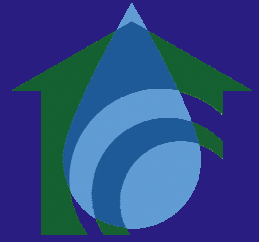


A newsletter of the Virginia Household Water Quality Program and Virginia Master Well Owner Network

Well Informed



Volume 3 Issue 2

September 2011

Virginia Master Well Owner Network continues to grow!

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Virginia Master Well Owner Network continues to grow! 1

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Following successful trainings this year in Richmond for extension educators and in Harrisonburg for volunteers, we are thrilled to announce that the Virginia Master Well Owner Network has grown to 111 people (see map on p. 3 to find out where our volunteers and educators are!). Our network now reaches 55 Virginia counties and 4 independent cities through the work of 72 volunteers and 39 extension educators. Thank you and welcome to our new members!

In addition to training volunteers and county extension educators (specializing in Agriculture and Natural Resources or Family and Consumer Sciences), representatives of the Virginia Department of Health and Virginia Department of Environmental Quality Northern Regional Petroleum Tank Staff attended our training in Richmond. We are looking forward to working with these experts to better serve Virginians reliant on wells, springs and cisterns.

We are extremely fortunate to have demonstration equipment donated to us for use in our trainings, including a well casing with a cutout, well pump, sanitary and traditional well caps, grout samples, and a pressure tank with cutout. These pieces are invaluable contributions to our



program, and made a huge difference to our training participants in Harrisonburg, allowing them to easily visualize the components that compose a properly constructed water well. Special thanks to CMC Supply, Inc. of Christiansburg, Fenton Well and Pump Service of Blacksburg, and Rorrer Well Drilling of Christiansburg

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Photos: Wayne Fenton volunteers as a guest speaker, explaining proper well construction and maintenance in Harrisonburg. Top: pointing out a well casing and pump. Left: explaining the function of a home pressure tank.



Biological Systems Engineering

Virginia Cooperative Extension



Applying knowledge to improve water quality
Mid-Atlantic Water Program
A Partnership of USDA NIFA & Land Grant Colleges and Universities

(Continued from page 1)



for providing these donations, and to the Virginia Water Well Association for their continued support of our programs! In each training workshop, we are amazed at the variety of knowledge and experience people bring, the insightful questions they ask, and their passion to learn more about protecting groundwater resources. Special thanks to our guest speakers this year: Curtis Bordewyk, Curtis Well Drilling; Brad White, Dept. of Environmental Quality; George Harlow, U.S. Geological Survey; and Wayne Fenton, Fenton Well and Pump Service.

Left: A sanitary well cap (above) and traditional, unsealed well cap (below) let participants see the difference between the two. Right: VAMWON Coordinator Erin Ling explains concepts using table-top groundwater models in Harrisonburg.



Wells, Earthquakes and Fracking, oh my!

For more on **Hydraulic Fracturing and Potential Risks to Groundwater**, please see our [November 2010 Well Informed issue \(Vol. 2, Issue 2\)](#)

Your
Water
Questions...
Answered!

Could my well water have been affected by the recent 5.8 earthquake in Virginia? Yes. Whether you were close to the epicenter in Mineral, or miles away, your well could have experienced a variety of changes. Magnitude, depth, distance from epicenter and hydrogeology (type and form of rock, location of water, etc) as well as your well depth, its construction and aquifer type will all play a role in how your drinking water is affected. Water level changes (both rapid and slow) decreases and/or increases may be observed. Wells have gone dry after earthquakes. Water may become turbid (filled with sediment), feel or taste different, change colors and/or smell. Water could also become contaminated if the well itself is damaged due to a quake.

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What should I do? Anytime you notice changes in your water, have your water tested by a certified lab. At a minimum, test for coliform and E. coli bacteria. If you are concerned about potential damage to your well casing, pump, grout or any other part of the system, have your well inspected by a water well system provider. For more information on specific issues, visit the [resources page](#) of our Virginia Household Water Quality Program website (www.wellwater.bse.vt.edu).

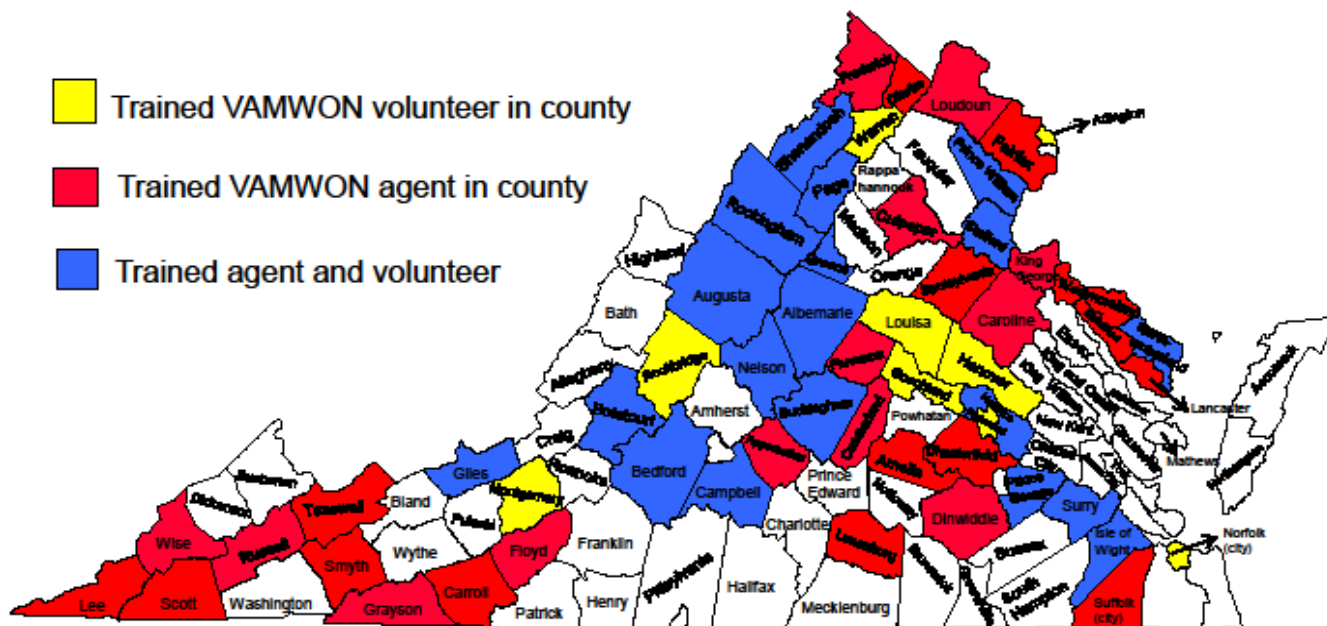
Is there any relationship between fracking activities and earthquakes?

