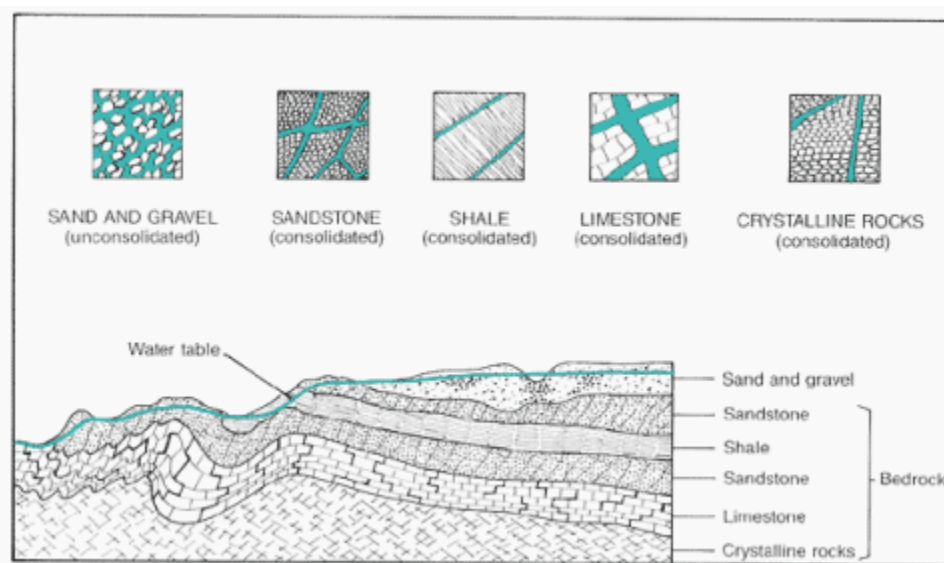


AQUIFERS COMPONENTS



The aquifers exist within a variety of materials such as river gravels, silt, limestone, sandstone slightly cemented porous, sandy beach, dunes, clay and volcanic formations.

