

# Groundwater Protection

INFORMATION FOR WELL OWNERS

NEW REQUIREMENTS IN EFFECT

*February 29, 2016*



BRITISH  
COLUMBIA

## ***What is the Groundwater Protection Regulation?***

The Groundwater Protection Regulation (GWPR) under the *Water Sustainability Act* requires water wells in B.C. to be properly constructed, maintained, and, at the end of their service, deactivated and decommissioned to protect the quality and safety of our groundwater resources. The regulation came into force on February 29, 2016 and replaces the former Ground Water Protection Regulation under the old *Water Act*.

## ***Why is it important to follow the regulation?***

By following the regulation, well owners can protect their own water supplies and those of their neighbours, and help to keep groundwater resources healthy and clean for future generations.

Ministry of Forests, Lands and Natural Resource Operations officials are responsible for administering the regulation and may order certain types of work to be done on private wells under particular circumstances.

## ***Hiring a registered well driller and well pump installer***

All water supply wells, except for dug wells less than 15 metres deep, must be constructed by or under the direct supervision of a registered well driller or a professional hydrogeologist or geotechnical engineer. Well decommissioning can be completed by a registered well driller, registered well pump installer (except for flowing wells) or under the direct supervision of a registered well driller, registered well pump installer or a professional hydrogeologist or geotechnical engineer. Pumps for water supply wells must be installed by or under the direct supervision of a registered well pump installer, registered well driller or a professional hydrogeologist or geotechnical engineer.

Registered well drillers and well pump installers have identification cards issued by the Ministry of Environment and, when requested, are required to show these cards as proof that they are qualified to work with wells and well pumps. The identification card for registered well drillers will include their classification as a water well driller, geoexchange driller and/or geotechnical/environmental driller. A well pump installer identification card does not include a classification.

A register of *registered well drillers* and *registered well pump installers* is maintained by the Province and can be accessed by visiting:

[www.gov.bc.ca/water](http://www.gov.bc.ca/water).

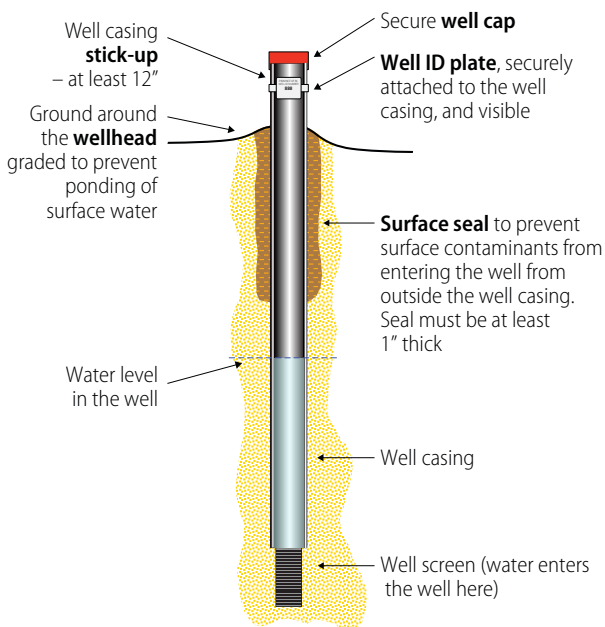
When hiring a registered well driller or registered well pump installer, a private well owner should ask for:

- » Proof of classification and qualification of the well driller and qualification of the well pump installer.
- » Information related to the requirements that must be followed in order to construct, alter or decommission a well or install a well pump in a well.
- » Information related to the likelihood of encountering a flowing artesian well and a plan for how it will be managed if encountered.
- » An estimate of well yield and what will happen if the well is dry.
- » A written report on the work completed.

### ***New requirements for water supply wells***

The person responsible for constructing, altering, decommissioning or installing a well pump in a water supply well is legally required to ensure the well meets the minimum requirements of the GWPR. These requirements include well siting, casings and liners, stopping or controlling artesian flow, pump installation and submission of well reports.

## Example of a water supply well



## Well owner responsibilities

Private well owners should ensure that they hire registered well drillers and registered well pump installers to construct or decommission a well or to install a well pump. Well owners must also operate and maintain their wells, even if the well is not being used, in a manner that meets the requirements of the *Water Sustainability Act* and the GWPR to ensure the well is sanitary and groundwater is protected. This includes, but is not limited to:

- » **STOPPING OR CONTROLLING ARTESIAN FLOW** – hire a registered well driller or professional.
- » **SECURING A WELL CAP** to the top of the well casing or a well cover to the opening of a well pit to prevent direct and unintended entry into the well of any water, foreign matter and animals.
- » **MAINTAINING THE WELL IDENTIFICATION PLATE** attached to the well and replacing it if it is damaged or lost. For a replacement well identification plate, contact:

[GroundWater@gov.bc.ca](mailto:GroundWater@gov.bc.ca).

- » **PROTECTING THE WELL** – maintain the area around the well so the wellhead is accessible, water does not pond around the wellhead, no foreign matter or contaminants can get into the well (e.g., pesticides, fertilizers, refuse, human or animal waste, or construction materials) and foreign matter or potential contaminants are kept from getting within three metres from the wellhead.
- » **CASINGS** – maintain the minimum casing stick-up of 30 cm (12 inches) and protect thermoplastic casings from damage and material breakdown to help floodproof and prevent material from entering the well.
- » **SURFACE SEALING** – promptly undertake repairs to the well or wellhead when needed, including filling any visible spaces around the well casing with sealant.
- » **OPERATING THE WELL** in a manner that does not adversely impact water quality or existing uses of water in other wells or hydraulically connected streams.
- » **DEACTIVATING AND DECOMMISSIONING THE WELL** – a well owner can deactivate their own well if the well has not been in service for five years. This involves capping, securing, protecting and maintaining the well in a safe and sanitary condition while it is out of service. Five years after a well is deactivated, a well owner must hire a registered well driller, registered well pump installer or professional to decommission a well that is no longer to be used. A well owner can decommission a drilled well that is less than five metres or a dug well less than 15 metres except if the well is a flowing artesian well.
- » **RETAINING RECORDS FOR THE WELL** – a well owner must retain information and records related to the well, including reports on well construction, decommissioning and flow tests.

## ***What can I do without hiring a contractor?***

A private well owner can undertake the following if they own the well and the work is completed in accordance with the GWPR and *Water Sustainability Act*:

- » Disinfect the pump and well.
- » Take water quality samples to ensure the well water is potable.
- » Install a flow meter, well cap or well cover.
- » Excavate a well up to 15 metres deep.
- » Deactivate the well.

### ***For more information:***

Questions related to the Groundwater Protection Regulation should be directed to the nearest regional office. Contact information can be found at:

<http://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells/regional-groundwater-contacts>.

For more information on the Groundwater Protection Regulation (GWPR) and groundwater in B.C., or to access this brochure online visit:

[www.gov.bc.ca/water](http://www.gov.bc.ca/water).

For more on applying for licences and approvals contact FrontCounter BC at **1-877-855-3222** or visit:

[www.frontcounterbc.gov.bc.ca](http://www.frontcounterbc.gov.bc.ca).