

Water Well **Inspection Checklist**

For Proper Well Maintenance



A private water well normally requires very little maintenance, but you should periodically inspect it and take a few simple steps to ensure your drinking water is safe and to prevent more costly problems occurring down the road.

"Water wells are expertly engineered systems that, like a car, need to be examined periodically to make sure they are in good operating condition," Cliff Treyens, the National Groundwater Association's public awareness director said during National Groundwater Awareness week in March. "When water well owners stay on top of their well system's maintenance, it reduces risks to their water supply and their health."

While well service and a detailed inspection of the well components should only be done by a professional, it's important for you, as a well owner, to know the basics of well inspection, understand any problems you might have and the simple steps you can take to maintain your well.

What you can do

There are a few well maintenance steps that you can do on your own. Doing these periodically will help detect problems early, while they're still easily correctable:

- Prior to the 1980s, drilled wells were finished below grade to prevent freezing, so your well may be below ground in a "well pit" or vault that you may not be able to easily find. If you don't know where your well is, a professional well contractor can help you locate it. Once found, it's a good idea to mark it with a large stone so you can find it easily.
- Periodically check the well cover or cap on top of the casing to make sure it's not cracked or broken and is properly vented. The cap is what keeps bugs, snakes, mice and contaminants out of the well.
- Keep any hazardous materials fertilizer, pesticides, gasoline or motor oil, among others away from the well. You should never dispose of any of these materials by pouring them on the ground.
- Make sure not to add materials when landscaping that will cause the well casing to be less that 8 inches above the ground and make sure the ground slopes away from the well.
- Be careful when building, mowing or working around the well to make sure you don't damage the casing.
- Keep accurate records about your well, including maintenance and service, in a place you can easily find them.

When to call a professional

The Water Systems Council recommends an annual well water test for certain contaminants and a regular inspection of the physical system and its components by a certified professional. Of course, it's time to call in the experts if you are experiencing problems with the mechanics of your well or if you are experiencing any problems with your water.

A well inspection includes:

- A review of the well's history.
- An assessment of the location of the well.
- Inspection of the well components and the construction of the well.
- A well water quality test.
- Analysis of the well's yield/flow.

- Well history

When you buy a home with a water well, ask the seller for maintenance and service records and the well log or well history. If the owner doesn't have a log, check with the company that drilled the well or check with your state's oversight agency. Massachusetts, New Hampshire and Vermont all have online databases that can be searched for information about private wells in the state.

-Location

The well's location on your property is a factor in determining contamination risks. Wells should be located uphill from septic systems, fertilized fields or oil/gas storage tanks and the ground should slope away from the well so that water and rain drain away from it and decrease the chance of contamination.

-Construction

What kind of well do you have? While the majority of wells are drilled, there are also dug wells and gravel wells. Different factors affect different types of wells, so it's important to know and understand the type of well you have.

Ideally the well is less than 20 years old and:

- The lining or casing is at least 8 inches above the surface (1 to 2 feet if the area floods).
- The casing is at least 50 feet deep.
- The cover has no cracks and is securely attached and sealed. Check for corrosion.
- Steps have been taken to prevent backflow.
- The pump, pressure tank and water system have been inspected in the past 10 years and are in good working order.

-Water quality test

The EPA recommends that well water be treated annually for nitrate and coliform bacteria. In addition, you should have the water quality tested when it tastes or smells bad, has an off color, causes laundry staining or if there is a pregnant or nursing mother in your house. While there are no EPA regulations for private well water, the agency does have a list of guidelines for the recommended maximum levels of contaminants in your water.

-Yield

Recommended minimum yield from private water wells varies by location and well size; the Water Well Board in New Hampshire, for example, suggests a minimum of 600 gallons of water within a two-hour period once each day, or a flow rate of 5 gallons per minute for two hours – the amount a typical household may use.

-Abandoned wells

Finally, if there is an unused or abandoned well on your property, contact a licensed water well contractor to have it sealed. An unsealed well can be a way for contaminants to be introduced into your current water supply as well as into the groundwater.

For more on well maintenance and inspection, you can go the New Hampshire Department of Environmental Services' website for information, resources and a detailed checklist for inspecting the condition of your well.



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