

Who can plug a well?

The DNR recommends that you hire an Iowa DNR certified well contractor to plug your well. As a well owner, you can do the work yourself if two conditions are met. 1) The well owner must plug the well following the current well plugging rules under supervision of the local county environmental health department, and 2) A certified well contractor or the local county environmental health agent must sign and submit a form stating that the well was plugged following the state's current well plugging rules.

If you want to plug your own well, please keep in mind that if you don't have supervision from a certified well contractor or your local county environmental health department, the well will not qualify for any cost share assistance under the Grants to Counties (GTC) well plugging program.

Please contact your local county environmental health office or the DNR for more information.

When to plug?

All wells which are abandoned must be properly plugged within 90 days of the date of abandonment or when the abandoned well is discovered.

Can I get financial assistance?

Financial assistance is available through your local county environmental health department under the Grants to Counties (GTC) Well Program. Administration of the GTC Well Program is through The Bureau of Environmental Health Services at the Iowa Department of Public Health. The bureau works closely with Iowa DNR, who provides technical oversight of water well testing, water well closure, and water well renovation under the GTC program.

Counties that participate in the GTC program can reimburse property owners up to \$500 for each well plugged and \$1000 for each well renovated.

For more information contact:

Your local county environmental health department
http://www.iowadnr.gov/Portals/idnr/uploads/water/wells/co_sanitarians.pdf

Or contact:

The Iowa Department of Natural Resources
Private Well Program at (515) 725-0462

Available web sites:

Iowa Private Well Plugging Program

www.iowadnr.gov/wellplugging

Iowa's Well Plugging Rules – Chapter 39

www.legis.iowa.gov/docs/iac/chapter/03-24-2010.567.39.pdf

Find an Iowa DNR Certified Well Contractor

www.iowadnr.gov/wellcontractorcert

Iowa DNR Private Well Program

www.iowadnr.gov/privatewells

Iowa Department of Public Health Grants to Counties Well Program

<https://idph.iowa.gov/Environmental-Health-Services/Grants-to-Counties-Water-Well-Program>

Plugging Abandoned Wells in Iowa



Partners in protecting your drinking water

**Iowa Department of Natural Resources
Iowa Department of Public Health**

Why plug your old wells?

In 1987, the Iowa Groundwater Protection Act was passed by our legislature to help prevent further contamination of one of Iowa's most precious resources; our groundwater. Proper plugging of abandoned wells was included in the legislation as well as a funding mechanism to help assist well owners with the cost of plugging wells.

Abandoned wells can be a direct pathway for contaminants to enter the groundwater and cause water quality problems for nearby existing wells and any future wells. In addition, large diameter wells, well pits, and cisterns also pose a safety hazard for people, pets, and livestock because the large openings may give-way leading to injury.

By definition, the term "abandoned well" means any well that is no longer in use, or is in such poor physical condition that it cannot be repaired to be safely used. The term can apply to all wells including public drinking water wells, monitoring wells, commercial wells, private supply wells, heat pump wells, and irrigation wells.

Abandoned wells should be properly plugged, renovated to today's well protection standards, or repaired, capped, and designated as a "standby" well. Each of these options is designed to meet the goals of protecting groundwater from further contamination and eliminating safety hazards.

What types of materials are needed?

Properly plugging a well requires the use the right materials – both fill materials *AND* sealing materials.

Fill is clean, granular material such as washed sand or pea gravel which is used in larger diameter wells to fill space and reduce the cost of plugging.

Sealing material is bentonite clay or "neat" cement (cement mixed without sand or gravel) and is used to seal the earth's natural confining layers that were penetrated during the construction of the well.

How do you plug a well?

Wells in Iowa fall into one of three well classes when we talk about well plugging. The method of well plugging used will depend on the well class, what is known about the well, the measured well depth, and the local geology. See the table below to identify each type of well and view one example on how it should be plugged. For others, see [Chapter 39](#).

	Dimensions	Description	Diagram
Class 1	<p>Greater than 18 inches in diameter or less than 100 feet deep; typically located in central, southern and western Iowa; potential physical and pollution hazards.</p> <p>Commonly called bored wells, dug wells, augured wells, seepage wells, or cistern wells.</p>	<p>Slowly place alternating layers of fill and sealing material. One foot of sealing material is used at the top of the water table, and again four feet from the top of the well to achieve the required seal. Fill is used between plug layers.</p> <p>Or you can omit all of the fill material and use only sealing material to completely plug the well.</p>	<p>Soil cap</p> <p>1' Sealing material</p> <p>Clean fill</p> <p>Water Table</p> <p>Clean fill</p> <p>Sealing material</p> <p>Remove top 4' of well tile</p>
Class 2	<p>Less than 18 inches in diameter or more than 100 feet deep; these can occur anywhere in Iowa, especially in northern and eastern Iowa; potential pollution hazards.</p> <p>Commonly called cased wells, drilled wells, deep wells, or artesian wells.</p>	<p>The plugging procedure for Class 2 wells will depend on the geologic formation that the well penetrates and whether or not a well log exists for the well. Because of this we recommend that you hire a Certified Well Contractor to plug all Class 2 wells. Find certified well contractors at the following web site: www.iowadnr.gov/wellcontractorc</p>	<p>4' Soil</p> <p>1' cement cap</p> <p>Sealing material</p> <p>Water Table or 10' into bedrock</p> <p>Clean fill</p> <p>Remove top 4' of well casing</p>
Class 3	<p>2 inches or less in diameter and shallow, 50 feet or less in depth.</p> <p>Commonly called sandpoint wells or driven wells.</p>	<p>Wells can be plugged by simply pulling the pipe from the ground and then filling the hole with bentonite clay, or if it cannot be pulled out, the pipe can be cut four feet below the surface and the well filled with sealing material.</p>	<p>All remaining open borehole is filled with sealing material</p> <p>Sandpoint pipe pulled from earth and sand in well bore collapses</p>