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## RESPECT THE WATER #1

Grade Levels: 5, 8

Subjects: Science & Technology, Geography

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### OBJECTIVE

Students will explore Aboriginal perspectives on respecting the environment; how individual and collective behaviour affects the environment; and the role of community engagement in maintaining healthy, sustainable ecosystems.

### SPECIFIC CURRICULUM EXPECTATIONS

Grade 5 Science & Technology: Understanding Earth Systems (Conservation of Energy and Resources)

- » Analyze the long-term impacts on society and the environment of human uses of energy and natural resources, and suggest ways to reduce these impacts
- » Use scientific inquiry/research skills to investigate issues related to energy and resource conservation
- » Use a variety of forms to communicate with different audiences and for a variety of purposes

Grade 8 Science & Technology: Understanding Earth Systems (Water Systems)

- » Evaluate personal water consumption and propose a plan of action to reduce personal water consumption to help address water sustainability issues
- » Use a variety of forms to communicate with different audiences and for a variety of purposes

Grade 8 Geography: Economic Systems

- » Outline the fundamental questions that all economic systems must answer: what goods are produced, how they are produced, by whom they are produced, and how they are distributed
- » Formulate questions to guide and analyze research on economic influences and relationships

### RESOURCES

- » "Water/El Agua," from *Talking With Mother Earth/Hablando con Madre Tierra*, by Jorge Argueta
- » Online video *The Story of Bottled Water* ([www.storyofstuff.org/movies-all/story-of-bottled-water](http://www.storyofstuff.org/movies-all/story-of-bottled-water))
- » "No Running Water," from *Canadian Dimension*, March/April 2011

### ASSESSMENT & EVALUATION STRATEGIES

- » Observation
  - » Anecdotal Notes
  - » Presentation
  - » Work Samples
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- » Oral Report
- » Checklist
- » Peer Assessment

### TEACHING STRATEGY #1 – SHARED READING & LARGE-GROUP DISCUSSION

Have students do a shared reading of the poem “Water/El Agua” from the dual-language book *Talking With Mother Earth/ Hablando con Madre Tierra*, by Jorge Argueta, an indigenous Pipil Nahua author from El Salvador. If there are students whose first language is Spanish, approach them beforehand and ask if they are comfortable reading the Spanish text. (If these students speak Spanish but do not read it, this presents an opportunity for parental and/or community engagement, with parents reading the Spanish text with their child or for the classroom.)

**Prompt:** What do you think Argueta means when he says the water “turns everything into life”? What does he mean when he says water turns everything “into songs/ into colors”?

**Background Information:** Aboriginal peoples believe that water cleanses the Earth and all living things. Babies begin their lives in water, and human life depends on it. Water is one of the four sacred elements, along with wind, fire, and earth. Many ceremonies include water; many sacred places are located next to water or at places where waterways meet. Aboriginal lifeways are dependent upon and inextricably linked to water for the maintenance of both physical and spiritual health.

**Prompt:** When Argueta writes that “Water is sacred./ It is the blood/ of Mother Earth,” he is sharing Aboriginal knowledge. How is this knowledge similar to Western scientific ideas on the water cycle?

**Background Information:** Human beings cannot survive without blood. Aboriginal peoples also know that the Earth depends on her blood (the water). The water cycle speaks of the continuous presence of water on the Earth, going in cycles and through different states (liquid, solid, gas). Aboriginal peoples speak of the cycle of water that happens every 28 days, with the movement of the moon and tides and their connection to the female cycle. The female cycle can culminate with pregnancy and birth, with the child living in water for nine months and being born from water. Aboriginal peoples see all life as interconnected, with water as part of the web of creation. Aboriginal peoples see the water as an ever-present force, circulating through the Earth in various ways, connecting people to land and unseen spiritual forces to everyday life.

**Prompt:** Why might Argueta have decided to include the words of his grandmother in this poem? What does this say about the place of elders in Aboriginal society?

**Background Information:** Elders pass on cultural knowledge and skills to the young; they are revered for their wisdom. Argueta is honouring his grandmother for the knowledge she has passed on to him.

