

Resources for Teaching/Learning about Canada/US Approaches to Water Issues

Articles & Curriculum

- <http://www.cbc.ca/news/background/water/>

Canada lucked out in the global water sweeps... [it is] near the top of water-rich nations, trailing only Brazil, Russia and China.

Thanks to the replenishing cycle of rain and evaporation, the amount of water on Earth has remained the same over the past four billion years. Only in this generation has there been concern that we may be ruining our water supply. Of all the water on our planet, 97.5 per cent is sea water and three-quarters of the remaining 2.5 per cent is locked in polar ice caps. The tiny bit left over is drinkable.

Estimates of Canada's supply of fresh water vary from 5.6 per cent to 9 per cent to 20 per cent of the world's supply, depending on how one defines "fresh water" – whether it means "available," "usable," or merely "existing." One study says Canada has 20 per cent of the world's fresh water – ranking it at the top – but only 9 per cent of "renewable" fresh water. Whatever the case, Canadians consume 350 litres of water a day per capita, second only to the Americans as the most profligate wasters of water in the world. The average global citizen needs only between 20 and 40 litres of water a day for drinking and sanitation.

It has been said that water will be "the oil of the 21st century," or "liquid gold," and that it will cause wars between nations. Whatever happens with regard to global water, and the environmental, economic and political fallout, Canada will be a major player. Talks have intensified during the past few years on whether Canada should take advantage of its bountiful supply of water by selling it for profit – like gas, oil and timber.

The House of Commons [has held]... televised hearings... on "freshwater [security]" to examine the pros and cons of selling Canada's water to other countries. Canada sells bottled water to other countries, but shipments of bulk water are not allowed.

There is also the issue of whether, under... the *General Agreement on Tariffs and Trade* (GATT) and the *North American Free Trade Agreement* (NAFTA), water is a "vital resource" like the air we breathe, or a "commodity" to be sold and traded.

- <http://www.watercan.com/h2oh/PDFS/LB-g10-Canada-U-S-Relations.pdf> A lesson plan for 10th grade students on Canadian-US relations that includes the issue of exporting fresh water.
- http://www.canadians.org/water/documents/Declaration_Water_Module.pdf A lesson plan provided by the Council of Canadians that includes key questions, talking points, sample municipal water declaration, & activities.
- http://geo.international.gc.ca/can-am/main/shared_env/greatlakes_stlawrence_basin-en.asp and http://geo.international.gc.ca/can-am/main/shared_env/submission_water_resources-en.asp *Canadian Embassy* - Great Lakes water removal.
- http://www.ctv.ca/servlet/ArticleNews/story/CTVNews/20060101/export_water_060101/20060101?hub=Canda Excellent article that shows the tension building around water conflicts between US and Canada.
- <http://www.american.edu/ted/water.htm> Good overview, lots of background info & cause/effect of water conflicts.
- http://www.ec.gc.ca/water/en/manage/removal/e_backgr.htm Environment Canada re. removal of water.
- <http://thehill.com/op-eds/u.s.-canada-water-disputes-appear-likely-to-keep-flowing-2007-10-17.html> US perspective on water issues.
- http://www.globalcentres.org/can-us/water_horbulyk.pdf Report on Canada-US water issues.
- http://www.canadians.org/DI/documents/Crossing_the_Line_Report05.pdf A citizen's inquiry to US-Canada relations produced by the *Council of Canadians* (Pages 38-42 deal with water and the environment).
- <http://www.cupe-vidc.org/iv/9903/page02.html> *Canadian perspective*. Can Canada afford to export water?
- http://www.greatlakesdirectory.org/zarticles/1017_bulk_water_export.htm Frequently Asked Questions about Great Lakes bulk water export that offers a *Canadian Perspective*.
- <http://www.uswaternews.com/archives/arconserv/5bottwate11.html> Bottled water exports from Great Lakes basin OK under proposed compromise - October 2005 *U.S. Water News Online*.

