## Virginia Household Water Quality Program

### Virginia Cooperative

Extension Virginia Tech

Virginia State University

#### **2018** Annual Report

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

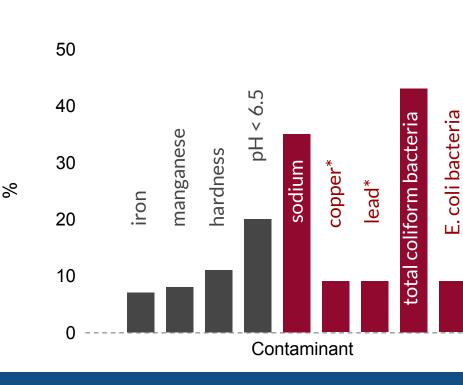
private water supplies are the responsibility of the



**2,161** analyz serving

**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. Gray bars represent % of samples exceeding standards for NUISANCE contaminants. Maroon 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 66 VAHWQP drinking water clinics offered in 2018 would be \$691,520. The cost to the 2018 participants was \$113,452, a cost savings of approximately 84%.





Annual well testing is recommended. Of 2018 participants, 41% report NEVER testing their water before. About 20% of participants are return clients; many new people participate each year.

\*based on estimate of \$20 per analyte

#### **Impact**



65% of participants reported attending the results interpretation meeting; remaining participants were mailed or emailed their reports with additional information



96% of participants stated that they understand their water test results

Participants were asked what recommended actions they planned to take: 23% will shock chlorinate (circulate chlorine



through well and plumbing to kill bacteria)



19% will install treatment or improve function of existing treatment devices



9% will seek additional testing



9% will improve maintenance of well or spring

20% shared more detailed actions they will take

# **Program satisfaction**

\*administered online; RR=15%

1-completely disagree: 10 - completely agree I gained useful

information.

It was affordable.

I feel empowered to manage my water supply.

I will recommend this program to my friends and neighbors.

This program was valuable to me.

It was easy to

participate.

About 630 kids were reached in 2018 with hands-on education about groundwater, drinking water and private water supplies through camps and fairs at Virginia Tech and visits to schools.

87 high schoolers visited the Virginia Tech campus with their own water samples, participated in lab activities, learned about food safety, water quality, well construction and career opportunities. They helped educate their families about their own water safety. We appreciate grant funding from the Rural Community Assistance Project and a donation from the Virginia Lakes and Watersheds Association to support these youth experiential education efforts!

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