## **Protecting our drinking water together**

# SEPTIC SYSTEMS

## What is a septic system?

A septic system is a private sewage treatment system.

Septic systems are common where there are no municipal sewage pipes for homes, farms, businesses or other facilities into which to connect. They are less common in large urban areas.

What your septic looks like, how it's designed and

constructed depends on where you live, how much space you have, the characteristics of the surrounding land, and make-up of the soil.

Whatever type you have, all septic systems require careful attention to design, construction, operation and maintenance.

# Why is it important to keep a septic system

# in good working order?

A septic system built to current-day standards, and maintained properly, may:

- Enhance the value of your property
- Prevent costly replacement or repairs in the future
- Prevent pollution

Septic systems in good working condition help reduce the risk of drinking water contamination, both to your water supply and your neighbour's. This is important, especially if your septic system is in an intake protection zone or wellhead protection area, and can affect a surface water intake or drinking water well.

### Why should I be concerned about my septic system?

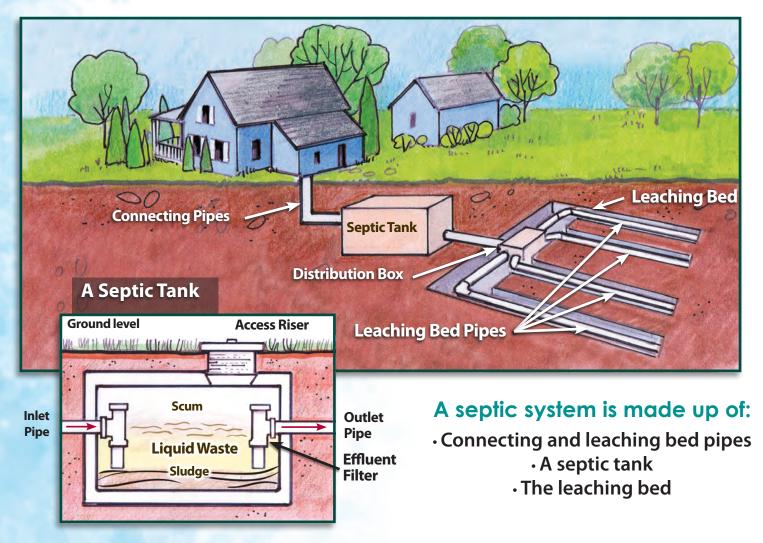
- Sinks, showers and toilets back up with sewage or drain slowly
- The lawn over the leaching bed has patches of abnormally healthy-looking grass
- There are soggy areas, areas with surfacing grey water, or areas with surfacing sewage, on or near the leaching bed
- The lawn above the leaching bed is wet
- There is a sewage odour in your home or over the area of your leaching bed
- Large amounts of algae growth occur in or around nearby lakes or water
- Nearby well water tests indicate high levels of nitrates, bacteria, or other contaminants
- Dosing pumps, if your system has them, run constantly or not at all





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#### **SEPTIC SYSTEMS**



## How does a septic system work?

If you rely on a traditional septic system, your household wastewater flows through pipes to an outdoor, underground septic tank.

Solids settle here and separate from the liquid.

Light solids, such as soap suds and fat, float to the top and form a scum layer.

This layer remains on top and gradually thickens until you have the tank cleaned.

The liquid waste flows through a series of pipes to where it is slowly released into the leaching bed.

The leaching bed is made up of porous materials, such as sand and gravel, and acts as a filter to clean the water before it seeps back into the ground. The heavier solids settle to the bottom of the septic tank where they are gradually decomposed by bacteria.

# Why do I need it pumped out?

Some non-decor

non-decomposed solids remain, forming a sludge layer that must be pumped out every three to five years.



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How can I keep my septic system working?

#### Get to know your septic system:

- Know the location of your septic tank
- Know the material of which it is made

#### Maintain your septic system properly:

- Have your septic system inspected at least every three years
- Pump your septic tank as needed (generally every three to five years)
- Service and maintain treatment units and effluent filters according to manufacturer instructions
- Install an effluent filter to the outflow pipe leading from your septic tank to your leaching bed. An effluent filter will prevent solids from entering and clogging the leaching bed

- Know the size of your leaching bed
- Be aware of the shape of your leaching bed
- An effluent filter is an inexpensive way to prevent costly tile bed repairs
- Locate all pump chambers and ensure pumps and alarms are working properly (if your system has them)
- Keep records of pumping, maintenance and repair
- Have the tank replaced if not sound (e.g., steel tanks are susceptible to decay and last only 20 to 25 years) or if undersized for sewage flows
- If you turn a seasonal residence into a permanent one, or add members to your family, your septic system may need to be resized to function properly

#### Be careful about what goes into your system:

- Take household hazardous wastes to your municipal hazardous waste facility.
   Do not pour paint, grease, pesticides, solvents, thinners, nail polish remover, kerosene, antifreeze, gas, diesel or oil down drains or into toilets. They can seep into groundwater. They may also prevent your septic system from working properly
- Avoid using disinfectants like bleach, caustic toilet bowl cleaners, and drain cleaners, which kill beneficial bacteria in your tank and may cause sewage to pass through system without treatment
- Look for liquid detergents or concentrated detergents that don't contain phosphates. Phosphates can harm local water quality
- Keep household items, such as dental floss, feminine hygiene products,



condoms, diapers, food solids, hair, washing machine lint and cat litter out of your system. These can clog your leaching bed and pipes

- Check with your local health department before using septic tank additives.
   Commercial septic tank additives do not eliminate the need for periodic pumping and can be harmful to your system
- Garboraters should not be used on most conventional septic systems. They will fill the tank much more rapidly and you'll need more frequent pump-outs

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# How can I keep my septic system working?

# Be careful about what goes over your septic system:

- Plant only grass over and near your leaching bed to aid in evaporation and prevent erosion
- Don't allow trees or shrubs to grow too close to the leaching bed or tank as their roots can clog or damage your system

- Do not apply manure or fertilizers over the leaching bed
- Keep vehicles and livestock off your leaching bed and away from your septic tank. Excessive weight can damage the pipes and tank, and your system may not drain properly under compacted soil
- Keep gutters and basement sump pumps from draining into or near your leaching bed, avoid heavy lawn watering and divert other forms of runoff

# Conserve water flowing to the system:

- Use low-flow showerheads
- Use low-flush toilets
- Fix any leaking plumbing fixtures

 Excessive water flowing into the septic tank, from overuse of toilets, laundry, dishwasher, showers, and baths, can cause sludge to be disturbed, allow solids to pass out of the tank and clog your leaching bed pipes and your leaching bed

#### Ensure that renters or guests are aware ...

... of your septic system and its proper use.

#### For more information we invite you to contact your local source protection region or area



Ausable Bayfield Maitland Valley Source Protection Region



#### Ausable Bayfield Maitland Valley Drinking Water Source Protection Region

c/o 71108 Morrison Line, RR 3 Exeter, ON NOM 1S5

1-888-286-2610

sourcewaterinfo.on.ca

Maitland Valley Source Protection Area: 519-335-3557 • Ausable Bayfield Source Protection Area: 519-235-2610