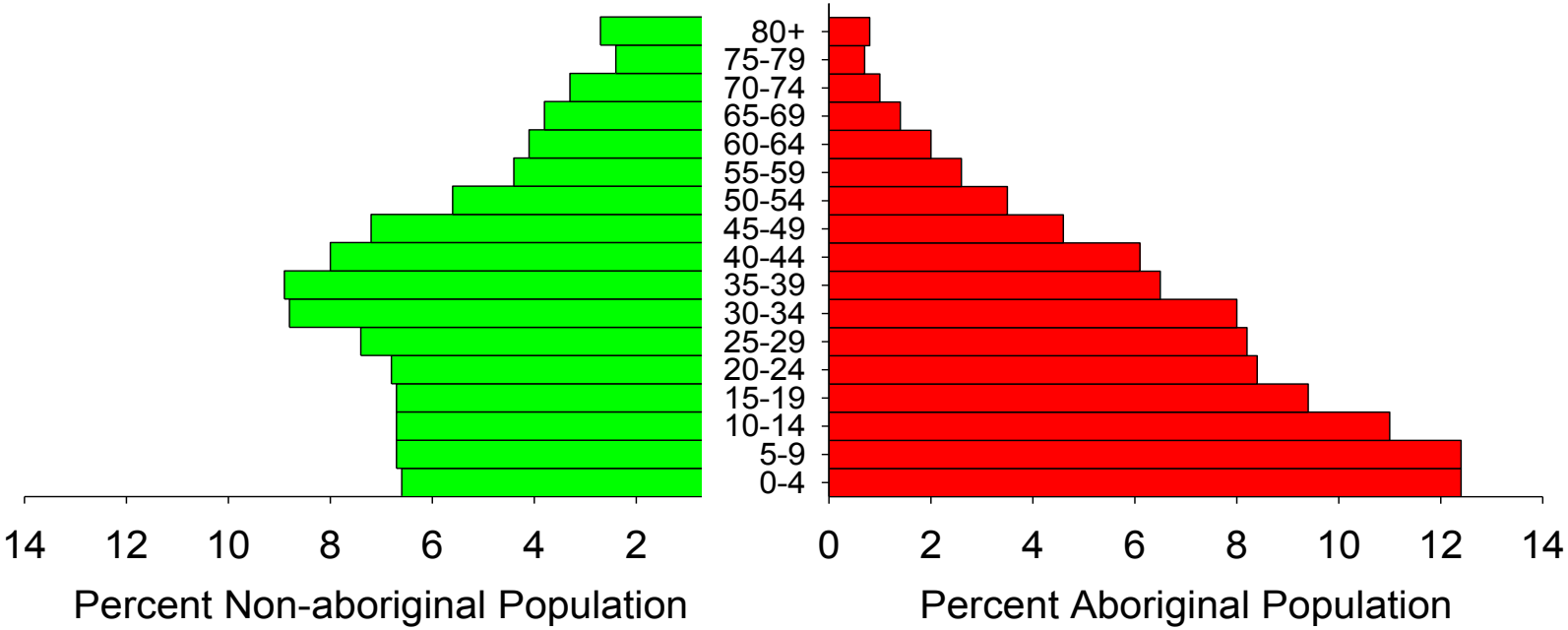


Photo courtesy of Joe Bryksa, Winnipeg Free Press

Photos courtesy of Joe Bryksa, Winnipeg Free Press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Percent Non-aboriginal Population
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Percent Aboriginal Population

February 18, 2014

Winnipeg Free Press

February 25, 2014 SCHOOL DAY 5

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LOCAL

Winnipeg Free Press - PRINT EDITION

Running water coming at last to Island Lake

By: Randy Turner

Posted: 02/18/2014 1:00 AM | Comments: 19 | Last Modified: 02/18/2014 9:04 AM | Updates

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Aboriginal Affairs and Northern Development minister Bernard Valcourt announced in Winnipeg $323.4 million has been set aside by the federal government over the next two years for new projects to improve waste-water and water issues on First Nations in Canada.

Bill S-8 (Historical)

Safe Drinking Water for First Nations Act

An Act respecting the safety of drinking water on First Nation lands

This bill was last introduced in the 41st Parliament, 1st Session, which ended in September 2013.

Status

This bill has received Royal Assent and is now **law**.

Summary

This is from the published bill. The **Library of Parliament** often publishes better independent summaries.

This enactment addresses health and safety issues on reserve lands and certain other lands by providing for regulations to govern drinking water and waste water treatment in First Nations communities. Regulations could be made on a province-by-province basis to mirror existing provincial regulatory regimes, with adaptations to address the circumstances of First Nations living on those lands.

88 First Nations communities across Canada are under a Drinking Water Advisory (Health Canada 31/01/2014).

- **Microbiological contamination**
- **Treatment equipment malfunction**
- **Inadequate disinfection**
- **Disinfectant residuals**
- **Unacceptable turbidity**

When population growth is taken into account, an estimated $4.7 billion will be required over the next 10 years to bring drinking water and wastewater infrastructure for all First Nations reserves up to safe standards <u>using current technologies and approaches</u>.

The CREATE H2O program is the first science-engineering research training program in Canada that combines technical water and wastewater management training with Indigenous theory, law and methodological skills training.

The $3-million program is a partnership between universities and First Nations communities, with support from First Nations organizations, industry and non-for profit stakeholders.

Program was initiated on April 1, 2013.

Thirteen undergraduate and graduate students.

Eight Manitoba and Ontario First Nation communities.

Thirty professors from the University of Manitoba, Trent University and University College of the North.

ENGAGING ELEMETARY AND HIGHSCHOOL STUDENTS IN FIRST NATIONS COMMUNITIES IN WATER SCIENCES AND CAPACITY BUILDING FOR EQUIPMENT IN SCHOOLS

PROVIDING OPPORTUNITIES FOR FIRST NATIONS GRADE 11 & 12 STUDENTS TO PARTICIAPTE IN UNIVERSITY RESEARCH

CHECK OUT OUR PROGRAM

http://create-h2o.ca/

OR CONTACT US

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