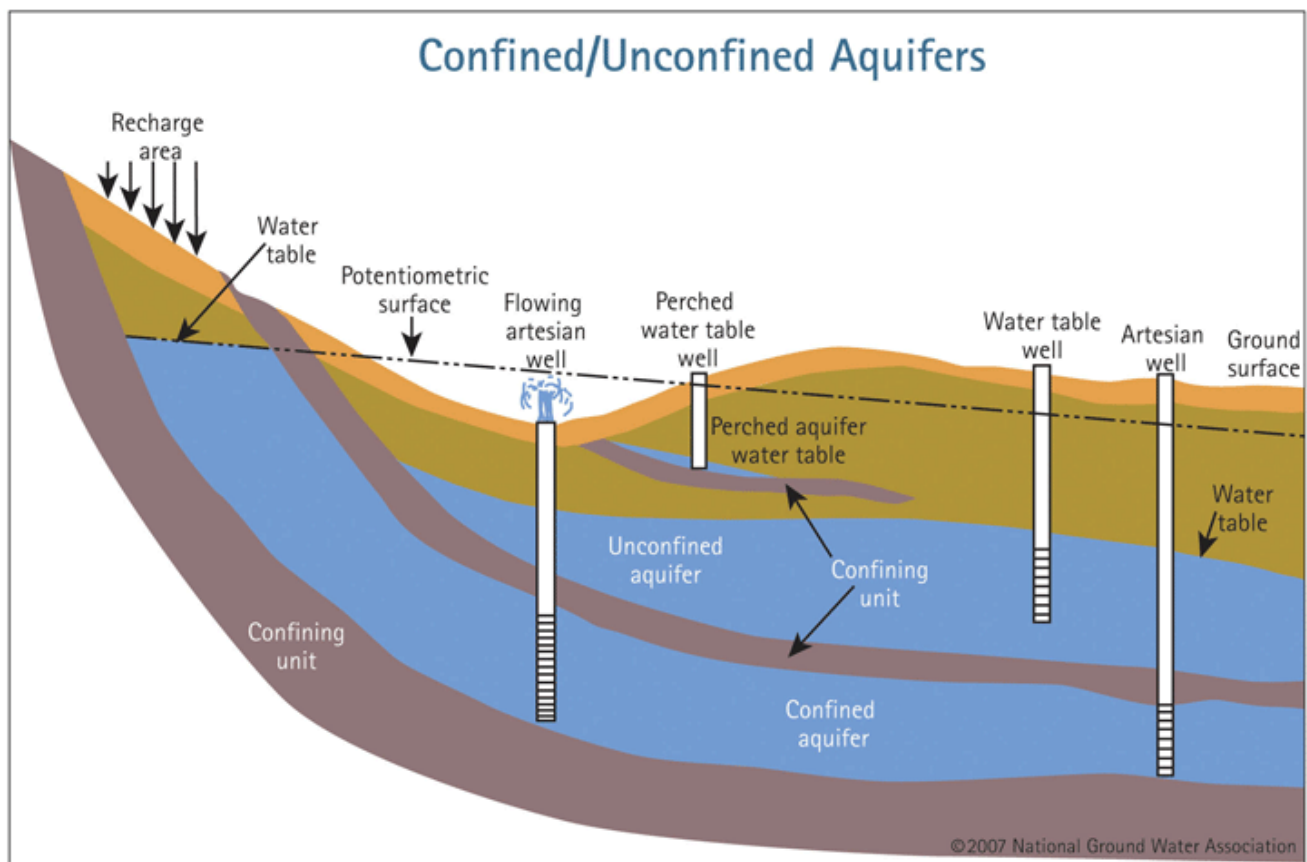


The parts or components of an aquifer are:

The “aeration”, “vadose” or “unsaturated” zone is the space between the water table and the surface. In this zone the water flow is downward and circulation occurs through the action of gravity through the pores and cracks in the ground.

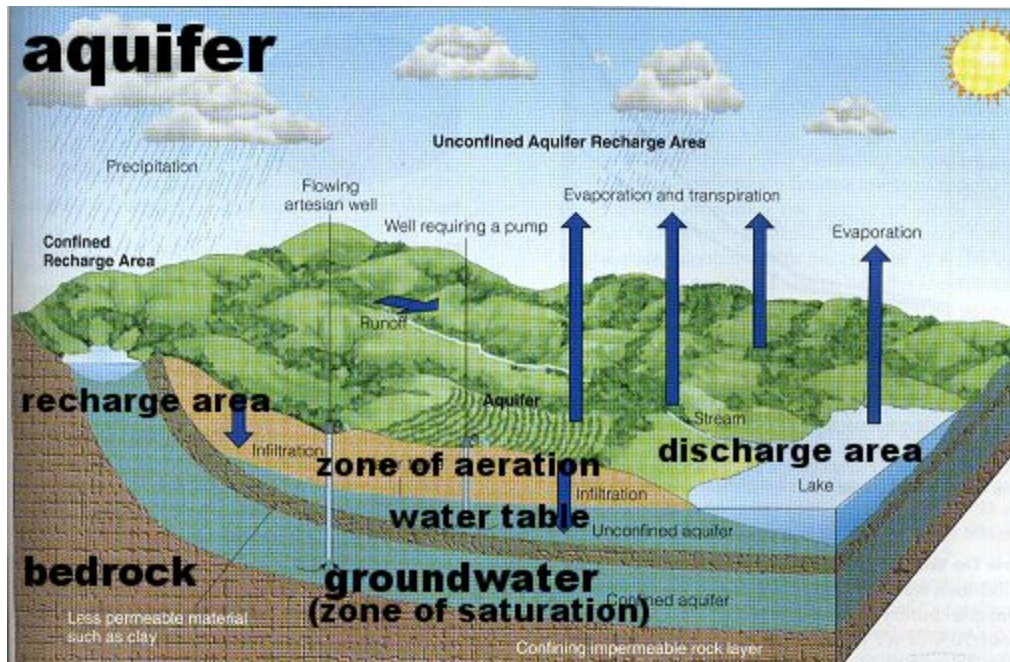
The groundwater level is known as “water table”.

The height to which the water is located is called “water table” and it might be at different depths in the same place depending on the physical properties of the rock, the pressure and the weather of the place (from a few centimeters to several meters below the surface). It is not horizontal but will have a slope following the action of gravity towards the ocean. The water table will go down when an aquifer is not recharged and will rise in times of rainfall.



The “saturation zone” is located above the impermeable layer, where water completely fills the pores of the rocks.

The lower rock layer called “wall” is impervious to water accumulation.



There can also be identified three areas depending on how aquifers are recharged by rainfall: the “recharge area” (where precipitation infiltrates), the “motion area” and the “discharge area” (a spring, a river or a discharge into the sea).

The temperature in aquifers depend largely on the physico-chemical characteristics of the rocks, porosity, thermal conductivity, and capacity with respect to the latitude of the Earth’s electromagnetic equator.

At 1000 meters deep the temperatures of water in aquifers may vary between 30 ° C (86°F) to even 200 ° C (392 °F). Aquifers can even get even at depths of 10,000 feet where there will be pressures up to 250 atmospheres (3,600 psi) in a supercritical fluid at temperatures above 380 ° C (710°F).

Source : <http://www.artinaid.com/2013/04/aquifers-components/>