

Source and Supply

The aquifer that is our source of water is roughly 100 feet beneath the surface of the ground at our pump site. Our registered hydrologist from Farnsworth & Wyle explained that the water table is discontinuous (not touching or adjacent) in the Indian Creek area.

It is not uniform in that we are on a boundary area adjacent to an ancient prehistoric ice age riverbed to our northwest. The result is that six test holes drilled came up with much different results. The strongest source by far is where our current well is drilled. We would have preferred it to be adjacent to the tower, but the test hole there was deeper and not as strong. The second strongest source is at the extreme southwest corner of the common area near the road to Towanda. Its problem is that it is very shallow (about 40 feet) and the engineers felt there was a risk of the water being polluted by chemical runoff from farmers' fields in that vicinity. All test holes came up with various sand, gravel, and rock formations at different levels.

The water table at our well is about 90 feet down and the hole goes down another 30 feet or so. It is an extremely strong source as indicated by what is called the cone of depression test. In this test the static water level is measured before pumping. Then the pump is started at a given pumping rate and for a specified period of time. As the pumping stops, the static water level is again measured. The difference in the readings is a measure of how fast the water is being withdrawn from the aquifer. The less difference in the readings, the stronger the supply. Our well measured a cone of depression of four feet. A satisfactory reading for our system would be 20 feet.