

## Free well tests offered this month

A project is under way to create regional water-quality maps for the Española Basin, including Santa Fe and the surrounding area. Through a project leveraged by the New Mexico Small Business Assistance (NMSBA), Sandia National Laboratories (SNL) and Los Alamos National Laboratory (LANL) will assist small New Mexico water-purification businesses and local government agencies to characterize areas with high levels of naturally occurring drinking-water contaminants.

The project supports the NMSBA mission by assisting small businesses in solving critical challenges in water quality and water scarcity in Northern New Mexico. This project is well-aligned with the New Mexico Environment Department's priorities in understanding naturally occurring uranium and arsenic contamination, and the commitment of all participants to improving water quality in the Santa Fe area. By confirming contaminant levels through lab testing and by mapping areas of known contaminant occurrence, participating entities will be better able to explain to residents how water can become contaminated by natural geologic processes.

A major objective of this project is to help inform the public about the occurrence and distribution of naturally-occurring contaminants in groundwater. Project scientists will document and explain the hydrogeologic reasons for the presence of localized areas where high contamination occurrences are supported with water chemistry data.

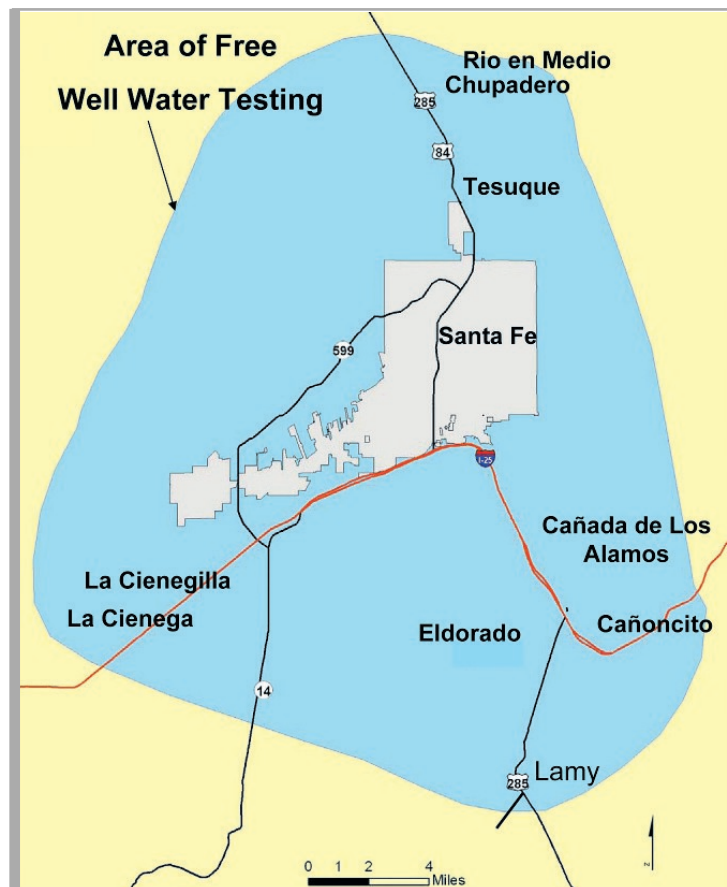
The maps will be generated in GIS (geographic-information system) format and will be available to the public at the offices of the New Mexico Environment Department (NMED). The data base, maps, and reports will serve as the basis for informing area residents what contaminants could potentially be in their private, domestic wells. The maps will provide a visual depiction of areas with elevated levels of naturally occurring contaminants. The project map set will be particularly useful to residents who unknowingly live in areas of contaminated drinking water. For residents contemplating the purchase of property within the study area, the maps will be a valuable tool in predicting what contaminants might be

present, what water testing should be done, and what water-treatment might be required.

Good Water Company, which specializes in treating problem well water, was invited to participate in the project. The other principal scientists and entities actively participating in the project are Patrick Longmire, Los Alamos National Laboratory (LANL) aqueous geochemist; Dennis McQuillan, geologist and NMED environmental health manager; Karen Torres, Santa Fe County hydrogeologist; Robert Gallegos, environmental-compliance specialist for the City of Santa Fe; Peggy Johnson, senior hydrogeologist with the New Mexico Bureau of Geology; and Ben Linhoff, geochemist and graduate research assistant at LANL.

increases, there is explosive growth in the development of more innovative and "greener" technologies, for contaminant removal. It is hoped that, through the findings of this study, the doors will be opened for finding affordable treatment assistance for financially challenged residents who are currently drinking contaminated water.

Environmental benefits will be realized by both the entities involved in the project and private well owners in the area. Water conservation is another advantage of the project as "greener" water processing technologies, where applicable, will decrease wasteful water use in treatment and new technologies will make previously undrinkable water suitable for consumption. Results of this study



Other participants in the Española Basin portion of the NMSBA project are National Water Services Inc., Santa Fe; HydraTech, Corrales; and Mesa Canyon Water and Wastewater Operations, Farmington.

It is anticipated that this project could last as long as three years. The work also includes field trials of innovative technologies designed to reduce levels of uranium and arsenic. As water demand

are applicable to water management for present-day and future needs.

Under the auspices of the New Mexico Environment Department, the participating organizations will be conducting a Water Fair in late June. The joint water-testing effort will enhance the ability of each collaborating organization to assess and map groundwater quality in the region. The testing area includes all of the City of Santa



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Fe, north to Tesuque, east to Cañoncito, south to Lamy, Eldorado and La Cienega, and west toward the Rio Grande. Water testing will include field and laboratory analyses for approximately 50 chemical parameters, including arsenic, nitrate, fluoride, heavy metals, organic vapors such as from gasoline and degreasing solvent, and total uranium.

NMED water-quality experts will provide residents with test results and will be available to answer questions. NMED will organize the testing and will be the custodian of the test data. NMED and participating entities will not release personal information including the names, addresses, and phone numbers of well owners to the general public. Locations and elevations of wells will be determined by GPS map coordinates. Map data points will only be described in terms of a project ID number and map coordinates. The testing is limited to private, domestic wells and excludes acequia water. Water supplied by regulated, public drinking-water systems will also be not eligible for this testing program.

This free testing program is strictly voluntary and the laboratory analyses will be conducted at LANL. On or around June 15, the NMED is expected to formally announce the Water Fair, explain the rationale for the free testing program and provide the details for how to enroll in this testing campaign to be conducted from June 23-25. Don't miss this opportunity for free, comprehensive laboratory testing if your private well is located within the testing area.

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