



Private Water Wells after Flooding

During and after a flood event, there is an increased risk that drinking water wells may become contaminated with bacteria and/or other contaminants. The water quality in private wells and cisterns used for drinking water is not regulated by the state of Kentucky or by the US Environmental Protection Agency (EPA). Individuals using private wells for drinking water must take precautions to ensure the safety and maintenance of their drinking water sources – especially during flood events.

FIRST AND FOREMOST – if the well’s electrical controls have been compromised during the flood event, **DO NOT** turn the well on, or attempt any maintenance of the well, until it has been inspected by a qualified electrician.

Once any electrical hazard(s) has been repaired, conduct a **visual assessment** of the well and the area surrounding it, looking for the following:

- Is the well located in or near the area that was flooded? If you did not see the area during the flood event, is there evidence of flooding such as unusual debris, mud or stains on or near the well?
- Is the ground around the well intact and stable? During a flood event the soil around the well may erode allowing a pathway for surface water to enter the well. If necessary, re-grade the ground around the well to direct all surface water away from the well casing.
- Is there any damage visible to the well casing?
- Is the well cap and seal securely fastened?

If damage to the casing, cap and or seal is noticed, it would be prudent to call a certified well driller to inspect and repair the damage to the well to help prevent infiltration of surface water into the well.

After the visual assessment has been conducted and applicable repairs made, then the well should be **purged** to rid the well of water that may have entered during the flood event. To purge the well, simply connect a garden hose to an outside spigot and allow the water to run until the water becomes clear and free of sediment. *However*, if you suspect that oil, gasoline or other chemical products may have entered the well, a certified well driller needs to be contacted to aid in the removal of this type of contaminant.

Once it is determined that the electrical components can be operated safely, there is no need to believe petroleum or other chemical contamination has occurred, and the well has been purged, then the owner can begin the disinfection process.

Immediate disinfection of bacterial contamination can be accomplished by drawing an amount of water to be used and bringing it to a rolling boil and keeping it there for *at least* one minute.

Full Well Disinfection of bacterial contamination is accomplished by putting a measured amount of chlorine bleach into the well according to an established protocol, as outlined in Marshall County Health Department’s **Well Disinfection Procedure**.

If you have any questions or concerns, please contact Wendy at 270-252-2702