



What Every Realtor Should Know About Private Drinking Water Wells



If you are a real estate agent representing the buyer or the seller, you may have a question about how you can best inform your client about private well water issues during a property transaction. This brochure will help to answer your questions.

According to the US Environmental Protection Agency, (EPA), it is estimated that approximately 2.3 million people, or 20% of New Englanders, rely on private wells for their drinking water supply. This percentage increases to more than 40% for Vermont, New Hampshire, and Maine. Contaminants, if present in drinking water at elevated levels, can pose a risk to families. Many of the contaminants that can be present in a private well are odorless, tasteless, and colorless. The only way to identify their presence is to have the well water tested.

Knowledge is Power!

Advise your client to get the most information possible from qualified professionals about both the well water quality and the condition and functioning of the entire drinking water system. For testing recommendations and information about

qualified professionals, it is best to contact the appropriate state agency, listed in the **For More Information** section at the end of this brochure.



Short-Term

If the property's private well has taste and odor problems, the prospective buyer may hesitate to make an offer on the property.

Encourage your seller to have the well tested for bacteria and other problematic contaminants and install water treatment if needed.

Long-Term

To protect their health, private well owners should periodically test their well water to ensure the quality of their drinking water.

It is best to have the well water tested annually for at least bacteria, nitrate and nitrite. Other contaminants, like arsenic, should be tested for on a less frequent or as needed basis.

Avoid Delays!

Testing and inspection prior to listing a property will help avoid delays in selling the home. Even though the potential buyer's lending institution will most likely require testing and inspection, an inspection commissioned by the home-seller will help identify any existing problems that should be remedied prior to listing. This will help to make the home more marketable and reduce the risk of problems during the sale. If necessary, correct any identified problems. (Note: To ensure public health protection in the long-term, state drinking water agencies recommend that homeowners arrange to have their private wells tested annually.)

Safe water can be a selling point!

If there are any objections to testing and inspecting the water system, you can advise your client that a house with a system in disrepair or with contaminants present in the water is worth less money on the market and can take longer to sell. Just like a home with a new roof will likely sell for more, a home with a properly functioning water system that provides safe drinking water is worth more and will be a place of comfort for the new owners.

What tests should be conducted?

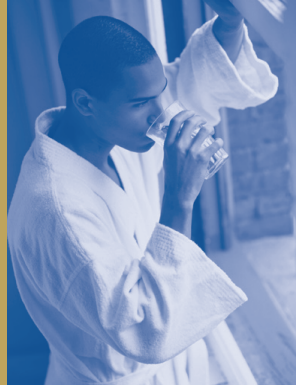
While this recommendation may vary from state to state, the EPA suggests that an initial test should include coliform bacteria, nitrates/nitrites, and pH. In addition, the homeowner should consult with experts about the need to test for arsenic, lead, copper, radon, a gross alpha screen, and volatile organic compounds. For more information on specific testing suggestions in your state, contact the appropriate state agency.

The buyer's lending institution will most likely require that the well pass a water quality test prior to loan approval. Most lenders require testing for bacteria, nitrate and lead at a minimum. Keep in mind that these tests are intended to ensure that the lender is not making a loan on a property with a faulty system, in case they have to repossess the property. The testing is not necessarily required to protect the health of the residents.



Where should the samples be taken?

The water sample should be collected from the cold water kitchen tap. Most water testing laboratories supply their own sample containers and provide detailed instructions on how to properly collect a water sample. Use the bottles provided and carefully follow all instructions to obtain a good sample. In some cases, a laboratory professional may come to the home and collect the sample.



If there is a home water treatment system, a water test should be done on both the raw water coming into the house before the treatment system and a separate test after the water has passed through the treatment system. This will identify the contaminants that are present and ensure that the treatment system is functioning properly.

Are there any specific state testing requirements?

State requirements for private well testing at the time of property sale vary from state to state. It is best to check with the state drinking water agency for requirements. In addition, your client can ask the appropriate state agency about any known contamination problems in the area to assist in determining what contaminants to test for.

Where should the water be tested?

Your client should arrange to have the water tested at a state certified lab. These labs follow accepted procedures for testing contaminants. Make sure that the lab is certified to test for the contaminants requested. The lab will provide sampling instructions and collection bottles for taking the water sample, or in some cases, may send a professional to the home to collect the samples. Contact the appropriate state agency for a listing of certified labs.

What else should I know about water testing?

