K-STATE Research and Extension | Meadowlark District

May 24, 2024

Ross Mosteller
District Extension Agent, Livestock & Natural Resources

Know Your Water

Water quantity and quality concerns vary from one corner of the state to the other, but there is no doubt that water is an issue of importance for all Kansans. I'm no water quality specialist, although water is a part of my job responsibilities. Luckily, K-State Research and Extension does have water quality specialist across the state. Today, I'll share some information from these folks on a new publication now available in our Extension Offices and via the online bookstore.

With much of the state facing abnormally dry to drought conditions, along with increasing concerns over water quality, it is essential for citizens to KNOW YOUR WATER. According to the Kansas Department of Health and Environment (KDHE), approximately 73,000 individuals in Kansas rely on private wells from groundwater sources. This is approximately 2 percent of the state's population.

For many residents, this is their only source of water, and the water quality from these wells isn't guaranteed. Often, private well users don't know that the water they're using could potentially be unsafe. "It's important to keep in mind you need to KNOW YOUR WATER to protect your water," said Stacie Minson, an extension watershed specialist at Kansas State University. Private wells can be used for domestic human use, livestock use, lawn and landscape irrigation, and more. Good quality water is important, whether it is for human consumption or livestock consumption.

Public water systems use water treatment and monitoring to protect consumers from such contaminants. Unlike public water users, private well owners are responsible for all quality and safety aspects of their water. Testing must be done by the well owners as these are not regulated by most state governments or laws or by the Federal government under the Safe Drinking Water Act.

Improperly disposed chemicals, human and animal manure, fertilizers, pesticides, wastes injected underground and naturally occurring minerals can all cause contamination in a private well. In addition, poor well location, and inadequate well construction, protection and maintenance could also lead to problems. The most common health concern contaminants are nitrates and coliform bacteria, especially *E. coli* or fecal coliform.

K-State Research and Extension and KDHE recommend annual private well testing for bacteria, nitrates and any contaminant of local concern. Other tests that might be of interest include: pH, hardness, iron, lead, cooper, manganese, sodium chloride, petrochemical and pesticides. "Life gets busy, and it's easy to forget to check your private well," said Minson. She suggests setting a reminder on your phone for collecting water samples and getting private wells tested.

Those who have questions on private well testing can contact a local K-State Research and Extension Office to get a copy of a new publication titled *Testing Private Water Systems* MF-3655. Local health departments or environmental offices may also be able to help. All of these agencies may have water test kits available and could even assist in sending samples off to a private lab. Meadowlark District has water testing kits available in our offices for homeowners to use and work directly with the testing laboratory on.