

WELL WATER *The facts*



BY ANDREW CHRISTIE // ILLUSTRATION BY KATHY BOAKE

As snow melts and ice flows, winter turns to spring. The earth shakes a bit from the tumult of it all, especially for those who live on and around the Niagara Escarpment. It's time to turn your attention to the source of your water.

While some filtering of what will become well water must occur through spring thaw, as water drains down through rock and sand and soil, all that movement of water also promotes the introduction of surface contaminants down into the water table. From there, it is forced or allowed to flow upward for human consumption.

In the country—and anywhere else where folks utilize wells for drinking water and other household uses—people turn faucet handles in their homes and expect clean water to flow just like they

would expect light when they hit the switch. We tend to take our modern conveniences for granted, but many of us rarely think about their technical function.

So let's think about it. Have you tested your well water lately? How do you know contaminants have not infiltrated your well since the last test, especially in light of the action that has occurred near the surface of the earth through winter's powerful cycles of freezing and thawing? According to the World Health Organization, approximately five million people die every year from water-borne diseases. Approximately three million Ontarians depend on ground water for their primary domestic water source. So if you're not testing your home's water regularly—at least three times per year for bacteria,

once per year for nitrates and once in a while for a broader range of possible contaminants—it's time to get with the program.

But it's not just about testing. In Ontario, we are very lucky to have some smart and energetic people working hard to increase public knowledge about wells. Dr. Mary Jane Conboy is a geoscientist and water specialist. She spearheads the activities at Wellwise and provides technical support to Well Aware. Both programs were created to increase well awareness and promote public safety. Well Aware recently received funding from the Ministry of the Environment for three more years.

The folks at Well Aware want us to know that wells require maintenance. Most wells in Ontario are bored, dug or drilled. Many older wells were never properly sealed to keep surface water out, and work is often required on newer wells to re-seal caps and casings that have deteriorated. All wells should have a water-tight casing that extends 16 inches above ground down to a depth of 20 feet. Only licensed well technicians should be working on wells. Well technicians are licensed by the Ministry of the Environment. A brief visual inspection by a homeowner can reveal obvious imperfections, including signs of water infiltration into dug or bored wells, and obvious contaminants like animals and insects inside the well. Water contamination is often caused by the simple entry of insects, rodents and household pesticides through the top area of the well. The infiltration of surface water is a problem because it has not benefited from the natural percolation and filtering that occurs when surface water drains down through stone and earth.

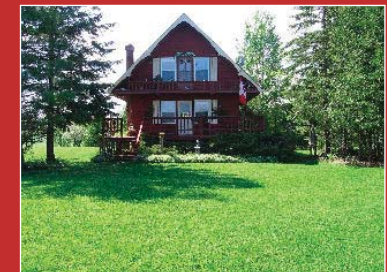
According to Conboy, septic system deficiencies are an enormous problem with reference to well contamination. "Out of sight, out of mind" applies to septic systems and wells; we tend to neglect both. Most septic tanks should be pumped every three to five years, depending on how many people use the system regularly. Watch for signs of possible problems at septic beds, including odours, and wet or soggy areas over the leaching bed. If a septic system is not working the way it should, septic effluent percolates down to the water table. It could then be pumped up into your drinking water! A lack of maintenance of your well or your septic will put the health of your family at risk.

Abandoned wells are a big problem in Ontario. The Ontario Ground Water Association estimates that there are more than 1.5 million private wells in Ontario that require decommissioning. Many property owners are unaware of a second or even third well on their property. If a home is older than 50 years, there is a high probability that a second well is on the site. In addition to being a falling hazard, abandoned wells are a highway for contaminants to enter the water table. Ontario wells that are not maintained for use—and those that are contaminated, salty or gassy—are legally required to be decommissioned. The decommissioning process includes disinfecting the well, installing filtering material where the water is, and then filling the well to near the top with impermeable material—material through which water will not flow, so contaminants will not infiltrate into the water table. Again, decommissioning should be carried out by a licensed well technician.

It's understandable that some well owners fear significant expense if their well and septic systems were to be inspected, but being a proactive, aware and responsible well and septic owner will help keep your family safe, and help protect our water table at the same time. **OH**

Andrew Christie is a Civil Engineering Technologist and owner of Safehomes Canada.

BEAVER VALLEY WINTER GETAWAY



**ASKING PRICE: \$269,900
SOLD FOR: \$259,000**

It turned out to be the perfect year to buy a home near the Beaver Valley Ski club for Julie and Brendan Lane.

A late start to the ski season gave the Lanes time to concentrate on renovating their newly purchased chalet near Eugenia.

The Lanes, who have three children, aged 16, 14 and 10, joined the ski club two years ago. They rented for a season while they searched for a winter home nearby.

They asked Robert Porteous of Royal LePage RCR Realty Brokerage in Flesherton, a fellow ski club member, to help in their search.

"We didn't want a traditional home, we wanted a home that looked like a winter getaway," says Julie Lane.

After a seven-month search, the Lanes found a charming chalet in the trees overlooking the Beaver Valley. It's right around the corner from the ski club.

The Lanes took possession in November and set out right away to finish the basement, adding a bedroom, bathroom and creating a new recreation room for their kids to enjoy.

Lane says working with Porteous was a very good experience.

"He was pleasant and very helpful," says Lane who is now looking ahead to next year and an early start to the ski season. **OH**

—Georgette McCulloch