Generating Momentum for our World Conference Resource

2008-2009

Beausejour

November 5/08

Gimli

December 4/08

Morden

January 22/09

Winnipeg

February 25

Brandon

March 11

Roblin

April 22



Manitoba Council for International Cooperation

The Manitoba Council for International Cooperation would like to thank:

- All the teachers and students who participated in this year's Generating Momentum for our World: Water for All conference. We look forward to hearing about all of the activities that students and teachers plan after the conference!
- Canada World Youth Participants-Joseph Enns and Sadaf Faroog



Contact us:

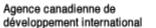
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Who Are We and What Do We Do?

The Manitoba Council for International Cooperation is a coalition of organizations involved in international development, who are committed to:

- Respect, empowerment and self-determination for all peoples;
- Development that protects the world's environment;
- Global understanding, cooperation and social justice;

MCIC's mission as a coordinating structure is to promote public awareness of international development issues, to foster member interaction, and to administer funds for international development. MCIC's programs for youth:

- Generating Momentum for Our World
- Move Your World Theatre Project
- Fair Trade Manitoba
- Global Citizenship awards (High School)

MCIC's Vision:

Manitobans- working together as global citizens

MCIC MEMBERS

African Canadian Disability Community Association

Canada World Youth – Jeunesse Canada Monde

Canadian Catholic Organization for

Development and Peace

Canadian Crossroads International Canadian Lutheran World Relief

Canadian Physicians for Aid and Relief

Canadian Red Cross Society

CHF-Parters in Rural Development

Christian Reformed World Relief Committee

CODE

Cooperative Development Foundation

CUSO

Engineers Without Borders

HOPE International Development Agency

International Child Care

International Development Enterprises (IDE)

Marquis Project

MATCH International

Mennonite Central Committee (MCC) Manitoba

Mennonite Economic Development Associates

Nicaraguan Children's Fund

Osu Children's Library Fund

People to People

Plan Canada

Primates World Relief and Development Fund

Save the Children Canada

SIM Canada

Sudan Relief and Rehabilitation Program

UNICEF

United Church of Canada

USC Canada

WUSC - World University Service of Canada

World Relief Canada

World Vision Canada

Wycliffe Canada

YMCA-YWCA of Winnipeg

AFFILIATE MEMBERS

Aegis Foundation for Development

Canadian Association for Bangladesh

Development

International Institute for Sustainable

Development (IISD)

Manitoba Interfaith Immigration Council

UNIFEM Canada - Winnipeg Chapter

United Nations Association in Canada -

Winnipeg Branch

How To Best Use This Resource

This resource was created to provide background information on the theme of Water for All, and also to act as a practical resource during and after the conference. Information of most of the conference content will be included under the Conference Information section. An overview on what you will find in this resource includes:

- Background information on local/global water issues
- Information from the opening/closing plenary
- What you can do
- Resources
- Conference Schedule
- Student Feedback forms

This resource was designed in a small binder so that you can easily take out sheets for photocopying, and or add further to this resource.

Curriculum Connections

The Generating Momentum for Our World: *Water for All* conference and conference resource are designed to fit with the Grade 7 Social Studies Curriculum, however, there are many connections that can be made to other subject areas and grade levels.

Grade 7 Social Studies – People and Places in the World

The Land: Places and People-Students will explore the dynamic relationships of people with land, places and environments.

Global Interdependence – Students will explore the global interdependence of people, communities, societies, nations and environments.

Power and Authority –Students will explore the processes and structures of power and authority, and their implications for individuals, relationships, communities, and nations

Economics and Resources – Students will explore the distribution of resources and wealth, in relation to individuals, communities and nations.

Core Skills

Skills for Active Democratic Citizenship – Cooperation, conflict resolution, taking responsibility, accepting differences, building consensus, negotiation, collaborative decision-making, and learning to deal with dissent and disagreement.

Communication Skills-Students interpret and express ideas clearly and purposefully using a variety of media.

Clusters

World Geography

- Students hear stories from more-developed / less-developed nations
- Students hear stories from newcomers
- World population clusters

Global Quality of Life

- Explore their capacity to impact others
- Examine the role of international agencies and global cooperation

Ways of life in Asia, Africa, or Australasia

- Focus on environmental, social, political and cultural issues
- Explore economic trade and work and consider impact of urbanization

Human impact in Europe or the Americas

- Explore use of natural resources and consumerism
- Students assess the consequences of their personal choices and actions

Canada World Youth and MCIC

This fall, MCIC had the pleasure of hosting Canada World Youth participants: Sadaf Faroog a 23year-old from Bareilly, Uttar Pradesh, India and Joseph Enns a 24-year-old from Abbotsford, B.C. Canada. Sadaf and Joseph assisted MCIC's public engagement team with planning the Generating Momentum for our World: Water for All conference and the Move Your World Theatre project's tour of You, in the Shadow. When asked about what the water situation was like in their home communities here is what they had to say:

Sadaf's Community



Sadaf Farooq, Canada World Youth participant

Water is one of the most important human rights everywhere in the world. But almost half of the population in India does not have access to clean drinking water and almost the same numbers of people do not have proper sanitation facilities.

In India there are always water problems either there is no water like the situation in Rajasthan a desert state or there is too much water causing floods as the situation is presently in Bihar a northern state of India.

The floods in Bihar started due to the longer monsoon season in July 2008 with a higher rainfall than expected. The flooding situation in the northern state of Bihar has affected almost 1 million people in the country. The river Kosi which is also called sorrow of Bihar changed its course after almost hundred years, when this happened hundreds of cities and towns were flooded and almost a million people were made homeless. This rapid change in the rivers course is due to global warming.

There are many new rising Multinational Corporations (MNCs) setting up their plants in India as there is much possible scope for a good market. India is a developing nation and because of this all or many of these factories allow their waste to flow into the major rivers of the country making the drinking water polluted. I can cite the example of Yamuna, it is one of the largest rivers in India. Delhi one of India's most powerful cities is located on the bank of Yamuna which is the major source of water for a large part of Delhi's population. The waste from different factories has polluted Yamuna so much that now it looks like a sewage dump and its waters are no longer suitable to drink although most of the population in Delhi is dependent on this

polluted water for their water needs. Consumption of this water leads to many water borne diseases in the children and is cause of many deaths in the city.

