

Enhancing Well Water Safety through University and Health Department Partnership

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Private Wells In Florida

- An estimated 2.5 million Floridians (approximately 12% of the population) rely on private wells for home consumption.
- Private well users control the management and protection of their wells.
- Limited public data exist on how many well users regularly test their water or drink from contaminated wells.



Septic Systems In Florida

- Nearly one in three household in Florida depends on septic systems.
- More than 2.5 million septic systems are in use across the State of Florida.
- The Basin Management Action Plans identify septic systems as a major source of nitrogen to impaired water bodies.



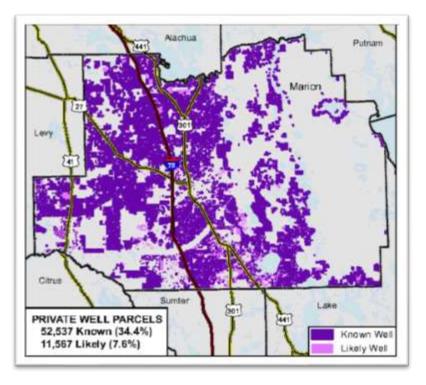
Florida Well Owner Network (FWON)

- To educate residents about well water quality and quantity, and best practices to ensure well maintenance and groundwater protection.
- To facilitate access to well water testing and provide information about treatment options if problems are found.
- To complement efforts by Florida Department of Health and Florida Department of Environmental Protection to increase awareness among Floridians about best practices regarding wells, septic systems, and drinking water quality.



Pilot in Marion County, Florida

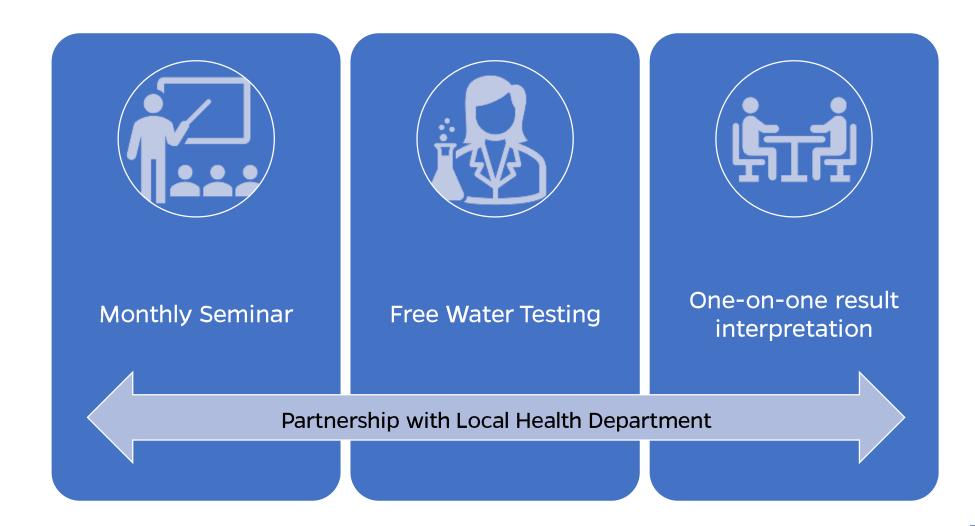
- At least one-third residents reply on private wells.
- No baseline well water quality data.
- Emergency response after Hurricane Irma
 - Bacteria rate at 26% (n=19)



Source: Florida Department of Health



Methods





Results: Sampling

- 371 people participated in this educational program.
- 214 samples collected to test for bacteria.
- 18% samples detected bacterial contamination.
 - All of them took the recommendation to shock chlorinate through their wells and plumbing to kill bacteria.





Results: Well Information

- 64% don't know their well system information (e.g., type, depth, year the well was constructed).
- 65% well owners have never tested their well water.
- 73% well owners drink the tap water without any treatment.
- 44% have never pumped their septic tanks and 3% only pump the tank when there is a problem.



Looking Forward

- Seek more partnerships.
- Conduct hybrid and in-person workshops and sampling events for residents in more counties.
- Create extension materials on private wells and septic systems.
- Develop centralized website to house materials and advertise events.





Questions and Comments

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