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## TEACHING STRATEGY #2 – VIDEO SUMMARY/RE-TELL

Screen the short online video *The Story of Bottled Water*. Split students into small groups and have them create a summary of the video in any format they choose (writing, illustrations, oral re-tell, performance). Have students present their summary to the class. After each presentation, conduct a peer assessment where students offer constructive criticism. After all the groups have presented their summaries, discuss the issue in the large group to consolidate understanding.

**Prompt:** Are there any common values between Aboriginal worldviews and the viewpoint expressed by Annie Leonard in the video?

**Background Information:** Aboriginal peoples believe that the water and land must be protected and preserved for the benefit of the next seven generations and for the future of all humankind. Annie Leonard speaks about preserving the Earth and ensuring that everyone has access to clean water.

**Prompt:** How does the story of bottled water affect your life? What impact does bottled water have on your community? Does this issue have a positive or negative impact for First Nations, Métis, and Inuit people?

**Background information:** Annie Leonard says that governments should ensure that everyone has access to safe water. However, there are many hundreds of on-reserve communities that do not currently have access to clean water. Find information on water quality on First Nations reserves via the *Canadian Dimension* article, the Council of Canadians website at [http://canadians.org/water/issues/First\\_Nations/index.html](http://canadians.org/water/issues/First_Nations/index.html) and via the CBC Archives at [www.cbc.ca/news/politics/story/2011/11/17/pol-water-quality-reserves.html](http://www.cbc.ca/news/politics/story/2011/11/17/pol-water-quality-reserves.html).

## TEACHING STRATEGY #3 – VIDEO SCREENING & SCHOOL CAMPAIGN

Have students organize a screening of *The Story of Bottled Water* at school. Then have them complete a survey detailing where bottled water is available (e.g., staff room, cafeteria, breakfast/lunch programs, student lunches, special events) and how much is used in each location or at each event. Finally, have students create a plan to suggest alternatives and reduce or eliminate the use of bottled water at school. As part of the plan for action, have students write letters to the principal to explain the issue. To get them started, provide students with the following guiding questions: What kind of chart do you need to create to carry out your survey? How might you determine how much water is used? (Count cases, take a visual inventory of recycling bins, ask administrative staff...) What kind of planning and strategizing will be involved in creating alternatives to bottled water?

## TEACHING STRATEGY #4 – ON THE HOT SEAT

Have students conduct a “hot seat” activity where they interview the corporations making bottled water. Students will gather in a circle with a chair in the middle. The student sitting in the chair plays the role of the corporation. The rest of the class interviews him or her. Students may use any ideas generated from the resource materials, small- or large-group discussions, or previous activities to guide their interview questions and answers. Making inferences is encouraged.

# No *Running* Water

by HELEN FALLDING

**ISLAND LAKE, MANITOBA** – A deadly outbreak of H1N1 flu swept through a First Nation on this picturesque lake in northeastern Manitoba's boreal forest during the first wave of the pandemic.

A year later, whooping cough broke out in the sister community across the lake, where two people in their 30s also died in quick succession last fall after catch-

ing seasonal flu. Kids in all three communities around the lake suffer from skin sores that won't heal, many are colonized by antibiotic-resistant superbugs, and diarrhea is common, especially in the spring. Even compared to other remote First Nations with similarly overcrowded housing, the health situation in Island Lake seems extreme.

St. Theresa Point:  
Geordie Rae carries  
water in the hot sun  
to his family.  
Joe Bryksa/  
Winnipeg Free Press



Crimean War nurse Florence Nightingale could probably have figured out a solution in about five minutes: get these people running water.

Hard as it is to believe, about half the 10,000 people living along the shores of Island Lake and nearby Red Sucker Lake have no plumbing. Those who can't afford a vehicle haul water home from communal outdoor taps by hand or on sleds, and they either use indoor latrine buckets – sometimes dumped in the yard – or brave 30 below trips to the outhouse.

“You can freeze your ass in there,” Sam Harper, 69, said of his family’s outhouse as he carried plastic pails of water up a slippery bank from a hole in the frozen lake. “I find myself, once in a while, lying down on the snow because I’m so tired.” As an elder, Harper sometimes gets treated water delivered by the band – as long as the truck doesn’t break down or get stuck in the snow.

An investigation by the *Winnipeg Free Press* revealed that it’s common for Island Lake families with young children to struggle on less than the 50 litres of water per person a day recommended by the United Nations for basic needs. Some use less than the 15 litres aid agencies try to distribute during natural disasters. The average Winnipeg resident uses 180 litres of treated water a day.

