Water Wells and Springs

Conditions at the Well

If you live on a property with a private water well or spring in or near the wildfire zone, your water system may have been impacted. After a wildfire, well components and pipelines may have been damaged due to excessive heat. Plastic and some metal components can melt or be deformed affecting the ability to deliver water and potentially impacting water quality. If the water system has lost pressure, it is possible that microorganisms and volatile chemicals could have entered the system. It is very important to do a thorough inspection of the well and water system before trying to use the water. If your home and yard have been burned, make sure the fire debris is cleared before inspecting the water system.

Use this preliminary checklist to survey your water system.

- Is there any visible damage to:
  - The wellhead or wellhouse
  - The well casing, cap or seal
  - Above ground piping or structures
  - Spring box
  - Pressure tanks
  - Filters or water treatment system
  - Wiring or electrical components

- What is the condition of the storage tanks, vents, or overflow pipes?
  - Is there standing water in the tanks
  - Is there any evidence of melting of plastic components?

- Is there any evidence of loss of pressure in the system? The easiest way to check this is to turn on an exterior faucet to see if there is water flowing or you hear air bubbles escaping from the system.

- Is there any ash or wildfire debris near the water system?
  - Does it seem like any ash, soot, or debris has entered any part of the water system?
  - Do you notice any other damage related to the fire?

If any part of your system has been damaged or there was a loss of pressure, **DO NOT USE** the water until it is tested for the presence of any microbiological or chemical contaminants that might have been introduced in the aftermath of the fire. Use an alternative source, such as bottled water, until water testing proves the water is safe for all uses. It is important to have repairs completed by a licensed and bonded well contractor or pump installer. The contractor will follow appropriate protocols for repressurizing the system, avoiding backflow or cross-connections, disinfecting the service lines, and confirming the quality of water by certified testing before putting the system back on-line.
Water Flushing and Testing

If your well was in an area affected by the fire, you may notice the water has an earthy, smoky, or burnt odor. The water also may be cloudy or contain visible particles. You should avoid running the water through your household piping system until you are sure it is not contaminated. If you can determine the source of the contamination, it is important to isolate it. If the system needs to be flushed, be careful to contain the runoff if possible or direct it to a channel to avoid erosion and minimize spreading the contamination.

Before you use the water, the quality of the water should be tested by a certified laboratory. It is important to verify that there isn’t any microbiological or chemical contamination. As a minimum, the water should be tested for coliform bacteria, turbidity, general geochemical parameters (pH, conductivity, color), and nitrate. If there are plastic components or evidence of any debris entering the system, it would be worthwhile to test the water for volatile organic compounds (VOCs) and semivolatile organic compounds (sVOCs). Rigorous sampling procedures are necessary for these tests and the laboratory will provide detailed instructions for collecting a sample. It is important to note that VOCs and sVOCs are also associated with ash and soot from burned structures and vegetation.

Using Your Water While You Wait for Test Results

If you are able to return to living in your home after the fire, you can use your water for outdoor uses, but avoid using it in the household plumbing or hot water tank until you are certain it is not contaminated.

Resources for Testing Your Well

A list of CA-approved laboratories is available on the Environmental Health website

Out of Water

If you source is damaged or no power is available, but you have a usable storage tank, water can be hauled by a licensed vendor.