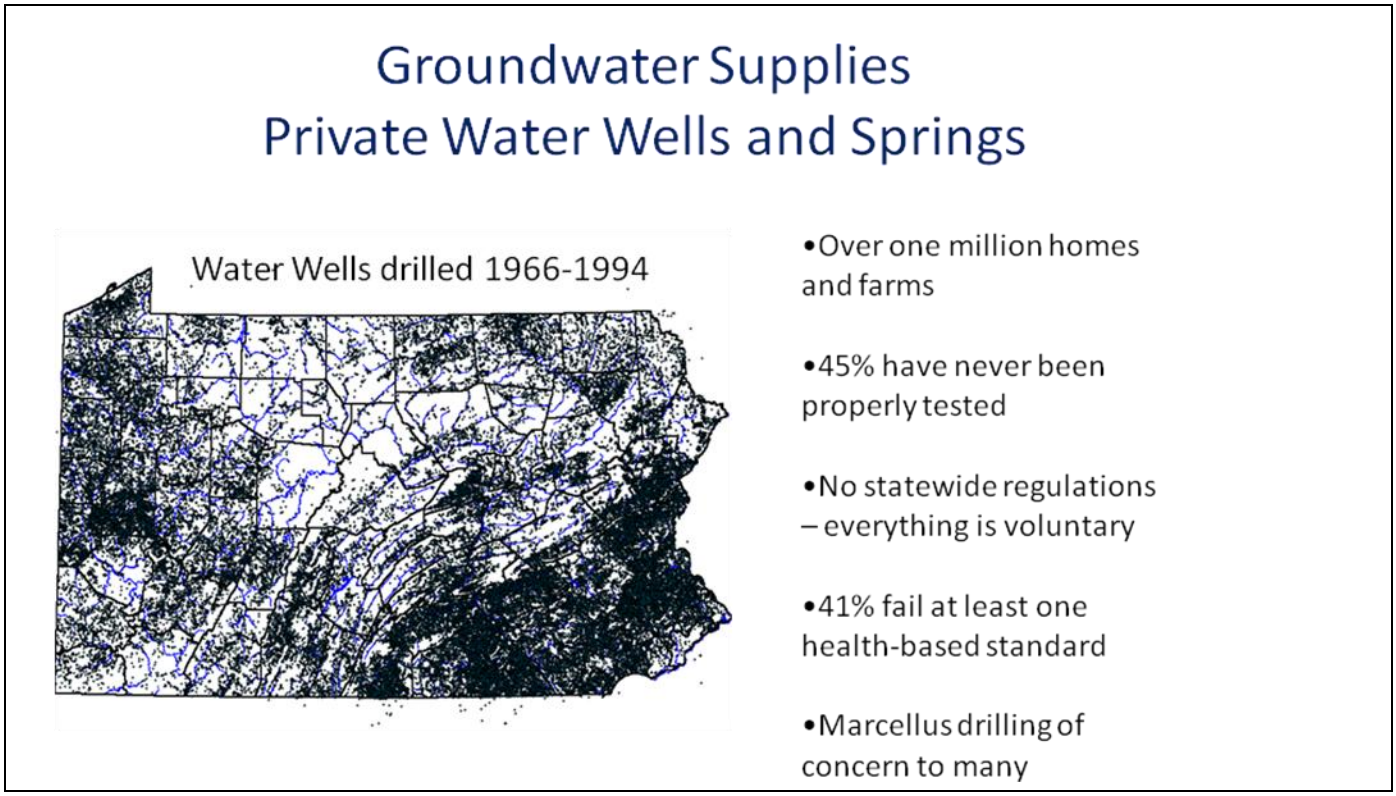
Your Private Drinking Water and the Natural Gas Industry

This column is presented weekly by the Public Education sub-committee of the Clinton County Natural Gas Task Force in an effort to provide accurate, up-to-date information on activities surrounding the Marcellus Shale formation and the natural gas exploration industry. For more information on Task Force activities, visit the Task Force page on the Clinton County government website at www.clintoncountypa.com.

Drilling for natural gas in central Pennsylvania has brought a range of economic benefits to the region, but has also raised environmental concerns. One question many people have is, how will gas drilling impact water wells and springs that many people use as their source of drinking water.

The Clinton County Natural Gas Task Force recently hosted two presentations that focused on protection and testing of private water supplies near natural gas drilling. Bryan Swistock, water resource extension specialist with Penn State's School of Forest Resources, was a key presenter at the meetings and provided valuable information and practical advice for people interested in protecting their private drinking water supplies. His presentation is being reproduced over the next several weeks in this column.

Swistock began his remarks by providing some statistics on the vast number of homes, farms and camps in Pennsylvania – more than one million -- that use water wells and springs as their drinking water source.



In Clinton County, nearly 6,700 homes, or about 31 percent of the homes in the county (as of the year 2000) used private wells and springs as their drinking source.

