

Before You Drill

*Are you drilling a
new water supply
well for business,
agriculture,
waterworks
or other non-
domestic purposes?*

*Know your
responsibilities!*



BRITISH
COLUMBIA

Are you planning to construct a new water supply well for business, agriculture, waterworks or other non-domestic uses?

Well drillers and owners have several legal requirements under the *Water Sustainability Act* (WSA) and Groundwater Protection Regulation (GWPR). Planning beforehand may help reduce your costs and ensure that both your drilling and water licence application go smoothly. This information is relevant to most situations. Do your due diligence to consider all possible responsibilities before constructing your new well.

Steps for constructing a new non-domestic water supply well:

1. **Hire a registered water well driller** or, in drought-prone areas, hire a professional hydrogeologist.
2. **Determine government requirements**, including water licensing, local bylaws, siting and setbacks, and administrative costs.
3. **Determine technical testing requirements and costs of water licensing** before constructing your well.
4. **Plan and schedule** well construction, technical assessment, and licence application with your registered well driller or professional hydrogeologist.

Choosing a water well driller

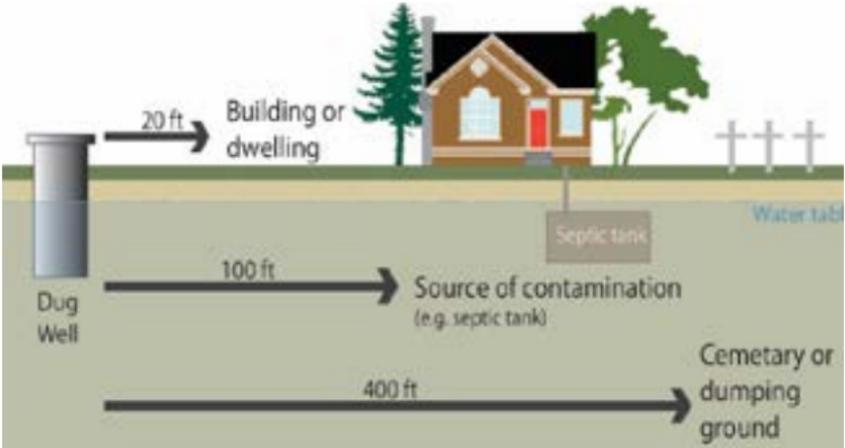
The WSA requires all drilled water supply wells and dug wells deeper than 15 m (50 ft)¹ to be constructed by, or under the direct supervision of, a **registered water well driller² or a professional³** in the field of hydrogeology or geotechnical engineering.

All wells must be constructed according to minimum specifications in the GWPR. You can find a local registered water well driller or professional online. To ensure you have the right contractor for the job, talk to registered water well drillers or professionals in your area and find a company that complies with legislation who can satisfy your needs.

1 Dug wells less than 15 m (50 ft) can be constructed by anyone if all relevant requirements under the WSA and GWPR are met
2 Well Driller Registry apps.nrs.gov.bc.ca/gwells/registries/
3 Engineers and Geoscientists BC <https://www.egbc.ca/>

Siting and setbacks

Your new water supply well should be in an area that: complies with regulated setbacks, allows easy and safe access to the wellhead, and protects the well from physical damage and flooding. Setbacks are regulated to prevent pumping interference and contamination.



Along with regulated setbacks shown above, new water supply wells must be sited at least 15 m (50 ft) from an existing water supply well (exceptions may apply).

Water licensing

All irrigators, industries, waterworks and others who divert and use groundwater from a well or dugout for non-domestic purposes are legally required to apply for a water licence.

Apply online at Groundwater.gov.bc.ca.

Domestic groundwater users

You do not need a licence if you use groundwater for domestic purposes, including for a private dwelling household, fire prevention, private lawn and garden watering (up to 1,000m² or ¼ acre), and water for domestic animals or poultry kept as pets or for household use. You are encouraged to **register your well for free** to protect your domestic water use rights.

Are you replacing your existing water supply well or changing how the water is used?

You may amend your existing water licence (e.g. change works or water purpose) if your new well is diverting from the same aquifer you have been using historically and the well will not divert an additional volume of water above historic or licensed use. **An amendment can be done through FrontCounter BC.**

Are there costs?

Water licence holders must pay an annual water rental based on the water use purpose and volume. In some cases, you may need to submit more information to determine if your groundwater use could impact the environment, other rights holders, or First Nations' interests. This can lead to additional time and effort.

Pumping test costs can range from \$5,000 to \$30,000 *or more* depending on duration, scale and complexity. You may need a pumping test if:

- the well is likely to be hydraulically connected to a stream or a surficial saline water body (e.g., coastal),
- there are active wells nearby in the same aquifer,
- the well is in an aquifer or a watershed with an allocation notation or known water scarcity issues,
- a large volume is requested (>100 m³/day bedrock aquifer, >1000 m³/day unconsolidated aquifer).

Other requirements

Ensure you have any permits or assessments to construct works, divert water, or conduct an activity, such as:

- **Drinking Water Protection Act operating permit**, required for all "water supply" systems,
- **Environmental Assessment:** Certificate or exemption letter (systems designed to pump at >75L/s) or project notification (systems designed to pump at >63.25L/s),
- **Permit over Crown Land or Crown Land Tenure** if any of your works are on or cross Crown Land,
- **Municipal or local government permits**,
- **Easement or agreement to access property** if works are on or cross someone else's private property.

Resources and useful links

If you have questions, refer to these resources, contact a registered water well driller, or contact FrontCounter BC at 1-877-855-3222 or FrontCounterBC@gov.bc.ca.

- Groundwater Wells and Aquifers Application: apps.nrs.gov.bc.ca/gwells/
- Information on groundwater wells and aquifers in B.C.: <https://www2.gov.bc.ca/gov/content/environment/air-land-water/water/groundwater-wells-aquifers>
- Licensing Groundwater in B.C. (FAQs): <https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/gwlicensinggas-2020.pdf>