

The drop on water

# Well Decommissioning

Decommissioning a well means to permanently fill in and seal it, eliminating it as a source of water.

Improperly constructed, unused, or contaminated wells that are beyond repair must be properly decommissioned according to the Water Well Decommissioning Guidelines.

## **Fill it and seal it**

Wells no longer in use must be properly decommissioned, otherwise unused wells may contaminate the aquifer.

Decommissioning a well

- ensures the safety of those in the vicinity of the well
- prevents surface water infiltration into an aquifer via the well
- prevents the vertical movement of water within a well
- conserves aquifer yield and hydraulic head
- removes physical hazards

## **Use certified well contractors**

Use contractors holding a valid certificate of qualification:

- for drilled wells – a certified well driller
- for dug wells – a certified well digger.

Find a list of certified well contractors in Nova Scotia at

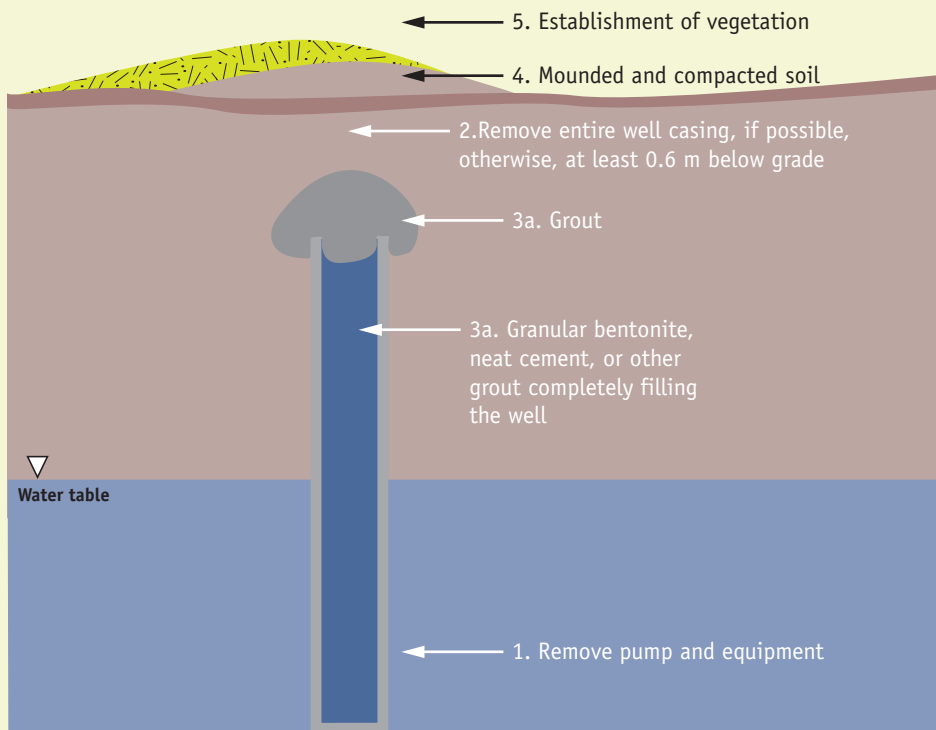
[www.gov.ns.ca/nse/water/docs/WellDrillersDiggers.pdf](http://www.gov.ns.ca/nse/water/docs/WellDrillersDiggers.pdf).

# Well decommissioning

## Steps to decommissioning a well

1. Remove pumping equipment.
2. Remove the casing or crocks.
- 3a. For drilled wells, install the appropriate well grout material – neat cement, sand-concrete mix, bentonite grout, or bentonite chips.
- 3b. For dug well, install clean natural backfill materials and for the upper 1 metre, install compacted clay or bentonite.
4. Mound earth at the site to eliminate surface water ponding.
5. Establish vegetation for increased stability.