There are many companies in the country which are manufacturing bottled water and it seems like every second person has bottled water in their hand but they are not carrying mineral water they are just reusing the bottles because most of the population cannot afford packaged drinking water in India.

Joseph's Community



The water situation in British Columbia, and specifically Abbotsford, is quite unique. Abbotsford sits in the Fraser Valley about 100km inland. Being near the Pacific Ocean we get a lot of rain. In the two driest months (July and August) we still average 50mm of rain each. Winnipeg, in comparison, has seven months that average less than 40mm of precipitation each. In one year Abbotsford gets about three times as much precipitation as Winnipeg, totaling over 1500mm.

Joseph Enns, Canada World Youth participant

With all that water it is sometimes hard to believe that there would be any real water shortage problems, but BC is subject to flooding. To try and minimize this we have 140 dykes reaching a combined length of over 1100km. Flooding and storms often contaminate the primary water reserves. For Abbotsford and Mission that is the Norrish Creek, a runoff of Stave Lake. Cannell Lake and 15 groundwater wells are used when Norrish Creek is contaminated or does not supply as much as the local demand. Contamination is common in the spring and fall because heavy rains and storms make the water too muddy or cloudy to use.

The current water system has a maximum capacity of 181 million litres per day for the 156,000 people being served, which is over 1100 litres per person per day. Abbotsford residents use an average of 454 litres per day. So we have the infrastructure required to sustain an overconsumption of water, but the water may not always be there. Abbotsford is currently undergoing water restrictions because of the shortfall in rain over the last few years. The system works wonderfully in theory but relies too much on rain.

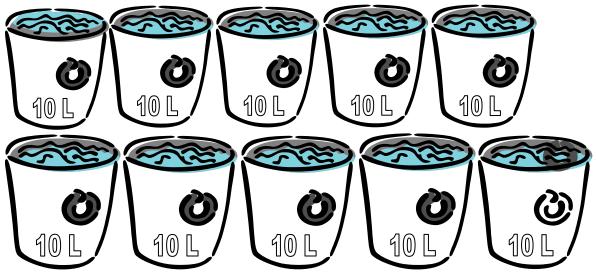
Heavy rains make the rivers too murky for use, so we switch to groundwater (which is restored by the rain.) Once the heavy rains have stopped and the rivers have cleared up we can start using that water. Abbotsford has no adequate way to store rain water for future use.

Groundwater runs into the ocean, constant rain is needed to keep the levels up. The last two years have had significantly less rain than usual and groundwater levels are approaching record lows. The rainfall in BC's interior has been similar so river levels are not as high as they typically are.

Another issue is privatization. A small portion of Clearbrook (a neighborhood in Abbotsford) is serviced by a private water utility company. Currently this company is required to sell its water and septic services at the same rate as the city of Abbotsford, and city employees inspect the pipes that run to houses in that district. My big concern is how did the city benefit from privatizing a portion of the waterworks, and how does the waterworks make its money? If the city is making money off of water, why sell it, and if the city is not making money, who would buy it? I wonder if service and quality have dropped, in the privatized zone, to create profit.

How Much Water is there?

If this were all of the water in the world...



Only 2.5 % would be fresh water...



Much of that water is trapped in glaciers or icecaps, underground aquifers, or is too polluted to use. The amount **available for human consumption** is approximately 1% of fresh water...



Of that, 77% goes to agricultural purposes, and approximately 20% to industry, leaving us with a little less than 10% for household and personal use.



North Americans (6% of the world's population) consume about 35% of that water, leaving the other 94% of the world's population to share the other 65%.

1.6 ml

Global Snapshot on Water

Global Snapshot on Water

Water and air, the two essential fluids on which all life depends, have become global garbage cans. -Jacques Cousteau (1910-1997)

How much water do we have?

According to Environment Canada about 70% of the earth is covered in water and the total amount of water in the world is approximately 1.4 billion km³, of which 97.5% is saltwater and 2.5% is fresh water. Nearly 70% of that fresh water is frozen in the icecaps of Antarctica and Greenland; most of the remainder is present as soil moisture, or lies in deep underground aquifers as groundwater not accessible to human use. And less than1% of the world's fresh water (~0.007% of all water on earth) is accessible for direct human uses. This is the water found in lakes, rivers, reservoirs and those underground sources that are shallow enough to be accessible at an affordable cost. Only this amount is regularly renewed by rain and snowfall, and is therefore available on a sustainable basis.

Which countries on the planet have the most renewable fresh water?

Brazil is the country with the most renewable fresh water. Canada is third after Russia.

(http://www.ec.gc.ca/WATER/en/info/facts/e_quantity.htm)

Billions of people do NOT have access to fresh clean drinking water!

According to the UNDP Human Development Report 2006:

• 1.2 billion people are without access to safe water and 2.6 billion without access to sanitation

To ensure our basic needs, we all need 20 to 50 litres of water free from harmful contaminants each and every day. In addition, a child born in the developed world consumes 30 to 50 times as much water as one in the developing world. The state of human health is inextricably linked to a range of water-related conditions: safe drinking water, adequate sanitation, minimized burden of water-related disease and healthy freshwater ecosystems. Urgent improvements in the ways in which water use and sanitation are managed are needed to improve progress towards meeting the Millennium Development Goals (MDGs) related to human health. (http://www.unesco.org/water/wwap/facts_figures/basic_needs.shtml)

International Response to Inequalities - The Millennium Development Goals

What are the Millennium Development Goals?

In 2000, world leaders at the UN Millennium Summit created a series of goals to overcome extreme poverty and extend human freedom. The Millennium Development Goals (MDGs) are founded upon democratic governance, rule of law, respect for human rights, and peace and security; leaders agreed to meet these targets outlined in the goals by 2015. The goals can be achieved if all the actors work together. (Adapted from Water Rights and Wrongs: A young people's summary of the United Nations Human Development Report 2006)

The Eight Millennium Development Goal's



The Millennium Development Goals, Water and Sanitation

Goal 1: Eradicate extreme poverty and hunger

By 2015, reduce half the proportion of people living on less than a dollar a day.

