

# Well Conversions

## NONCOMMUNITY PUBLIC WATER SYSTEMS

### What is well conversion?

Well conversion is when an existing water-supply well is converted from private to public use. When a public water system wants to start using an existing well to serve the public, the well must go through a source evaluation by the Minnesota Department of Health (MDH) Drinking Water Protection (DWP) and Well Management (WM) Sections to determine if the conversion process is needed. If the well existed and was used as a public water-supply well prior to August 4, 2008, the well conversion process is not needed, and the well will be inspected during a DWP sanitary survey. If the well was not used as a public water-supply well prior to August 4, 2008, [Minnesota Rules, part 4725.5825, Subp. 6](https://www.revisor.mn.gov/rules/4725.5825/#rule.4725.5825.6) (<https://www.revisor.mn.gov/rules/4725.5825/#rule.4725.5825.6>) requires that the well may only be converted to public use if it meets the standards of the current Minnesota Well Code ([Minnesota Statutes, chapter 1031.205](https://www.revisor.mn.gov/statutes/cite/1031.205) (<https://www.revisor.mn.gov/statutes/cite/1031.205>) and [Minnesota Rules, chapter 4725](https://www.revisor.mn.gov/rules/4725/) (<https://www.revisor.mn.gov/rules/4725/>)).

### Why might my well not convert?

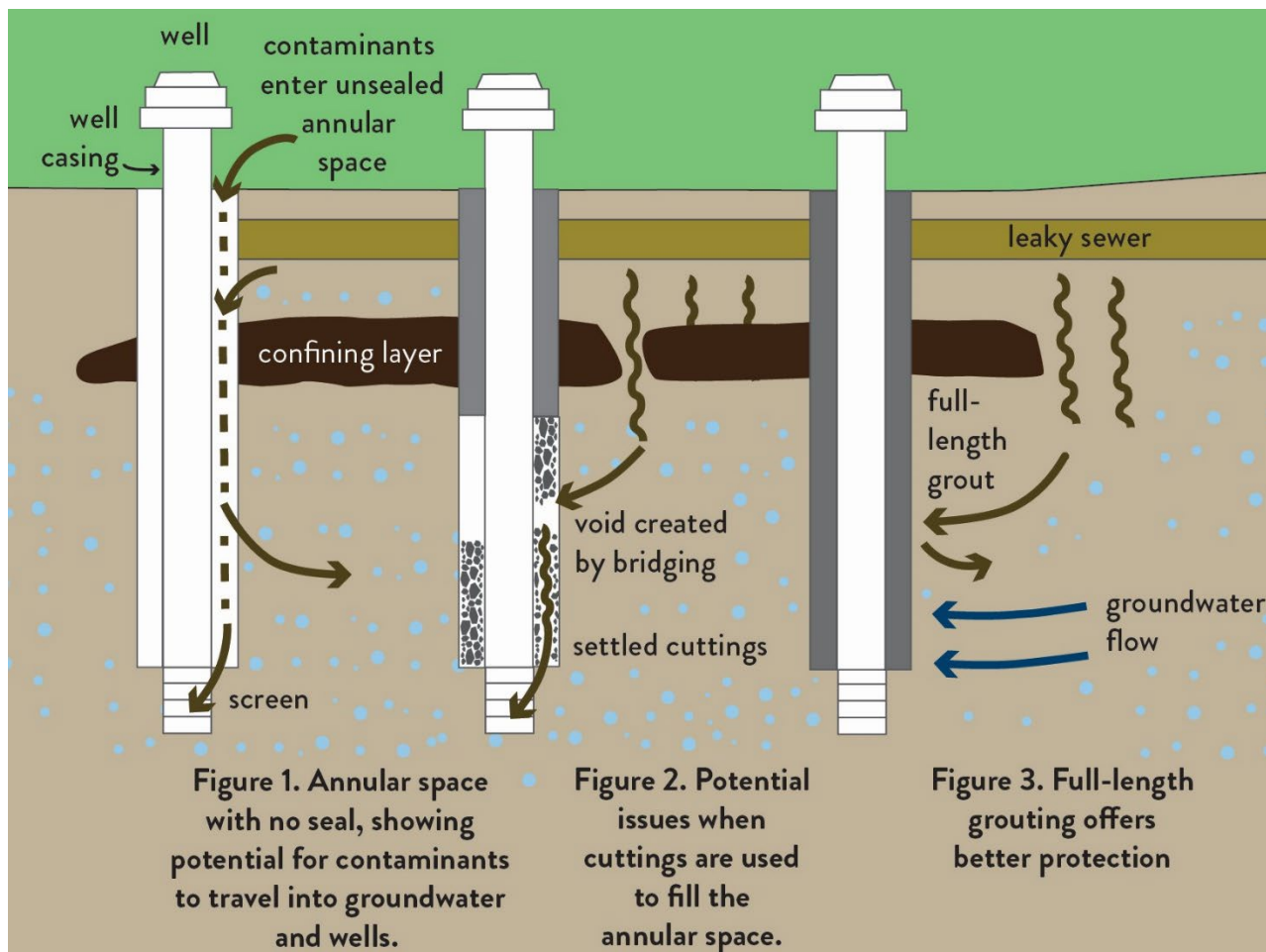
During the well conversion process, a WM hydrologist, with help from a DWP field sanitarian, gathers information on the well construction and determines whether the well meets the current Well Code requirements. There are many standards in the Well Code, including the requirement for full-length grouting for public water-supply wells. Because full-length grouting was not a Well Code requirement prior to 2008, the lack of full-length grout is the most common reason a well won't convert.

