

wellcare® information for

Real Estate Professionals

**Buying or Selling a Home
with a Well**

More than 15 million households, or about 15 percent of all Americans, are served by a private well water system. When it comes to buying or selling these homes, your customers need the best possible information about their drinking water.

Most homebuyers would never consider purchasing a home without a thorough inspection of the structure and its operating systems. Buyers must take the same care to inspect the property's well system and the quality of its drinking water. Many mortgage lending institutions, as well as some local governments, require inspections and tests before settlement. Disclosure laws and customary real estate practices also may govern well and drinking water issues.

For sellers, evidence of high quality drinking water increases a property's marketability and appeals to increasingly health-conscious buyers. Private wells offer a safe, modern and affordable source of clean water. Even better, the homeowner remains in control of the water supply.

Sellers can avoid delays at settlement by addressing water quality concerns before the house is placed on the market or comes under contract. Proof of a recent water test and well inspection reduces the chance of any surprises far along in the sales process.

If your clients object to the minimal costs involved, remind them that a house with a well system in disrepair or with contaminants in the water will be worth much less than a comparable property with a properly maintained water system.

Research the Well's History

Try to get as much information as possible on the construction, maintenance and condition of the well. Ask the seller or contact the company that drilled the well for the well log or well history (also known as a water well record or drilling report). Most states require well contractors to file a well log on each new well drilled. County or town health departments also may have records on when the well was drilled and how it was constructed.

The well log will include a reference number for the well, the well owner at the time of construction, location of the well and various construction details. These may include the drilling method used, depth of the well, amount and type of casing, size and type of screen, and type of pump. Ask for any records of maintenance and inspection of the well system after construction.

Also request a copy of any water quality tests taken in the years after the well was drilled. Most states encourage homeowners to test their well water once a year, usually in the spring. If the homeowner doesn't have records, check with the well driller or the local health department for water test results.

Review the Well's Condition

The well log should help determine the location, age and condition of the well. There are other aspects of the well to consider. The list below includes the most positive conditions for a well. Each is a strong selling point for the quality of drinking water available and the proper construction of the well.

Well location:

- **Proximity to pollution sources** – The well is uphill from pollution sources, such as the septic tank and septic field. Surface water doesn't reach the well or is diverted from the well.
- **Distance from pollution sources** – The well is at least 100 feet away from potential pollution sources and meets or exceeds all state minimum requirements for distance. The local health department has these standards.
- **Soil type** – The soil is fine-textured, such as clay loams or silty clay. This is the best soil type to filter impurities before ground water reaches the well.
- **Subsurface conditions** – The water table or fractured bedrock is deeper than 20 feet, which permits plenty of filtering.

Well construction and maintenance:

- **Age** – The well is less than 20 years old.
- **Well type** – It is a drilled well.
- **Casing height** – The lining of the well (the casing) is 12 or more inches above the land surface. In flood prone areas, the casing is one to two feet above the highest recorded flood level. This ensures that no substances can wash into the well.
- **Condition of casing and well cap** – No holes or cracks are visible, the cap is tightly attached and a screened vent faces the ground.
- **Casing depth** – The casing extends 50 or more feet below the land surface.
- **Backflow protection** – Measures are taken to prevent backflow (reverse flow in waterpipes) and, where necessary, anti-backflow devices are installed.
- **Well components** – Pump, pressure tank and water treatment system, if any – are in good condition and have been regularly maintained. Pumps last 10 to 15 years. Asking for the date of installation of the pump would be handy.
- **Well inspection** – The well was inspected within the last 10 years and records are available.

Well capacity:

- The well log or drilling report contains information on the well's capacity and yield in gallons per minute.
- There is a minimum well yield of one gallon per minute, which amounts to 1,440 gallons of water per day. The average family of four consumes 300 gallons per day.
- Appropriate storage capacity is available to meet all the needs of the family, as well as the other water uses typical of a suburban or rural family home.

Water treatment systems:

- Water treatment devices are appropriate and have been regularly maintained. These include point-of-entry equipment, which treats the water as it enters the house, or point-of-use equipment, which treats the water at an individual tap, such as the kitchen sink.

If the well falls short of these ideal conditions, contact your local well professional about further well inspection, water testing and/or the need for well repair or replacement. Finally, encourage homebuyers to schedule future inspection, maintenance and testing to keep their new well system operating at peak efficiency.

Conduct a Water Test

At a minimum, every well should be tested every year for bacteria, the most common water quality problem. Federal home loan programs also require tests for bacteria, lead and nitrate/nitrites (see below), as well as contaminants of local concern, such as arsenic or radon.

