



Water at risk!

It's our source for life

Water: Essential to our bodies and vital to the natural world around us

Here in Ontario we are fortunate in having abundant freshwater. From the Great Lakes, the world's largest freshwater system, to the rivers, streams, wetlands and moraines that feed rich agricultural land, this valuable resource sustains us and all the ecosystems that make up our environment. It supplies us with drinking water and recreation, supports forests that help reduce air pollution, and feeds vital wetlands that help filter our drinking water and provide habitat for fish, birds, and other wildlife.

Today this crucial asset is under stress. Pollution has contaminated many Ontario lakes and rivers. Rapid development has destroyed wetlands and buried streams and rivers. Poor land-use practices have made us question whether it's safe to drink our water.

How can we make sure people and wildlife are nourished, not poisoned, by our water? The Federation of Ontario Naturalists has been working for decades to protect our wetlands and waterways. Now FON wants you to help us realize our vision for clean, abundant water and healthy natural areas. At the provincial level, FON will continue to push for laws to protect waterways and coastlines as well as the woodlands they sustain. But to reclaim Ontario's water for Ontarians, we need your help. That's why we are encouraging thousands of Ontarians to become water stewards by using simple household practices to make a huge difference in our water quality.

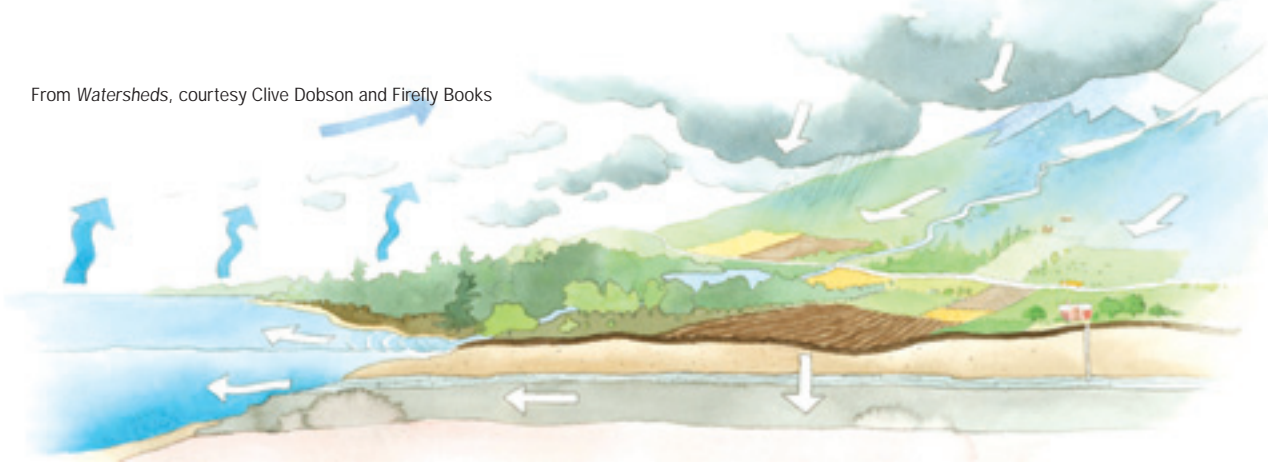


Heather Webb

Our quality of life – whether it's the beauty of nature and wildlife, our strong agricultural economy, or our access to clean, safe water — depends on all of us working together to protect and restore this precious gift.



From *Watersheds*, courtesy Clive Dobson and Firefly Books



The water cycle

Water is constantly moving through the environment in a process known as the water or hydrologic cycle. The sun's energy causes water in lakes and oceans to evaporate. The vapour cools and falls back to the

earth as precipitation. Much of this water again evaporates fairly quickly back into the atmosphere. The rest makes its way into **surface water** in lakes and rivers or seeps into the ground and trickles into aquifers –

underground water reservoirs – where it is called **groundwater**. This is a very slow process – so slow, in fact that a raindrop can take thousands of years to reach a deep well!

Our role in the cycle

In cities, water that goes down drainpipes passes through sewer systems and usually on to a sewage treatment plant. After treatment it is discharged into lakes and rivers. In many cities, pipes draw drinking water from these same water bodies and carry it to a filtration plant for treatment.

Our personal actions can have a major impact on our water resources. Most water treatment plants are not equipped to remove toxic contaminants. Pouring unused paint down storm drains, using harsh cleaning products in our homes, flushing old medications down the toilet, and applying excess

chemicals to our lawns all add toxic chemicals into the water system. When we consider how many people share a water source, we realize just how much pollution that can be.

Want more information on water conservation?

Environment Canada Freshwater Website
Ontario Ministry of the Environment
Ontario Clean Water Agency
Canadian Water and Wastewater Association
Riversides
Waterwiser (USA)

www.ec.gc.ca/water/e_main.html
www.ene.gov.on.ca
www.ocwa.com
www.cwwa.ca
www.riversides.org
www.awwa.org/waterwiser/

M.J. Thomson



In May 2002, Mr. Justice Dennis O'Connor released the Part Two Report of the Walkerton Inquiry, including 93 recommendations for ensuring the safety of Ontario's drinking water sources. The report covered topics such as protecting water at its source, the role of municipalities in providing water, and technical improvements to water distribution systems.