Prior to obtaining a water sample for testing, advise your client to confirm that the well has no chlorine in it. The well may have

been chlorinated because of a failing bacteria or other test. Chlorine would mask the presence of bacteria and other contaminants that may be present in the well water. A pool chemical test kit can confirm whether chlorine is present. If chlorine is present, delay the water test. Remove chlorine from the well and plumbing by running the water at each faucet until no chlorine odor is detected. Wait at least 24 hours after no chlorine odor is detected before re-testing for the presence of chlorine and collecting a water sample. Using the pool chemical test kit prior to sample collection will ensure the continuity of checking for chlorine each time a sample is collected.

What are the costs for testing?

What to test for and how much the test will cost will vary by state and lab. Testing can range from as little as \$5 for an individual test parameter (like pH) to \$250 or more for a combination of tests covering a wide spectrum of parameters. See the state drinking water agency contacts for more information.

Once the testing is done, how does my client know the water is safe to drink?

The EPA establishes limits on the concentrations of certain contaminants that would pose a public health threat if present in elevated levels in public drinking water supplies. These limits, or standards, are set to protect public health by ensuring good quality water. Private well owners are generally not required to test their drinking water to meet standards, unless the state has regulations for private well testing. However, lending companies may use some of these standards for loan approval. Private well owners and potential buyers can use the public drinking

water standards as guidelines when evaluating the quality of private drinking water. For more information on drinking water quality standards, visit EPA's website: www.epa.gov/safewater State drinking water agencies may also set advisory levels for some contaminants, such as sodium, that are either stricter than the federal standards or that are not covered by the federal standards.

Are there any other parts of the water system that need to be inspected?

Yes. In addition to a well water test, the mechanical workings of the water system should also be inspected. This includes the well pump, pressure tank, water treatment system (should one exist), the condition of the area around the well, and the well's proximity to potential contamination sources. The well itself should be inspected to ensure tight construction. Also, the well's location should not be subject to flooding. It is important to advise your client to rely on qualified professionals to conduct the inspection. Qualified home inspectors can inspect the plumbing system, such as general age, appearance and performance of the piping, storage tank and/or other water system appliances like water filters and treatment systems. For any inspection or work on the well, it is recommended to contract with a registered well driller or pump installer.

What are the costs for inspection?

The inspection fee for a typical one-family house varies geographically, as does the cost of housing. The knowledge gained from an inspection is well worth the cost. When selecting the home inspector, the inspector's qualifications, including experience, training, and professional affiliations, should be an important consideration.



Where does your client get information on the age of the private well, the type of well, its depth, and testing and maintenance records?

The current homeowner may have testing and maintenance records, and well construction information (also known as a well log, a water well record, or a drilling report). Most states require that a registered well driller file a well log with the state drinking water agency or local town hall. However, depending on the age of the well, this may not have been done. In some cases, your client may be able to contact the individual who constructed the well. If this information is unavailable, then your client will have to rely on the information produced by the well inspector.

Determining the well type—whether dug, driven, or drilled—can often be done by a visual inspection of the well. For more information on well types, see the University of Rhode Island factsheet *Drinking Water Wells* at:
www.uri.edu/ce/wq/has/html/Drinking.pdf

How does your client determine if the private well will produce enough water for household needs?

The well log or drilling report may contain the information on the well's capacity and yield in gallons per minute. If this information is not available, you can contact a registered well driller to conduct a well yield test. This person will have the equipment and knowledge necessary to conduct the test.

Most states have private well construction regulations that require a minimum well depth based on the yield of the well. For example, in Rhode Island, a well with a yield of one gallon of water per minute is required to have a minimum well depth of 300 feet. A minimum well yield of one gallon per minute amounts to 1,440 gallons of water per day. By comparison, it is estimated that the average daily water use per person is 75 gallons; for a family of four this amounts to 300 gallons of water per day.



However,² a well producing less than 5 gallons per minute is still considered low yielding and may not be able to keep up with too many demands being placed on it at the same time. Water-use chores may need to be spread out over the week to limit demand.

How does my client determine if the well is properly located away from potential contaminant sources?

The potential for contaminants entering a well depends upon its placement and construction, as well as the proximity of the well to potential pollution sources, the condition of the well casing and well cap, and general construction. States have minimum setback distances for wells from potential contaminant sources. Examples include setback distances from septic tanks, leach fields, agricultural operations, and roads. Older wells, constructed prior to the adoption of these setback requirements, may not meet these criteria. States also issue well construction regulations or guidelines that ensure a safe water supply. Your client can contact the state drinking water agency for specifics. Encourage your client to find out more about private well ownership and use. A guide entitled, *Drinking Water from Household Wells* is available from the EPA to help answer questions and provide links to additional information. The booklet can be viewed at www.epa.gov/safewater/pwells1.html or it can be ordered by calling the Safe Drinking Water Hotline at: (800) 426-4791.