 More than one billion people still subsist on less than \$1 a day, many regions of the world still falling short of achieving the target.

According to the World Water Development Report, problems of poverty are inextricably linked with those of water-its availability, its proximity, its quantity and its quality. Improving the access of poor people to water has the potential to make a major contribution towards poverty eradication.

Goal 2: Achieve universal primary education

By 2015, ensure that all boys and girls complete a full course of primary schooling.

• Approximately 113 million children of school age, some %60 of which are girls, do not attend school. The outlook is, however hopeful.

According to the World Water Development Report, water factors, such as the need to collect domestic water, play a large part in school attendance.

Goal 3: Promote gender equality and empower women

Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015.

• Two thirds of the world's illiterate are female, and the rate of employment of women is only two thirds of men. It has been shown, however, that water-related enterprises, such as agricultural development projects, have a far greater success rate when women are involved than when they are excluded.

Water and Gender:

In many places, culture dictates that women and girls take care of the household; so it is their responsibility to find and fetch water for their families. Some women and girls walk up to 10km each way to fetch water for the day.

For girls, the lack of clean water and sanitation facilities close to home turns into lost opportunities to go to school, learn marketable skills, and fully participate in their communities.

According to the World Water Development Report, many girls are prevented from attending school because they are in charge of collecting domestic water and lack of separate toilet facilities.

Goal 4: Reduce child mortality

By 2015, reduce two thirds the mortality rate among children under five

 Some 11 million children under the age of five die each year, mainly from preventable diseases. Many of these diseases are caused by lack of access to safe water. Children are most affected by water-related diseases.

Goal 5: Improve maternal health

By 2015, reduce by three quarters the maternal mortality rate.

• In developing countries, there is one chance in 48 for mother to die during childbirth, although many countries have now implemented safe motherhood programmes.

Access to safe water and sanitation is essential in reducing the maternal mortality rate.

Goal 6: Combat HIV/AIDS, malaria and other diseases

By 2015, halt and begin to reverse the spread of HIV/AIDS

• Forty million people are now infected with HIV/AIDS, but some countries, such as Brazil have shown that the tide can be stemmed.

People weakened by HIV/AIDS are likely to suffer the most from lack of safe water supply and sanitation, especially since diarrhea and skin diseases are two of the more common infections.

Goal 7: Ensure environmental Sustainability

By 2015, reduce half the portion of people without sustainable access to safe drinking water

1.1 billion people lack access to safe drinking water, 2.6 billion to adequate sanitation.
 To achieve this target, an additional 1.5 billion people will require access to some form of improved water supply by 2015.

Goal 8: Develop a global partnership for development

According to the World Water Development Report, achieving the MDG on drinking water supply coverage will represent a major expenditure in all countries, requiring between US \$10 billion and US measures to make debt sustainable in the long term.

Sourced from World Water Assessment Programme for development, capacity building and the environment:

http://www.unesco.org/water/wwap/facts_figures/mdgs.shtml
Generating Momentum for our World: Water for All Conference Resource

What Does It Look Like To Have Improved Water and Sanitation?

Improved drinking water sources

Household connection
Public standpipe
Borehole (waterwell)
Protected dug well
Protected spring
Rainwater collection

Unimproved drinking water sources

Unprotected well
Unprotected spring
Rivers or ponds
Vendor-provided water
Bottled water*
Tanker truck water

Improved sanitation facilities

Connection to a public sewer Connection to a septic system Pour-flush latrine Simple pit latrine Ventilated improved pit latrine

Unimproved sanitation facilities

Public or shared latrine Open pit latrine Bucket latrine



Photo from transglobal water resources

^{*}Bottled water is not considered improved due to limitations in the potential quantity, not quality, of the water

Impacts of Lack of Access to Water



Lack of access to clean, safe water can impact almost every area of human development.

Water and Health

- Poor water quality can increase the risk of diarrheal diseases including cholera, typhoid fever, salmonellosis, other gastrointestinal viruses, and dysentery. Water scarcity may also lead to diseases such as trachoma, plague and typhus. Trachoma, for example, is strongly related to a lack of water for regular face washing. World Health Organization
- Water scarcity means that people store water in their homes, which makes a breeding ground for mosquitoes, and increases exposure to malaria.
- Over half of the hospital beds in the developing world are occupied by people suffering from preventable diseases caused by unsafe water and poor sanitation. – UN Water Booklet



Water and Education

- ➤ It is women and girls who suffer most from a lack of freshwater and private sanitation facilities. Women and girls have to fetch and manage water for family and other uses and are most often the caregivers for those who fall ill.
- On average, they walk a distance of six kilometres each day, carrying 20 litres of water. If schools lack adequate sanitation facilities, girls often will not attend. – UN Water Booklet



Water and Food

- ➤ Global food production will have to increase by 60 per cent from 2000 to 2030 to meet growing demands resulting from population growth. This requires a 14 per cent increase in water used for irrigated agriculture.
- Irrigated land, which represents only about 20 per cent of the world's farmland, produces around 40 per cent of the world's food supply and 60 per cent of cereals. UN Water Booklet

➤ 20% of people in the world depend on fish as a source of protein. "In recent decades, increasing pollution from inland, along with loss of coastal habitats that filter pollution, has led to extensive "dead zones" where fish are unable to survive, such as in the Gulf of Mexico." – UN Water Booklet



Water and Peace

- ➤ On World Water Day 2001 the UN Secretary-General challenged the world to solve the water crisis, and the UNDP responded: world governments must make 20 litres of fresh, clean water every day a universal human right-as 20 litres is the minimum a person needs to live.
- In many countries masses of people still have access to less than 20 litres, or drink dirty water containing faeces, pesticides or other poisons. Also, where safe sources do exist, they are only available to those who can pay.
- ➤ If water is not recognized as a human right, these situations will continue indefinitely. The time to make water a human right is now, and this will not be achieved without total global commitment. If everyone's rights to water and sanitation were respected, a ripple effect of health and development would spread around the world. —Water Rights and Wrongs 2006



Threats to Water Access

Dams

➤ Large-scale dam projects may cause severe environmental impacts on wildlife habitats, fish migration and water flow and quality, as well as serious socio-economic impacts related to resettlement of local communities. — UN Water Booklet

Privatization

- Global water corporations, international financial institutions, trade agreements, governments and even parts of the United Nations have been promoting privatization and commodification of water as a way to deal with this crisis.-blue planet project
- ➤ But the evidence shows that privatization leads to rising water rates, unclean water and of course, soaring corporate profits. Water should be safe, affordable, and accessible to everyone not just those who can afford to pay. —blue planet project

Pollution

➤ Water pollution has been defined as the presence in water of harmful and objectionable material - obtained from sewers, industrial wastes and rainwater run-off - in sufficient concentrations to make it unfit for use.

