



Environment
Canada

Environnement
Canada

“Beaches closed again this weekend. | Wetlands disappearing. | Boiled water advisory in effect. Turn off the tap when you're brushing! | Algae blooms might kill our lake. | Record droughts for the prairies. | Are oil sands a hazard to our waters? | Are these fish safe to eat? | Water shortages the biggest environmental concern on the planet: study. | Will we ever run out of water? | Conserving water and being environmentally friendly is not a fad. | What's your water footprint?”

Everyone's
talking about

WATER

It's time for action!



Canada 



Did you know?

Canada has approximately 25 percent of the world's wetlands—the largest wetland area in the world.

Canada has more freshwater underground than on the surface.

Canada has more lake area than any other country in the world.

We all play a role in protecting and conserving our water so that future generations of Canadians have access to clean water and a healthy environment. From the highest levels of government policy to individual actions, every drop counts.

Let's talk about water. This brochure provides you with the basics about Canada's water resources. It gives an overview of what the Government of Canada is doing to keep our water clean and safe, and tips for what you can do to use water more responsibly.

Water, Water Everywhere?

Canada is home to roughly seven percent of the globe's renewable freshwater, making it the third-largest water supply in the world. So we might think there's an endless supply, but in reality our supply of clean, accessible water is limited. We have to learn to use it more wisely if we want to keep enjoying the social, economic and environmental benefits it provides.

We need to act *now*, and this is why the Government of Canada is taking a comprehensive approach to water that includes the Action Plan for Clean Water. The Action Plan helps Canadians deal with immediate environmental concerns, without losing sight of the longer-term goals of improved infrastructure, research and monitoring of Canada's freshwater resources.

Together, we can ensure that we don't continue to waste more water and that we help conserve this precious natural resource.

Cleaning Up Our Waters

For too long, we have been treating our lakes and rivers without enough care: taking more than we need or releasing industrial pollutants, sewage, chemicals, and agricultural runoff into these delicate ecosystems.

That is why the Government is working hard to reduce pollution at the source, by regulating municipal wastewater effluents as well as specific industries such as pulp and paper mills and metal mines.

The Government of Canada's Action Plan for Clean Water invests \$96 million into cleaning up polluted bodies of water across the country. This includes Lake Winnipeg and Lake Simcoe, and several Areas of Concern in the Great Lakes, such as the Niagara River.

The Government is also working internationally through the International Joint Commission on Boundary Waters to address common concerns around water. Agreements like the Great Lakes Water Quality Agreement are in place to address threats to water quality in the Great Lakes, and the portion of the St. Lawrence River that straddles the Canada-U.S. border.

Spotlight: Lake Simcoe Clean-Up Fund

Lake Simcoe's water quality has been affected by large amounts of phosphorus from urban and rural sources. The Government of Canada has invested \$30 million to establish a Lake Simcoe Clean-Up Fund, which provides financial and technical support for projects that help reduce phosphorus inputs, rehabilitate habitats, restore the cold-water fishery in Lake Simcoe, and enhance research and monitoring capacity. For details, visit www.ec.gc.ca/pace-cape.

Per capita water consumption in Canada is the second highest in the world, exceeded only by the United States.

The average Canadian uses 328 litres of water per day in his or her home. Here's how we use our water:

35% Bathing

30% Toilet flushing

25% Laundry and cleaning

10% Cooking and drinking



The Water Calculator

Visit Environment Canada's website to calculate your family's water usage. Challenge yourselves to reduce your use, and try again in a month to see how much water (and money!) you're saving.

www.ec.gc.ca/eau-water

What You Can Do

It's easy to cut your household water use, by making small, simple changes in your everyday life. Here's how:

- ♦ Turn off the water while brushing your teeth.
- ♦ Fix leaking taps.
- ♦ When boiling food, use no more water than necessary and cover with a tightly fitting lid.
- ♦ Landscape with native or drought-resistant plants, and with garden designs that minimize water use.
- ♦ Switch to a low-flow showerhead.
- ♦ Toilets are big household water-wasters. Invest in water-efficient models or retrofit your toilet with a water-saving device.
- ♦ Get involved with a community action project. Check out Environment Canada's funding programs that can help your organization get a cleanup project off the ground. Visit www.ec.gc.ca/pace-cape.
- ♦ Visit Environment Canada's website, www.ec.gc.ca, for more ideas.



Chemicals and Our Water

Human waste and industrial activities cause water pollution that can seriously harm fish and other wildlife. Each body of water is part of a delicately balanced ecosystem in continuous interaction with the surrounding air and land. Freshwater bodies have a great ability to break down some waste materials, but not in the quantities discarded by today's society. As well, there are many persistent pollutants (such as petroleum, PCBs, lead and mercury) that are affected slowly, or not at all, by this process.

The result of this overload is pollution, which eventually puts the ecosystem out of balance. Harmful chemicals in aquatic ecosystems can be harmful to fish and wildlife by reducing fertility and causing genetic deformities, immune system damage, tumours and death.

Through the \$300-million Chemicals Management Plan, the Government of Canada is taking action to regulate chemicals that are harmful to the health of Canadians and our ecosystems. In addition to the Plan, federal regulations restrict the level of phosphorus in household and industrial cleaning products such as laundry and dishwasher detergents. Phosphates released into the environment from these products can flow into waterways and cause algae, including blue-green algae, to grow in lakes and rivers.

