



The drop on water

Protecting Your Drinking Water

It's your responsibility as a homeowner to maintain your water well. Protecting your water source and water supply system must be your prime consideration. Protection starts with proper location and construction of the well.

If your drinking water is supplied by a private well, below are some measures you can take to protect your water supply.

Inspect your well once a year

Check each of the following at least once a year, but preferably more often, for both drilled wells and dug wells:

- The wellhead is visible, not buried, and extends at least 152 millimetres (6 inches) above grade. If it is buried, contact a well contractor for help.
- The well cap is present and securely in place.
- The well cap is not broken, damaged, or cracked.
- The vent in the cap is screened and the screen is intact and not blocked by vegetation.
- All connections into the cap and well are properly sealed.
- Surface drainage near the well is directed away from the well casing or cracks.
- Surface water does not pond near the well.
- No settling or cracking of surface seals is visible.
- The pump and plumbing system are functioning properly.

See Figure 1 for a drilled well and Figure 2 for a dug well.

Protecting Your Drink

In addition,

For dug wells, ensure that

- The crocks and covers are secure with no holes, cracks, or broken pieces.
- Joints and connections in the crocks and liner are not leaking.
- The vent, if one is present, is not damaged or blocked. For a dug well, the vent is optional.
- No staining is visible above the apron – visible staining usually indicates a leaking joint or seal.

For drilled wells, ensure that

- The well casing has no holes or cracks – the part that is visible above ground.
- No gaps are visible between the casing and the ground around it.

If you note any problems, contact a certified well contractor. Find a list of certified well contractors in Nova Scotia at www.gov.ns.ca/nse/water/docs/WellDrillersDiggers.pdf.

Test water quality regularly

Homeowners are responsible for monitoring the quality of their well water. Investigate changes in the quantity or quality of the water immediately, and take action to correct problems.

Test the bacterial quality of your well water every six months. Test the chemical quality of your well water every two years. Test more frequently if you notice changes in taste, smell, or colour.

Collect water samples when the probability of contamination is greatest – after heavy rains, spring floods, extended drought, or lengthy periods of non-use.

Use an accredited water testing laboratory. Find a list of accredited water testing laboratories at www.gov.ns.ca/nse/water/waterlabs.asp or see the Yellow Pages under “laboratories.”

Get the special sampling bottles and instructions on proper sampling from the laboratory.

REGULAR TESTING

Homeowners are responsible for monitoring the quality of their well water:

- Test for bacterial quality every 6 months.
- Test for chemical quality every 2 years.
- Test more often if you notice changes in physical qualities – taste, smell, or colour.

Regular testing alerts you to problems with your drinking water.



king Water

The cost of analyzing water samples can range from \$15 for a single parameter to \$230 for a full suite of chemical parameters. The cost can vary depending on the lab and the number of parameters being tested.

Ensure that chemical and microbiological parameters meet the levels recommended by the Guidelines for Canadian Drinking Water Quality. This will help reduce the risk of short and long term illnesses.

Prevent well problems

The following simple rules will help ensure that your well provides water of good quality.

General

- Observe minimum distances of wells to oil and septic tanks and to other potential contaminant sources, such as those listed in the Well Construction Regulations – www.gov.ns.ca/just/regulations/regs/envwellc.htm
- Install an approved vermin-proof cap with a shielded and screened vent. This prevents debris, vermin, and insects from entering your well.
- Disinfect your well, pump, and pipes every time the pump or lines are removed for any reason, or repair work is carried out on the well. Chemical disinfection or chlorination ensures that your well, pump, and pipes are free from bacteria that can be introduced during well construction, pump installation, and well or pump repair.

Landscape and Vegetation

- Grade the area around the well to promote surface drainage away from the well and prevent ponding of water.
- Grow a grass buffer around the well. Don't use or store fertilizers, pesticides, or herbicides near your well. These can leach into the groundwater supply. This is especially important for homes with dug wells.
- Do not use bark mulch and wood chips near the well – they may release chemicals into the water as they decompose.
- Do not bury brush piles, stumps, or other such debris near a dug or drilled well.

Protecting Your Drink

Chemicals

- Do not allow liquids or wastes from contaminant sources such as garbage and manure piles to drain towards the well.
- Do not mix or use fuels, degreasers, waste oils, and other pollutants near the well. Spillage can contaminate the well.
- Never dispose of chemical wastes in unused wells. Dispose of such substances at the proper facilities.

Waste

- Keep animals from urinating or defecating near the well.
- Never dispose of hazardous chemicals in a septic system. Do not flush oils, detergents, paints, solvents, or other chemicals down the toilet.
- Have your septic systems pumped and inspected every three years by a qualified person. For a list of qualified persons see our website at www.gov.ns.ca/nse/water/onsitesewage.asp.

After a flood

- Stay away from the well pump while it is flooded to avoid electric shock.
- Do not drink or wash from the flooded well. You may become sick.
- Get help from a certified well or pump contractor to clean and turn on the pump.
- After the pump is turned back on, pump the well until the water runs clear to rid the well of flood water.
- Test the chemical and bacterial quality of your water to ensure it is safe to drink.



king Water

Hire certified well contractors

When constructing, modifying, or decommissioning a well, hire a certified well contractor to minimize contamination of your well water.

Keep accurate records

Accurate records, kept in a safe place, will help identify any problems that may occur. Keep each of the following:

- well and water line location
- well construction contract
- well and pump installation records
- maintenance records, such as disinfection, sediment removal, pump repair or replacement, and special procedures such as liner installation and hydraulic fracturing
- any use of chemicals in the well or treatment system
- water quality test results

For more information on well records, see our publication *Maintaining Your Water Treatment*, part of the *Your Well Water* booklet series at www.gov.ns.ca/nse/water/privatewells.asp.