### Why is full-length grouting important?

During most well construction, an open annular space is created between the well casing and the bore hole wall (Figure 1). Grouting is a method where the annular space is filled with an approved low-permeability material to prevent contaminants from entering the well or the groundwater.

For wells that do not serve the public, wells completed in unconsolidated (non-bedrock) formations require grouting from the ground surface to the bottom of the well casing or 50 feet below ground surface ([Minnesota Rules, part 4725.3050, Subp. 3](https://www.revisor.mn.gov/rules/4725.3050/#rule.4725.3050.3) (<https://www.revisor.mn.gov/rules/4725.3050/#rule.4725.3050.3>)). Wells completed in bedrock have additional grouting requirements. The portion of the annular space below 50 feet can be filled with either grout or drill cuttings (sediments removed while drilling the bore hole). Cuttings may not always provide an effective seal of the annular space, because placing them can leave voids or permeable spaces if the cuttings separate, bridge, settle, or cause native material to collapse (Figure 2).

Therefore, to provide increased protection for wells that do serve the public, [Minnesota Rules, part 4725.5825, Subp. 4](https://www.revisor.mn.gov/rules/4725.5825/#rule.4725.5825.4) (<https://www.revisor.mn.gov/rules/4725.5825/#rule.4725.5825.4>) requires a public water-supply well, constructed with a method that creates an open annular space, to be grouted from within ten feet of the lower termination of the well casing to the established ground surface or base of the pitless adapter or unit. This is referred to as "full-length grouting." Prior to 2008, public water-supply wells were not required to be full-length grouted. Figure 3 illustrates how full-length grouting can provide increased protection from contamination.



## What happens if my well won't convert?

If your well is not able to convert, but is already connected, the situation is considered a significant deficiency under the Ground Water Rule and corrective action is required. Corrective action may include drilling a new well or connecting to an existing public water supply source. Unless there is also a water quality issue identified, you may continue to use the well until correction is made. Your DWP sanitarian and compliance staff will work with you to determine the timeline for taking your chosen corrective action. A Source Water Protection (SWP) grant may be available to assist you. For more information, go to the [Source Water Protection Grants \(https://www.health.state.mn.us/communities/environment/water/swp/grants.html\)](https://www.health.state.mn.us/communities/environment/water/swp/grants.html) webpage. If you have questions about the conversion process or the SWP grant process, please contact your DWP sanitarian. You may find contact information on [Noncommunity Public Water Supply Unit \(PDF\) \(https://www.health.state.mn.us/communities/environment/water/docs/noncomstaffmap.pdf\)](https://www.health.state.mn.us/communities/environment/water/docs/noncomstaffmap.pdf).