



Provincial Water Quality Monitoring Network

The quality of the water resources in a watershed are a true reflection of how well humans have been managing their activities within the natural environment. Whether these activities are passive (recreational or aesthetic) or active (power generation or irrigation) they can affect the quality and quantity of our water supply.

The Sault Ste. Marie Region Conservation Authority (SSMRCA) in partnership with the Ministry of the Environment (MOE) samples water chemistry at five locations within the watershed. The sampling

locations are: Big Carp River, East Davignon Creek, Coldwater Creek as well as two locations on the Root River. From April to November, we collect samples on a variety of weather and flow conditions on streams throughout the local watershed. The samples are then analyzed for 36 different parameters. Some of these measurements are calculated on-site. Sampling and monitoring provides a baseline of data to determine water quality in the watershed. It also provides the necessary data for the Drinking Water Source Protection Program.



The SSMRCA samples water chemistry at five locations within the watershed.

Some of the parameters measured include: nutrients, suspended solids, trace metals, and other general chemistry parameters which are then compared with the Provincial Water Quality Objective.

Provincial Groundwater Monitoring Network

Groundwater is valuable to public health and economic well-being. A significant segment of our community both urban and rural, rely on groundwater for their source of water. Six municipal groundwater wells are located in our watershed



PGMN information collected serves as baseline groundwater data in the region.

which provide roughly 50% of Sault Ste. Marie's drinking water.

The Sault Ste. Marie Region Conservation Authority (SSMRCA) in partnership with the PUC Inc. and the Ministry of the Environment (MOE) monitors 13 wells as part of the Provincial Groundwater Monitoring Network (PGMN) within our watershed. The goal of this monitoring network is to determine where, how, and why the groundwater resources are changing.

These monitoring wells record water levels with automated equipment on an hourly basis, providing valuable information on our groundwater resources. Water chemistry is also sampled once per

year supplying further information on the quality of water within the groundwater aquifer of the Sault Ste. Marie Region Source Protection Area. The information collected serves as baseline groundwater data in the region. This data is being used in a variety of ways including: carrying out drought assessment, defining emerging issues, trends towards source water shortages, contamination and groundwater management studies.



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Sometimes Bugs Are Good!



Benthos monitoring helps to identify environmental problems that affect our local watersheds.

The Ontario Benthos Biomonitoring Network (OBBN) uses benthic or bottom dwelling organisms as indicators of stream health. This Provincial program was developed cooperatively by Environment Canada - Environmental Monitoring and Assessment Network and National Water Research Institute, as well as the Ministry of the Environment. Benthos monitoring helps to identify environmental problems that affect our local watersheds and sub-watersheds.

In June 2008, SSMRCA staff certified by OBBN began working with a Lake Superior State University student to sample four locations on the Root River. Sampling of the Root River will commence in May and continue to early fall.

For more information contact Lorelei Premo at (705) 946-8530 or visit the OBBN website at <http://www.eman-rese.ca/eman/ecotools/protocols/freshwater/obbn/page6.html>.

Sault Ste. Marie Region Source Protection Committee

The Sault Ste. Marie Region Source Protection Area is comprised of Sault Ste. Marie, Prince Township and portions of the Sault North Planning area. Each source protection planning area in the province has a Source Protection Committee (SPC) to oversee the work being done to complete the scientific studies and develop an Assessment Report for each source protection area. The Terms of Reference was submitted to the Minister of the Environment,

and was approved and posted to the EBR February 5, 2009. The Assessment Report is due on February 5, 2010. After completion of the Assessment Report the SPC is responsible for the development of a Source Protection Plan which will develop policies to ensure existing threats cease to be threats and that future threats are mitigated. The SPC is mandated to involve residents and stakeholders in the source protection planning process through public open

houses, exhibitions and regular SPC meetings. Our local SPC has 9 members which represent a wide range of interests including: municipal, PUC, aggregate industry, environmental and landowner interest. There is still an open seat available for local business owners. There have been 15 SPC meetings throughout the source protection area since the fall of 2007. These meetings are open to the public. Please visit www.ssmrca.ca for more information.

Travelling Education Program for Children

The Sault Ste. Marie Region Conservation Authority Drinking Water Source Protection communications staff have been travelling to classrooms and youth groups locally, offering a glimpse of some of the Children's Source Water Festival interactive centres. The festival aims to teach children the importance of protecting our sources of drinking water now and in the future.

The educational program boasts a 'hands-on' learning environment,

delivered in a manner that is fun. This approach empowers children to take action by respecting and protecting our drinking water sources. The travelling activity centres cover five basic water themes: Water Conservation, Water Attitude, Water Technology, Source Water Protection and Water Science.



This publication has been made possible through the generous support of the Government of Ontario.



Pioneer Water Race