- ➤ Pollution from agriculture, industry and domestic wastewater is making water resources, both surface water and groundwater, increasingly scarce and decreasingly poor in quality.
- ➤ In the United States alone, it is estimated that industry generates about 36.3 billion kg of hazardous pollutants each year, with only about 10% disposed of in an environmentally responsible manner.

(UNESCO facts and figures about water pollution)



Stories About Water

Note: These stories can be used with the PowerPoint Presentation, included in the Conference Resource on CD.

From the Tap or the Bottle...

Living in a big city in Russia for my entire life, I was used to buying bottled mineral water. It never occurred to me to drink from the tap because anyone who did got very sick. Every morning when I brushed my teeth, I used mineral water. When we ran out of bottles, I used special filters and boiled the water. This took forever. Sometimes I went to school without brushing my teeth.

Now I'm an exchange student in the United States. Can you imagine my surprise when I saw my host parents drinking tap water? But they still buy mineral water. I don't know why.

Olya Chebykina, Russia

Denied My Right to Clean Water

In my home of Mushin, a suburb in Lagos, Nigeria, there is rarely water in the taps. My family and I have to purchase water from water collectors. Every day we spend about 150 Naira (US \$1) to fill an 80-litre container. People living in the mainly poor neighbourhoods are not as lucky. Instead of being in school, many poverty stricken children spend hours each day collecting water for their families. I've watched kids taking water from leaking pipes and gutters. The local government is only paying lip service to this demeaning situation: they construct boreholes (deep, narrow holes in the ground where we sometimes can find water), but they stop working after two or three weeks. I have been hospitalized twice because I drank water from a bore- hole. I need water to live, but all I get is tainted water. I have a right to clean water and I am denied it. Why? We, as youth, need to create awareness about the importance of clean water and sanitation. We must change our mindsets, attitudes and habits to be proactive. Together we must work to see that water is recognized as a human right and that funding is increased to make water clean and safe, not only for ourselves, but for all future generations. Francis Anyaegbu, Nigeria

Curbing the Abuse

In the plateau between Peru and Bolivia, lies Lake Titicaca. But the lake is dying. We are dependent on the lake, but we have abused it, allowing waste and runoff from mining and farming into the ecosystem. Almost a million people live around the lake, but they are unaware of the damage that they have caused. They warn us not to drink the water or eat the fish anymore – and fish is my favourite food! In the past fifteen years the Bolivian and Peruvian governments have established organizations to curb the abuse. These groups cooperate and work to educate local people about the impacts of their farming. Plans exist to improve waste-disposal facilities, but we face major challenges. Now there are too many people to sustain the traditional ways of farming. The waste from one farm does not cause much damage, but the waste from thousands does. As I walk along the shore by my house it makes me sick to see all the pollution. Before we can clean up the lake we must clean up our lives. We need better waste management and health services. We need sustainable farming techniques. Lake Titicaca is a tremendous resource, but without care we could destroy it. Thanks to the cooperation between the

Peruvian and Bolivian governments, we might not be too late. We can still save the lake. Hopefully I will be able to eat fish again someday!

Gaby Mavila, Peru

Water Water Everywhere....

In January 2006, the Waghi River in the western highlands of Papua New Guinea flooded. After months of drought my family had been praying for rain. We needed water for the vegetable gardens where we grow our food and for the coffee plantation we work on. When the rains came they didn't stop. The river overflowed its banks and washed away every-thing in the flat valley bottom. Everyone in the village fled into the hills, but our homes, our gardens, our animals, the plantation... Everything was under water. We thought the worst was over when the water receded, but we were wrong. Everything was covered in a thick layer of mud and sand and debris. The bodies of drowned animals began to decay and we got sick from malaria because the puddles and ponds were ideal breeding places for mosquitoes. It took four months of cleaning and repairing before my family could move back home. The bitter irony of the flooding was that even though we had prayed for rain and the water came, we were dying of thirst. After the flood there was no access to safe water for drinking or washing because the usual streams that we took water from were destroyed or polluted with dead animals. We had to rely on bottled water! Even a year later things still haven't returned to normal. Norman Wai, Papua New Guinea

Sick In The Toes

For years the owners of the apartment buildings across the road have been draining their sewage and human waste into the playground of Ezra Gumbe, a primary school in East Africa.

John Mark, Babu and Marcos are students at Ezra Gumbe. They are about 10 years old and, like all children, they love to play. "Some water at our school is not clean," John Mark says. "When we are running over the field here, sometimes our legs are sick in the toes." Both John Mark and Marcos bend over and point to their feet. The illness they speak of is most likely Bilharzia. Bilharzia is caused by parasitic worms that infest water contaminated by urine or faeces. The worms enter through the feet and cause a rash and pain-which John Mark, Babu and Marcos say they have experienced. Without quick medical attention Bilharzia can damage the liver, intestines, bladder, and lungs, and eventually lead to death.

Bart Abbot, USA

Stories from Water rights, Water wrongs - UNDP youth booklet

Local Snapshot on Water

Local Snapshot on Water

We no longer see the world as a single entity. We've moved to cities and we think the economy is what gives us our life, that if the economy is strong we can afford garbage collection and sewage disposal and fresh food and water and electricity. We go through life thinking that money is the key to having whatever we want, without regard to what it does to the rest of the world.

David Suzuki

According to Environment Canada:

Canada has seven per cent of the world's renewable fresh water.

