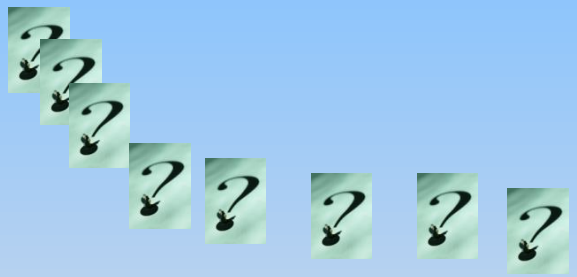
If you were to ask
two simple questions

Where does my drinking
water come from,
and is it safe to drink ?



But .... Who would you ask?

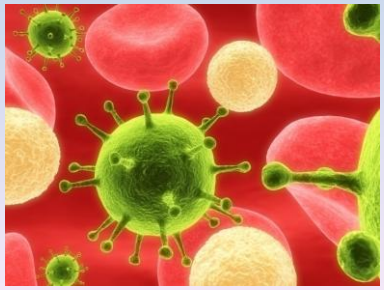
Why would you bother to ask ?

Drinking water can be almost pure if it is obtained from a pristine, drinking water source.

Because impure water is highly complex no two samples of water are identical

However, if the **drinking water source** has human or natural contamination, there is a risk to the water quality.

Testing small water samples from a few specific locations does not necessarily provide an accurate evaluation of quality in a large water system

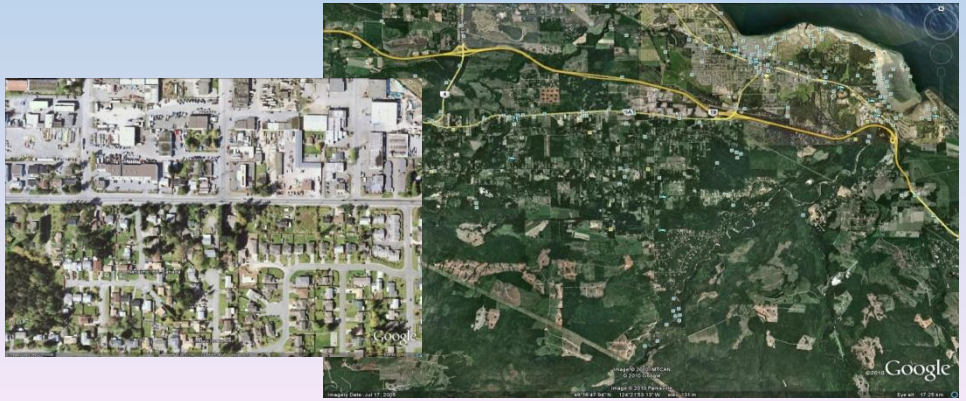


Where does your water come from ?

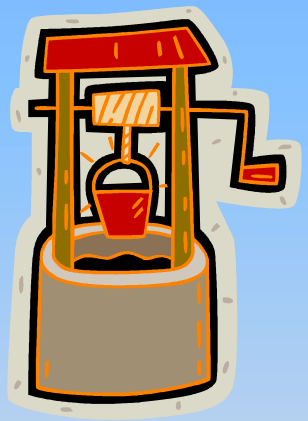
Determining the **source of your drinking water** is fundamental to understanding the quality of the water you drink.

The water from your tap originates as precipitation falling on the earth

But .... Where on earth does your drinking water fall ?



The area of land (**drinking water source**) that supplies your water can be very large and include a wide range of land uses. Almost every type of land use, will affect the quality and /or quantity of the water, in some way.



Single well

Determining the size and location of your drinking water source depends on many factors including the type of water **supply collection system**:

Well well well

Multiple wells

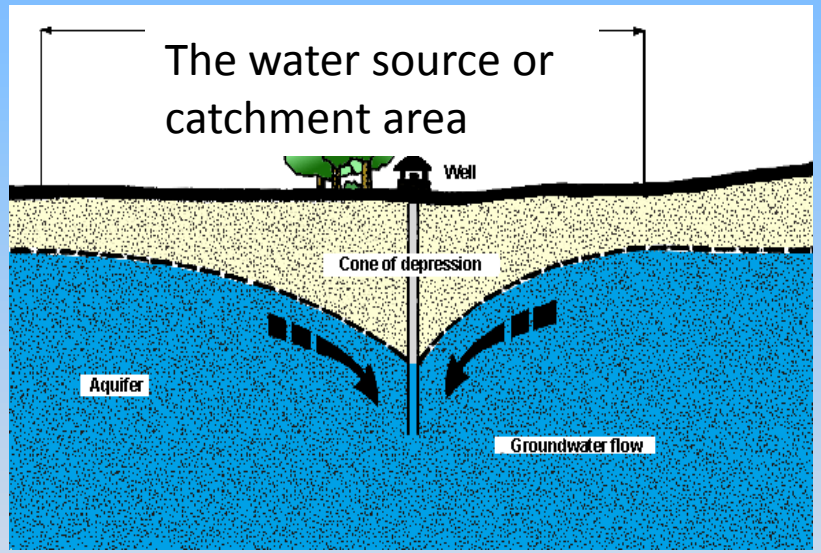
Surface water intake

Or a combination of well/s and surface intake

Does your drinking water come from a well ?

