

Section III

Well Maintenance

There are more than 15 million private wells in the U.S. that provide drinking water for approximately 40 million people. As the owner of a private drinking water well, you are responsible for well maintenance and testing to make sure the water used in the home is safe and clean. Well testing is discussed in [Section II](#). How to respond to the water testing results is discussed in [Section IV](#). References and additional resources can be found in [Section V](#).

It is expensive to investigate and treat contaminated water and install a new well. It is much simpler and cheaper to test and maintain a functioning well to prevent or avoid problems.

Drilled wells have a liner, called the casing, which is sealed and grouted. A proper well functioning seal will keep surface water and surface water runoff as well as shallow contamination from underground storage tanks and septic tanks, out of the well. Figure 3.1 shows a drilled well similar to the ones found on many Pound Ridge properties. Figure 3.2 is a drawing of a generic drinking water well.



Figure 3.1: Drilled well. (www.maine.gov)

Regular well maintenance should include the following areas:

- The well casing should be sealed and grouted and the casing should extend out of the ground to block surface water from pooling around the well, seeping inside the well casing and into the aquifer (figure 2).
- The casing should be rust free as rust can erode the casing and allow contamination to enter the well.

- Check for cracks in the casing which can allow surface water and runoff to enter the well. Snow plows, gardening equipment, construction equipment etc. can damage a casing.
- The well cap should be rust free and locked.

Preventive actions:

- Follow local regulations regarding septic system inspections and pumping. A malfunctioning septic system, yours or one nearby, is a common source of bacteria in drinking water.
- Pound Ridge's Local Law #2 addresses septic systems. You can find the law here: [Local Law 2 of 2011](#)
- Don't mix or use fertilizers, herbicides, fuels, degreasers, and other pollutants near your well. Chemicals in the soil near a well will travel towards the well.
- Don't dispose of hazardous waste in your septic system.
- Bring your old medications and other pharmaceuticals to the Pound Ridge Police Department's Drug Disposal Collection Program. Don't flush it into your septic tank. Old motor oil can be disposed at local gas stations and not put into the storm drain outside.
- Test your well regularly. [Section II](#) discusses well testing requirements and [Section V](#) provides a list of local laboratories.

Identify potential sources of contaminants that can impact your well:

- Malfunctioning septic system
- Leaking underground fuel tanks
- Disposal of motor oil or other household wastes in the backyard by you or your neighbor
- Any nearby plant nurseries or agricultural area using pesticides and/or herbicides
- Use of lawn fertilizer, herbicides or pesticides near the well
- Animal manure
- Proximity to road or driveway where road salt is used

Shallow wells, where the water is located close to the surface, and wells with damaged well casings are vulnerable to contamination from surface or near surface sources such as septic tanks and storm water runoff.

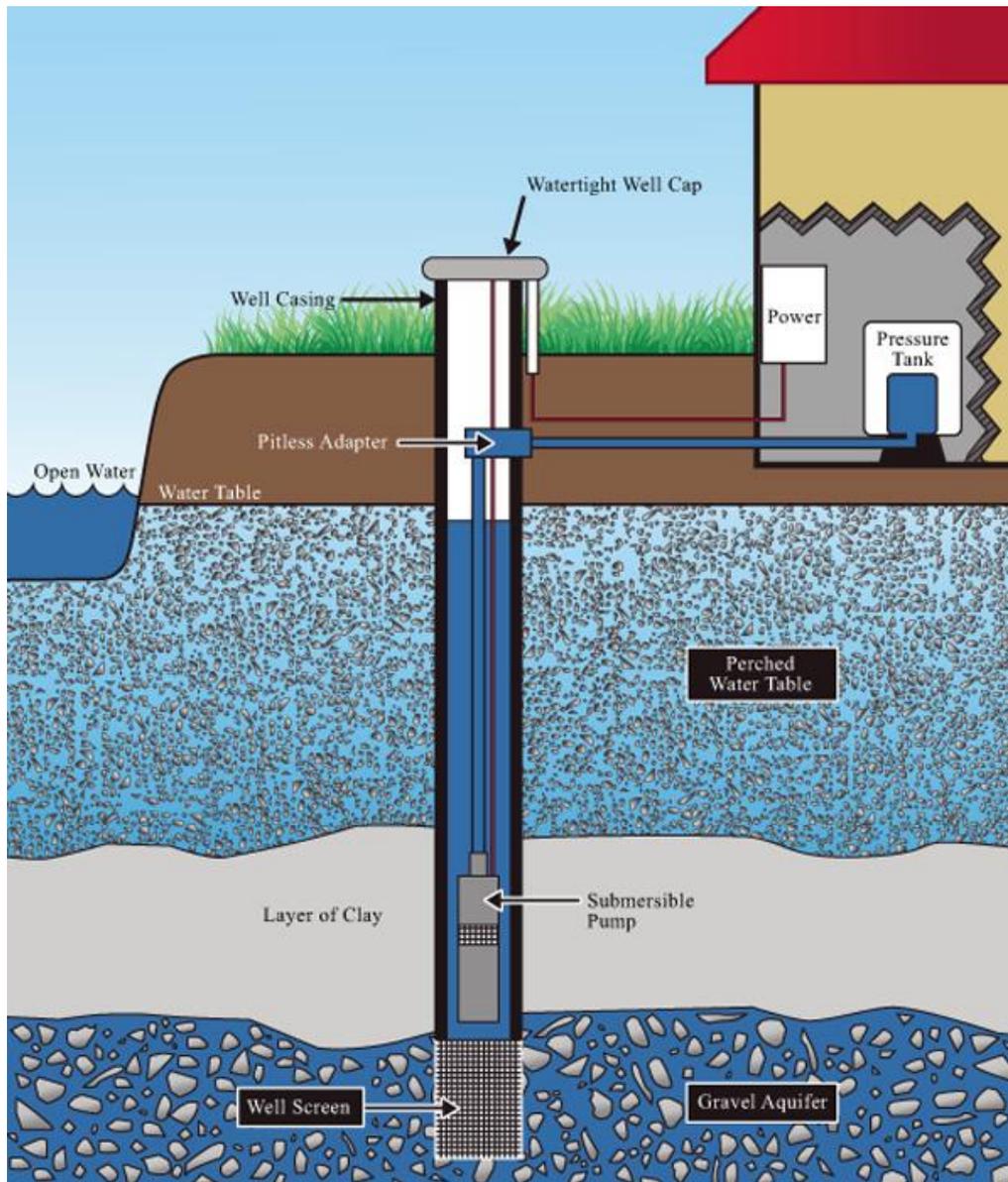


Figure 3.2. Drawing of a generic drilled well cross section .www.ianrpubs.unl.edu

Pound Ridge water – Section I

Water Testing – Section II and Table 1

Water treatment – Section IV – Table 2 treatment systems and Table 3 troubleshooting

References – Section V