



CNHE/IISE

Canadian Nurses for Health and the Environment
Infirmières et Infirmiers pour la Santé et l'Environnement

Celebrate World Water Day: March 22, 2015

In 1993, the United Nations General Assembly designated 22 March as the first World Water Day. 22 years later, World Water Day is celebrated around the world, shining the spotlight on a different issue every year. In 2015, the theme for World Water Day is '**Water and Sustainable Development**'. Water resources, and the range of services they provide, underpin poverty reduction, economic growth and environmental sustainability (UN Water, 2015). From food and energy security to human and environmental health, water contributes to improvements in social well-being and inclusive growth, affecting the livelihoods of billions (ibid).

See the official **World Water Day 2015 Trailer**:

https://www.youtube.com/watch?feature=player_embedded&v=1Zwd4B_Zqw

Read what the **Secretary General of the United Nations** has to say:

http://www.unwater.org/fileadmin/user_upload/worldwaterday2015/docs/SG%20message%20on%20WWD_22%20March2015.pdf



1.0 Global Challenges

Despite impressive gains made over the last decade, 748 million people do not have access to an improved source of drinking water and 2.5 billion do not use an improved sanitation facility (UN Water, 2015). To cover every person worldwide with safe water and sanitation is estimated to cost US\$ 107 billion a year over a five-

year period (ibid). The United Nations World Water Day 2015 recognizes the following:

Water is Health

Water is essential to human health and essential to our survival. Regular hand washing is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others. 748 million people do not have access to an improved source of drinking water and 2.5 billion do not use an improved sanitation facility.

Water is Nature

Ecosystems lie at the heart of the global water cycle. All freshwater ultimately depends on the continued healthy functioning of ecosystems, and recognizing the

water cycle is essential to achieving sustainable water management. Yet most economic models do not value the essential services provided by freshwater ecosystems. This leads to unsustainable use of water resources and ecosystem degradation.

Water is Urbanization

Today, one in two people on the planet live in a city. And the world's cities are growing at an exceptional rate: 4 people moved to cities in the time it took you to read this sentence. 93% of the urbanization occurs in poor or developing countries, and nearly 40% of the world's urban expansion is growing slums. Thousands of kilometres of pipes make up each city's water infrastructure. Many antiquated systems waste more freshwater than they deliver.

Water is Industry

Every manufactured product requires water. Some industries are more water-intensive than others. 10 litres of water are used to make one sheet of paper. 91 litres are used to make 500 grams of plastic. Global water demand for manufacturing is expected to increase by 400% from 2000 to 2050. The main increases will be in emerging economies and developing countries. Technology and smart planning would reduce the use of water, and can improve the quality of wastewater.

Water is Energy

Water is required to generate energy and energy is required to deliver water. Today over 80% of power generation is by thermal electricity. Water is heated to create steam to drive electrical generators. Billions of gallons of water are also needed for cooling. But renewable energy comes from resources which are naturally replenished such as sunlight, wind, rain, tides, waves and geothermal heat. These do not require large quantities of fresh water.

Water is Food

One litre of water is needed to irrigate one calorie food. Inefficient water use can mean 100 litres are used to produce one calorie.



Irrigation takes up to 90% of water withdrawn in some developing countries. Globally, agriculture is the largest user of water, accounting for 70% of total withdrawal. By 2050, agriculture will need to produce 60% more food globally, and 100% more in developing countries. Inefficient use of water for crop production depletes aquifers, reduces river flows, degrades wildlife habitats, and has caused salinization of 20% of the global irrigated land area. To increase efficiency in the use of water, agriculture can reduce water losses and,

most importantly, increase crop productivity with respect to water. Yet with increased intensive agriculture, water pollution may worsen.

Water is Equality

In developing nations the responsibility for collecting water every day falls disproportionately on women and girls. On average women in these regions spend 25 percent of their day collecting water for their families. Investments in water and sanitation show substantial economic gains.