ACTION NEEDED: The Government of Ontario needs to commit to land-use planning on a watershed-wide basis and to protecting water at its source by implementing all of Justice O'Connor's recommendations immediately.

A **watershed** is an area of land that drains into a particular body of water such as a river or lake. No matter where you live, you're in a watershed, and it's from a watershed that you obtain your water supply. Typically, a watershed is named after its main water body – for example, the Grand River watershed or the Lake Ontario watershed.

Natural areas are vitally important for healthy watersheds. Vegetation improves water quality by absorbing excess nutrients and fertilizers and even some toxins. Forests and wetlands act as huge sponges, soaking up surplus water after rain and snowfall and releasing it slowly back into streams and groundwater sources.

Get involved! Join a project in your community

FON is currently helping to create and restore a wetland near downtown Toronto. Beechwood Wetland is an important local natural area situated in the Don River Valley. It's part of a regional natural corridor connecting a network of natural areas, and it provides habitat for wildlife and enjoyment for hikers and cyclists. Volunteers help by planting native trees, shrubs and other plants that had been choked out by non-native species.

The project will help re-establish a natural balance in the river valley, and the restored wetland will help reduce water pollution such as salt runoff from the nearby Don Valley Parkway. Interpretive panels on site demonstrate the link between healthy wetland and woodland habitats. A collaborative effort of FON, the City of Toronto, the Task Force to Bring Back the Don, and the Toronto and Region Conservation Authority, the project is a terrific example of how local groups can work together to improve a community's water quality and benefit wildlife.



M.J. Thomson

FON is working to protect Ontario's water

FON has a long history of seeking to protect our water resources, beginning in 1937 with a survey of King Township in the former York County to determine typical wetland loss in southern Ontario. FON played a major role in the fight against acid rain, and in 1979 launched a campaign to protect significant wetlands. As a result, public and media understanding of the ecological importance of wetlands changed dramatically, and Ontario's provincial wetlands policy was approved by the Ontario government in 1992.

FON's current work on water focuses on preserving Ontario's surface and groundwater resources. Here are just some of the things we're doing:

- Protecting Ontario's water resources through our woodlands conservation project;
- Working to curb urban sprawl and promote smart communities, promoting clear and safe guidelines to protect our headwaters, streams and rivers;
- Working with other conservation organizations and governments to develop new provincial laws and policies to protect our water and aquatic habitats;
- Promoting personal actions to benefit water quality and quantity.



Heather Webb

Become a water steward: help conserve and preserve our water sources!

As a water steward, you'll be taking personal actions to help maintain our water supply. Here are some of the many ways you and your family can help:

An average backyard swimming pool can hold 40,000 litres of water. How many pools-worth can your family save in one year?

Here are a few tips for conserving water:

- You can save a swimming pool's worth of water in a year by changing your showerhead to a water-efficient model and cutting your shower time by one to two minutes.
- Consider using water-efficient appliances like washing machines and dishwashers – you can save up to a half a swimming pool of water in a year! Running them only when you have a full load will save even more, and cut your water-heating bill too.
- Save half a pool by putting a water-saving device such as a dish-soap bottle filled with water in your toilet tank. Better still, save a pool and a half by installing an ultra low-flush toilet.
- Fix drips and leaks. A slow, steady drip wastes 19,000 litres per year, a fast drip 32,400 litres. That's almost a whole pool from one dripping faucet!
- Save up to 2 pools by installing aerators on your kitchen and bathroom taps. These reduce the amount of water used but keep the pressure high.
- Disconnect your eavestrough downspouts from sewer systems and collect "free" rainwater in barrels, or drain it into your garden.
- Water wisely. Only water your lawn or garden in the early morning or late evening and when winds are calm. One hour of lawn sprinkling uses 1,300 litres of water. Your lawn can only absorb 2.5 centimetres of water at a time, so watering for longer than an hour doesn't help your grass.

Here are a few ways you can help in preserving water quality:

- Don't pour paint, oil, medications or other chemicals down the drain. Dispose of them at your municipal household hazardous waste depot or at special hazardous waste days set up by your city or town.
- Use only environmentally friendly products on your lawn and garden. Avoid pesticides, which can get washed into sewers and find their way back to our drinking water sources. Visit your local garden centre to find non-toxic products.
- Road salt is harmful to many plants and animals. Shovel your walk and driveway, and use sand or cat litter instead of salt wherever possible.
- Instead of grass, use native ground cover plants to "naturalize" your yard. You'll save time, energy and water by not having to maintain your lawn and you'll also provide a home for native wildlife.



M.J. Thomson

The Federation of Ontario Naturalists (FON) protects Ontario's nature through research, education, and conservation action. FON champions woodlands, wetlands and wildlife, and preserves essential habitat through its own system of nature reserves. FON is a charitable organization representing 25,000 members and supporters and 125 member groups across Ontario.

If you wish to support the FON or learn more about current conservation issues in Ontario visit: www.ontarionature.org



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