While there is speculation as to whether hydraulic fracturing (fracking) may cause large earthquakes, studies by the United States Geological Survey (USGS) do show that the process has caused smaller episodes. "The thing that can induce larger earthquakes is the high-pressure waste fluid injection that's done in some places," said Mike Blanpied, scientist at USGS, referring to disposing of the fracking waste water into deep injection wells. "Just to be clear," he said, "the connection between fracking and fluid injection and earthquakes is an area of active research and really we're only starting to learn about how those things are connected."

Resources: <http://www.realaspen.com/article/828/Scientists-study-link-between-fracking-and-earthquakes>; <http://gallery.usgs.gov/videos/441>; <http://pubs.usgs.gov/fs/fs-096-03/>



Virginia Master Well Owners by County



Well-come new members of the Virginia Master Well Owner Network!

Albemarle

Lorraine Morris

Amelia

Jane Henderson*

Arlington

Alex Wardle

Augusta

Sandy Greene

Buckingham

Jennifer Ligon*

Campbell

Cheryl Marshall

Caroline

Pegi Wright*

Chesterfield

Linda Cole*

Clark

Karen Poff*

Giles

Diane Reaver

Hanover

Porter Knight

Fredericksburg

Daniel Dobson

Isle of Wight

Janet Spencer*

King George

Pegi Wright*

Lancaster

Kathleen Watson*

Lunenburg

Donna Daniel*

Northumberland

Kathleen Watson*

Page

Charles Newton

Karen Poff*

Prince William

Thomas Bolles*

Richmond City

Kemper Loyd

Danna Revis

Richmond County

Kathleen Watson*

Rockbridge

Sharon Kirk

Rockingham

Susan Plank

Bruce Ritchie

Shenandoah

Russell Kohrs

Karen Poff*

Spotsylvania

Kim Elkins*

Stafford

Margret Dascenzo

Kim Elkins*

Suffolk

Janet Spencer*

Surry

Janet Spencer*

Warren

Wendy Calvert

Westmoreland

Kathleen Watson*

* = Extension Educator

Upcoming Events	Details	Contact
Master Well Owner Network VOLUNTEER Training	Southwest Virginia December 2011	Erin Ling: ejling@vt.edu 540-231-9058 Visit www.wellwater.bse.vt.edu to complete an application today!
Lunenburg and Nottoway County Drinking Water Clinics	--NOTE DATE CHANGE-- Kickoff Meeting: 9/12/11 Sample Collection: 9/21/11 Interpretation Meeting: Week of 10/18/11	Donna Daniel: ddaniel@vt.edu (434) 696-5526 Please pre-register for this event!
Buckingham County Drinking Water Clinic	Kickoff Meeting: 9/19/11 Sample Collection: 9/21/11 Interpretation Meeting: Week of 10/18/11	Jennifer Ligon: jligon@vt.edu (434) 969-4261 Please pre-register for this event!
Spotsylvania and Stafford County Drinking Water Clinic	Kickoff Meeting: Mon 10/17/11 Sample Collection: Wed 10/19/11 Interpretation Meeting: Mon 11/21/11	Kim Elkins: KimElkins@vt.edu John Howe: jhowe@vt.edu (540) 507-7570 Please pre-register for this event!



**Soil and Water Conservation Society, Virginia Chapter
Annual Meeting**
Coal, Uranium and Natural Gas Extraction in Virginia
Extraction methods, laws, rights, regulations and impacts on land and water resources
Comfort Inn Monticello, Charlottesville
Thursday, Oct 20, 9am - 4pm
For more info, visit www.bse.vt.edu/swcs/ or email klinek@vt.edu

Important! Master Well Owner Volunteers:

Ensure that your hours of service and hard work are accounted for! Your *Accomplishments* and *Numbers of Contacts* are needed. Please visit <http://www.wellwater.bse.vt.edu/protected/volunteers.php> today. Thanks!

Interested in volunteering too? Visit http://www.wellwater.bse.vt.edu/become_a_mwo.php today!



VIRGINIA HOUSEHOLD
WATER QUALITY
PROGRAM
Virginia Cooperative Extension

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Our objective is to improve the water quality and health of Virginia families reliant on private water supplies.