Water wells are dug or drilled into an aquifer or groundwater, many wells receive water directly from surface water.

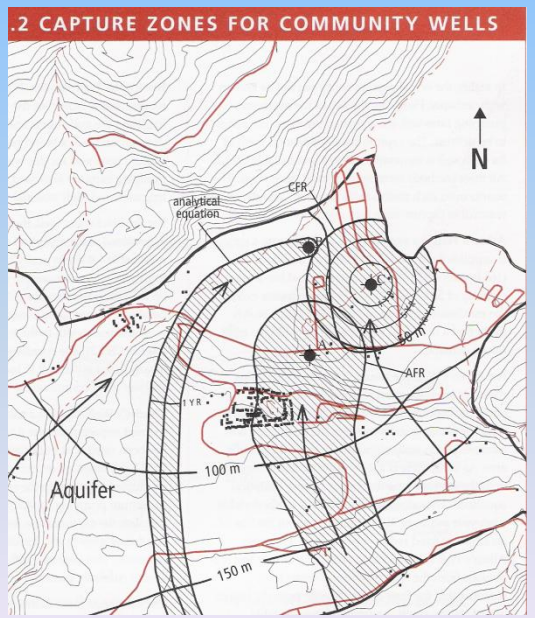
The amount of land area considered as the **water source** of your well, will range from about 100 hectares to many square kilometres, particularly if the well is recharged with surface water.



Well field catchment area

Where is your well/s located ?

Could your drinking water well be located on this map ?



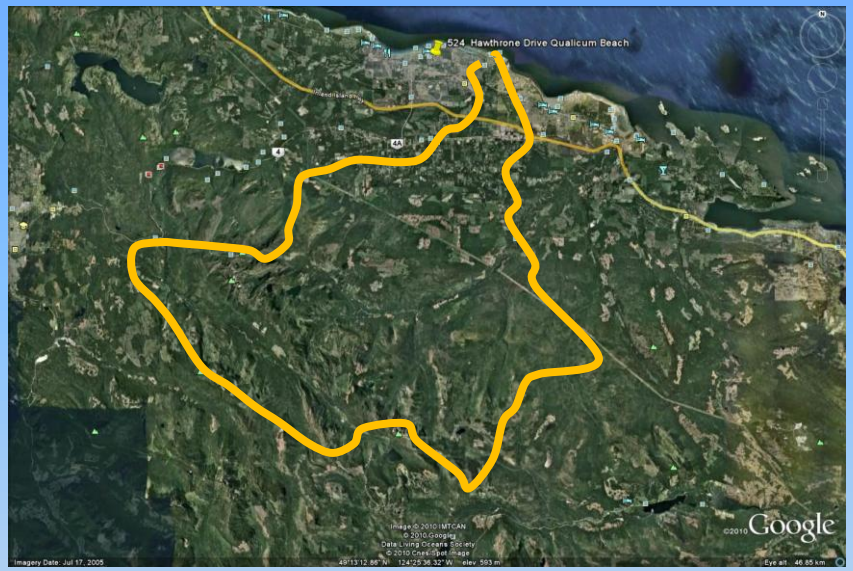
Where is the boundary of the well catchment area ?

This catchment area delineation is fundamental to drinking water source protection and management

Is your drinking water collection system a surface water intake, from a river, lake, or perhaps a surface water supplied well ?

Now your drinking water source is the entire watershed above or upstream of the catchment system

This area can encompass hundreds of square kilometres and multiple land uses



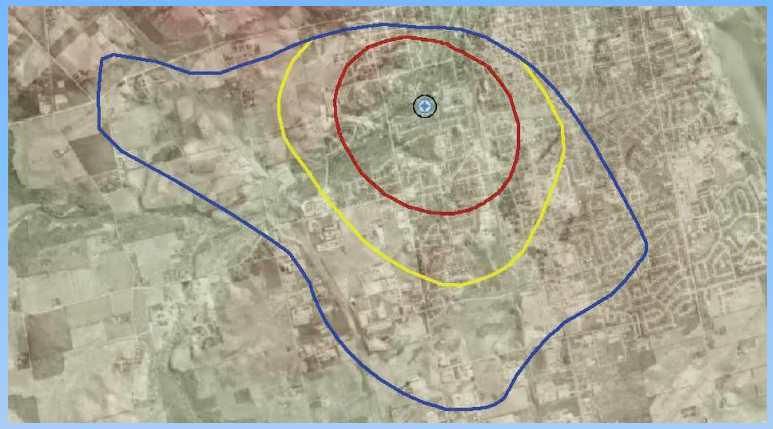
Is the drinking water supply watershed protected ?

