

## News of Interest:



DIVISION OF WATER, GROUNDWATER BRANCH  
KENTUCKY DRILLER  
QUARTERLY

### LOCATING AND MAPPING DOMESTIC WATER WELLS IN MARSHALL COUNTY, KENTUCKY

By Wendy D. Langhi, MS, RS, Marshall County Health Department  
Presented at the Kentucky Water Resources Symposium,

The Marshall County Board of Health became interested in the water quality of local water wells after Board members attended a seminar where awareness was raised regarding this issue. Upon returning, several Board members began questioning the quality of water the citizens in Marshall County are receiving from domestic water wells. The Health Department had some historical data pertaining to bacterial contamination in residential wells and it was evident that some wells in the county had elevated levels of bacterial contamination.

The Health Department was directed by the Board of Health to conduct a study of the location and bacterial contamination of water wells in the county. The 'Well Mapping' project had two primary objectives. The first was to identify, map and sample water supplies for residents without current access to publicly supplied drinking water. The second objective, as requested by the Department for Public Health, was to help establish a method where other local health departments could conduct similar studies. It was determined that field personnel would be trained to visually assess wells for the KY Division of Water's specified characteristics and Consolidated Groundwater database. If no AKGWA number was noted and the well did not appear in an on-line database search, health department personnel would assign a number to that well.

A target area of the county was then defined and informational letters were sent to the affected residences. In this letter, the owner was asked to provide specific information regarding any well on the property that might not be obtainable during field work.

Once field work commenced, Marshall County Health Department personnel traveled to the residences which had responded to the initial informational letter. The well was 'mapped' using hand-held Global Positioning Satellite (GPS) devices, pertinent well information was recorded and a water sample was collected from an outside spigot. During field work, residences were visited which did not respond to the initial mailing. If no one was home an informational door hanger was left. The plan is to attempt to reach the non-responsive parties via telephone to ensure all available data are collected.

Collected water samples were analyzed by the Western Kentucky Regional Laboratory for the presence of total coliform and E. coli. Once the sample results were completed, a packet of information regarding well maintenance, groundwater protection and the assigned AKGWA number, if applicable, was sent to the homeowner. If a sample was 'positive' for total coliform and/or E. coli, a sheet outlining disinfection procedures was also included.

As the project continues, the Marshall County Health Department is providing the Department for Public Health GPS coordinates of the located wells and KY Division of Water with well inspection forms and sample results. All involved personnel are hopeful that this will help generate an up-to-date database of the well locations in Marshall County.

The response rate to the initial mailing was approximately 30%. To date, the Health Department has located water wells at over half of the residences, which responded to the mailing. 78% of the sampled wells tested positive for total coliform contamination and approximately 1% tested positive for E. coli. AKGWA numbers were assigned to 81% of the located wells.

Undertaking this project has been very time-consuming and has not progressed as rapidly as hoped, due, in part, to the limited amount of personnel available for field work. It has been determined that this project will be on-going. During the summer months, more personnel may become available, in the form of interns, to assist with the data collection aspect of this project.



## New Board Meets

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The Kentucky Water Well Certification Board met March 2 at the Kentucky Ground Water Association's Workshop and Trade Show in Louisville. This was the first meeting for the new board appointees. Alan Burgess was unanimously elected as the new chairperson. The role of the board and statutes and regulations were discussed. The board also met on June 9 in Frankfort and regulations were again discussed.

The next scheduled meeting will be Friday, Sept. 15 starting at 9 a.m. at the Division of Water in Frankfort. The meeting will be open to all drillers and the public.

## Information from: The Kentucky Ground Water Association

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The 2006 Kentucky Ground Water Association's Workshop/Trade Show was held March 2 and 3 at the Executive Inn in Louisville. Overall, the show went really well. There were about 135 drillers and spouses who signed up, and there were about 20 exhibiting booths. On Thursday afternoon there was a class for one CEU credit. That night, there was a hospitality hour during which people could visit with exhibitors and enjoy refreshments.