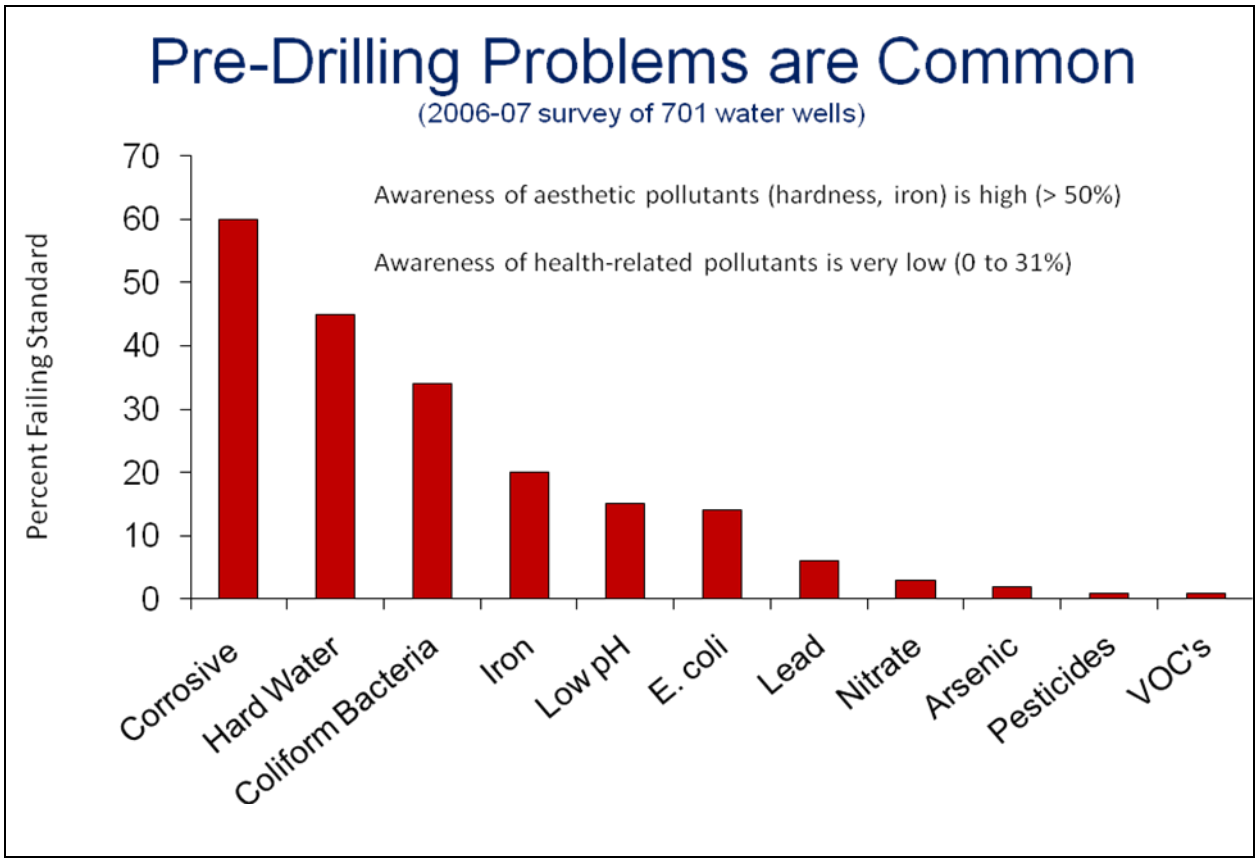
PRIVATE WATER SYSTEMS IN THIS REGION

County	# of homes served by private water systems 1980	# of homes served by private water systems 2000	% of homes using wells, springs	% drilled wells	% hand-dug wells	% springs
Cameron	970	3564	52	58	13	29
Centre	6885	10939	19	69	9	22
Clearfield	9280	9890	28	54	18	29
Clinton	3536	6692	31	54	7	39
Elk	3025	6601	28	62	7	31
Jefferson	8488	11544	47	65	11	25
Lycoming	15790	22630	39	85	6	9
McKean	7650	9552	40	69	4	27
Potter	4020	11308	68	64	5	31
Tioga	9126	14650	65	77	7	16

Swistock said many issues – separate from natural gas drilling activities – can be found with private water systems. Some typical problems that have existed for many years include improperly sealed well caps, animals nesting inside the well system, and housing pets or other items near the well caps. He showed several photographs of common problems.

Issues with Private Water Systems

"Many people are having their well water tested before Marcellus Shale drilling near their water supply, and they are finding a range of issues that had existed but that they weren't aware of because their water supplied hadn't been tested before," says Swistock. "One of the most common pre-existing problems is corrosiveness in the water supply, and other common issues include hard water, coliform bacteria, iron, low pH, and E. coli bacteria."



Separate from the Marcellus Shale natural gas drilling, Swistock recommends having your private water supply tested, if only for your own comfort, health and safety. He said testing is even more important if there is natural gas drilling that will be taking place in the vacinity of your water supply.

Next week's column will highlight how you can protect your water supply, the existing regulations for protecting drinking water supplies, and water supply issues associated with natural gas drilling. The following week's article will discuss the importance of testing your water prior to any natural gas well drilling, how to purchase a water test, and suggestions on what to test for in your water. The fourth article in the series will address how important it is to understand your water test results, web sites to help determine when to test your water, and resources and information available through the Penn State Extension office.