

## PLANNING PROCESS UNDERWAY

It has been a busy year for the Lakehead Source Protection Committee and the Lakehead Source Protection Authority as they started work on the process to develop a local Source Protection Plan for the Lakehead Source Protection Area.



The local Source Protection Committee held regular monthly Meetings throughout 2008 to complete the “Terms of Reference” (work plan) that will guide the process to develop the local Source Protection Plan. The Committee is made up of nine members from three sector groups: Municipal, Industry and Economic and Public and is directed by Regulation of the “Clean Water Act, 2006”.

The Source Protection Authority made up of the same Municipal representatives as the Lakehead Region Conservation Authority Board has continued to provide support for the planning process. Both groups worked together to meet the tight deadlines associated with the legislated process.



Rosslyn Village near Municipal wellhead

The Lakehead Source Protection Committee is working in partnership with local Municipalities and community stakeholders to produce a science-based plan to be completed by August 2012. Technical studies and scientific information will be used to identify potential and significant threats to the sources of water for the two identified Municipal residential drinking water systems in the Lakehead Source Protection Area.



The plan will provide measures to protect the source water that supplies the Municipal systems for the City of Thunder Bay and Rosslyn Village from contamination and over use.

The plan will provide residents in the Lakehead Source Protection Area who are on one of the two identified Municipal drinking systems with the reasonable expectation that the source water that feeds their taps will be clean and safe. However, protecting source water is only the first step in a multi-barrier approach aimed at ensuring safe, clean drinking water for all Ontarians.



Thunder Bay's North Harbour on Lake Superior

# Drinking Water Source Protection

## KEY ACCOMPLISHMENTS

### January 2008

Code of Conduct and Operations Manual for Source Protection Committee completed. \*

### February 2008

Letters of Commencement sent to provide notification for preparation of the Terms of Reference: Clerks of the Eight Member Municipalities and Fort William First Nation. \*

### March 2008

Watershed Characterization Report completed.

### April 2008

"Meet and Greet" Open House to present the Watershed Characterization Report and Overview of Source Protection Planning.

### June 2008

Notice of 35-day public comment period for Draft Proposed Terms of Reference: Internet, Public Viewing Stations and newspaper notices. Deadline - July 25, 2008. \*

### July 2008

Tour of the Bare Point Intake Protection Zone and Rosslyn Village Wellhead Protection Area.

Two Open Houses for Draft Proposed Terms of Reference: LRCA (July 15) and Rosslyn Village Community Centre (July 17). \*

### August 2008

Lakehead Source Protection Committee submits the Draft Proposed Terms of Reference to Lakehead Source Protection Authority by August 20, 2008 deadline. \*

Notice of 30-day public comment period for Proposed Terms of Reference: Internet, Public Viewing Stations and newspaper notices. Deadline - September 18, 2008. \*

### September 2008

Water Budget and Water Quantity Stress Assessment completed.

### October 2008

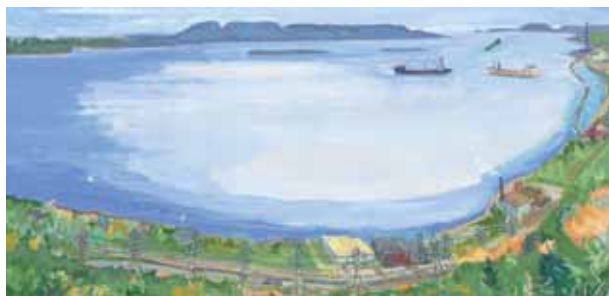
Lakehead Source Protection Authority submitted "Proposed Terms of Reference" to the Minister of Environment for approval. \*

(\* met legislated deadline)



## ENGAGING STAKEHOLDERS

The work of the Lakehead Source Protection Committee and Lakehead Source Protection Authority (SPA) is focused on engaging stakeholders and property owners who obtain drinking water from the two Municipal drinking water systems in the Lakehead Source Protection Area.



Lake Superior - Bare Point Intake Protection Zone

## PUBLIC CONSULTATION

Public consultation is a requirement of the regulated process for producing the local Source Protection Plan. Opportunities are provided for stakeholders including the public, businesses, Municipalities, and First Nations living within the Lakehead Source Protection Area to comment and provide feedback.

The Terms of Reference was the first of three documents which required public consultation. Consultation on the Assessment Report and Source Protection Plan will follow a similar process.

The Lakehead Source Protection Committee and the Lakehead Source Protection Authority encourages public input in a number of ways. Notices are posted in local newspapers, at public viewing stations and on the Internet ([www.sourceprotection.net](http://www.sourceprotection.net)) to inform and provide community residents with the opportunity to comment and review documents within a defined comment period. Open Houses are also part of outreach to educate and inform community residents on the planning process.