What You Can Do

- ♦ Use EcoLogo-certified environmentally friendly products around the house. Visit **www.terrachoice-certified.com** for more information.
- ♦ Never dump hazardous substances down storm drains, which flow directly into waterways.
- ♦ Dispose of paints, car fluids and other potentially dangerous substances with care—they can leach into groundwater if not disposed of properly. Call your municipality to learn about the disposal method in your region.
- ♦ Avoid using pesticides in your yard, and use natural fertilizers such as compost.

Did you know?

The longest Canadian river is the Mackenzie River (Northwest Territories–Alberta–British Columbia), at 4241 kilometres.

At 614 metres deep, Canada's deepest lake—Great Slave Lake in the Northwest Territories—could easily submerge the CN tower.

Worldwide, one billion people lack access to safe drinking water.



Understanding Our Waterways

When making decisions about Canada's water, both governments and individuals need to have the right information. By learning as much as possible about the state of our water resources, we can all become water decision-makers in our homes and communities.

Environment Canada has a large network of specialists collecting data about water quality and quantity. Together with other federal departments and provincial and territorial governments, our specialists monitor chemical and biological characteristics of Canada's watersheds at more than 400 sites. In partnership with the provinces and territories, we also measure water levels and provide flow estimates at an additional 2600 sites.

In addition to monitoring freshwater quality and quantity, Environment Canada has been monitoring marine shellfish waters since 1971 through the Canadian Shellfish Sanitation Program. Monitoring of water quality for pollution sources near shellfish-harvesting areas helps protect the public from the consumption of contaminated shellfish and ensures that Canada meets established international sanitary standards. To learn more about this program, visit www.ec.gc.ca/marine.

At various science and technology facilities across Canada, scientists conduct leading-edge research into water-related problems, and generate the scientific knowledge needed to solve complicated environmental concerns. The Government of Canada is also making an important contribution on the international stage, through its more than 30 years of involvement and \$2.5-million investment in the United Nations Environment Programme's Global Environmental Monitoring System, GEMS/Water.

Knowledge is power, and the better we understand the challenges facing our water resources, the better we can protect and conserve them. The Canadian Environmental Sustainability Indicators (CESI) initiative compiles environmental information from federal, provincial and territorial governments, who share responsibilities for environmental management in Canada. To learn more, visit www.ec.gc.ca/indicateurs-indicators.

Did you know?

The Great Lakes are the largest system of fresh surface water on Earth, containing approximately 18 percent of the world's fresh surface water. Lake Superior is the largest freshwater lake in the world by area.

One drop of oil can render up to 25 litres of water unfit for drinking.

What You Can Do

- ♦ Learn about water resources in your area.
- ♦ Visit Environment Canada's website for detailed maps and information about your local watershed profile. Visit our Know Your Watershed page and enter your local town to see your watershed basin.
- ♦ For the adventurous, check out our Geocache Your Watershed website. Geocaching is an adventure game played with Global Positioning System (GPS) devices—it's a high-tech treasure hunt. The goal of this Environment Canada project is to promote the discovery of local watersheds by students and the general public. Visit www.ec.gc.ca/geocache to join in.

Treating Our Water Right

Even with the best conservation efforts on the part of Canadians everywhere, dealing with wastewater is still a challenge and we need the best infrastructure to deal with it effectively. The Government of Canada is investing in infrastructure so that municipalities and First Nations communities across Canada can properly upgrade wastewater treatment facilities in order to reduce pollution and keep waterways clean.

Under the Canadian Council of Ministers of the Environment's Municipal Wastewater Strategy, the Government of Canada is developing wastewater effluent regulations through the *Fisheries Act*. These regulations will provide clearer direction for more than 4000 operators of wastewater treatment facilities, and will ensure that the release of wastewater effluents does not pose risks to human and environmental health and fishery resources.

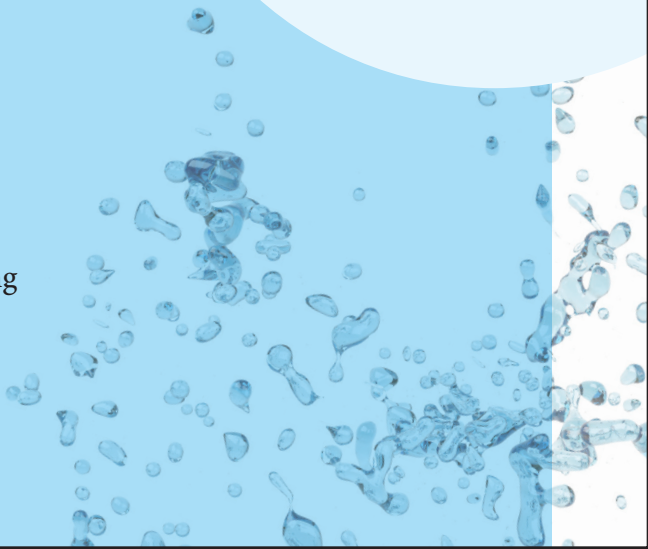
We all have a responsibility for treating our water right. By working together and taking concrete actions, we can all help ensure that Canadians have access to clean water and a healthy environment for generations to come.

Did you know?

Health problems related to water pollution in general are estimated to cost Canadians \$300 million per year.

Water power meets about 62 percent of Canada's electrical needs.

Canada is the world's largest producer of hydroelectricity, followed by the United States and Brazil.





To learn more about the Government of Canada's Comprehensive Approach to Clean Water, and how you can help protect this natural resource, visit www.ec.gc.ca or call **1-800-668-6767** (toll-free) / **TTY 819-994-0736**.

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