



CANADIAN WILDLIFE FEDERATION
FÉDÉRATION CANADIENNE DE LA FAUNE

Your connection to wildlife

unlock underwater
mysteries
www.RiverstoOceansWeek.ca

Resource Sheet 4: Protecting Unseen Watery Worlds

The fact that most threats to underwater ecosystems are “out of sight” does not mean that they should remain “out of mind.” Humans create most of these threats from homes, schools and businesses that are based on land. And that’s exactly where all of us, from politicians to students in elementary and secondary schools, can begin to take action!

Doing Our Part

Each of us can do our part to protect Canada’s underwater worlds at home, at work and at school. A little bit each day will add up to a healthier, richer life for all of us, above and below the water’s surface.

- **Reduce Water Consumption.** Let’s all work toward reducing the amount of water we put down the drain and through our municipal water treatment plants. Remember: this water is clean when it enters our house but it is contaminated with all kinds of things from food and bacteria to soaps and other chemicals by the time it leaves. It requires energy and more chemicals to “clean” it before it goes back into the watershed it came from. Canadians have the second highest domestic water consumption in the world. Here are some tips to get you started:
 - **Reduce your water consumption by taking shorter showers** (five minutes should be long enough), and use a low-flow shower head to cut your waste water in half. Low-flow toilets give similar water conservation results.
 - **Reduce or eliminate the area of grassed lawns around your home.** These require a lot of water. Replace them with drought-resistant native plants.
 - **Restrict the time to water your lawn.** Water your gardens, if you must, in the evening or early morning when there is less evaporation.
 - **Keep a jug of water in the fridge** so you won’t be tempted to run the tap for a cold drink.
 - **When it is time to replace appliances that use water, buy “Energy Star” models.** Front-loading washing machines use a fraction of the water required by conventional machines. For listings of “Energy Star” products, go to <http://oee.nrcan.gc.ca/energystar/english/consumers/index.cfm>.

- **Reduce Your Use of Harmful Chemicals.** Chemicals you pour down the drain, spray on your yard, or put into landfills eventually end up in water systems where they become the constant companion of underwater creatures. Here are some handy suggestions:
 - **Reduce or eliminate the use of pesticides and herbicides in your gardens.** In fact, you can go even further by asking your municipal leaders to make your community pesticide-free.
 - **Replace strong household cleaners with environmentally friendly products** such as baking soda and vinegar.
 - **Do not pour chemical-laden products such as paints and solvents down the drain.** Take them to your local toxic waste disposal area.
- **Learn More About Healthy Underwater Ecosystems.** You can learn more about your own effects on underwater ecosystems. And you can spread the word so that others can take responsible action.
- **Make Your School a Blue School.** Start a Blue School aquatic habitat project in your community. Find out more about this program from the Canadian Wildlife Federation (visit www.WildEducation.org).
- **Join the Adopt a River Program.** Learn more about this program by visiting www.cvrbc.qc.ca and www.wmvp.ca.
- **Support the Good Work of Groups That Work for Water.** For example, the Canadian Heritage Rivers System was established in 1984 to conserve and protect the best examples of Canada’s river heritage from dams, diversions, pollution and development. Visit the *CHRS* website at www.chrs.ca for more information about rivers that are protected under this system.
- **Become a Planet Protector.** Join the Water Wizards Club at www.dfo-mpo.gc.ca/canwaters-eauxcan/bbb-lgb/index_e.asp.
- **Use Satellite Technology to Track the Movements of Aquatic Migrants,** including sea turtles at www.SpaceForSpecies.ca.
- **Look for More Information About Canada’s Wildlife at *Hinterland Who’s Who*** at www.hww.ca.
- **Discover More About How You Can Take Action** to keep water healthy at *Water Under Fire* at www.WaterUnderFire.ca.



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Protection by Governments

Governments at all levels (municipal, provincial, territorial and federal) protect aquatic ecosystems through planning, and through creating and enforcing laws. For instance, the Canadian government has created the *Fisheries Act*, *Oceans Act*, *Species at Risk Act*, *Canadian Environmental Protection Act* and the *Canadian Environmental Assessment Act* — all sets of laws that can be used to protect underwater species and ecosystems. Provinces support federal laws and add their own — Ontario's *Lakes and Rivers Improvement Act*, Nova Scotia's *Fisheries Act* and many more. Even your local municipalities can “get into the act” by creating bylaws to protect shorelines, monitor water quality and control development.

Governments also use laws to create special protected areas including national parks, national marine conservation areas, national wildlife areas, marine wildlife areas, heritage rivers, provincial parks, fish sanctuaries and conservation areas. These go beyond protecting individual species — which is also important — to protecting their habitats. One such area, the Saguenay-Saint-Lawrence Marine Park, which was established in 1998, is celebrating its 10th anniversary. *Ocean Act* marine protected areas (MPAs) also protect and conserve important or sensitive marine ecosystems. Canada's first *Oceans Act* marine protected area was created in 2003 to protect the Endeavour Hydrothermal Vents. This cluster of underwater hot springs, which is 250 kilometres southwest of Vancouver Island, is 2,250 metres below sea level and contains at least 40 species of marine life that have not been found anywhere else in the world.