

PRIVATE WELLS & COMMUNITY NEEDS

VOICES FROM THE LOWER YAKIMA VALLEY

SUMMARY

Background: One out of every three people in the Lower Yakima Valley uses a private well. Washington state government does not check if private well water is safe to drink, so the burden falls on the people using the wells. In Winter 2018, 37 people with private wells in the Valley participated in focus groups. They discussed community strengths, community needs, and ways to share information.

Community strengths: Desire to protect family, home repair experience, and awareness of agricultural contamination.

Community needs: Step-by-step information, lower costs, help with landlords and neighbors, and technical advice.

Sharing information: Participants wanted information that was easy to understand and recommended clear actions.

Recommendations: Residents need one website with step-by-step information and water test results that are easy to understand.

BACKGROUND

One out of every three people in the Lower Yakima Valley uses a private well.¹ Washington state government does not check if private well water is safe to drink after a well is constructed. This means that a person using private well water must make sure their water is safe to drink. A safe well is tested and maintained every year and the water is treated if necessary.

Testing, maintenance, and treatment are important in the Valley because many private wells are contaminated. A recent study suggests that **one out of every four private wells** in the area has an unsafe level of nitrate.² Drinking water with nitrate at these levels can be dangerous, especially for babies and pregnant women. Private wells can also be contaminated with bacteria and other pathogens.

Researchers at the University of Washington conducted focus groups to ask people in the Valley how community and government organizations can help. Also, many organizations want to know how to share more information in the Spanish-speaking community. Focus group participants discussed community strengths, community needs, and ways to share information.

Who participated in the focus groups?

- > 37 people with private wells in Lower Yakima Valley.
- > 2 focus groups were in Spanish. 2 were in English.
- > 54% of participants were women. 46% were men.

When did the focus groups happen?

- > November 2018 to January 2019.

COMMUNITY STRENGTHS

Desire to protect family: Participants said their families motivated them to learn about well testing and maintenance. Some spoke with a strong sense of responsibility. They shared worries about babies, pregnant women and older adults in their families.



“The responsibility always ends with us. We are the owners of our family, of our children, and we are the ones who have to look for what we should do.”

- Spanish focus group participant

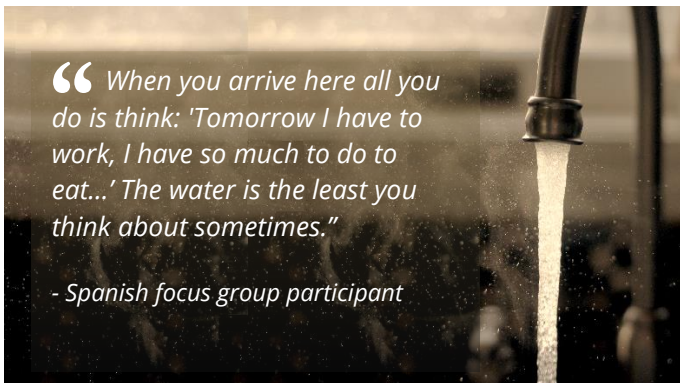
Home repair experience: Spanish focus group participants described their problems with well water and how they tried to address them. They asked detailed questions about well construction, revealing their experience with home repairs.

Awareness of agricultural contamination: Many participants shared information about contamination from dairies and crop fields. They discussed nitrate and pesticides more than other contaminants. Many were worried that agricultural activities could contaminate their well water.

COMMUNITY NEEDS

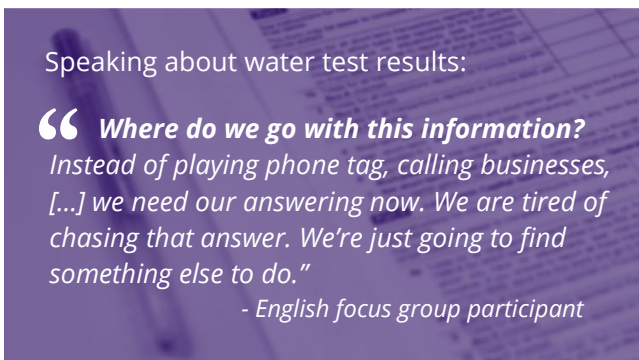
Step-by-step information: Many participants did not have information about how to test, treat, or maintain their wells. Also, many Spanish focus group participants said that their water looked or smelled bad. They asked for solutions.

Lower costs: Participants said that cost and taking time off work made it hard to test and treat their wells. One participant discussed the challenges that immigrants face:



Help with landlords and neighbors: A renter asked whether she or her landlord was responsible for making her well water safe. Another participant shared her well with her neighbor. When the well became contaminated with bacteria, they did not disinfect it because her neighbor did not think it was needed.

Technical advice: Many participants wanted help reading their water test results. Others wanted advice on how to make their well water safe to drink after testing.



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CITATIONS

1. Washington State Department of Ecology. Lower Yakima Valley Groundwater Quality: Preliminary Assessment and Recommendations Document. (2010). 2. Huffman, R. L. Concentrations of Nitrate in Drinking Water in the Lower Yakima River Basin, Groundwater Management Area, Yakima County, Washington, 2017. (2018).

SHARING INFORMATION

Participants liked materials that were short, included images, and had clear messages about health risks. When looking at water test results, they preferred charts with intuitive colors. Participants in the English and Spanish focus groups agreed that schools and a local Spanish-language radio station were trustworthy sources of information.

RECOMMENDATIONS

> **Share clear steps for testing, maintaining, and treating well water on one website.** Information can be difficult to find because it is spread across government websites. People with private wells need one website that shares information on: 1) recommended steps for testing, maintaining, and treating well water; 2) contact information for testing laboratories and well repair professionals; and 3) ways to lower costs. Financial assistance is available through Yakima County's HOME Consortium, the Rural Community Assistance Corporation Household Water Well Program, and the USDA Single Family Housing Repair Program.

> **Make water test results easier to understand.** Water test results are difficult to understand for many people. Test results are easier to understand when they do not have unnecessary text, are at an appropriate reading level, use familiar visuals, and share recommended actions. The Pacific Northwest Agricultural Safety and Health Center has developed fact sheets based on these principles. (See fact sheets at deohs.washington.edu/pnash/WellWaterHealth.) We recommend that laboratories share these fact sheets with the test results. We also recommend that local testing laboratories share contact information for the Yakima Health District (YHD) when they share test results. YHD can help people understand test results and find solutions.

> **Build on community strengths.** Focus group participants were dedicated to their families' health. Public outreach that emphasizes protecting family health can motivate people to take care of their wells. Also, many people in the Valley have experience with home repairs. Clear bilingual instructions on how to take care of a well will help people maintain their wells themselves.