Climate change negatively impacts fresh water sources. Current projections show that freshwater-related risks rise significantly with increasing greenhouse gas emissions, exacerbating competition for water among all uses and users, affecting regional water, energy and food securities. Combined with increased demands for water, this will create huge challenges for water resources management.

2.0 Canada's Challenge

Canada is home to 7% of the world's renewable freshwater (The Council of Canadians, 2015). Yet the perception that Canada is blessed with an abundance of fresh water has led to misuse and abuse of this precious resource: from household toilets that use 20 litres per flush where 6 litres would do, to industrial plants (Environment Canada, 2013). Canada's freshwater withdrawals are already the second highest in the world (Environment Canada, 2014). The capacity of our lakes, rivers and oceans to purify the wastes we dump into them is much more limited than we once thought it was and there is a price for it: billions and billions of

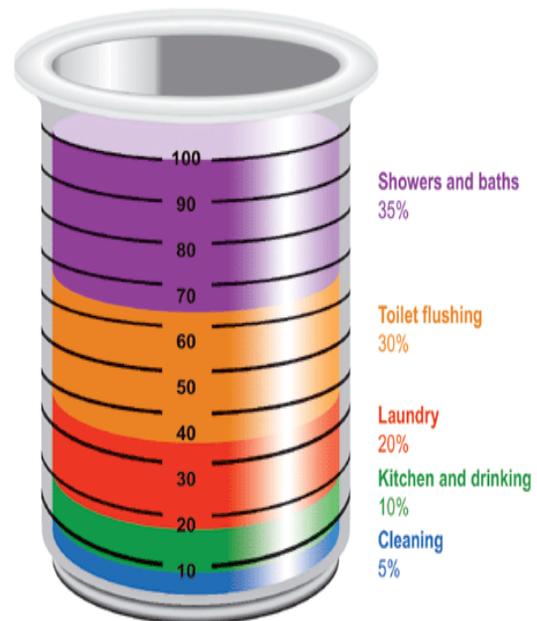


dollars are required to clean up or prevent pollution (ibid). Sooner or later it presents us with a bill: the price of neglect (ibid). As the readily available supplies of fresh water are being used up, we begin to see that there are real limits to how much water we can count on (ibid). The quantity, quality and economic problems we face as a result of our use of water are complex but, at least one of the causes of these problems is easy to manage: the way we waste water (Environment Canada, 2013). And, the solution is straight forward: water conservation (ibid). Simply stated, 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 (ibid).

3.0 Suggested conservation methods (Source: Safe Drinking Water Foundation, n.d.):

- **When bathing:** fill your bathtub only one quarter full
- **If you shower:** try to limit your shower to approximately five minutes
- **Consider installing a low-flow showerhead:** it cuts the amount of water used for a shower in half (that can save more than 50 litres of water each time you shower!)
- **Check your water meter:** if you don't have any water running but the meter is moving, you may have a leak
- **Check your taps:** to make sure they aren't leaking (a leak of one drop each second wastes approximately 10,000 litres of water each year: that amount of water could fill 85 bathtubs!)
- **Don't leave the tap running:** such as when you are brushing your teeth, shaving, or washing dishes
- **If you use a dishwasher:** use the short cycle and make sure that the dishwasher is full (the short cycle uses approximately 32 litres of water, as compared with 40 to 54 litres with the regular cycle)
- **When doing laundry:** set the level appropriately (front loading washing machines use less water than top loading washing machines)
- **Use a cistern or rain barrel and collect rainwater to use on your lawn and garden:** water it earlier in the morning, because that is when the least amount of evaporation and runoff will occur
- **Plant native grass and plants or plant shrubs and trees in your yard:** as these require less water
- **Wash your car with a sponge and bucket:** instead of a hose or pressure washer, as this can save up to 300 litres of water each time you wash your car!
- **Make sure your toilet doesn't continue to run after you flush it:** as this can waste up to 200,000 litres of water each year

