

**Frequently Asked Questions** 

Natural Champions

#### **SOURCE WATER PROTECTION**

What is Source Water Protection?	<ul> <li>Source water protection is simply protecting water resources such as lakes, rivers and groundwater, from contamination or overuse.</li> <li>Water is critical to all aspects of our lives. Protecting the sources of our water is important to ensure that there is enough safe water for all our uses - now and in the future.</li> </ul>
What are some water sources?	<ul> <li>Our water comes from two major sources: surface water and groundwater. Surface water includes lakes, rivers, streams and wetlands. Groundwater includes underground aquifers.</li> <li>Groundwater and surface water are interconnected, flowing from one to the other.</li> </ul>
Why is it important to protect sources of drinking water?	<ul> <li>We need to protect the sources of our water in order to safeguard the public health of our residents and ensure there is enough water for all.</li> <li>Over two million residents in Ontario get their water directly from surface or groundwater sources and do not have access to treatment systems.</li> <li>Treating water for drinking is very costly. As a result, conventional water treatment methods cannot always remove many hazardous chemicals.</li> </ul>
Don't we have an unlimited supply of fresh water in Canada?	<ul> <li>We do not have an infinite supply of water on our planet. Most of the water we use is recycled through the natural water cycle. It falls to earth as precipitation, is absorbed by plants and soil and then evaporates back into the atmosphere where the cycle begins again. Some of the water we use is thousands of years old.</li> <li>Our supply of groundwater can be depleted if water is taken out of the ground more quickly than it can become naturally recharged.</li> </ul>
What is the best way to protect source water?	<ul> <li>We protect sources of water by managing the human and natural influences on them. We need to prevent contaminating or overusing our water resources.</li> <li>Water flows within watersheds, therefore it is best to manage our water resources on a watershed basis.</li> <li>As water flows across the watershed, it crosses forests, farmlands, towns and cities. Along the way it is affected by different activities.</li> <li>The fewer negative impacts on our sources of water throughout the watershed the better the chance that the water coming out of our taps will be healthy. Protecting our sources of drinking water is absolutely essential to our health.</li> </ul>
How do we make sure our drinking water is safe now?	<ul> <li>A number of actions are taken to prevent our water from becoming contaminated ensuring that it is safe and clean from source to tap.</li> <li>These include protecting sources of water by monitoring and managing our lakes, rivers and streams, using up to date water treatment systems, ensuring that the pipes, watermains and storage towers are in good repair, water testing and training water managers.</li> </ul>

#### How are our sources of water threatened?

Both the quality of our water and the amount available can be threatened by different activities. Some of the threats to our water include:

- Natural contaminants
- Irresponsible land use activities which contaminate our water or take too much out.
- Urban development can make it difficult for water to filter into the ground in order to replenish groundwater sources. When this happens, water just flows across the surface of land rather than percolating down to aquifers.
- Air pollution from vehicles, coal plants, industries and other sources fall directly on surface waters or enter water sources through surface runoff.
- As a result of climate change, there is also concern that the warming of the Earth's atmosphere will reduce the amount of water available in lakes, rivers and streams due to reduced precipitation and increased evaporation.

### How can we best protect sources of water?

- Lakes, rivers, streams and other sources of water are best protected with proper planning involving a variety of water users.
- A source water protection plan is a management strategy designed to minimize the impact that human and natural activities have on the quality and supply of our water resources.
- Source protection plans include physical information about our watersheds, identify sensitive areas where water resource supply and/or quality is threatened, provide scientific data about the quality and supply of current water resources, and include up to date mapping, computer projections about future water resources and recommendations to manage the impacts of harmful activities.

## Does source water protection take place today?

- Working closely with the province, municipalities, landowners and other local groups, Conservation Authorities already plan and deliver watershed management programs and services for many watersheds in Ontario. This work needs to expand.
- Conservation Authorities collect data, carry out studies, map our resources and monitor the state of our watersheds daily.
- Conservation Authorities believe in the importance of involving the people living in watersheds in making decisions about the best way to ensure there are healthy and sustainable resources now and in the future.

# How does the Clean Water Act fit into source water protection?

- The *Clean Water Act*, 2006, is part of the Ontario government's commitment to ensure the sustainability of clean, safe drinking water for all Ontarians and to implement the Walkerton Inquiry recommendations.
- Protecting water at the source is the first step to a multi-barrier approach and an important part of ensuring the health of people, ecosystems and economies. Provincial laws such as the *Safe Drinking Water Act* and the *Ontario Water Resources Act*, are in place to regulate other key elements of the multi-barrier approach including effective water treatment, adequate testing, rigorous monitoring, operator training, permits to take water and to regulate industrial pollution.
- The *Clean Water Act*, 2006, which passed into law in October 2006, completes the multi-barrier approach to ensuring safe drinking water from 'source to tap'.
- The Clean Water Act, 2006 applies primarily to municipal supplies of drinking water. Maintaining safe and secure private drinking water systems, such as private wells, is the responsibility of homeowners, institutions and businesses who own their own water systems. These are regulated separately under the Safe Drinking Water Act, the Ontario Water Resources Act, and the Health Protection and Promotion Act.