

## Section I

### Pound Ridge Drinking Water

Groundwater is the source of drinking water in Pound Ridge. Our ground water is of high quality and plentiful. Wells that supply our water are drilled into aquifers located within the rock formations beneath Pound Ridge. An aquifer is an underground geological formation that can store and yield water. In Pound Ridge, our aquifers are mainly bedrock aquifers where the water is found in cracks and joints in the permeable rock. Permeable means that liquids or gases can move through the rock. The top of the water level in an aquifer is called the water table.

An aquifer fills with water from rain or melted snow that drains into the ground. In some areas, water passes through soil on top of the aquifer; in others, it enters through joints and cracks in rocks. The water moves downward until it meets less permeable rock. Figure 1.1 shows a cross section of a geological formation with two aquifers separated by a rock formation.

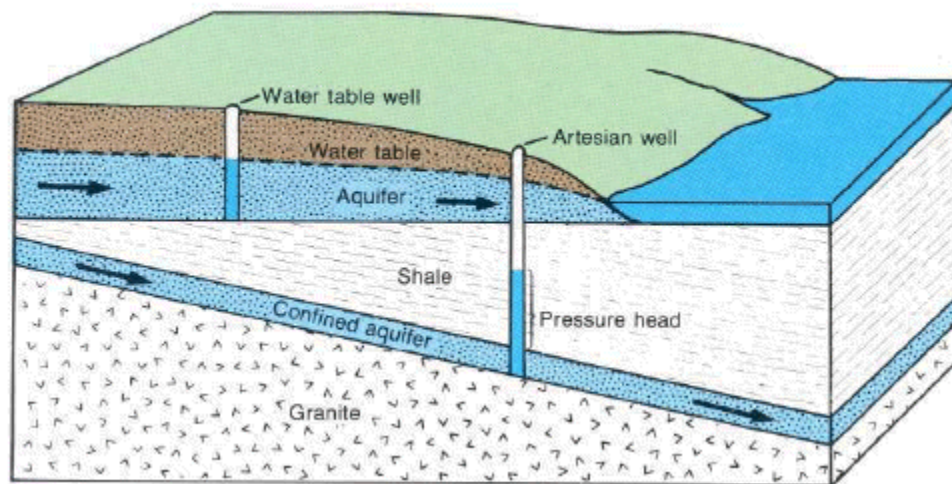


Figure 1.1. Cross section of a geological formation with bedrock and aquifers from [www.USGS.gov](http://www.USGS.gov).

Aquifers act as reservoirs for groundwater. Wells drilled into aquifers provide water for drinking, agriculture and industrial uses. Aquifers can dry up when people drain them faster than nature can refill them. Because aquifers fill with water that drains from the surface of the earth, they can be contaminated by any chemical or toxic substance found on the surface. ( [http://education.nationalgeographic.com/education/encyclopedia/aquifer/?ar\\_a=1](http://education.nationalgeographic.com/education/encyclopedia/aquifer/?ar_a=1) )

One of the main, permeable, water bearing rock formations in Pound Ridge is the Inwood Marble. More information about the Inwood marble and other aquifers in Pound Ridge is available from the Westchester County Department of Planning, the New York State Department of Environmental Conservation, the PRUP Study (1979), and the town's Masterplan. The last two documents are available on the Town's web site.

Appendix E Land Use Through Ecology  
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Section II