



Frequently asked questions about groundwater

What is groundwater and why is it important?

Groundwater is water stored underground, in spaces within soil, sand and rock. Groundwater between 50 and 200m deep is a source of water for our native plants and wildlife. It is also a valuable resource for communities, agriculture and industry.

What is an aquifer?

An aquifer is an underground area of rock and soil that can store and pass on groundwater.

What chemicals do you normally find in groundwater?

Some natural chemicals are found in groundwater. These include salts, metals, methane gas, hydrocarbons (compounds of hydrogen and carbon) and radionuclides (naturally radioactive chemicals that break down to slowly release some radiation). These chemicals must be in low concentrations for agriculture and even lower for drinking water.

What is recharge?

Groundwater recharge is when water moves from the earth's surface underground into the aquifer.

What are environmental tracers?

Environmental tracers are natural chemicals in the groundwater that change with time. Scientists can use them to find out how old water is and where it came from. These tracers are easy to measure and include tritium, carbon-14 and helium. They can show if groundwater is young (>50 years old), old (1000-10,000 years), or very old (>20,000 years). The age is important when studying groundwater recharge.