More people attended on Thursday than in the previous years. On Friday, there was a breakfast buffet and a lunch buffet that people enjoyed. There were also classes at three different times for drillers to get CEU credits. Overall, drillers could have gotten 4 CEU credits for Kentucky and 5 CEU credits for Tennessee. The show adjourned at 3 p.m. on Friday.

The officers of the Kentucky Ground Water Association for 2006:

Todd Mills – President  
Marc Naranjo – Vice President  
Alan Burgess – Past President  
Susie Givens – Secretary/Treasurer  
Holly Lyell – Executive Secretary

The Board of Directors for 2006:

John Christ with Baroid  
Vickie Ross with DSI  
Danny Kelly with Kelly Well Drilling  
Scott Kelly with Kelly Well Drilling  
Orris Hayes with Hayes Well Drilling  
Jim Bates with Bates Well Drilling & Excavation  
Tommy Maybrier with Maybrier Well Drilling

Information provided by Holly Lyell, Kentucky Ground Water Association

## Leaving Company?

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When a certified driller leaves a company, the driller should notify the Groundwater Branch in order to keep an avenue of communication open. This will insure that important information such as certification renewals and future re-instatement procedures can be transferred to the driller.

## Site Visits

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Groundwater personnel plan to make several well site visits with certified drillers this year. If you would like to meet with them at one of your well sites, please contact Joe Moffitt to schedule a time.

# Training Opportunities

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**For upcoming conferences, workshops or meetings contact:**

American Ground Water Trust - Phone (603) 228-5444  
www.agwt.org

Grundfos Pumps Corporation - Phone (913) 227-3400  
www.grundfos.com

Warren Pump & Supply  
Huntington, WV. - Phone (304) 429-6723

Ohio Water Well Association, Inc. - Phone (800) 537-6585

National Ground Water Association - Phone (800) 551-7379  
www.ngwa.org

International School of Well Drilling - Phone (866) 983-9855  
www.welldrillingschool.com FAX: (813) 983-9816

Redvector  
http:redvector.com

Tennessee Water Well Association  
Phone (423) 357-0815

Kentucky Ground Water Association  
Phone (270) 251-3004  
www.kygroundwater.org

South Atlantic Well Drillers Jubilee and  
Virginia Water Well Association  
Phone (540) 740-3329

**In order to use training other than the Kentucky Ground Water Association's Annual Drillers' Workshop, you MUST contact Joe Moffitt or Harold Lee at the Groundwater Branch. Phone: (502) 564-3410.**

**Remember to obtain proper attendance documentation when attending any training for your continuing training requirement. This includes a signed certificate, training card or letter along with the training agenda.**

**8-hour or 40-hour OSHA training is not acceptable for the continuing training requirement.**

## Groundwater Protection Plans

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Generic Groundwater Protection Plans (GPP) for well drillers are available. Drillers are required to keep and implement a GPP. Also, generic GPPs for domestic wells and septic systems are available to homeowners. These GPPs can be located on the Groundwater Branch's Web site at: <http://www.water.ky.gov/gw/gwprotection/gwplans/> or by contacting Pat Keefe at (502) 564-3410, Ext. 445



## Call Before You Dig

Kentucky Underground Protection, Inc., is a nonprofit organization established to provide a communication link between excavators and operators of underground utilities.

KRS 367.4901 to 367.4917 requires that you call two business days before you dig in the state of Kentucky.

The toll free number to call is:

**1-800-752-6007**

In Louisville, (502) 266-5123

**Kentucky Driller Quarterly is a publication of the Kentucky Division of Water.**

**Inquiries should be made to:**

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Groundwater Branch  
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Frankfort, KY 40601  
Phone: (502) 564-3410  
FAX: (502) 564-9899**

**Visit the Groundwater Branch Technical Services page on the Internet at:**

**<http://www.water.ky.gov/gw/gwtech/gwdrill/>**

**E-mail: [Harold.Lee@ky.gov](mailto:Harold.Lee@ky.gov)**



**Environmental and Public Protection Cabinet  
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Division of Water**

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