For More Information

U.S. EPA New England

EPA's New England Office has a new campaign to get the word out to homeowners about the importance of taking precautions to protect, maintain, and test their private well. Through a variety of efforts, the campaign will reach the general public, the real estate community, schools, local officials, and trade associations like well drillers.

www.epa.gov/ne/eco/drinkwater/private_well_owners.html

New England Region Water Quality Program

For information and education programs on private well water protection. **www.usawaterquality.org/newengland**

Connecticut

Connecticut Department of Public Health

Connecticut's private well water quality regulations are contained in Public Health Code Section 19-13-B101.

Well construction regulations are contained in PHC Section 19-13-B51a-m. Private well regulations are under the jurisdiction of Connecticut's local health departments. They should be contacted with any private well questions. Additional information may also be obtained by contacting the Department of Public Health's (DPH) Drinking Water Division (DWD) at (860) 509-7333 or by accessing the DWD's website.

www.dph.state.ct.us/BRS/Water/DWD.htm

Maine

For a list of state certified labs, contact the Drinking Water Program in the Division of Health Engineering, Department of Human Services (207) 287-1929.

The Environmental Toxicology Program in the Department of Human Services maintains health based Maximum Exposure Guidelines (MEGs) for owners of private wells. The toll free number is (866) 292-3474.

The University of Maine Cooperative Extension Water Quality Program has information on private well water protection and testing on their web page. www.umaine.edu/waterquality/

Massachusetts

Local Boards of Health can adopt regulations requiring a permit for private drinking water well construction, testing, and abandonment. Contact your local Board of Health for more information.

For more information about types of wells, maintaining wells, water quality issues and testing well water, visit the UMass Extension website.

www.umass.edu/nrec/watershed_water_quality/index.html

For information on state certified laboratories in Massachusetts, see the Drinking Water Program at the Massachusetts Department of Environmental Protection website.
www.state.ma.us/dep/bspt/wes/files/qalabjp.htm#findlab



New Hampshire

The New Hampshire Department of Environmental Services has extensive information on its website at: www.des.state.nh.us/wseb

- For information concerning laboratory testing of water samples, please call an independent certified laboratory in NH or the state laboratory at 603-271-3445. For information concerning water quality, treatment, and questions concerning the public drinking water program, please call 603-271-2513.
- For information on wells, water quantity, and licensed well drillers, please call 603-271-2513.
- For health related information, please call 603-271-4608.
- For water quality test requirements for new housing, contact your local community's code enforcement program.

Some NH communities have local testing requirements. Contact your local town hall to learn about any local testing requirements in your community.

Rhode Island

Rhode Island Department of Health

Regulations for private drinking water well testing at time of real estate sale and information on testing and state certified laboratories. (401) 222-6867.

www.health.ri.gov/environment/dwq/privatewell.htm

RI Department of Environmental Management

To obtain a listing of registered well drillers and pump installers, regulations pertaining to private drinking water well construction and abandonment, call (401) 222-4700 or visit the website.

www.state.ri.us/dem/programs/benviron/water/permits/privwell/index.htm

The University of Rhode Island Cooperative Extension Water Quality Program has an extensive private well web page with fact sheets and a program calendar offering private well education workshops. See www.uri.edu/ce/wq and click on the Rhode Island Home*A*Syst Program link.

Vermont

For technical assistance and other information including health concerns, testing recommendations for private well owners, fact sheets, and diagrams on proper installation of wells, and information about home water treatment, contact the Vermont Department of Health at (802) 863-7220 or (800) 439-8550 (from within Vermont).

www.healthyvermonters.org/hp/waterquality/safewater.shtml

For more information about laboratory testing services; water testing; or to order test kits, contact the Vermont Public Health Laboratory at (802) 863-7335 or, from within Vermont, (800) 660-9997.

For information on Vermont Licensed Well Drillers, contact the Vermont Department of Environmental Conservation, Water Supply Division at (802) 241-3400 or (800) 823-6500 (from within Vermont)

www.vermontdrinkingwater.org/wells.htm

Water Systems Council

Water Systems Council is a national organization solely focused on individual wells and other well-based water systems not regulated under the federal Safe Drinking Water Act. The Council offers educational materials and trainings.

Wellcare Hotline: (888) 395-1033

www.watersystemscouncil.org/about/index.cfm

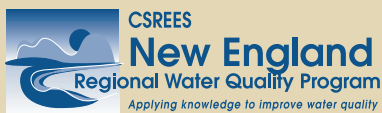
American Ground Water Trust

This national not-for-profit educational organization focuses on groundwater resource protection. The Trust conducts training programs and develops educational materials on groundwater resource protection including private drinking water well protection and maintenance.

American Ground Water Trust: (603) 228-5444

www.agwt.org or www.privatewell.com





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