

Barton Springs Edwards Aquifer

# **Rainwater Harvesting**

It's important to understand and check the quality of water your well is producing. At minimum, it's recommended to test well water <u>annually</u> for E. coli bacteria and nitrate-nitrogen. If your water suddenly has a change in taste or smell, test your water as soon as possible to help identify the cause and solutions to the issue.

While the District hosts well water checkups annually, well owners can get their water tested at any time at the following local labs:

# Edwards Aquifer and Research Data Center

- www.eardc.txst.edu/analytical.html
- (512) 245-2329
- 220 E Sessoms Dr, San Marcos, TX

#### **Aqua-Tech Laboratories**

- www.aqua-techlabs.com
- (512) 301-9559
- 3512 Montopolis Dr Suite A, Austin, TX

#### LCRA Environmental Lab Services

- www.lcra.org/services/els
- (512) 730-6022
- 3505 Montopolis Dr, Austin, TX

#### **Coliform Bacteria**

Coliforms are a family of bacteria that occur naturally in soil, decaying vegetation, and intestines of warm-blooded animals. The presence of coliforms in a water test indicates the potential presence of disease-causing microorganisms in water or that a pathway exists for those bacteria to enter the water (e.g. a hole or opening in the well).

### E. Coli Bacteria

While many coliforms are harmless, fecal coliforms, like E. coli, can make people sick with symptoms including diarrhea, cramps, nausea, headaches, and more. Fecal coliform and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal fecal matter.

#### **Nitrates**

The most common pollutant resulting from man-made sources is nitrate. Because nitrate is colorless, odorless, and tasteless, it's undetectable without testing. Nitrates occur naturally in drinking water; however, if there are high levels, it's likely the result of overuse of chemical fertilizers and/or improper disposal of human and animal wastes. High levels of nitrates aren't likely to affect most adults, but it can be harmful to infants and individuals with anemia, cardiovascular disease, lung disease, and sepsis.

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In limestone aquifers, like the Edwards and Trinity, slightly acidic groundwater slowly dissolves the rock to form karst environments full of caves, crevices, pores, and cracks. The pH of water can contribute to pipe corrosion and change the taste of the water.

# Salinity or Total Dissolved Solids (TDS)

TDS is often referred to as a measure of salinity because the most common mineral in high-TDS water is sodium chloride. Drinking water with more than 500 mg/L total dissolved solids may taste salty and/or stain laundry and plumbing fixtures. Reverse osmosis can be installed to reduce TDS levels.