

# QUAIL > CREEK M.U.D. A RELIABLE SOURCE



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## **Drinking Water Facts**

### Interesting Facts About Your Drinking Water Supply

#### Groundwater versus Surface Water

At Quail Creek MUD our drinking water comes from three wells that are drilled into the Gulf Coast Aquifer to a depth of approximately 600 feet below the land surface.

Since your drinking water comes from water wells, it is considered groundwater. Groundwater is very different from surface water, (which is water from a lake, river or stream). Because groundwater is different from surface water it is treated and regulated differently. Although both water supply sources require disinfection with a disinfection agent like chlorine, groundwater typically requires much less treatment than surface water.

#### Fluoride in Drinking Water

Water fluoridation began in some parts of the United States in 1945, after scientists noted that people living in areas with higher water fluoride levels had fewer cavities. Starting in 1962, the United States Public Health Service (PHS) recommended that public water supplies contain fluoride to help prevent tooth decay. At that time, the United States Public Health Service (PHS) recommended that public water supplies contain between 0.7 and 1.2 milligrams of fluoride per liter (mg/L) of drinking water to help prevent tooth decay. This recommendation was updated in 2015 to a fluoride level of 0.7 mg/L. The naturally occurring fluoride in your water supply is 0.61 mg/l. This is because groundwater does not typically have silt, mud, decaying plants, animal life, protozoa, or heavy levels of bacteria in it like many surface water supplies do.

Here at Quail Creek MUD, the only treatment required to make the water safe to drink is disinfection with chlorine to kill any bacteria that may be present. In addition to adding enough chlorine to kill any bacteria that may be present in the water, we add enough extra, or residual, chlorine to keep it disinfected all the way through our network of underground pipes to the point where it flows into your household plumbing.

Many decades after fluoride was first added to drinking water in some parts of the United States, there is still controversy about the possible health effects of drinking water fluoridation. Many people have strong views either for or against water fluoridation. Their concerns are based on everything from legitimate scientific research, to freedom of choice issues, to government conspiracy theories.

Fluoride is now used in the public drinking water supplied to about 3 out of 4 Americans. The decision to add fluoride to drinking water is made at the state or local level.

QUAIL CREEK MUD DOES <u>NOT</u> ADD FLUORIDE TO ITS WATER SUPPLY TO PROMOTE DENTAL HEALTH LIKE MANY SYSTEMS DO. THE GROUNDWATER FROM OUR WELLS ALREADY HAS AN OPTIMAL LEVEL OF NATURALLY OCCURRING FLUORIDE IN IT.

#### Arsenic

As you may know, your water supply here at Quail Creek MUD does, like most groundwater sources, have some arsenic in it. Arsenic is a naturally occurring element in rocks, soils, and the waters in contact with them, and its contamination of groundwater is largely the result of minerals dissolving from weathered rocks and soils. Groundwater arsenic contamination is widespread in Texas, especially in South Texas and the Panhandle.

For many years, the regulatory limit for arsenic in public drinking water supplies was set at 50 parts per billion. Earlier research has found that people who drink water containing arsenic levels of 50 parts per billion for 15 to 20 years have about a 1 in 100 risk of dying from lung or bladder cancer, and smokers have twice that risk. In

#### Water Pressure

A good, reliable source of water is essential for proper hygiene and firefighting. Public water supplies in Texas are required by state law to maintain a minimum water pressure throughout the water distribution system during normal operating conditions. Under the Rules and Regulations for Public Water Supply Systems Quail Creek MUD has the following responsibilities for maintaining water pressure:

- Maintain minimum operating pressure of 35 pounds per square inch (psi) throughout the water distribution system.
- Maintain minimum operating pressure of 20 psi under fire flow conditions.

#### Social Media

Social Media sites like Facebook and Next-door Neighbor have become very popular and are often effective means of communication. On the other hand, however, rumors and misinformation can spread very rapidly over these sites. Many times, these rumors get out of control and become widespread before the utility even knows there is a problem. Once the rumors are out there, it is very difficult to dispel them and get the accurate information out to the public. 2001, EPA lowered the arsenic maximum contaminant level (MCL) for drinking water to 10 parts per billion, based on studies that suggested cancer risks decrease at lower levels. Drinking water suppliers had to comply with the new standard by 2006.

The arsenic levels in your water supply range from 7.2 to 13.4 parts per billion (based on sampling from 2017). Quail Creek MUD effectively manages the arsenic levels in your water supply by blending the amount of water produced from each of its three water wells so that the water consistently complies with the regulatory requirements. We are also taking additional steps to rehabilitate one of our wells to further reduce the arsenic concentration in your water supply.

At Quail Creek MUD, our pumps are set to come on when the pressure in the system reaches 45 psi and to cut off when the pressure in the system reaches 65 psi.

Many times, low pressure at a residence may be caused by household plumbing issues or point of use treatment units like water softeners. Quail Creek MUD has no control over pressure problems that arise on the customer's side of the meter.

If you experience low pressure at your residence, please call the Quail Creek MUD office and report it. We will be happy to come out and check your pressure for you and try to identify the cause of the problem.

Additionally, since many individuals post about a problem with their water supply rather than reporting it to the water supplier, the water supplier does not know about the problem and therefore, cannot address the problem in a timely manner.

If you experience a problem with your water supply, please call the Quail Creek MUD office and report it as soon as possible so we can adequately address the issue for you.