

EXTENSION NEWS
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Water Quality Study to be Conducted

By: Susan C. Condlin

A source of clean drinking water is critical for human health. Most Lee County residents living outside of the city limits and not connected to the city water system rely daily on well water as a source for their family's drinking water and agriculture business operations. Special care must be taken to protect their water source from contamination.

We often think of water as being pure hydrogen and oxygen. But water naturally can contain minerals and microorganisms from the rocks, soil and air. Human activities add many more substances to water such as bacteria, gasoline and industrial solvents. Still other materials such as iron, sulfur, nitrate and salt occur naturally.

Groundwater contains many dissolved chemicals, which can move through rocks and the subsurface soil. Dissolved chemicals and gases from natural sources and from industrial, domestic, and agricultural operations can accumulate in our groundwater in large enough concentrations which can cause numerous health problems.

Protecting our natural water resources is a high priority for many of our families. Locating and controlling sources of pollution to groundwater can be challenging, but is far more preferable to the cost and difficulty of cleaning up contaminated groundwater. Ironically, wells are often the most direct route for pollutants to get into our groundwater. Wells, which aren't used as a drinking source, also need to be protected. Contamination of these wells may pollute a neighboring water source or the water found far beneath the ground. If we are not diligent, the quality of our water will suffer.

As North Carolina moves toward possibly mining for natural gas, Lee County potentially holds the state's riches natural gas deposits. Experts predict there could possibly be over forty years of natural gas in our ground. As this news became more wide spread, oil companies started to visit landowners with offers of leasing their mineral rights. With our "buyer beware" philosophy, Cooperative Extension focused educational efforts on helping landowners to understand the oil & gas lease proposals they were receiving. As we continue to provide non-biased information to our residents we are collaborating with U.S. Geological Survey (USGS), Duke University and the Lee County Health Department to assist landowners with gathering information about the quality of their well water. This study and assessment will provide landowners and elected officials with base line data on the quality of the ground water in our county, before any drilling takes place. If mining for natural gas does happen, the information obtained from these test will allow landowner and officials to compare the water quality in the future with today's results.

A well water testing informational program will be held at the McSwain Extension Education Center in Sanford on Thursday, February 9, 2012 at 4:00pm and repeated again at 7:00pm. Topics to be covered during the program will include a description of the aquifers located in the area, proper well construction and well protection and an overview of the USGS/Duke University water sampling plans for parts of Lee and Chatham Counties. During the program USGS field personnel to be involved in taking the water samples will be introduced. At the conclusion of the meeting well owners will have the opportunity to sign up for the water-testing program. Currently we have funds, which will allow us to accept 95 participants into program.

If you own land in the Triassic basin, Deep River area, and have a well on your property, you are encouraged to participate in this educational program. To register or for more information, call Cooperative Extension at 775-5624.

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