It is easy for Canadians to assume that they have an almost endless supply of clean, fresh water. After all, we're often told that Canada has approximately 20 per cent of the world's total freshwater resources. However, less than half of this water - about nine per cent of the global supply - is "renewable". Most of it is fossil water retained in lakes, underground aquifers, and glaciers.

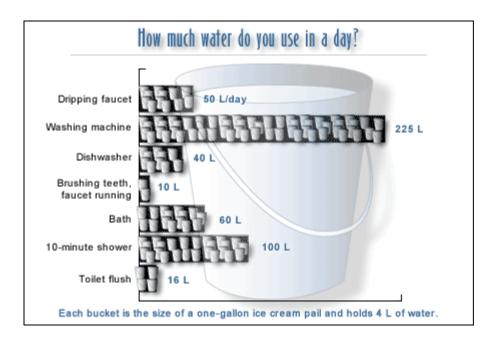
For Canada's 30 million people - about half a percent of the world's population - this is still a generous endowment. But, more than half of this water drains northward into the Arctic Ocean and Hudson Bay. As a result, it is unavailable to the 90 per cent of the Canadian population who live within 300 kilometers of the country's southern border. That means the remaining supply, while still abundant, is heavily used and often overly stressed.

Water Use in Canada:

The perception that Canada is blessed with an abundance of fresh water has led to misuse and abuse of the resource: from household toilets that use 18 litres per flush where 6 litres would do, to industrial plants – and some municipalities – that use water bodies as convenient sewers.

In 2004, the average Canadian daily domestic use of fresh water per capita was 329 litres!

Water conservation means doing the same with less, by using water more efficiently or reducing where appropriate, in order to protect the resource now, and for the future. Using water wisely will reduce pollution and health risks, lower water costs, and extend the useful life of existing supply and waste treatment facilities. Meanwhile, people need between **20 and 50 litres** of water every day for their basic needs. There is quite a difference in the amount of water used around the world. For example, a person living in sub-Saharan Africa uses between **10** and **20** litres of water a day.



We cannot live without water. We need water to drink, prepare food, wash ourselves, and keep our homes clean. We also need water to grow food and for livestock, manufacturing, and hydro-electric power. However, about 97.5 percent of the world's water is saltwater, which cannot be used for drinking or farming. The remaining 2.5 percent is freshwater, which must be shared by everybody around the world—over 6 billion people.

Sourced from CIDA youth zone: http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/REN-218125537-Q2B

Do you know where your drinking water comes from?

Manitobans get their water from two sources: ground water meaning wells, or surface water lakes and rivers. Where does your community get its drinking water from? If your community is not listed here, go to google.ca to search your town's website. A listing of water services should be available for viewing or call your municipal office!

Pick th	e correct answer
Beause	ejour
a)	ground water b) surface water
	If your answer is b name the water source:
Morde	n
a)	ground water b) surface water
	If your answer is b name the water source:
Gimli	
a)	ground water b) surface water
	If your answer is b name the water source:
Winnip	peg
a)	ground water b) surface water
	If your answer is b name the water source:
Brando	on
a)	ground water b) surface water
	If your answer is b name the water source:
Roblin	
a)	ground water b) surface water
b)	If your answer is b name the water source:

Answers:

Beausejour: Ground water Morden: Minnewasta Lake Gimli: Ground water Winnipeg: Shoal Lake Brandon: Assimiboine River Roblin: Ground wells

Boil Water Advisories

What are boil water advisories and boil water orders?

Boil water advisories and boil water orders are public announcements advising the public that they should boil their tap water for drinking and for other uses noted below. They are preventative measures issued to protect public health from waterborne infectious agents that could be or are known to be present in drinking water. Boil water advisories are issued by either the local public health unit or other responsible authority, or by the water utility. Boil water orders are usually issued by the public health unit or other responsible authority. Sourced from: Health Canada http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/boil-ebullition-eng.php

How many have been issued across Canada?

The following information is from the Canadian Medical Association Journal (CMAJ):

More than 1760 provincial boil-water advisories are currently in effect in communities and neighbourhoods across Canada, prompting calls from national and municipal advocacy groups for a federal and provincial strategy to ensure safe drinking water for all Canadians.

Poor quality drinking water in Canada is often perceived as an issue primarily of concern to First Nations communities; as of Feb. 29, 2008, there were boil-water advisories in place in 93 First Nations (*CMAJ* 2008;178:985). These are not included, however, in the 1766 advisories now in place elsewhere in Canada (Box 1). *CMAJ* compiled provincial lists of small towns, cities and townships, as well as neighbourhoods, trailer parks and business establishments within larger communities where local health officials have instructed residents not to drink water without first boiling it — or, in a few cases, not to drink or bathe in it at all. Advisories are intended to be a precautionary measure in the public health tool kit, but given that some have been in place for at least 5 years, they are apparently being used as a band-aid substitute for treatment.

In **Manitoba**, there were **59** boil-water advisories or boil orders in place as of Mar, **14**, 2008. Those advisories covered both public water systems, and private wells and septic field systems, according to Manitoba Water Stewardship's Office of Drinking Water.

The 1766 boil-water advisories currently in place mean affected residents cannot rely on the safety of their drinking water. Affected communities range from portions of Bay Roberts, Newfoundland and Labrador, and Wallaceburg, Ontario, to the entire communities of Sullivan Bay, British Columbia, Victoria Beach, Manitoba, and Tilley, Alberta.

Sourced from: Canadian Medical Association Published at www.cmaj.ca on Apr. 7, 2008

Taking Action



WHAT YOU CAN DO IN YOUR SCHOOL AND COMMUNITY

Below is a list of ideas to help raise awareness and take action on the issues of water! Creativity is encouraged so if you have a new idea that is not on the list please feel free to combine, change, invent or pursue another idea!

Good luck and we look forward to hearing about your plans!