Jacob Flett’s mother Valene worried about how she

was going to follow a nurse’s instructions to bathe her child and wash his clothes regularly after the baby developed itchy sores. “I only have one pail,” she said. Meanwhile, Bernard Flett waited a decade after a doctor “prescribed” running water to help prevent diabetes-related infections before the band found enough money to install a water holding tank in his home. By the time he got plumbing, Flett’s toes had been amputated and he and one of his grandchildren were colonized by the MRSA superbug that spreads easily in homes without proper sanitation. “We try to keep the kids clean,” Flett said, as a child pulled out a small red plastic tub used for baths. His daughter sometimes puts a wooden yoke carved by her grandfather over her shoulders to lug heavy water buckets home.

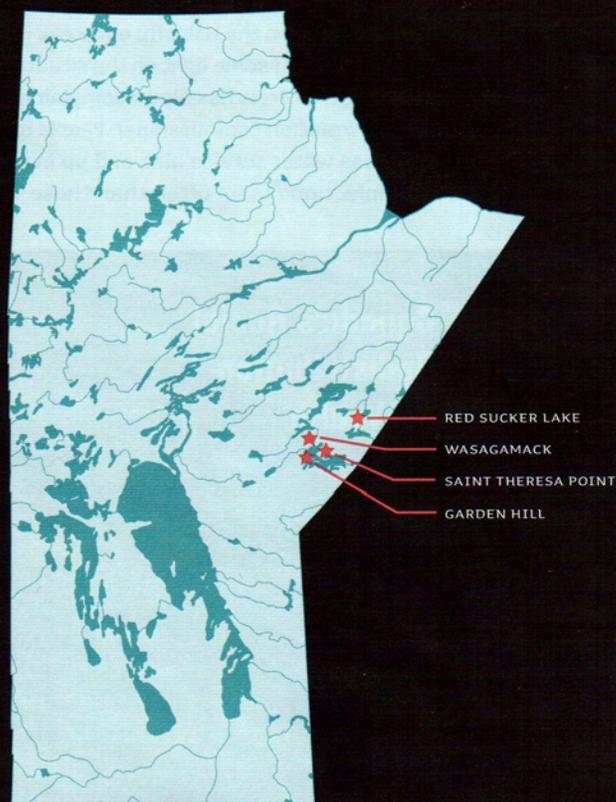
### Too long to wait

Few Canadians have heard about the situation in Island Lake, but when confronted with the reality, many leap to fictional conclusions. Surely the First Nations must have squandered government cash set aside for plumbing. And what about those overpaid chiefs we keep hearing about from the Canadian Taxpayers Federation? The Federation’s own numbers show the average Manitoba band council member earns about \$63,000. Water and sewer projects can cost \$10 million for larger First Nations like those in

**MANITOBA’S** Island Lake region consists of four First Nations: St. Theresa Point, Garden Hill, Wasagamack and Red Sucker Lake. They were once a single band, but split into separate First Nations in 1969. If they had remained together, their combined population would make them the fourth-largest First Nation in Canada, after the Six Nations of the Grand River, Mohawks of Akwesasne and Blood in Alberta. A video documentary about life in these communities is online at [www.winnipegfreepress.com/no-running-water](http://www.winnipegfreepress.com/no-running-water) and you can sign a petition at [www.manitobachiefs.com/water](http://www.manitobachiefs.com/water). The Mennonite Central Committee has launched a fundraising campaign to help out. More information is available at [manitoba.mcc.org/programs/aboriginalneighbours](http://manitoba.mcc.org/programs/aboriginalneighbours).

A few other Canadian First Nations struggle without running water, including Pikangikum in northwestern Ontario, Lubicon Lake in Alberta and Kitcisakik in Northern Québec. Kenora public health doctor Pete Sarsfield raised a stink about Pikangikum in 2006 and Amnesty International has campaigned on behalf of the Lubicon.

Meanwhile, 116 First Nations across Canada – almost one in five – have running water that is not drinkable because of contamination.



Island Lake, so no amount of salary scrimping by the chiefs would make a significant dent.

