

Onsite Wastewater Management Systems – Before, During and After Flooding

Floods can cause considerable damage to onsite wastewater management systems (septic systems) and create unsafe conditions through the release of untreated sewage into the environment or from sewage backing up into the residence or building. Untreated sewage contains harmful organisms such as bacteria and viruses that can cause serious illness so it is very important to take steps that minimize exposure to untreated sewage through direct contact or ingestion of contaminated drinking water.

Floodwater can enter septic tanks and holding tanks through leaky access risers and manholes and in some cases can cause tanks to float up out of the ground. Disposal fields can become submerged and saturated and fine materials present in the floodwater can plug the system leading to poor performance and system failure. Disposal fields installed above ground, such as sand mounds and total area fields, may experience extensive damage and will need to be repaired or replaced.

This document provides guidance for septic system owners before, during and after the flood. Understanding the type of septic system you have, its location, and its components will make this guide more useful. Please visit the Onsite Waster Management Program website to access educational resources for septic system owners.

https://www.gov.mb.ca/sd/waste_management/wastewater/wastewater_management/index.html

Before the flood

- Have a licensed plumber install a backflow prevention device on the building sewer so sewage cannot backup into the residence or building.
- Inspect the septic/holding tank and make sure access risers and manhole covers are watertight and that access risers extend above ground surface. Make sure the ground around the access risers and manhole covers slopes downwards so surface water drains away from the system.
- Turn off the power to all the system's electrical components at the circuit breaker (pumps, alarms, floats): turn off water softeners to prevent them from regenerating.
- Remove any debris that may float and cause damage to the septic system.
- Reduce water use in the residence or building.
- Do not pump the septic or holding tank empty because it makes the tank more buoyant and more likely to float.

During the flood

- Follow emergency and evacuation advice for your area.
- Eliminate all non-essential water use and flush toilets as little as possible. Do not use the septic system if the tanks and/or disposal field are covered with water.

After the flood

- Avoid contact with any standing water that may contain sewage and do not drink well water until it has been tested for contamination. Contact the Office of Drinking Water or a certified laboratory for well testing procedures.
- Do not use the septic system until the floodwaters have receded and the septic system has dried out. This could take several weeks. The system's user should conserve water until the system is completely dry. If the system is used while it is saturated the sewage will not be treated and will become a source of pollution.
- Once the septic system has dried out, hire a registered sewage hauler to inspect and pump out the septic tank or holding tank (see contact information below). Do not pump tanks under flooded conditions as this could cause the tank to float out of the ground and cause damage. If the septic tank is above the floodwater elevation, it can potentially be used as a temporary holding tank.
- Protect the disposal field area from compaction by keeping all vehicle and equipment traffic off the area. There is often a considerable increase in traffic around a flooded home as flood clean-up and restoration occurs. If possible, install a fence or rope-off the septic system to protect it.
- If the septic system has been damaged or is not working properly, contact a certified septic system installer to conduct an inspection and perform any necessary repairs. Major repairs or system replacement will require submission of a registration application (permit) to the applicable Regional Environment Office (see contact information below).
- Do not touch any of the wiring or electrical parts of the system. Have a qualified electrician check electrical connections for damage or wear before turning electricity back on. Test all pumps and controls before putting the system back into operation.
- Check the soil and vegetation over the tanks and disposal field. Repair erosion damage and sod or re-seed to provide a good grass cover.

Contact Information

Contact information can be found on the Onsite Wastewater Management Program website:
https://www.gov.mb.ca/sd/waste_management/wastewater/wastewater_management/index.html

Contact information includes:

- List of Certified Installers
- List of Registered Sewage Haulers
- Regional Environment Offices
- Manitoba Onsite Wastewater Management Association