

Management Guidance for Flooded Grain

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AMES, Iowa – Even if your home was not damaged by flooding, your private well may need attention. Wells that have been submerged beneath floodwater or high groundwater tables should be disinfected and tested for safety before using water from them for drinking or food preparation.

Most wells do not have watertight caps, so bacteria, silt and other pollutants are likely to enter them if they are submerged. Wells located near streams or drainage ditches are particularly vulnerable to flooding following rapid snowmelt or heavy rainfall, but wells located away from surface water also can become submerged if they are located inside leaky frost pits that become flooded as shallow water tables rise during wet seasons.

To reduce the risks of well contamination caused by submergence, [wells should be constructed \(https://store.extension.iastate.edu/product/4149\)](https://store.extension.iastate.edu/product/4149) with watertight casing that extends at least 1-2 feet above ground or above the highest known flood level at that location. In addition, earth should be mounded around the casing to prevent ponding of contaminated water around the well.

If your well has been flooded, disinfect it using a procedure called [shock chlorination \(https://store.extension.iastate.edu/Product/4200\)](https://store.extension.iastate.edu/Product/4200). Experienced and properly equipped do-it-yourselfers may be able to shock chlorinate their own wells, but the procedure requires removing the well cap, and dealing with electrical wiring and piping that may obstruct the interior of narrow diameter wells. A well driller or pump installer would have the professional training and equipment to perform the job thoroughly and safely.

After the well is disinfected, a [water sample \(https://store.extension.iastate.edu/Product/4730\)](https://store.extension.iastate.edu/Product/4730) must be tested for coliform bacteria to ensure that the disinfection procedure was effective and that the water is again safe to drink. Until test results indicate that water from the well is safe for human consumption, use bottled water from a safe source for drinking and food preparation. If bottled water is not available, small batches of clear (not cloudy) well water can be disinfected by vigorously boiling it for at least five minutes.

More information can be found in the following ISU Extension and Outreach publications:

- [Good Wells for Safe Water \(https://store.extension.iastate.edu/product/4149\)](https://store.extension.iastate.edu/product/4149)
- [Shock Chlorinating Small Water Systems \(https://store.extension.iastate.edu/Product/4200\)](https://store.extension.iastate.edu/Product/4200)
- [Sampling Your Drinking Water \(https://store.extension.iastate.edu/Product/4730\)](https://store.extension.iastate.edu/Product/4730)

More detailed information and guidance for wells with significant flood damage is available from the Iowa DNR: "[What Should I Do When My Well Floods?](https://www.iowadnr.gov/Portals/idnr/uploads/water/wells/What_should_I_do_when_my_well_floods.pdf)" (https://www.iowadnr.gov/Portals/idnr/uploads/water/wells/What_should_I_do_when_my_well_floods.pdf)