



Meet the Scientist!



<http://www.naturalinquirer.org>

A hydrogeologist is a person who studies the ways that groundwater (hydro) moves through the soil and rock of the earth (geology). Hydrogeologists evaluate the quantity, quality, reliability, and sustainability of groundwater.

Joe Gurrieri Hydrogeologist

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Important Scientist Characteristics:

A hydrogeologist must have scientific knowledge across a range of disciplines, the ability to visualize geology and conceptualize groundwater flow in three dimensions, and the skill of drawing conclusions from incomplete information.

Example of a simple research question I have

tried to answer: How fast does groundwater move through the ground, and what flow path does it take on its journey? I have been asked to answer this question many times for different reasons including tracking the movement of pollutants and determining groundwater connections to surface water.

Technology or equipment used in research:

My hiking boots are the most important piece of equipment. A geoscientist needs to spend time in the field to be able to understand how natural systems operate. Wells are also important. Wells are used to sample groundwater quality and measure the depth to the water table.

Most Exciting Discovery

Large mines are my favorite projects to work on. Mining huge holes and tunnels in the ground can severely reduce or pollute groundwater in aquifers. Analyzing the effects of mining on groundwater dependent ecosystems like springs, streams, lakes, and wetlands is very challenging and rewarding.

When did you know you wanted to be a scientist?

When I was a young boy, I watched TV shows about scientists doing all kinds of exciting things like going to exotic places, climbing mountains, and scuba diving. I remember saying to myself, "I want to be a scientist when I grow up."

<https://www.fs.fed.us/geology/groundwater.php>