Change your Own Consumption:

- Create a water diary and keep track of how much water you use in a week
- Reduce your own water consumption (See "You Can Help Conserve Water" in the Conference Resource for more ideas)

Raise Awareness:

- Put posters up in your school
- Make buttons and wear them!
- Write an article for your school or community newspaper
- Start a blog
- Create a podcast or radio show
- Create a video
- Get permission to make a mural in a public place
- Create a theatre piece or skit
- Organize a workshop or assembly to educate students or the public:
 - Classroom presentations
 - Movies/Films (See Resource Section for Ideas)
 - Special guest speakers
 - Simulation games
- Have a meal that raises awareness about food and water
- Play "Are You More Concerned About A Better World Than A 7th Grader" in your school
- Set-up Toilet Tolls in your school for more information visit: http://www.cpar.ca/globalkidz/files/Toilet%20Tolls.pdf

Check out the United Nations
International days of the year
calendar and organize an event
on one of their special days like
March 22nd World Water Day:
http://www.unac.org/en/newsevents/undays/internationaldays.asp

2008 is the International Year of Sanitation!

Create Change at your School / In your Community:

- Research ways you can save water at school and talk to your principal, school board or Parent-Teacher Group (See Do a Water Audit of Your School in the Conference Resource)
- Organize a water bottle free zone in your school or community organization (For more info visit: http://www.insidethebottle.org/)

Support an Organization Working on Water Issues:

- Choose an organization to support at your school. (See the list of MCIC members working on Water issues or call MCIC (204) 987-6420)
- Hold a fundraiser, here are some fundraising ideas:
 - Concert
 - Talent Show
 - Garage Sale
 - Bake Sale
 - Art exhibit
 - Supper
 - Silent Auction
 - Hair Shaving/dying
 - Winter/summer/spring/fall fair
 - BBQ's
 - School Dance
 - Book sales
 - Coffee house
 - Photo Exhibit
 - Create and sell a cook book or calendar
 - Sell Fair Trade Chocolate bars (contact MCIC for an information package)
 - Fashion show

Promoting the Rights of Others:

- Create a banner and invite students to sign it
- Organize a meeting with local politicians
- Create a petition and get as many students, teachers, parents, friends, organizations, community members and politicians to sign it. Present it to the local media or politicians (or anyone else you have in mind) Continue collecting water drops and send them to Youth 4 Water!
- Organize a toilet seat petition from the Sanitation and Water Action Network send it to them before March 22, 2009! (see Toilet Petition resource)

You Can Help Conserve Water

Water is a lifeline and our most precious resource—without it we cannot survive. It is not an endless resource. With the increased demand for water, a rise in pollution and more frequent droughts, our usable water supply is decreasing. Yet the average Canadian consumes as much as 335 liters of water a day. Of that, 30% is flushed down the toilet, 35% is used for showers and baths, 20% for washing clothing, 10% for cooking, 5% for cleaning. In the summer, household water use often increases by 50%, largely because of watering the lawn.

You can help protect this valuable resource by conserving water...

... in the kitchen.

- Keep a jug of drinking water in the fridge to avoid running water until it is cold.
- Fill the dishwasher before you turn it on. It uses 35-40 litres per cycle!
- Give your dishes a quick rinse when washing them by hand. Don't leave the water running.
- Repair leaky taps. A leak of 1 drop/second wastes 10,000 litres of water a year!

... in the bathroom.

- Turn off the tap while brushing your teeth.
- A quick shower uses less hot water than a bath. When having a bath, fill the tub only 1/2 way.
- Never use your toilet as a garbage.
- Check for leaks in your toilet tank by putting 3 drops of food colouring in the tank at the back of the toilet. Wait a few minutes, and if the colour appears in the bowl, there is a leak!

... in the laundry room.

- Wash only full loads of laundry and be sure you don't overload the machine.
- Be sure to properly set the water level for the size of the load you are washing.

... outside.

- Don't over-water the lawn.
- Water in the early morning or late afternoon. In the hot daytime sun water is lost to evaporation.

From Engineers Without Borders,

http://www.ewb.ca/en/whatwedo/canada/projects/hso/students/w4w/conserve.html

Audit Your School's Water Consumption

Get your class, environmental club or a group of friends together and follow these 4 steps to learn how water is being used in your school and how it can be reduced.

1. Learn about your school's water system

Ask the school's superintendent to take you on a school tour and explain current water uses, conservation practices and how the water system works.

Take note of:

- the location of the water meter and the connection to the community water system
- the many ways water is used
- the location of drinking fountains, faucets, washrooms, showers, sinks, sprinklers, kitchens, and pools
- whether there is any special equipment such as automatic dishwashers

Asking these questions will help you gather more information:

- 1. How is the school attempting to conserve water? Have water-saving devices been installed?
- 2. Are there additional water systems such as an irrigation system for the athletic field or a sprinkler system for fires?
- 3. How frequently and for how long are the athletic fields, lawns and gardens watered?
- 4. What water applications use the most water?

2. Plan your water audit

Plan a strategy for auditing your school's water system.

- Make a list of all the places where water is used at school.
- Organize the water use sites into research areas that can be assigned to Action Groups to audit that particular area. (You might divide the school water system by area first floor,

- second floor, outside, or you may organize by sites classrooms, hallways, maintenance areas, offices, food service areas, washrooms, etc.)
- Find out whether you need permission to conduct your audit and from who, as well as whether some areas are closed to students.

You may want to use a chart such as this one to record your Water Audit Plan:

Water Audit Plan				
Research Area (Student Names)		Accessibility Permission Required	Audit Due Date	

3. Begin to audit

With your Action Group, research your area by compiling a detailed list of all water outlets (water fountains, showers, toilets) and water use sites (washrooms, kitchens, science labs) in you research area.

Decide with your group the best way to conduct your research. How will you monitor the frequency and length of water use of each site - will someone be stationed there for a given period of time? Consider the best time to conduct your audit at each site accounting for how different times in the day affect use.

You should also discuss how to identify waste or water conservation measures at each site taking note of leaks, unneeded water left running and how these habits can be changed.

You may want to use a chart like this one to record your group's plan:

Action Group Plan				
Water Site	Numbers and Types of Outlets	Date and Time of Audit	Method of Monitoring Use	Student(s) Responsible for Audit

4. Complete Your Audit

Work with your group to develop a method for measuring water consumption at the sites in your area. You will need a pitcher or bucket, a 250 mL measuring cup and a stopwatch.

