

News Release

GROUNDWATER IOI

RIDEAU VALLEY, December 18, 2007 — Groundwater — so important, but quite often forgotten. Nearly three million people in Ontario use and depend on groundwater every day, but some don't even know it. To keep you 'au courant' about the importance of groundwater, we present Groundwater 101.

Groundwater is literally water stored underground. Sounds simple right? Well, not quite. Water on earth is constantly being recycled through a process known as the hydrologic cycle. Water from our lakes, rivers and oceans evaporates and forms clouds. Depending on weather conditions the water vapor within those clouds condenses and falls back to earth in the form of rain or snow. This precipitation runs off into our lakes, rivers and streams or seeps into the ground to collect in formations called aquifers.

An aquifer is the layer underground at which groundwater is found moving through soil particles and cracks and crevices in rock. Groundwater is not confined to only a few channels underground, it's actually found almost everywhere under the earth's surface. Groundwater sometimes discharges into local lakes, rivers and streams or it can remain underground for millions of years.

Groundwater supplies us with drinking water and water for agricultural and industrial uses. We in Eastern Ontario are fortunate to have vast quantities of groundwater stored in aquifers throughout the region, but it is still important to conserve and protect this resource.

Contamination of our groundwater occurs from point and non-point source pollution. Examples of point sources of pollution include industrial discharges, septic systems, wells and underground oil and gas storage tanks. Non-point sources include urban and rural runoff that can contain pollutants such as road salt, fertilizers or pesticides.

Municipal drinking water systems can treat some of these pollutants but not all. The cost of cleanup from an environmental and health standpoint can also be astronomical. Keeping our sources of drinking water clean is the best and most economical solution.

So how do we protect our groundwater? The Ontario Government has made protection a priority with the passing of the Clean Water Act. The Act is designed to protect our local sources of drinking water from both contamination and depletion.

There are also a number of things that you can do to protect our groundwater. Here are a few useful suggestions:

Use nontoxic, biodegradable soaps and household cleansers, or try environmentally-friendly alternatives

Recycle, as the less we put into the landfill the less leachate is created that could potentially contaminate our groundwater sources

Reduce or eliminate fertilizers and pesticides from your lawn care regimen as these chemicals leach into the soil and into our groundwater

Maintain your septic system.

To learn more about local groundwater protection efforts, visit your local source protection group.

Cataraqui Source Protection Area — www.cataraquiregion.on.ca

Mississippi-Rideau Source Protection Region — www.mrsourcewater.ca

Quinte Source Protection Region — quintesourcewater.ca