Water use in the home



Source: <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=F25C70EC-1>

4.0 World Water Day Events across Canada (Source: UN Water, 2015)

- ✿ **Truro, Nova Scotia:** An exhibition named after Gil Garcetti's book "*Water is Key*", one of many compelling photo essay publications he has produced, tells the story of how clean water in villages in West Africa changes the lives, health, education, and destiny of the people there, especially that of women and girls:
<https://www.facebook.com/WaterIsKey>

- ✿ **Various Locations, Quebec:** *Rassemblement des événements francophones pour la Journée Mondiale de l'Eau 2015* réalisés sur le bassin Grands Lacs - Saint-Laurent
Trois-Rivières: Grand Rassemblement citoyen et spectacle, par la coalition Eau Secours!
Rimouski: Photothon avec bouteilles d'eau réutilisables, par le CÈDRE;
Exposition sur les enjeux de la gestion de l'eau, par l'Association des Étudiant(e)s en Gestion des Ressources Maritimes:
<https://www.facebook.com/events/795832610470638/798388293548403/>

- ✿ **Toronto, ON:** *Community Environment Alliance* through the Greening Sacred Spaces program is hosting a community event in partnership with the Fo Guang Shan Temple of Toronto. This event aims to provoke thought on what water means to us and increase awareness of water issues in the world:
<http://communityenvironment.org/>

- ✿ **Hamilton, ON:** *McMaster University* has organized a number of events have been organized for the day, including a field trip and a panel discussion:
<http://waterweek.mcmaster.ca/>

- ✿ **Manitoba:** *Manitoba Conservation Districts Water Festival* will teach visitors about the path of our freshwater and how it knows no boundaries when it comes to water management; how it gathers nutrients as it travels to our rivers and lakes; and teach about things everyone can do in their own homes to preserve water and the quality of it: <http://www.mcda.ca/>

- ✿ **Regina, SK:** *World Water Day Discussion in Regina* will celebrate with a short film and a discussion at the Copper Kettle on Scarth Street:
<https://www.facebook.com/events/410079359167290/>

- ✿ **Edmonton, AB:** *Sunshine Treeshade Humanitarian Charity's 8th Annual WWD Celebration* is celebrating with a multi-arts entertainment & science info in support of Water for Life efforts to raise awareness and action to help save 1000+ kids killed daily & globally by toxic water related diseases:
<http://waterforlifefestival.org/>

- ✿ **British Columbia:** *The Okanagan Basin Water Board & Okanagan Waterwise* will have CBC Daybreak South host Chris Walker as MC moderating its popular

(and FREE) annual public forum as part of this year's Canada Water Week/UN World Water Day celebrations: <http://www.eventbrite.ca/e/wetlands-not-wastelands-panel-discussion-wetland-tour-film-screening-tickets-16057154381>

March 22 is #WorldWaterDay! Use #WaterIs to share messages about #Water & #Sustainability @UN-Water https://twitter.com/UN_Water

References

- Environment Canada. (2013, July 23). *Wise water use*. Retrieved from <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=F25C70EC-1>
- Environment Canada. (2014, August 22). *Residential water use*. Retrieved from <http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=en&n=7E808512-1>
- Safe Drinking Water Foundation. (N.d.). *Water consumption*. Retrieved from http://www.safewater.org/PDFS/resourcesknowthefacts/Water_Consumption.pdf
- The Conference Board of Canada. (2015, n.d.). *Water withdrawals*. Retrieved from <http://www.conferenceboard.ca/hcp/details/environment/water-consumption.aspx>
- The Council of Canadians. (N.d.). *World water day events 2015*. Retrieved from <http://canadians.org/event/world-water-day-events-2015>
- UN Water. (2015, n.d.). *World water day 2015 on water and sustainable development*. Retrieved from <http://www.unwater.org/worldwaterday/learn/en/>
- UN Water. (2015, n.d.). *Message on world water day*. Retrieved from http://www.unwater.org/fileadmin/user_upload/worldwaterday2015/docs/SG%20message%20on%20WWD_22%20March2015.pdf
- Youtube. (N.d.). *Water is our world – world water day 2015 trailer*. Retrieved from https://www.youtube.com/watch?feature=player_embedded&v=1Zwd4B_Zqw