

Septic Systems – What to Do After a Flood

Where can I find information on my septic system?

Please contact your local health department for additional advice and assistance. For more information on onsite/decentralized wastewater systems, call the National Environmental Services Center at (800) 624-8301 or visit their website at www.nesc.wvu.edu.

Do I pump my tank during flooded or saturated drain field conditions?

No! At best, pumping the tank is only a temporary solution. Under worst conditions, pumping it out could cause the tank to try to float out of the ground and may damage the inlet and outlet pipes. The best solution is to plug all drains in the basement and drastically reduce water use in the house.

What if my septic system has been used to dispose wastewater from my business (either a home-based or small business)?

In addition to raw sewage, small businesses may use their septic system to dispose of wastewatercontaining chemicals. If your septic system that receives chemicals backs up into a basement or drain field, take extra precautions to prevent skin, eye and inhalation contact. The proper clean-up depends on what chemicals are found in the wastewater. Contact the health department or EPA for specific clean-up information.

What do I do with my septic system after a flood?

Once floodwaters have receded, there are several things homeowners should remember:

- Do not drink the well water until it is tested. Contact your local health department.
- Do not use the sewage system until water in the soil absorption field is lower than the water level around the house.
- Have your septic tank professionally inspected and serviced if you suspect damage. Signs of damage include settling or an inability to accept water. Flooding doesn't damage most septic

tanks since they are below ground, i.e., completely covered. However, septic tanks and pump chambers can fill with silt and debris and must be professionally cleaned. If the soil absorption field is clogged with silt, a new system may have to be installed.

- Only trained specialists should clean or repair septic tanks because tanks may contain dangerous gases. Contact your health department for a list of septic system contractors who work in your area.
- If sewage has backed up into the basement, clean the area and disinfect the floor. Use a chlorine solution of a half cup of chlorine bleach to each gallon of water to disinfect the area thoroughly.
- Pump the septic system as soon as possible after the flood. Be sure to pump the tank, the distribution box and the lift station if present. This will remove silt and debris that may have washed into the system. Do not pump the tank during flooded or saturated drain field conditions. At best, pumping the tank is only a temporary solution.
- Do not compact the soil over the soil absorption field by driving or operating equipment in the area. Saturated soil is especially susceptible to compaction, which can reduce the soil absorption field's ability to treat wastewater and lead to system failure.
- Examine all electrical connections for damage before restoring electricity.
- Be sure the septic tank's access cover is secure and that inspection ports have not been blocked or damaged.
- Check the vegetation over your septic tank and soil absorption field. Repair erosion damage and sod or reseed areas as necessary to provide turfgrass cover.

Remember: Whenever the water table is high or your sewage system is threatened by flooding, there is a risk that sewage will back up into your home. The only way to prevent this backup is to relieve pressure on the system by using it less.

What are some suggestions offered by experts for homeowners with flooded septic systems?

- Use common sense. If possible, don't use the system if the soil is saturated and flooded. The wastewater will not be treated and will become a source of pollution. Conserve water as much as possible while the system restores itself and the water table falls.
- Prevent silt from entering septic systems that have pump chambers. When the pump chambers are flooded, silt has a tendency to settle in the chambers and will clog the drain field if it is not removed.
- Do not open the septic tank for pumping while the soil is still saturated. Mud and silt may enter the tank and end up in the drain field. Furthermore, pumping out a tank that is in saturated soil may cause it to "pop out" of the ground. (Likewise, recently installed systems may "pop out" of the ground more readily than older systems because the soil has not had enough time to settle and compact.)
- Do not dig into the tank or drain field area while the soil is still wet or flooded. Try to avoid any

work on or around the disposal field with heavy machinery while the soil is still wet. These activities will ruin the soil conductivity.

- Flooding of the septic tank will have lifted the floating crust of fats and grease in the septic tank. Some of this scum may have floated and/or partially plugged the outlet tee. If the septic system backs up into the house, check the tank first for outlet blockage. Clean up any floodwater in the house without dumping it into the sink or toilet and allow enough time for the water to recede. Floodwaters from the house that are passed through or pumped through the septic tank will cause higher flows through the system. This may cause solids to transfer from the septic tank to the drain field and will cause clogging.
- Locate any electrical or mechanical devices the system may have that could be flooded to avoid contact with them until they are dry and clean.
- Aerobic plants, upflow filters, trickling filters and other media filters have a tendency to clog due to mud and sediment. These systems will need to be washed and raked.

Source: The Environmental Protection Agency, publication EPA 816-F-05-029, September 2005, Office of Water (4606 M), <u>www.epa.gov/safewater</u>

The Arkansas Cooperative Extension Service offers its programs to all eligible persons regardless of race, color, national origin, religion, gender, age, disability, marital or veteran status, or any other legally protected status, and is an Equal Opportunity Employer.