

Growth vs. Grunge

Growth and Grunge: can they be compatible? Septic tanks in the mountains are increasing; some are very old and their existing leach fields are in need of replacement.. Over 15,000 homes are on septic tanks in the mountain areas. State wide over 25% of homes use septic tanks as their means of removing sewage.

Ground water is affected by the use of septic tanks. If the flow of sewage from the house doesn't percolate through the leach field; that is if the leach field is clogged or filled up the water goes directly to ground water via the soil and rock fractures and then to the well water. Septics depend on soil absorption and in wet rainy years, poor leach fields will fill up causing further pollution from the nitrates and phosphates

Increasingly, nitrates and phosphates in our ground water cause our wells to become contaminated. Nitrates are a cause of cancer and when in the case of one mountain area of shallow water wells three people with houses next to each other die of cancer it sent up an alarm signal. As a result, the people still living in those houses use bottled water.

These types of measures are being addressed by experts such as Ed Church, a civil engineer in the Golden area whose firm, E.O.Church, works exclusively with sanitation problems. With offices in Evergreen, Denver and Castle Rock they process over 1000 projects annually.. He currently consults with Jefferson County and assists communities such as the Indian Hills area in planning for waste water treatment problems.

His advice to Jefferson County is to adopt laws that require septic tanks to be licensed and after 25 years, a mandatory new system would have to be installed. Existing septic tanks would have to show proof of being pumped every five years. He realizes these laws may be unpopular with residents currently on septic tanks but with increasing growth to protect the groundwater for all residents, he believes it's a valid requirement.

He is currently working with Indian Hills residents who are looking for solutions to the nitrate contamination of their wells. He believes that one compartment tanks installed prior to 1992 that are 1000 gallons or less are not effective. Two compartment tanks provide better cleaning of the effluent into the leach fields. His firm installs new types of tanks which use a trickling filter in the 2nd chamber of the tank and a treatment of anaerobic and aerobic bacteria.

Church believes they are much better biochemically and will extend the life of the drain field for many years. The high tech system has recently been approved by Jefferson County to be used in the Indian Hills area. This type of septic tank is priced almost twice that of the normal tanks but according to Jerry Schulte, director of the Evergreen Water and Sanitation District they are the "wave of the future".

What can people do who are on septic tanks to ensure that their wells are safe and their septic systems aren't polluting the groundwater? One recommendation by Jerry Schlute, is to have your well water tested. Over 10 mg per liter of nitrates are toxic to babies Ed Church further recommends a maintenance schedule of regular pumping of the septic every 2 years and as mentioned earlier a mandatory pumping every 5 years.

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