

Use of Wells and Septic Systems Following a Wildfire

Quick facts....

- Fire damage to above and underground structures can lead to well water contamination and malfunction of wastewater (septic) systems.
- Well owners need to inspect and test their well and septic system following impact by wildfire.
- Keep adequate bottled water on hand for cooking and drinking until certain that well water is safe.

Following a wildfire, homeowners using a private well or septic system are encouraged to complete a visual inspection of their system and promptly repair any damage before use. Typically, the underground components of the well, pump and septic system are unharmed by wildfire. However, the wiring at the top of the well and the junction box may be burned if the fire was in close proximity. Damage to electrical wires, controls, pipes, tanks, and other components of these systems may affect system performance and may compromise the safety of your water supply, or affect the proper disposal of wastewater. If the outside of your home or yard area near your well is burned, you should have a licensed well company inspect the system. The pump may be functioning; however, burned wires not visible from the surface may cause damage to the system.

If you do not have power to your home following the fire, a generator can be used to run the well but the pumping system can be damaged by using undersized generators. Contact a licensed well contractor, electrician or your power company to determine the minimum size generator needed to properly power your pump motor.

Once you have your well working, flush the system thoroughly both inside and outside the house. If your water still tastes or smells earthy, smoky or burnt, you should flush your water lines again thoroughly and take a water sample for testing at a laboratory for routine well water quality parameters including metals. Any damage to the wellhead casing or seal requires testing for coliform bacteria followed by chlorination. Colorado State University Extension Factsheet 0.520 "Selecting an Analytical Laboratory" offers information on how to select a certified water quality testing laboratory and provides a list of commonly used laboratories throughout Colorado (<http://www.ext.colostate.edu/pubs/crops/00520.html>). Additionally, if flame retardant was heavily used near your well it is possible that constituents from the material may migrate into your well water over time, particularly if the wellhead is compromised. In this situation, monitoring nitrate concentrations after a period of several months may be prudent.

Onsite wastewater (septic) systems have most of their functional components below ground and are typically more resistant to fire damage. However, it is important to inspect your system for damage to PVC piping above or near the ground that may have been impacted by heat. If your wastewater disposal system has been damaged, or if your system is backing up or malfunctioning, discontinue use and contact your local health department for guidance and instruction on repair and restoration of the system.

For More Information

- **Colorado State University Extension Fact Sheets on Water and Septic System Operation and Maintenance** <http://www.ext.colostate.edu/pubs/pubs.html#water>
- **Drinking Water Resources** (by the Northern Plains and Mountains Regional Water Program) http://region8water.colostate.edu/drinking_water.shtml

For additional information on using your well and septic system following a wildfire contact your local county department of health or your local county Extension agent (<http://www.ext.colostate.edu/contact2.html>) .

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