

## BACKGROUNDER

March 7, 2011

### THE IMPORTANCE OF WATER

This is the first of four backgrounders on the sources, use and protection of our local water supply right here in Eastern Ontario. These four articles will give lots of food for thought as we celebrate World Water Day on March 22.

Water appears in many forms in our lives...lakes, rivers, wetlands, groundwater and drinking water among others. Each is important to humans and to many other forms of life which depend on it, and each form of water is linked to all other forms.

Wetlands: Wetlands cover about 15% of our area providing huge benefits in terms of flood reduction, recharge of the underground water for wells, habitat for plants and animals, waste treatment and nutrient recycling. A recent Ontario study calculated that wetlands provide an estimated value of \$247 per person per year in these so-called ecological goods and services. In other words, Mother Nature through wetlands does for free what we would otherwise have to pay millions of dollars to do through technology and infrastructure. When we remove the wetlands, we lose the services.

Lakes: The beautiful lakes in the Mississippi and Rideau valleys and many others of Eastern Ontario add huge value and interest to the lives of residents and visitors alike. All of the recreational pursuits suitable to lakes (fishing, boating, birding, swimming) are healthy antidotes to the high stress of our urban lives. The tourism value of the lakes creates millions of dollars in revenue for the municipalities and the businesses in the area. Lakes occupy less than 5% of the local landscape but remain as one of the most memorable and sought-after places for vacations and, increasingly, retirement living.

Rivers/streams: The rivers, streams and creeks that make up the drainage pattern of the area are under stress. People tend to clear cut or harden the banks of small local streams under the mistaken impression that these watercourses are of little value. In fact, the tissue of small tributary feeder streams to the Mississippi, Rideau or Ottawa Rivers can easily be 30 times longer than the main rivers themselves! And research shows us that these tributaries are often in poorer environmental health. Taking care of the "tribs" is often the first course of action in taking care of the big rivers.

Groundwater: Studies show that about 17% of the people in the Mississippi and Rideau watersheds (over 140,000 people) rely on groundwater and wells as their daily source of household water. Groundwater is vulnerable to whatever type of activity is happening on the ground surface above. It becomes important to know and protect the areas around the well head from storage, use and spills of hazardous materials. Groundwater also flows eventually into rivers and streams keeping up the supply of surface water even during surface droughts and extended hot weather.

Drinking water: This one's fairly obvious. Canadians use a whopping 300+ litres of freshwater each and every day for domestic purposes such as drinking, cooking, toilet flushing and washing. Drinking water is one of the smallest portions of our local water use (less than 1% of the available water in the valley) but is certainly the most important. Celebrating and protecting water for its essential value to our way of life is a little self-serving but it does get the job done. If we do it for ourselves and our families, our entire environmental, social and economic systems will benefit too.

Next week: What is our local water supply situation like?