

Summit County, Utah Water Systems

An in Depth Analysis of The Summit County, Utah Water Systems, Wells, Groundwater, Contamination and Drought.

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Ground Material Composition

Whether or not an aquifer exists underground has much to do with the geological composition of the material which the ground is comprised of. When large caverns of water (large aquifers) are absent, the only way to find ground water is to search for small deposits. This means finding bedrock fractures deep underground, or deposited of specific material types which hold water well. For example, the amount of water that can be held in a fractured deposit of lime stone is far less than the amount which could be held in the same sized deposit of unconsolidated loose material. This is largely due to the density in which the material is packed together and how much free space is allowed within the material. The fractured lime stone only allows space for water in open cracks when unconsolidated material like sand or gravel allows large amounts of water. Unfortunately Summit County sits on top of an extremely large quantity of consolidated material mostly comprised of sandstone and limestone. This forces Summit County residents to drill a large number of low production wells which tap into bedrock cracks and small deposits of unconsolidated material.

USGS Summit County