The simple truth is that the federal government – responsible for water and sewer services on reserves – has never gotten around to funding plumbing for half the homes in Island Lake. Indian and Northern Affairs Canada has a tentative plan to extend water and sewer services to more – but not all – Island Lake homes between about 2013 and 2017. That’s a long time to wait for people like Mary Jane Harper, who nearly died from flu that spread rapidly in homes without enough water for hand-washing, or elder Moyer Taylor, who can no longer walk to an outhouse. “My dad, he’s sitting in a wheelchair and he . . . just has a pail to go to the toilet,” said his frustrated son Chris Taylor.

### **Clear links between clean water and health, so why is nothing happening?**

The link between running water and health was demonstrated most clearly by Dr. Thomas Hennessy in a study published in the *American Journal of Public Health* in 2008. He found Alaskans 65 and older were twice as likely to be hospitalized for pneumonia or influenza in areas where a lower proportion of homes have tap water and flush toilets. Infants in under-served villages had a five times higher rate of hospitalization for lower-respiratory-tract infections and respiratory syncytial virus, and were 11 times more likely to be hospitalized for pneumonia compared to the overall US population.

Health Canada refuses to release an epidemiological report on the H1N1 flu outbreak in Island Lake that might shed some light on the situation there. The *Winnipeg Free Press* has filed a complaint with the federal information commissioner. People living in areas with less water service also end up in hospital with skin infections more often than those with an ade-

quate water supply, according to the Alaska study.

Meanwhile, a University of Manitoba master’s student in community health sciences went door-to-door in Island Lake in 2006 and 2007 collecting stool samples from 142 people with acute diarrhea. The study found people who did not have running water, drank lake water or did not have access to an outhouse were more likely to have diarrhea-causing germs.

The Canadian Pediatric Society says lack of quality running water is one of the reasons methicillin-resistant *Staphylococcus aureus* is spreading on First Nations. It often causes nasty skin boils that are hard to treat, and can be fatal if it moves deeper into the body. A four-year-old Nunavut boy was killed by MRSA in 2007. Health researchers have been debating for decades whether there’s any point collecting more data that proves what Florence Nightingale knew 150 years ago – poor hygiene means poor health.

Frontline health workers in Island Lake are furious about the amount of time they are forced to spend helping people bathe and tending wounds that patients can’t keep clean at home. “We would like to spend more time on education, heart disease, diabetes prevention, maternal-child issues. But we can’t because we’ve got to take care of what needs attention right now,” said a medical professional. Many would like to give politicians a piece of their mind, but are afraid of losing their jobs if they speak out.

### **Build the road, bring the water**

Manitoba Grand Chief Ron Evans is pushing the Canadian government to help build a \$1.4-billion all-weather road into Island Lake and neighbouring communities, now accessible only by air or by ice road for a month each winter. A permanent road would make it much cheaper to haul in plumbing supplies, but could take a decade to complete, even if the federal

## **Canada’s Racial Redistribution of Wealth**

**IT IS NOT** liberal benevolence – more government handouts – that will help these communities out of the poverty trap they are caught in. Rather, we must end the continuing racial reconfiguration and redistribution of wealth that puts them in such an untenable position. Northern indigenous peoples’ wealth, in the form of time, communities and land are all being taken from them or restructured so that wealth in the form of minerals,

timber or energy can be produced. This is the racial reconfiguration of wealth. These new forms of wealth are then redistributed to non-indigenous peoples in southern centres, which is where the profits go. This is the racial redistribution of wealth.

