

EXTREME WEATHER

Septic Systems: After the Flood

According to University of Minnesota Extension and the Onsite Sewage Treatment Program (OSTP) staff, if you have a septic system that is in the area affected by the recent flooding, there is potential for damage to the system. However, you can take action after the flooding to minimize the damage. When floodwaters cover your septic system it should not be used. If the drainfield or ground above your septic tank floods, your individual sewage treatment system is not working.

IF YOUR SYSTEM WAS FLOODED

The OSTP staff recommends the following steps to help your system recover:

Pump the tank(s) as soon as possible after the flood recedes and prior to resuming use of the system

Be sure to pump both the septic tank and the pump/lift station (if you have one). Silt and other debris may have collected in your septic tank while it was under water which could ultimately find its way to and damage the drainfield. Additionally, a variety of substances such as pesticides, petroleum products and other contaminants may have entered the tank. These contaminants could be detrimental to the beneficial bacteria in both the tank and the drainfield and therefore need to be removed. However, it is not advisable to leave the septic tank empty after pumping if the soil around the area of the tank(s) is saturated; this can cause the tank to “float” toward the ground’s surface if the soil’s water pressure remains high. If you have this

concern, consult a licensed tank pumper/maintainer.

Locate and protect the drainfield from compaction by keeping all traffic off the area

Often considerable traffic takes place around a flooded home as flood cleanup and home restoration occur. This traffic could include but is not limited to foot traffic, debris piles, dumpsters, and heavy equipment. Compaction reduces the capacity of your drainfield to treat wastewater and could lead to the early failure of your entire system.

Check electrical connections for damage or wear before turning electricity back on

Check that the septic tank manhole cover is secure and that inspection ports have not been blocked or damaged. Check for animal damage or intrusion in the drainfield area.

Check the vegetation over your septic tank and drainfield

Repair erosion damage; sod or reseed as necessary to provide a good plant cover. You may need to mulch the area to provide insulation if the grass has not become well established before winter.

Inside your home, be sure to disinfect thoroughly if sewage backed up into the house or garage

Disease-causing organisms (pathogens) in wastewater can cause serious illness, such as dysentery, hepatitis and other waterborne illnesses. However, avoid flushing disinfectants into drains which empty into the septic system, or clean before pumping. The disinfectants could be detrimental to the

beneficial bacteria in both the tank and the drainfield. If you need to chlorinate your well, follow the instructions fully on the University of Minnesota *Safe Drinking Water from Wells in Flooded Areas* fact sheet. Do not allow the bleach to enter your septic system.

If after the floodwater has receded from the drainfield and the surrounding soil has had a chance to dry, but the drainfield still will not accept effluent from the septic tank, the drainfield pipes or soil might be “plugged.” At this time the homeowner should consult a licensed septic system professional.

If homeowners have additional concerns they should discuss them with a local septic system permitting authority or a licensed septic system professional.

If you have a drainfield that has not been flooded, but is soggy due to heavy rain, minimize water use within the home

The additional water added due to household use can cause poorly treated sewage to surface in your yard or raw sewage to back up into your house. You can minimize water use within the house in a variety of ways, including taking shorter showers or baths and not doing laundry until the drainfield begins to dry out.

IF PORTIONS OF YOUR SYSTEM WERE DESTROYED

Often flood waters can cause components of septic systems to be partially or completely washed away. The owner of such a system should not assume that soil or other “fill” can be added and new system components constructed.

Heavy rains can cause slides to partially or completely cover septic system components with rock, mud, or silt. These slides can affect the operational integrity of the system, especially the drainfield. Care needs to be taken for slide debris removal from the area on or around a septic system in order to protect system components, taking special care to keep vehicle and equipment traffic off the drainfield to avoid compaction.

If your drainfield is saturated or has standing water not caused by flooding or heavy rain, you may have a long-term problem.

For any of the problems listed above, contact a licensed septic system professional or the local septic system permitting authority to discuss options that will meet state and local codes.

Source: University of Minnesota Onsite Sewage Treatment Program staff

For more information: septic.umn.edu or extension.umn.edu/flood

The *Septic System Owner's Guide* is an excellent resource for more information. To order, call **800-876-8636** or go to shop.extension.umn.edu.