



Well Owner Responsibilities

A private water well can provide a reliable, safe source of drinking water but ownership comes with responsibility.

Private wells can provide a clean, safe source of water if they are properly located, built and maintained. If you use a private well, it is your responsibility to properly operate and maintain it to ensure it remains a reliable, safe source of drinking water.

The *Water Act* is the legislation which outlines the regulations, codes of practice, and standards and guidelines for managing and protecting Alberta's water.

Under the *Water Act*, the Water (Ministerial) Regulation establishes standards for water well construction and outlines the responsibilities of well owners to protect their water wells and help to keep ground water resources healthy and clean for future generations.

Under the Regulation, well owners must:

Plug old or abandoned wells

You are responsible for having any abandoned wells on your property properly decommissioned or plugged. See the *Plugging Your Well* fact sheet for more information.

Abandoned wells pose one of the biggest risks to our groundwater resources because they provide a direct pathway for surface contamination to reach groundwater aquifers. In the case of larger diameter wells, they also pose a serious safety hazard to animals and small people.

Ensure all wells are securely capped and kept clean

Any wells on your property (including those that are not being used, but are intended for future use) should be properly capped, regularly inspected and disinfected.

A vermin-proof cap with a shielded and screened vent will prevent debris, vermin and insects from entering your well. Well casing should extend above ground surface by at least 20 cm and the area around the well should always be kept in a sanitary condition.

What else should I do to take proper care of my well?

In addition to the requirements under the Regulation, here are a few more beneficial management practices that will help you take care of your well and protect our groundwater.

Keep your well clean

Annually disinfect your well to keep bacteria growth in check. Iron and sulphate-reducing bacteria commonly thrive in water wells and are not harmful to your health but can cause problems with well productivity and water quality. See the fact sheet *Shock Chlorinating Your Well* for more information. Preventative maintenance is also less costly in the long run.



As a well owner, you are responsible for properly operating and maintaining your well. It is also your responsibility to make sure your water is safe to drink.

Test your well water

You should test your water for coliform bacteria twice a year (or more often if your well is less than 50 feet deep). Contact your local Community Health Centre (Public Health Unit) for sample bottles and information on how to collect a water sample and transport it to the laboratory.

For a list of local Health Units visit: <https://myhealth.alberta.ca>.

You should also test for routine chemistry every few years to identify any changes that may be occurring. Always have your test results interpreted by a Public Health Inspector.

Don't over-pump your well

Never pump your well at a higher rate than is recommended on the drilling report by your licensed water well contractor or you risk damaging both your well and the aquifer.

If you do not have a drilling report for your well you should hire a licensed water well contractor to perform a yield test on your well to establish a recommended pumping rate.

**WORKING
WELL**

Clean water.
Well protected.



Conduct regular inspections

You should regularly inspect your well and surrounding area looking for cracks or holes in the well cap and casing and any gap between the well casing and the ground around it. This area should always be properly sealed to prevent potential surface contaminants from draining into your aquifer. Consider building a protective structure around your well to protect it from any physical damage caused by lawn mowers, snow ploughs or other equipment.

Monitor your well

Monitoring your well's productivity over time ensures you have enough data to identify when the well needs servicing. Monitor both the non-pumping and pumping water levels and periodically hire a licensed water well contractor to conduct a flow test. They will be able to assess the cause of any declined productivity and how to rehabilitate the well, if possible. See the fact sheet *Measuring Well Water Levels* for more information.

Keep good records

Keeping a record of all water quality testing, water flow testing, well maintenance and repair helps you build history on your well. This information is valuable in identifying any changes in water quality or your well's ability to produce water.

Protect your well from contamination

The most common contamination threats are often close to home. Our land-use activities can have a negative impact on groundwater quality, particularly on shallower aquifers that are closer to ground surface. Fertilizers, pesticides, fuel storage tanks, landfills, animal waste and septic systems are examples of potential contamination sources. Be sure to keep

these contamination sources as far away as possible and down slope of your well. Always observe regulated minimum setback distances from contamination sources.

Use water wisely

Sometimes when landowners share the same aquifer for their water supply there is insufficient water to meet everyone's demand. Multiple withdrawals of groundwater from a single aquifer have a cumulative effect. So, when pumping in the area collectively exceeds the natural recharge rate to the aquifer, each well owner may experience a decline in the non-pumping water level in their well and the amount of water they can extract.



In Alberta, if the water is to be used for household (domestic) purpose, you do not need permission or a license to use your well.

Household purpose is defined in the *Water Act* as "the use of up to 1250 cubic metres (750 imperial gallons) of water per year per household for the purposes of human consumption, sanitation, fire prevention and watering animals, gardens, lawns and trees." Licensing your well gives you priority of right to the water for your non-household water use.

If you intend on using more water than that, or if you want to divert the water for purposes other than household use, it is your responsibility to contact Alberta Environment and Parks and inquire about obtaining a diversion license.



Copies of the *Water Act* and the Water (Ministerial) Regulation are available through the Queen's Printer Bookstore at 780-427-4952 (Edmonton) or online at <http://www.qp.alberta.ca/index.cfm>

FOR MORE INFORMATION:

Working Well

www.workingwell.alberta.ca

Water Wells That Last

<https://open.alberta.ca/dataset/716-a10>

A comprehensive water well management guide.

Alberta Water Well Drilling Association

<http://www.awwda.ca/>

For a list of licensed water well drillers in your area, visit the Association's website.

CONTACT US:

General Questions?

Alberta Environment and Parks
Information Centre
Phone: 310-3773 toll free

Technical Questions?

Alberta Agriculture and Forestry
Ag-Info Centre
Phone: 310-FARM (3276) toll free