

ENHANCING PRIVATE WELL WATER SAFETY THROUGH EXTENSION OUTREACH

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Management and protection of private well water is under the control of well owners and depends primarily on education rather than regulation. University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) Extension Marion County partners with local health department and offers a two-hour seminar monthly to educate well owners of the possibility of contamination of their wells, the causes of and methods for prevention and treatment. A free well water test for total coliform and E.coli is offered after the class, followed by an explanation of the results and well water protection practices. As of June 2018, 180 well owners attended the class and 124 surveys were collected. All have indicated that they improved their understanding of private well management, septic system maintenance, and importance of protecting Florida's water. Ninety-six class attendees collected water samples and returned them back to the Extension office for a bacteria test. The average water sample return rate is around 25% according to the Texas and Virginia Well Owner Network. This program has a sample return rate at 53%. Bacteria was detected in 28 samples. Twenty-six successfully disinfected the well and the other 2 installed continuous disinfection systems. Annual well testing is recommended, but about 65% participants reported never testing their water, mainly because they did not know where to test it and what to test. The free water testing provides an opportunity for well owners to test their well water. Ninety class attendees committed to pumping their septic systems. Twenty-two of them pumped the tanks as a result of attending the class, eliminating approximately 1,500 pounds of nitrogen leaching into groundwater in five years. This program is an initial attempt of the Florida Well Owner Network and will support on-going Florida groundwater quality improvement and protection.

PRESENTER BIO: Dr. Yilin Zhuang is the Community Resource Efficiency Agent at UF/IFAS Extension Marion County. Her Extension programs include water conservation, water quality protection, and K-12 environmental education. She received her Ph.D. in Civil Engineering from University of South Florida. She is a LEED® professional and Florida Water StarSM certifier.