

Mitigation Measures for Snow Melt Ponding Winter/Spring 2023

Septic Systems:

Your septic system could be impacted by any heavy rainfall or significant amount of ice/snow melt. As the precipitation soaks into the ground, it saturates the drain field of your septic system, preventing it from draining wastewater and causing an overflow. This overflow can back up through the pipes into your house and end up in your toilet, bathtub or sink or it can also send untreated sewage into groundwater, wells, or local bodies of water.

If your septic tank is backed up, then there are things you can do to reduce the negative impacts before a professional is able to fix the problem.

1. If possible, do not use the system if the soil is saturated and flooded. The wastewater will not be treated and will become a source of pollution.
2. Reduce the amount of water you use to relieve some pressure on the septic system. The Environmental Protection Agency (EPA) advises conserving water as much as possible while the system restores itself and the water table falls, and until a professional can assess the situation.
3. Prevent silt from entering septic systems that have pump chambers. When the pump chambers are flooded, silt may settle in the chambers and clog the drain field if it is not removed.
4. 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.
5. 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.
6. 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, then check the tank first for outlet blockage.
7. 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.
8. Aerobic plants, upflow filters, trickling filters, and other media filters may clog due to mud and sediment. These systems will need to be washed and raked.

9. Inspection ports and cleanouts can be extended and raised above ponding areas.

You can take steps before heavy rains or snow melt happens to help mitigate impacts to your system.

Routine Maintenance:

- Have your septic system inspected annually to look for signs that the system is clogged or not emptying properly.
- Schedule a professional to pump your septic tank on a routine basis.
- Evaluate your landscaping. Direct all surface drainage away from the septic system. Having the right landscaping on and around your system is important, as tree and shrubbery roots can grow into the drain lines. Strong roots and heavy items can cause the drain field to fail.
- Do not drive on the drain field. Heavy items like cars can break drain lines.

Wells:

Heavy rain and snow melt may impact your well. Wastewater from malfunctioning septic tanks or chemicals seeping into the ground can contaminate the ground water for systems at a depth of 300 feet or less. The well can become contaminated with bacteria or other contaminants. It may be necessary to take long-range precautions, including repeated testing, to protect the safety of drinking water. If you have a private well or spring, then do not drink your water until you can get it tested for contaminants from your septic system, such as *E. coli* bacteria and nitrates.

For more information as a private well owner, visit the Arizona Department of Health Services (ADHS) website: [ADHS - Test Your Well - Home \(azdhs.gov\)](https://www.azdhs.gov).

The local ADHS approved lab for testing private well water is:

Nortest Analytical Labs

2400 E Huntington Drive, Flagstaff, AZ

Phone: 928-774-2312

Web: [Northern Arizona Water Analysis and Water Testing - Nortest Analytical](#)

It is recommended to use bottled or hauled water if you are unsure if your drinking water is safe. Boil water, if you do not have bottled water. Boiling is sufficient to kill pathogenic bacteria, viruses, and protozoa. If water is cloudy, then let it settle and filter it through a clean cloth, paper towel, or coffee filter. Bring water to a rolling boil for at least one minute, and at elevations above 6500 ft, boil for three (3) minutes. For more information on how to disinfect water, visit the CDC website: [Making Water Safe in an Emergency | Water, Sanitation, & Hygiene-related Emergencies & and Outbreaks | Healthy Water | CDC](#)