

BRIEFING

Upcoming workshop to help watershed residents protect their drinking water

Did you know that poorly maintained and constructed water well can put your water supply at risk of contamination?

Have you had your well water tested in the last two years? Have old unused wells on your property been properly sealed and decommissioned? Have you ever shock chlorinated your well? Do you know the age and depth of your well, or how it was constructed?

If you answered *no* to any of these questions, your groundwater supplies could be at risk. As a landowner, you're responsible for looking after the water wells on your property. Despite the fact that 600,000 rural Albertans rely on groundwater for drinking and household use, few know that proper water well construction, siting, and maintenance can help protect your well from contamination.

The key to ensuring your water is safe and secure is knowing how groundwater works and knowing your well and how to properly maintain it. In order to be sure your water well is safe, you should also know how far your septic system is from your well. Septic tanks should be regularly pumped and inspected. You should also disinfect your well on a regular basis.

It is also important to regularly test and document water quality and quantity in your well. By keeping good records you can see how your water quality and well performance has changed over time. Proper well maintenance and operation can save you costly repairs and ensure your well water yields are sustained over many years.

If you'd like to find out if your groundwater is at risk and what more you can do to protect your well, come to a **free water well management workshop** being hosted by the Pigeon Lake Watershed Association (with technical expertise from Alberta Agriculture and Rural Development, Alberta Environment and Prairie Farm Rehabilitation Administration) on July 5 at the Lakedell Hall. This hands-on workshop is designed to help water well owners better understand and manage their precious groundwater supply.

A misunderstood resource

Despite its importance, many Albertans give little thought to groundwater and where it comes from. It is a common belief that groundwater comes from fast flowing underground rivers and lakes. This is not true. Groundwater is the water that fills the cracks and spaces between soil particles, sand grains and rock. An aquifer is simply a water-bearing zone in the ground where there are interconnected cracks and spaces (e.g. sand, gravel or fractured shale) that allow groundwater to move freely.

It is also a little known fact that groundwater and surface water are connected. In some areas groundwater can be a source of recharge for streams, lakes and dugouts. In other areas water from rivers, lakes, snowmelt and rain seeps into the ground, where it trickles downward until it reaches the water table. The water table is the point at which the ground is completely saturated with water. Below the water table, the spaces between every grain of soil and rock are completely filled with water.

Water, the great 'dissolver'

Water is the world's greatest solvent: it tries to dissolve everything it comes in contact with. This means manure, pesticides and fertilizers over-applied to lawns and fields can be carried by rain or snowmelt seeping down through the soil to the water table. Sewage from poorly maintained septic systems or spilled and improperly disposed-of chemicals can similarly seep into groundwater.

If you have highly permeable soils on your land, such as sand or gravel, your groundwater could be at higher risk, because these soils are poor filters. Having abandoned or poorly constructed or infrequently maintained wells on your property is even more risky because such structures could be draining surface water and everything it carries *directly* into your aquifer.

If you'd like to find out if your groundwater is at risk and what you can do protect your well sign up for a water well management workshop by calling Alberta Environment at 403.340.7052 (toll free dial 310.000).

For more details on this topic contact the following:

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