## Did You Know?

### Safe, Clean Water: Essential To All Our Lives!

#### WHAT IS SOURCE WATER?

Source water is untreated water from surface and ground sources with the two connected through the water cycle. Streams, lakes, rivers are examples of surface water, while an underground aquifer or spring is a source of groundwater. The water cycle influences both water sources with the endless circulation of water from the atmosphere to the earth in the form of evaporation and precipitation (rain and snow).

#### WHAT IS SURFACE WATER?

Surface water refers to water found on the surface of the earth. Surface water is simply where the water table associated with groundwater meets and collects on the surface of the earth. Rain and snow affects surface water.

Surface water flows through a watershed and is often fed by groundwater seeping through the ground into lakes, rivers and streams. In turn, the flow of surface water can penetrate the ground, providing a water source for groundwater aquifers.

#### WHAT IS GROUNDWATER?

Groundwater is a valuable resource as it makes up 2/3 of the world's fresh water supply. Groundwater collects beneath the Earth's surface between the cracks and spaces in soil, sand and rock. It moves very slowly through the ground where it can collect in large quantities to form aquifers.

The rate at which water moves through the ground depends on the makeup of the soil or rock. The process can take weeks or hundreds of years with the soil and fractures in rock acting as a natural filter to remove some impurities.

### Everyone's Responsibility!

#### WHY IS IT IMPORTANT TO PROTECT SOURCE WATER?

The incident in Walkerton, Ontario (2000) revealed how easily water can become contaminated and how damaging the consequences can be. While it costs money to protect water sources, the investment generates economic vitality and growth. Communities with clean water sources attract human settlement, development and business.

#### What is Source Protection?

Source Protection is the focus of the "Clean Water Act, 2006" to ensure the sources of water that supply Municipal residential drinking water systems are safe and clean, now and in the future. Source Protection Committees have been established across Ontario to develop local Source Protection Plans that will reduce or eliminate risks and threats to the sources of Municipal residential drinking water.

### You Can Make A Difference!

#### WHAT CAN YOU DO?

We need to protect the sources of water from contamination or over use by managing the influences on them from natural and human activities. The best way to ensure water quality and water quantity is by being environmentally responsible about things we do in our home and in our yard including proper maintenance of wells and septic systems.

#### THINGS WE CAN DO IN OUR HOME?

- Take shorter showers.
- Turn tap off when you brush your teeth.
- Plug and fill sink for washing.
- Detect and repair leaks.
- Run washing machines/dish washers when full.
- Do not flush paint or chemicals down the drain.
- Return unused prescriptions to a pharmacy.

#### THINGS WE CAN DO IN OUR YARD?

- Use a rain barrel.
- Wash your vehicle at a car wash.
- Use a broom to clean your driveway.
- Use sand instead of road salt on walkways.
- Reduce the use of pesticides and fertilizers.
- Take care when refueling lawn equipment.
- Clean up pet waste.

# Protecting Municipal Residential Drinking Water

## ROSSLYN VILLAGE WELLHEAD PROTECTION AREA



The Municipal residential drinking water for Rosslyn Village comes from a groundwater aquifer that feeds two drilled wells. The source water is piped to the Municipal system where it is chlorinated and distributed to approximately 30 homes. The remaining homes in the neighbourhood that have drilled wells receive their water from the same aquifer.

The Wellhead Protection Area shows the area around the wellhead where land use activities have the potential to affect the quality of water that flows into the well. The type of soil surrounding the well and the direction and speed groundwater travels determine the time-of-travel zones ranging from two to 25 years. Technical studies will determine the level of protection in the zones.

## BARE POINT INTAKE PROTECTION ZONE



The City of Thunder Bay receives Municipal residential drinking water from the Bare Point Water Treatment Plant for 92 percent of its population (about 100,000 people). Lake Superior is the single surface water source that supplies the plant with water from an intake located approximately 750 metres out in the lake.

The primary vulnerable area around the surface water intake for the Bare Point Water Treatment Plant, (defined by the yellow circle), is called the Intake Protection Zone. Technical studies will be completed as required by the Assessment Report Regulation. These studies will be used in preparation of the Assessment Report to identify significant and potential threats to Municipal residential drinking water.



Information including printed materials relating to Source Protection and the protection of the sources of Municipal residential drinking water are available through the Source Protection Program at the Lakehead Region Conservation Authority. Visit [www.sourceprotection.net](http://www.sourceprotection.net) or phone (807) 344-5857.

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