

## **Personality and Human Characteristics of Aquifers**

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*Listen carefully to what the aquifer is trying to tell you. Not all is learned in books and with computer programs. You must spend time in the field to understand how and why an aquifer works. – Editor*

Aquifers like to be treated with respect. If they are abused, they can be contrary, and the ground water can be spiteful. They would admit these charges if they were allowed to speak.

Most people do not think seriously of the valuable ground water and water-bearing formation that is in the ground beneath their feet. Aquifers have a range of personalities and characteristics. They can be kindly or unkindly. What is behind the hostility? Let us have a conversation with ground water and aquifers.

Humans argue about good and bad features of ground water and the behavior of aquifers. Points of view differ widely while total understanding and communication are less than perfect. The aquifers want to express themselves, but they are left out of the discussions and communications.

Aquifers are talking but do we listen?

Is there something we are missing?

The personality and human characteristics of aquifers can be expressed usefully in metaphorical language. Ascribing human feelings and sensibilities to nonhuman beings, objects, or phenomena is known as anthropomorphism. This approach tends to provide a different perspective and represents a useful picture language. For example, the well beckons and invites surrounding relaxed ground water to its pompous pump.

Aquifers try to serve humans in helpful ways, but these water-bearing systems can be undesirably stubborn, resulting in problems that collectively run into billions of dollars. Aquifers can readily resist some human actions. An attitude or light-hearted philosophy that maintains that inanimate objects are hostile to humans is called resistentialism. It involves seemingly spiteful behavior from these objects or phenomena. You drop the toast and it hits the floor jelly side down. Humans feed aquifers with wastes here and there, and in return the aquifers give contaminated water back in dispersed form that is difficult and costly to manage. In some cases, over-pumped aquifers give brackish or undesirable water of poor quality to well supplies. Ground water can bite back in many ways.

As an aquifer, I abide by nature's wishes and not by human wishes and expectations. Government agencies try to protect me, of course. Yet, I developed my characteristics and special patterns long before the regulatory agencies were formed. They try to make me behave in regimented ways that they have devised. I have my own creed and will

continue to behave as nature has taught me, regardless of human demands. Humans should try to understand better how I operate and then apply proper rules-of-thumb procedures and generalizations that apply.

Like the human body, I have many parts, features, and characteristics that act together in hidden ways. The groundwater specialists probe and examine me with test wells and monitoring programs. In similar ways to blood pressure tests, they may check my inner system and patterns of fluid flow. In some cases the costs are very high. I do not try to simplify things. I tease humans with various complexities and drive mathematical-oriented specialists wild, but they pretend to make me simple and play with me in idealized ways. I am never perfect in all respects. I have as many flaws and complex side-effects as many human medicines.

Humans appreciate my great usefulness in providing potable water to wells for many people and my ability to furnish water to creeks and rivers to maintain surface water supplies. Yet, when abused I can fight back and be spiteful. As with the human body, I can get sick and weak. Already there is a wide variety of problems which shall be even more critical in the years ahead. We have had communication problems in the past, but I am willing to talk with you.

I am not easily adaptable to human regulations but I will behave with my own deliberations. (The aquifer creed)

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