**Figure 1**  
**Diagram of the decommissioning of a typical drilled well**



*Diagram not to scale.*

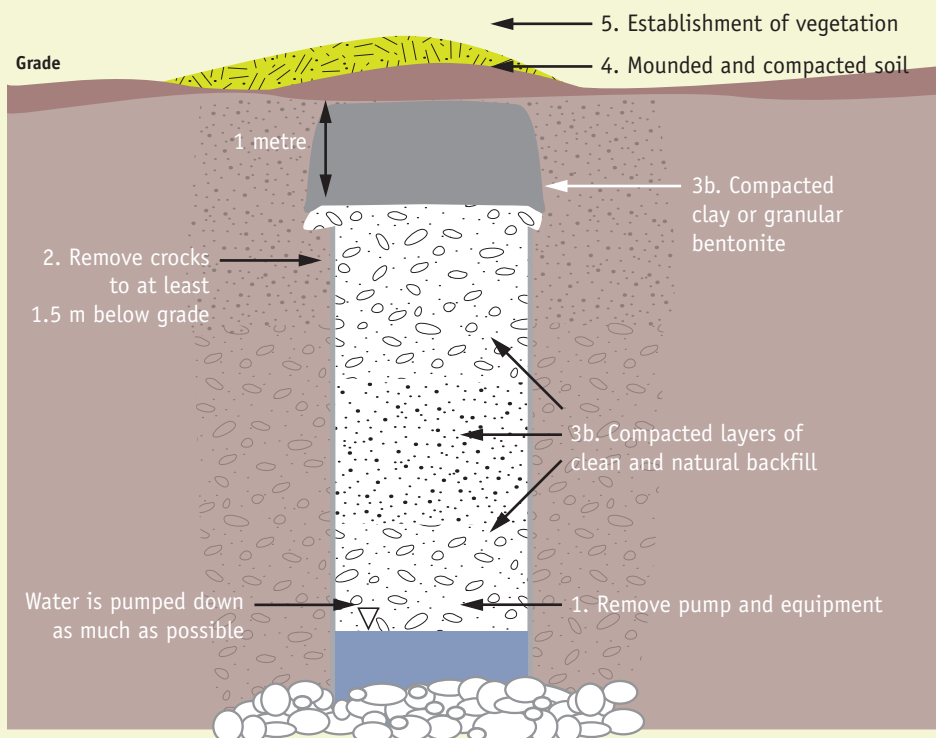
# Commissioning

The procedure for decommissioning both drilled and dug wells is described in the Water Well Decommissioning Guidelines at [www.gov.ns.ca/nse/water/groundwater/docs/WellDecommissioningGuidelines.pdf](http://www.gov.ns.ca/nse/water/groundwater/docs/WellDecommissioningGuidelines.pdf).

## Some wells need special care

Under some conditions, the well may need a site-specific decommissioning method or specialized grout material. The certified well contractor must submit alternative decommissioning methods to Nova Scotia Environment before proceeding.

**Figure 2**  
**Diagram of the decommissioning of a typical dug well**



*Diagram not to scale.*

# Well decommissioning

Special decommissioning methods may be needed for wells that:

- have flowing artesian conditions
- are affected by salt water
- are high yield production wells
- are extremely deep
- have been contaminated by natural or man-made conditions
- have been constructed by neither drilling nor digging
- have other unusual conditions

## Cost

Homeowners bear the cost of well decommissioning. This can be expensive, but is both the duty and responsibility of the homeowner.

NOT decommissioning an unused well,

- is a safety hazard
- can threaten the integrity of the existing water supply
- can be more costly over time

## Duty to submit records

As of September 2007, decommissioning records must be submitted to Nova Scotia Environment.

## More than one well?

Sometimes more than one well may be present on a property. The previous owners may have had water shortages or other problems with their existing well. They may have replaced or added to the supply of wells.

If more than one well exists on the property, you should find out why. It may indicate previous

- water shortages
- well contamination
- improper construction of a well
- construction of a well for purposes other than drinking and regular household use

## FOR MORE INFORMATION

Contact

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

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

  
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