If you follow these guidelines, your well should provide good quality water for a long time.

Protecting Your Drink

Figure 1
Cross-section of a typical drilled well

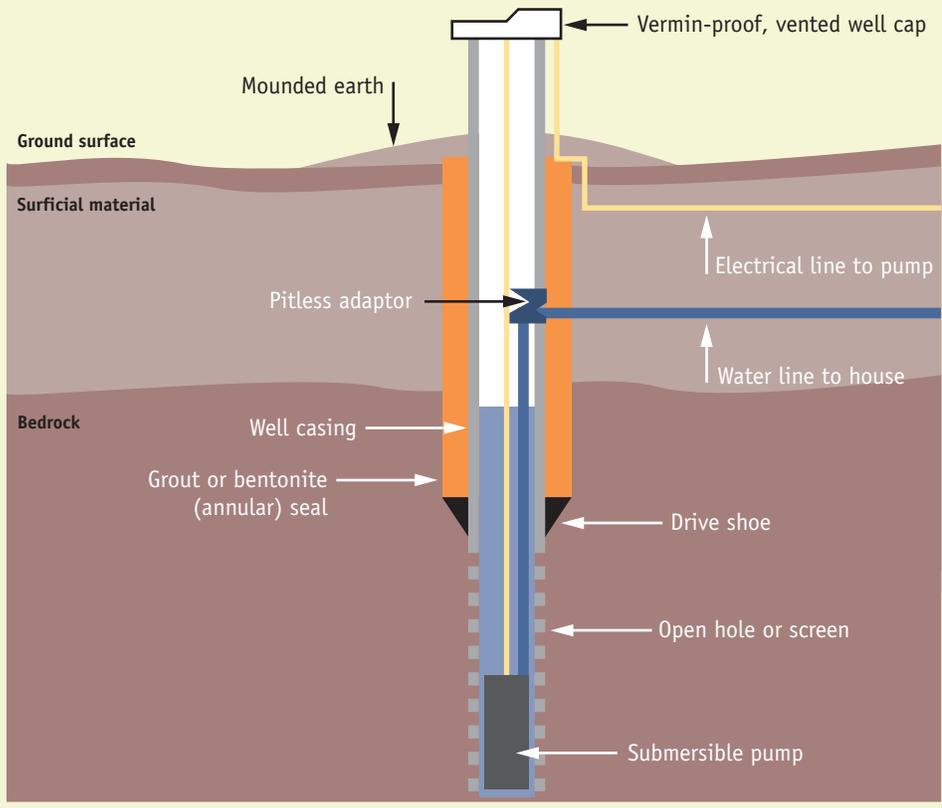


Diagram not to scale.

king Water

Figure 2
Cross-section of a typical dug well

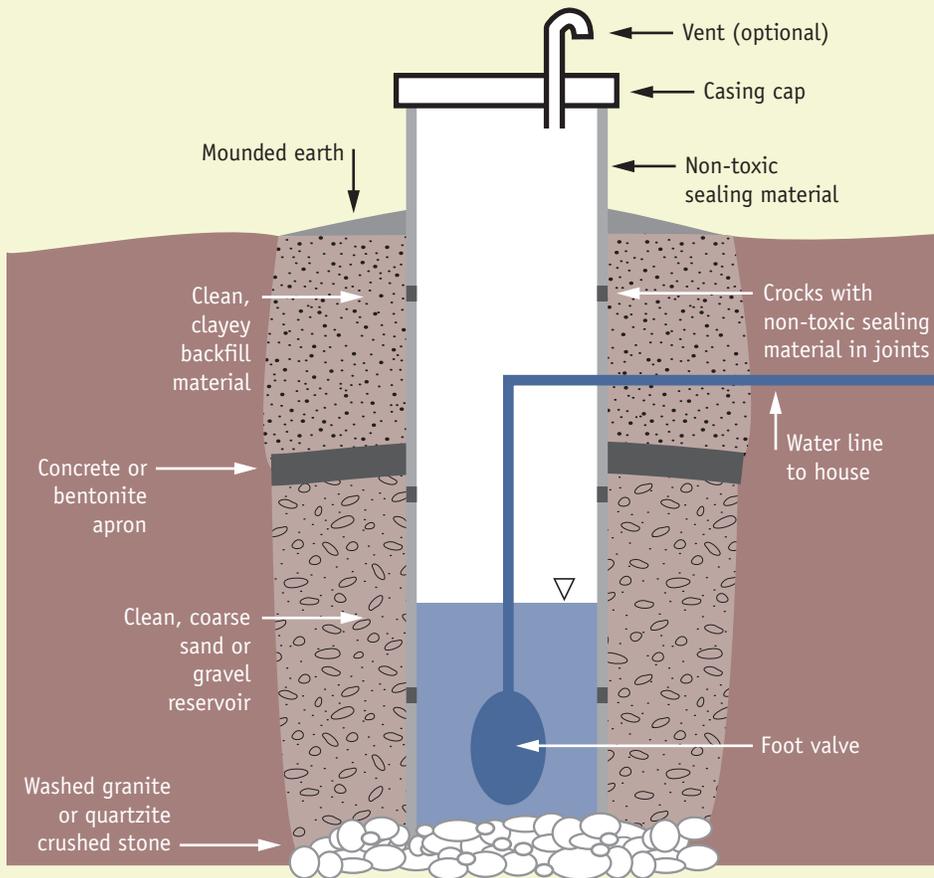


Diagram not to scale.

FOR MORE INFORMATION

Contact
Nova Scotia Environment at
1-877-9ENVIRO
or 1-877-936-8476

www.gov.ns.ca/nse/water/


NOVA SCOTIA
Environment

