

Maintaining Your Well After Wildfire

Water Well Issues After Wildfire

This handout identifies a number of issues that may occur with water well systems following a wildfire and provides a list of contacts and resources.

Electrical Hazards

Exposed electrical wiring to the well poses a significant safety hazard due to the potential for electric shock. There is the potential for an electrical short to the metal casing or other infrastructure at the wellhead.

Fix damaged or exposed wires and other electrical issues prior to restoring power to the site, attempting well repair, or touching the well or wiring. Contact a licensed contractor authorized to work on water pumps or electrical to inspect or repair the wires. Flag the area at a safe distance as a warning to others until repairs are made.

Dug Wells: Falling and Drowning Hazards

Wells that are dug into the ground (instead of drilled) tend to be old and landowners may be unaware that such a well exists on their property. Well covers can be damaged by fire. People and animals can become trapped or injured by walking on a weakened well cover that collapses, or by accidentally falling into an uncovered well. Some dug wells also contain water and may be a drowning hazard.

The Oregon Water Resources Department (OWRD) can provide technical assistance to help abandon dug wells to prevent safety hazards and groundwater contamination. If the well is still in use, inspect and replace the well cover if damaged. Until the cover is repaired, place barricades around it to prevent animals and people from falling in.

Similarly, if you discover what appears to be a sinkhole or an open hole, barricade the area around it, as it may be a dug well. Do not push debris into the hole, as this can lead to groundwater contamination. Contact your local OWRD well inspector as soon as possible.

Drilled Wells and Water System Damage

Some drilled wells may be damaged by wildfire. For example, most domestic wells have steel casing that rises at least one-foot above land surface. Within the well, PVC liners, a sanitary seal with rubber gasket, or PVC pipes may be melted or damaged. Outside of the well casing is the well seal. The seal may be damaged by the fire and could allow surface contaminants to flow into the groundwater. Well houses, pipes, pressure tanks, and storage tanks should also be inspected for damage.

If a well was burned or damaged by fire, contact an Oregon licensed well constructor or licensed contractor authorized to work on water pumps to assess the damage.

Water wells drilled since 1996 have stainless steel ID labels attached to the well casing. If the label is not attached, re-attach it to the well casing using a steel band. If the label cannot be read, request a new label from OWRD.

Water Treatment Damage

Water treatment systems such as filters, tanks, and treatment systems may be damaged. Contact a water treatment professional to inspect and repair the system.

Contaminants and Water Testing

Chemicals can get into the water if the well, piping or water system is damaged, or if chemicals and contaminants from above ground seep into the ground and into the groundwater. In some instances, chemicals may also be a problem when a system is depressurized. Dug wells that are uncovered may also be contaminated with debris or ash. Visit the Oregon Health Authority's website for more information on potential contaminants: <https://go.usa.gov/xGueZ>.

It is recommended that you have your water tested before use. Contact a water treatment professional, licensed contractor authorized to work on water pumps, or licensed well constructor to investigate treatment options. In addition, if you use water from a dug well, have a professional clean out your well before use.

Abandoning Wells

If the well is no longer in use, it is important to have it properly abandoned by a licensed well constructor. Properly abandoning unused wells protects the groundwater resource for future use.

Post-Fire Well Damage

Even if a well is not damaged during the fire, it can become damaged during post-fire debris clean up and construction. Clearly identify where the well is located on the property so that it does not become damaged during debris removal or other construction work. It is a good idea to flag the well, so the location is known and inform any contractors that come on site of its location.

Drilling a New Well

New wells must follow OWRD well construction standards and a licensed well constructor should be hired to perform the work. Consult the well constructor when planning the location of the well, as OWRD requires wells to be set away from certain features such as septic systems and other potential sources of contaminants.

If you have a water right for your groundwater use and need to replace a well with a new well, you may need to apply for a water right transfer (a change in the point of appropriation). Authorization must be obtained from OWRD before the use of groundwater from the new well may begin under your water right. Contact OWRD for more information.

Additional Information and Resources

Well Constructors and Contractors

Depending on the type of license and the services offered, these businesses may inspect and repair wells and associated water systems, assist with water testing and treatment, address electrical issues, or abandon wells. Use these databases to check for an active well constructor or a contractor's license before hiring.

Oregon Water Resources Department's Database of Licensed Well Constructors: <https://go.usa.gov/xGMCX>

Construction Contractors Board's Database to find Licensed Contractors: <http://search.ccb.state.or.us>

Tip for searching: Type "pump" or "water" in the search bar to find contractors with those words in the name.

Oregon Water Resources Department

Well construction standards, well logs, well inspections, and well constructor licensing. Processes water right transactions.

Oregon Water Resources Department Website: www.oregon.gov/owrd

Phone: 503-986-0900

Well Construction and Compliance Webpage: <https://go.usa.gov/xGMCV>

Phone: 503-986-0852

Well Inspector Contact Information: <https://go.usa.gov/xGMCv>

Water Resources Department Well Owners Handbook: <https://go.usa.gov/xGMCw>

Oregon Health Authority

Information on water well testing and potential water contaminants.

Domestic Well Safety Program Webpage: <https://go.usa.gov/xGMCG>

Phone: 971-673-0440

Emergency Preparedness and Planning - Wildfire: <https://go.usa.gov/xGueZ>

Tips for Testing Water: <https://go.usa.gov/xGMCP>

List of Accredited Labs for Water Testing: <https://go.usa.gov/xGMCE>

Oregon Department of Environmental Quality

Resources for Private Well Owners: <https://go.usa.gov/xGMCH>