Here is an easy way to measure the regular water flow for each site:

- 1. Turn the water onto its normal flow.
- 2. Hold an empty pitcher under the fixture for 10 seconds
- 3. Transfer the water from the pitcher to a measuring cup, one cup at a time, counting how many cups it takes.
- 4. Multiply the number of cups by 6 to give you the number of cups per minute your faucet uses.
- 5. Convert cups to litres (1 cup = 250mL and 1,000mL = 1L) by multiplying by 4.
- 6. Record how many litres are used per minute.

Once you have calculated the flow, determine how long the water runs during each use and the number of times each day it is used. By multiplying these numbers you will get the approximate water consumption per day for that site.

Flow Rate x Length of Use x Uses per Day = Daily Water Consumption

Use the same procedure at each site as well as to measure drips and leaks.

You can use a chart like this to measure your findings:

Water Use Chart					
Water Outlet Flow (per or Site minute)		Average Length of Uses per Each Use Day		Waste (Total Leaks)	Total Daily Water Use

Discuss with your Action Group the results obtained from your audit of sites in your area. Were you surprised by the results? Did you find clear indications of waste, where and how much?

With your results, you can strategize recommendations for improvement in your school so as to reduce water consumption.

A similar procedure can be followed to learn how much water you use at home and how it can be reduced.

From Engineers Without Borders,

http://www3.ewb.ca/en/whatwedo/canada/projects/hso/students/w4w/audit.html

Toilet Tolls

Voluntary toll collected for sanitation facilities.



Time Factor: 🐐 👣 🥎 🥎

Fun Factor: \$\\$\}\}

Issue: Water & Sanitation

Description: Set-up voluntary toll booths in front of the busiest washrooms in your school.

Ask students to make a VOLUNTARY donation as they enter and have the

doors of the toilet stalls plastered with information about access to

sanitation facilities and the importance of sanitation & hygiene in healthy &

sustainable development.

Materials: Stuff for making posters (paper, tape etc.)

As many donation jars as you have toll collectors

Stickers to give out saying "I flushed for World Toilet Day" (optional)

Table and/or chair for your toll collectors (optional)

Facilities: Permission to use the hallways in front of washrooms.

Volunteers: Purchasing materials, making posters, acting as toll collectors

Preparation:

- Obtain permission to set-up toll booths
- Produce posters for inside of toilet stalls
- Introduce issue to students (PA Announcements, Culture Jamming etc.)
- Recruit volunteers, assign roles and make task schedule
- Make stickers (easily printed on address labels)

Execution:

- · Hang posters and set-up toll booths
- Ensure that volunteer toll collectors are there all day (rotate the schedule using spares etc.) and that the
 tolls are voluntary donations!

Follow-Up:

- Roll change & determine final tally of \$ raised
- Take down posters
- Donate proceeds to support programs related to your issue
- · Congratulate students on their participation & inform them of how their donations are being used

Ask our Leaders to make Water & Sanitation an Aid Priority



The Sanitation and Water Action Network (SWAN) Canada is calling on Canadians, coast to coast, to help make a stink about the lack of safe water and basic sanitation in the developing world.

The water and sanitation crisis is a silent humanitarian emergency that results in the needless deaths of **two million people each year** and significantly impedes global human development efforts.

The achievement of universal access to safe drinking water and basic sanitation is *achievable*, *politically feasible* and *ethically imperative*.

The National Toilet Seat Petition kicks-off on World Toilet Day (November 19th, 2008) and closes World Water Day (March 22nd, 2009)

Imagine the power of the message: toilet seats with the signatures of concerned citizens will be presented in Ottawa and at the offices of Members of Parliament across the country, urging Canada to make water and sanitation a foreign aid priority!

- Inexpensive and light-weight plastic toilet seat Purchase at your local home and garden store, such as Rona, Home Hardware or Canadian Tire, for \$8.00.
- Permanent markers in any colors
- Wide clear tape
- Printout of the Toilet Seat Statement ()

Tape the printed statement onto the lid of your toilet seat. Wrap your toilet seat carefully in wide clear tape, so that it can be reused. Consider tying your marker to your toilet seat for easy collection of signatures.

Ask your students, classmates, teachers, friends, family, congregations and work colleagues to sign your petition, and be as creative as they want to be. Have some <u>Water and Sanitation Crisis Briefing Notes</u> on-hand to inform people about the situation globally. (provide links)

Beyond people you know and want to approach individually, setting up a booth with a simple display is often the most effective and fun way of getting lots of signatures on your toilet petition.

Putting together a display board is simple! (insert photo of sample display here) (provide link)

- Purchase a fold-out presentation board
- Print off the <u>Water and Sanitation Briefing Notes</u>
- <u>Contact WaterCan</u> to order a free <u>SWAN poster</u> or <u>print one</u> off yourself
- Write the shocking statistics on colored paper
- Assemble as in the photo, or be creative and add your own flare!

Option A: Send your light-weight toilet seat petition to the SWAN coordination office in Ottawa (321 Chapel Street, Ottawa ON K1N 7Z2) to be part of an exciting display and official hand-over to Members Parliament on Parliament Hill next World Water Day, Sunday, March 22, 2009.

This display in the national capital will symbolize the united effort of concerned Canadians from across the country and will help break the silence about this taboo, albeit, critical subject!

Option B: Assemble a delegation to present the petition to your <u>local Member of Parliament</u>. Contact your local media to alert them to the time and place of the hand-over, and take some pictures of the action yourself too! Contact the WaterCan office for media assistance and to report on the hand-over.

Be sure to share your petition successes with SWAN!

SWAN Canada is a coalition of Canadian non-governmental organizations united in the belief that improving global access to safe, affordable, and sustainable water supply and sanitation services must be a foreign aid priority for the Government of Canada.

OUR MPs WANT TO HEAR FROM US.
TOGETHER WE CAN AFFECT THE FOCUS OF OUR FOREIGN AID!

For more information or resources, contact: Andrea Helfer at WaterCan ahelfer@watercan.com or visit http://watercan.com/whatyoucando/worldwaterday.htm

Resources

Please check local library or search online for books and videos.

