

Virginia Household Water Quality Program

2021 Annual Report



Virginia
Cooperative
Extension

Virginia Tech
Virginia State University

The Virginia Household Water Quality Program provides affordable, confidential water testing and education to the

1.7 million, or 22% of Virginians

who rely on wells, springs and cisterns for household water.

Municipal water supplies are regulated in the U.S., but maintenance, testing and addressing problems with

private water supplies are the responsibility of the owner.

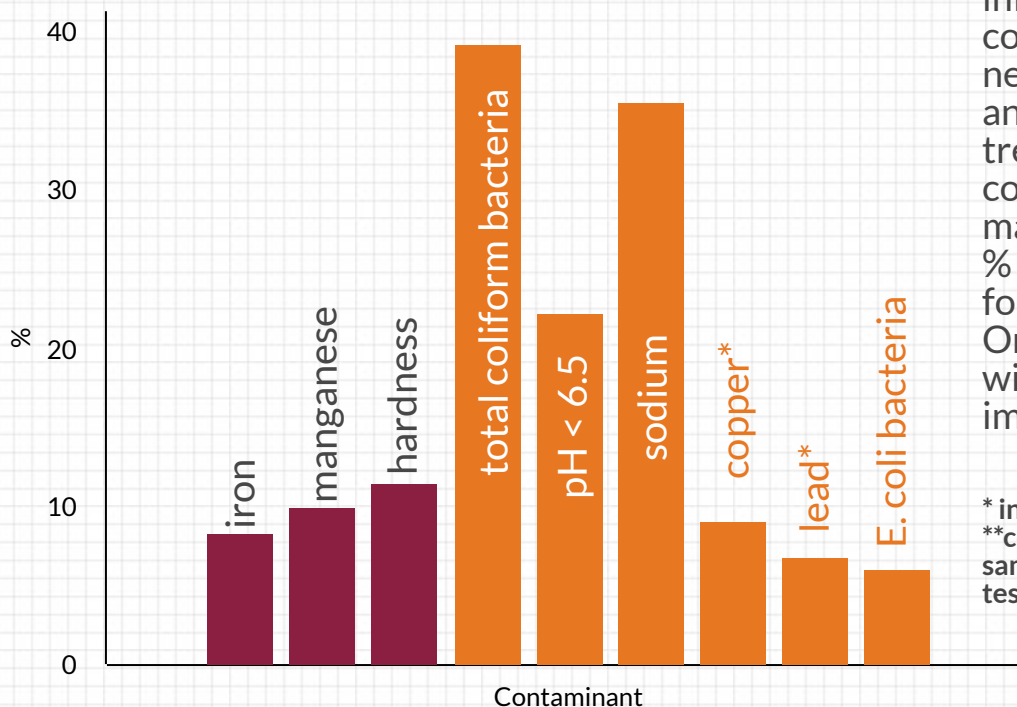


2,785 samples analyzed serving

6,876 Virginians

in 91/96 counties

What's in the water?



Household water quality is influenced by geology, well construction and condition, nearby sources of contamination, and, within the home, water treatment devices and composition of plumbing materials. Maroon bars represent % of samples exceeding standards for NUISANCE contaminants. Orange bars signify contaminants with associated HEALTH impacts.**

* in first draw household tap water samples
**contaminants found in less than 5% of samples not shown; more information on testing here.

Value



Participation in a VAHWQP clinic is designed to encourage subsequent, annual testing using a commercial lab. If delivered commercially, the value attributed to the 65 VAHWQP drinking water clinics offered in 2021 would be \$891,200. The cost to the 2021 participants was \$147,911, a cost savings of approximately 85%. In addition, grant funding and donations** reduced the cost of testing for families, making the program more accessible for many.



Annual well testing is recommended. Of 2021 participants, 41% report NEVER testing their water before and 32% have tested only once (with any lab). Of our survey respondents, 57% were new to the program; 22% have participated once; 16% 2-4 times and 5% 5 or more times.

*based on estimate of \$20 per analyte; **grant funding from an EPA grant, "Untapping the Crowd: Consumer Detection and Control of Lead in Drinking Water", The Private Well Class through Rural Community Assistance Project, and local funding secured by collaborating Extension offices.

Impact



93% of participants stated that they understand their water test results

Participants were asked what recommended actions they already took or planned to take:

	did it since clinic!	plan to in a year!
install treatment or improve function of existing treatment devices	23.6 %	19.4 %
shock chlorinate (circulate chlorine through well and plumbing to kill bacteria)	2.1 %	6.3 %
improve maintenance water system or move a source of contamination	7.2 %	7.9 %
seek additional testing	4 %	17.4 %
use bottled water	9.8 %	6.6 %

Program satisfaction survey*

*administered online; RR=17%

1-completely disagree; 5 = completely agree

I gained useful information. → 4.9

4.8 ← It was affordable.

I feel empowered to manage my water supply. → 4.7

4.9 ← I will recommend this program to my friends and neighbors.

This program was valuable to me. → 4.9

4.8 ← It was easy to participate.

Participant comments

“ Easy to participate, extremely friendly and knowledgeable staff. I've used commercial labs before for water testing but nothing compares to the service I get from VT...and at a much more affordable price!”

The best value is that I trust what this service let us know about our water, and I know what I need to do to be able to drink my water with trust, instead of drinking bottled water.

This service was incredibly helpful! I learned a lot about how to properly service and protect my well to prevent further water contamination. Without this service, I would've likely prolonged my water treatment plan and possibly damaged plumbing fixtures.

To me, the ease with which we were able to participate; great communication and follow-ups. Each time it has been a pleasant and informative experience. The staff has been GREAT!!!

Visit us online! www.wellwater.bse.vt.edu