Private water well screenings set for South Texas July 16-18

Residents near Benavides, Falfurrias, Robstown, Rio Grande City, Laredo, Zapata, Hebbronville, Alice and Kingsville are invited to free water well screenings and results meetings

The Texas Well Owner Network, TWON, is hosting five upcoming events in south Texas on July 16-18 to allow residents to have their well water screened: four "Well Informed" water well screenings in Benavides, Falfurrias, Kingsville, and Zapata/Rio Grande City.

Joel Pigg, Texas A&M AgriLife Extension Service program specialist and TWON coordinator, College Station, said the Texas Well Owner Network program is for Texas residents who depend on household wells for their water needs.

"The TWON program was established to help well owners become familiar with Texas groundwater resources, septic system maintenance, well maintenance and construction, and water quality and treatment," he said. "It allows them to learn more about how to improve and protect their community water resources."

Water samples will be screened for contaminants, including total coliform bacteria, *E. coli*, arsenic, nitrate-nitrogen and salinity.

Water sampling and meeting information

— Falfurrias, Alice, and Hebbronville areas: July 17, water samples can be dropped off from 8:00-10 a.m. at the AgriLife Extension office for Jim Hogg County, 109 E. Santa Clara St., Hebbronville, or the AgriLife Extension office for Jim Wells County, 200 N. Almond St., B110, Alice, or the AgriLife Extension office for Brooks County, 219 Calixto Mora Avenue, Courthouse Annex, Falfurrias or the Brush County Groundwater Conservation District, 732 West Rice, Falfurrias. There will be no cost for the water well screening.

The follow-up meeting to explain the results of the screenings will be from 1:00 p.m. till 2:00 p.m. on Friday, July 18 at Brush Country Groundwater Conservation District Office, 732 West Rice, Falfurrias.

— Kingsville and Sarita areas: July 17, water samples can be dropped off from 8:00-10 a.m. at the AgriLife Extension office for Kleberg County & Kenedy County, 729 East Yoakum Avenue, Kingsville or the Kenedy County Groundwater Conservation District, 365 La Parra Blvd, Sarita. There will be no cost for the water well screening.

The follow-up meeting to explain the results of the screenings will be at 4:00 p.m. on Friday, July 18 at the AgriLife Extension office in Kingsville.

— Zapata and Rio Grande City areas: July 17, water samples can be dropped off from 8:00-10 a.m. at the AgriLife Extension office for Zapata County, 200 E. 7th Avenue, Suite 249, Zapata County Courthouse, Zapata or the AgriLife Extension office for Starr County, 500 N. Britton Ave, Rio Grande City. There will be no cost for the water well screening.

The follow-up meeting to explain the results of the screenings will be at ?????????? at the Zapata County AgriLife Extension office or at the Starr County AgriLife Extension office.

— Benavides and Laredo areas: July 16, water samples can be dropped off from 8:00-10 a.m. at the AgriLife Extension office for Duval County, 131 West Main Street, Benavides or the Duval County Groundwater Conservation District office, 231 East Railroad Ave, Benavides, the AgriLife Extension office for Webb County, 7209 E. Saunders St. Suite 5, Laredo or the AgriLife Extension office for Jim Wells County, 200 N. Almond St, B110, Alice. There will be no cost for the water screening.

On July 18, the follow-up meeting to explain the results of the screenings will be at 1:00 p.m. at the Duval County GCD office, 231 East Railroad Ave, Benavides.

Sampling instructions

Pigg said area residents wanting to have their well water screened should pick up sample bags, bottle and instructions from their local AgriLife Extension or Groundwater Conservation District office.

“It is very important that only sampling bags and bottles be used, and all instructions for proper sampling are followed to ensure accurate results,” he said.

Private water wells should be tested annually, he said. The samples will be screened for contaminants, including total coliform bacteria, *E. coli*, nitrate-nitrogen, arsenic and salinity.

Pigg said it is essential for those submitting samples to be at the appropriate follow-up meeting to receive results, learn corrective measures for identified problems and improve their understanding of private well management.

Well water contaminants, concerns

John Smith, AgriLife Extension program specialist, Bryan-College Station, said research shows the presence of *E. coli* bacteria in water indicates that waste from humans or warm-blooded animals may have contaminated the water. Water contaminated with *E. coli* is more likely to also have pathogens that can cause diarrhea, cramps, nausea or other symptoms.

The presence of nitrate-nitrogen in well water is also a concern, and water with nitrate-nitrogen at levels of 10 parts per million is considered unsafe for human consumption, he said.

“These nitrate levels above 10 parts per million can disrupt the ability of blood to carry oxygen throughout the body, resulting in a condition called methemoglobinemia,” Pigg said. “Infants less than 6 months of age and young livestock are most susceptible to this.”

Long-term consumption of arsenic in water, Smith said, increases the risk of skin cancer and cancer in the liver, bladder and lungs. In addition, chronic exposure to arsenic may lead to gastrointestinal irritation and cardiovascular disease.

Salinity, as measured by total dissolved solids, will also be determined for each sample, he said. Water with high levels may leave deposits and have a salty taste. Using water with high levels for irrigation may damage soil or plants.

To learn more about the programs offered through the network or to find additional publications and resources, visit https://twon.tamu.edu. For more information on the water screening contact Pigg at 979-321-5946 or j-pigg@tamu.edu.

The screenings are presented by AgriLife Extension and Texas Water Resources Institute, TWRI, in partnership with the AgriLife Extension offices in Duval County, Jim Wells County, Jim Hogg County, Brooks County, Zapata County, Starr County, Webb County, Kenedy and Kleberg Counties. Additional support provided by Duval County GCD, Brush Country GCD and Kenedy County GCD.

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