Books

Blue Covenant: the global water crisis

Author: Maude Barlow

When the Rivers Run Dry: Water--The Defining Crisis of the Twenty-First Century

Author: Fred Pearce

Videos

Big Thirst: The Coming Drought

Many climate experts say a serious drought is on its way — unlike anything Canadians have ever seen. What's more, this one will last not just a few seasons, but years and years. For the Canadian prairies, and its farmers, a drought of this magnitude will be devastating. In interviews with a glaciologist, water ecologist, leading prairie climate expert and a beef farmer besieged by water trouble, The National's Margo McDiarmid examines the very clear warning signs of drought already appearing in southern Alberta. Find out what efforts are being made to conserve water, the history of drought on the prairies, and how global warming will impact the approaching "big thirst."

Blue Gold: World Water Wars

In every corner of the globe, we are polluting, diverting, pumping, and wasting our limited supply of fresh water at an expediential level as population and technology grows. The rampant overdevelopment of agriculture, housing and industry increase the demands for fresh water well beyond the finite supply, resulting in the desertification of the earth.

We follow numerous worldwide examples of people fighting for their basic right to water, from court cases to violent revolutions to U.N. conventions to revised constitutions to local protests at grade schools. As Maude Barlow proclaims, "This is our revolution, this is our war". A line is crossed as water becomes a commodity. Will we survive?

http://www.bluegold-worldwaterwars.com/

Crapshoot: The Gamble with our Wastes

Hazardous mix of waste is flushed into the sewer every day. The billions of litres of water-combined with unknown quantities of chemicals, solvents, heavy metals, human waste and food-where does it all go? And what does it do to us? The contaminants we flush resurface in Generating Momentum for our World: *Water for All* Conference Resource 39

our food chain. Fish swim through waste-water dumped into rivers, while sewage sludge is spread on farmland as fertilizer. Filmed in Italy, India, Sweden, The United States and Canada, this bold documentary questions whether the sewer is actually compounding our waste problems. Production Agency: National Film Board of Canada

Dead in the Water

There's a problem with the world's water supply. One person in four doesn't have access to clean drinking water. Many governments lack either the resources or the will to provide this essential commodity to their citizens. *Dead in the Water* investigates the results of these efforts at privatization in several key locations, and chronicles what many see as the first in a wave of battles in the years to come.

Thirst

The looming freshwater crisis is the greatest environmental and human rights crisis of our time. Not surprisingly, the move is on by powerful corporations and governments to commodify and cartelize the world's water supplies for power and profit. Thirst is the story of this assault and the fight to stop it.

Online Videos

WaterCan: Clean Water for All

http://www.youtube.com/user/WaterCanada

From Waste to Water: Greywater Reuse in the Middle East http://rana.lilypadresources.com/greywater/upehi.html

UNICEF Video on Water Impacts

http://www.unicef.org/videoaudio/ramfiles/4149h water.ram

Websites

CoDevelopment Canada

CoDev is a BC-based non-profit agency that works for social change in Latin America and global education here in Canada. Resources are available for teachers that fit the B.C. school curriculum. There is an excellent resource on water called Thirsty Planet which targets the grade 6 curriculum but can be adapted for grade 7.

www.codev.org

Environment Canada

Environment Canada's section on freshwater several publications and a teacher's corner full of useful information coded for age appropriateness.

http://www.ec.gc.ca/water/

See "Every Drop Counts: A Resource for Teachers" http://www.ec.gc.ca/Water/en/info/pubs/Intwfg/topic6-e.pdf

Global Trek

The mission of GlobalTrek is to provide social studies materials for classroom use that present the world as a global village. Through travel adventure promoting awareness of basic human rights displayed in world communities, students gain knowledge on how to make a difference. GlobalTrek connects Canadian students to the global community to become informed, active, and responsible global citizens.

http://www.globaltrek.ca/

The Manitoba Water Stewardship

This website provides information on a number of different aspects of water in Manitoba from drinking water to fish and habitat and the province's new phosphorus reduction act. http://www.gov.mb.ca/waterstewardship/

Ryan's Well

This organization works in developing countries to help with water and sanitation projects. Resources are available for educators and youth.

http://www.ryanswell.ca/

World Beat

The Saskatchewan Council for International Cooperation has a global education project called WorldBeat. Here you will find a number of lesson plans that can assist with global education: http://www.earthbeat.sk.ca/worldbeat

United Nations

UNICEF-water, environment and sanitation:

http://www.unicef.org/wes/index 3951.html

United Nations Development Programme

Online youth booklet, Water rights and wrongs:

http://hdr.undp.org/en/media/water rights and wrongs english.pdf

UNESCO water facts:

http://www.unesco.org/water/wwap/facts figures/basic needs.shtml

World Toilet Organization

World Toilet Organization (WTO) is a global non- profit organization committed to improving toilet and sanitation conditions worldwide. http://www.worldtoilet.org

MCIC's Member Agencies Working On Water And Development

Canadian Catholic Organization for Development and Peace-Informational resources made available on their website.

www.devp.org

Canadian Physicians for Aid and Relief (CPAR)- Works with communities towards better (and more equitable) access to both safe water and sanitation facilities. http://www.cpar.ca/

CUSO-VSO- Work on model forests which includes a water component. www.cuso.ca

Engineers without Borders- Run interactive workshops titled "Water for the world" and it includes access to safe water, water contamination as well as resource usage. http://www.ewb.ca/en/whatwedo/canada/projects/hso/teachers/w4w/index.html
Contact the local chapter at umanitoba@ewb.ca

Hope International Development Agency-Water and sanitation is one of Hope's key focuses. Videos and other resources are available.

www.hope-international.com

International Child Care- Safe water projects in Haiti and the Dominican Republic. http://www.intlchildcare.org/

International Development Enterprises-Irrigation Projects in Asia, Africa, and Latin America, which focus on small farmers who lack simple technology to effectively irrigate their crops.

www.ide-canada.org

United Church of Canada-Educational resources, as well as links to other organizations working on water issues.

http://www.united-church.ca/ecology/water

USC Canada- Work related to soil, water conservation and food security, food justice issues - in particular with agrofuels.

http://usc-canada.org/