Websites Suitable for Student Research

- www.americanrivers.org [wealth of information on American river systems]
- www.azurix.com [Texas based company with info on water issues]
- <http://bioshpere.ec.gc.ca> [Montreal's Biosphere]
- www.canadiangeographic.ca
- www.cciw.ca/glimr/data/stlawrence-basin-project/intro.html
- www.canadians.org [Council of Canadians—public interest group]
- www.dams.org [World Commission on Dams]
- www.ducks.ca [Ducks Unlimited of Canada]
- www.ec.gc.ca/water/index.htm [Environment Canada]
- www.epa.gov/glnpo/atlas/intro.html [Great Lakes Atlas online]
- www.epa.gov/owow/monitoring/nationswaters
- www.epa.gov/surf [surf your own watershed on line]
- www.epcor-group.com [private water company in western Canada]
- www.ewpca.de [European Water Association]
- www.great-lakes.net [Great Lakes Information Network]
- www.greatlakes-seaway.com/en/home.html [video on St. Lawrence Seaway]
- www.groundwater.org [Groundwater Foundation has kids corner]
- www.ijc.org [International Joint Commission]
- www.iawq.org.uk [International Water Association]
- www.irn.org [International Rivers Network]
- www.on.ec.gc.ca/glimr/intro-e/html
- www.riversfoundation.org
- http://seawifs.gsfc.nasa.gov/OCEAN_PLANET/HTML/peril_fresh_water.html
- www.transboundarywaters.orst.edu [trans boundary issues]
- www.uswaternews.com
- www.water-ed.org [focus is on western water issues—good teacher info]
- www.water.usgs.gov [U.S. Geological Survey—federal water data]
- www.wow.nrri.umn.edu [Water on the Web--student and teacher page]
- www.worldwatercouncil.org

Reference Books on Canada – US Water Issues

- Barlow, Maude and Clarke, Tony. ***Blue Gold: The Battle Against Corporate Theft of the World's Water.*** Toronto: Stoddart, 2002.
- Cusser, Clive. ***Blue Gold.*** New York: Simon & Schuster, 2000. ISBN 0-671-78546
- deVilliers, Marq. ***Water: The Fate of Our Most Precious Resource.*** Boston: Houghton Mifflin, 2000. ISBN 0-618-03009-3
- Gleick, Peter. ***The World's Water 2002-2003: The Biennial Report of Fresh Water Resources.***
- Glennon, Robert Jerome. ***Water Follies: Groundwater Pumping and the Fate Of America's Fresh Waters.*** Washington, D.C.: Island Press, 2002.
- Harris, Michael. ***Lament for an Ocean: The Collapse of the Atlantic Cod Fishery-A True Crime Story.*** Toronto: McClelland and Stewart Inc., 1998.
- National Geographic Special Edition. ***Water" The Power, Promise, and Turmoil Of North America's Fresh Water.*** Washington, D.C. National Geographic_Society, 1993.
- Outwater, Alice. ***Water: A Natural History.*** New York: Basic Books, 1996.
- Pielou, E.C. ***Fresh Water***
- Rothfeder, Jeffery. ***Every Drop for Sale.*** New York: Penquin Putnam Inc., 2001.
- Stewart, Walter. "A Late Great Lake?" ***Canadian Geographic.*** September 2003.
- Ward, Diane Raines. ***Water Wars: Drought, Flood, Folly and the Politics of Thirst.*** New York: Riverhead Books, 2002.

The Looming Issue of the Northwest Passage

- <http://www.guardian.co.uk/climatechange/story/0,12374,878287,00.html>

The North-west Passage, for centuries a forbidding and deadly challenge to explorers and adventurers, is being so transformed by global warming that it may change the face of international transport.

Scientists predict that it may be free of ice within 50 years, opening it to cruise vessels, tankers and warships. It is already being nicknamed "Panama Canal North".

US naval officers have circulated a report arguing the case for a new type of ice-strengthened warship to patrol Arctic waters, according to the Los Angeles Times. This summer the Canadian navy sent ships north of the Arctic Circle for the first time since the cold war ended.

- <http://thetyee.ca/Views/2006/01/30/DefendNorthwestPassage/> [excerpt only]

Canadians should be alarmed. An international shipping route along Canada's third coast could facilitate the entry of drugs, guns, illegal immigrants and perhaps even terrorists into this country, as well as providing an alternative route for illicit shipments of weapons of mass destruction or missile components by rogue states. And any shipping involves the risk of accidents, particularly in remote and icy waters. An oil spill would cause catastrophic damage to fragile Arctic ecosystems; a cruise ship in distress would require an expensive and possibly dangerous rescue mission. Any new fishery will be highly susceptible to over-exploitation, particularly because of the difficult-to-police location, rapid declines in fish stocks elsewhere and the consequent, excess fishing capacity that now exists worldwide.

Who owns the Northwest Passage? Ownership of the islands is not at issue. In 1880, Britain assigned them to Canada and that title has not subsequently been contested-with one small exception: Hans Island. Denmark and Canada have agreed to negotiate a solution, which will likely come in the form of a joint management regime under which the sovereignty issue will cease to matter....