What to Do After Your Private Well Has Flooded

If you suspect your private well was affected by recent flooding, it is crucial to take action to protect your health. Floodwaters can carry large debris that might damage your well and can bring contaminants like sediment, bacteria, or chemicals into your water.
Follow these steps to address potential flooding impacts on your well.

1. Inspect your well and equipment

WARNING: DO NOT TURN ON THE PUMP OR WASH WITH WELL WATER PRIOR TO FOLLOWING THIS GUIDANCE. Doing so poses a danger of electrical shock and damage to your well or pump, and you risk getting sick from drinking or washing with potentially contaminated water.

6 steps to assess your well

Step	What To Look For	When to Call a Professional
1. TURN OFF THE POWER TO THE WELL.		
2. Check whether the well was flooded.	Check your well for flood water or signs of flooding. If you did not see the area during the flood, debris and mud in the area and water or mud stains on the well may indicate that the well was flooded.	If you can't safely access the well.
3. See if the ground surface around the well is broken or unstable.	Check for erosion that can cause unsafe conditions or a pathway for surface water and contaminants to get into the well. Check whether floodwater entered the well.	If you need to regrade land around the well or repair/replace the well or casing.
4. Inspect electrical components and wires.	Do not touch electrical wires. Look for exposed/damaged wiring or electrical components. Check whether water entered any electrical components. If electrical connections or controls located outside the well casing remain submerged, do not turn	If any water or damage is seen, or if it is suspected that any part of the electrical system has gotten wet, call an electrician or well professional.

	on the pump.	
5. Check the well casing.	A bent/cracked well casing, or a well casing that has shifted, may allow water, sediment, and debris to enter the well and increase the risk of contamination.	If the well casing needs to be repaired or replaced.
6. Check the well cap and seal.	See if the cap and seal are securely fastened to the well casing. Sediment and debris may enter the well through a loose well cap and contaminate the water.	If sediment or debris has entered the well, call a professional before restarting it.

2. Disinfect (shock) your well

If you complete the inspection items listed above and see no impacts to the well, return power to the well pump and follow the steps below to disinfect your well. Please note, drilled, driven, or bored wells are best disinfected by a professional; if you must perform emergency disinfection, follow these steps:

- ☐ If your well water is muddy or cloudy, turn on an outside spigot and run the water until it becomes clear and free of sediment.
- ☐ Gather materials: one (1) gallon of non-scented household liquid bleach, rubber gloves, eye protection, old clothes, and a funnel.
- ☐ Determine your well type and access point (e.g., removing an air vent, plug, or entire cover for bored/dug wells).
- ☐ Carefully pour the gallon of bleach down the well casing.
- ☐ Run water from your well, through a hose, back into the casing until you smell chlorine. This will distribute the chlorine throughout the well.
- ☐ Switch water treatment systems such as softeners or sediment filters to bypass. Turn on all cold water faucets until a chlorine odor is detected at each, then shut them off.
- ☐ Wait 12 to 24 hours. **Do not drink, cook, bathe, or wash with this water during this time due to the elevated/shocking chlorine residual within the well.**
- ☐ After the wait/shock period has ended, run an outside spigot into a safe area (away from plants, lakes, streams, or septic tanks) until the chlorine odor is gone.
- ☐ The system should now be disinfected (re-engage any water treatment systems).

3. Test your water

It is critical to test your water to ensure it is safe. We highly recommend testing your well before you use the water for drinking and cooking.

- After you've disinfected the water, wait 7-10 days and test the water for bacteria.
- Contact your local health department to have the water sampled and tested, or find a

certified lab. Follow health department drinking and bathing advisories if you are in doubt about the safety of your well water. See below for sample collection steps if your health department provides sample bottles for individuals to sample their own wells.
- **Important Caution:** Due to groundwater flow, your well could be impacted for months after a flood and could become recontaminated by malfunctioning septic tanks or chemical seepage. Long-term precautions, including repeated testing, are important. Well disinfection does not protect against chemical contamination, which requires special treatment to address.

Sample Collection Steps (For Biological Contaminants like Total Coliforms, E. coli, etc.)

If the lab or health department provides sterile bottles for you to collect samples, you must follow their instructions. General guidance for collecting samples for biological contaminants includes:

- Use sterile 125- or 150- mL plastic bottles.
- If the sample is chlorinated, use Sodium Thiosulfate as a preservative.
- Cool samples to below 50 °F, but do not freeze them. It is important to deliver the sample to the lab on the same day of collection, or ship overnight. Samples often need to be analyzed within 30 hours from the time they are collected.
- Avoid collecting samples from outdoor faucets, faucets connected to cisterns/softeners, leaky faucets, or those close to the ground.
- **Collection process:** Wear gloves. Do not rinse the bottles. Remove faucet attachments, Before collecting the sample, open the cold tap and let water flush for 5 minutes, reduce the flow, quickly open the bottle without setting the cap down (hold by outside edges), and fill to just above the 100 mL line, leaving approximately one inch between the water line and the cap. Cap immediately and place on ice.

Additional concerns: chemical contamination

While well disinfection addresses bacterial contamination, it does not protect water quality from chemicals, such as volatile organic chemicals (VOCs), pesticides, heavy metals, or other non-biological contamination. If your area experienced flooding that may have introduced other chemical contamination (i.e., fuels like diesel, agricultural runoff (containing nitrates), or industrial contaminants), special treatment and specific testing are required. *For more detailed information on sample collection, please refer to the EPA's Quick Guide To Drinking Water Sample Collection*.

Resources:

- *EPA's Quick Guide To Drinking Water Sample Collection*.
- *EPA's What todo with your private well after a flood*.