Home sellers should schedule their annual drinking water test for just before their property is listed. Buyers should conduct a drinking water test before closing and make sales contracts contingent on test results, just like a home inspection.

State and local health departments will have a list of state-certified laboratories, qualified to test for specific contaminants on behalf of the homeowner or buyer. Choose a lab that can return test results within two weeks in a form that is understandable to the average homeowner.

While the cost varies by state and lab, water testing can range from as little as \$5 for an individual test parameter, such as pH, to \$250 or more for a combination of many different parameters. Again, state and local health departments can provide guidance on what tests to request.

The laboratory will provide specific sampling instructions and clean bottles or small plastic bags in which to collect the water sample. Homeowners must carefully follow these instructions, as a carelessly collected sample can give inaccurate results.

Compare test results with both U.S. Environmental Protection Agency (EPA) maximum containment levels for the contaminant, which are guidelines used for public water supplies. EPA does not regulate private wells. Go to www.epa.gov/safewater/hfacts.html for individual standards. There also may be state or local standards for contaminants, such as sodium, that EPA does not regulate.

Any positive test for bacteria requires disinfection of the well system. Chlorine, ultra-violet light or ozone treatments will kill *E. coli* or other harmful germs. Other contaminants usually can be reduced to acceptable federal standards through point-of-use or point-of-entry systems installed in the home.

Review Mortgage Lender Requirements

U.S. Department of Housing and Urban Development (HUD) testing requirements are the minimum standard acceptable for Federal Housing Administration (FHA) insured loans.

For FHA mortgage insurance, the following is mandatory:

- Well water must be tested by a state-certified laboratory, in accordance with local and state drinking water regulations for private wells, within the past three months. This includes testing for lead, nitrate, nitrite, total nitrate/nitrite and bacteria (total coliforms and fecal coliforms or *E. coli*). If state and local agencies impose additional standards, these, too, must be met.
- Results of water tests may not exceed the U.S. EPA's maximum containment level for each contaminant:

Lead	15 parts per billion
Nitrate	10 parts per million
Nitrite	1 part per million
Total Nitrate/Nitrite	10 parts per million
Bacteria	Zero
- An on-site well and septic inspection must be conducted by one of the following: local health department staff, state-licensed engineers (who can include well drillers) or state-licensed sanitarians.
- Water quantity must be certified by the inspector. For new construction, the pump test must indicate that the system is capable of delivering a flow of five gallons per minute over at least a

four-hour period. For existing homes, the system must be capable of delivering three gallons per minute over at least a four-hour period. Systems should be checked to establish that adequate amount of water pressure is present and can be sustained.

- The well must be located a minimum distance from the septic system and from a variety of listed pollution sources.
- New wells must be drilled, no less than 20 feet deep and cased. Casing should be steel or other durable material that is leak-proof and acceptable to (either) the local health authority and (or) the trade or profession licensed to drill and repair wells in the local jurisdiction.

For more information on the HUD standards, go to www.hud.gov/offices/hsg/sfh/ref/sfh1-21b.cfm

For more information on wells for home buyers

Water Systems Council **wellcare**® Hotline for wellowners: 888-395-1033 or www.watersystemscouncil/wellcarehotline/index.cfm

WSC offers **wellcare**® information sheets on well components, maintenance, drinking water testing and potential contaminants: www.watersystemscouncil/wellcare/infosheets.cfm

Comprehensive guide, *Drinking Water from Household Wells*, U.S. EPA Office of Water: www.epa.gov/safewater/privatewells/pdfs/household_wells.pdf

Links to wells and drinking water by region or state, U.S. EPA Office of Water: www.epa.gov/safewater/privatewells/wherelive.html

*Home*A*Syst: An Environmental Risk-Assessment Guide for the Home* (Natural Resource, Agriculture and Engineering Service (NRAES) and the Regents of the University of Wisconsin System, 1997) can be found in the reference section of many public libraries or ordered from NRAES at www.nraes.org or 607-255-7604. A single copy costs \$11.50, including shipping and handling.

For more information on your drinking water

The following sites provide up-to-date information on efforts to protect drinking water supplies and steps you can take as a private well owner:

Water Quality Association www.wqa.org
NSF International www.nsf.org

For more information about wells and other wellcare® publications

wellcare® is a program of the **Water Systems Council (WSC)**. WSC is a national nonprofit organization dedicated to promoting the wider use of wells as modern and affordable safe drinking water systems and to protecting ground water resources nationwide. Well owners and others with questions about wells or well water can now call the **wellcare**® hotline at **888-395-1033** or visit www.watersystemscouncil.org



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Well water naturally better... Contact your local water well professional