IS YOUR WATER WELL? PRIVATE WELL TEST AWARENESS AND NITRATE MONITORING IN THE SUWANNEE RIVER BASIN

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Private well owners must take personal responsibility to ensure the safety of their water supply. Socioeconomic class and barriers of knowledge, risk perception, and inconvenience prevent many well owners from testing their wells often enough or at all. This leaves well owners at risk of water quality health hazards, particularly in regions with vulnerable geologies and intensive land uses.

Nitrate contamination is widespread in Florida's aquifers. The state of Florida and the U.S. Environmental Protection Agency have adopted a Maximum Contaminant Level (MCL) for nitrate to guard against methemoglobinemia, or "blue baby syndrome," which can cause suffocation or death.

Is Your Water Well? is a community-based public health awareness campaign focused on addressing barriers to private well testing and identifying nitrate pollution in the groundwater of the Suwannee and Santa Fe River basins, Florida. This presentation will include findings from groundwater nitrate data and spatial information collected with permission from private well owners. Clusters of MCL exceedances for nitrate in private well water have been mapped using data obtained from state agencies through public records requests. Strategies used to communicate with private well owners, including outreach to target vulnerable populations and homes in areas of previous MCL exceedances, will be presented.

<u>PRESENTER BIO</u>: Hailey Hall is Secretary/Treasurer of AquiferWatch and project manager of *Is Your Water Well?* She has a bachelor's degree from the University of Florida in environmental geosciences and five years of work experience in hydrology, GIS, and science communication.