If it is not, you should ask more questions

Examples of the distance, drinking water source boundaries can extend from a surface intake or well

Location of the water system collection point

300 meter minimum radius from any well



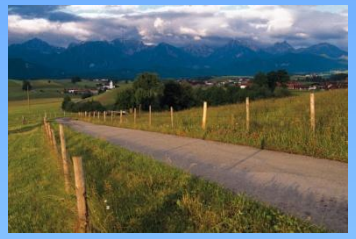
5 + kilometres from a high production well

15 + kilometres from a well supplied by surface water

25 + kilometres from a surface water intake

The land uses, topography and geology within the water source area, will determine the quality and quantity of the raw water.

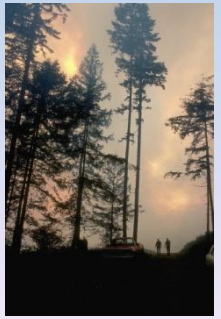


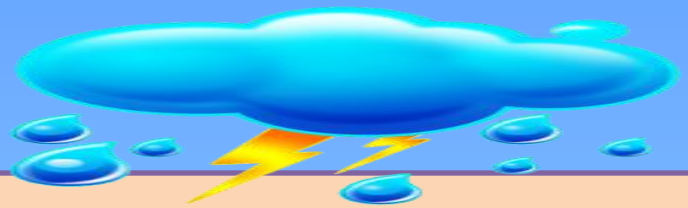






Could any of the following land uses be located in your drinking water source



Animal waste storage

Automobile wrecking, machinery etc.

Aggregate extraction or mining

Graveyards

Municipal Landfills

Potentially toxic material storage

Industrial commercial & home based businesses

Major transportation systems

Saltwater intrusion areas

Wastewater disposal- septic systems

Sewage sludge distribution

Non-point contamination

Urban run-off

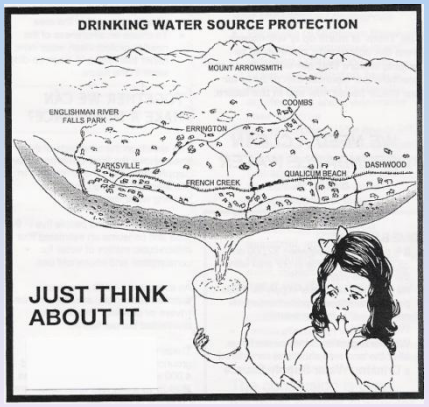
Water is a universal solvent, and can contain traces of thousands of natural and man made substances. As water passes over the land surface it can pick up small amount of almost any substance it contacts.

Who do you ask, questions about your drinking water source ?

If you receive your piped in drinking water from a supplier or purveyor, you should have the contact information on a billing notice.

Information about supply wells, intake locations, catchment areas and drinking water supply watersheds may be available from your supplier or a local historian.

Investigation has revealed that many (most) drinking water purveyors do not know the actual drinking water source for the water they distribute.



Many jurisdictions and levels of government around the world are implementing 'Drinking Water Source Protection' regulations and legislation.

Action Plan for Safe Drinking Water in British Columbia

Ministry of Health Planning
Ministry of Health Services

New Protection - from Source to Tap

China Issues Drinking Water Source Protection Plan
June 21, 2010 | Print | Email | Comments | Category: Environment

Ontario

Please consider enquiring about your drinking water

Identify your supplier and emergency contact information?

Are you supplied from a well, multiple wells, surface water or a combination?

Where is your well/s or intake located ?

Where is the boundary of your drinking water source ?

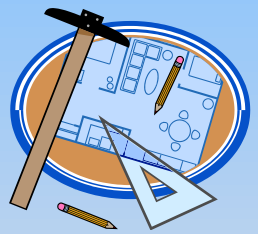
Are there any contamination risks in the drinking water source ?

How is your drinking water treated or disinfected ?

The good news is

There are many ways to help protect your drinking water source.

Contamination risk reduction measures



Regulate land uses that pose a risk

Proactive land planning to maintain water quality and quantity

Enhanced natural storm water catchment and retention features

Purchase or expropriate land to protect the water source

Become informed

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