

TUOLUMNE COUNTY ENVIRONMENTAL HEALTH

What to Do After a Flood

February 2017

What to Do If Flood Water Reaches Your Well!

Drilled, driven or bored wells are best disinfected by a well or pump contractor, because it is difficult for the private owner to thoroughly disinfect these wells.

If you suspect that your well may be contaminated, contact Tuolumne County Environmental Health for specific advice on disinfecting your well. The suggestions below are intended to supplement flood precautions issued by state and local health authorities.



Foothill Type Flooding

WARNING!
DO NOT TURN ON THE PUMP There is danger of electrical shock and damage to your well or pump if they have been flooded

WARNING!
DO NOT Drink or WASH WITH WELL WATER
People drinking or washing with water from a private well that has been flooded will risk getting sick.

In This Handout

- Well & Pump Inspection
- Emergency Disinfection
- Sampling Well Water
- Concerns
- Contacts



Library in Calaveras—Union Democrat

Well & Pump Inspection

Flood Conditions at the Well - Swiftly moving flood water can carry large debris that could loosen well hardware, dislodge well construction materials or distort casing. Coarse sediment in the flood waters could erode pump components. If the well is not tightly capped, sediment and flood water could enter the well and contaminate it. Wells that are more than 10 years old or less than 50 feet deep have a greater risk of being contaminated, even if there is no apparent damage. Floods may cause some wells to collapse.

Electrical System - After flood waters have receded and the pump and electrical system have dried, do not turn on the equipment until the wiring system has been checked by a qualified electrician, well contractor, or pump contractor. If the pump's control box was submerged during the flood all electrical components must be dry before electrical service can be restored. Get assistance in turning the pump on from a well or pump contractor.

Pump Operation - All pumps and their electrical components can be damaged by sediment and flood water. The pump including the valves and gears will need to be cleaned of silt and sand. If pumps are not cleaned and properly lubricated they can burn out. Get assistance from a well or pump contractor who will be able to clean, repair or maintain different types of pumps.

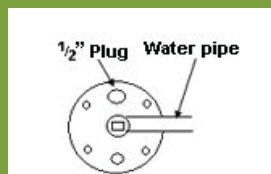
Materials For Well Disinfection:

- One gallon of non-scented household liquid bleach
- Rubber gloves
- Eye protection
- Old clothes
- Funnel (do not use a funnel that was used for petroleum products—like gasoline)



Tuolumne River - Overflow

Well Disinfection



Step 1

If your water is muddy or cloudy, run the water from an outside spigot with a hose attached until the water becomes clear and free of sediments.

Step 2

Determine what type of well you have and how to pour the bleach into the well. Some wells have a sanitary seal with either an air vent or a plug that can be removed. If it is a bored or dug well, the entire cover can be lifted off to provide a space for pouring the bleach into the well

Step 3

Take the gallon of bleach and funnel (if needed) and carefully pour the bleach down into the well casing.

Step 4

After the bleach has been added, run water from an outside hose into the well casing until you smell chlorine coming from the hose. Then turn off the outside hose.

Step 5

Turn on all cold water faucets, inside and outside of house, until the chlorine odor is detected in each faucet, then shut them all off. If you have a water treatment system, switch it to bypass before turning on the indoor faucets.

Step 6

Wait 24 hours before turning the faucets back on. It is important not to drink, cook, bathe or wash with this water during the time period --- it contains high amounts of chlorine.

Step 7

Once the waiting period is up, turn on an outside spigot with hose attached and run the water into a safe area where it will not disturb plants, lakes, streams or septic tanks. Run the water until there is no longer a chlorine odor. Turn the water off.

Step 8

The system should now be disinfected, and you can now use the water.

Step 9

Have your water tested for bacteria 7 to 10 days after disinfection.

Sampling & Testing

Environmental Health recommends that all wells that have had flood waters come in contact with the well to be sampled and tested for contamination. Contact the Tuolumne County Environmental Health Division for specific instructions on water sampling and local laboratory services . Or, call your state laboratory certification officer to find a certified lab near you. You can get this number from the Safe Drinking Water Hotline (1-800-426-4791).

After the pump is back in operation, the well should be sampled periodically to ensure no further contamination exists.

Concerns & Advisories

If in doubt about the well water supply, follow state and federal drinking & bathing advisories. Remember that there is a danger of electrical shock from any electrical device that has been Flooded. Please consult a certified electrician to properly asses your well. Rubber boots and gloves are not adequate protection from electric shock.

Well disinfection will not provide protection from pesticides, heavy metals and other types of non-biological contamination. If such contamination is suspected, due to the nearness of these contaminant sources, special treatment is required.

Information on home water treatment units (also called point-of-use and point-of-entry units) is available from U.S. EPA by phoning the **Safe Drinking Water Hotline (1-800-426-4791)**.

If you observe chemical containers (including barrels and drums) that have moved to your property, call Tuolumne County Environmental Health Division or the **Superfund Hotline (1-800-424-9346)**.

Contact Us

Tuolumne County Environmental Health: 209-533-5639
dlarson@co.tuolumne.ca.us

Tuolumne County Office of Emergency Services 209-533-5511

Tuolumne County Health Department:
209-533-7401

Safe Drinking Water Hotline 1-800-426-4791

Superfund Hotline
1-800-424-9346