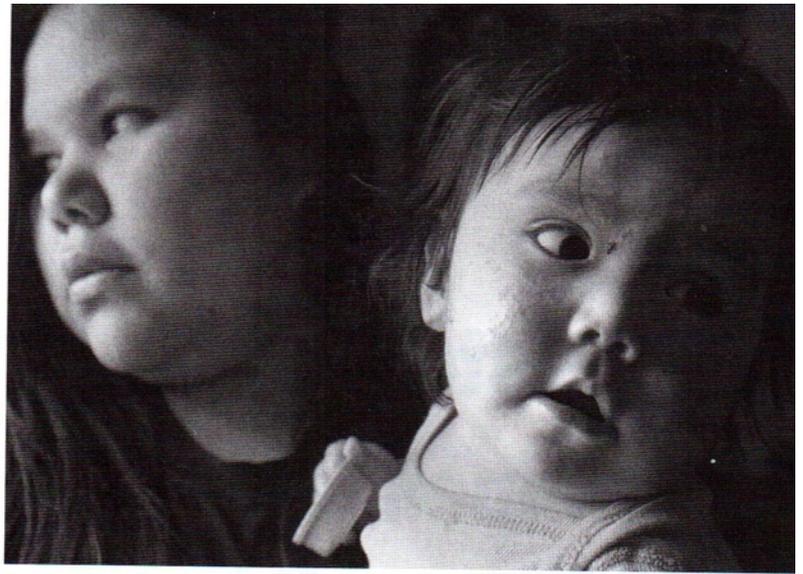
Why do northern cities like Thompson and Flin Flon have paved roads and modern public facilities while so many reserves do not? Because revenues from the industries in those towns go

government agrees to help the Manitoba government fund it. In the meantime, St. Theresa Point Chief David McDougall has started work on an emergency plan to protect the health of his people until multi-million-dollar piping can be installed. He estimates that 364 outhouses need to be built on concrete pads in his community alone, and 314 water containers installed that hold at least the 350 litres per family per day needed to meet United Nations minimum health standards. Trucks would need to be bought and drivers hired to suck out sewage from the outhouses and deliver clean water. McDougall said some homes likely don't have driveways usable by delivery trucks, so road access work would also be required.

None of that can be done within existing budgets, the chief said. Island Lake's four First Nations receive about \$105 million a year between them in federal government funding, but most is allocated to specific things like operating schools and health centres and can't just be diverted to water projects.

Governments spend less than half as much per capita on First Nations residents as they do on other Canadians, according to a 2004 report by the Assembly of First Nations. The Manitoba regional director general for Indian Affairs, Anna Fontaine, is by all accounts a sincere advocate for First Nations in her region, but she's competing with other regions for Minister John Duncan's attention. He's in turn competing with other departments that are a higher priority for the Harper Conservatives.

The Canadian government has spent a whopping \$3.5 billion between 1995 and 2008 on improving previously neglected water and sewer systems on First Nations. Hundreds of millions more have been committed since. But communities with limited plumbing have been mysteriously left off the government's high-risk priority list. It focuses on fixing treatment



plants and ignores whether water from those plants is actually distributed to homes!

A national survey just wrapping up on First Nation water and sewer infrastructure is in danger of repeating that glaring omission. An early draft of a report on one of the Island Lake communities overlooked the fact that most homes don't have flush toilets.

Meanwhile, a proposed law to regulate drinking water on First Nations – for the first time ever – puts the cart before the horse. Bill S-11, now before the Senate, would make First Nations liable for not meeting drinking water quality standards, without allocating the money to bring their infrastructure up to snuff!

When details of this situation were first published in the *Winnipeg Free Press*, many of its readers questioned why people living in Island Lake don't just pack up and move to the city, where even those living on social assistance have running water. "The racism that my children and I endure is not worth it and we can hardly wait to go back," responded an Island Lake mother studying in Winnipeg. ❖

Mother Larissa Harper and child Lyra, who has an undiagnosed skin rash. In homes with no running water, skin conditions are common because it's difficult to keep children clean.

Joe Bryksa/  
Winnipeg Free Press

to federal, provincial and municipal governments. No revenues flow directly to the indigenous communities whose lands are one of the bases of these developments. So most reserves are on gravel roads with poor infrastructures, based on small pitances begrudgingly doled out by miserly federal governments. Yet the resources in those towns will, sooner or later, come to an end. And most of the people will leave, going to the next boom town,

where the jobs are. Meanwhile, in the nearby reserves, people will continue wanting to stay where their great grandparents laid roots, where their community attachments and attachments to the land remain strong and intergenerational. But all the infrastructure funding goes to the temporary resource towns, and very little of it to the long-term indigenous communities. The world is turned upside down.

So, when you see stories of

indigenous rural poverty remember that more hand outs is not the solution. Respect for treaty and Aboriginal rights would mean those communities get decision making power over what developments take place on their traditional territories. Out of this could come direct revenue streams that would fund infrastructure and social development. The problem isn't poverty. It's theft.

—Peter Kulchyski