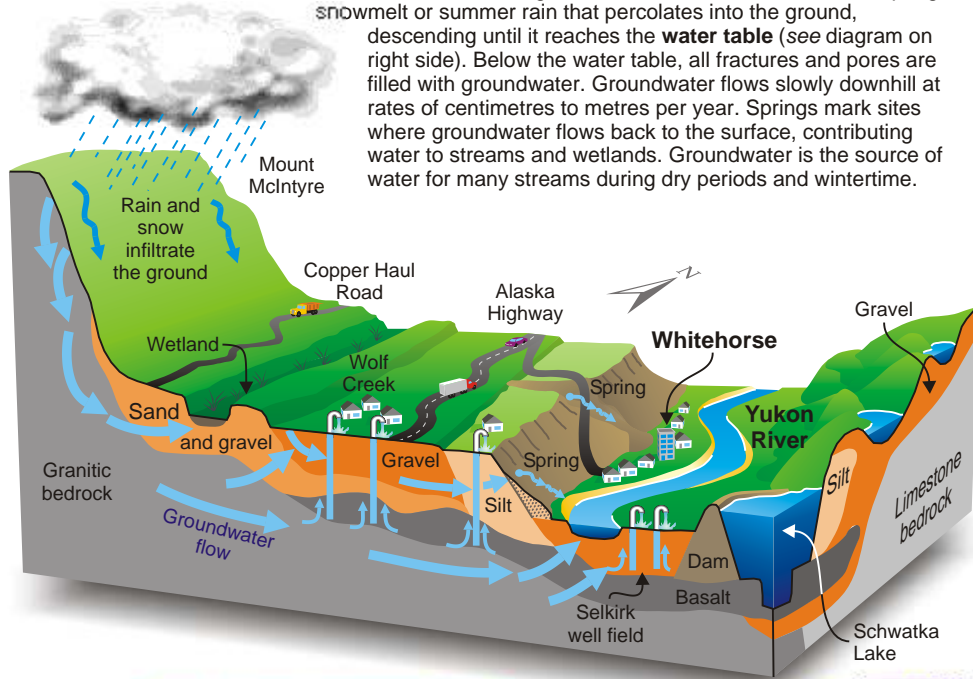
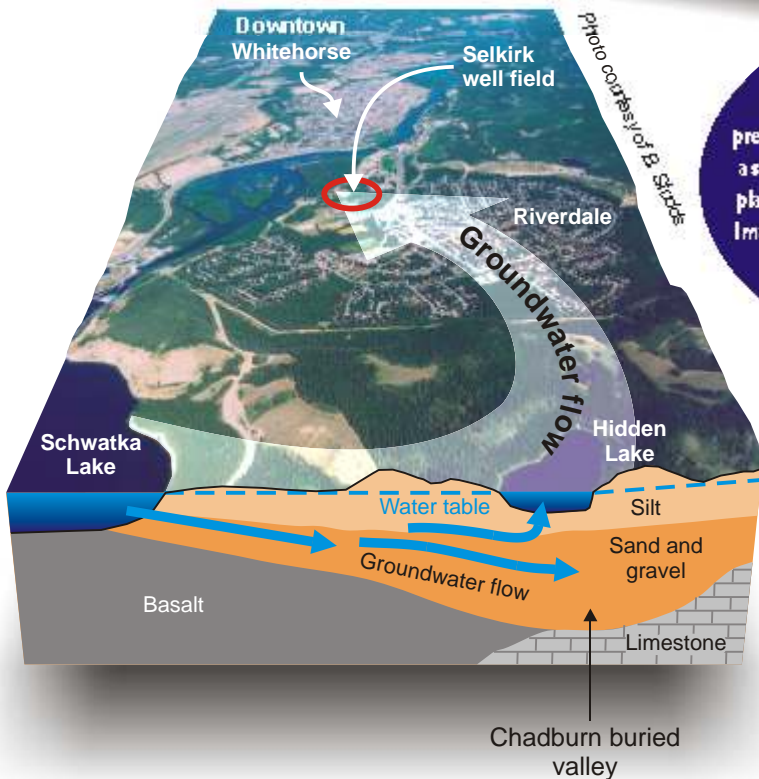
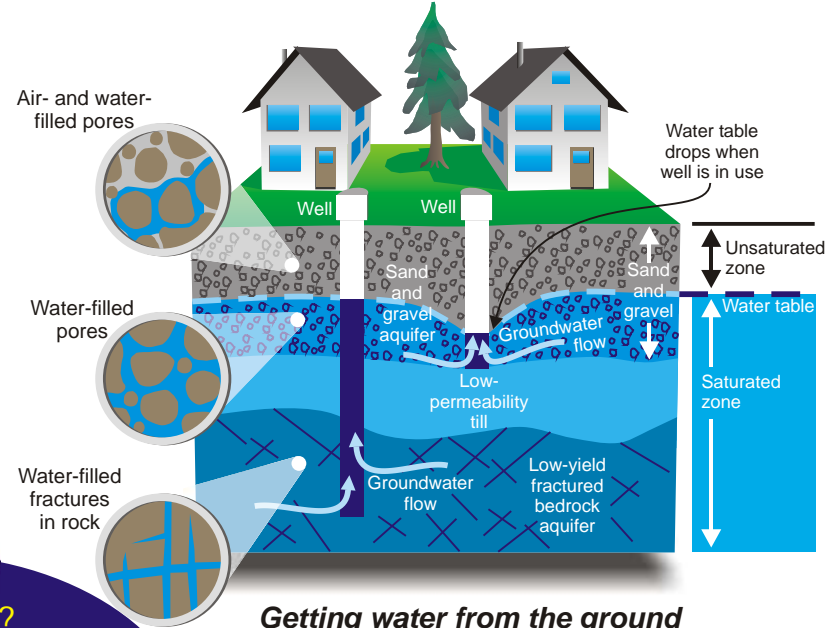


What goes down may come back up!

Water that resides in the spaces between grains in sand and gravel, and in fractures in rocks, is called groundwater. Groundwater starts as spring snowmelt or summer rain that percolates into the ground, descending until it reaches the **water table** (see diagram on right side). Below the water table, all fractures and pores are filled with groundwater. Groundwater flows slowly downhill at rates of centimetres to metres per year. Springs mark sites where groundwater flows back to the surface, contributing water to streams and wetlands. Groundwater is the source of water for many streams during dry periods and wintertime.



GROUNDWATER: Our vital underground plumbing



Did you know?

Whitehorse receives an average of 260 mm of precipitation per year. About 235 mm leave the area as stream runoff, evaporation, and transpiration by plants. The remaining 25 mm infiltrate the ground. Imagine – only an inch of water per year is added to our groundwater supply! We must be careful that we do not deplete this precious resource.

Careful!

Drinking water below

Groundwater is less vulnerable to contamination than surface water, but is very difficult to clean once it is contaminated. A spill of a harmful substance such as gasoline or heating oil could contaminate your drinking water. We must be careful!

The Selkirk well field, in a greenbelt area of Riverdale, taps a water-bearing sand and gravel aquifer that fills an ancient buried valley. Groundwater percolates slowly northward from Schwatka and Hidden lakes to reach the well field.

Getting water from the ground

Many rural residents in the Whitehorse valley obtain their water from wells. Wells must extend below the water table to water-bearing layers (**aquifers**). Sand and gravel layers are often excellent aquifers. Buried basalt has abundant fractures and porous zones, making it a good aquifer. In contrast, granite contains no pore space and few fractures, making it a typically poor aquifer.



The filling of Schwatka Lake caused a rise in the local water table, which raised levels in nearby lakes. These

C. Roots